

JUNIATA FORWARD: BUILDING ON 25 YEARS OF CONSERVATION

An Update to the Juniata Watershed Management Plan (2000)



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Our Mission

The **WESTERN PENNSYLVANIA CONSERVANCY** protects and restores exceptional places to provide our region with **CLEAN WATERS** and healthy forests, wildlife and **NATURAL AREAS** for the benefit of present and future generations. The Conservancy creates **GREEN SPACES AND GARDENS**, contributing to the vitality of our cities and towns, and preserves **FALLINGWATER**, a symbol of people living in **HARMONY WITH NATURE**.

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EXECUTIVE SUMMARY

The Juniata Forward: Building on 25 Years of Conservation is a comprehensive study that compiles broad-based data about recreational, historical, socio-economic, and natural resources throughout the region. The plan involves a strong community participation element through the identification of local needs and concerns.

This document is non-regulatory, and serves as a reference and educational tool promoting the conservation of natural resources, monitoring and improvement of water quality, and advocating sound community-planning practices. Recommendations identified in this plan are not enforceable by any agency. Implementation of this plan is the responsibility of the entire watershed community, and depends upon cooperation and collaboration among many different organizations.

The Pennsylvania Rivers Conservation Program aids groups in accomplishing local initiatives through planning, implementation, acquisition, and development activities. As part of the program, Pennsylvania Department of Conservation and Natural Resources (DCNR) established the Pennsylvania Rivers Registry to validate the completion of approved watershed conservation plans. The registry serves to promote public awareness of completed plans, while fostering support for future projects that will enhance the overall quality of the watershed. The Juniata Forward: Building on 25 Years of Conservation Plan was conducted to document current conditions that identify initiatives to improve the livability and attractiveness of the region. Through public perception of current conditions and future expectations, the plan engages community involvement to develop a future vision for the watershed and create a prioritized list of recommendations to achieve this vision. With the completion of this plan, The updated Juniata Forward: Building on 25 Years of Conservation will be placed on the Pennsylvania Rivers Registry, which is available at <https://www.dcnr.pa.gov/Conservation/Water/RiversConservation/RiversRegistry/>.

Project Background

In 2021, WPC submitted a grant application to the Pennsylvania Department of Natural Resources (PA DCNR) to complete an update to the Juniata Watershed Management Plan (2000). The original plan, completed by the Juniata Clean Water Partnership (JCWP), outlined a vision for the community in the Juniata River watershed. The update to this plan will build upon what has been accomplished in the past 25 years. Funding for Juniata Forward: Building on 25 Years of Conservation was awarded in 2022.

In May 2023, the watershed conservation plan process was initiated at a set of three public meetings held at various locations throughout the watershed. Local citizens were invited to come together to voice their opinions about local conservation issues and the need to protect and improve the watershed. Additionally, a public survey was developed via Survey Monkey to gather additional input.

Municipal and county officials were encouraged to participate in the planning process. A survey was sent to all municipalities in the watershed to garner their input for the plan. Additionally, county planning commission meeting and intermunicipal stormwater committee meetings were attended.

Purpose

The purpose of this study is to document current conditions and identify additional initiatives aimed at improving the livability and attractiveness of the region. This study considered all previous research compiled in the original 2000 plan, identified gaps and new and emerging issues and solutions, and recommended specific projects to provide those missing data sources and improve recreational

amenities and natural resources of the communities of the watershed. A need also existed to catalog the accomplishments that had been made by implementing action steps of the original plan. The community was involved in developing a vision for the future of the watershed through public meetings, surveys, and interviews. Stakeholders identified important issues and resources needing restoration, protection, conservation, and/or preservation. The goal of this plan is to develop a strategy to make the vision for the watershed a reality. Practical solutions and action steps were suggested, and resources were identified to support implementation. This plan can be used to assist groups and citizens working and/or living within the watershed with obtaining funding and other resources to fulfill the vision set forth for the area.

Building on 25 Year of Conservation

Through public meetings and public surveys, people of the watershed emphasized the natural beauty and scenic vistas of the area. Since the previous plan was developed 25 years ago, many organizations have been working to preserve this natural beauty.

The summary below highlights the collaborative efforts of various organizations and institutions to improve and protect the Juniata River watershed through conservation, education, and restoration projects.

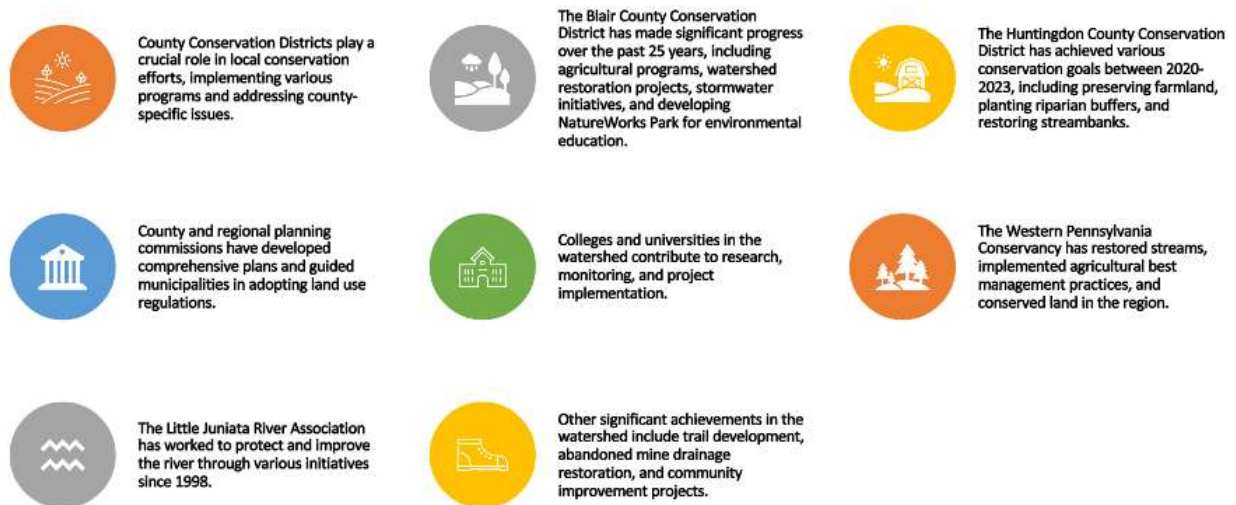


Figure ES 1: Sample of Projects in the Juniata River Watershed over the Past 25 Years.

Chapter Summaries

Project Area Characteristics

- The Juniata River watershed encompasses 3,400 square miles across 12 counties in southcentral Pennsylvania. The stream flows in a mainly easterly direction until it empties into the Susquehanna River. Major tributaries include Frankstown branch, Little Juniata River, and the Raystown Branch.
- There has been an increase in municipalities that have land use control regulations, including a 33% increase in zoning ordinances, a 54% increase in comprehensive plan adoption, and a 10% increase in subdivision ordinances.

- The population of the area is shrinking. The estimated population in 2020 was 324,917. This is approximately a 2.5% decrease from 2010. The average per capita income in the watershed is lower than Pennsylvania average.
- Major road ways in the area include Interstates 70, 76, and 99; and U.S. routes 22, 30 and 322.
- There are eight environmental justice areas identified in the watershed.
- The watershed is mainly located in the Appalachian Ridge and Valley province, with the headwaters located along the Allegheny Front.
- Land use in the watershed is mainly forested (67%), with significant portions of prime farmland (22%). Approximately 8% of the watershed is developed.

Issues and concerns

Multiple venues were used to gather input, including public meetings, community events, governmental meetings, and online surveys.

Public meetings and events were held in various locations, with presentations and visioning sessions to gather community input.

Two governmental meetings were held with county planning commissions and stormwater committees.

Online surveys were conducted for both the general public (76 responses) and municipalities (37 responses).

Key Issues and Concerns:

- Climate Change: Long-term shifts in temperature and weather patterns affecting the watershed area. Pennsylvania has experienced a warming trend and increased precipitation over the past 110 years.
- Concerns about increased flooding events that can damage infrastructure and disrupt ecosystems. Climate change may increase the frequency and intensity of floods.
- Concerns about urban sprawl, development near sensitive areas, and loss of farmland to housing and solar farms.
- Concerns about water quality, including temperature, runoff from various sources, and drinking well water quality.
- Issues with aging infrastructure, lack of internet/broadband coverage, traffic, and wastewater operations needing upgrades.
- Need for improved access to fishing, boating, and trails, as well as concerns about trail maintenance and connectivity.

Land Resources

- Geology and Topography:
 - Mostly in the Ridge and Valley Physiographic Province
 - Characterized by parallel northeast-southwest running ridges and valleys
 - Bedrock from Cambrian, Ordovician, Silurian, and Devonian periods

- Soil Characteristics:
 - Derived from sandstone, shale, and limestone bedrock
 - 12 major soil series described, including Berks, Hagerstown, and Weikert
 - Prime agricultural soils and farmland of statewide importance identified
- Land Ownership and Use:
 - Over 70% privately owned
 - 28.6% publicly owned (state forests, game lands, etc.)
 - Forestland dominates (67%), followed by agriculture (22%) and developed areas (8%)

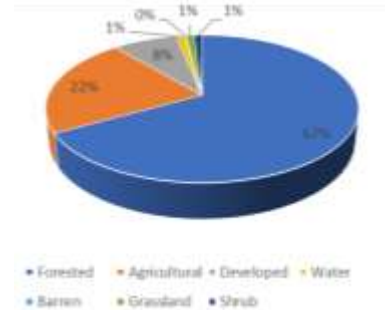


Figure ES 2. Land Use in the Watershed

- Critical Areas:
 - Steep slopes (25% or greater) limit development
 - One permitted landfill in the watershed
- Hazardous Areas:
 - Several CERCLA/Superfund sites listed
 - Land Recycling Program encourages voluntary cleanup of contaminated sites
 - RCRA and Toxics Release Inventory sites present
 - Abandoned mine lands in specific areas, with some AMD treatment projects completed
 - Sinkholes common, posing risks for groundwater pollution
 - Illegal dumpsites in remote areas
- Environmental Programs:
 - Land Recycling Program for voluntary cleanup of contaminated sites
 - AMD Set-Aside Program for addressing acid mine drainage
 - Keep Pennsylvania Beautiful initiative for addressing illegal dumping

Water Resources

- Major Tributaries:
 - The Juniata River is formed by three major tributaries: Raystown Branch, Frankstown Branch, and Little Juniata River.
 - Other major tributaries include Standing Stone Creek, Aughwick Creek, Kishacoquillas Creek, and Tuscarora Creek.
- Lakes and Reservoirs:
 - Most sizable lakes and reservoirs in the watershed are human-made.
 - They serve various purposes including drinking water supply, flood control, and recreation.
 - Raystown Lake is the largest lake at 8,300 acres.
- Wetlands:
 - Wetlands play important roles in groundwater recharge, flood protection, and biodiversity.

- The National Wetland Inventory provides data on wetland areas, though it has some limitations.
- Floodplains:
 - Floodplains help dissipate energy from high flows and absorb floodwaters.
 - The National Flood Insurance Program provides insurance for flood-prone areas.
- Water Quality:
 - The Clean Water Act establishes water quality standards and regulates pollution discharges.
 - Pennsylvania uses a designation system for waterways based on uses like aquatic life, water supply, and recreation.
 - Some streams are classified as High Quality or Exceptional Value waters.
 - Impaired waterways are listed and may require Total Maximum Daily Loads (TMDL).
- Major Water Quality Issues:
 - Agriculture is the largest contributor of nutrients in the watershed.
 - Stormwater runoff can cause pollution and flooding issues.
 - Point source discharges are regulated through NPDES permits.
- Monitoring:
 - Various agencies conduct water quality monitoring, including PA DEP, USGS, and the Susquehanna River Basin Commission.
 - Monitoring includes continuous instream monitoring, the Water Quality Network, and USGS stream gauges.
- Water Supply:
 - Water is used for various purposes including drinking water, irrigation, and industry.
 - The Susquehanna River Basin Commission regulates water use in the basin.
 - Drinking water comes from both public water supplies and private wells.
- Water Management:
 - Pennsylvania updated its State Water Plan in 2022 to address water resource management.
 - There are programs to protect public water sources and educate private well owners.

Biological Resources

This chapter emphasizes the rich biodiversity of the region while highlighting various conservation efforts and challenges facing different species and habitats.

- Wildlife:
 - The watershed has diverse habitats supporting many species, including white-tailed deer, wild turkey, black bear, and various small mammals.
 - There are about 50 mammal species, over 240 breeding bird species, and 82 fish species.
 - Bats are threatened by white-nose syndrome.
 - Bird populations have declined significantly since 1970.

- Fish and Aquatic Life:
 - Important game fish include brook and brown trout, bass, muskellunge, walleye, and pike.
 - Historically had large populations of migratory fish like American shad and eels, now mostly excluded by dams.
 - Invasive fish species are present and spreading.

- Vegetation:
 - About 67% of the watershed is forested, mostly oak forests.
 - Forest cover has increased compared to a century ago, when much was cleared for farming and timber.

- Invasive Species:
 - Pose significant threats to native plants and animals.
 - Management involves prevention, early detection, and control methods.

- Species of Concern:
 - 362 species of concern identified, including 227 plants, 90 invertebrates, and various animals.
 - 15 natural community types listed as important habitats.

- Conservation:
 - 363 Natural Heritage Areas identified in the watershed.
 - Various programs and initiatives aim to protect biodiversity and habitats.

- Challenges:
 - Chronic wasting disease in deer populations
 - Aquatic organism passage issues at road crossings
 - Climate change impacts on bird populations
 - Spread of invasive species

Cultural Resources

This chapter highlights the diverse recreational opportunities, natural resources, educational initiatives, and historical significance of the Juniata River watershed region.

- The watershed contains more than 620,000 acres of public lands for recreation, including local parks, state parks, state forests, and state game lands.

- There are 11 state parks in the watershed, offering activities like hiking, camping, picnicking, swimming, boating, and fishing.

- Portions of six state forests are located within the watershed, providing opportunities for hiking, hunting, fishing, horseback riding, and mountain biking.

- The watershed contains 36 state game lands totaling 242,593 acres, primarily for wildlife habitat management and hunting/trapping.

- Raystown Lake, the largest lake entirely in Pennsylvania, offers 8,300 acres of water and 21,000 acres of surrounding land for various recreational activities.
- The area has numerous trails and greenways, including water trails for activities like kayaking and canoeing.
- Fishing is plentiful in the watershed, with organizations working to increase public access to streams.
- Boating is popular, with over 300 public access areas managed by the Pennsylvania Fish and Boat Commission.
- Environmental education is emphasized in the region, with programs run by schools, conservation districts, and facilities like the Raystown Field Station and Shaver's Creek Environmental Center.
- The watershed area has a rich history, with counties established in the 18th and 19th centuries. There are 126 sites listed on the National Register of Historic Places within the watershed.
- Two Heritage Areas, Allegheny Ridge Corporation and Lincoln Highway Heritage Corridor, are located within the watershed, contributing to tourism and economic development.

Management Recommendations

Management recommendations are non-regulatory suggestions to maintain or improve the conditions that affect many aspects of life within the region. These recommendations are best used as a guide to conserving, restoring, or improving important watershed characteristics. They were compiled from municipal and public surveys, public meeting workshops, and key individual interview comments. No limitation to the number or types of issues, actions, approaches, partners or funding opportunities should be assumed, due to ever changing circumstances. Creativity in implementing the identified recommendations or developing additional suggestions is highly encouraged.

Table ES 1. Goals for Juniata Forward: Building on 25 Years of Conservation

Project Area Characteristic Goals

Goal 1-1: Proactively plan for future development.

Goal 1-2: Carefully plan development to ensure economic enhancement while preserving community character without adversely affecting quality of life.

Goal 1-3: Enhance transportation infrastructure.

Goal 1-4: Enhance support and services for emergency responders.

Goal 1-5: Increase communications and cooperation among municipalities and counties within the region to promote sharing of services and improve conditions collectively affecting watersheds.

Goal 1-6: Improve infrastructure for the community to be better able to access services.

Goal 1-7: Educate stakeholders about benefits of watershed protection and the use of best management practices.

Land Resource Goals

Goal 2-1: Reduce impacts caused by dirt and gravel roadways.

Goal 2-2: Preserve agricultural lands and culture for future generations.

Goal 2-3: Establish or enhance incentives for land protection and conservation practice implementation.

Goal 2-4: Identify, inventory, cleanup illegal dumpsites, and prosecute violators using illegal dumpsites.

Goal 2-5: Work with agricultural landowners to install best management practices on their farms to reduce impacts on livestock and area waterways.

Goal 2-6: Reclaim abandoned wells, mines, and quarries.

Goal 2-7: Protect ecologically significant lands.

Water Resource Goals

Goal 3-1: Implement current sub-watershed plans and initiatives.

Goal 3-2: Minimize impacts from stormwater.

Goal 3-3: Protect area waterways by promoting and planting riparian buffers.

Goal 3-4: Reduce the amount of erosion and sedimentation entering waterways.

Goal 3-5: Protect wetland habitats.

Goal 3-6: Minimize potential flooding damages by taking a proactive approach to managing floodplains.

Goal 3-7: Establish, maintain, or upgrade sewage treatment facilities

Goal 3-8: Promote conservation practices to reduce water consumption.

Goal 3-9: Protect waterways and wetlands that are designated as High Quality or Exceptional Value.

Goal 3-10: Maintain existing AMD treatment systems and investigate remediating untreated discharges.

Goal 3-11: Provide educational programs educating residents about impacts and pollution sources.

Goal 3-12: Establish, maintain, or upgrade water treatment facilities.

Biological Resource Goals

Goal 4-1 Reduce impacts caused by invasive species.

Goal 4-2: Identify and protect natural heritage areas.

Goal 4-3: Protect rare, threatened, and endangered species and their habitats.

Goal 4-4: Enhance aquatic habitats.

Goal 4-5: Develop, adopt, and implement management plans to protect forest and wildlife resources.

Goal 4-6: Implement best management practices to protect forest resources.

Goal 4-7: Identify and protect important habitats for plant and animal species.

Goal 4-8: Implement wildlife management practices to protect biodiversity.

Goal 4-9: Increase the use of native plants in landscaping and remediation projects.

Cultural Resource Goals

Goal 5-1: Establish, expand, and improve area trails.

Goal 5-2: Improve recreational facilities and ensure availability and access.

Goal 5-3: Enhance recreational opportunities for sportspeople and outdoor enthusiast.

Goal 5-4: Highlight and preserve local history within the region.

Goal 5-5: Encourage environmentally sound practices when operating recreational vehicles, and enforce existing laws to minimize intrusion on private lands.

Goal 5-6: Promote community involvement in conservation and educational initiatives.

CHAPTER 1 - PROJECT AREA CHARACTERISTICS

Location and Size

The Juniata River watershed is located in southcentral Pennsylvania, encompassing 3,400 square miles in all or parts of Bedford, Blair, Cambria, Centre, Franklin, Fulton, Huntingdon, Juniata, Mifflin, Perry, Snyder and Somerset Counties. The watershed is bordered by the West Branch of the Susquehanna on the north, the Susquehanna River on the east, the Potomac River to the south and the Ohio River to the west. Map 1-1 shows the location of the Juniata watershed in reference to the location of these larger basins.

The mainstem of the Juniata River forms at the confluence of two major tributaries: the Frankstown Branch of the Juniata River and the Little Juniata River. The Raystown Branch, the third major tributary to the Juniata River, joins the mainstem a few miles downstream of its origins. All three major tributaries originate on the eastern slope of the Allegheny Front, a major ridgeline that divides waters travelling eastward into the Chesapeake Bay from waters traveling westward into the Gulf of Mexico. The Raystown Branch is the largest tributary of the Juniata River at 120 miles long and drains 964 square miles of rough mountainous country. The



Photo 1-1. Juniata River at McVeytown, Mifflin County

Frankstown Branch is 45 miles long and drains 396 square miles. The Little Juniata is 32 miles long and drains 342 square miles. The mainstem of the Juniata River is over 100 miles long and empties in the Susquehanna River near Duncannon, Pennsylvania. Other major tributaries include Aughwick Creek, Kishacoquillas Creek, Standing Stone Creek and Tuscarora Creek. Map 1-2 shows the Juniata watershed and outlines the major sub-basins that comprise it. There are also over 400 named streams that make up the river basin drainage area, for a total of 6,560 total stream miles (Juniata Watershed Management Plan, 2000).

Governmental Bodies

The Juniata watershed encompasses parts of 12 counties, with a majority of the watershed in Bedford, Blair, Fulton, Huntingdon, Juniata, Mifflin and Perry Counties. Altogether, there are 200 municipal subdivisions. The Juniata River basin encompasses all or parts of the townships and boroughs listed below. The municipalities and counties that cover the watershed are listed below and shown in Map 1-3.

Bedford County (34)

Townships: Bedford, Bloomfield, Broad Top, Colerain, Cumberland Valley, East Providence, East St. Clair, Harrison, Hopewell, Juniata, Kimmel, King, Liberty, Lincoln, Monroe, Napier, Pavia, Snake Spring, South Woodbury, West Providence, West St. Clair, Woodbury

Boroughs: Bedford, Coaldale, Everett, Hopewell, Manns Choice, New Paris, Pleasantville, Rainsburg, Saxton, Schellsburg, St. Clairsville, Woodbury

Blair County (24)

Townships: Allegheny, Antis, Blair, Catharine, Frankstown, Freedom, Greenfield, Huston, Juniata, Logan, North Woodbury, Snyder, Taylor, Tyrone, Woodbury

Boroughs: Bellwood, Duncansville, Hollidaysburg, Martinsburg, Newry, Roaring Springs, Tyrone, Williamsburg

Cities: Altoona

Cambria County (8)

Townships: Cresson, Dean, Gallitzin, Portage, Reade, Summerhill, Washington

Boroughs: Tunnelhill

Centre County (10)

Townships: Ferguson, Gregg, Halfmoon, Harris, Huston*, Patton, Potter, Rush, Taylor, Worth*

Franklin County (3)

Townships: Fannett, Metal*, Peters*

Fulton County (9)

Townships: Belfast*, Brush Creek, Dublin, Licking Creek*, Taylor, Todd, Union*, Wells

Boroughs: Valley-Hi

Huntingdon County (48)

Townships: Barree, Brady, Carbon, Cass, Clay, Cromwell, Dublin, Franklin, Henderson, Hopewell, Jackson, Juniata, Lincoln, Logan, Miller, Morris, Oneida, Penn, Porter, Shirley, Smithfield, Springfield, Spruce Creek, Tell, Todd, Union, Walker, Warrior's Mark, West, Wood

Boroughs: Alexandria, Birmingham, Broad Top City, Cassville, Coalmont, Dudley, Huntingdon, Mapleton, Markelsburg, Mill Creek, Mount Union, Orbisonia, Petersburg, Rockhill, Saultillo, Shade Gap, Shirleysburg, Three Springs

Juniata County (17)

Townships: Beale, Delaware, Fayette, Fermanagh, Greenwood, Lack, Milford, Monroe, Spruce Hill, Susquehanna*, Turbett, Tuscarora, Walker

Boroughs: Mifflin, Mifflintown, Port Royal, Thompsontown

Mifflin County (16)

Townships: Armagh, Bratton, Brown, Decatur, Derry, Granville, Menno, Oliver, Union, Wayne

Boroughs: Burnham, Juniata Terrace, Kistler, Lewistown, McVeytown, Newton Hamilton

Perry County (22)

Townships: Buffalo, Centre, Greenwood, Howe, Jackson, Juniata, Liverpool, Miller, Northeast Madison, Oliver, Penn, Saville, Southwest Madison, Tyrone*, Toboyne, Tuscarora, Watts, Wheatfield

Boroughs: Bloomfield*, Duncannon*, Millerstown, Newport

Snyder County (3)

Townships: Spring*, West Beaver, West Perry

Somerset County (6)

Townships: Allegheny, Brothers Valley*, Ogle*, Shade*, Stoneycreek*

Boroughs: New Baltimore

**Less than one percent of the municipality is in the watershed*

Topography

The Juniata River basin lies within the Appalachian Ridge and Valley physiographic province. This region is comprised of alternating ridges and valleys generally oriented in a northeast to southwest direction. The western boundary of the watershed (its headwaters) is the Allegheny Front, which separates rivers that flow eastward towards the Susquehanna River and the Chesapeake Bay from the rivers that flow westward towards the Ohio River and eventually the Mississippi (National Park Service 2018).

The highest ridges of the Juniata River basin range upward of 3,000 feet above sea level, with the highest point being Blue Knob Ridge at 3,146 feet above sea level. The lowest point in the basin is at the confluence of the Juniata and Susquehanna Rivers at 340 feet above sea level. The average fall of the mainstem Juniata River is approximately 3.2 feet per mile, whereas in the headwaters it is much steeper. Several of the streams that drain the basin, the Little Juniata and Frankstown Branch in particular, cut diagonally through the ridges. However, the Raystown Branch follows along the steep slopes of Allegrippis Ridge and Terrace Mountain, containing many deeply entrenched meanders.

Soil Characteristics

Most of the rock found in the basin is sedimentary siliclastic and carbonate rock of alternating layers of sandstone, shale and limestone. These formations range from Ordovician through Pennsylvania time periods (500 million years to 290 million years ago). A Study by the U.S. Geological Survey (USGS) found that, in the ridge and Valley province, 87% of the underlying bedrock consists of siliclastic rocks (sandstone, shale and coal-bearing rocks) and 13% consists of carbonate rocks (limestone) (Risser and Siwiec 1996).

There are two broad groups of soils generally found in the Juniata River basin. The first can be associated with non-carbonate sedimentary rocks as a parent material, and the second can be associated with the parent materials of carbonate sedimentary rocks. The dominant soil series in the watershed include the following: Berks, Edom, Hagerstown, Hazleton, Creamer, Leck Kill, Morrison, Murril, Opequon, Pope, Weikert, and Westmoreland (NRCS 2024).

Mineral resources in the basin are somewhat abundant. There is one major area of coal in the watershed, located in the Broad Top region, where Bedford, Fulton and Huntingdon Counties adjoin. All of the stream that flow off the Broad Top Plateau eventually empty into the Raystown Branch of the Juniata. Coal in the Broad Top region is a semi-bituminous coal formed around 286 to 320 million years ago during the Mississippian and Pennsylvanian Periods. Three seams of the Pennsylvanian age have been mined extensively: the Fulton, Barnett, and Kelly seams. The Fulton is the deepest, with varying depths due to extensive folds and faulting in the region. All three of these seams are located in the Allegheny Formation (Groenendaal et al. 1981). Several other types of mineral extractions have occurred in the Juniata watershed, such as sand, shale, manganese, clay, limestone, zinc, lead, iron, aluminum, copper and Marcellus shale. Map 1-4 shows the location of oil and gas wells.

Climate

The mean annual temperature is 49.8° Fahrenheit. The winters are generally cold with average monthly temperatures below freezing in December, January and February. The coldest month is January, with a mean temperature of 27.4° F. The warmest month is July, with a mean temperature of 71.5° F. The mean annual precipitation is 39.7 inches (Model My Watershed 2023).

Socio-Economic Setting

The population of the watershed was estimated by summing all municipal populations. Municipalities with areas outside of the watershed had their populations adjusted. First, the proportion of municipal area within the watershed to total municipal area was calculated. This percentage was then multiplied by the total municipal population to derive an adjusted watershed population for that municipality. The population of the Juniata River basin is estimated to be approximately 324,917. The most populated city in the watershed is Altoona, Blair County, with more than 14% of the total basin population. Blair County itself contains nearly 39% of the total basin population. Between the 2010 census and 2020 census, the population of the watershed decreased by 2.6% (Table 1-1). Centre, Perry, and Snyder Counties are the exception to this and have had a slight increase in population.

Table 1-1. Population and Population Change

County	2010 Population	2020 Population	% Change in Population
Bedford	42,413	40,749	-3.92
Blair	126,662	122,250	-3.48
Cambria	792	712	-10.10
Centre	20,054	21,164	5.54
Franklin	892	869	-2.58
Fulton	3,487	3,354	-3.81
Huntingdon	45,913	44,092	-3.97
Juniata	23,438	22,413	-4.37
Mifflin	45,874	45,322	-1.20
Perry	14,293	14,588	2.06
Snyder	559	568	1.61
Somerset	540	461	-14.63
Total	324,917	316,542	-2.58

Source: U.S. Census

In 2023, the average unemployment rate in Pennsylvania was 3.4%, down from a decade-high of 16.2% during the Covid-19 pandemic. This unemployment rate is better than the pre-pandemic rate of 4.4%. Huntingdon County has the highest rate in the watershed at about 4.5%. Perry County had the lowest rate at 3.1% (PA Department of Labor and Industry 2024). In 2022, average per capita income across the seven counties was approximately \$50,633, considerably lower than the Pennsylvania average of \$64,279 (PA Department of Labor and Industry 2024). Table 1-2 lists the 2022 per capita income figures and the 2023 unemployment rates. Below is the list of largest employers for the seven major watershed counties. A list of all major employers throughout the watershed can be found in Appendix A.

Table 1-2. Income and Unemployment

County	Per Capita Income 2022	Unemployment Rate 2023 (%)
Bedford	\$49,468	3.6
Blair	\$55,101	3.5
Fulton	\$48,013	3.4
Huntingdon	\$45,049	4.5
Juniata	\$56,651	3.5
Mifflin	\$46,121	3.5
Perry	\$54,026	3.1
Watershed Average	\$50,633	3.6
Pennsylvania Average	\$64,279	3.4

Source: PA Department of Labor and Industry

Major Employers	
Wal Mart Associates, Inc.	Master Woodcraft Cabinetry LLC
UPMC Altoona	Geisinger-Lewistown Hospital
JLG Industries Inc.	H E Rohrer, Inc.
State Government	Sheetz Inc.

Environmental Justice

Environmental justice (EJ) embodies the principles that communities and populations should not be disproportionately exposed to adverse environmental impacts. Historically, minority and low-income Pennsylvanians have been forced to bear a disproportionate share of adverse environmental impacts (PA DEP¹ 2024). The Pennsylvania Environmental Justice Mapping and Screening Tool ([PennEnviroScreen](https://gis.dep.pa.gov/PennEnviroScreen/)) available online at gis.dep.pa.gov/PennEnviroScreen/. This state-of-the-art mapping tool will allow DEP to more accurately identify communities facing environmental justice issues using more than 30 environmental, health, and socioeconomic indicators. DEP has defined an EJ Area as any census tract where 20 percent or more individuals live at or below the federal poverty line, and/or 30 percent or more of the population identifies as a non-white minority, based on data from the U.S. Census Bureau and the federal guidelines for poverty (PA DEP¹ 2024). There are eight environmental justice areas in the Juniata River watershed (Map 1-5).

Land Use/Land Control

The Juniata watershed is approximately 67% forested, 22% agriculture, 8% developed, and the rest in water, grasslands, scrub, and barren land. Developed uses include residential, commercial, and industrial areas as well as utility lines, railroads, and highways. Map 1-6 shows land cover in the watershed.

Most of the forestland in the watershed exists on or near the mountain ridges. A very large portion of the watershed has been logged, with heavy logging occurring in the late 19th and early 20th centuries. Most of the wood was used for charcoal, log homes, and furniture. From 1890 to the mid-1920s, most forests were completely clear-cut. Therefore, although most of the area is forested, it represents secondary successional growth. Major managed forestlands exist in Rothrock, Bald Eagle, Tuscarora, and Buchanan State Forests.

Agriculture is the second largest land use (22%) in the watershed, and is generally confined to the valley bottoms. Approximately 21% of the watershed is considered “prime farmland” and approximately 37% is considered to be of “statewide importance.” Prime farmland is specifically designated by the U.S. Department of Agriculture as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses” (USDA 2015). Farmland of statewide importance is not as high quality as prime farmland, but it is nevertheless valuable agriculture land.

Historically, farming has been the largest sources of income for a majority of counties in the watershed. Markets range from fruit, grain, and dairy to poultry, hogs, and cattle. Agricultural land and services are decreasing throughout the watershed due to regional development. Of the seven main counties in the Juniata watershed, a 10% loss of farmland has been seen between 2012-2017 (USDA 2017).

Land use in the Commonwealth of Pennsylvania is primarily regulated at the local level. Municipalities manage growth primarily through comprehensive planning and local subdivision and zoning ordinances. Assistance is provided by county planning entities to help identify, create, and implement municipal policies. Of the 200 municipalities in the watershed, a total of 60 have zoning ordinances, 97 have comprehensive plans, and 156 have subdivision ordinances (Map 1-7). Appendix B lists land use planning tools for all municipalities.

Table 1-3. Land Use Controls

Land Use Control	2000 Land Use Regulations	2024 Land Use Regulations	% Change Land Use Regulations
Zoning	45	60	33%
Comprehensive Plan	63	97	54%
Subdivision	142	156	10%

Transportation

Major roads of the area include east-west access on Interstates 70 and 76, and US Routes 22, 30, and 322. North-south access includes Interstate 99, US Routes 220 and 522, and PA Routes 26 and 35. Map 1-8 shows the major transportation routes and airports in the watershed.

The only large public regional airport in the watershed is the Altoona-Blair County Airport located near Martinsburg. A number of smaller county and public/private airports are dotted throughout the watershed.

The main railroad line in the Juniata River watershed, the Pittsburgh Line of Norfolk Southern, follows the Juniata River upstream from its confluence with the Susquehanna River to the Little Juniata River and into Altoona. The rail line then heads west over the Allegheny Mountains near Portage.

Outstanding and Unique Features

Pennsylvania’s outstanding and unique scenic features have been identified by the Pennsylvania Topographic and Geological Survey reported in Environmental Geology Report 7 (Geyer and Bolles, 1979). The Juniata watershed contains 20 of these resources as identified below.

Bedford County

Blue Knob – Blue Knob is the second highest peak in Pennsylvania, and the highest peak in the Juniata River watershed. Located at 3,146 feet above sea level, this summit provides numerous lookouts located within the park. Along the base of the mountain, red siltstones and shales of the Catskill Formation (Devonian Age) may be seen along the roads and trails. Near the summit, outcrops of gray-green conglomerate of the same age are found. A balanced rock is also located near the summit.

Hogback Mountain – Located in West Providence Township, this summit is located along the Raystown Branch of the Juniata – four miles northeast of Everett. This narrow sliver of red shale, siltstone, and sandstone are of Devonian age, Catskill Formation. This summit was created by a deep meander of the Raystown Branch of the Juniata River.

Morrison Cove Overlook – Located in South Woodbury Township on PA Route 869, this breathtaking view overlooks the Ridge and Valley province.

Blair County

Arch Spring and Tytoona Cave – Located in Tyrone Township, this large sinking spring flows into a collapsed cave. The water ponds up in the center and has a natural arch over it. This arch was part of the former cave system, composed of the Ordovician Loysburg formation. This spring is the eighth largest spring in Pennsylvania.



Photo 1-2. Tytoona Cave in Blair County PA

Celestine Locality – Located in Antis Township, near Bellwood, this outcrop contains irregular layers of Celestine in hard calcareous shale of the Tonoloway Formation (Silurian age). This locality is where the mineral was first discovered, named, and described.

Chimney Rocks – Located in Blair Township adjacent to PA Route 36 near Hollidaysburg, these vertical beds of Silurian Tonoloway Limestone form three finger-like projections skyward. Chimney Rocks Park provides a view from the top of Chimney Rocks.

Horseshoe Curve – Located in Logan Township, the Horseshoe Curve is of historical and geologic significance. The finest display of Late Paleozoic rocks along the Allegheny Front can be found along the Pittsburgh Line of Norfolk Southern tracks. This rock section extends for more than 45,000 feet, and exposes mostly shales and sandstone that range from the upper Devonian Lock Haven Formation, 7,000 feet up to the base of the Pennsylvania Conemaugh Group. Historically, the Horseshoe Curve is an engineering marvel, built in 1854 by the Pennsylvania Railroad. This section of railroad traverses the Allegheny Front. This large semicircle track has become a scenic wonder of the world. This track also overlooks the Kittanning Reservoir and Lake Altoona.

Sinking Valley Lead-Zinc Mines/Fort Roberdeau – Located in Tyrone Township, these mines served as an active lead and zinc mine to supply bullets for the American Revolutionary War. Active mining began in 1778, and General Roberdeau built the fort to protect lead miners from the Native Americans. The fort has been reconstructed on the original site.

Wopsonnock Lookout – Located six miles west of Altoona in Logan Township, this overlook provides a beautiful view from the Allegheny Front of the Ridge and Valley province to the east. The elevation is 2,580 feet above sea level. The bedrock here is a Burgoon Sandstone of Mississippian age, which is quite weather resistant.

Huntingdon County

Big Kettle – Located in Jackson Township, five miles northwest of Kishacoquillas Valley, this plunging anticline is made up of Tuscarora Quartzite of Silurian Age. This area has a large kettle-like formation, known as Big Kettle, on the lee side of the anticline. The Little Kettle and Treaster Kettle are also nearby. Chestnut Spring and Ross Spring flow from the base of the quartzite ridges.

Trough Creek Gorge – Trough Creek State Park is located two miles north of PA Route 994 near Newburg. This state park provides many deeply entrenched streams that follow horizontally bedded sandstones, siltstones, and conglomerates of the Pocono Formation (Mississippian age). The gorge has many waterfalls, spectacular cliffs, and three interesting geological features in the Balanced Rock, Ice Cave, and the Copperas Rock.



Photo 1-3. Balanced Rock at Trough Creek State Park.
Photo by B. Diehl.

Pulpit Rocks – The Pulpit Rocks are northwest of Huntingdon between the State Correctional Institute and Alexandria. These sandstone pillars of Devonian age have eroded through time to form isolated pillars. Juniata College is the current landowner of this area.

Butler Knob – This “knob” of weather resistant quartzite, located west of Shirleysburg on Jacks Mountain, is one of the highest points in Huntingdon County, and provides an excellent view of the Appalachian Mountain topography.

Juniata County

Hawstone Overlook – Located in Milford Township, this overlook is located on PA Route 333, east of Hawstone village. This overlook provides an excellent view of the Lewistown Narrows and the Juniata River between Blue Mountain and Shade Mountain.

Concord Narrows – This water gap through Tuscarora Mountain is located at the intersection of Juniata, Huntingdon, and Franklin Counties on PA Route 75. The gap is narrow and scenic with Tuscarora quartzite of Silurian Age.

Mifflin County

Mammoth Spring – Located in Armagh Township in the Kishacoquillas Valley, this spring is the third largest in Pennsylvania and is the headwaters of Honey Creek. From the head of the cave, the spring rushes through a short and primitive gorge for the first several hundred yards of Honey Creek. Above the mouth of the spring is a dry cavern. In the early 1920’s, these two caverns were open to the public and called Alexander Caverns. Because the caves have experienced significant vandalism, the current landowners have sealed the dry cave entrance, and the wet cave entrance is forbidden.

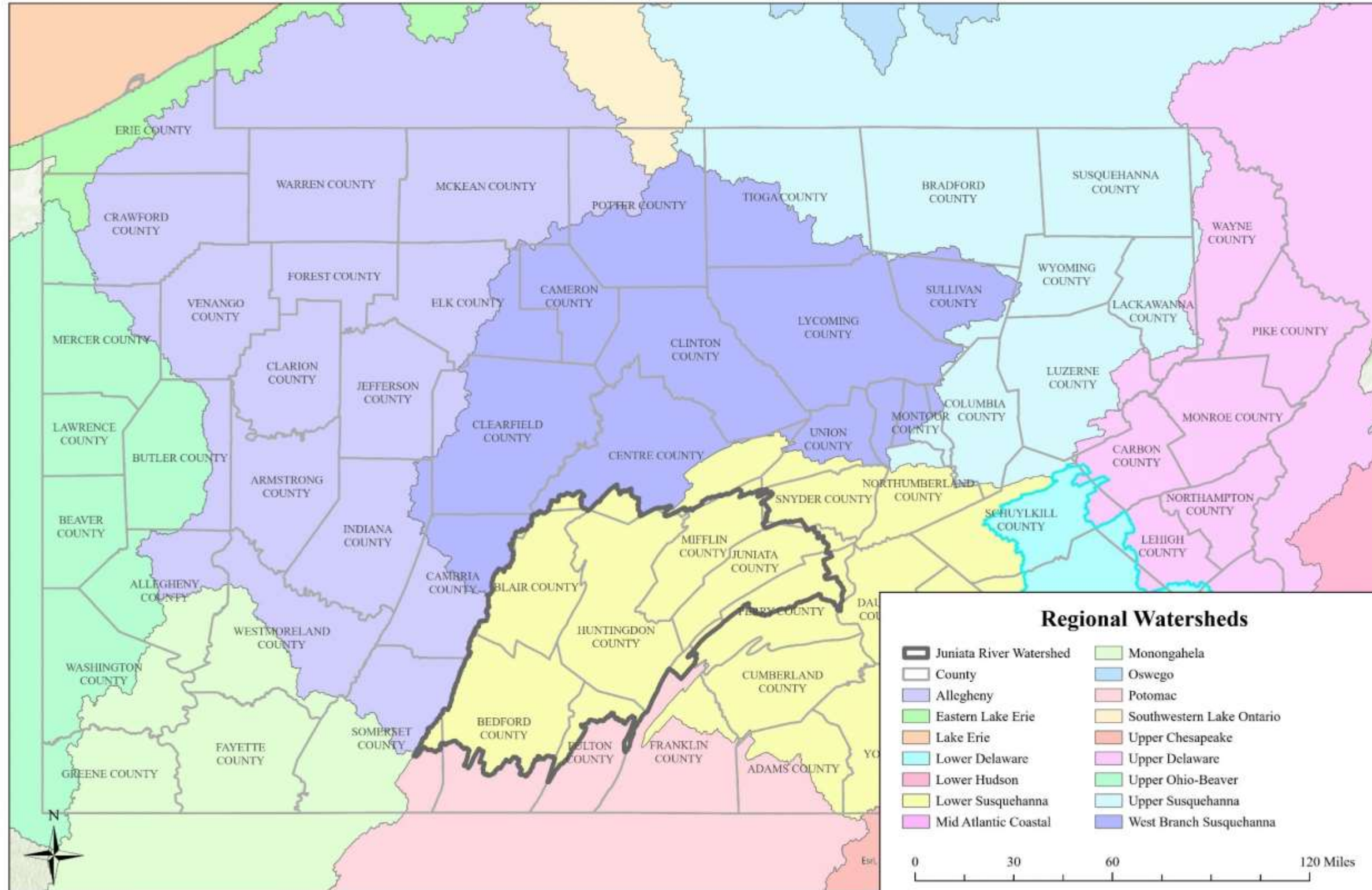
Prayer Rock – Located at the crest of Jacks Mountain in Menno and Oliver Township, this overlook provides a magnificent view of Kishacoquillas Valley. Massive outcrops of steeply dipping Tuscarora Quartzite form the ridge. The Mifflin County Federation of Men’s Bible Classes erected a monument on this site.

Perry County

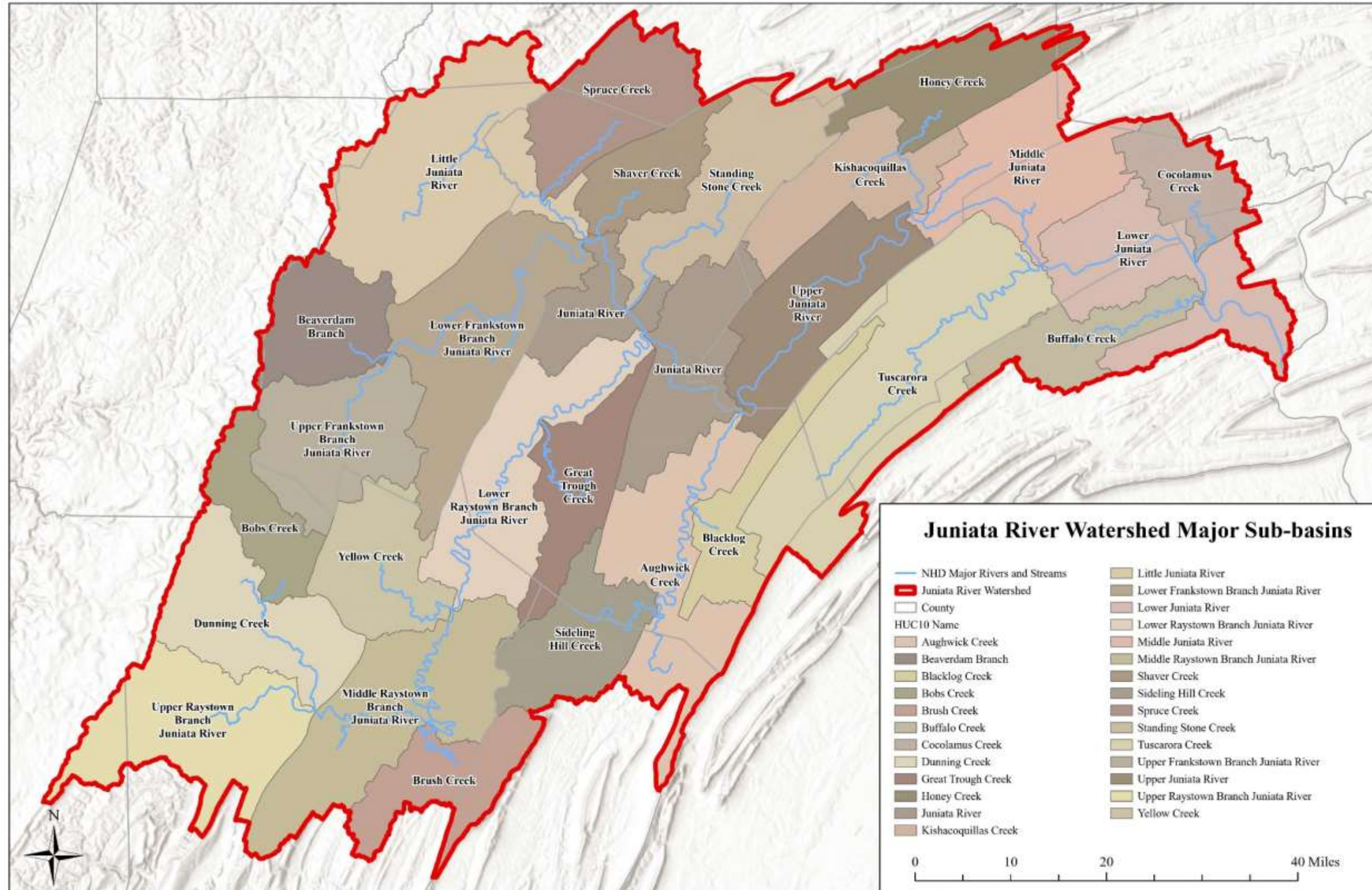
Juniata River Overlook – Located along US Route 22/322 seven miles north of Amity Hall, this overlook is extremely picturesque as the river meanders through a valley of Devonian red shales.

Big Knob – Located three miles southeast of East Waterford, this ridge point is located in the Tuscarora State Forest. It is composed of resistant Tuscarora Quartzite of Silurian Age. Little Knob is a similar feature nearby.

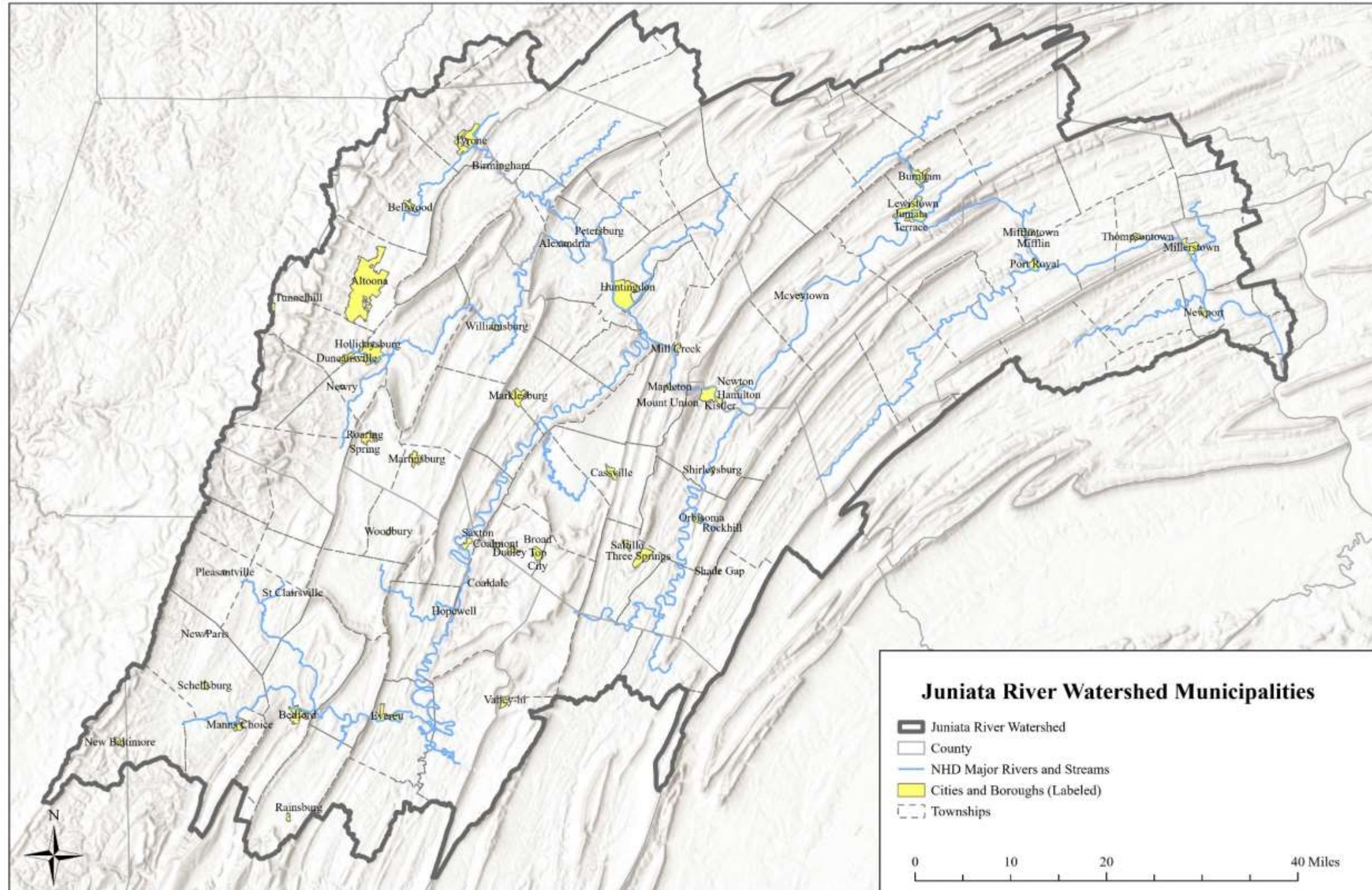
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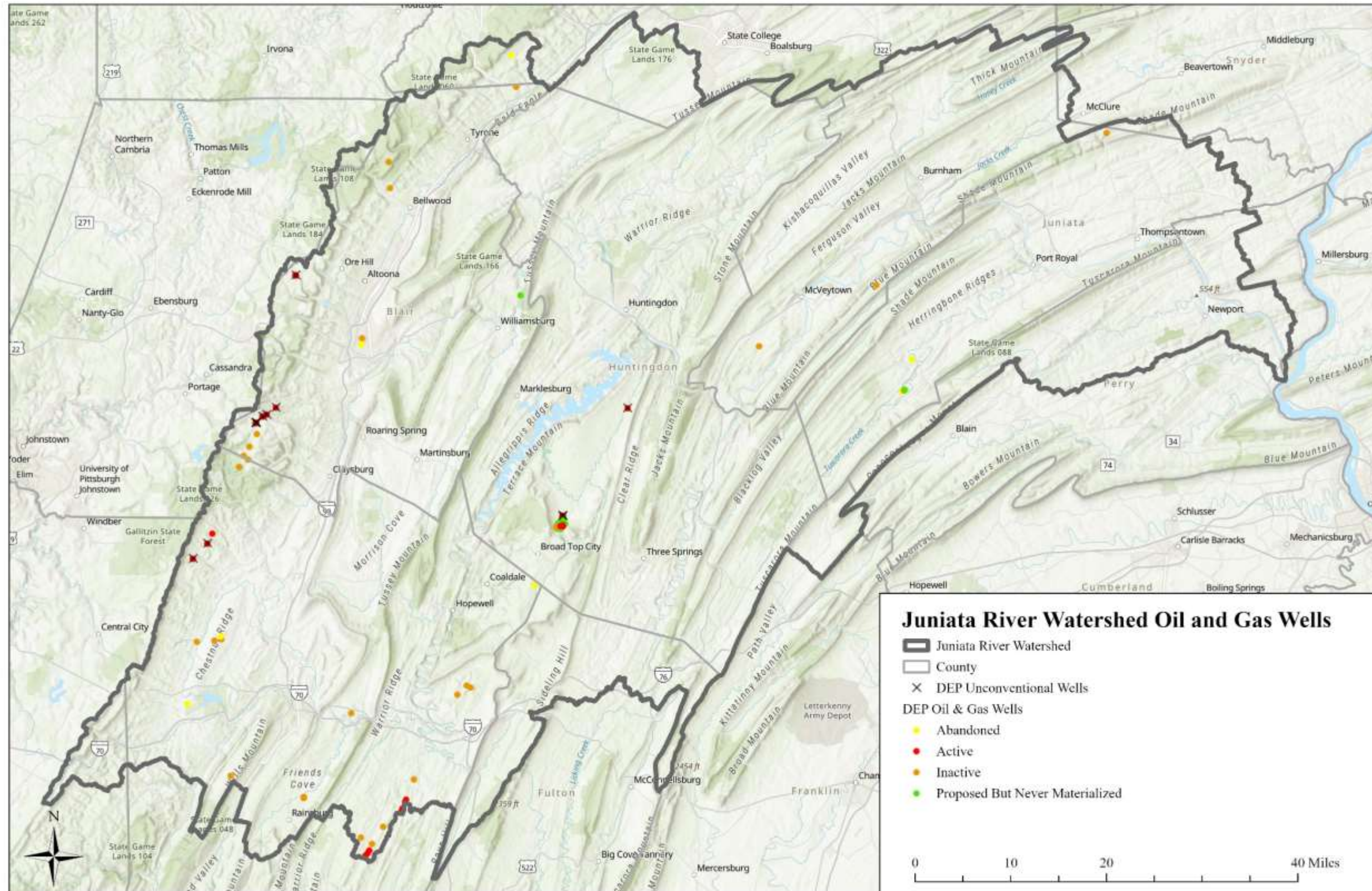
Map 1-1. Juniata River Watershed Location within the Region



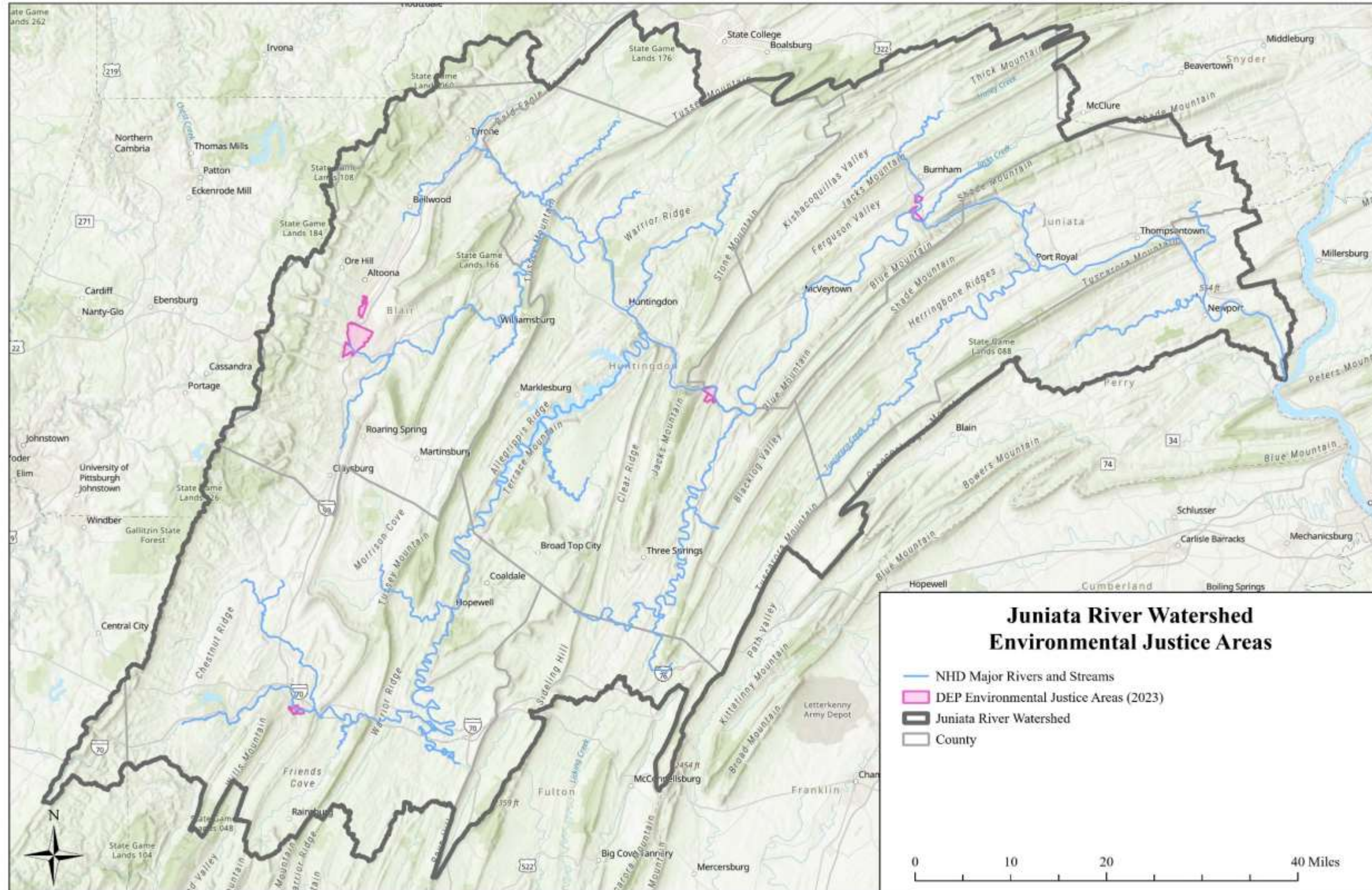
Map 1-2. Sub-Basins of the Juniata River Watershed



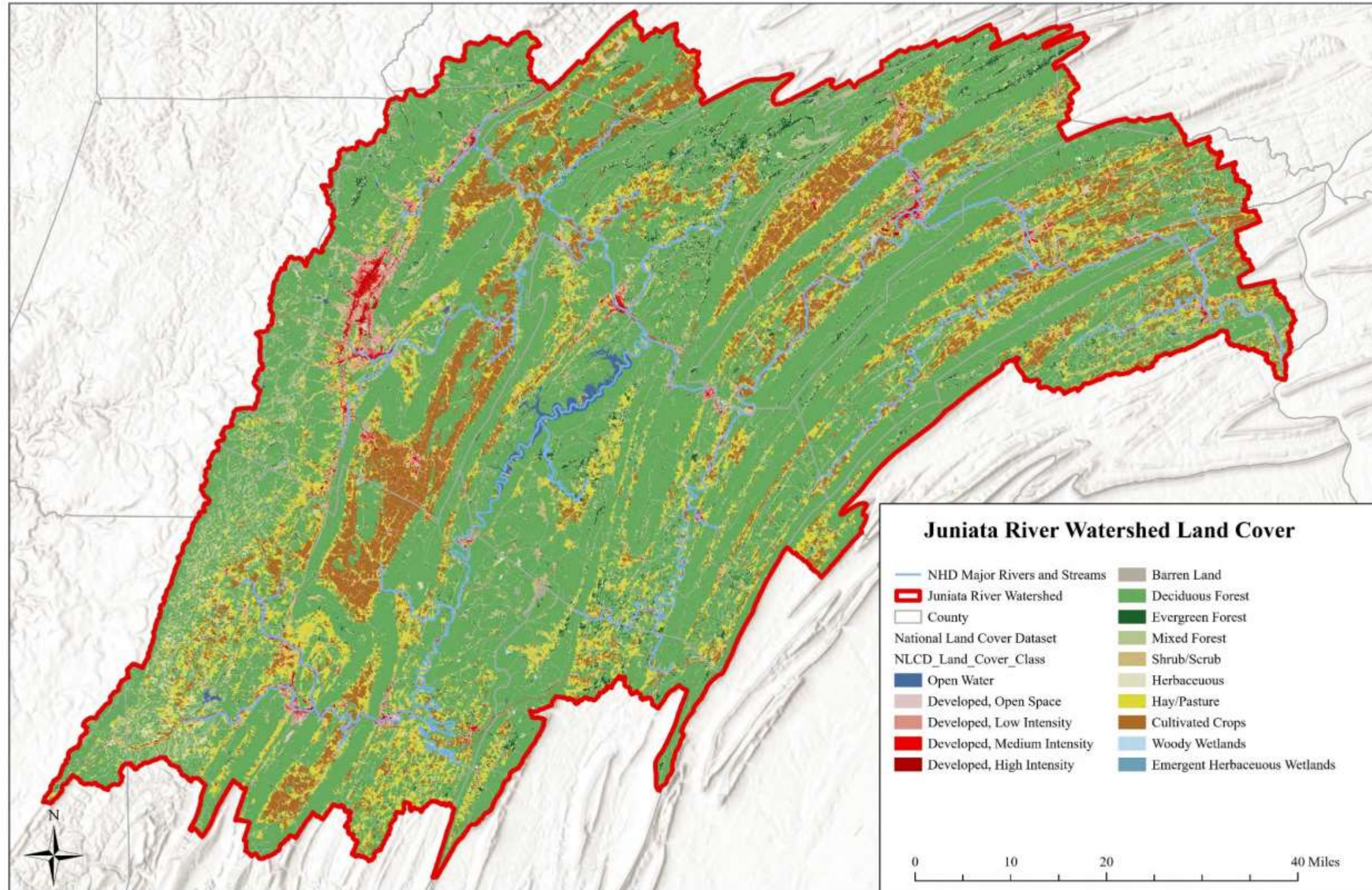
Map 1-3. Municipalities within the Juniata River Watershed



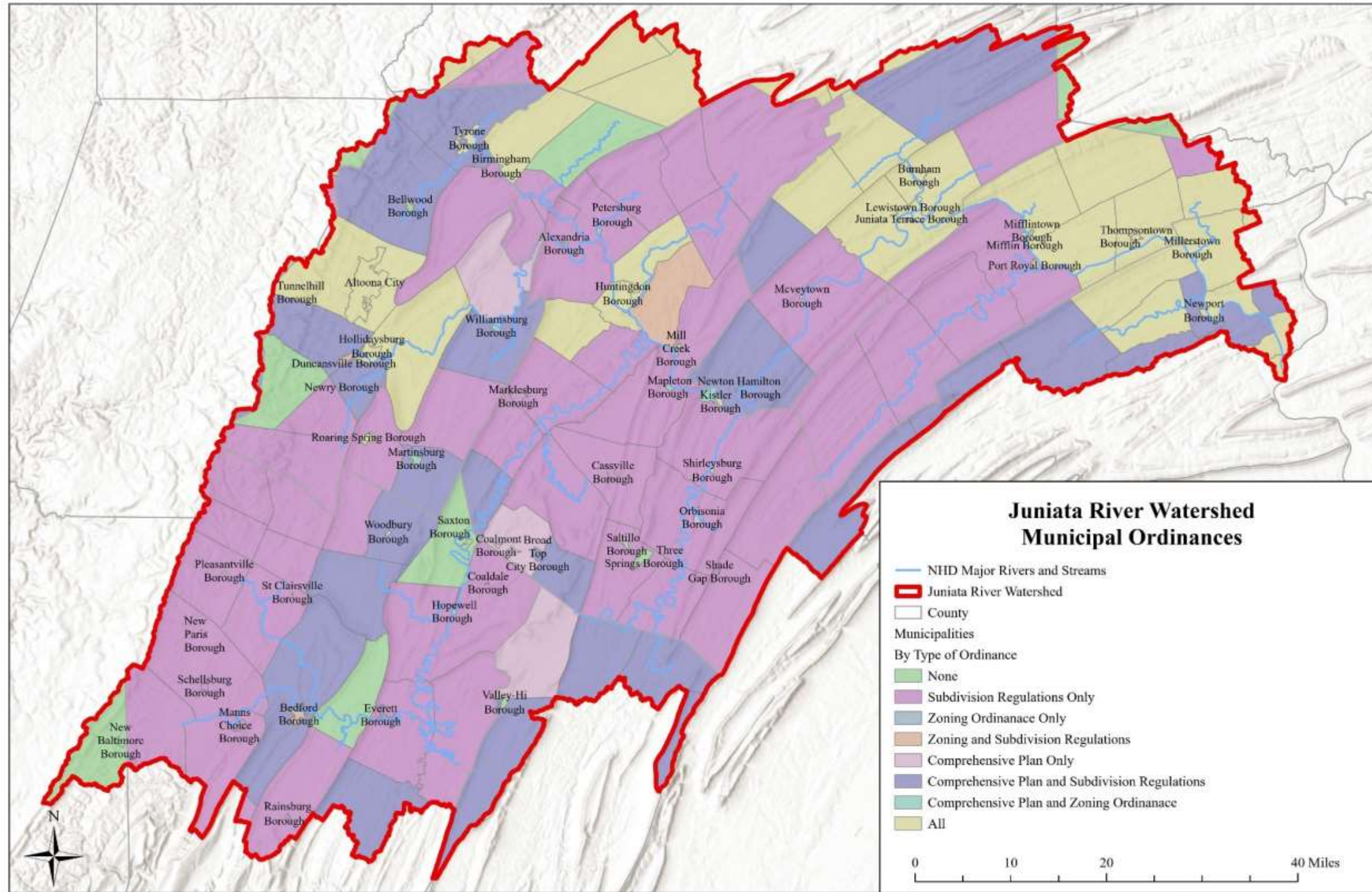
Map 1-4. Juniata River Watershed Oil and Gas Wells



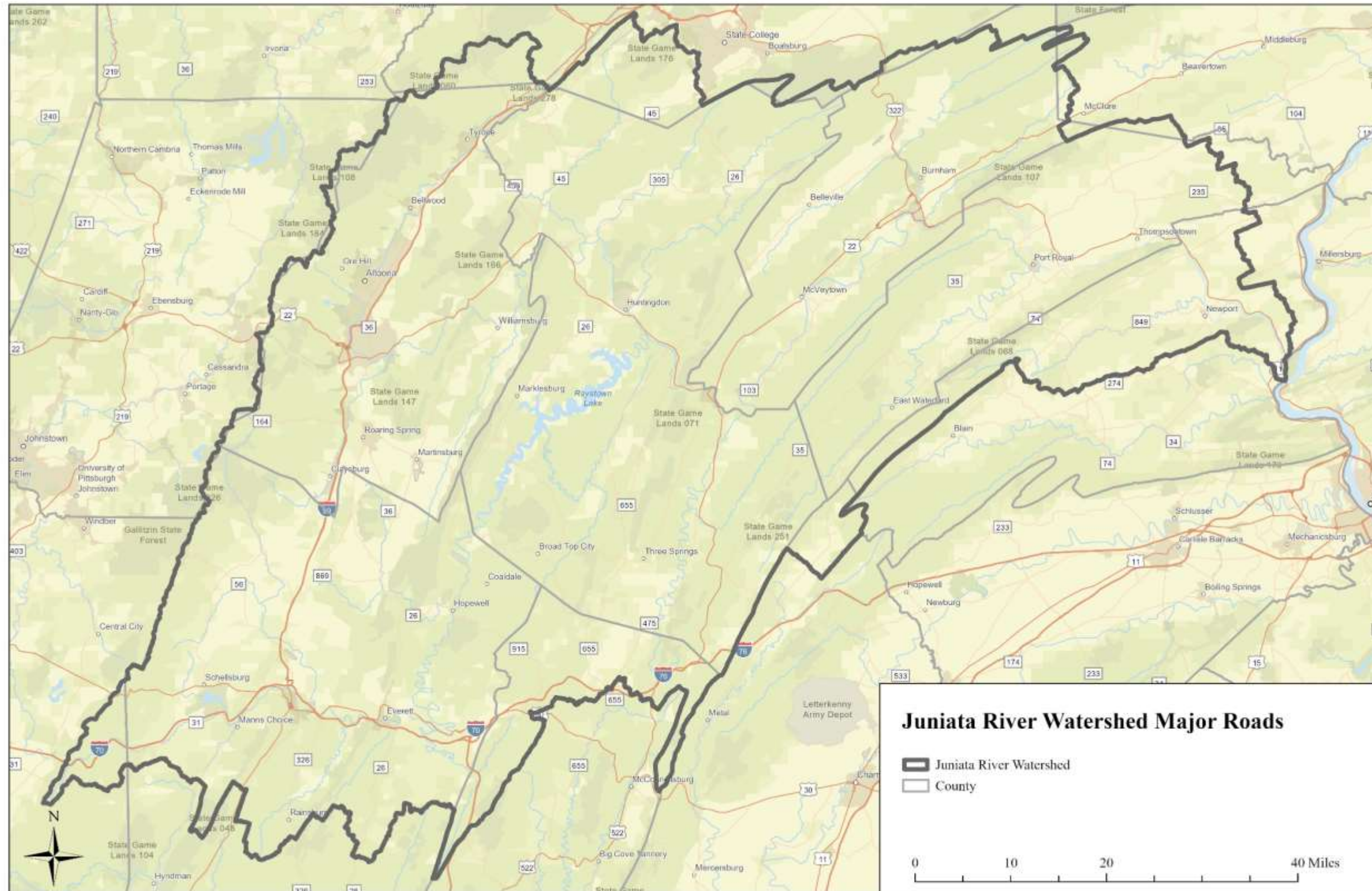
Map 1-5. Environmental Justice Areas within the Juniata River Watershed



Map 1-6. Juniata River Watershed Land Cover



Map 1-7. Municipal Ordinances in the Juniata River Watershed



Map 1-8. Major Roads of the Juniata River Watershed

CHAPTER 2 – ISSUES & CONCERNS

Public Participation

Public participation is one of the most important components of the planning process. The Juniata River watershed spans 3,400 square miles and more than 200 municipalities. Multiple venues for public input were utilized throughout the planning process: public meetings, community events, governmental meetings, and online public and municipal surveys. Public meetings and the online survey were promoted via social media, flyers, direct email, mailings and signs (Figure 2-1). Each type of public input venue sought to gather input from local residents.



Figure 2-1. Public Participation

Public Meetings and Events

Numerous public meetings and events were held to gather input from the community. A flyer advertising the meetings was posted on social media, given to partners, and posted at businesses. Below is a snapshot of each meeting and event.

Nature Works Park Earth Day Festival – April 22, 2023

Spoke to twenty-one people about the update to the Juniata Watershed Management Plan. The festival was organized by the Blair County Conservation District. Handed out flyers advertising the public meetings and online survey (Figure 2-2).

Public Meetings

There were 14 participants at the Marzoni's public meeting, 12 participants at the Friendship Fire Hall meeting, and three participants at the Saxton Fire Hall meeting. At each meeting, a map of the watershed was on display for folks attending the meetings. A



Figure 2-2. Marzoni's Public Meeting

presentation was given outlining the planning process and then a visioning session was held to gather the communities input on positive aspects of the watershed, areas needing improvement in the watershed, and project ideas. Participants were also given the flyer with the QR code for the online survey. Positive comments expressed by the participants include the natural beauty of the area and the access to recreational opportunities. Areas needing improvement included solar farms displacing farm land and development increase near sensitive areas. For a full account of the visioning session results from the public meetings, see Appendix C.

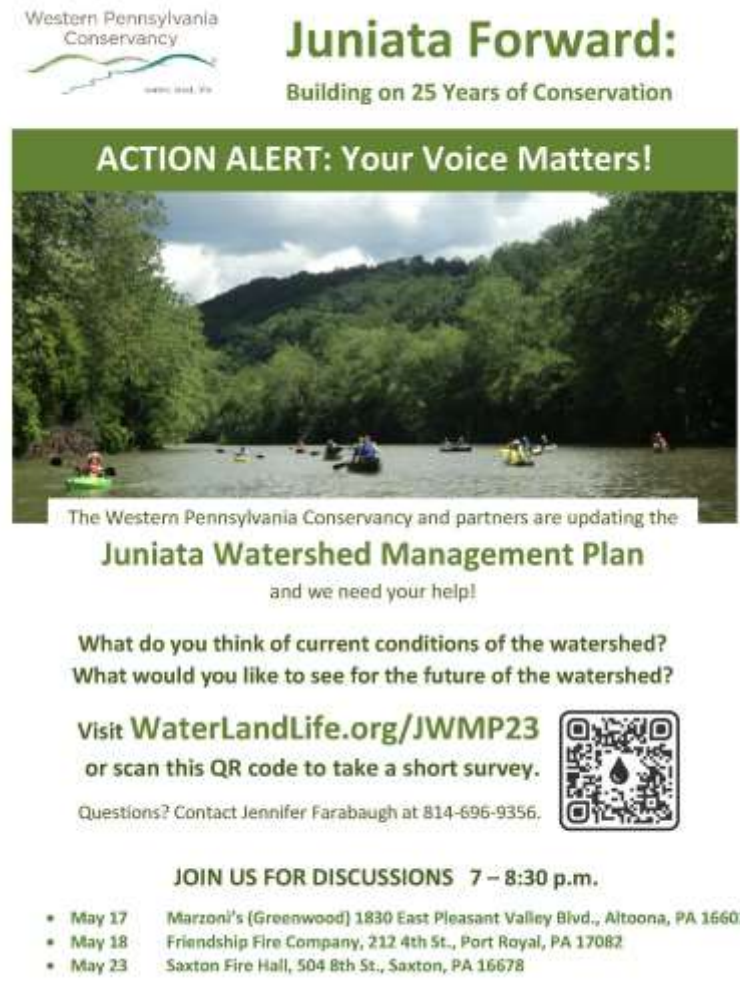


Figure 2-3. Public Meeting and Survey Flyer

Governmental Meetings

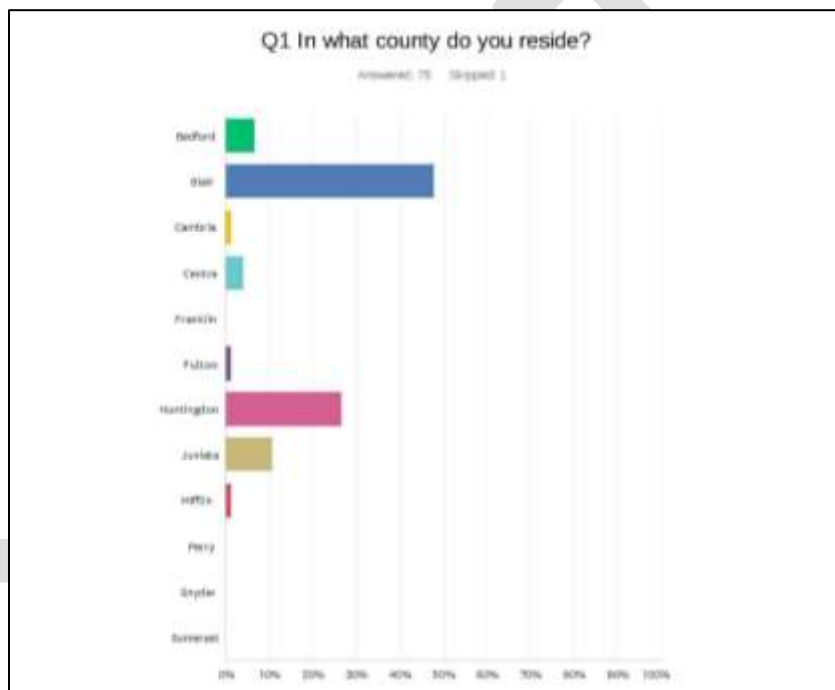
Two meetings were held with governmental organizations. At the Blair County Planning Commission meeting, there were 14 people in attendance. At the Blair County Intermunicipal Stormwater Committee meeting, there were 17 people in attendance. These two meetings had participants ranging from township supervisors, farmers, and local constituents. At these meetings, a presentation about the planning process was given and then participants were invited to provide input. Some of the positive aspects about the watershed given at these meetings was that farmers are working more with

governmental agencies to improve conservation practices on their properties. Other participants mentioned that the amount of water trails for canoeing and kayaking are a benefit to the area. Areas needing improvement included the need to combat invasive species and that natural heritage inventories need to be updated.

Online Survey

WPC developed a 10-question online survey to allow residents to express their thoughts about the resources in the watershed; 76 surveys were completed.

The following highlights do not express every survey question. There were also open-ended questions where participants were allowed to write-in three things they like about the area, three things that they don't like about the area, and three suggestions to improve the watershed.



Juniata Forward: Building on 25 Years of Conservation		
ANSWER CHOICES	RESPONSES	
Bedford	6.67%	5
Blair	48.00%	36
Cambria	1.33%	1
Centre	4.00%	3
Franklin	0.00%	0
Fulton	1.33%	1
Huntingdon	26.67%	20
Juniata	10.67%	8
Mifflin	1.33%	1
Perry	0.00%	0
Snyder	0.00%	0
Somerset	0.00%	0
TOTAL		75

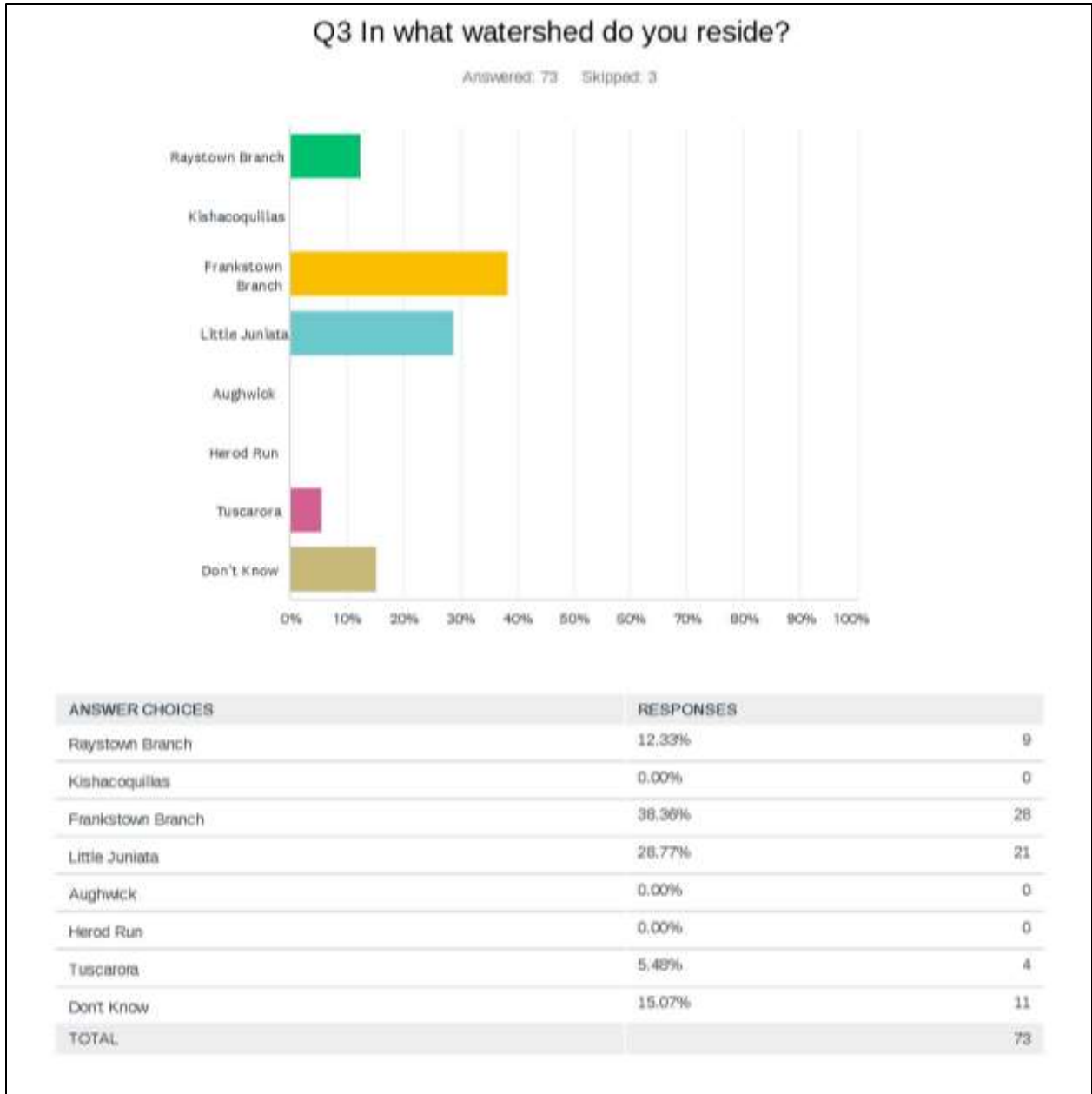
Q2 In what municipality do you reside?

Answered: 75 Skipped: 1

#	RESPONSES	DATE
1	Bedford Borough	8/27/2023 9:43 AM
2	Walker	8/26/2023 10:26 AM
3	Todd Township	8/24/2023 8:45 PM
4	Holidaysburg Borough	8/24/2023 7:32 PM
5	Holidaysburg	8/24/2023 4:53 PM
6	Porter	8/24/2023 2:37 PM
7	Mifflintown	8/24/2023 2:33 PM
8	Frankstown TWP	8/24/2023 11:34 AM
9	Antis Twp	8/24/2023 8:42 AM
10	Halfmoon Township	8/21/2023 11:44 PM
11	Frankatown Township	8/21/2023 10:58 AM
12	Walker Township	8/17/2023 3:32 PM
13	Tyrone Borough	8/17/2023 11:52 AM
14	Altoona	8/1/2023 8:24 AM
15	Logan Township	7/31/2023 2:30 PM
16	Pennsylvania Furnace	7/6/2023 3:22 PM
17	Oneida township	7/4/2023 8:01 AM
18	Spruce Creek	7/3/2023 9:02 AM
19	Juniata two,	7/3/2023 7:30 AM
20	Walker Twp	7/2/2023 5:45 PM
21	Bellwood	7/2/2023 3:44 PM
22	Porter Township	5/31/2023 9:19 AM
23	Holidaysburg	5/29/2023 8:26 AM
24	Shade gap	5/29/2023 11:25 PM
25	Tyrone borough	5/28/2023 11:13 AM
26	Taylor	5/26/2023 8:42 PM
27	Miller	5/25/2023 2:48 PM
28	Huntingdon Borough	5/25/2023 9:53 AM
29	Frankstown Township	5/25/2023 10:45 PM
30	Frankstown	5/25/2023 11:28 AM
31	Lack Township	5/24/2023 9:44 PM
32	Frankstown	5/24/2023 8:00 PM
33	Union twp	5/24/2023 6:48 PM

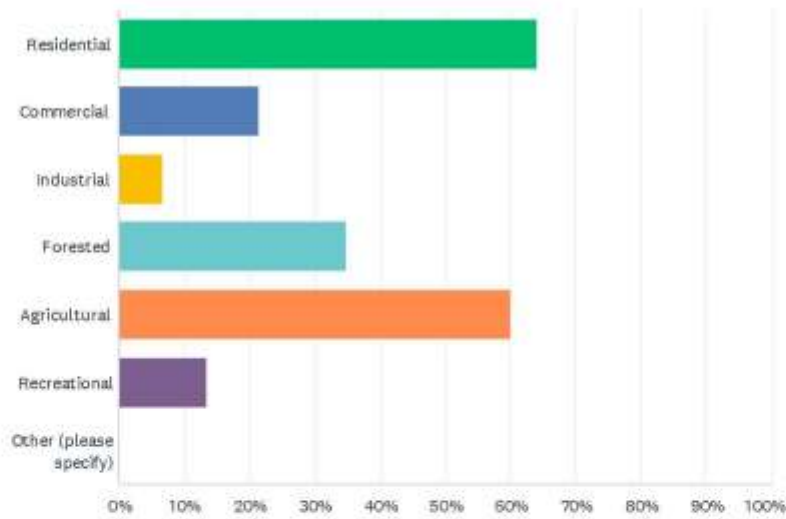


34	Pavia	5/24/2023 5:48 PM
35	Logan	5/24/2023 4:55 PM
36	KIMMEL TOWNSHIP	5/24/2023 4:52 PM
37	Altoona	5/24/2023 4:00 PM
38	Snyder Township	5/24/2023 3:53 PM
39	Wayne Township	5/24/2023 2:08 PM
40	Morris Township	5/24/2023 1:40 PM
41	Altoona	5/24/2023 12:35 PM
42	Holidaysburg	5/24/2023 12:32 PM
43	Snakesprings	5/24/2023 12:11 PM
44	Holidaysburg	5/24/2023 11:51 AM
45	Williamsburg	5/24/2023 9:45 AM
46	Altoona	5/24/2023 9:25 AM
47	Blair Twp.	5/24/2023 9:11 AM
48	Brady twp	5/24/2023 9:09 AM
49	Ashtville	5/24/2023 8:58 AM
50	Logan twp	5/24/2023 8:38 AM
51	Altoona	5/24/2023 8:37 AM
52	Frankstown	5/24/2023 8:32 AM
53	Freedom township	5/24/2023 8:31 AM
54	Holidaysburg Borough	5/24/2023 8:30 AM
55	Tyrone Township	5/24/2023 7:58 AM
56	Blair Township	5/24/2023 7:46 AM
57	Spruce Creek Township	5/24/2023 7:24 AM
58	Ardanheim	5/24/2023 5:58 AM
59	Smithfield	5/24/2023 5:56 AM
60	penn township	5/23/2023 10:07 PM
61	Altoona	5/23/2023 9:33 PM
62	Licking Creek Township	5/23/2023 9:23 PM
63	Franklin	5/23/2023 8:44 PM
64	Allegheny Township	5/19/2023 8:44 AM
65	Beale Twp.	5/18/2023 7:02 PM
66	Holidaysburg	5/18/2023 3:31 PM
67	Thompsontown	5/18/2023 3:06 PM
68	Bedford township	5/17/2023 2:51 PM
69	Porter Township	5/12/2023 8:05 PM
70	Juniata	5/10/2023 3:16 PM
71	Mifflintown	4/25/2023 9:06 PM
		
72	Huntingdon Borough	4/20/2023 8:36 AM
73	City of Altoona	4/19/2023 9:32 AM
74	Walker Twp.	3/30/2023 10:15 AM
75	State College	2/16/2023 10:29 AM



Q4 What do you think are the two most common land uses in your area?

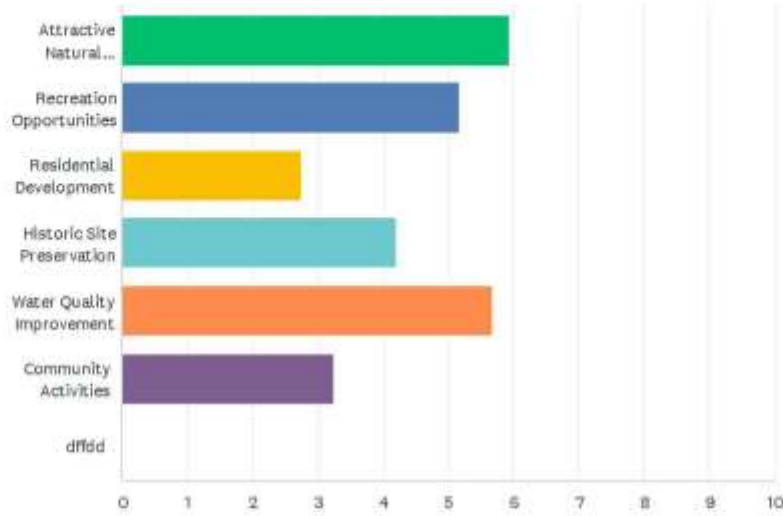
Answered: 75 Skipped: 1



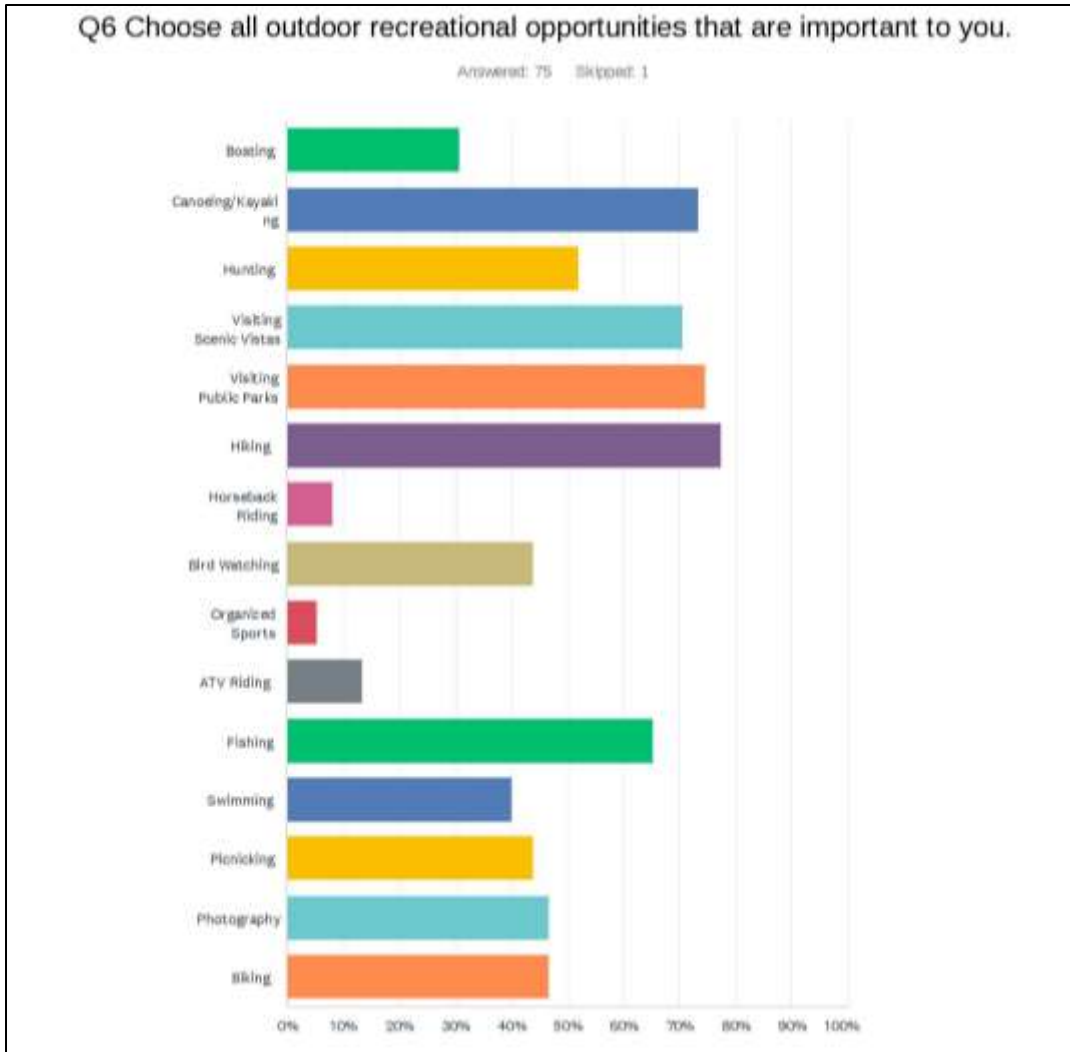
ANSWER CHOICES	RESPONSES	
Residential	64.00%	48
Commercial	21.33%	16
Industrial	6.67%	5
Forested	34.67%	26
Agricultural	60.00%	45
Recreational	13.33%	10
Other (please specify)	0.00%	0
Total Respondents: 75		

Q5 In order of importance, please rank the following list in regard to your future vision of the watershed.

Answered: 76 Skipped: 0



	1	2	3	4	5	6	7	TOTAL	SCORE
Attractive Natural Settings	34.21% 26	38.16% 29	19.74% 15	5.26% 4	0.00% 0	2.63% 2	0.00% 0	76	5.93
Recreation Opportunities	17.11% 13	30.26% 23	25.00% 19	11.84% 9	11.84% 9	3.95% 3	0.00% 0	76	5.17
Residential Development	3.95% 3	1.32% 1	5.26% 4	6.58% 5	22.37% 17	60.53% 46	0.00% 0	76	2.76
Historic Site Preservation	1.32% 1	7.89% 6	32.89% 25	32.89% 25	18.42% 14	6.58% 5	0.00% 0	76	4.21
Water Quality Improvement	43.42% 33	18.42% 14	13.16% 10	15.79% 12	6.58% 5	2.63% 2	0.00% 0	76	5.68
Community Activities	0.00% 0	3.95% 3	3.95% 3	27.63% 21	40.79% 31	23.68% 18	0.00% 0	76	3.24
dfdd	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0	0.00



ANSWER CHOICES	RESPONSES	
Boating	30.67%	23
Canoeing/Kayaking	73.33%	55
Hunting	52.00%	39
Visiting Scenic Vistas	70.67%	53
Visiting Public Parks	74.67%	56
Hiking	77.33%	58
Horseback Riding	8.00%	6
Bird Watching	44.00%	33
Organized Sports	5.33%	4
ATV Riding	13.33%	10
Fishing	66.67%	49
Swimming	40.00%	30
Picnicking	44.00%	33
Photography	46.67%	35
Biking	46.67%	35
Total Respondents: 75		

Q7 List three things you like about the area in which you live.

Answered: 68 Skipped: 0

ANSWER CHOICES	RESPONSES
1.	100.00% 68
2.	97.06% 66
3.	89.71% 61

#	L	DATE
1	Rural setting	8/27/2023 9:43 AM
2	Rural	8/26/2023 10:26 AM
3	Proximity to public land	8/24/2023 8:45 PM
4	natural beauty	8/24/2023 7:32 PM
5	Trees	8/24/2023 4:53 PM
6	Natural Setting	8/24/2023 2:37 PM
7	landscape	8/24/2023 2:33 PM
8	Plenty of "wild" areas	8/24/2023 11:34 AM
9	Mountains	8/24/2023 8:42 AM
10	Rural aspect of the area	8/21/2023 11:44 PM
11	It's quiet and secluded - even for Hollidaysburg.	8/21/2023 10:58 AM
12	Rural	8/17/2023 3:32 PM
13	Natural setting.	8/17/2023 11:52 AM
14	Quiet neighborhood	8/1/2023 8:24 AM
15	The nature that remains is beautiful	7/31/2023 2:30 PM
16	Parks close by	7/6/2023 3:22 PM
17	forests	7/4/2023 8:01 AM
18	Quiet	7/3/2023 9:02 AM
19	Privacy	7/3/2023 7:30 AM
20	Lack of development	7/2/2023 5:45 PM
21	Forests	5/31/2023 9:19 AM
22	Scenic	5/29/2023 8:26 AM
23	Quiet	5/28/2023 11:25 PM
24	It's not overdeveloped	5/28/2023 11:13 AM
25	Fishing	5/26/2023 8:42 PM
26	Fishing	5/26/2023 2:48 PM
27	Recreation Opportunities	5/26/2023 9:53 AM
28	Natural setting	5/25/2023 10:45 PM

29	Fly fishing	5/25/2023 11:28 AM
30	forests	5/24/2023 9:44 PM
31	wild life	5/24/2023 8:00 PM
32	Greenspace	5/24/2023 5:48 PM
33	Quiet	5/24/2023 4:55 PM
34	RURAL NATURE	5/24/2023 4:52 PM
35	Nothing	5/24/2023 4:00 PM
36	No big cities	5/24/2023 3:53 PM
37	Rural	5/24/2023 2:08 PM
38	Attractive setting	5/24/2023 1:40 PM
39	Access to Rivers	5/24/2023 12:32 PM
40	A lot of trees.	5/24/2023 12:11 PM
41	lots of fishing opportunitys	5/24/2023 11:51 AM
42	mountains	5/24/2023 9:11 AM
43	Natural beauty	5/24/2023 9:09 AM
44	Rivers	5/24/2023 8:58 AM
45	Vicinity to forest	5/24/2023 8:38 AM
46	vicinity to state parks and rails to trails/hiking trails	5/24/2023 8:37 AM
47	Lower population density	5/24/2023 8:32 AM
48	rual	5/24/2023 8:31 AM
49	Open space	5/24/2023 8:30 AM
50	wildlife	5/24/2023 7:58 AM
51	Many places to fish	5/24/2023 7:46 AM
52	Few people	5/24/2023 7:24 AM
53	good fishing	5/24/2023 5:58 AM
54	Waterways	5/24/2023 5:56 AM
55	I. Juniata catch and release	5/23/2023 10:07 PM
56	Close to the Little J	5/23/2023 9:33 PM
57	undeveloped	5/23/2023 9:23 PM
58	Remote but still close to town.	5/23/2023 8:44 PM
59	Neighbors not too close	5/19/2023 6:44 AM
60	close relation to urban areas	5/18/2023 3:31 PM
61	Rural	5/18/2023 3:06 PM
62	Fishing	5/12/2023 6:05 PM
63	Waterways	5/10/2023 3:15 PM
64	River	4/25/2023 8:06 PM
65	Access to varied outdoor recreational opportunities.	4/20/2023 8:36 AM
66	Convenience	4/19/2023 9:32 AM

67	Rural Living	3/30/2023 10:15 AM
68	lots of isolated natural areas	2/16/2023 10:29 AM
#	2.	DATE
1	Nature	8/27/2023 9:43 AM
2	Minimal Crime	8/26/2023 10:26 AM
3	Recreation opportunities	8/24/2023 8:45 PM
4	the state parks, game lands, and the public parks in boroughs and city of Altoona	8/24/2023 7:32 PM
5	Recreation parks	8/24/2023 4:53 PM
6	Proximity to outdoor recreation	8/24/2023 2:37 PM
7	open space	8/24/2023 2:33 PM
8	Outdoor opportunity	8/24/2023 11:34 AM
9	Rivers	8/24/2023 8:42 AM
10	Recreational opportunities	8/21/2023 11:44 PM
11	It is centrally located and everything is a short drive away.	8/21/2023 10:58 AM
12	Access to many outdoor activities	8/17/2023 3:32 PM
13	Ample fishing and hunting opportunities	8/17/2023 11:52 AM
14	Safe from crime	8/1/2023 8:24 AM
15	Not too crowded, relatively low cost of living	7/31/2023 2:30 PM
16	Stone Valley close by	7/6/2023 3:22 PM
17	quiet	7/4/2023 8:01 AM
18	History	7/3/2023 9:02 AM
19	Flora and fauna	7/3/2023 7:30 AM
20	Lots of public land	7/2/2023 5:45 PM
21	Close proximity to commercial areas	5/31/2023 9:19 AM
22	Community spirit	5/29/2023 8:26 AM
23	Scenic	5/28/2023 11:25 PM
24	Access to parks and trails	5/28/2023 11:13 AM
25	Hunting	5/26/2023 8:42 PM
26	Hiking	5/26/2023 2:48 PM
27	Easy to navigate and uncongested	5/26/2023 9:53 AM
28	low population density	5/25/2023 10:45 PM
29	Wild trout	5/25/2023 11:28 AM
30	hunting	5/24/2023 9:44 PM
31	quiet	5/24/2023 8:00 PM
32	Rural	5/24/2023 5:48 PM
33	Clean	5/24/2023 4:55 PM
34	HUNTING OPPORTUNITY	5/24/2023 4:52 PM
35	Nothing	5/24/2023 4:00 PM

36	Lots of forests	5/24/2023 3:53 PM
37	Wooded	5/24/2023 2:08 PM
38	Agricultural area	5/24/2023 1:40 PM
39	Many State Parks	5/24/2023 12:32 PM
40	Not a lot of people living nearby,	5/24/2023 12:11 PM
41	reasonably quite	5/24/2023 11:51 AM
42	natural surroundings	5/24/2023 9:11 AM
43	Rural	5/24/2023 9:09 AM
44	Streams	5/24/2023 8:58 AM
45	Wildlife	5/24/2023 8:38 AM
46	Naturally, it is a very pretty area.	5/24/2023 8:37 AM
47	Greenspace	5/24/2023 8:32 AM
48	people mind there own business	5/24/2023 8:31 AM
49	Clean air	5/24/2023 8:30 AM
50	greenery	5/24/2023 7:58 AM
51	State Parks to visit	5/24/2023 7:46 AM
52	eagle sightings	5/24/2023 5:58 AM
53	Forests	5/24/2023 5:56 AM
54	Easily accessible outdoor recreation areas	5/23/2023 9:33 PM
55	scenic	5/23/2023 9:23 PM
56	State Parks/Forests opportunities in our area.	5/23/2023 8:44 PM
57	Close to work, shopping & cultural activities	5/19/2023 6:44 AM
58	scenic beauty	5/18/2023 3:31 PM
59	Less light pollution	5/18/2023 3:06 PM
60	Public lands	5/12/2023 6:05 PM
61	Fishing	5/10/2023 3:16 PM
62	Mountains	4/25/2023 8:06 PM
63	Small town atmosphere	4/20/2023 8:36 AM
64	Proximity to green space	4/19/2023 9:32 AM
65	Outdoor activity opportunities	3/30/2023 10:15 AM
66	clean water	2/16/2023 10:29 AM
#	3.	DATE
1	Rivers and streams	8/27/2023 9:43 AM
2	Peaceful	8/26/2023 10:26 AM
3	Rural setting	8/24/2023 8:45 PM
4	hiking and bicycling trails	8/24/2023 7:32 PM
5	Scale of living	8/24/2023 4:53 PM
6	Low population density	8/24/2023 2:37 PM

7	low development	8/24/2023 2:33 PM
8	Wet lands	8/24/2023 8:42 AM
9	Natural Areas for hiking, camping, cycling, canoeing, etc.	8/21/2023 11:44 PM
10	The trees and woods around my rental are beautiful. So much green!	8/21/2023 10:58 AM
11	Low development/population.	8/17/2023 11:52 AM
12	My family is here	7/31/2023 2:30 PM
13	Lots of hiking.	7/6/2023 3:22 PM
14	not too many people	7/4/2023 8:01 AM
15	Natural Resources	7/3/2023 9:02 AM
16	Wild life	7/3/2023 7:30 AM
17	Ample fishing opportunities	7/2/2023 5:45 PM
18	Lots of great river access points	5/31/2023 9:19 AM
19	Water resources	5/29/2023 8:26 AM
20	Nature	5/29/2023 11:25 PM
21	Surrounding woods	5/28/2023 11:13 AM
22	Hiking	5/26/2023 8:42 PM
23	Scenery	5/26/2023 2:48 PM
24	It's just beautiful	5/26/2023 9:53 AM
25	low crime	5/25/2023 10:45 PM
26	Rural area	5/25/2023 11:28 AM
27	visiting parks	5/24/2023 9:44 PM
28	famable ground	5/24/2023 8:00 PM
29	Neighbors	5/24/2023 4:55 PM
30	FISHING OPPORTUNITY	5/24/2023 4:52 PM
31	Nothing	5/24/2023 4:00 PM
32	Outdoor recreational opportunities	5/24/2023 3:53 PM
33	Near the Juniata River	5/24/2023 2:08 PM
34	close to waterway	5/24/2023 1:40 PM
35	Mostly Quiet	5/24/2023 12:32 PM
36	Can fish anytime. Walking or hiking any seasons.	5/24/2023 12:11 PM
37	good public parks	5/24/2023 11:51 AM
38	close Ag. lands and products	5/24/2023 9:11 AM
39	Friendly	5/24/2023 9:09 AM
40	Forest	5/24/2023 8:58 AM
41	All the local streams and waterways	5/24/2023 8:37 AM
42	History of area.	5/24/2023 8:32 AM
43	papermill shut down	5/24/2023 8:31 AM
44	Low foot traffic	5/24/2023 8:30 AM

45	peace and quiet	5/24/2023 7:58 AM
46	Lots of wooded area	5/24/2023 7:46 AM
47	get away	5/24/2023 5:58 AM
48	Low population	5/24/2023 5:56 AM
49	History	5/23/2023 9:33 PM
50	outdoor activities close by	5/23/2023 9:23 PM
51	Country setting.	5/23/2023 8:44 PM
52	Can see wildlife	5/19/2023 6:44 AM
53	small town feel	5/18/2023 3:31 PM
54	Juniata river for recreational use	5/18/2023 3:06 PM
55	Rural communities	5/12/2023 6:05 PM
56	Beauty	5/10/2023 3:16 PM
57	Agriculture	4/25/2023 8:06 PM
58	Proximity to larger areas like State College and Altoona	4/20/2023 8:36 AM
59	Very liveable balance	4/19/2023 9:32 AM
60	Local History	3/30/2023 10:15 AM
61	lots of trees	2/16/2023 10:29 AM

DRAFT

Q8 List three things you don't like about the area in which you live.

Answered: 64 Skipped: 12

ANSWER CHOICES	RESPONSES	
1.	100.00%	64
2.	95.31%	61
3.	75.00%	48

#	1.	DATE
1	Agriculture impact on water	8/27/2023 9:43 AM
2	Campgrounds (big)	8/26/2023 10:26 AM
3	Poor water quality	8/24/2023 8:45 PM
4	need more public parks and trails to walk within a 5 minute walk of urban residences	8/24/2023 7:32 PM
5	No sidewalks in shopping areas	8/24/2023 4:53 PM
6	Poor broadband	8/24/2023 2:37 PM
7	Residential development	8/24/2023 11:34 AM
8	Noise pollution	8/24/2023 8:42 AM
9	Minimal regulations from municipality as to what people do with their land (ex. Junkyards, tire disposal, etc.)	8/21/2023 11:44 PM
10	Better/more side walks, public transportation, and bike paths would be amazing	8/21/2023 10:58 AM
11	Lack of municipal storm water management	8/17/2023 3:32 PM
12	Increasing development pressure from State College and Altoona.	8/17/2023 11:52 AM
13	No green space	8/1/2023 8:24 AM
14	Gas stations everywhere	7/31/2023 2:30 PM
15	Too congested	7/8/2023 3:22 PM
16	people destroying nature to build things	7/4/2023 8:01 AM
17	Traffic	7/3/2023 9:02 AM
18	Atvs and dirt bikes	7/3/2023 7:30 AM
19	Way too many residential subdivisions	7/2/2023 5:45 PM
20	Lack of public transit	5/31/2023 9:19 AM
21	Corporate disregard for natural resources	5/29/2023 8:26 AM
22	Smoke from outdoor burners	5/28/2023 11:25 PM
23	Becoming more populated	5/28/2023 11:13 AM
24	Not enough water quality control	5/28/2023 8:42 PM
25	parking or access to fishing areas is very limited	5/28/2023 2:48 PM
26		5/28/2023 9:53 AM
27	Over development	5/25/2023 11:28 AM

28	atv riding	5/24/2023 9:44 PM
29	lack of cleaning debris out after storms causing dams	5/24/2023 8:00 PM
30	Less educated population	5/24/2023 5:48 PM
31	Neighbors	5/24/2023 4:55 PM
32	NOISE POLLUTION	5/24/2023 4:52 PM
33	Everything	5/24/2023 4:00 PM
34	Too close to Penn State/State College	5/24/2023 3:53 PM
35	Residential encroaching	5/24/2023 2:08 PM
36	limit residential development	5/24/2023 1:40 PM
37	Warm water seeping into Little Juniata river	5/24/2023 12:32 PM
38	Too much traffic on Rte 30.	5/24/2023 12:11 PM
39	no boat/kayak access to Beaverdam branch	5/24/2023 11:51 AM
40	increasing development	5/24/2023 9:11 AM
41	Too much log truck traffic	5/24/2023 9:09 AM
42	Na	5/24/2023 8:58 AM
43	Uncontrolled agricultural pollution	5/24/2023 8:38 AM
44	No sidewalks, the walkability of Altoona is discouraging	5/24/2023 8:37 AM
45	Lack of quick access to rail trail	5/24/2023 8:32 AM
46	river smells funny	5/24/2023 8:31 AM
47	Air pollution	5/24/2023 8:30 AM
48	increase in traffic and fast driving	5/24/2023 7:58 AM
49	Lots of posted land	5/24/2023 7:46 AM
50	Republicans	5/24/2023 7:24 AM
51	flooding	5/24/2023 5:58 AM
52	Tourism	5/24/2023 5:56 AM
53	agricultural runoff	5/23/2023 10:07 PM
54	The Little J is filled with trash, railroad runoff and litter.	5/23/2023 9:33 PM
55	excessive use of manure	5/23/2023 9:23 PM
56	State College is turning into a city	5/23/2023 8:44 PM
57	Development is expanding	5/19/2023 6:44 AM
58	amount of flooding potential	5/18/2023 3:31 PM
59	Growth of residential areas	5/18/2023 3:06 PM
60	No internet	5/10/2023 3:16 PM
61	Small town blight	4/25/2023 8:06 PM
62	Waterways are in large inaccessible to public	4/19/2023 9:32 AM
63	Residential and industrial development on prime Farmland	3/30/2023 10:15 AM
64	commercial development	2/16/2023 10:29 AM
#	2.	DATE

1	Roadway runoff impact on water	8/27/2023 9:43 AM
2	Solar "Farm"	8/26/2023 10:26 AM
3	Nutrient management issues	8/24/2023 8:45 PM
4	Over development	8/24/2023 4:53 PM
5	Poor condition of infrastructure	8/24/2023 2:37 PM
6	Local government is behind the times re: land use	8/24/2023 11:34 AM
7	Littering	8/24/2023 8:42 AM
8	Little protection of the watershed within township	8/21/2023 11:44 PM
9	The blight in my neighborhood is noticeable and some neighbors do not have pride in place.	8/21/2023 10:58 AM
10	Unplanned growth	8/17/2023 3:32 PM
11	Disregard from local politicians on important environmental issues.	8/17/2023 11:52 AM
12	Increasing traffic	8/1/2023 8:24 AM
13	Not a lot to do if you're not into sports or especially religious	7/31/2023 2:30 PM
14	crime	7/6/2023 3:22 PM
15	oil and gas pipelines	7/4/2023 8:01 AM
16	Run down properties	7/3/2023 9:02 AM
17	Junk piles	7/3/2023 7:30 AM
18	Way too much urban sprawl	7/2/2023 5:45 PM
19	Trails don't often connect to communities	5/31/2023 9:19 AM
20	Land reclamation challenges.	5/29/2023 8:26 AM
21	electric companies spraying with no regards to employees or residents or nature and animals	5/28/2023 11:25 PM
22	No noticeable plans for development to protect resources	5/28/2023 11:13 AM
23	Stocking streams that trout cant survive in the summer	5/26/2023 8:42 PM
24	There seem to be a lot of junk yards popping up	5/26/2023 2:48 PM
25	Limited dining options	5/26/2023 9:53 AM
26	Polluted streams	5/25/2023 11:28 AM
27	residential development	5/24/2023 9:44 PM
28	Township corruption	5/24/2023 8:00 PM
29	Poor community inclusion	5/24/2023 5:48 PM
30	Noise	5/24/2023 4:55 PM
31	DEVELOPMENT	5/24/2023 4:52 PM
32	Everything	5/24/2023 4:00 PM
33	Windmills on the mountains are terrible	5/24/2023 3:53 PM
34	Lack of respect for environment along the river	5/24/2023 2:08 PM
35	Litter	5/24/2023 12:32 PM
36	Along the banks if the river, is being bought and posted no trespass.	5/24/2023 12:11 PM
37	no stocking of the beaverdam branch	5/24/2023 11:51 AM
38	Lack of realizing the importance of Ag.	5/24/2023 9:11 AM

39	Road conditions	5/24/2023 9:09 AM
40	Na	5/24/2023 8:58 AM
41	Lack of concern for natural resources	5/24/2023 8:38 AM
42	Beautiful trails put right next to busy roads	5/24/2023 8:37 AM
43	Too many people own dogs that pollute the environment	5/24/2023 8:32 AM
44	lack of fish in the river	5/24/2023 8:31 AM
45	Traffic	5/24/2023 8:30 AM
46	lack of reliable utilities	5/24/2023 7:58 AM
47	Inaccessible areas in state game lands	5/24/2023 7:46 AM
48	plastic/debris	5/24/2023 5:58 AM
49	Low income housing	5/24/2023 5:56 AM
50	residential sprawl	5/23/2023 10:07 PM
51	Some traffic	5/23/2023 9:33 PM
52	noise from truck traffic	5/23/2023 9:23 PM
53	Too much pavement/concrete	5/23/2023 8:44 PM
54	Local municipality encourages development	5/19/2023 6:44 AM
55	lack of businesses that provide outdoor recreation activities (rentals/tours)	5/18/2023 3:31 PM
56	Limited concern for conservation	5/18/2023 3:06 PM
57	Trash from tourist	5/10/2023 3:18 PM
58	Lack of restaurants	4/25/2023 8:06 PM
59	Public conservation knowledge is limited	4/19/2023 9:32 AM
60	Litter and lack of recycling availability	3/30/2023 10:15 AM
61	traffic	2/16/2023 10:29 AM
#	3.	DATE
1	Development impact on water	8/27/2023 9:43 AM
2	Residential building (developers)	8/26/2023 10:26 AM
3	Lack of substantial trout habitat	8/24/2023 8:45 PM
4	Ugly development	8/24/2023 4:53 PM
5	Lack of diversity	8/24/2023 2:37 PM
6	Lack of interest in preserving the area history	8/24/2023 11:34 AM
7	Dumping	8/24/2023 8:42 AM
8	I get a lot of pests (bugs and rodents). I am assuming it is because it is so close to the woods.	8/21/2023 10:58 AM
9	Increasing noxious and invasive plant populations.	8/17/2023 11:52 AM
10	most people don't care about environmental issues in the area	7/31/2023 2:30 PM
11	Too left wing	7/6/2023 3:22 PM
12	"development" on route 22	7/4/2023 8:01 AM
13	Agricultural runoff	7/3/2023 9:02 AM
14	No cell service	7/3/2023 7:30 AM

15	Too many gas stations	7/2/2023 5:45 PM
16	Lack of quality housing for middle-income families	5/31/2023 9:19 AM
17	Lack of high tech opportunities for young people	5/29/2023 8:26 AM
18	Electric companies cutting down every tree in site	5/28/2023 11:25 PM
19	Noisy	5/28/2023 11:13 AM
20	fish stocking in the area seems less than past years	5/28/2023 2:48 PM
21	Stocked trout	5/25/2023 11:28 AM
22	commercial development	5/24/2023 9:44 PM
23	lack of cleaning ponds	5/24/2023 8:00 PM
24	Train exhaust	5/24/2023 4:55 PM
25	LAND ACCESS	5/24/2023 4:52 PM
26	Everything	5/24/2023 4:00 PM
27	Too much drugs/crime	5/24/2023 3:53 PM
28	Housing for people with children or young couples. Only thing they built is Housing for senior citizens. The young people has to move away no affordable housing.	5/24/2023 12:11 PM
29	more outdoor recreation public events	5/24/2023 11:51 AM
30	Speeding	5/24/2023 9:09 AM
31	Na	5/24/2023 8:58 AM
32	Little history given for an area chock full of history	5/24/2023 8:37 AM
33	Wind farms on the mountain tops	5/24/2023 8:32 AM
34	farm run off	5/24/2023 8:31 AM
35	Toxin in the ground	5/24/2023 8:30 AM
36	Private stream access	5/24/2023 7:46 AM
37	train noise	5/24/2023 5:59 AM
38	Tourism	5/24/2023 5:56 AM
39	high speed of traffic through township	5/23/2023 10:07 PM
40	Road quality	5/23/2023 9:33 PM
41	poor dirt and gravel road maintenance	5/23/2023 9:23 PM
42	Traffic and pollution	5/23/2023 8:44 PM
43	Traffic	5/19/2023 6:44 AM
44	lack of knowledge of available outdoor recreation activities (maps/websites)	5/18/2023 3:31 PM
45	Too much turf grass	5/18/2023 3:06 PM
46	Lack of entertainment	4/25/2023 8:06 PM
47	Infrastructure is focused on vehicle travel	4/19/2023 9:32 AM
48	Increased traffic	3/30/2023 10:15 AM



Q9 List three suggestions to improve conditions in the watershed.

Answered: 61 Skipped: 15

ANSWER CHOICES	RESPONSES	
1.	100.00%	61
2.	95.08%	58
3.	77.05%	47

#	1.	DATE
1	Stronger riparian buffer laws	8/27/2023 9:43 AM
2	Stop trash	8/26/2023 10:26 AM
3	Reduce soil erosion	8/24/2023 8:45 PM
4	needs to be a county recreation authority to help preserve public parks and trails like the Lower Trail	8/24/2023 7:32 PM
5	Less paving	8/24/2023 4:53 PM
6	Minimize pollution, sedimentation, and trash	8/24/2023 2:37 PM
7	protecting open space	8/24/2023 2:33 PM
8	Survey the industries to determine pollution sources	8/24/2023 11:34 AM
9	Stiffer fines for littering	8/24/2023 8:42 AM
10	Protection of the watershed area	8/21/2023 11:44 PM
11	I wish there was a bigger rain barrel rebate. I know Blair County Conservation District does one, but getting the rain barrels is competitive. When they give them out, it is not widely marketed and people line up early to get them.	8/21/2023 10:58 AM
12	Mandatory BMPs on farming operations (steern fence, crossings, etc).	8/17/2023 11:52 AM
13	Limit development/impervious surface	8/1/2023 8:24 AM
14	Stop building gas stations and dollar stores every three miles	7/31/2023 2:30 PM
15	keep out trash	7/6/2023 3:22 PM
16	plant more native trees	7/4/2023 8:01 AM
17	Reduce private ownership of land	7/3/2023 9:02 AM
18	Stream protection/improvement	7/3/2023 7:30 AM
19	Further restrict paving/new subdivisions	7/2/2023 5:45 PM
20	Improve paddle sports access at Lower Trail Aifarata Station (Alexandria)	5/31/2023 9:19 AM
21	Closed to un authorized vehicles .	5/29/2023 8:26 AM
22	Public education and awareness	5/28/2023 11:13 AM
23	Make class a stream (halter creek) catch an release only	5/26/2023 8:42 PM
24	provide more parking near fishable waters	5/26/2023 2:48 PM
25	policing those who live along the river and dump trash on the river bank as a means of "trash removal" when flooding occurs	5/25/2023 10:45 PM
26	Protection from residential/industrial development	5/25/2023 11:28 AM

27	commercial pollution accountability	5/24/2023 9:44 PM
28	remove debris from water ways	5/24/2023 8:00 PM
29	Remove invasives (Japanese Knotweed)(Poison Hemlock!)	5/24/2023 5:48 PM
30	Add more water	5/24/2023 4:00 PM
31	Severely punish illegal dumpers/polluters	5/24/2023 3:53 PM
32	limit residential development	5/24/2023 1:40 PM
33	DEP needs to regulate water runoff into rivers	5/24/2023 12:32 PM
34	Make every business that pollutes it ,pay to clean it up.	5/24/2023 12:11 PM
35	build an access area to paddle the beaverdam branch	5/24/2023 11:51 AM
36	Better restrictions on the location of development	5/24/2023 9:11 AM
37	No more buildings	5/24/2023 9:09 AM
38	Clean up around tracks rail road	5/24/2023 8:58 AM
39	Greater regulation of agricultural activities	5/24/2023 8:38 AM
40	More preservation and conservation.	5/24/2023 8:37 AM
41	Removal of invasive species, the Japanese Knotweed is awful	5/24/2023 8:32 AM
42	make catch a release fishing	5/24/2023 8:31 AM
43	Water improvement	5/24/2023 8:30 AM
44	preservation of historic sites with an increase in funding	5/24/2023 7:58 AM
45	Provide more access to public water	5/24/2023 7:46 AM
46	clean-up	5/24/2023 5:58 AM
47	Improve/reduce runoff	5/24/2023 5:56 AM
48	make the entire Juniata catch and release	5/23/2023 10:07 PM
49	Regulate/inspect commercial properties lining the river INCLUDING the railroad	5/23/2023 9:33 PM
50	manure management for optimum application rates	5/23/2023 9:23 PM
51	Grants/Education for farmers	5/23/2023 8:44 PM
52	Zoning regulations	5/19/2023 6:44 AM
53	stream clean outs for better navigation of waterways	5/18/2023 3:31 PM
54	Increase buffer planting	5/18/2023 3:06 PM
55	Riparian buffers need improved in the area	5/17/2023 2:51 PM
56	Organized cleanup efforts	5/12/2023 6:05 PM
57	More officer support	5/10/2023 3:16 PM
58	Sediment Run off control	4/25/2023 8:06 PM
59	Stream/river improvement projects	4/20/2023 8:36 AM
60	Additional parks with access to waterway	4/19/2023 9:32 AM
61	More conservation easement funds to preserve farmland	3/30/2023 10:15 AM
#	2.	DATE
1	Stronger ag runoff laws	8/27/2023 9:43 AM
2	clean brush from sides of river	8/26/2023 10:26 AM

3	Improve riparian habitat	8/24/2023 8:45 PM
4	need to preserve more wetlands along the Old 220 Corridor by making them public parks like the Soaring Eagle Wetland in Julian, PA	8/24/2023 7:32 PM
5	Stream cleanup	8/24/2023 4:53 PM
6	Develop/improve access points	8/24/2023 2:37 PM
7	more public recreation areas	8/24/2023 2:33 PM
8	Strengthen the penalties for stream pollution	8/24/2023 11:34 AM
9	Prison time for dumping	8/24/2023 8:42 AM
10	Conservation easements protecting natural and historic areas	8/21/2023 11:44 PM
11	More rain gardens - potential to make some as pocket parks?	8/21/2023 10:58 AM
12	Improved waste treatment facilities (especially Altoona).	8/17/2023 11:52 AM
13	Increase green space & recreation areas	8/1/2023 8:24 AM
14	Invest in green energy locally	7/31/2023 2:30 PM
15	keep cows out	7/6/2023 3:22 PM
16	stop development plans like Ruters in Huntingdon	7/4/2023 8:01 AM
17	State purchasing lands that become available	7/3/2023 9:02 AM
18	Less timbering	7/3/2023 7:30 AM
19	Encourage wetland construction and restoration	7/2/2023 5:45 PM
20	Take out area for innertube floats on the Raystown Branch downstream of Raystown Dam	5/31/2023 9:19 AM
21	Fire prevention acts.	5/29/2023 8:26 AM
22	Opportunities for public to help improve conditions	5/28/2023 11:13 AM
23	Clean up trash	5/26/2023 8:42 PM
24	provide more ease of access to fishable waters	5/26/2023 2:48 PM
25	Habitat improvements for fishing	5/25/2023 11:28 AM
26	recreation pollution accountability	5/24/2023 9:44 PM
27	allow for cleaning personal ponds	5/24/2023 8:00 PM
28	Plant native riparian buffers	5/24/2023 5:48 PM
29	To the Juniata	5/24/2023 4:00 PM
30	More public access to Little J	5/24/2023 3:53 PM
31	limit industrial development	5/24/2023 1:40 PM
32	more river clean ups	5/24/2023 12:32 PM
33	Quit opening up Shawnee state park dam every time it rains hard. It floods everything.	5/24/2023 12:11 PM
34	a stream study of the beaverdam branch	5/24/2023 11:51 AM
35	increased consideration of Storm Water from development	5/24/2023 9:11 AM
36	Agriculture run off	5/24/2023 9:09 AM
37	More public access	5/24/2023 8:58 AM
38	Better forestry management by private land owners	5/24/2023 8:38 AM
39	More regulation on what can build in these areas	5/24/2023 8:37 AM
40	Too much litter/debris in the river	5/24/2023 8:32 AM

17	Extended safe zone to prevent mining activities nearby..	5/29/2023 8:26 AM
18	More public education and awareness of their impact on watershed	5/28/2023 11:13 AM
19	provide handicap fishing areas	5/26/2023 2:48 PM
20	increased boat access on the Juniata river	5/25/2023 11:28 AM
21	incentives to not develop land	5/24/2023 9:44 PM
22	stop allowing certain individuals to put in toxic fill. ones that are tied to the township supervisors	5/24/2023 8:00 PM
23	Continue to remove invasives and trash	5/24/2023 5:48 PM
24	More canoeing	5/24/2023 4:00 PM
25	Get rid of invasive carp	5/24/2023 12:32 PM
26	See if kids from the high schools wants to learn about the watershed and have them do things around it. They will get a better understanding of our waters.	5/24/2023 12:11 PM
27	removal of strainers	5/24/2023 11:51 AM
28	increased funding for farms	5/24/2023 9:11 AM
29	More trees along stream	5/24/2023 9:09 AM
30	Litter control	5/24/2023 8:58 AM
31	Anything to enhance the beauty and accessibility of this area	5/24/2023 8:37 AM
32	Enclose the open V-ditches in some older neighborhoods, people dump everything in them	5/24/2023 8:32 AM
33	clean up the feeder streams	5/24/2023 8:31 AM
34	More open space areas	5/24/2023 8:30 AM
35	Clean acid mine drainage in Frankstown Branch	5/24/2023 7:46 AM
36	add trash cans/signage at public access areas	5/24/2023 5:58 AM
37	Limit boat size on Raystown	5/24/2023 5:56 AM
38	expand the trail system to include the H&BT rail bed	5/23/2023 10:07 PM
39	Actual responses and communication when fish kills are reported.	5/23/2023 9:33 PM
40	maintain riparian buffers	5/23/2023 9:23 PM
41	Less nutrient runoff	5/23/2023 8:44 PM
42	Education of public officials about watersheds	5/19/2023 6:44 AM
43	pollution and settlement reduction	5/18/2023 3:31 PM
44	Monitoring air and water quality	5/12/2023 6:05 PM
45	Pesticide run off	4/25/2023 8:06 PM
46	More public involvement opportunities	4/19/2023 9:32 AM
47	Increase Plain sect interest in Conservation efforts	3/30/2023 10:15 AM



41	hold farm responsible for the chemicals that go into the water	5/24/2023 8:31 AM
42	Noise reduction	5/24/2023 8:30 AM
43	Open land to atv and Jeeps	5/24/2023 7:46 AM
44	monitor sewage/discharges	5/24/2023 5:58 AM
45	Reduce tourism	5/24/2023 5:56 AM
46	monitor the old SNEC for radiation	5/23/2023 10:07 PM
47	Organized clean ups	5/23/2023 9:33 PM
48	road maintenance standards	5/23/2023 9:23 PM
49	Less storm runoff	5/23/2023 8:44 PM
50	More public parks & trails	5/19/2023 6:44 AM
51	trash collection	5/18/2023 3:31 PM
52	Educational programs	5/18/2023 3:06 PM
53	Conservation programs	5/12/2023 6:05 PM
54	More waterway enforcement officers	5/10/2023 3:16 PM
55	Industrial run off control	4/25/2023 8:06 PM
56	Improved public recreational access (ex. Work with the Little Juniata River Association to renew lease for public access on the Little Juniata at the New Enterprise Quarry)	4/20/2023 8:36 AM
57	More bike, pedestrian infrastructure	4/19/2023 9:32 AM
58	Better planning to decrease storm water runoff	3/30/2023 10:15 AM
#	3.	DATE
1	Better stormwater management	8/27/2023 9:43 AM
2	stop people from dumping sewage in river	8/26/2023 10:26 AM
3	Implement agriculture conservation practices	8/24/2023 8:45 PM
4	a state law and funding to test biosolids for PFAS chemicals and not spread on the landscape if they contain them or other hazardous substances	8/24/2023 7:32 PM
5	Better governance over development	8/24/2023 4:53 PM
6	Create more community involvement and support	8/24/2023 2:37 PM
7	Cameras at problem dumping sites	8/24/2023 8:42 AM
8	Making recycling more accessible. I drive to the IRC because I know my products will be recycled there. Local trash haulers charge more for recycling and sometimes just throw the recycling bin contents in the trash.	8/21/2023 10:58 AM
9	Community engagement to encourage watershed appreciation.	8/17/2023 11:52 AM
10	Increase riparian buffer zone requirements for development	8/1/2023 8:24 AM
11	Don't be determined to pave every blade of grass	7/31/2023 2:30 PM
12	preserve forests	7/4/2023 8:01 AM
13	State officials working more closely with Penn State and local farmers to ensure compliance with rules	7/3/2023 9:02 AM
14	Plant pollinators	7/3/2023 7:30 AM
15	Closely monitor water release from Petersburg power dam	7/2/2023 5:45 PM
16	Public river access in or near Mill Creek, PA	5/31/2023 9:19 AM

Q10 Other comments or concerns.

Answered: 13 Skipped: 63

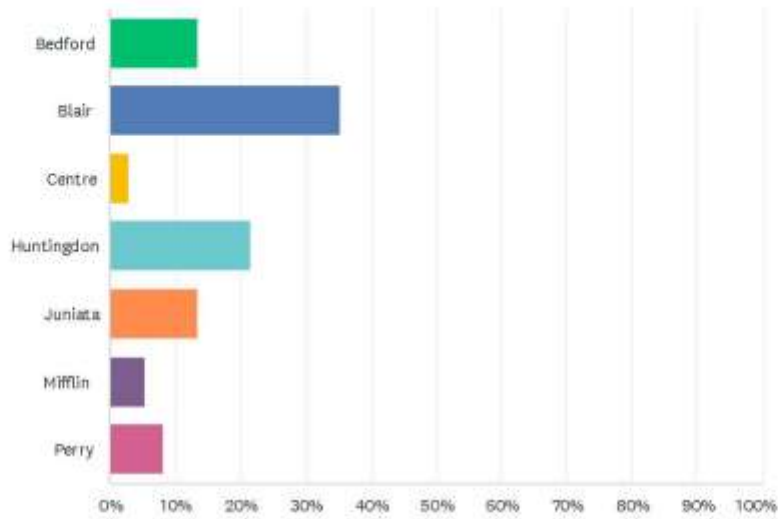
#	RESPONSES	DATE
1	We need more tree planting in riparian zones. Need better river access (raystown branch) including soft landings for canoes/kayaks. More outreach at schools on the importance of watersheds/water and how pollution and refuse impact our waters. Overall, we need more advocacy about our water resources. The river is under utilized and under appreciated in Bedford specifically, I would really love to see the two low-head dams removed in Bedford at the fort and downstream to open up more miles for recreational boating.	8/27/2023 9:43 AM
2	Thank you for considering our watershed as a vital. Your work on Warriors Mark Run is impressive at the Colerain Forges Mansion. Thank you!	8/21/2023 11:44 PM
3	Huntingdon County is currently working on an active transportation plan that includes paddle sports along with walking/hiking, biking, and wheelchair access. https://www.surveymonkey.com/r/Huntingdon-County-Active-Transportation https://huntingdonco.maps.arcgis.com/apps/CrowdsourcingReporter/index.html?appid=19753cc183df4af983169bd5a9b267ac	5/31/2023 9:19 AM
4	Catch and release area between Tyrone and Huntingdon is entirely too long limiting opportunity for regular fishermen.	5/26/2023 2:48 PM
5	I often drive on River Road (Frankstown Branch) and have been perplexed as to why they've topped so many trees and cut back vegetation beyond the powerline right-of-ways.	5/24/2023 5:48 PM
6	I've been catching more target species of fish in the Beaverdam branch over the last 3 years including Smallmouth bass, Trout, and even small pickerel. The water quality has improved and wish it was looked at more for recreational activities. A launch area near Hoss's in Duncansville would be great for people wishing to paddle the river to Hollidaysburg.	5/24/2023 11:51 AM
7	I am 58 years old and the Juniata river is alot more cleaner than when I was a kid. Good job.	5/24/2023 9:09 AM
8	Sinking Valley is a wonderful, beautiful place to live.	5/24/2023 7:58 AM
9	Aquatic vegetation is necessary and it's eradication to appease tourism needs to stop	5/24/2023 5:56 AM
10	Flooding	5/17/2023 2:51 PM
11	Juniata watershed is a beautiful place to live and I hope we can protect and conserve it.	5/12/2023 6:05 PM
12	NA	4/25/2023 8:06 PM
13	Love the area, but our urban waterways are overlooked and could be attractions that also encourage conservation mindfulness.	4/19/2023 9:32 AM

Municipal Online Survey

A nine-question municipal survey was sent to every municipality located in the watershed, either a link to the survey via email or a paper survey mailed directly to the municipality; 37 municipalities responded. Below are the results of this survey.

Q1 County

Answered: 37 Skipped: 0



ANSWER CHOICES	RESPONSES	
Bedford	13.51%	5
Blair	35.14%	13
Centre	2.70%	1
Huntingdon	21.62%	8
Juniata	13.51%	5
Mifflin	5.41%	2
Perry	8.11%	3
TOTAL		37



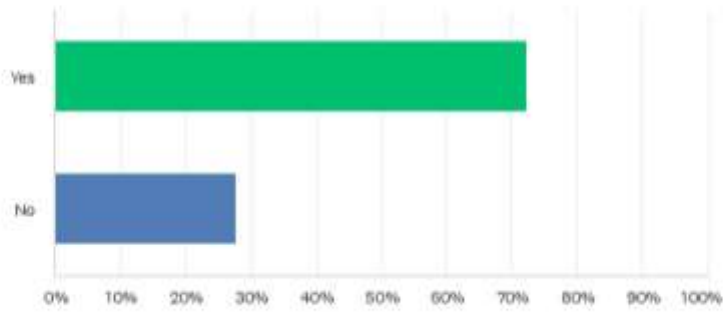
Q2 Municipality

Answered: 37 Skipped: 0

#	RESPONSES	DATE
1	Logan Twp	9/12/2023 12:17 PM
2	Williamsburg Borough	8/22/2023 2:07 PM
3	Delaware Township	8/21/2023 8:59 AM
4	Frankstown Township	7/21/2023 9:46 AM
5	City of Altoona	7/18/2023 7:26 AM
6	Borough of Holidaysburg	7/13/2023 1:18 PM
7	Tyrone Borough	7/13/2023 12:56 PM
8	Artis Township	7/13/2023 11:35 AM
9	Huntingdon Borough	7/12/2023 11:33 AM
10	Broad Top Twp	7/5/2023 6:33 AM
11	Susquehanna Township	6/27/2023 7:19 PM
12	Henderson Twp	6/27/2023 6:15 PM
13	Miller Township	6/26/2023 5:18 PM
14	Fayette Township	6/23/2023 2:09 PM
15	Smithfield Township	6/23/2023 10:01 AM
16	Artis Township	6/22/2023 3:50 PM
17	Juniata Township	6/1/2023 11:39 AM
18	Jackson	5/19/2023 9:26 PM
19	Shirley Township	5/19/2023 12:22 PM
20	Hopewell	5/19/2023 12:18 PM
21	Tyrone Township	5/19/2023 11:20 AM
22	Blair Township	5/19/2023 8:09 AM
23	Millerstown Borough	5/10/2023 1:19 PM
24	Allegheny Township	5/8/2023 2:12 PM
25	Bedford township	4/19/2023 3:09 PM
26	Harris Township	4/17/2023 3:21 PM
27	West Providence Township	4/12/2023 8:29 AM
28	Derry Township	4/10/2023 8:43 AM
29	Juniata Township	4/7/2023 11:58 AM
30	Millerstown Borough	4/6/2023 10:07 PM
31	Freedom Township	4/6/2023 2:42 PM
32	Beale Township	4/6/2023 2:25 PM
33	Warriors Mark Township	4/6/2023 12:45 PM
34	Juniata Township	4/6/2023 8:52 AM
35	Wayne Township	4/6/2023 8:45 AM
36	Fermanagh Township	4/6/2023 8:33 AM
37	Liberty Township	4/5/2023 5:30 PM

Q3 Does your county/municipality have a comprehensive plan?

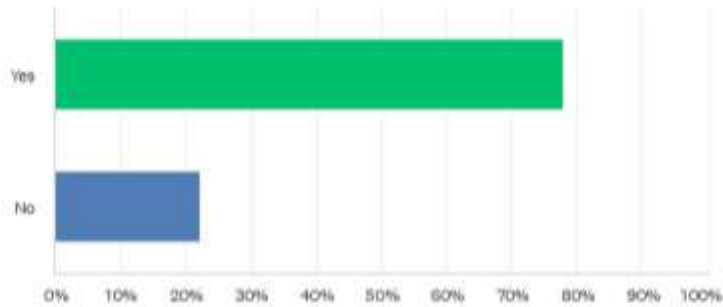
Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	72.22%	26
No	27.78%	10
TOTAL		36

Q4 Does your county/municipality currently utilize zoning and subdivision ordinances?

Answered: 36 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	77.78%	28
No	22.22%	8
TOTAL		36

Q5 What are the three most critical needs or challenges in your county or municipality that affect the Juniata River Watershed?

Answered: 28 Skipped: 9

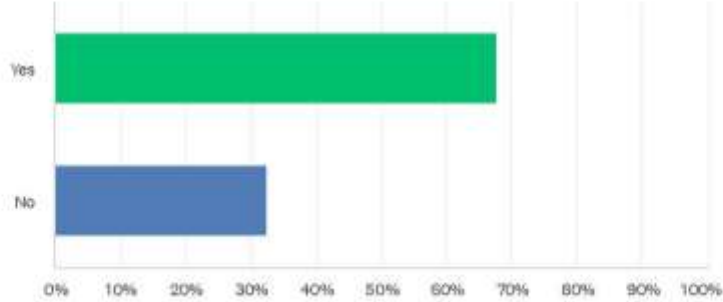
ANSWER CHOICES	RESPONSES	
1.	100.00%	28
2.	71.43%	20
3.	46.43%	13

#	L	DATE
1	Budget shortfall to implement MS4 permit projects.	9/12/2023 12:17 PM
2	Stormwater	8/22/2023 2:07 PM
3	Water run off	8/21/2023 8:59 AM
4	Nuisance flooding outside of the floodplain	7/21/2023 9:46 AM
5	Overdevelopment (flooding)	7/18/2023 7:26 AM
6	Flooding	7/13/2023 1:18 PM
7	Levee deterioration	7/13/2023 12:56 PM
8	Stormwater Management Expense	7/13/2023 11:35 AM
9	Current area municipal water source	7/12/2023 11:33 AM
10	AMD	7/5/2023 6:33 AM
11	Erosion control from our dirt/gravel roadways as well as on private lands	6/27/2023 7:19 PM
12	Road management	6/27/2023 6:15 PM
13	malfunctioning on lot residential sewer systems	6/23/2023 2:09 PM
14	Pre-existing flood zone intrusions	6/22/2023 3:50 PM
15	Stormwater	6/1/2023 11:39 AM
16	Septic issues	5/19/2023 9:26 PM
17	farm run off	5/19/2023 11:20 AM
18	Flooding in developments with substandard piping	5/19/2023 8:09 AM
19	Funding	5/10/2023 1:19 PM
20	Storm water	4/19/2023 3:09 PM
21	None. The only portion of our township in the watershed are Commonwealth owned forests and a State Park.	4/17/2023 3:21 PM
22	Updates to the Lewistown Wastewater Treatment Plant	4/10/2023 8:43 AM
23	There are none as we only have a small portion in our township.	4/7/2023 11:58 AM
24	Stormwater management	4/6/2023 10:07 PM
25	Flooding	4/6/2023 12:45 PM
26	Cleaning of debris	4/6/2023 8:52 AM

27	Septic Management	4/6/2023 8:33 AM
28	Flood management	4/5/2023 5:30 PM
#	2.	DATE
1	Controlling SWM on previously constructed large scale developments.	9/12/2023 12:17 PM
2	Funding	8/22/2023 2:07 PM
3	modification to structures in the floodplain	7/21/2023 9:46 AM
4	Horrible past planning	7/18/2023 7:26 AM
5	Streambank erosion	7/13/2023 1:18 PM
6	Gravel bar build-up	7/13/2023 12:56 PM
7	Flood Zone Infringements and Maintenance	7/13/2023 11:35 AM
8	Juniata river to become secondary source	7/12/2023 11:33 AM
9	Storm run off	7/5/2023 6:33 AM
10	The need for buffer zones between farmland and water sources	6/27/2023 7:19 PM
11	Water run off	6/27/2023 6:15 PM
12	potential groundwater contamination caused by lack of oversight either by private individuals or the inability of local Townships being able to enforce existing ordinances	6/23/2023 2:09 PM
13	Erosion of over-grazed pastures and smaller streams	6/22/2023 3:50 PM
14	culvert erosion	5/19/2023 11:20 AM
15	Large debris jams in river causing flooding where it should.	5/19/2023 8:09 AM
16	Farm runoff	4/19/2023 3:09 PM
17	None	4/7/2023 11:58 AM
18	Farm runoff	4/6/2023 10:07 PM
19	Pollution	4/6/2023 8:52 AM
20	Sewage plant concerns	4/5/2023 5:30 PM
#	3.	DATE
1	Promoting & enforcing effective SWM practices for new developments.	9/12/2023 12:17 PM
2	Continued use of existing residents in the floodway	7/21/2023 9:46 AM
3	Debris in channel	7/13/2023 1:18 PM
4	The stabilization of streambanks	6/27/2023 7:19 PM
5	Dirt	6/27/2023 6:15 PM
6	potential overdevelopment	6/23/2023 2:09 PM
7	Malfunctioning on-lot septic systems	6/22/2023 3:50 PM
8	DEP permitting to do work	5/19/2023 11:20 AM
9	Worse and more storms than usual	5/19/2023 8:09 AM
10	Onlot septic	4/19/2023 3:09 PM
11	None	4/7/2023 11:58 AM
12	Upstream pollution	4/6/2023 10:07 PM
13	Storm water management	4/5/2023 5:30 PM

Q6 Does your municipality/county have any public water services in the Juniata River Watershed area?

Answered: 37 Skipped: 0

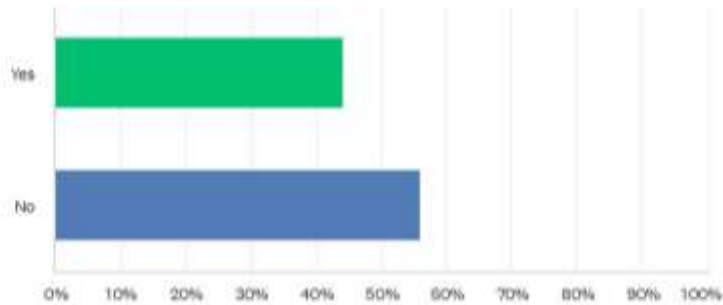


ANSWER CHOICES	RESPONSES	
Yes	67.57%	25
No	32.43%	12
TOTAL		37



Q7 Do you foresee the need to upgrade or establish a public water supply in your county/municipality within the next 10 years?

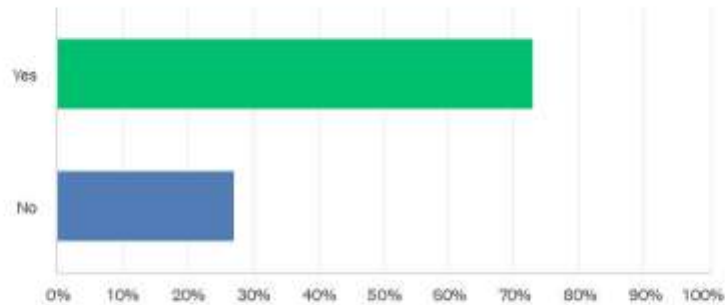
Answered: 34 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	44.12%	15
No	55.88%	19
TOTAL		34

Q8 Does your county/municipality have any public sewage systems in the Juniata watershed?

Answered: 37 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	72.97%	27
No	27.03%	10
TOTAL		37

Q9 What projects would you like to see implemented in the area that you represent that could be included in the Juniata Forward: Building on 25 Years of Conservation plan? Please list short-term and long-term projects.

Answered: 27 Skipped: 10

ANSWER CHOICES	RESPONSES	
Land Use/Land Resources (farmland preservation, development, planning, etc.)	81.48%	22
Water Resources (quality, quantity, etc.)	55.56%	15
Biologic Resources (plant, animal, terrestrial, aquatic, areas of concern, etc.)	55.56%	15
Cultural Resources (historical, recreational, environmental education, etc.)	44.44%	12
Other (roads, other transportation, economy/jobs, etc.)	66.67%	18

Media

Various media outlets helped to advertise the public meetings and online survey. A press release was sent to local newspapers and media outlets announcing the public meeting dates and link to the online survey. WTAJ, the local television station, did a story about our public meetings on the nightly news and posted a link to the survey on their webpage. Both the Huntingdon Daily News and the Altoona Mirror printed stories highlighting the public meetings and online survey. A copy of all of the media can be found in Appendix D.

Issues and Concerns

Following is a sample of the major issues and concerns identified in the public meetings, public survey, and municipal survey. These are broad, overarching issues found throughout the watershed. Many of these issues addressed by the watershed community are interconnected and cannot be addressed separately. Projects should be designed to address the issues collectively whenever possible.

Climate Change

Climate change refers to long-term shifts in temperatures and weather patterns. Changes to Earth's climate driven by increased human emissions of heat-trapping greenhouse gases are already having widespread effects on the environment: glaciers and ice sheets are shrinking, river and lake ice is breaking up earlier, plant and animal geographic ranges are shifting, and plants and trees are blooming sooner. Effects that scientists had long predicted would result from global climate change are now occurring, such as sea ice loss, accelerated sea level rise, and longer, more intense heat waves. Some changes (such as droughts, wildfires, and extreme rainfall) are happening faster than scientists previously assessed (NASA 2024).

Climate Change in Pennsylvania

Below is an excerpt from Wild Heritage News, Fall 2018. The article, "Understanding Climate Change" was written by Pennsylvania Natural Heritage Program staff member Mary Ann Furedi.

Although climate change may be more evident in some regions of the planet, no place is considered immune to its effects. Even the climate of Pennsylvania has experienced notable change. Over the past 110 years, a time period associated with industrialization and the use of fossil fuels, Pennsylvania has undergone a long-term warming trend of almost 2°F and an overall increased precipitation trend. Climate models show that this pattern will continue into the future at an accelerated rate. The Representative Concentration Path model, one of two emission models currently being used by climate scientists, shows that by 2050, Pennsylvania will be over 5°F warmer than at the end of the 20th century. The model also shows more precipitation in Pennsylvania as well (8% annual increase with a winter increase of 14%), but it will exhibit an altered pattern. More precipitation will fall in the winter, but as rain instead of snow. Alterations in these ecosystem drivers will result in a variety of effects such as a higher heat index in the summer, more extreme heat and storm events, and longer growing

seasons. These changes will ultimately affect all aspects of life in Pennsylvania from human health and the economy to agriculture and water resources.

Given these projected effects, it is likely that the plants, animals, and landscapes in Pennsylvania will be altered by climate change. The challenge now for those charged with the management and conservation of Pennsylvania's natural resources is how to adapt and mitigate for climate change.

Climate Resiliency

The Nature Conservancy's Resilient and Connected Landscapes project is the first study to comprehensively map resilient lands and significant climate corridors across Eastern North America. Released in October 2016, the study took eight years to complete, involved 60 scientists, and developed innovative new techniques for mapping climate-driven movements. The tool can be found at <https://www.maps.tnc.org/resilientland/#/explore>. The tool includes three interactive maps (explained below) to explain the project.

Resilient Land identifies the most climate-resilient areas for each of 62 characteristic environments in Eastern North America. The study develops new methods for mapping species-relevant microclimates and highly connected lands in order to identify places where species are most likely to persist. The map tool allows non-profits, communities, and policy makers to view the resilience results and use basic analytic tools to understand the data and assess specific areas.

Connected Landscapes maps climate-resilient sites, confirmed biodiversity locations, and species movement areas across Eastern North America. The study uses the information to prioritize a conservation portfolio that naturally aligns these features into a network of resilient sites integrated with the species movement zones. This network acts as a blueprint for conservation that represents all habitats.

Conservation Strategies provides specific conservation strategies to act as illustrative examples of where the prioritized network of resilient and connected lands could be used, in conjunction with other spatial data, to strategically maximize benefits for multiple objectives.

Flooding and Stormwater

Rivers and streams experience flooding as a natural result of large rains storms or spring snowmelt that quickly drains into streams and rivers. Flooding is a common occurrence in the Juniata River watershed. Large flood events can damage homes, roads, bridges, and other infrastructure; wipe out crops; and harm or displace people. Although regular flooding helps to maintain the nutrient balance of soils in the flood plain, larger or more frequent floods could disrupt ecosystems by displacing aquatic life, impairing water quality, and increasing soil erosion (U.S. EPA 2023⁷).

Climate change may cause river floods to become larger or more frequent than they used to be. Additionally, increased stormwater from impervious surfaces and turf grass also contribute to more frequent and larger flood events. Stormwater management involves planning for surface runoff into

stream and river systems during rain and snowmelt events. In the Juniata River watershed, 79 municipalities are covered under a stormwater ordinance or plan.

Development

Issues associated with development and urban sprawl were a common theme throughout the public input phase of the planning process. In particular, development near sensitive areas (i.e. high-quality streams and exceptional value wetlands), development near Raystown Lake, and the loss of farms due to development (housing developments and solar farms) were highlighted.



Photo 2-1. Rain gardens can help reduce stormwater flowing into area waterways. Photo by Blair County Conservation District.

Illegal Dumping

In addition to being unsightly, illegal dumps pose direct threats to the watershed and have a high potential to contaminate waterways. Waste containing hazardous materials soaked by rainfall may cause contaminants to leach through the soil or run off the land surface, contaminating ground or surface water. Trash and debris can directly enter the stream through heavy rainstorms, affecting water quality and stream aesthetics.

The number of illegal dumpsites can be reduced through cleanups, education, and alternate disposal methods. Active participation by watershed residents and local government officials is needed to address illegal dumping issues. In addition, educating the public about the threats of illegal dumping is an important step in battling the prevalence of littering and illegal dumps. There are a number of groups that work to clean-up illegal dumpsites and littering, including Keep Pennsylvania Beautiful affiliates, Little Juniata River Association, Keep Huntingdon County Beautiful, and Bobs Creek Stream Guardians.

Water Resources

Many residents voiced concern about the water quality in the watershed. These concerns ranged from water temperature, runoff from roads and impervious surface, runoff from agricultural operations, and drinking well water quality standards.

Infrastructure

Concerns about aging infrastructure were also prevalent issues gathered from the public. These issues ranged from lack of internet/broadband/cell phone coverage, traffic, and wastewater operations needing upgrades due to nearing their life expectancy. Many of these issues regarding infrastructure are addressed in the Alleghenies Ahead: Comprehensive Plan developed for the six-county region of central Pennsylvania. The plan can be found at <https://sapdc.org/alleghenies-ahead-comprehensive-plan/>.

Recreation

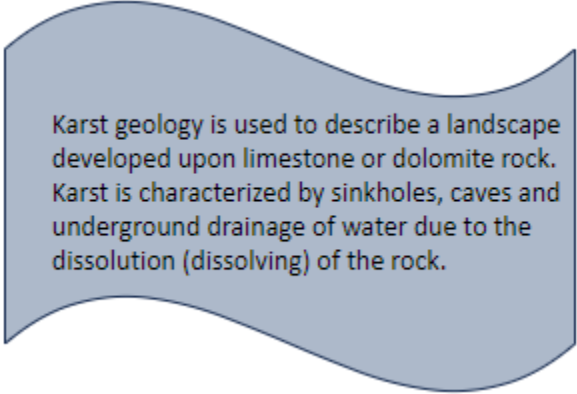
Access to recreational opportunities was also a theme in the visioning sessions and public surveys. Residents see a need for access to fishing, boating, and trails to connect communities. Another concern was finding safe routes for larger trails systems, getting private property owners on board for trail connections, and who is ultimately responsible for taking care of the trails.

CHAPTER 3 - LAND RESOURCES

Geology

Nearly the entire Juniata River basin lies within the Ridge and Valley Physiographic Province. The western edge of the watershed (only four percent of the total area) extends into the Appalachian Plateau (or Central Appalachia) Physiographic Province. The Allegheny Front, a major north-south running escarpment, separates the two provinces. Because most of the basin is in the Ridge and Valley province, the basin topography is characterized by parallel series of northeast-southwest running ridges outlining deeply cut river valleys. This basic topography influences many aspects of the basin, such as soil type, land use, and transportation routes.

The bedrock geology of the region is represented by the Cambrian, Ordovician, Silurian, and Devonian periods (Map 3-1 and Appendix E). Rocks formed during this period include argillaceous limestone, argillaceous sandstone, calcareous shale, dolomite, limestone, mudstone, quartzite, sandstone, shale, and siltstone (Map 3-2).



Karst geology is used to describe a landscape developed upon limestone or dolomite rock. Karst is characterized by sinkholes, caves and underground drainage of water due to the dissolution (dissolving) of the rock.

Soil Characteristics

Soils in the Juniata River watershed are largely derived from underlying bedrock material of three main types: sandstone, shale, and limestone. Differences in erosion patterns and rates among these bedrock types enhanced the already folded topography of the basin. Sandstone erodes the slowest and thus makes up the majority of ridges in the region. Limestone weathers more quickly, eroding and dissolving to form wider flatter valleys.

Soil Series

There are 12 major soil series in the project area (Map 3-3). Descriptions of each are located below (USDA 2024).

1. **Berks** series consists of moderately deep, well drained soils formed in residuum weathered from shale, siltstone and fine-grained sandstone on rounded and dissected uplands. Slope ranges from 0 to 80 percent. Permeability is moderate or moderately rapid.
2. **Edom** series consists of deep and very deep, well drained soils formed in material weathered from interbedded shaly or platy limestone and calcareous shale. Slopes range from 3 to 45 percent. Permeability is moderately slow to moderate.
3. **Hagerstown** series consists of deep and very deep, well drained soils formed in residuum of hard gray limestone. Slope ranges from 0 to 45 percent. Permeability is moderate.
4. **Hazleton** series consists of deep and very deep, well drained soils formed in residuum of acid gray, brown or red sandstone on uplands. Slope ranges from 0 to 80 percent. Permeability is moderately rapid to rapid.

5. **Kreamer** series consists of very deep, moderately well drained soils that formed in colluvium or glacial material derived from limestone. They occur on nearly level to strongly sloping concave hillsides. Slopes range from 0 to 15 percent. Permeability is moderately slow in the upper part of the solum and slow in the lower part.
6. **Leck Kill** series consists of deep and very deep, well drained soils formed in residuum or glacial till weathered from red shale, siltstone, and sandstone. They are on the uplands. Slopes range from 0 to 60 percent.
7. **Morrison** series consists of very deep, well drained soils formed in residuum of weathered noncalcareous sandstone. Slopes range from 0 to 50 percent. Permeability is moderate to moderately rapid.
8. **Murrill** series consists of very deep, well drained soils formed in colluvial materials derived from acid sandstones and shales and the underlying limestone residuum, on lower backslopes, footslopes, fans and benches. Saturated hydraulic conductivity is moderately high to high in the colluvial material and in the residual material. Slopes range from 0 to 55 percent.
9. **Opequin** series consists of shallow, well drained soils derived from residuum weathered from relatively pure limestone or dolomite. In some areas the bedrock and the solum may contain chert. Slopes range from 0 to 100 percent. Permeability is moderate to slow.
10. **Pope** series consists of very deep, well drained soils formed in alluvium on flood plains. Permeability is moderate or moderately rapid. Slopes range from 0 to 4 percent.
11. **Weikert** series consist of shallow, well drained soils formed in material that weathered from interbedded gray and brown acid shale, siltstone, and fine-grained sandstone on gently sloping to very steep areas on uplands. Slope ranges from 0 to 100 percent. Permeability is moderately rapid.
12. **Westmoreland** series consists of deep and very deep, well drained soils in residuum of weathered interbedded siltstone, sandstone, and limestone. Slopes range from 0 to 70 percent. Permeability is moderate.

Agricultural Soils

Soils that meet certain physical, chemical, and slope characteristics are identified as prime agricultural soils (NRCS 2015). Based upon a predetermined set of criteria, they are designed by the USDA Natural Resources Conservation Service (NRCS) in each county. The criteria typically include level to nearly level slopes, a well-drained structure, deep horizons, an acceptable level of alkaline or acid components, and the capacity for producing food and crops. There are 141 prime agricultural soils within the watershed. A listing of these is located in Appendix F.

Farmland of statewide importance does not meet the criteria for prime agricultural soils, but nearly meets the criteria and produces high yields of crops when managed accordingly (NRCS 2015). Some of these areas may even produce yields as high as areas in prime farmland when conditions are favorable (NRCS 2015). A list of these is located in Appendix H. Map 3-4 shows both prime farmland and farmland of statewide importance.

Land ownership

Land in the Juniata River watershed is owned primarily by private individuals. Over 70% of the 3,403 square miles in the watershed is privately owned. Nearly 975 square miles are in public ownership, or 28.6% of the total watershed area (Table 3-1).

Most public land in the Juniata River watershed is owned by the Commonwealth of Pennsylvania. Large tracts of public land exist in the region. State forests and state game lands lie along many of the wooded ridges. Raystown Lake, in southern Huntingdon County, is managed by the U.S. Army Corps of Engineers. There are also small amounts of public land owned by the PA Fish and Boat Commission as boat launches or public fishing accesses. A small amount of county and municipal owned land also exists in the region (Map 3-5). Appendix G has a full listing of public lands in the watershed.

Table 3-1. Public Lands

Public Land Category	Acreage	Percent of Total Watershed Area
State Forests	331,971	15.2%
State Parks	14,781	0.7%
State Game Lands	242,594	11.1%
Federal Lands	29,700	1.4%
County/Municipal Land	4,610	0.2%
Fish and Boat Commission Land	146	0.0%
Total	623,802	28.6%
Source: Pa.gov		

In the past 25 years, there has been an increase in public lands in the watershed by more than 216,000 acres. These increases were mainly additions to state forests and state game lands.

Land Use

The Juniata River watershed is a mainly rural area with some growth from development. Table 3-2 and Map 1-5 display the current land cover information for the watershed. Forestland overwhelmingly dominates the land use at more than 67% of the land cover. Agriculture, at 22% land cover, is the second largest land use. Developed areas account for nearly 8% of the land cover.

Table 3-2. Land Cover

Land Cover Type	Area (mi ²)	Coverage (%)
Open Water	29.03	0.86
Developed, Open Space	153.89	4.53
Developed, Low Intensity	75.74	2.23
Developed, Medium Intensity	30.5	0.9
Developed, High Intensity	9.71	0.29
Barren Land (Rock/Sand/Clay)	5.63	0.17
Deciduous Forest	2,014.28	59.36
Evergreen Forest	54.68	1.61
Mixed Forest	214.01	6.31
Shrub/Scrub	17.3	0.51
Grassland/Herbaceous	22.09	0.65
Pasture/Hay	383.64	11.3
Cultivated Crops	371.97	10.96
Woody Wetlands	8.32	0.25
Emergent Herbaceous Wetlands	2.76	0.08

Critical areas

Critical areas are areas that have constraints that limit development and various other activities. Critical natural areas contain rare, threatened, or endangered species, natural communities of special concern, or significant ecological and geological landscapes worthy of protection. Steep slopes, ridgetops, floodplains, streambanks and wetlands are examples of critical natural areas.

Steep Slopes

The Juniata River basin lies in the Ridge and Valley Province, with highly-folded topography and an abundance of steep slopes. Slopes of 25% or greater are shown in Map 3-6. Because of the risks and costs inherent to building on such steep slopes, this removes a considerable amount of land from the developable land base. It also helps to explain why so much land in the region has remained forested. As long as these slopes remain forested, the likelihood of landslides and erosion problem (common problems associated with steep slopes) is relatively low. However, because these slopes often run down directly to a stream, the possibility of sedimentation remains a concern.

Landfills

There is only one PA DEP permitted landfill in the watershed, the Advanced Disposal Services Sandy Run Landfill located in Bedford County. This landfill accepts municipal waste.

Hazardous Areas

Hazardous areas in the watershed include waste sites, abandoned mines, sinkholes, and illegal dumpsites.

Waste Sites

The Comprehensive Environmental Response Compensations and Liability Act (CERCLA), commonly known as Superfund, was enacted in 1980 to provide broad federal authority to respond to releases of hazardous substances that may endanger public health or the environment (U.S. EPA¹ 2023). By creating a tax on the chemical and petroleum industries, a trust fund was established to provide for cleanup where no responsible party could be identified. In 1986, the Superfund Amendments and Reauthorization Act (SARA) amended CERCLA. Table 3-3 shows CERCLA sites in the Juniata River watershed.

Generally, EPA's Superfund program has three options for Superfund sites that need long-term (remedial) clean ups:

1. Listing the site on the [National Priorities List](#) (NPL),
2. Addressing the site using other clean up options (e.g., other federal or state programs).
3. Using the Superfund alternative approach.

Short-term and long-term action responses were identified in the law. Short-term removals require prompt response for releases or threatened releases. Long-term responses permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious but not immediately life threatening. These actions can be conducted only at sites listed on U.S. EPA's National Priorities List (NPL) (U.S. EPA² 2023).

The Superfund alternative (SA) approach uses the same investigation and cleanup process and standards that are used for sites listed on the NPL. The SA approach is an alternative to listing a site on the NPL; it is not an alternative to Superfund or the Superfund process. The SA approach can potentially save the time and resources associated with listing a site on the NPL. As long as a PRP enters into a SA approach agreement with EPA, there is no need for EPA to list the site on the NPL (although the site qualifies for listing on the NPL) (U.S. EPA³ 2023). Table 3-3 lists the Superfund sites in the Juniata River watershed. An updated list of CERCLA/Superfund sites can be found at <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>.

Table 3-3. CERCLA/Superfund Sites

EPA ID	Site Name	City	County
PAD000824771	ALTOONA WESTERLY STP	LOGAN TWP	BLAIR
PAD981040611	BAREFOOT DISPOSAL	HOLLIDAYSBURGH	BLAIR
PAD981038052	DELTA QUARRIES & DISPOSAL, INC./STOTLER LANDFILL	ANTIS/LOGAN TWPS	BLAIR
PAN000306118	EVERETT JUNKYARD (AKA THOMAS COLLEGE PROPERTY)	EVERETT	BEDFORD
PAD980829493	JACKS CREEK/SITKIN SMELTING & REFINING, INC.	MAITLAND	MIFFLIN
Source: US EPA ⁴ 2023			

The U.S. EPA also has an online tool to map superfund cleanups. [Cleanups in My Community](#) enables users to map and list hazardous waste cleanup locations and grant areas, and drill down to details about those cleanups and grants and other, related information.

Pennsylvania's Land Recycling Program (Voluntary Cleanup Program) was established by a series of legislation enacted in 1995. The Land Recycling Program encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites.

The Land Recycling Program is built on four cornerstones that break down redevelopment obstacles:

- Uniform cleanup standards: enables the remediator to clearly understand the extent and cost of site cleanup. The selection of standard(s) assures that a site is protective of its present and future use. A property used for industrial development need not be as clean as a residential site.
- Liability relief: addresses the concerns that previously inhibited site redevelopment and sale of properties, the liability protection extends to future owners.
- Standardized reviews and time limits: provides date certainty. Consistent reporting requirements and standardized review procedures provide a definite time frame for report review.
- Financial Assistance: provides grants and low-interest loans for assessment or remediation. These programs are available to people who did not cause or contribute to contamination at the site.

The goals of the Land Recycling Program are to encourage private sector cleanup of contaminated, vacant or otherwise underutilized properties and return them to productive use. Further development of brownfield properties stimulates economic growth, encourages local government partnerships with business, and maximizes the use of existing infrastructure, thereby preserving prime farmland, open space and natural areas (PA DEP² 2024). Thus far, the program has been quite successful: 408 sites have been cleaned up as of April 2024 and 47 more sites are in the process of being cleaned up (Appendix H). More information and updated lists of sites can be found at <https://www.dep.pa.gov/Business/Land/LandRecycling/Pages/Program-Results.aspx>.

The Resource Conservation and Recovery Act (RCRA), a federal statute, regulates the transportation, handling, storage, and disposal of solid and hazardous materials. Regulatory responsibilities, including obtaining permits, identifying and listing hazardous waste, adhering to proper procedures when transporting or disposing of waste, developing risk management plans, and maintaining records, may be controlled by federal facilities (U.S. EPA⁵ 2023). Requirements for underground storage tanks, including

cover tank design, operation, cleanup, and closure, are also contained in the RCRA. There are five RCRA sites within the Juniata River watershed (Table 3-4).

Table 3-4. RCRA Sites

EPA ID	Handler Name	City
PAD004344172	SKF USA INC	Altoona
PAD004397683	KENNAMETAL INC	Bedford
PAD990752321	GBW RAILCAR SERVICES LLC	Hollidaysburg
PAD003009461	ELCO CORP	Huntingdon
PAD057631889	BEDFORD MATERIALS CO INC	Manns Choice
Source: US EPA		

The Toxics Release Inventory (TRI) tracks the waste management of certain toxic chemicals that may pose a threat to human health and the environment. U.S. facilities in different industry sectors must report annually how much of each chemical they release into the environment and/or managed through recycling, energy recovery and treatment, as well as any practices implemented to prevent or reduce the generation of chemical waste (U.S. EPA⁶ 2023). There are 30 TRI-related facilities located in the watershed (Appendix I).

Abandoned Mine Lands

The Juniata River watershed lies for the most part in a non-coal region between the bituminous (west) and anthracite (east) coalfields of Pennsylvania. Low-volatile bituminous coal fields are located in two main areas of the watershed: along the Allegheny Front of the northwestern edge of the watershed, and on the Broad Top plateau at the junction between Bedford, Fulton, and Huntingdon counties (Map 3-7).

The Bureau of Abandoned Mine Reclamation (BAMR) administers and oversees the Abandoned Mine Reclamation Program in Pennsylvania. The bureau is responsible for resolving problems such as mine fires, mine subsidence, dangerous highwalls, open shafts and portals, mining-impacted water supplies and other hazards which have resulted from past coal mining (pre-1977) practices in accordance with requirements established by the federal Office of Surface Mining under authority of the Surface Mining Control and Reclamation Act (PA DEP³ 2024).

The AMD abatement and treatment program (AMD Set-Aside Program) is authorized in Section 402(g)(6) of the Surface Mining Control and Reclamation Act, as amended (SMCRA). It was first authorized in 1990. The 2006 SMCRA amendments increased the funding limits and removed a previous requirement for the Office of Surface Mining Reclamation and Enforcement (OSMRE) to approve an AMD plan (PA DEP³ 2024).

AMD Set-Aside funds, together with all interest earned, can only be expended for the abatement of the causes and treatment of the effects of AMD in a comprehensive manner within a Qualified Hydrologic Unit (QHU) (formerly Hydrologic Unit Plan (HUP)) affected by coal mining practices.

A Qualified Hydrologic Unit means a hydrologic unit which meets the following requirements:

1. Water quality has been significantly affected by acid mine drainage from coal mining practices in a manner that adversely impacts biological resources.

2. The unit contains lands and waters that meet both the following requirements.
 - a. Eligible under section 404 of SMCRA, and include any of the coal priorities described in section 403(a).
 - b. The subject of expenditure from the forfeiture of a bond under section 509 or from other State sources to abate and treat acid mine drainage.

The AMD Set Aside Program indicates that 10 passive treatment project sites in the watershed have been completed (Table 3-5).

Table 3-5. AMD Passive Treatment Project Sites

Project/Treatment	Receiving Stream	Watershed	Year Constructed	County
Sandy Run MP-10	Sandy Run	Raystown Branch	1999	Bedford
Sandy Run MP-11	Sandy Run	Raystown Branch	1999	Bedford
Sandy Run MP-12	Sandy Run	Raystown Branch	1999	Bedford
Glenwhite Run	Glenwhite Run	Beaverdam Branch	2001	Blair
Glenwhite Run	Glenwhite Run	Beaverdam Branch	2001	Blair
Glenwhite Run Coke	Glenwhite Run	Beaverdam Branch	2001	Blair
Glenwhite Run	Glenwhite Run	Beaverdam Branch	1999	Blair
Bellwood Site AB	Bells Gap Run	Little Juniata River	2001	Cambria
Bellwood Site C	Bells Gap Run	Little Juniata River	2001	Cambria
Rocky Ridge S.	Roaring Run	Sideling Hill Creek	1998	Huntingdon

Source: PA DEP

Sinkholes

A sinkhole is an area of ground that has no natural external surface drainage--when it rains, the water stays inside the sinkhole and typically drains into the subsurface. Sinkholes are common where the rock below the land surface is limestone, carbonate rock, salt beds, or rocks that can naturally be dissolved by groundwater circulating through them. As the rock dissolves, spaces and caverns develop underground (USGS 2018). They are a common occurrence in the Juniata watershed. Unfortunately, some people see these holes in the ground as potentials garbage dumps. Because sinkholes are conduits into ground water aquifers, dumping garbage into them is likely to cause ground water pollution.

Additionally, land use surrounding a sinkhole may impact water quality. Runoff contaminated by nutrients, sediment, and chemicals can enter directly into the ground water via sinkholes, instead of by the usual slow infiltration process.

Illegal Dump Sites

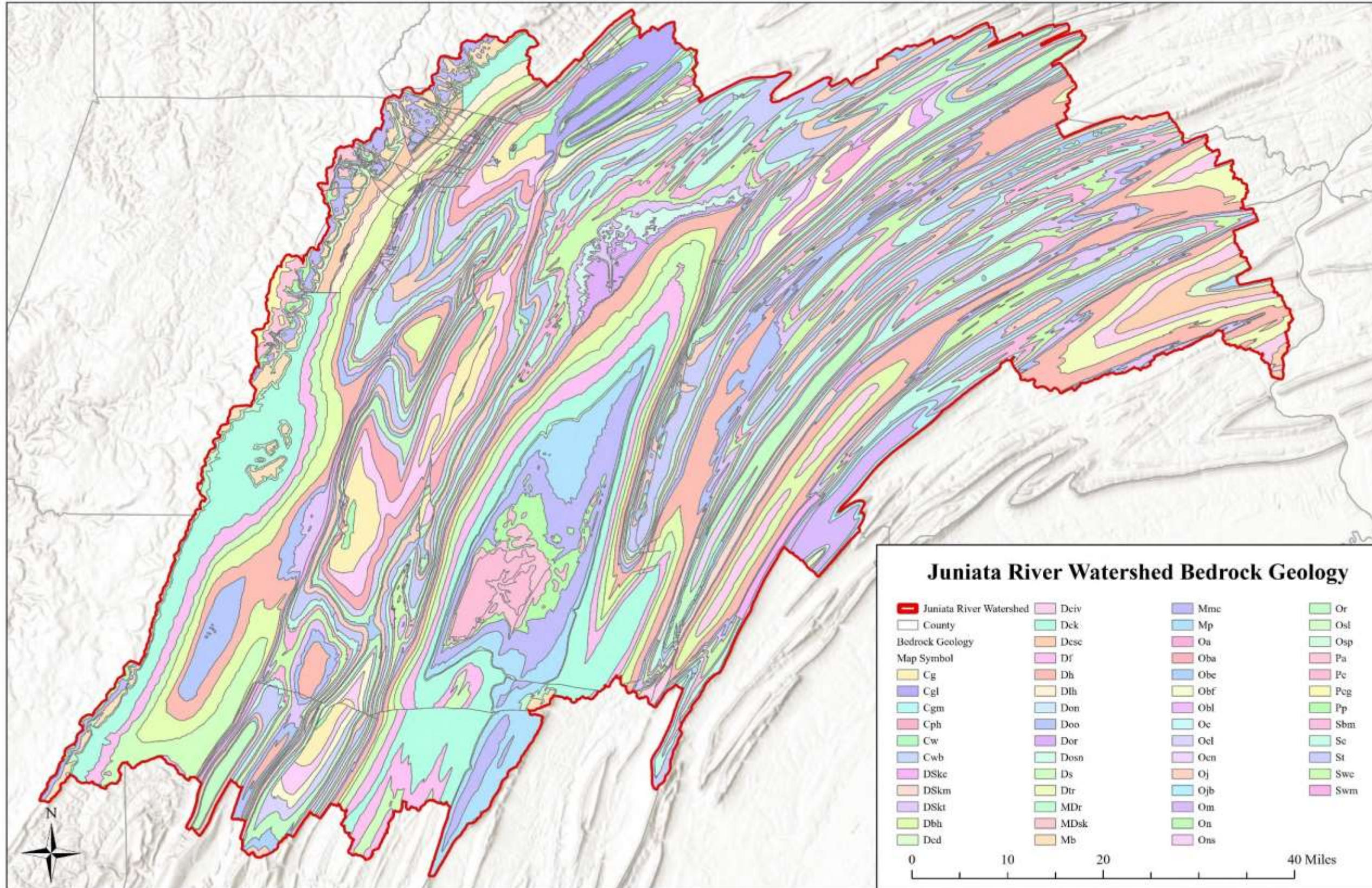
In remote areas of the watershed, streambeds, hillsides, and back roads are inundated with discarded tires, appliances, and other items that people no longer want. These illegal dumps grow with continued use over time and can cause a variety of environmental and health impacts. It is generally the responsibility of the municipality to identify and clean up dumpsites.



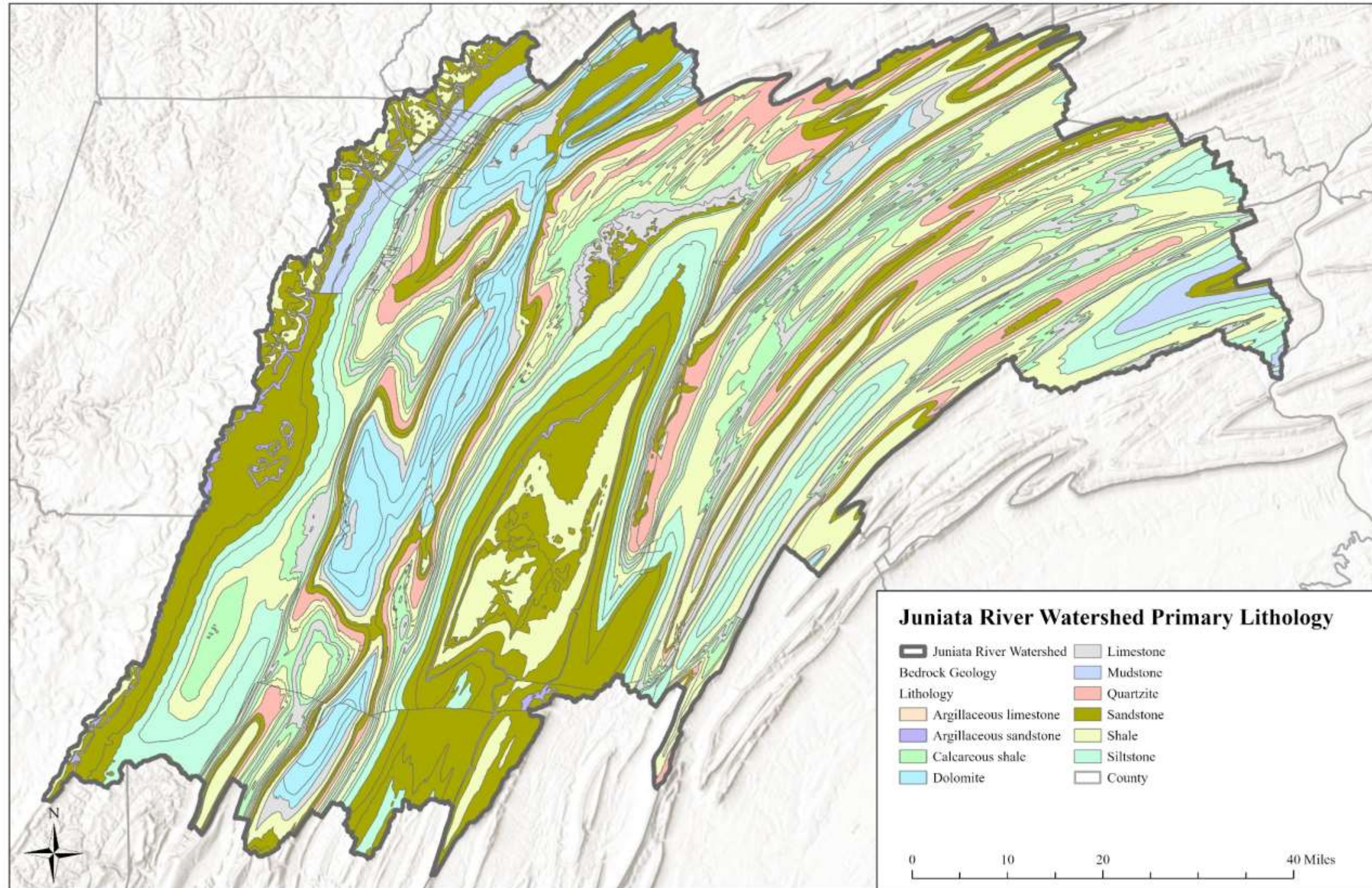
Photo 3-1. Illegal Dump Site

Keep Pennsylvania Beautiful affiliates throughout the state work to clean up and prevent illegal dumping through action and education. Affiliates organize local events and programs based on their communities' needs. More information about Keep Pennsylvania Beautiful and their affiliates can be found at <https://www.keppabeautiful.org/>.

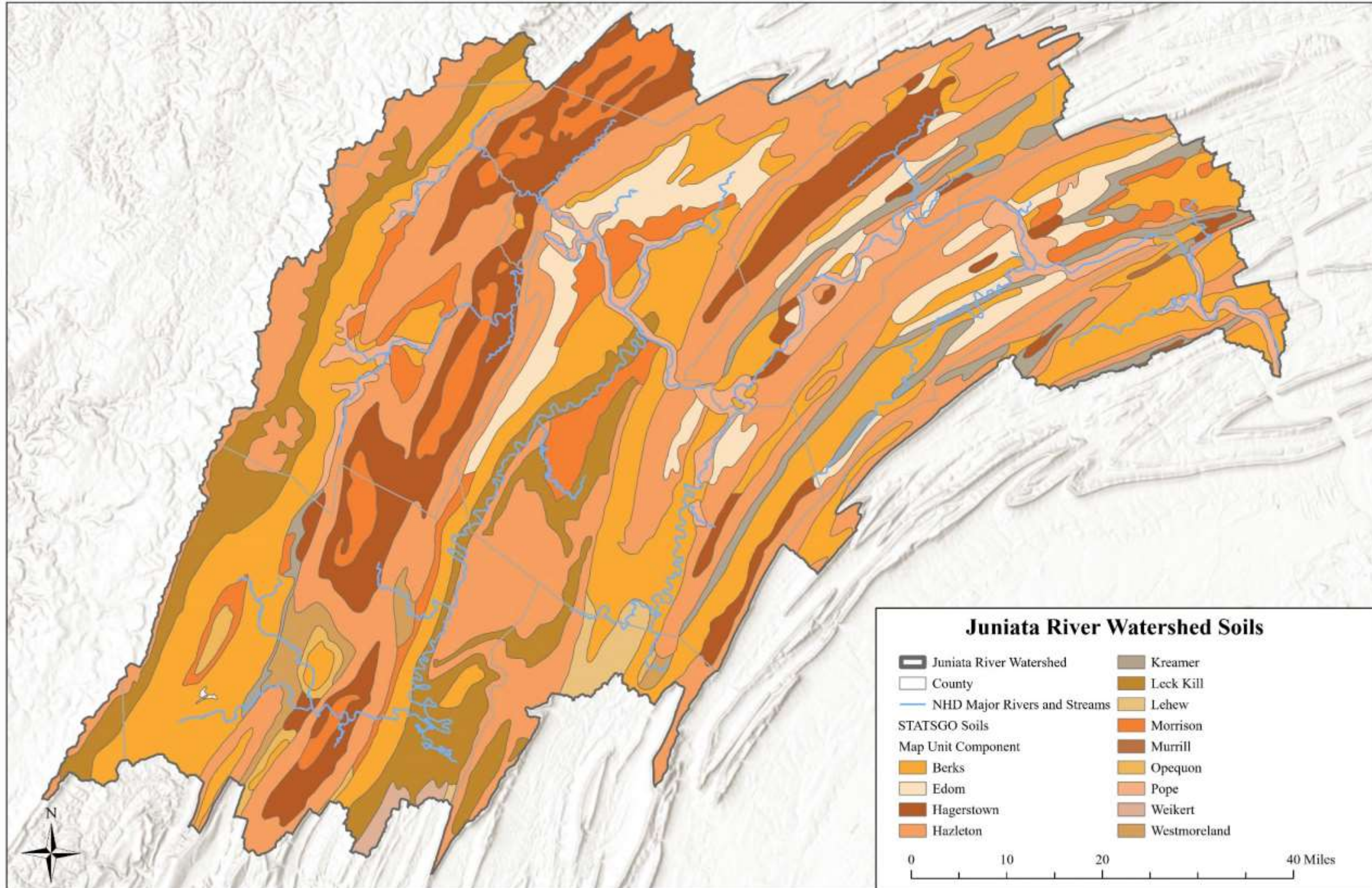
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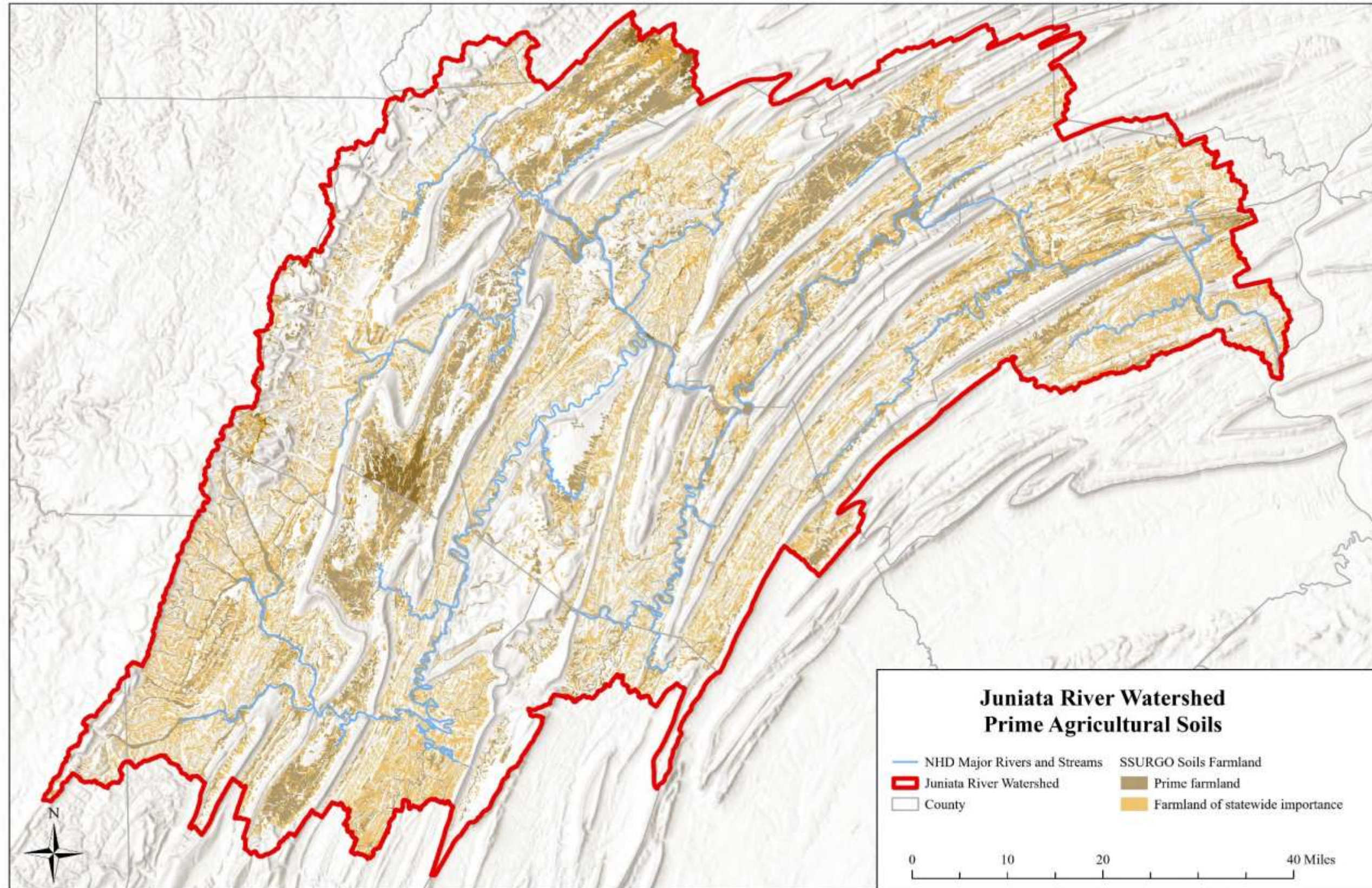
Map 3-1. Bedrock Geology in the Juniata River Watershed



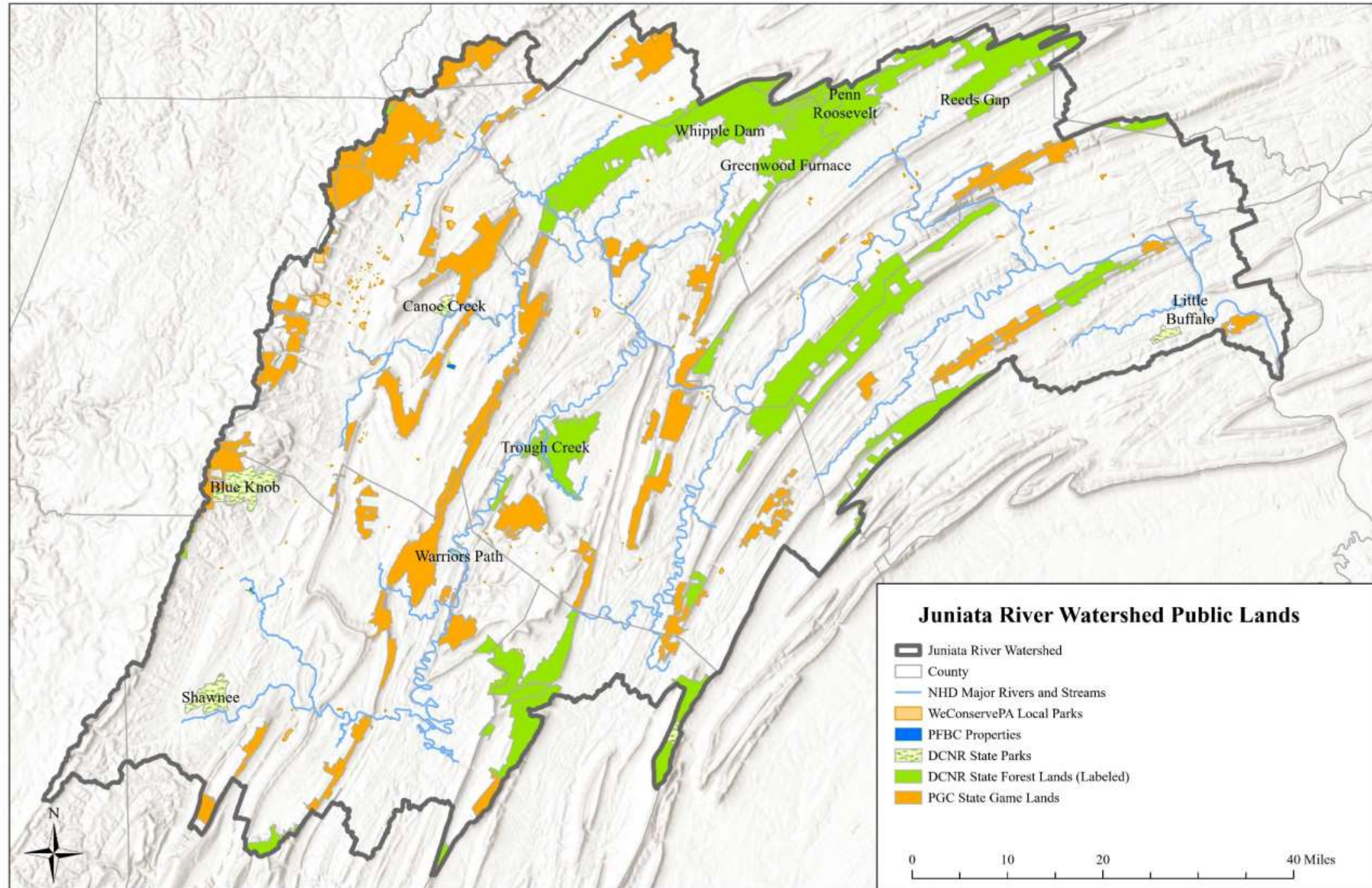
Map 3-2. Lithology in the Juniata River Watershed



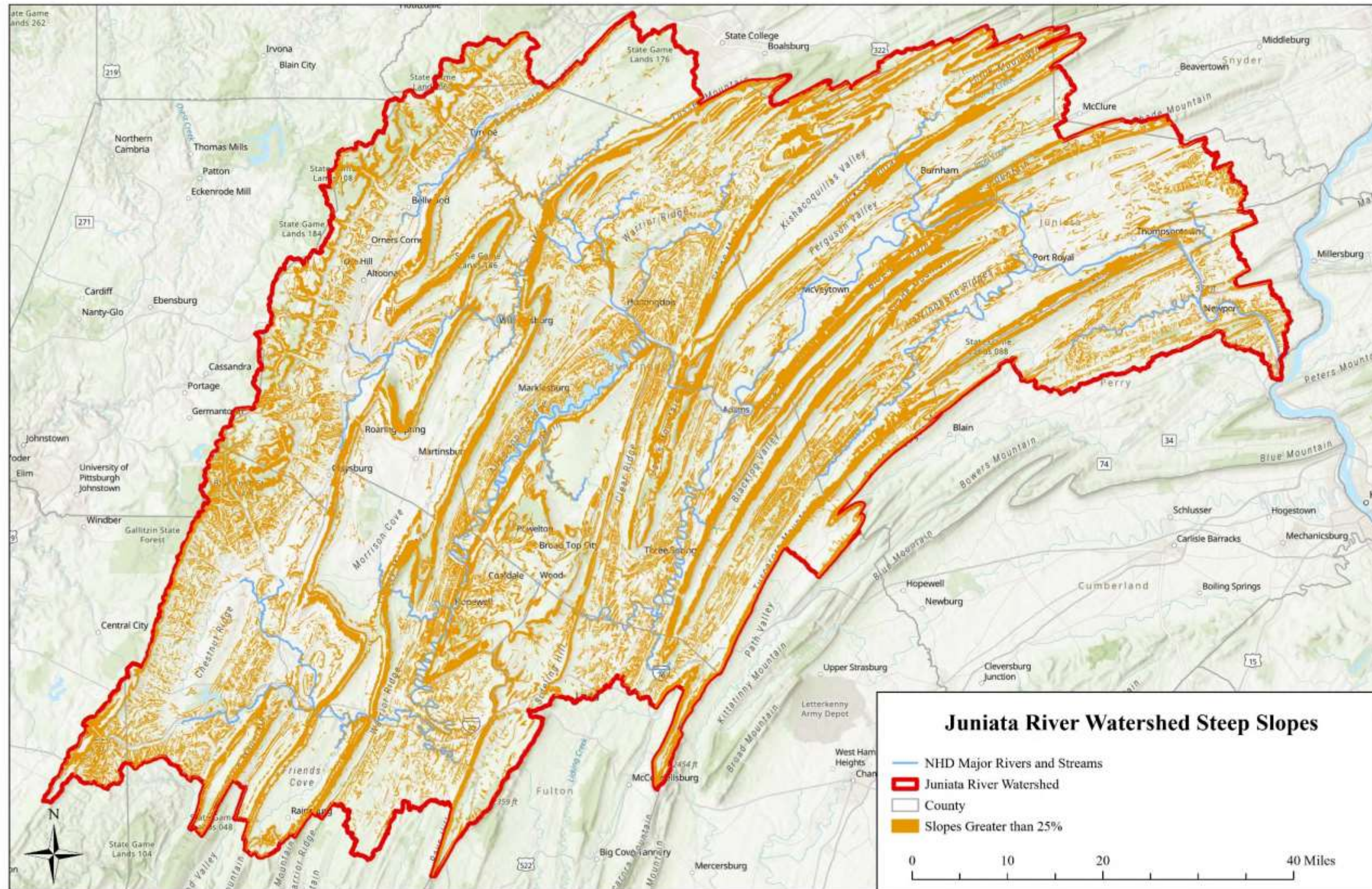
Map 3-3. Soil Components in the Juniata River Watershed



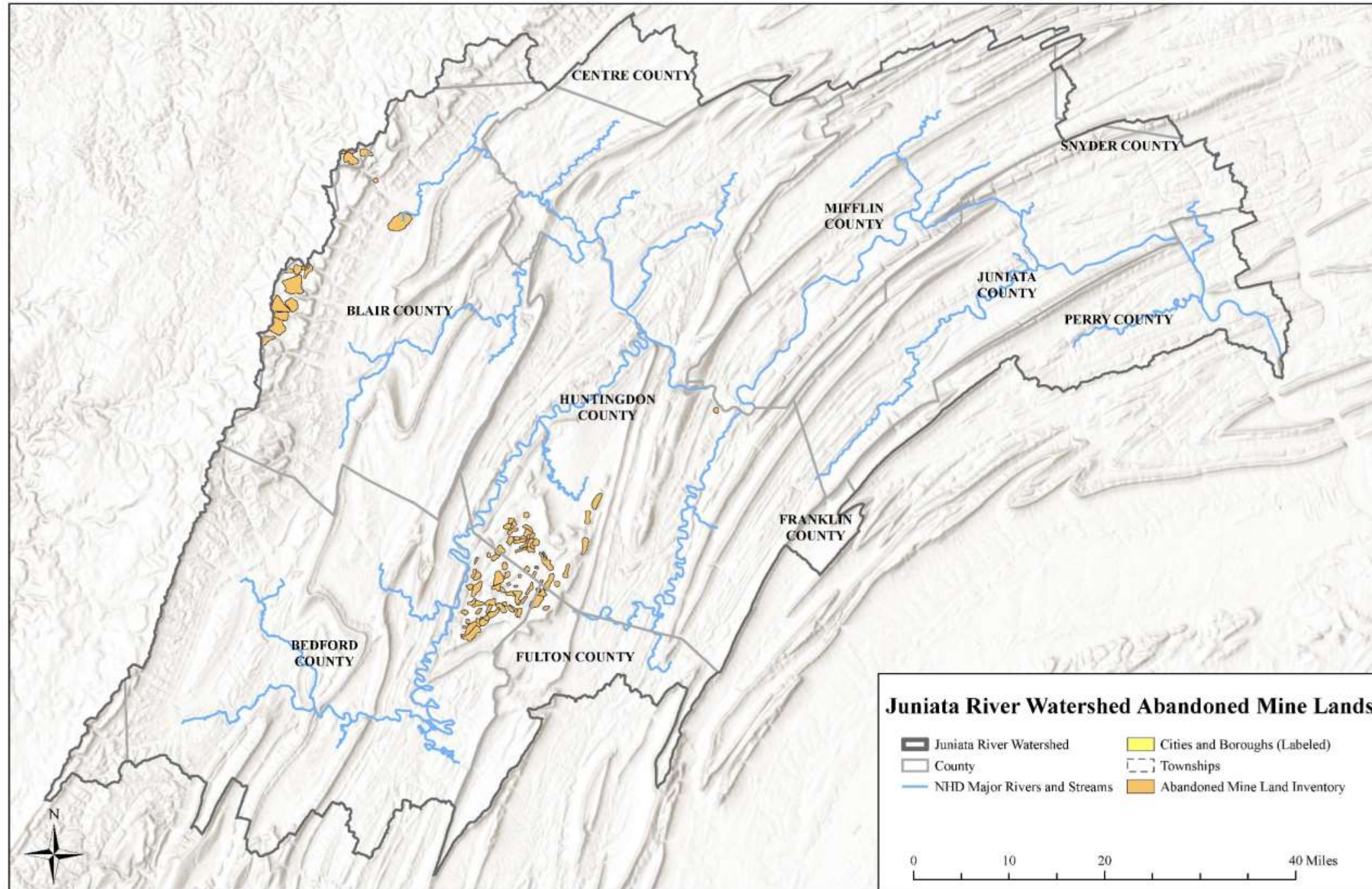
Map 3-4. Prime Agricultural Soils in the Juniata River Watershed



Map 3-5. Public Lands in the Juniata River Watershed



Map 3-6. Steep Slopes in the Juniata River Watershed



Map 3-7. Abandoned Mine Lands in the Juniata River Watershed

CHAPTER 4 - WATER RESOURCES

Major Tributaries

The mainstem of the Juniata River is formed by three major tributaries: the Raystown Branch, the Frankstown Branch, and the Little Juniata River. Other major tributaries that feed the Juniata River include Standing Stone Creek, Aughwick Creek, Kishacoquillas Creek, and Tuscarora Creek. These subbasins, which appear on Map 1-2, are described below.

Raystown Branch

The Raystown Branch of the Juniata River (which includes the HUC 10's of Upper, Middle, and Lower Raystown Branch, Dunning Creek, Bobs Creek, Yellow Creek, and Brush Creek) begins its journey in Somerset County, on the eastern slopes of the Allegheny Front. The stream flows east and north for about 120 miles, through the boroughs of Bedford, Everett, and Saxton. The Raystown Branch subbasin features a drainage area of 964 square miles and flows through the northern half of Bedford County, southwestern Huntingdon County, and a portion of western Fulton County. This represents 28% of the land area in the watershed. Because it drains the Broad Top plateau, the largest coal field in the Juniata River watershed, the Raystown Branch and its tributaries have been severely impacted by abandoned mine drainage (AMD). The AMD impacted streams in this subbasin include Hartman Run, Longs Run, Miller Run, Sandy Run, Sixmile Run, and Shoup's Run. Treatment efforts have improved the fisheries in some of these streams. At the northernmost end, Raystown Dam backs up the stream to form Raystown Lake, a popular recreation area and, at 8,300 acres, the largest lake in Pennsylvania. The Raystown Branch joins the Juniata River a few miles downstream of Huntingdon Borough.



Figure 4-1. Major Tributaries of the Juniata River Watershed

Frankstown Branch

The Frankstown Branch of the Juniata River forms at the confluence of Beaverdam Creek and South Poplar Run in southern Blair County. Some of the tributaries that originate on the Allegheny Front are impacted by coal mining and AMD. These streams include Burgoon Run, Kittanning Run, Glenwhite Run, and Sugar Run. The Frankstown Branch flows northeastward for 45 miles past the boroughs of Hollidaysburg, Williamsburg, and Alexandria. The Frankstown Branch subbasin drains 396 square miles and represents 12% of the land area in the watershed.

Little Juniata River and Spruce Creek

The Little Juniata River begins on the north side of the city of Altoona and flows north to the borough of Tyrone, where it is joined by Bald Eagle Creek. At Tyrone, the Little Juniata turns southeastward and flows a total of 32 miles through northern Blair and northwestern Huntingdon Counties. The drainage area of the river is 342 square miles and represents 10% of the land area in the watershed. This subbasin contains some of the best trout fishing streams in the watershed. The Little Juniata River joins the Frankstown Branch a few miles upstream of Petersburg Borough to form the official beginning of the mainstem of the Juniata River.

Standing Stone Creek and Shaver Creek

Standing Stone Creek flows into the Juniata River at the eastern edge of Huntingdon Borough. Standing Stone Creek, along with Shaver Creek, drains the northeastern part of Huntingdon County, flowing southwesterly for 33 miles. The drainage area of this subbasin is 195 square miles and represents 6% of the land area in the watershed. Much of this subbasin is designated as a high-quality cold-water fishery.

Aughwick Creek and Sideling Hill Creek

Aughwick Creek forms at the confluence of the Little Aughwick Creek and Sideling Hill Creek in southern Huntingdon County. The subbasin drains 251 square miles in northern Fulton County and southeastern Huntingdon County and represents 7% of the land area in the watershed. After it travels northward for 30 miles, Aughwick Creek enters the Juniata River a few miles east of Mount Union borough.

Kishacoquillas Creek and Honey Creek

Kishacoquillas (Kish) Creek starts its 23-mile journey in the upper end of the Kishacoquillas Valley, Mifflin County, which features some of the most fertile farmland in the entire watershed. The subbasin drains 191 square miles in Mifflin County. This represents 6% of the land area in the watershed. Because of its proximity to highly productive farms fields as well as urban industries, Kish Creek is one of the most pollution-stressed streams in the watershed; however, concentrated outreach and implementation efforts over the last 25 years have made improvements to the watershed. Kish Creek empties into the Juniata River in the borough of Lewistown.

Tuscarora Creek

Tuscarora Creek's headwaters flow off the slopes of eastern Huntingdon County and northwestern Franklin County, forming a stream that flows northeastward for 45 miles through southern Juniata County. The subbasin, which includes Buffalo Creek and Cocolamus Creek, drains 270 square miles throughout Juniata and northern Perry Counties. This represents 8% of the land area in the watershed. Tuscarora Creek enters the Juniata River near the borough of Port Royal.

Lakes

Lakes and reservoirs play important roles in the Juniata watershed; some are used for public drinking water supply, some for flood control, and some for recreation. A few, like Raystown lake, fulfill more than one roll. Nearly all the sizable lakes and reservoirs in the watershed are human-made. See Table 4-1 for a list of major lakes.

Table 4-1. Lakes: Designated Use

Lake Name	HUC 8 Name	Area (acres)	County	Designated Use
Canoe Creek Lake	Upper Juniata	153	Blair	HQ-CWF
Cowans Gap Lake	Lower Juniata	43	Fulton	HQ-CWF
Greenwood Lake	Upper Juniata	5	Huntingdon	HQ-CWF
Holman Lake	Lower Juniata	81	Perry	HQ-CWF
Kettle Dam Reservoir (Brush Mountain Dam)	Upper Juniata	30	Blair	WWF
Kittanning Reservoir	Upper Juniata	42	Blair	WWF
Lake Perez	Upper Juniata	67	Huntingdon	HQ-CWF
Laurel Creek Reservoir	Lower Juniata	58	Mifflin	HQ-CWF
Mill Run Reservoir	Upper Juniata	37	Blair	HQ-CWF
Plain Nine Reservoir	Upper Juniata	22	Blair	TSF
Plum Run Lake (Camp Sinoquipe)	Lower Juniata	11	Fulton	TSF
Raystown Lake	Raystown	8127	Huntingdon	WWF
Shawnee Lake	Raystown	445	Bedford	WWF
Tipton Reservoir	Upper Juniata	41	Blair	HQ-CWF
Whipple Lake (Whipple Dam State Park)	Upper Juniata	15	Huntingdon	HQ-CWF

Wetlands

In order for an area to be considered a wetland, it must have three components: anaerobic or hydric soils, wetland vegetation, and indications that it has been covered with water at least part of the year (Mitsch and Gosselink 2000). Anaerobic or hydric soils include those that form under conditions of flooding long enough in the growing season to not contain oxygen in the upper part. It is important to note that an area does not have to be covered with water during the entire year to be considered a wetland. Wetland areas may be permanently flooded by shallow water, permanently saturated by groundwater, or periodically saturated for varying periods during the growing season.



Photo 4-1. Beaverdam Wetland, Blair County PA

Of particular importance to the project area is that they are sites of groundwater recharge, essentially helping to replenish the water supply during times of drought. Wetlands near streams also perform important filtering and flood-protection functions, absorbing water during flood times to reduce flooding pressures and taking up nutrients, bacteria, and sediment that would otherwise end up in the water. They are also important sites of biodiversity. Only special types of plants are able to survive in wetland soils, which have reduced soil oxygen, and wildlife (such as birds and amphibians) is attracted to these habitats. It is

estimated that over 50% of wetlands in Pennsylvania have been lost to development and agriculture (Mitsch and Gosselink 2000).

The National Wetland Inventory (NWI) is a database of wetlands in the United States developed from black and white, infrared, and natural-color aerial photographs. Unfortunately, the database does not include all wetland areas or sometimes identifies wetlands where they are not present, because photographs cannot easily identify transition zones between wetlands and other land types, and they may not identify wetlands with standing water during only a part of the year. Although NWI wetlands can be a good starting point for identifying the extent of wetlands in an area, its limitations should be considered. Map 4-1 shows NWI wetlands for the project area.

Floodplains

Floodplains refer to areas of land adjacent to a stream onto which water spills when the water level in the stream rises. Floodplains increase the capacity of a stream to handle flood events by dissipating energy from high flows. The vegetation along a stream essentially acts as a giant sponge, absorbing and filtering floodwaters. As a result, building on floodplains, or other alternations can increase flooding downstream, cause bank failures, and be dangerous for residents. Flooding continues to be a pressing issue for many Pennsylvanians, especially with climate change increasing the volume and frequency of wet weather events.

The National Flood Insurance Program (NFIP) was established in 1968 with the National Flood Insurance Act (most recently reauthorized in 2024). The Federal Emergency Management Agency (FEMA) administers it. This act enables property owners to purchase insurance as a protection against flood loss in exchange for communities agreeing to adopt ordinances that reduce flood damage, including limited building in floodplain areas. In communities that adopt such ordinances, building in Special Flood Hazard Areas may only occur if the owner agrees to purchase flood insurance. These hazard areas are areas within the 100-year flood zone. Map 4-2 shows the floodplains in the Juniata River watershed. Special subsidies are available for existing structures. Future structures built in the 100-year floodplain must meet certain requirements. FEMA recently implemented the most significant updates to disaster assistance in 20 years and added new benefits, expanded eligibility, and simplified the application process (FEMA 2024).

To reduce the threat of flooding and to protect flood-prone areas, the U.S. Army Corps of Engineers (USACE), Commonwealth of Pennsylvania, and local governments have constructed several flood control projects in the watershed. Raystown Dam is the most prominent project in the region. Other flood control projects include the Tyrone Local Flood Protection Project (FPP), Everett FPP, the Smithfield Township FPP, and the Hyndman Borough FPP (PA DEP 2013).

The Susquehanna River Basin Commission has recently provided data collection support to the USACE in the Juniata River watershed for two separate flood risk management studies. USACE is currently working with FEMA to provide updated modeling and mapping to support update of existing FEMA Flood Insurance Rate Maps (FIRM). Additionally, USACE is currently working with representative of Perry County to perform a Flood Risk Management Study. Phase 1 of the study, which focused on Susquehanna River impacts in the county was recently completed. Phase 2, now funded and underway, will assess flood risk for Juniata River communities of Millerstown and Newport (SRBC interview).

Water Quality

The 1977 amendments to the federal Water Pollution Control Act became known as the Clean Water Act (CWA). This act establishes the basic structure for regulating discharges of pollution into waterbodies of

the United States. The CWS give the United States Environmental Protection Agency (U.S. EPA) the authority to regulate pollution discharges and set water quality standards.

The CWA works to enforce these requirements by making sure streams and lakes are suitable for specific uses. Designated uses include the types of activities that the waterbody currently supports, regardless of whether they have been attained since 1975. An existing use is defined as any use that has been attained or has occurred in a waterbody since November 1975. In Pennsylvania, the Pennsylvania Department of Environmental Protection (PA DEP) enforces the requirements of the CWA. Uses include aquatic life, water supply, and recreation and fish consumption (Table 4-2). Also included are special protection uses (Exceptional Value and High Quality) and Warm Water and Cold-Water Fishery designations. Map 4-3 shows stream designations for the project area.

Warm Water and Cold-Water Fishery Designations

Streams can be scientifically classified as Warm Water and Cold-Water Fisheries. As the name suggests, Warm Water Fisheries are those containing fish and other aquatic species characteristic of streams with comparatively higher temperatures, while Cold Water fisheries contain species tolerant of lower temperature conditions. In Pennsylvania, Cold Water and Warm Water Fisheries are official classifications and are considered to be uses under the CWA. A PA DEP Warm Water Fishery satisfies certain temperature requirements, including a maximum healthy water temperature of 87° in August, versus 66° for a Cold-Water Fishery.

Table 4-2. Pennsylvania Waterbody Designated Uses (PA DEP)

PA DEP Designated Uses	Description
Aquatic Life	
CWF	<i>Cold Water Fishes</i> —Maintenance or propagation, or both, of fish species including the family Salmonidae and additional flora and fauna which are indigenous to a cold-water habitat.
WWF	<i>Warm Water Fishes</i> —Maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.
MF	<i>Migratory Fishes</i> —Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which move to or from flowing waters to complete their life cycle in other waters.
TSF	<i>Trout Stocking</i> —Maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.
Water Supply	
PWS	<i>Potable Water Supply</i> —Used by the public as defined by the Federal Safe Drinking Water Act, 42 U.S.C.A. § 300F, or by other water users that require a permit from the Department under the Pennsylvania Safe Drinking Water Act (35 P. S. § § 721.1—721.18), or the act of June 24, 1939 (P. L. 842, No. 365) (32 P. S. § § 631—641), after conventional treatment, for drinking, culinary and other domestic purposes, such as inclusion into foods, either directly or indirectly.
IWS	<i>Industrial Water Supply</i> —Use by industry for inclusion into nonfood products, processing and cooling.
LWS	<i>Livestock Water Supply</i> —Use by livestock and poultry for drinking and cleansing.

AWS	<i>Wildlife Water Supply</i> —Use for waterfowl habitat and for drinking and cleansing by wildlife.
IRS	<i>Irrigation</i> —Used to supplement precipitation for crop production, maintenance of golf courses and athletic fields and other commercial horticultural activities.
Recreation and Fish Consumption	
B	<i>Boating</i> —Use of the water for power boating, sail boating, canoeing and rowing for recreational purposes when surface water flow or impoundment conditions allow.
F	<i>Fishing</i> —Use of the water for the legal taking of fish. For recreation or consumption.
WC	<i>Water Contact Sports</i> —Use of the water for swimming and related activities.
E	<i>Esthetics</i> —Use of the water as an esthetic setting to recreational pursuits.
Special Protection	
HQ	<i>High Quality Waters</i>
EV	<i>Exceptional Value Waters</i>

Special Protection Designations

With Pennsylvania, a stream designated as High Quality or Exception Value meets a number of criteria, including specific water quality and biological standards (Tables 4-3 and 4-4). As with other designated uses, any proposed discharge that will degrade a High-Quality stream below these criteria can only occur if a special exception is granted and the public is informed. No special exceptions are granted for Exceptional Value watersheds.

Table 4-3. High Quality Watershed or Watershed Stream Qualifications (PA DEP)

Parameter	Description
Chemistry (meeting at least one condition)	The Water has long-term water quality, based on a year of data, including being better than the water quality criteria in PA Code 93.7 at least 99% of the time.
	Additional chemical and toxicity information, which characterizes or indicates good water quality.
Biology (meeting at least one condition)	The surface water supports a high-quality aquatic community based upon information gathered using peer-reviewed biological assessment procedures that consider physical habitat, benthic macroinvertebrates or fishes based on Rapid Bioassessment Protocols for Use in Streams and Rivers: Benthic Macroinvertebrates and Fish, Plafkin, et al., (EPA/444/4-89-001), as updated and amended. The surface water is compared to a reference stream or watershed, and an integrated benthic macroinvertebrate score of at least 83% shall be attained by the referenced stream or watershed.
	The surface water supports a high-quality aquatic community based upon information gathered using other widely accepted and published peer-reviewed biological assessment procedures that the Department may approve to determine the condition of the aquatic community of a surface water.
	The Department may consider additional biological information which characterizes or indicates the quality of a water in making its determination.
	The surface water has been designated a Class A wild trout stream by the Fish and Boat Commission following public notice and comment.

Table 4-4. Exceptional Value Watershed or Stream Qualifications (PA DEP)

<p>(in addition to High Quality requirements)</p> <p>The waterbody meets one of the following:</p> <ul style="list-style-type: none"> • The water is located in a national wildlife refuge or a state game propagation and protection area. • The water is located in a designated state park natural area or state forest natural area, national natural landmark, federal or state wild river, federal wilderness area, or national recreational area. • The water is an outstanding national, state, regional, or local resource water. • The water is a surface water of exceptional recreational significance. • The water achieves a score of at least 92% using approved biological assessment methods. • The water is designated as a Wilderness Trout Stream by the Pennsylvania Fish and Boat Commission following public notice or comment. • The water is a surface water of exceptional ecological significance.
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Impaired Water Body or 303(d) List

In order to satisfy the requirements of the CWA, states must report to the U.S. EPA every two years on the status of its waterways, and provide a list of waterways not meeting water quality standards. A water quality standard is a combination of a designated use for a particular waterbody and the water quality criteria to protect the use. Typically, states now report on the status of all assessed waterbodies and this list is referred to as the Integrated Water Quality Report. Streams are assigned to one of five categories based on their status on this list and are required to develop a Total Maximum Daily Load (TMDL) for streams in Category 5 (Table 4-5). Impaired streams are show on Map 4-4 and listed in Appendix J. Streams with an approved TMDL can be found in Table 4-6. An updated list can be found on PA DEP’s website under Integrated Waters Report.

Table 4-5. Sections of the Pennsylvania Integrated Water Quality Report (PA DEP)

Category	Classification Description
1	Waters supporting all uses.
2	Waters where some but not all uses are supported.
3	Waters for which there are insufficient or no data to determine if any uses are supported
4	Waters impaired for one or more uses, not needing a TMDL.
5	Waters impaired for one or more uses by a pollutant that requires a TMDL.

Table 4-6. Watersheds with a TMDL (U.S. EPA)

Information	Status	Links
Halfmoon Creek - Huntingdon & Centre Counties		
Category: NONPOINT SOURCE Cause: TURBIDITY, TOTAL SUSPENDED SOLIDS (TSS), SILTATION	EPA Approved 8/30/2018	TMDL: Halfmoon Creek Watershed Sediment TMDL
Hungry Run - Mifflin County		
Category: Advance Restoration Plan Cause: TURBIDITY, DISSOLVED OXYGEN, EUTROPHICATION, PHOSPHORUS, ALGAE, TOTAL SUSPENDED SOLIDS (TSS), SILTATION, CHLOROPHYLL-A, NUTRIENTS, BIOCHEMICAL OXYGEN DEMAND (BOD), ORGANIC ENRICHMENT	EPA Approved 9/1/2027	TMDL: Kishacoquillas Creek Watershed Alternative Restoration Plan
Little Lost Creek - Juniata County		

<p>Category: NONPOINT SOURCE</p> <p>Cause: TURBIDITY, DISSOLVED OXYGEN, EUTROPHICATION, PHOSPHORUS, ALGAE, TOTAL SUSPENDED SOLIDS (TSS), SILTATION, CHLOROPHYLL-A, NUTRIENTS, BIOCHEMICAL OXYGEN DEMAND (BOD), ORGANIC ENRICHMENT</p>	<p>EPA Approved 9/27/2019</p>	<p>TMDL: Little Lost Creek TMDL</p>
<p>Markee Creek - Juniata County</p>		
<p>Category: NONPOINT SOURCE</p> <p>Cause: TURBIDITY, DISSOLVED OXYGEN, EUTROPHICATION, PHOSPHORUS, ALGAE, TOTAL SUSPENDED SOLIDS (TSS), SILTATION, CHLOROPHYLL-A, NUTRIENTS, BIOCHEMICAL OXYGEN DEMAND (BOD), ORGANIC ENRICHMENT</p>	<p>EPA Approved 9/14/2018</p>	<p>TMDL: Markee Creek TMDL</p>
<p>UNT 12463, UNT 12483, UNT 12496, UNT 12518 - Mifflin County</p>		
<p>Category: Advance Restoration Plan</p> <p>Cause: TURBIDITY, TOTAL SUSPENDED SOLIDS (TSS), SILTATION</p>	<p>EPA Approved 9/1/2017</p>	<p>TMDL: Kishacoquillas Creek Watershed Alternative Restoration Plan</p>
<p>Upper Kishacoquillas Creek, UNT 12431 - Mifflin County</p>		
<p>Category: Advance Restoration Plan</p> <p>Cause: TURBIDITY, DISSOLVED OXYGEN, EUTROPHICATION, PHOSPHORUS, ALGAE, TOTAL SUSPENDED SOLIDS (TSS), SILTATION, CHLOROPHYLL-A, NUTRIENTS, BIOCHEMICAL OXYGEN DEMAND (BOD), ORGANIC ENRICHMENT</p>	<p>EPA Approved 9/1/2017</p>	<p>TMDL: Kishacoquillas Creek Watershed Alternative Restoration Plan</p>
<p>Warble Run - Juniata County</p>		
<p>Category: NONPOINT SOURCE</p> <p>Cause: TURBIDITY, TOTAL SUSPENDED SOLIDS (TSS), SILTATION</p>	<p>EPA Approved 8/29/2018</p>	<p>TMDL: Warble Run Sediment TMDL</p>

Chesapeake Bay TMDL

Since the early 1980s with the first Chesapeake Bay Agreement, states in the Bay watershed have recognized the importance of cleaning up the Chesapeake Bay. However, while there was some improvement to water quality, it was not enough to clean-up the Bay. In 2010, the U.S. EPA established a TMDL for the entire Chesapeake Bay watershed. Below is an excerpt from U.S. EPA Chesapeake Bay TMDL, 2010. Progress for reaching the goals outlined in the TMDL can be found at <https://ian.umces.edu/publications/2023-2024-chesapeake-bay-watershed-report-card/>.

On December 29, 2010, the U.S. EPA established the Chesapeake Bay TMDL. The TMDL is a historic and comprehensive “pollution diet” to restore clean water in the Chesapeake Bay and the region’s streams.

Despite extensive restoration efforts and significant pollution reductions since the late 1980s, the TMDL was prompted by insufficient progress and continued poor water quality in the Chesapeake Bay and its tidal tributaries. The TMDL is required under the federal Clean Water Act and responds to consent decrees in Virginia and the District of Columbia from the late 1990s. It is also a keystone commitment of a federal strategy to meet President Barack Obama’s Executive Order to restore and protect the Bay.

The TMDL – the largest ever developed by EPA – identifies the necessary pollution reductions of nitrogen, phosphorus and sediment across Delaware, Maryland, New

York, Pennsylvania, Virginia, West Virginia and the District of Columbia and sets pollution limits necessary to meet applicable water quality standards in the Bay and its tidal rivers and embayments. Specifically, the TMDL sets Bay watershed limits of 185.9 million pounds of nitrogen, 12.5 million pounds of phosphorus and 6.45 billion pounds of sediment per year – a 25 percent reduction in nitrogen, 24 percent reduction in phosphorus and 20 percent reduction in sediment. These pollution limits are further divided by jurisdiction and major river basin based on state-of-the-art modeling tools, extensive monitoring data, peer-reviewed science and close interaction with jurisdiction partners.

The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025, with at least 60 percent of the actions completed by 2017. The TMDL is supported by rigorous accountability measures to ensure cleanup commitments are met, including short-and long-term benchmarks, a tracking and accountability system for jurisdiction activities, and federal contingency actions that can be employed if necessary to spur progress.

Watershed Implementation Plans (WIPs), which detail how and when the six Bay states and the District of Columbia will meet pollution allocations, played a central role in shaping the TMDL. Most of the draft WIPs submitted by the jurisdictions in September 2010 did not sufficiently identify programs needed to reduce pollution or provide assurance the programs could be implemented. As a result, the draft TMDL issued September 24, 2010 contained moderate- to high-level backstop measures to tighten controls on federally permitted point sources of pollution.

Pennsylvania is tasked with reducing its nitrogen loads by 34.13 million pounds per year, phosphorus loads by 0.75 million pounds per year, and sediment loads by 2.16 million pounds per year. Pennsylvania submitted Phase 1 and Phase 2 WIPs to EPA in 2010 and 2012, respectively. Both Phase I and Phase II WIPs described actions and controls to be implemented by 2017 and 2025 to achieve applicable water quality standards. The Phase 2 WIP built on the initial Phase 1 WIP by providing more specific local actions. Pennsylvania submitted its Phase 3 WIP in 2019 and amended it in 2022 to include all Countywide Action Plans (CAPs). CAPs outline how each county will meet the state’s pollution and nutrient reduction goals. CAPs for each of the counties in Figure 4-2 can be found at <https://www.dep.pa.gov/Business/Water/Watershed-Restoration/Chesapeake-Bay-Watershed-Restoration/WIP3/GetInvolved/Pages/Countywide-Action-Plans.aspx>.



Figure 4-2. Countywide Action Plans in the Juniata River Watershed

Agriculture

Agriculture is the largest contributor of nutrients in the Juniata River watershed. When nutrients, in the form of fertilizer and manure, are applied in excess of plant needs, nutrients can wash into aquatic ecosystems. In Pennsylvania, every agricultural operation, as defined in 25 Pa. Code § 91.1 and 3 Pa.C.S. § 503, in Pennsylvania that land applies manure or agricultural process wastewater (generated on the agricultural operation or received from an importer), regardless of size, is required by 25 Pa. Code § 91.36(b) to have and implement a written Manure Management Plan. This includes manure and agricultural process wastewater application by various types of equipment and/or direct application of manure by animals on pastures and in ACAs. So, even agricultural operations that do not mechanically apply manure to the land, but have animals on pastures or ACAs, are required by regulation to have a Manure Management Plan (PA DEP 2024⁴). Additionally, Act 38 requires Concentrated Animal Operations (CAOs) to have a nutrient management plan (NMP) written by a certified planner. A CAO is an operation that has greater than 2 animal equivalent units (AEUs) per acre. The nutrient management program is under the purview of the State Conservation Commission.

Stormwater

Stormwater is water that rapidly rushes off of the land during rain events. Water running off of impervious surfaces, such as paved parking lots and sidewalks, cannot filter into groundwater and often reaches streams quickly, creating a rapid increase to stream flow. Besides causing flooding, stormwater can contribute a significant amount of pollution to waterways. Fast-moving stormwater runoff can erode streambanks, push excess nutrients, sediment, litter, pesticides, leaking fuel and other chemical contaminants into rivers and streams.

The U.S. EPA established a municipal stormwater management program known as the Municipal Separate Stormwater Sewer System (MS4) Program that is intended to improve our Nation's waters by reducing the quantities of pollutants that stormwater collects and transports during a storm event. In Pennsylvania, the MS4 Program is administered by the PA DEP. As part of the MS4 Program, municipalities may hold a permit to discharge their stormwater into local waterways. This permit requires the municipality to design a stormwater management program that reduces said discharge of pollutants to the maximum extent possible. In the Juniata River watershed, the only MS4 area is in Blair County. This includes the municipalities of City of Altoona, Logan Township, Hollidaysburg Borough, Blair Township, Antis Township, Bellwood Borough, Allegheny Township, Duncansville Borough, and Frankstown Township.

NPDES Permits

One of the ways the CWA is executed through the National Pollutant Discharge and Elimination System (NPDES), whereby PA DEP issue permits for point source discharges. Point sources refer to discharges that enter a stream or lake directly via a pipe, culvert, container, or other means, whereas non-point sources do not have a defined source and mainly include runoff from agriculture, residential areas, and commercial operations. In Pennsylvania, PA DEP and local conservation districts are responsible for issuing point source permits to industrial operations, municipal wastewater treatment plants, concentrated animal feeding operations (CAFOs), and households.

In the Juniata River watershed, a total of 578 facilities have NPDES permits (PA DEP 2023). These include sewage treatment facilities, CAFOs, stormwater facilities, and industrial waste facilities. Appendix K lists all of the NPDES permitted sites in the watershed.

Sewage Facilities

Act 537, the Pennsylvania Sewage Facilities Act, requires that all municipalities develop and implement an official sewage plan addressing present and future sewage disposal needs. These plans are modified when new land development projects are proposed or whenever a municipality's sewage disposal needs change. DEP reviews and approves the official plans and any subsequent revisions (PA DEP 2019).

Act 537 plans vary by municipality and may include plans for municipal sewage treatment facilities and upgrades to on-lot septic systems. Sewage Enforcement Officers within each municipality are responsible for issuing permits for new systems and repairs to old systems. All homes not serviced by a sewage treatment facility are required to have a functioning on-lot septic system that does not create an obvious discharge. Map 4-5 shows the location of public sewage treatment plants in the watershed.

Concentrated Animal Feeding Operations (CAFOs)

A CAFO is an agricultural operation that meets one or more of the following criteria: The operation is considered a Concentrated Animal Operation (CAO) with greater than 300 Animal Equivalent Units (AEUs); or the operation maintains an animal population of greater than 1,000 AEUs, or the operation is defined as a large CAFO under U.S. Environmental Protection Agency (EPA) regulations at 40 CFR 122.23(b)(4). Agricultural operations meeting the definition of a CAFO in Pennsylvania are required to obtain an NPDES permit. PA DEP is delegated to administer the federal NPDES program under an agreement with EPA. Under EPA regulations, the production area of a CAFO (i.e., animal confinement areas, manure storage areas, raw material storage areas, and waste containment areas) is considered a point source. CAFOs are also required to have a written nutrient management plan.

Monitoring

There have been many monitoring efforts in the Juniata River throughout the past 25 years. PA DEP collects data through the Statewide Surface Water Quality Monitoring Program for the purpose of assessing the Commonwealth's protected water uses. This includes monitoring for aquatic life, water supply, recreation, fish consumption, and special protection. The Assessment Section is responsible for analyzing available monitoring data, both internal to DEP and from outside sources (watershed organizations; other state, local and federal agencies; river basin commissions; etc.), to determine the attainment of surface water standards (PA DEP⁵ 2024).

PA DEP also has a range of continuous instream monitoring stations located throughout the watershed. PA DEP Division of Water Quality Standards uses deployable instream monitors that collect data up to every 15 minutes. DEP commonly configures instream monitors to measure four parameters: water temperature, specific conductance, pH and dissolved oxygen. Monitors can also be configured to measure additional stream properties such as turbidity and water depth. Deployments are usually for one year but may be shortened in order to capture time periods of specific interest (PA DEP⁶ 2024). There are 30 stations currently located within the Juniata River watershed (Table 4-7). Reports for these stations can be found at

https://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/Pages/CIMReports.aspx?Paged=TRUE&p_Basin=Ohio&p_Stream_x0020_Name=Clarion%20River&p_ID=73&PageFirstRow=31&&View={2A9C1BAB-E8C8-4FB3-89C1-7BB171E975FC}.

Table 4-7. Continuous Instream Monitoring Stations

Identifier	Location
133431246-001	Juniata River at Newport (Left Descending - UPS Island)
133431246-002	Juniata River at Newport (Left Descending - DWS Island)
65605226-001	Little Juniata River at Spruce Creek Rd
65605228-001	Spruce Creek at Riverside Dr
65607782-001	Frankstown Branch Juniata River off Fox Run Rd
65607860-001	Clover Creek of off Clover Creek Road
65839561-001	Raystown Branch at Point Rd
65843181-001	Bobs Creek off of Burnt House Road
65844233-001	Beaver Creek off of Upper Snake Spring Road
66204247-001	Lost Creek in Juniata Saddle Club
66204441-001	Kishacoquillas Creek at Manns Narrows
66204809-001	Jacks Creek at Back Maitland Rd
66204813-001	Kishacoquillas Creek at Kishacoquillas Park
66204821-001	Lost Creek UPS William Penn Hwy
66205361-001	Juniata River at Lewistown Narrows
66206101-001	East Licking Creek off of Licking Creek Rd
66206621-001	Buffalo Creek at Rt 849
66206837-001	Juniata River at Amity Hall
66206949-001	Tuscarora Creek at Groninger Valley Rd
66209321-001	Willow Run off of Willow Run Rd
66209723-001	Juniata River at Newton Hamilton
66210781-001	Aughwick Creek DWS Hwy 522
66210819-001	Fort Run at Shirleysburg off Germany Valley Rd
66211409-001	Old Woman Run at Rt 2016
66211655-001	Blacklog Creek UPS Orbisonia
66211853-001	Shade Creek at Covered Bridge Rd
66211915-001	Three Springs Creek at Wilson Rd
66211955-001	Aughwick Creek at McKendree Rd
66212601-001	Sideling Hill Creek at Elliots Run Rd
66212661-001	Little Aughwick Creek DWS Rt 475

The Pennsylvania Water Quality Network (WQN) is a statewide, fixed station water quality sampling system operated by DEP’s Bureau of Clean Water. It is designed to assess both the quality of Pennsylvania’s surface waters and the effectiveness of the water quality management program by accomplishing four basic objectives:

- Monitor temporal water quality trends in major streams throughout the Commonwealth of Pennsylvania
- Monitor temporal water quality trends in selected reference waters
- Monitor the trends of nutrient and sediment loads in the major tributaries entering the Chesapeake Bay

- Monitor temporal water quality trends in selected Pennsylvania lakes

Major streams, for the purposes of this Network, are interstate and intrastate waters with drainage areas of roughly 200 square miles or greater. These waters receive both point and non-point source pollutants and are sampled at or near their mouths to measure overall quality before flows enter the next higher order stream or before exiting the state. In this way, trends can be established and the effectiveness of water quality management programs can be assessed by watershed. The WQN web application (<https://gis.dep.pa.gov/WQN/>) allows users to spatially view WQN stations (PA DEP⁷ 2024).

The Susquehanna River Basin Commission (SRBC) monitors biological, physical, and chemical traits of streams and rivers to determine water quality conditions throughout the Susquehanna River Basin. Using bundled water quality sensors, dataloggers, telemetry, and solar power, SRBC operates more than 70 continuous instream monitoring (CIM) stations to feed real-time data to SRBC's website for public access. The typical monitoring parameters include: pH, specific conductance, water temperature, dissolved oxygen, and turbidity. In addition to CIM, water samples are collected every three months for laboratory analyses of nutrients, sediment, metals, and common ions. Moreover, aquatic life (benthic macroinvertebrates and fish) surveys are conducted at CIM stations on a rotating basis. SRBC operates the following three CIM stations within the Juniata River watershed:

- Kishacoquillas Creek near Belleville, PA
- Little Juniata River near Tipton, PA
- Bobs Creek near Pavia, PA

In 2023, staff examined water quality trends adjusted for streamflow and seasonality for stations with 10 years or greater period of record. The Bobs Creek station had 10 years on record. No statistically significant trends were observed for the station, except for turbidity, which is increasing. Increased and prolonged periods of turbidity may increase sedimentation in a waterbody and, in turn, can have adverse impacts on aquatic organisms, however no significant changes to the macroinvertebrate community were observed. Please see the [Commission's Continuous Instream Monitoring Network \(CIM\) webpage](#) to access real-time water quality data for the above stations, and others. The 2023 report describing water quality trends may also be viewed using the webpage link above.

Since its origin in the mid-1980s, SRBC has been a partner in the Chesapeake Bay Program's non-tidal network (NTN). The NTN includes more than 120 stations located throughout the non-tidal portion of the Chesapeake Bay watershed. NTN stations are monitored (e.g., crews collect samples for laboratory analyses) every month as well as during select storm events (up to eight such events/year and distributed across all seasons). In addition to water quality sample data, each NTN station includes continuous sensors that measure water level that is subsequently converted to stream flow. The combination of water quality and stream flow data is used to estimate the mass transported (referred to as "load") and trend direction for several pollutants that are important to living resources in the non-tidal streams/rivers, as well as the Bay overall.

Pollutant loads are calculated for the following five NTN stations situated in the Juniata River watershed; although just two of the stations (Newport, PA and Saxton, PA) have monitoring period lengths sufficient to calculate trends.

- Raystown Branch of Juniata River at Saxton, PA

- Frankstown Branch of Juniata River at Williamsburg, PA
- Little Juniata River at Spruce Creek, PA
- Kishacoquillas Creek at Reedsville, PA
- Juniata River at Newport, PA

For the period 2011 – 2020, total nitrogen trends at both Saxton and Newport were degrading (i.e., increasing through time); total phosphorus trend was improved at Newport (i.e., decreasing through time) and no trend for total phosphorus was discernible at Saxton; whereas, suspended sediment trend was degrading at Saxton and not discernible at Newport. More information and access to Load and Trend information for the NTN is available here: <https://va.water.usgs.gov/geonarratives/ntn/>.

USGS also conducts water quality monitoring throughout the nation. The USGS Water Quality Portal (<https://www.waterqualitydata.us/>) contains up to date information on all USGS monitoring stations.

The U.S. Geological Survey (USGS) has a series of stream gauges and monitoring 15 sites throughout the Juniata River watershed (Table 4-8). The new USGS National Water Dashboard is an interactive map of stream gauges located through the country, and has up to date data on stream flows (<https://dashboard.waterdata.usgs.gov/app/nwd/en/>).

Table 4-8. USGS Stream Gauge Stations

Station #	Station Name	County	Dates of Operation
1556000	Frankstown Br Juniata River at Williamsburg, PA	Blair	1889 - present
1557500	Bald Eagle Creek at Tyrone, PA	Blair	1936 - present
1558000	Little Juniata River at Spruce Creek, PA	Huntingdon	1936 - present
1559000	Juniata River at Huntingdon, PA	Huntingdon	1896 - present
1559790	Raystown Branch Juniata River at Wolfsburg, PA	Bedford	1989 - present
1560000	Dunning Creek at Belden, PA	Bedford	1936 - present
1562000	Raystown Branch Juniata River at Saxton, PA	Bedford	1889 - present
1563200	Rays Br Juniata R bl Rays Dam nr Huntingdon, PA	Huntingdon	1970 - present
1563500	Juniata River at Mapleton Depot, PA	Huntingdon	1936 - present
1564500	Aughwick Creek near Three Springs, PA	Huntingdon	1889 - present
1564512	Aughwick Creek near Shirleysburg, PA	Huntingdon	1990 - present
1564895	Juniata River at Lewistown, PA	Mifflin	1989 - present
1565000	Kishacoquillas Creek at Reedsville, PA	Mifflin	1936 - present
1566000	Tuscarora Creek near Port Royal, PA	Juniata	1889 - present
1567000	Juniata River at Newport, PA	Perry	1889 - present
Source: USGS Water Resources Data			

Other water quality data sources include:

- PADEP Macroinvertebrate Story Map and Data Viewer
 - <http://www.depgis.state.pa.us/macroinvertebrate/index.html>
- National Water Quality Portal (USGS, U.S. EPA, National Water Quality Monitoring Council)
 - <https://www.waterqualitydata.us/>

- Chesapeake Monitoring Cooperative Data Explorer
 - <https://cmc.vims.edu/#/home>

Water Supply

Water is used for many different reasons, ranging from recreation, aquatic life, drinking water, irrigation of crop fields, and industry. In Pennsylvania, we are blessed with an abundance of water resources; however, it is still important to ensure that there are enough water resources for everyone. SRBC regulates the use of water within the Susquehanna River Basin. They have summarized consumptive water (CU), using the [Commission’s Cumulative Water Use and Availability Study](#) database, in the Juniata watershed (at Newport) for the most recent, available year (2020) to compare against water use in 2014, when the database was first developed (table below). Since 2014, approved and reported CU in the Juniata watershed has decreased by 3.4 million gallons per day (mgd) (11.3%) and 1.6 mgd (9.0%), respectively. Both approved and reported CU does not exceed the amount defined by the Commission as being available for development.

Water Use Type	2014 (mgd)	2020 (mgd)
Approved Consumptive Use	30.1	26.7
Reported Consumptive Use	18.1	16.5

In 2023, Commission staff developed a Geographic Information Systems (GIS) framework to identify areas of greater and lesser groundwater recharge potential throughout the Susquehanna Basin. Recharge is the infiltration of water from the land surface to underground water-bearing zones and is the primary means of ensuring water is available in aquifers for water supply and as baseflow to streams. Groundwater recharge potential was assessed relative to surrounding areas and is independent of precipitation, temperature, evapotranspiration, climate variability, and/ or water use. The resulting output, in the form of a GIS raster, illustrates recharge potential on a scale of 100 (low) to 500 (high) at a spatial resolution of 30 by 30 meters. Partners and stakeholders in the Juniata watershed can utilize mapped coverages of high recharge potential areas to inform a variety of water management actions, including, but not limited to, agricultural and forested land preservation activities and aquifer/stormwater recharge enhancement projects. All recharge datasets are available for download on the [Pennsylvania Spatial Data Access](#) (PASDA) geospatial data portal. The layers may also be viewed using the [Susquehanna Atlas](#).

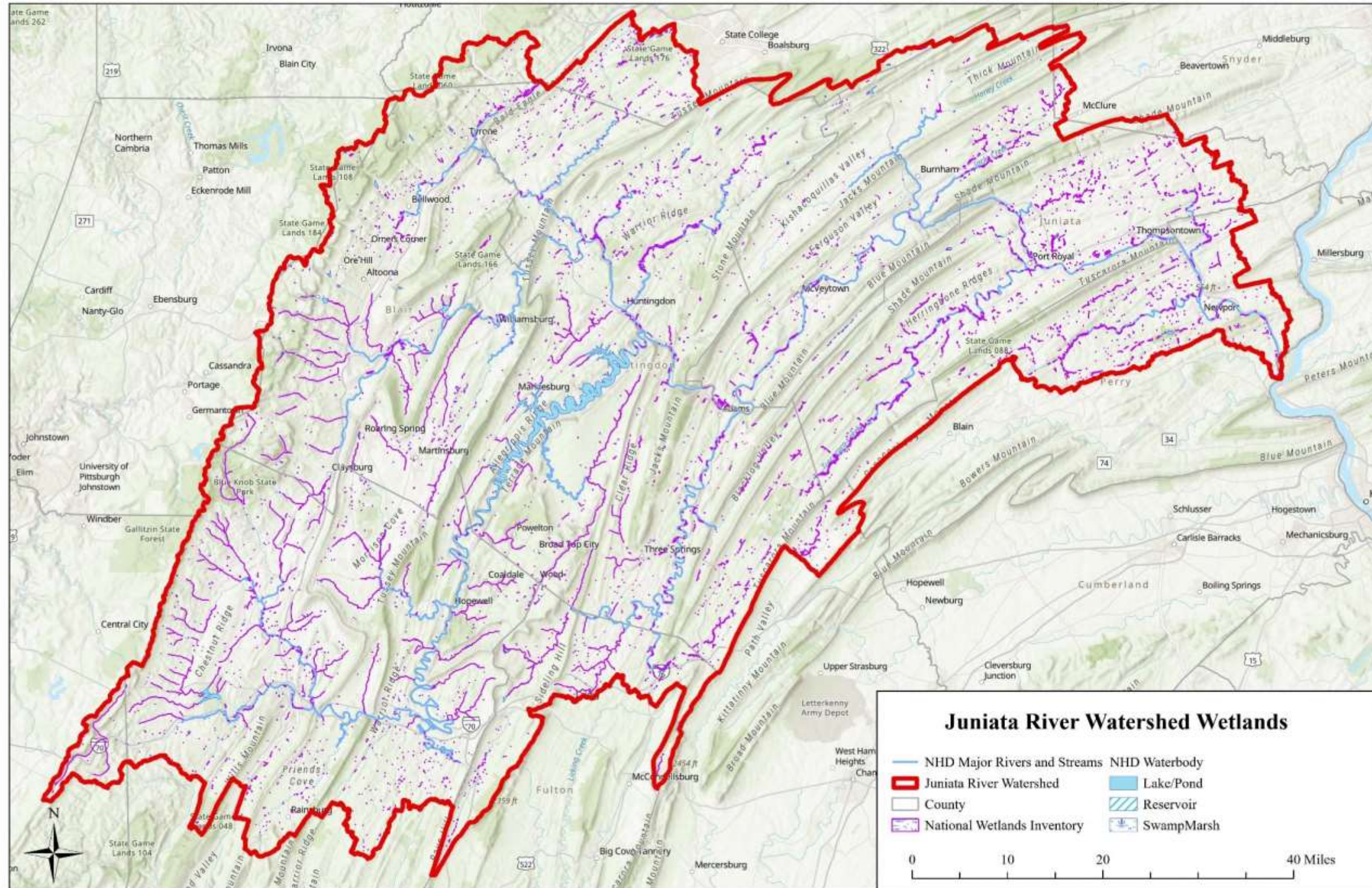
PA DEP updated the Pennsylvania State Water Plan in 2022. The State Water Plan seeks to provide the commonwealth’s public and private leaders and its citizens with access to important data, evaluations of key challenges, and specific recommendations for actions so that we may, together, more effectively conserve, develop, utilize, and manage these resources to serve current needs and generations yet to come. The plan includes an inventory of water availability, an assessment of current and future water use demands and trends, and an assessment of resource management alternatives and proposed methods of implementing recommended actions. An analysis of problems and needs associated with specific water resource uses, such as navigation, stormwater management, and flood control, was also addressed. The Plan also includes an assessment of climate change adaptation strategies (PA DEP 2023). In the State Water Plan, information is broken down into six watershed regions—Ohio, Great Lakes, Potomac, Delaware, Upper/Middle Susquehanna, and Lower Susquehanna. The project area is located within the Lower Susquehanna region.

Drinking water in the Juniata River watershed either comes from public water supplies or private drinking wells. The majority of public water supplies are centered around the more populated boroughs and townships in the watershed (Map 4-6).

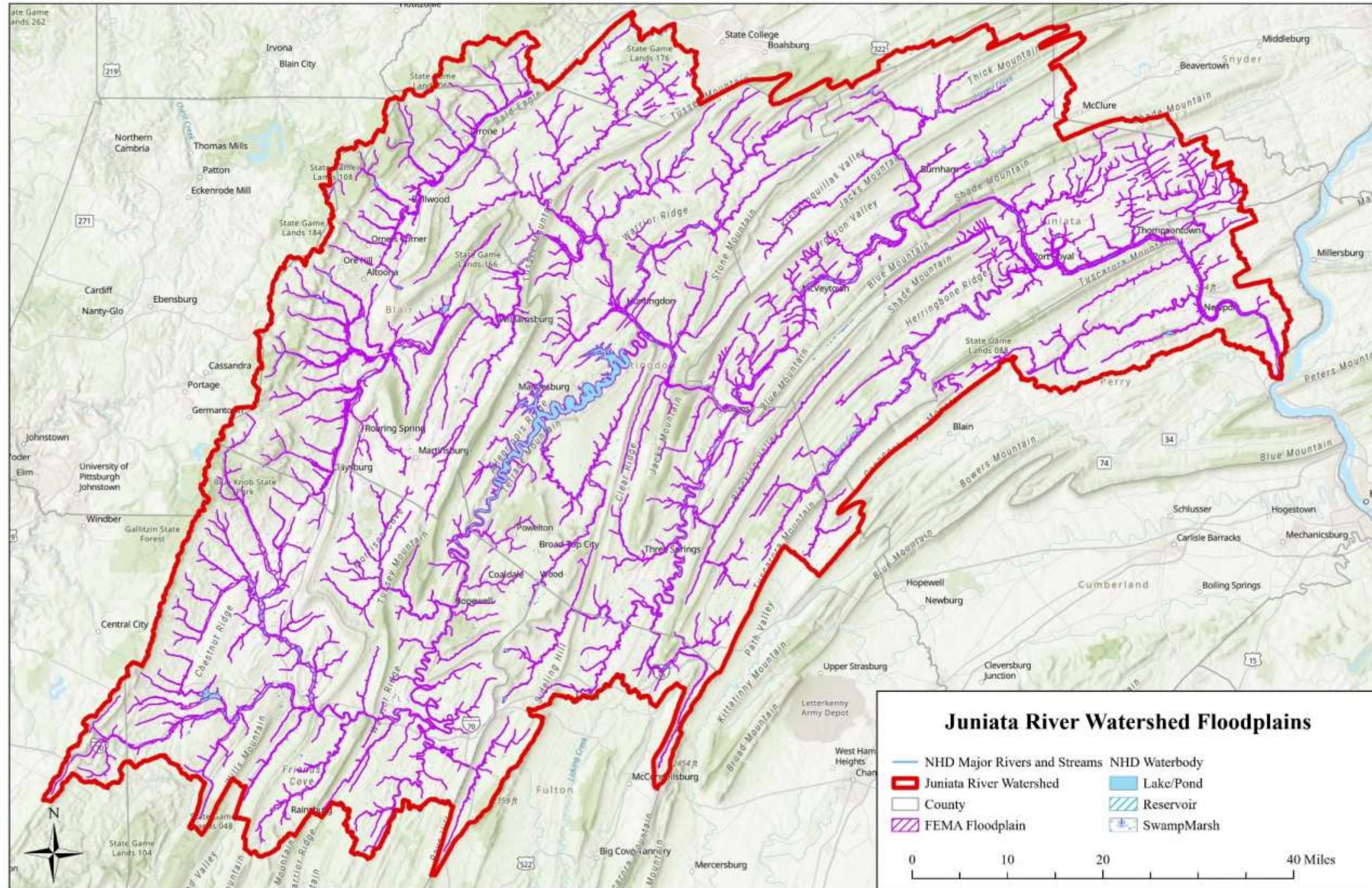
PA DEP also has developed a Wellhead Protection Program to protect ground-water sources used by public water systems from contamination that may have an adverse effect on public health. Participation in the program is voluntary and builds upon the basic requirements for water purveyors to obtain the best available source and to take the appropriate actions to protect the source, thereby ensuring a continual and safe water supply.

There are a variety of resources for private well owners to ensure the quality of their drinking water. Penn State Extension has a Master Well Owner Network (<https://extension.psu.edu/programs/mwon>) that trains volunteers to help educate rural homeowners on the proper management of their wells.

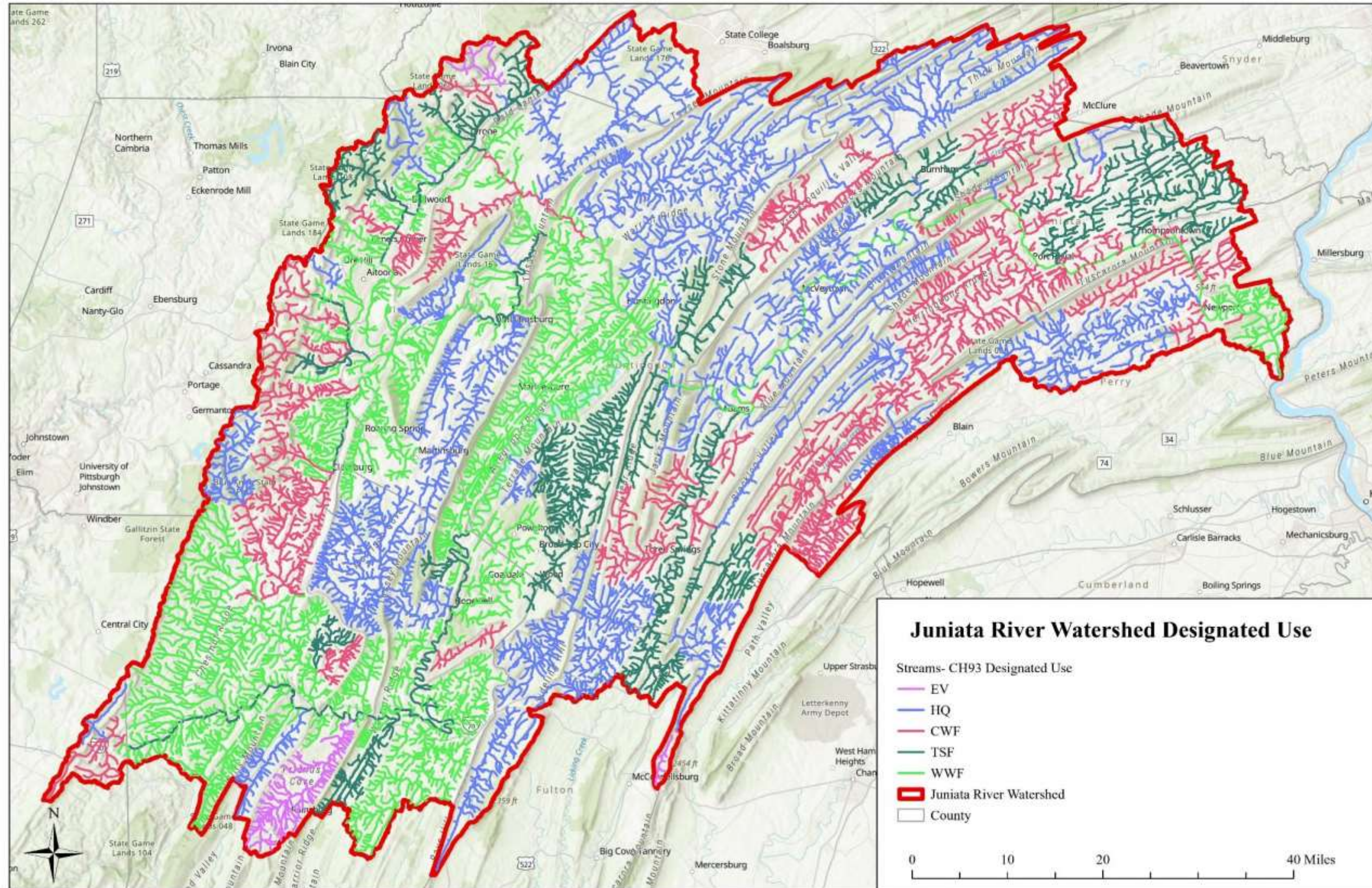
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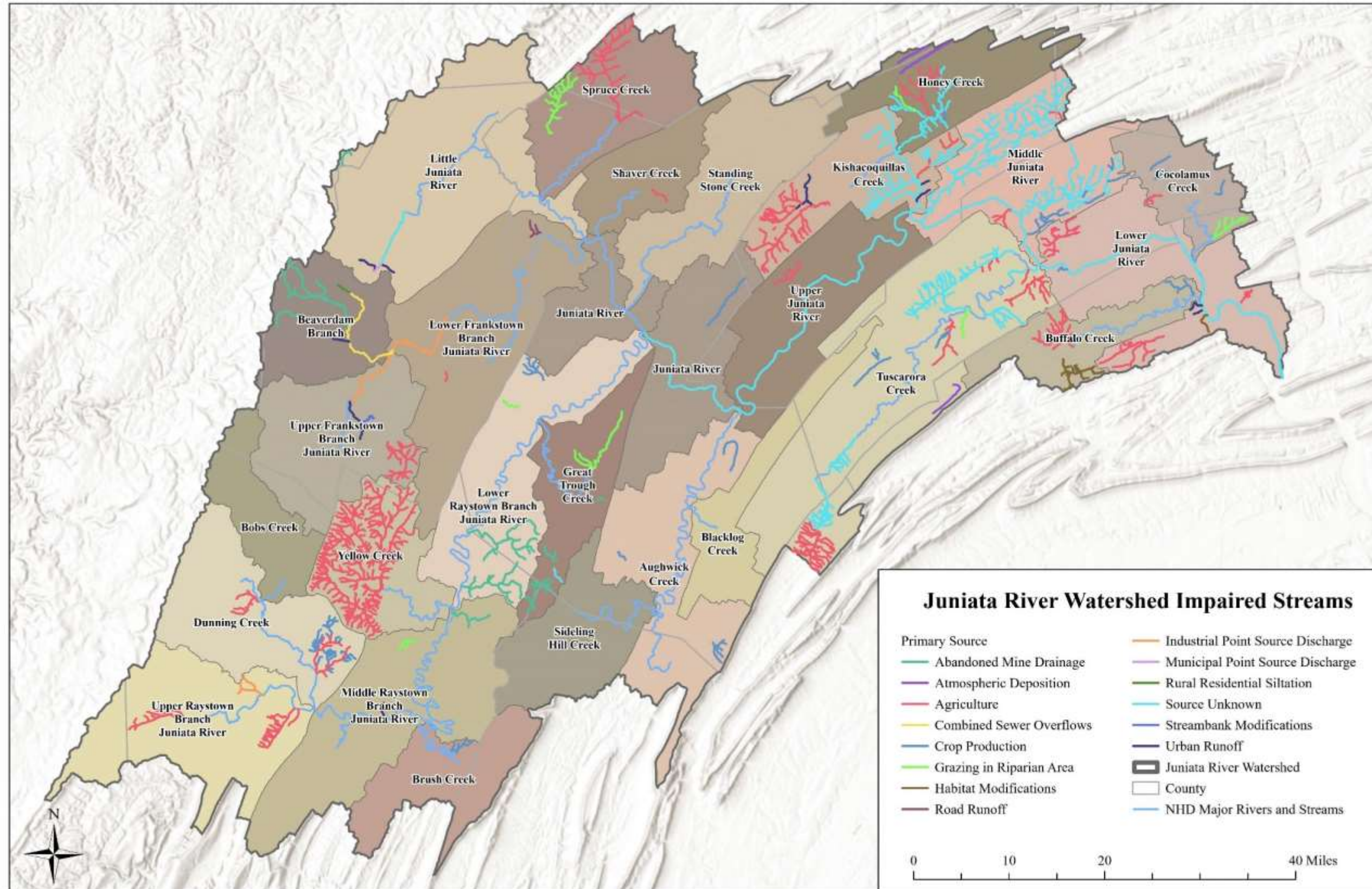
Map 4-1. Wetlands Located in the Juniata River Watershed



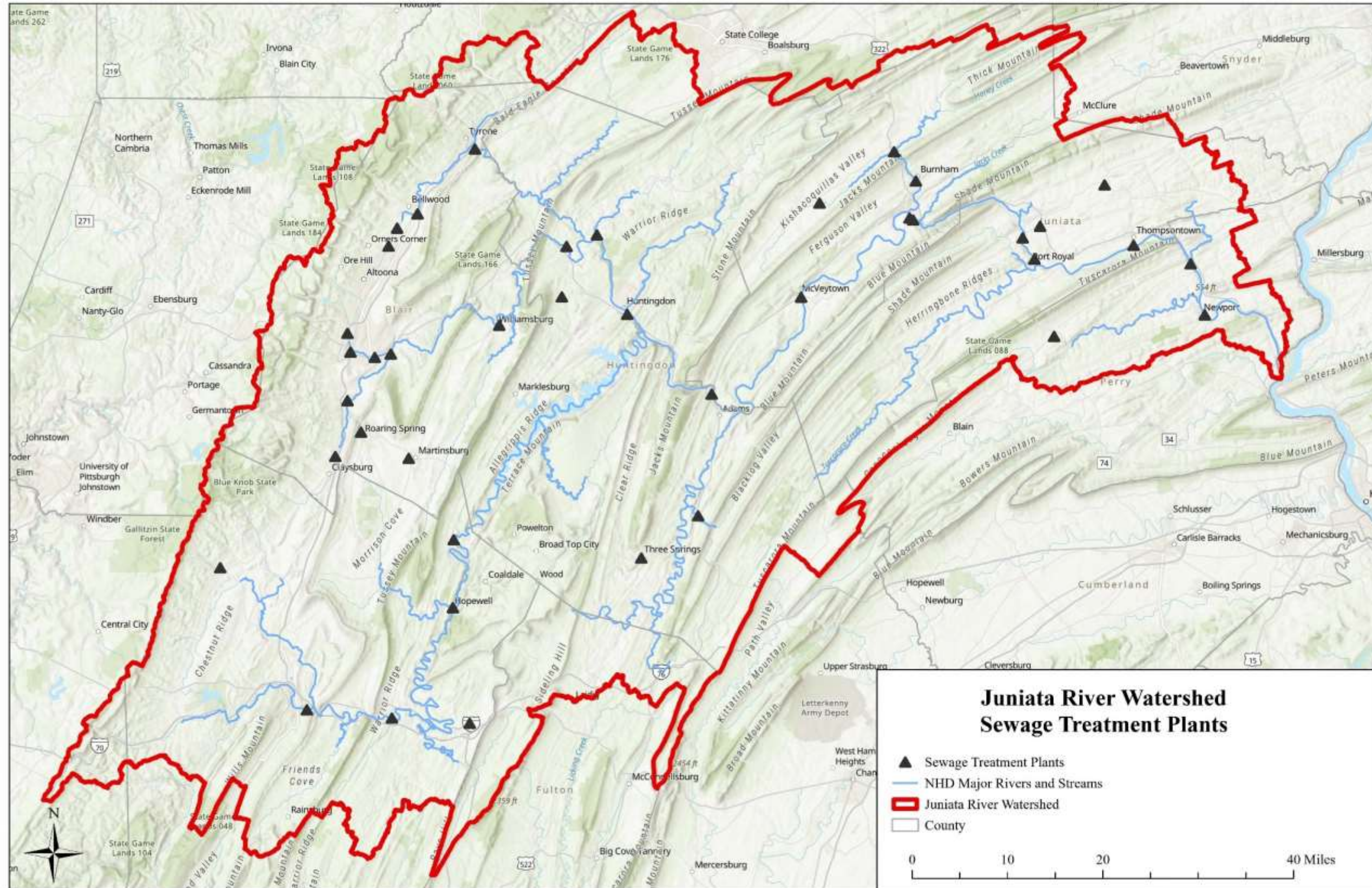
Map 4-2. FEMA Floodplains in the Juniata River Watershed



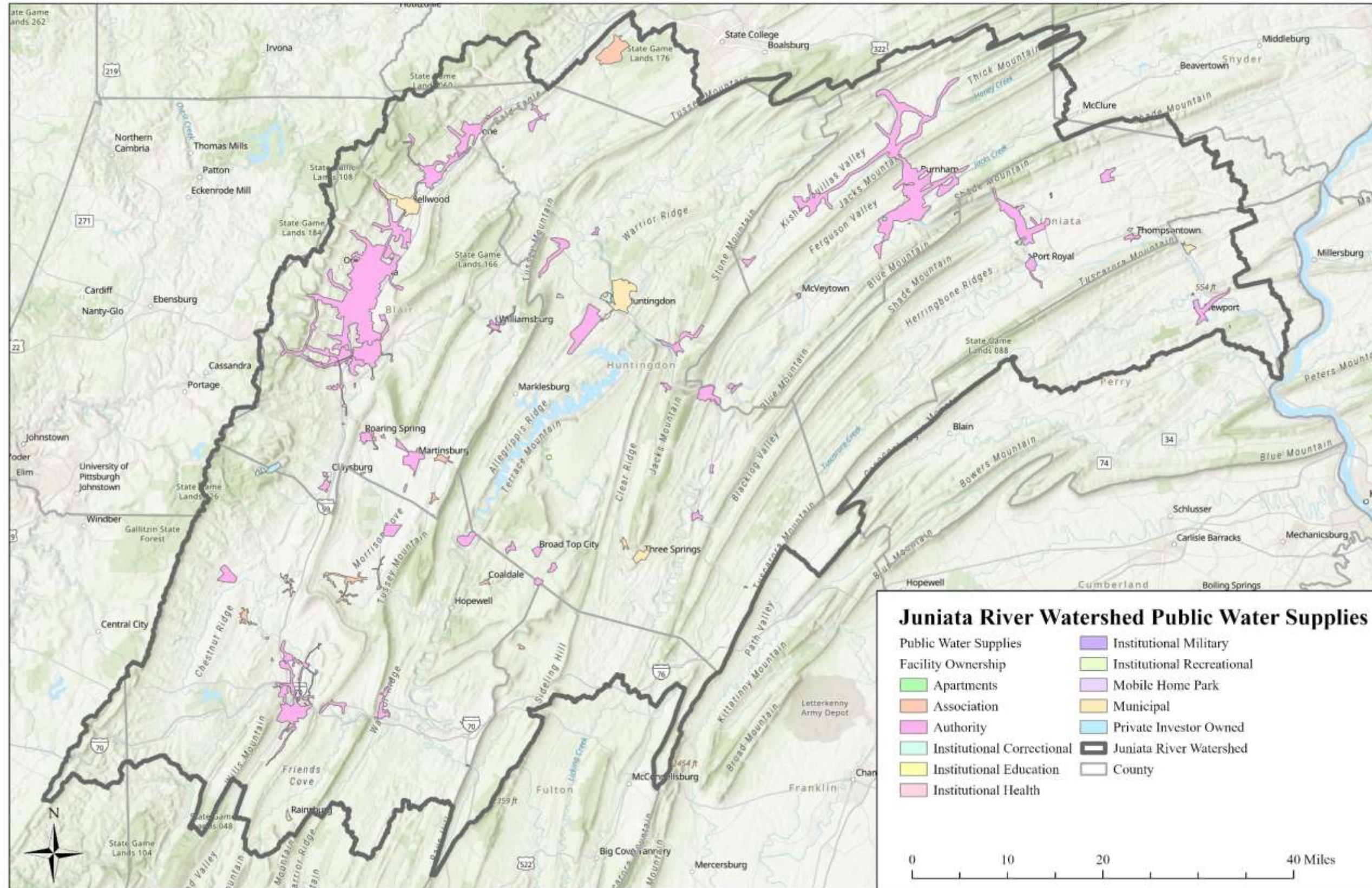
Map 4-3. Designated Use for Stream in the Juniata River Watershed



Map 4-4. Impaired Streams in the Juniata River Watershed



Map 4-5. Sewage Treat Facilities in the Juniata River Watershed.



Map 4-6. Public Water Supplies in the Juniata River Watershed

CHAPTER 5 - BIOLOGICAL RESOURCES

Biological resources sustain and enhance the quality of our lives, while maintaining the health of ecosystems. Biological resources, like wood products, crops, and livestock, offer economic income. Wild game and fish offer opportunities for hunting, fishing, and wildlife watching. Trees, wildflowers, and wildlife can enhance our outdoor experiences. Plants clean water, air, and regulate temperature. Pollinators ensure sufficient crop yields and beautiful blooms. This chapter provides a comprehensive overview of the biology, habitats, and threats to these resources within the Juniata River watershed.

Wildlife

Central Pennsylvania is blessed with abundant wildlife, and the Juniata River watershed is no exception. The abundance of forestland interspersed with plentiful farmland and water resources creates a diversity of habitat types that favors many species. White tailed deer and wild turkey are the most significant game species in the region, but other important game species include black bear, gray squirrel, Eastern cottontail rabbit, and groundhogs. Fur-bearing species that can be tapped and/or hunted include beaver, muskrat, red fox, gray fox, raccoon, opossum, skunk, various weasel species, and coyote.

Wildlife and fisheries diversity benefits recreation potential, which in turn improves the local economy and quality of life of watershed residents. Recreational activities are enhanced by the presence of biodiversity, high quality habitats, and clean air and water. Therefore, these activities inherently include the preservation and conservation of wildlife, fisheries, and their associated habitats. A sampling of some of the wildlife of the Juniata River watershed is highlighted in this section.

Mammals

Predominant mammal species of the region include the whitetail deer, red fox, woodchuck, raccoon, opossum, porcupine, striped skunk, cottontail rabbit, fox squirrel, long-tailed weasel, eastern chipmunk, short-tailed shrew, meadow jumping mouse, masked shrew, and hairy-tailed mole. Historically common but now extirpated species include the bison, elk, mountain lion, and timber wolf. Approximately 50 species of mammals live in the watershed (Table 5-1).

Table 5-1. A Sample of the Mammals Found in the Juniata River Watershed

Mammals		
White-tailed deer	Short-tailed Weasel	American Beaver
Southern Fly Squirrel	White-footed Mouse	Meadow Vole
Red Fox	Southern Red-backed Vole	Deer Mouse
Common Raccoon	Allegheny Woodrat	Northern Short-tailed Shrew
Eastern Gray Squirrel	Tricolored Bat	Brown Rat*
Eastern Chipmunk	Fisher	Hairy-tailed Mole
American Mink	Little Brown Bat	North American Porcupine
Muskrat	North American River Otter	Big Brown Bat
Groundhog	Star-nosed Shrew	Star-nosed Mole
Eastern Red Bat	Masked Shrew	Meadow Jumping Mouse
American Black Bear	Gray Fox	Woodland Vole

Striped Skunk	Bobcat	North American Deer Mice
Coyote	Eastern Small-footed Myotis	Eastern Fox Squirrel
Virginia Opossum	House Mouse*	American Red Squirrel
Eastern Cottontail	Long-tailed Weasel	
Source: inaturalist.org		

* Indicates an introduced species.

Whitetail Deer

Proper management of whitetail deer populations may help to keep the negative impacts associated with this species to a minimum. In areas that are overpopulated with deer, forest regeneration may be hindered, crops may be damaged, and resources may be scarce for other wildlife. Habitat destruction by overabundant deer populations has had a serious impact on songbird populations, especially woodland warblers. Many of the bird species affected are in decline. In addition, overabundant deer populations pose a significant risk to the safety of motorists and damage to vehicles when roadway collisions occur. Whitetail deer management at the state level is regulated in Pennsylvania through hunting permits allocated by the Pennsylvania Game Commission (PGC).

Public land managers experiencing high density deer populations should incorporate considerations into land and habitat management techniques. Food plots may be established to improve herd health and decrease the animals’ dependency on natural areas. Public and private landowners may now enroll in a program through PGC called the Deer Management Assistance Program (DMAP), which provides additional permits to hunt antlerless deer on registered properties to help reduce deer populations (PA DCNR).

Chronic wasting disease (CWD), is a contagious, always-fatal brain disease that affects members of the deer family. It was discovered in Pennsylvania's free-ranging white-tailed deer in 2012 and continues to be a threat to deer and elk in the Commonwealth. Since then, the number of deer testing positive for CWD has risen and the area in which it is found has expanded (PGC 2024).

To prevent the spread of CWD throughout Pennsylvania, PGC created Disease Management Areas (DMAs). DMAs are created when new CWD detections are found in free-ranging or captive deer in Pennsylvania. To designate a DMA, a 10-mile radius buffer is created around each new detection. The buffer will be used to establish or expand an existing DMA. If a new detection is near an existing DMA boundary, either within or outside, the existing DMA boundary could expand to encompass this latest detection. A new detection well beyond the boundaries of any existing DMA will lead to the creation of a new DMA (PGC 2023).

There are currently seven active DMAs in Pennsylvania. The entire Juniata River watershed falls within DMA 2 (PGC 2023). PGC has created a story map with more information about CWD. It can be found at <https://storymaps.arcgis.com/stories/ddfce74f89d24a91b116a84ddf126ac6>.

Bats

Bats are both economically and environmentally beneficial, particularly in controlling insect populations. However, bats are currently being threatened by white-nose syndrome (WNS), which is devastating populations of all species of bats across Pennsylvania the northeast. WNS is a disease that affects hibernating bats and is caused by a fungus, *Pseudogymnoascus destructans*, or *Pd* for short. Sometimes *Pd* looks like a white fuzz on bats’ faces, which is how the disease got its name. *Pd* grows in cold, dark

and damp places. It attacks the bare skin of bats while they’re hibernating in a relatively inactive state. As it grows, *Pd* causes changes in bats that make them become active more than usual and burn up fat they need to survive the winter. Bats with white-nose syndrome may do strange things like fly outside in the daytime in the winter.

White-nose syndrome has killed millions of bats in North America. At some sites, 90 to 100 percent of bats have died. Several species are affected, with the hardest-hit being the northern long-eared bat, little brown bat, and tricolored bat. Other species, like the Virginia big-eared bat, have been found with *Pd*, but they don’t show signs of being sick with white-nose syndrome.

There is no cure for white-nose syndrome, but scientists from all over the world are working together to study the disease, how it spreads and infects bats and what we can do to control it. Several experimental treatments, including a vaccine and making changes to bat habitats, are in progress and will hopefully lead to increased survival of bats from this devastating disease (U.S FWS 2024).

Reptiles and Amphibians

Amphibian and reptile species that are widespread within the region include the dusky salamander, American toad, spring peeper, snapping turtle, painted turtle, northern water snake, garter snake, smooth green snake, and milk snake. Many amphibians, particularly lungless salamanders, can be studied as indicators of water quality. Additionally, many terrestrial salamanders depend on the vernal pools present in forestlands to lay eggs and reproduce. Reptiles, especially snakes, keep pest populations under control by consuming a variety of insects, mice, and voles. A list of amphibian and reptile species can be found in Tables 5-2 and 5-3.

Table 5-2. Sample of Amphibians found in the Juniata River Watershed.

Amphibians	
American Toad	Jefferson Salamander
Green Frog	Spring Salamander
Wood Frog	American Bullfrog
Gray Treefrog	Pickerel Frog
Northern Slimy Salamander	Spotted Salamander
Eastern Newt	Allegheny Mountain Dusky Salamander
Spring Peeper	Northern Dusky Salamander
Northern Two-lined Salamander	Four-toed Salamander
Long-tailed Salamander	Eastern Red-backed Salamander
Red Salamander	Eastern Spadefoot
Fowler's Toad	Marbled Salamander
Valley and Ridge Salamander	
Source: inaturalist.org	

Table 5-3. Reptiles Found in the Juniata River Watershed

Reptiles		
Common Box Turtle	Eastern Rat Snake	DeKay's Brown Snake
Wood Turtle	Common Five-lined Skink	Eastern Musk Turtle

Northern Map Turtle	Red-bellied Snake	Smooth Greens Snake
Common Garter Snake	Gray Rat Snake	Spotted Turtle
Painted Turtle	Eastern Copperhead	Common Ribbon Snake
Common Water Snake	Eastern Fence Lizard	Norther Red-bellied Cooter
Common Snapping Turtle	North American Racer	Eastern Hognose Snake
Timber Rattlesnake	Eastern Worm Snake	Pond Slider*
Ring-neck Snake	Eastern Milk Snake	
Source: inaturalist.org		

* Indicates an introduced species.

Birds

Large numbers of birds live in the Juniata River watershed, including songbirds, waterfowl, and raptors. There are more than 240 breeding species of birds found in the area (Pennsylvania Bird Atlas 2024). A list of species can be found in Appendix N. More about the birds in the Juniata River watershed can be found at <https://ebird.org/atlaspa/home>.

Birds are in decline throughout the United States. According to research, America’s bird populations have declined by almost 3 million, or one third, since 1970 (Rosenberg et.al. 2019). While these declines are caused by a number of factors including pesticide use, habitat loss, window collisions, and West Nile Virus (WNV), these impacts are expected to be amplified by the effects of climate change. According to Audubon’s recent Survival by Degrees report, global temperature rise is expected to place two-thirds of North American birds at increasing risk of extinction (Mid-Atlantic Audubon 2024).

The Important Bird Areas (IBA) Program is a global initiative of BirdLife International, implemented by Audubon and local partners in the United States. The IBA program identifies and aims to conserve areas that are vital to birds and other biodiversity. The goal of the program is to minimize the effects that habitat loss and degradation have on birds and other biodiversity. Land trusts have been an important partner of the IBA program. There are portions of 11 IBAs in the Juniata River watershed (Map 5-1).



Bald Eagle Ridge - This area contains large expanses of unfragmented forest habitat for breeding Neotropical migrant species such as Worm-eating Warbler, Wood Thrush, Scarlet Tanager, and Ovenbird. Additionally, its spring seeps are of high value to resident Woodcock and Wild Turkey. Bald Eagle Ridge is also an important flyway for raptors. Counts of Golden Eagles are some of the highest recorded in eastern North America.

The Barrens at Scotia – SGL 176 - This unique habitat is one of the largest barrens left in Pennsylvania. It harbors large numbers of Neotropical migrants during spring and fall migration. Thirty-three species of warblers have been observed including Blue-winged, Golden-winged, Tennessee, Orange-crowned, Nashville, Northern Parula, Chestnut-sided, Magnolia, Cape May, Black-throated Blue, Yellow-rumped, Black-throated Green, Blackburnian, Pine, Palm, Bay-breasted, Blackpoll, Cerulean, Black-and-white, American Redstart, and Worm-eating warblers. Other species include Ovenbird, Northern Waterthrush, Louisiana Waterthrush.

Kittatinny Ridge – This area is the premier raptor migration corridor in the northeastern U.S. and one of the leading raptor sites in the world. The ridge funnels thousands of southbound migrants; lesser numbers also follow the ridgeline north in the spring. Other species in addition to raptors migrate through, including Ruby-throated Hummingbirds and Monarch Butterflies. The ridge is covered with second-growth deciduous forest. The valleys on either side are characterized by mixed farmland and small, rural communities. Renowned Hawk Mountain Sanctuary is among the best-known hawk watching sites in the East, and includes part of the ridge and adjacent lowlands. Rocky outcrops offer excellent views of migrants.

Fish and Aquatic Invertebrates

Eighty-two species of fish have been found in the Juniata River watershed as seen below in Table 5-4 (PFBC 2024). Habitat types range from the renowned warmwater bass fisheries of the Juniata River mainstem, Raystown Lake, and Shawnee Lake, to the cold-water trout fisheries of the smaller headwaters. Spruce Creek, which feeds into the Little Juniata River, is notorious for its excellent trout fishing, which lures such notable fishers as former President Jimmy Carter. Important game fish include brook and brown trout, bass species, muskellunge, walleye, and pike.

Table 5-4. Fish Found in the Juniata River Watershed

Fish			
Blacknose Dace	Redside Dace	Goldfish	Rainbow Trout
Bluegill	Rosyface Shiner	Johnny Darter	Redbreast Sunfish
Blackside Darter	Rosyside Dace	Brown Bullhead	River Chub
Blue Ridge Sculpin	Satinfin Shiner	American Eel	Rainbow Smelt
Blacknose Shiner	Shorthead Redhorse	Atlantic Salmon	American Shad
Bluntnose Minnow	Shield Darter	Alewife	Greenside Darter
Brook Trout	Smallmouth Bass	Banded Darter	Lake Trout
Tiger Muskellunge	Slimy Sculpin	Banded Killifish	Largemouth Bass
Tessellated Darter	Silverjaw Minnow	Longnose Dace	Grass Pickerel
Walleye	Channel Catfish	Mottled Sculpin	Potomac Sculpin
Tonguetied Minnow	Common Carp	Margined Madtom	Swallowtail Shiner
Brown Trout	Comely Shiner	Mimic Shiner	Quillback

Central Stoneroller	Creek Chub	Muskellunge	River Redhorse
Chain Pickerel	Common Shiner	Mountain Redbelly Dace	Creek Chubsucker
Black Crappie	Cutlips Minnow	Northern Hog Sucker	White Catfish
Yellow Perch	Fallfish	Northern Pike	White Bass
Yellow Bullhead	Fantail Darter	Pumpkinseed	White Perch
White Sucker	Emerald Shiner	Pearl Dace	Rock Bass
White Crappie	Gizzard Shad	Striped Bass	Golden Shiner
Stonecat	Striped Bass hybrid	Spottail Shiner	Fathead Minnow
Green Sunfish	Spotfin Shiner	Flathead Catfish	
Source: PFBC			

Historically, the Juniata River was home to large populations of migratory fishes like American shad and American Eels. The construction of dams downstream on the Susquehanna River has mostly excluded these fishes from their native habitat for decades. Numerous programs and projects have worked to restore these fish populations by providing passage around the dams without largescale success.



Photo 5-1. The Unassessed Waters Initiative inventories streams for wild trout.

Trout are one of the most popular sport fishes within the watershed. The Little Juniata River is one of the most popular trout fishing destinations in the state. Additionally, there are numerous smaller streams that are also popular for trout fishing. Some of these trout populations are supported by stocking, while many others are wild populations supported by natural reproduction. Native brook trout reside within the watershed, as well as invasive brown and rainbow trout. The Unassessed Waters Initiative is a longstanding program designed to systematically inventory streams and recommend qualifying headwater trout streams for increased permitting protections. For an interactive map identifying wild trout, class A wild trout, and stock trout streams go

to

<https://pfbc.maps.arcgis.com/apps/webappviewer/index.html?id=65a89f6592234019bdc5f095eaf5c6ac>

The Juniata River watershed is home to an array of long-established populations of invasive fishes including common examples like brown trout, rainbow trout, smallmouth bass, green sunfish, and channel catfish. Populations of invasive flathead catfish have been detected in the past decade and are growing. There is concern that northern snakehead could potentially invade the Juniata watershed in the future. Considering aquatic invasive species outside of fishes, there are extensive populations of *Corbicula* spp. (invasive clams), as well as rusty crayfish. There is concern that rusty crayfish could expand their current range. There are also established populations of New Zealand mudsnails in adjacent watersheds, which creates the threat for the invasion of the Juniata watershed. The threat of invasives is not new, but does continue to grow and threaten the ecological integrity of the watershed.

The Pennsylvania Aquatic Community Classification (ACC) project describes patterns in aquatic biodiversity to help conservation activities and aquatic resource management in the region. In order to address the threats to flowing waters, the ACC was designed to systematically identify stream

community and habitat types for freshwater mussels, macroinvertebrates and fish that live in Pennsylvania's streams. This information provides a baseline for conserving flowing water systems and can be used to help assess the status of streams and rivers, prioritize high quality aquatic habitats for preservation, and select low quality habitats for restoration. More information can be found at <https://www.naturalheritage.state.pa.us/aquatic.aspx>.

Aquatic Organism Passage

Stream connectivity is important for all aquatic species, but especially important for salmonid species in a number of ways, including access to thermal refuge, access to important spawning habitat, and for eliminating genetic isolation of populations. However, poor design of culverts and bridges (road-stream intersections) can negatively affect stream connectivity. Culverts can act as barriers to fish passage in a number of ways. A culvert can be perched above the stream bed, causing fish to have to jump large heights. Aquatic organisms have varying levels of mobility and passable culverts are essential for a connected ecosystem. High current velocities in culverts can make it impossible for organisms to move through them. Water depth within the culvert can be too shallow, or may not provide resting areas for organisms that are migrating upstream. In fact, properly designed and installed culverts also benefit other aquatic species that are less mobile than trout including mussels, hellbenders, other amphibians, reptiles and macroinvertebrates. Poorly designed and/or installed culverts also pose problems for stormwater runoff, infrastructure maintenance and public safety in the event of flooding. Often, an undersized culvert creates a blowout effect downstream, increasing water velocities and streambank erosion. A plugged culvert that cannot pass debris also acts as a dam during high water events, exacerbating flooding and becoming a public safety hazard.

The North Atlantic Aquatic Connectivity Collaborative (NAACC) is a collaboration of individuals from universities, conservation organizations, and state and federal natural resource and transportation departments focused on improving aquatic connectivity across a thirteen-state region, from Maine to West Virginia. NAACC has developed standardized protocols and training for assessing road-stream crossings (culverts and bridges) and developed a regional database for this field data. The information collected can be used to identify high priority bridges and culverts for upgrade and replacement. More information can be found at <https://streamcontinuity.org/naacc>.



Photo 5-2. NAACC assessments determine if road/stream crossings pose a barrier to AOP.

Vegetation

Much of the watershed is forested, about 67%. The general forest type is mostly oak forests with a smaller percentage of mixed mesophytic forest, once dominated by the American chestnut, now with chestnut oak, red maple, white oak, black oak, beech, yellow-poplar, sugar maple, ash, basswood, buckeye, and hemlock (CEC 2011). Prior to European settlement, the amount of forestland was considerably greater. By the beginning of the 20th century, much of the forestland was completely cleared, either for farmland or timber. Trees were used primarily for making charcoal to fire the iron furnaces of the region. But wood was also in high demand for building and heating homes, making

furniture and mine supports, and cooking food. Presently, the amount of forestland in the watershed has greatly increased compared to a century ago.

Invasive Species

Invasive species are non-native to the ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species are spread primarily by human activities, often unintended. People, and goods transported, travel quickly around the world, and often carry uninvited species with them. Invasive species can be introduced to an area by ship ballast water, firewood, accidental release, and by people. Insects can be transported easily in wood, shipping pallets, and crates shipped across the globe. Ornamental plants can become invasive after escaping in the wild. The introduction and establishment of invasive species to the U.S. (intentional or unintentional) can pose a significant threat to native plant communities. Invasive species can lead to the extinction of native plants and animals, destroy biodiversity, and permanently alter habitats (USDA 2024).

Some invasive plants pose a threat to health and human safety, and these plants are categorized as noxious weeds. A list of Pennsylvania's noxious weeds can be found at https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/NIPPP/Pages/Controlled-Plant-Noxious-Weed.aspx. Noxious weeds are federally designated by USDA Animal and Plant Health Inspection Service (APHIS). This designation adds additional penalties and controls on those species. According to the Pennsylvania Department of Agriculture (PDA), it is illegal in Pennsylvania to propagate, sell, or transfer any of the state-designated noxious weeds.

Managing Invasive Species

Integrated Pest Management (IPM) techniques incorporate science and information about the target pest, varying economic approaches, and utilization of ecologically sensitive control tactics to deal with infestations. The first step in effective invasive species management is prevention. Most invasives are opportunistic, and take advantage of disturbed areas or weakened species. Invasive species are less likely to establish in effectively managed landscapes and well protected, pristine natural areas. By preventing an invasive species from establishing or spreading, money can be saved and chemicals need not be applied.

The second step is early detection, followed by quick application of management techniques. Early detection and rapid response will save money and effort required to control the species. In order to detect an invasive species early, correct identification is critical. Numerous tools and publications are available to help properly identify invasive species.

Once positive identification is confirmed, small, isolated populations of invasive species should be contained. Established invasives can be mechanically (physically pulling or cutting weeds), chemically (applying pesticides), or biologically (utilizing another living species to control the invasive target) controlled. Often, for well-established invasive species, a combination of control methods is necessary to efficiently and effectively control the invasive. When chemical means are necessary to control an invasive weed, insect, or animal; pesticides must be handled by an applicator certified by either the state of Pennsylvania. Landowners and land managers should contact their County Cooperative Extension office or a private, certified applicator to seek assistance.

Education is a critical component in the management of invasive species. Volunteers, land managers, and citizens should be taught to correctly identify invasive species that threaten their watershed. This would facilitate easy, rapid detection and reporting to the proper agency at the first sign of encroachment. Addressing any invasive problems early helps minimize the negative impacts on native species and natural resources. Well established invasive species are much more difficult and costlier to control.

Below are some resources about invasive species in Pennsylvania.

- USDA National Invasive Species Information Center’s (NISIC) – Provides identification tools of invasive plants. <https://www.invasivespeciesinfo.gov/>
- PA DCNR Invasive Plant Fact Sheets - Aids in identification of invasive plants, treatment, and protection suggestions. <https://www.dcnr.pa.gov/Conservation/WildPlants/InvasivePlants/InvasivePlantFactSheets/Pages/default.aspx>
- PA Department of Agriculture (PDA) Invasive Species of Concern in Pennsylvania - The Pennsylvania Governor’s Invasive Species Council has identified about 300 invasive plants, insects, pathogens, and animals as having the greatest current or potential negative impacts for Pennsylvania. This list is provided to inform development of regulation, policy, and education to protect our agricultural and natural resources. https://www.agriculture.pa.gov/Plants_Land_Water/PlantIndustry/GISC/Pages/Invasive-Species-in-Pennsylvania.aspx
- iMapInvasives Network – An online, GIS-based data management system used to assist community scientists and natural resource professionals working to protect natural resources from the threat of invasive species. <https://www.imapinvasives.org/>

Species of Concern

The Pennsylvania Natural Heritage Program (PNHP) is a partnership between the PA DCNR, PFBC, PGC, and the WPC in cooperation with the U.S. Fish and Wildlife Service. PNHP is a member of NatureServe, an international network of natural heritage programs that gather and provide information on the location and status of important ecological resources (plants, vertebrates, invertebrates, ecological communities and geologic features).

Within the Juniata River watershed, 362 species of concern have been identified, including 227 plants, 15 birds, 90 invertebrates, 17 reptiles, 12 mammals, and one fish. In addition, 15 natural community types have been listed among the species of concern as important natural features and habitats of conservation significance (Table 5-4). Appendix M lists all of the species of concern.

Table 5-5. Natural Community Types in the Juniata River Watershed

Name	G Rank*	S Rank*
Calcareous Opening/cliff	GNR	S2
Eastern Woodland Vernal Pool	G3	S3
Ephemeral/fluctuating Natural Pool	GNR	S3
Hemlock - Mixed Hardwood Palustrine Forest	GNR	S3S4
Hemlock Palustrine Forest	GNR	S3

Herbaceous Vernal Pond	GNR	S3S4
Prairie Sedge - Spotted Joe-pye Weed Marsh	GNR	S1S2
Red-cedar - Mixed Hardwood Rich Shale Woodland	GNR	S1S2
Red-cedar - Redbud Shrubland	GNR	S2
Rice Cutgrass - Bulrush Vernal Pool	GNR	S2?
Rich Hemlock - Mesic Hardwoods Forest	GNR	S2S3
Side-oats Gramma Calcareous Grassland	GNR	S1
Sphagnum - Beak-rush Peatland	GNR	S3
Virginia Pine - Mixed Hardwood Shale Woodland	GNR	S2
Yellow Oak - Redbud Woodland	GNR	S2

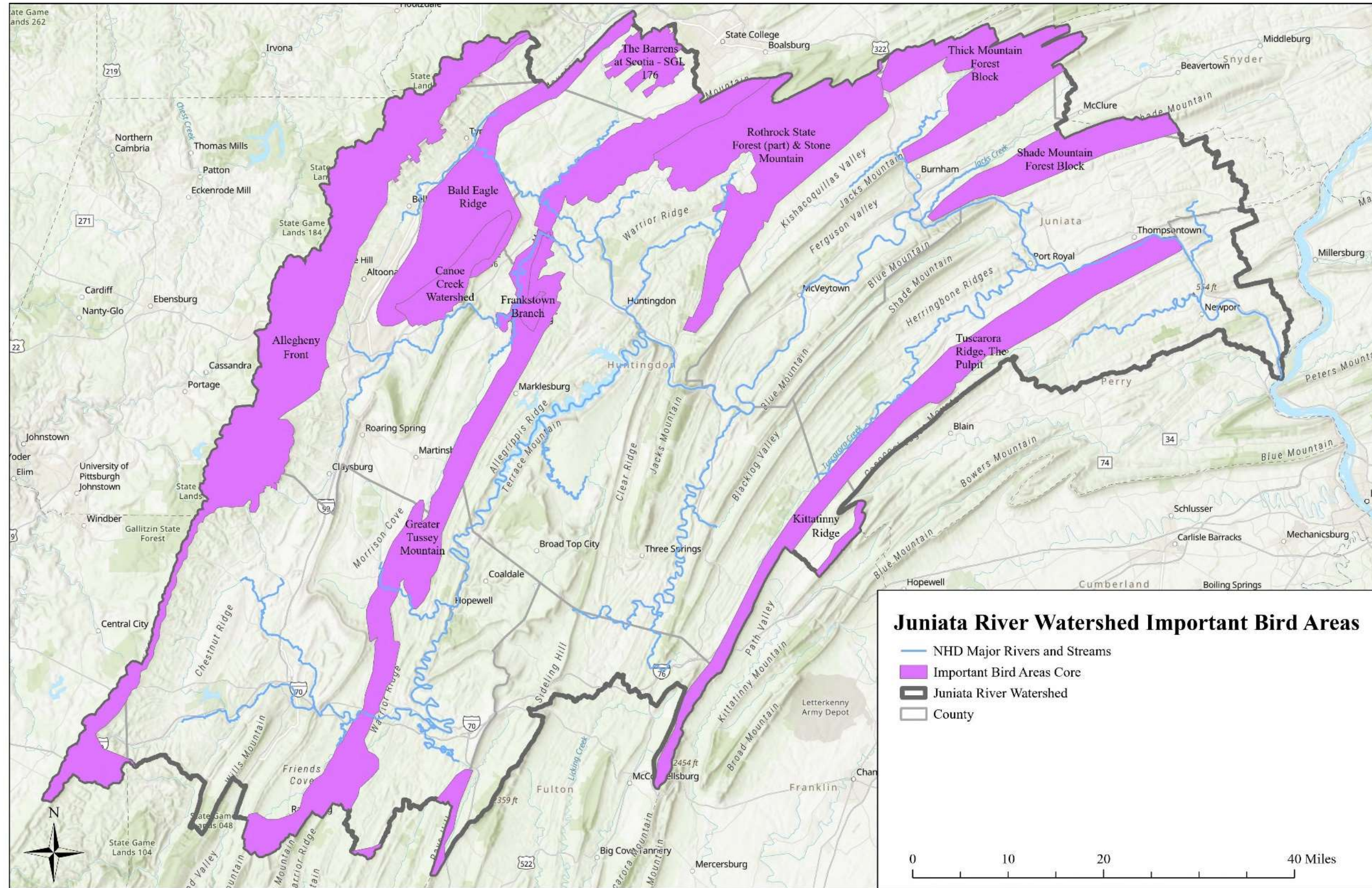
* Please see Appendix M for “G” global rank and “S” state rank definitions.

Conservation Areas

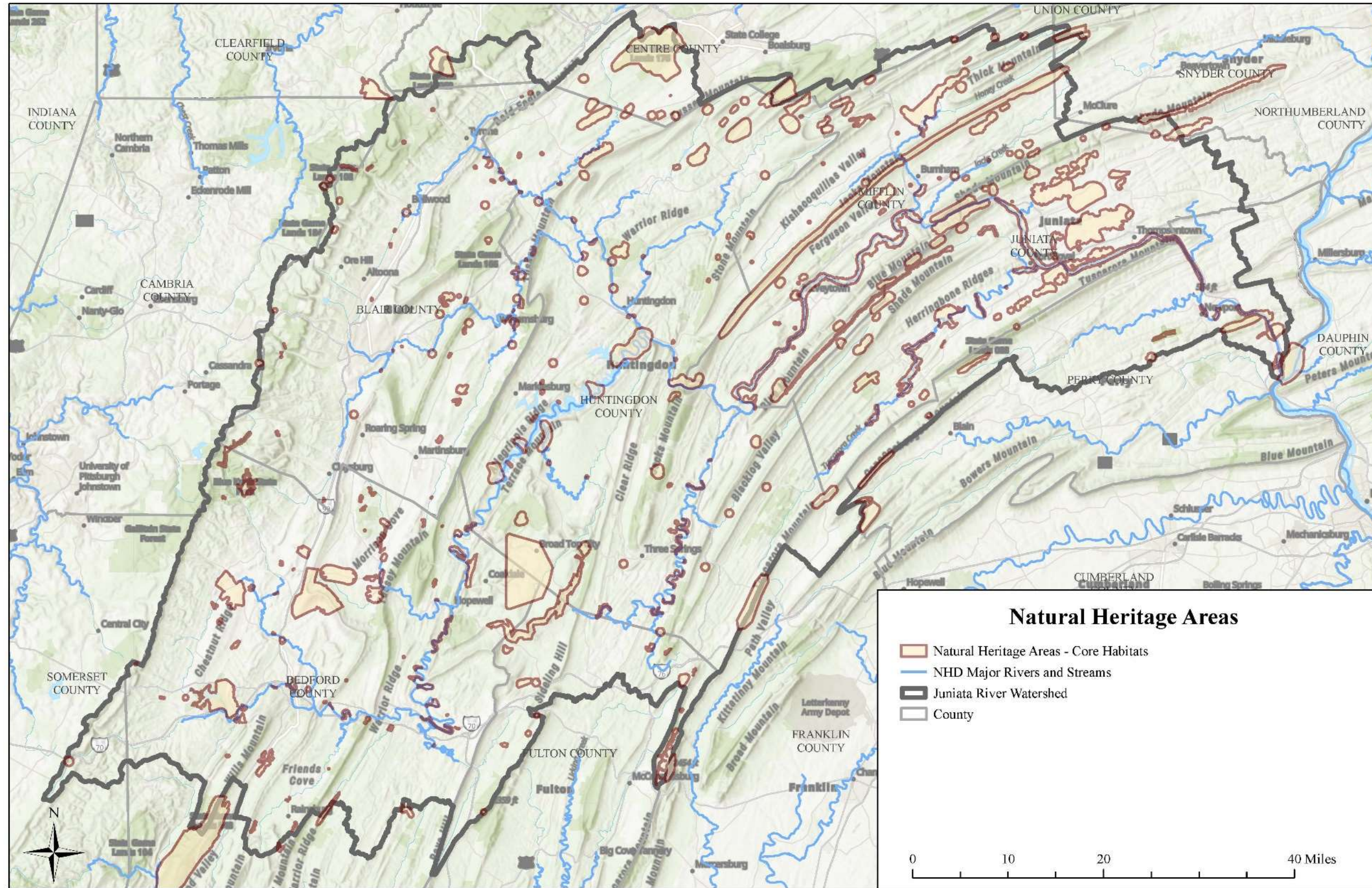
Pennsylvania Natural Heritage Areas

Natural Heritage Areas (NHAs) are sites that have been identified as areas that support rare plants or animals, exemplary ecological communities, and Pennsylvania’s native species biodiversity. PNHP inventories and reports the critical biological resources found within each NHA and throughout each county in Pennsylvania. NHAs are not designated as public land or parks; they are intended to guide conservation efforts.

Locations of all NHAs and their site descriptions are viewable in the [Conservation Explorer Map](#) by turning on the “Natural Heritage Area: Core Habitat” layer. A list of the NHAs and site descriptions is available [here](#). The Juniata River watershed has 363 NHAs identified (Map 5-2).



Map 5-1. Important Bird Areas in the Juniata River Watershed



Map 5-2. Natural Heritage Areas in the Juniata River Watershed

CHAPTER 6 - CULTURAL RESOURCES

Recreational Opportunities

Outdoor recreation are activities that people do outdoors in their free time such as walking, bicycling, picnicking, hunting, fishing, camping, playing basketball, bird watching, paddling, touring historic sites and nature centers, motorized riding, etc. Outdoor recreation is vitally important to resident's health and wellness. This was especially apparent during the Covid-19 pandemic. From 2020 to 2021, outdoor recreation use increased by 22% (PEC 2022). Recreation opportunities abound throughout Pennsylvania and in the Juniata River watershed. The watershed has lakes, streams, forested ridges, unique natural features, and historical sites that attracts folks to the region. There are more than 620,000 acres of public lands in the Juniata River watershed for residents and visitors to enjoy (Map 3-5).



Photo 1. Raystown Lake provides an abundance of recreational opportunities. Photo by Branden Diehl.

Every five years, states across the nation are required to produce a new statewide recreation plan to help guide their recreation policies, programs, and investments. The plan is needed to remain eligible for federal grants from the Land and Water Conservation Fund, which are used to: build parks and historic sites; conserve forests, rivers, lakes, and wildlife habitat; and provide access to recreation, hunting, and fishing. Pennsylvania has benefitted from more than \$216 million in funding from the Land

and Water Conservation Fund for projects across the Commonwealth since 1965. Pennsylvania is currently developing its 2025-2029 Statewide Outdoor Recreation Plan (DCNR 2020).

Local Parks

There are 187 local parks located in the watershed. These parks provide playgrounds, basketball courts, ball fields, picnic areas, etc. for residents in every county of the watershed. They provide opportunities for scenic enjoyment, bird watching and walking. A list of local parks can be found in Appendix G.

State Parks

Eleven state parks are located in the watershed (Table 6-1). The purpose of these parks is to provide recreational and education experiences for all the residents of Pennsylvania. The location of the state parks was designed so that no resident of Pennsylvania is farther than 25 miles from at least one of these places. Stewardship of the natural outdoor experience and conservation of natural, scenic, aesthetic, and historical values over the long-term are overriding values that guide the management of the parks.



Photo 2. Balanced rock at Trough Creek State Park. Photo by Branden Diehl.

Table 6-1. State Parks

State Park	Acres	County
Little Buffalo	989	Perry
Penn Roosevelt	42	Centre
Reeds Gap	224	Mifflin
Whipple Dam	250	Huntingdon
Warriors Path	304	Bedford
Cowan’s Gap	1114	Fulton / Franklin
Shawnee	3750	Bedford
Blue Knob	6196	Bedford
Canoe Creek	959	Blair
Greenwood Furnace	418	Huntingdon
Trough Creek	536	Huntingdon

State parks provide areas for hiking, camping, picnicking, wildlife viewing, biking, swimming, boating, fishing, horseback riding, and other recreational activities (Table 6-2). They also provide winter sports for snow mobiles, sledding, and cross-country skiing. Activities available at each state park can be found at

<https://www.dcnr.pa.gov/StateParks/Pages/default.aspx>.

Table 6-2. Amenities at Pennsylvania State Parks

State Park	Picnic Areas #	Camp Sites #	Miles of Hiking Trails
Little Buffalo	2	46	8
Penn Roosevelt	1	18	0.5
Reeds Gap	3	14	5
Whipple Dam	3	Not listed	Not listed
Warriors Path	2	Group Site	3

Cowans Gap	4	201	13
Shawnee	5	200	16
Blue Knob	7	50	23
Canoe Creek	3	8	12
Greenwood Furnace	8	49	8
Trough Creek	5	29	12
Source: pa.gov			

State Forests

Parts of six state forests located within the Juniata River watershed (Table 6-3). State forests support a multitude of resources, uses, and values, including: water and air purification, recreational opportunities, aesthetic beauty, plant and animal habitat, economic benefits through the provision of wood products, and environmentally sound utilization of mineral resources. State forests provide unique opportunities for dispersed, low-density outdoor recreation that can be obtained only through large blocks of forest. Forest recreation is one of the most common ways that people connect with and enjoy the state forest. The state forest system provides bountiful opportunities for citizens to recreate and enjoy the forest. Management of state forests is guided by [Penn’s Woods](#), the bureau’s strategic plan, and the [State Forest Resource Management Plan](#) (PA DCNR 2024¹).

Table 6-3. State Forests

State Forest	Acres	County
Tuscarora	93,556	Juniata/Mifflin/Perry/Huntingdon
Gallitzin	13,861	Cambria/Bedford
Buchanan	52,181	Fulton/Bedford
Rothrock	96,281	Huntingdon/Centre/Mifflin
Bald Eagle	76,082	Snyder/Mifflin
Moshannon	10	Centre

Hunting on state forest lands is generally permitted, except for safety zones around buildings and picnic areas. Fishing is permitted during the appropriate seasons. Horseback riding and mountain biking are generally allowed on most trails and roads. Other activities allowed on specific state forests are listed below. All information can be found on DCNR’s website at <https://www.dcnr.pa.gov/StateForests/FindAForest/Pages/default.aspx>.

Bald Eagle State Forest spans the high, sharp ridges of central Pennsylvania. About 76,000 acres of this 194,602-acre state forest lies within the Juniata River watershed. There are more than 300 miles of hiking trails, 45 roadside campsites, 20 miles of ATV/motorcycle trails, and four designated picnic areas.

Buchanan State Forest straddles the ridges of southcentral Pennsylvania. About 52,000 acres of this 71,683-acre state forest lies within the watershed. There are 157 miles of share-used trails, four designated picnic areas, and 33 miles of ATV trails. Primitive camping is allowed.

Gallitzin State Forest rests on the Allegheny Front and Laurel Ridge. About 13,800 acres of this 24,370-acre state forest lies within the watershed.

Rothrock State Forest spans the ridges of Huntingdon, Centre, and Mifflin Counties and lies almost entirely in the Juniata River watershed. There are nearly 300 miles of hiking trails and two designated picnic areas in this state forest. Primitive camping is allowed and there is one motorized, roadside camping opportunity.

Tuscarora State Forest covers the narrow valleys and steep, rocky ridges of the ridge and valley region of Pennsylvania. About 93,500 acres of this 96,025-acre state forest lies within the Juniata River watershed. There are 220 miles of hiking trails (including 23 miles of the Appalachian Trail) and 55 motorized, roadside campsites.

Moshannon State Forest lies within the transition zone between the northern hardwood and Allegheny hardwood forests to the north and the mixed oaks and oak-hickory forests to the south. Only 10 acres of this 190,031-acre state forest is within the Juniata River watershed.

State Game Lands

The Game Commission owns and manages more than 1.5 million acres of state game lands throughout the Commonwealth. The primary purpose of these lands is the management of habitat for wildlife and provide opportunities for lawful hunting and trapping. Secondary recreational uses are permitted in accordance with the Game Commission's regulations. There are 36 state game lands in the watershed, totaling 242,593 acres. State Game Lands can be found online on the PGC's interactive map:

<https://pagame.maps.arcgis.com/apps/webappviewer/index.html?id=c9c7c8912356450fa77fc34d30b131fb>.

Raystown Lake

Raystown Lake is the largest lake located totally in Pennsylvania. It offers 8,300 acres of water surrounded by 21,000 acres of forested mountain slopes. The lake is managed by the U.S. Army Corps of Engineers for flood damage reduction, recreation and natural resource opportunities, and hydropower. Boating, camping, hiking, biking, swimming, and picnicking are all allowed at the lake.

Trails and Greenways

Trails are links among communities, providing alternative transportation, recreation, and educational opportunities. Trails are used for hiking, biking, horseback riding, or ATV and snowmobile riding. They are sometimes used for cultural and historic promotion and environmental education. In addition to numerous trails within state forests and state game lands, there are a number of public trails in the watershed. An interactive map of trails can be found on DCNR's website at <https://www.trails.dcnr.pa.gov/>. Greenways are corridors of open space that can connect people, parks, historic sites, and natural areas. Below is a list of trails and greenways in the watershed (Figure 6-1).



Figure 6-1. Trails and Greenways in the Juniata River Watershed

Water Trails are recreational waterways on lakes, rivers, and streams between specific destinations with access points and day-use and/or camping sites for the boating public. Pennsylvania’s Water Trails are exceptionally suited for low-impact use such as kayaking canoeing, paddling, and floating. There are two water trails in the Juniata watershed (Figure 6-2).



Figure 6-2. Water Trails in the Juniata River Watershed

Fishing

Fishing in the Juniata River watershed is plentiful. Groups such as PFBC and Little Juniata River Association work to make streams open to public fishing through easements or procurement of properties.

Boating

In Pennsylvania, the regulations for boating are under the jurisdiction of PFBC. Boating is extremely popular in Pennsylvania with more than 85,000 miles of stream and numerous natural and man-made lakes. The number of registered boats peaked in 2012 at more than 332,000 and has remained mostly stable (PFBC 2024).

The most recognizable form of free, public access along Pennsylvania waterways is the more than 300 PFBC-owned access areas, as well as more than 700 other boat ramps operated by state agencies, municipalities, and non-profit groups.

PFBC manages more than 300 public access areas to Pennsylvania’s waterways, while other state agencies, organizations and municipalities manage more than 700 access points (PFBC 2023). In 2005, the PFBC



Photo 3. Kayaking is a popular form of recreation within the watershed. Photo by Branden Diehl.

created the Boating Facility Grant Program to provide grants for the planning, acquisition, development, expansion and rehabilitation of public boating facilities located on the waters of the Commonwealth. The goal of the program is to ensure Pennsylvania's recreational boaters have the highest quality boating facilities. More information about the Boating Facility Grant Program can be found here: <https://www.fishandboat.com/About-Us/Grants/Pages/BoatingFacilityGrantProgram.aspx>. Other grant opportunities for boating access include the Western Pennsylvania Conservancy's Canoe Access Development Fund and the Pennsylvania Organization for Watersheds and Rivers (POWR) Statewide Waterway Access Grant Mini Grant Program (SWAG).

Environmental Education

The importance of environmental education has grown over the past 25 years. Pennsylvania has developed environment and ecology standards that are part of a school's curriculum. Students are tested on their knowledge through the Science Pennsylvania System of School Assessment (PSSA) and the Biology Keystone Exam.

PA DEP's Environmental Education and Information Center (EEIC) assists teachers and non-formal educators by conducting workshops, providing online lesson plans and sources of environmental curricula. The EEIC also does outreach to the general public through hands-on exhibits, the [Teaching Green](#) newsletter, and addressing questions at major events such as the PA Farm Show, Home Shows, Ag Progress Days and others. PA DEP also coordinates and funds the DEP Environmental Education Grants Program, established by the Pennsylvania Environmental Education Act of 1993. School districts, private schools, colleges and universities, intermediate units, environmental education centers, nonprofit conservation and education organizations and businesses and county conservation districts may apply for funding to develop new or expand current environmental education programming.

County conservation districts throughout the watershed collaborate with state agencies, watershed associations, school districts, and other groups to provide environmental education to their communities. A part of that work is to organize and conduct county Envirothon competitions. The Envirothon programs in Pennsylvania provides environmental education to students throughout the state. County conservation districts organize regional Envirothon challenges where school groups compete against one another to test their knowledge of aquatic systems, forestry, soils, land use, wildlife, and current issues. The winning school from each county moves on to compete in the state Envirothon competition, and the winners of the state competitions compete at the national level.

Penn State University's Cooperative extension offices provide environmental education outreach. Each office provides access to collegiate expertise and resources, while maintaining local service providers and accessibility. Programs run by cooperative extensions include after-school programs, youth development, 4-H, and economic and community development programs.

There are also a number of environmental education/research facilities located in the Juniata River watershed. The Raystown Field Station is located on 365 acres of Raystown Lake in Central Pennsylvania. It was established by Juniata College and the U.S. Army Corps of Engineers in 1974 to provide special opportunities for environmental research and education. Facilities at the Field Station consist of the Lakeside Center campus, which houses residential academic semesters, and Grove Farm, which serves primarily as a retreat center. All facilities are available for rental to the public when not occupied by Juniata programs. Shuster Hall is a LEEDs certified green building. There are also two lakeside lodges that provide comfortable modern housing, with each lodge having a complete kitchen. The lodges

function as dorm space for the residential semesters, and are not equipped with bedding. These facilities can be rented with or separate from Shuster Hall.

Shaver's Creek Environmental Center provides educational and recreational opportunities for families, schools, corporate groups, and Penn State students. The newly-renovated facility features native wildlife, including amphibians, reptiles, and raptors, on display year-round for visitors. Each year, Shaver's Creek engages more than 4,000 elementary students in summer camps and school programs and draws 3,000 attendees to their Maple Harvest Festival and Enchanted Halloween Trail. Shaver's Creek is home to a variety of birds, including hawks, owls, eagles, vultures, and falcons — a group known as raptors. All of the resident birds arrived from rehabilitation centers with permanent disabilities, and they are permitted to Shaver's Creek to work alongside our Animal Care staff and volunteer team as ambassadors for their wild counterparts. In addition, there are hiking trails, picnic areas, and the Litzinger Discovery Room at the Environmental Center.

Historical Overview

Bedford County was created on March 9, 1771, from part of Cumberland County. It was named for Fort Bedford, that in turn had been named in 1759 for the Duke of Bedford. First entered by Virginians in 1728, the site that became Bedford Village was a connecting point along several American Indian trails and settler paths. Its location continued to lie along Pennsylvania's main East-West route until the opening of the Pennsylvania Railroad (1846); the Pennsylvania Turnpike in the 1940s placed it again on a main route. The original settlers included a large group of German descent. Rye, used often for whiskey, was the major crop until 1860, after which general farming prevailed. Dairy production flourished after 1930.

Blair County was created on February 26, 1846 from parts of Huntingdon and Bedford Counties, and named for John Blair, a prominent citizen. Before the county's formation the area was located on the Frankstown Path and was dangerous to settle because of threats from American Indians. The Blair family appeared after the Revolution and led the movement to form the county. In 1831, Hollidaysburg became the terminal of the Portage Railroad that carried canal boats over the mountains to Johnstown. Altoona arose because of the Pennsylvania Railroad's yards founded there in 1846; this was the main employer in the county until the 1970s. Originally settled by German and Scotch-Irish groups, Altoona's railroad employment brought about a much wider ethnic mix.

Huntingdon County was created on September 20, 1787, from part of Bedford County and named for its county seat, Huntingdon. Dr. William Smith, provost of the University of Pennsylvania, owned the land where the town was laid out in 1767 and named it for the Countess of Huntingdon, England. Fort Shirley, the reinforced trading post of the colorful Indian trader George Croghan, was an important defense post in 1755–1756. Iron ore and limestone are abundant, so the manufacture of a superior charcoal-made iron was the foundation of the economy until surpassed by competitors after 1850. Charcoal production denuded the forests, and later the state bought those areas as preserves. Brick making and pottery were major industries until recent decades. Paper, silk, and hosiery industries once flourished.

Mifflin County was created on September 19, 1789, from parts of Cumberland and Northumberland Counties and named for Governor Thomas Mifflin. The Pennsylvania Canal arrived in 1829 followed twenty years later by the Pennsylvania Railroad, and the county was also favored by being on the route of the William Penn Highway (later U.S. 22). Despite mountains, the Kishacoquillas Valley is fertile, and

limestone, glass quality sand, silica sand, and ganister are profitable. A silk industry was converted to rayon, then to nylon, and now to polyester. In the 1930s Vicose Silk had 4,000 employees, 10 percent of the county's population. Iron and steel were once produced, leaving in their trail the current trades of fabricated forgings, rolled rings, and railroad wheels and axles.

Juniata County was created on March 2, 1831, from part of Mifflin County and named for the Juniata River. The Indian name Juniata is said to mean "people of the standing stone." Squatters settled here and were evicted by the provincial government in 1750. After they returned, American Indians raided them in 1755–1756. The Pennsylvania Canal was the backbone of the early economy beginning in 1826, followed by the Pennsylvania Railroad in the late 1840s. The canal closed about 1900, and the Tuscarora Valley Railroad closed in 1934.

Perry County was created on March 22, 1820, from part of Cumberland County and named in honor of Oliver Hazard Perry, victor in the Battle of Lake Erie. The area was a favorite for illegal squatters before American Indians yielded the land at the Treaty of Albany in 1754. In 1820 Sherman's Valley boasted forty-eight grist and merchant mills, a forge, ten fulling mills, sixty sawmills, eight carding machines, four oil mills, a furnace, two tilted hammers, and a powder mill. The Pennsylvania Canal had four locks in Perry; the economies of Duncannon, New Buffalo, Liverpool, and Newport depended on the canal from 1828 to 1901, when it was closed. Perry also had the Juniata Canal from 1828 to 1898. The county made high-quality hickory barrel hoops.

Fulton County was created on April 19, 1851, from part of Bedford County and named for Robert Fulton, the inventor who pioneered in the use of the steamboat. The area that became the county was included in the 1754 Albany Purchase from the American Indians. The Great and Little Coves, which make up most of the county, lay along the Forbes Road and that brought an early prosperity. Gristmills and tanneries were successful. But the Main Line Canal and the Pennsylvania Railroad route bypassed Fulton and isolation resulted. Fulton never established railroad contact with outside markets and was a remote area until the Pennsylvania Turnpike appeared in 1940. The timber industry was strong until about 1930. Much of the county is now held as state forests, parks, and game lands (PHMC 2024¹).

Historical Sites, Structures, and Districts

In 1966, the National Historic Preservation Act established the National Register of Historic Places. Listed properties include districts, sites, buildings, structures, and other objects significant to American history, architecture, archeology, engineering, and culture.

Nationally, properties are nominated to the National Register of Historic Places by the State Historic Preservation Office (SHPO). In Pennsylvania, the Pennsylvania Historical and Museum Commission's (PHMC's) SHPO performs these duties. The SHPO's role in this process is review and advisory in nature. Only the Keeper of the National Register, at the National Park Service (NPS), has the authority to list a property or determine if it is eligible for the National Register. All other findings by SHPOs or federal agencies are considered to be opinions.

To list a property in the National Register, private property owners must apply through the SHPO. Private property owners may apply directly to the office of the Keepers only through the designated appeals process. The listing process is detailed in the [Code of Federal Regulations 36CFR Part 60](#).

The SHPO reviews submitted nominations to determine whether they meet the National Register Criteria for Evaluation. The SHPO's National Register review staff reviews adequacy of documentation, assures that the procedures and standards of the National Register program are met, and conducts site visits to proposed historic districts (PHMC 2024²).

There are 126 historical sites located within the watershed listed on the National Register of Historic Places (Appendix N). Sites include historic districts, iron furnaces, covered bridges and historic buildings.

Heritage Areas

In 1989, Pennsylvania launched its State Heritage Parks Program. Among the first such efforts in the nation, the initiative aimed to promote economic development, cultural conservation, recreation, education and intergovernmental cooperation in regions closely associated with industrial history and manufacturing. Today, the program remains vibrant and is widely recognized as the most successful state-level heritage area effort in the country. The Pennsylvania Heritage Areas Program is a multi-region asset-based economic development program rooted in the Commonwealth's rich natural, cultural, and industrial history. In 2014, tourists spent an estimated 7.5 million days and nights in Pennsylvania's Heritage Areas, purchasing more than \$2 billion worth of goods and services. Seventy-percent of this spending was purely reliant on heritage-related attractions. The total contribution of heritage visitor spending to the state economy was 25,708 jobs and \$798 million in labor income. There are two Heritage Areas within the Juniata River watershed: Allegheny Ridge Corporation and Lincoln Highway Heritage Corridor (DCNR 2024²).

CHAPTER 7 – ACHIEVEMENTS

This section provides a “snapshot” of the achievements and continuing efforts of non-profit groups, governments, businesses and individuals working together to better the Juniata River watershed. Since the completion of the Juniata Watershed Management Plan 2000, much progress has been made in implementing the plan and many improvement projects have been completed. The following descriptions are by no means a complete or comprehensive list.

County Conservation Districts

County conservation districts are the backbone of the community’s conservation efforts. Conservation districts implement a variety of programs, and provide for a range of issues unique to their county. These issues can include abandoned mines, agricultural land preservation, environmental education, erosion and sedimentation pollution control, floodplain management, nutrient management, stormwater management, dirt and gravel and low volume roads (DGR), waterway protection, and much more.

25 Years of Conservation with the Blair County Conservation District

Since its inception in 1966, the Blair County Conservation District has been locally led, solving local resource issues and concerns. The District Board has led an expansion of programs and staff resources over the last 25 years to serve all facets of our community.

The primary focus of the District has always been our agriculture programs. The District continues to work closely with our Blair County Ag Operators and the agencies of the Commonwealth and USDA to provide both technical and financial assistance. The District has operated a Chesapeake Bay Program since the 1990’s and we accepted delegated duties for the State’s Nutrient Management Program to include plan reviews and farm inspections of regulated sites. More recently the District participated in the County Wide Action Plan (CAP) Program again spearheaded by the state as part of their Watershed Implementation Plan. Blair County identified projects and areas whereby we could reduce the nutrient and sediment load to the Chesapeake Bay. Along with the plan came an annual allocation of funds for implementation of those projects, some of which, like the Cover Crop Incentive Program ran through our ag operators. Most recently we have undertaken the Agricultural Conservation Assistance Program with over 1.5 million dollars slated to come to Blair County for the administration, design and implementation of Best Management Practices through 2025. The District has diligently prepared a program and has begun the dissemination of funds for a multitude of practices to include waterways, cover cropping, waste storage structures, heavy use area protection and more. Also of importance is our Urban Agriculture Initiative both in Blair County and throughout our region, spearheaded by grant funding to address food insecurity in our region.

An increased emphasis of our holistic watershed approaches started about 25 years ago in Blair County with several Abandoned Mine Drainage Projects in the western part of the county. In the early 2000’s the District was finishing the Glenwhite Watershed Restoration Project, which helped to restore the water quality to one of the reservoirs serving the citizens of the City of Altoona. Additional watershed studies and projects were completed in Kittanning Run and Sugar Run, also west of Altoona, and in Plum Creek, an agricultural watershed west of Martinsburg. An important aspect of the watershed analysis was actual field sampling of the streams for water quality data. The District has continued to use both

staff and volunteers to monitor water quality throughout the county and are in the process of reinvigorating our volunteer water sampling program.

The District continues to operate the Dirt, Gravel and Low Volume Road Program in Blair County where about \$200,000 per year is made available to participating municipalities to implement Environmentally Sensitive Maintenance practices on publicly owned roads. To date we have completed nearly 70 projects and provided \$2 million to our local municipalities across Blair County.

Stream restoration projects, again driven by grant funding, has been a focus of the District over the last 10 years. First working with groups like Trout Unlimited and the Western PA Conservancy and expanding to utilize staff and funding from the CAP program and the Intergovernmental Stormwater Committee (ISC). One project alone completed in 2023 on the Frankstown Branch of the Juniata River restored 2,600 linear feet of stream.

Speaking of the ISC, Blair County municipalities, in conjunction with the Blair County Conservation District and Planning Commission, recognized the need for collaboration related to the Municipal Separate Stormwater Sewer System (MS4) program and have steadily worked toward a formalized approach to jointly manage, implement, fund, and comply with the Federal Regulations. With their inception in 2016, the Blair County Intergovernmental Stormwater Committee (ISC) has made it their mission to preserve, restore, and enhance water quality of Blair County through implementation of best management practices. Through the development of the Blair County Collaborative Pollution Reduction Plan, the ISC was required to reduce a total of 1.4 million pounds of sediment per year by 2023. The ISC laid the groundwork for the current and future MS4 permit cycle including establishing projects necessary to meet the required sediment reduction of the PRP, prioritizing the potential projects, and formulating a budget to design and construct the proposed projects. Since 2017 the ISC has implemented a total of 33 projects that reduce a total of 1,032,038.20 lbs./yr. of sediment within Blair County waterways. These projects consist of 5 detention basin retrofits/filtering practices, 15 rain gardens, an acre of pervious parking areas, 3.5 acres of riparian buffers, a wet pond mechanical dredging project, and 7,305 linear feet of streambank stabilization and restoration projects. The ISC diligently strives towards development and solidification of partnerships that ensure implementation of a water quality enhancement project, providing community enrichment throughout the process and after.

The District continues to provide Erosion and Sediment Control plan reviews and administers the NPDES Permit for Stormwater Associated with Construction Activities. Annually nearly 100 plans and permits are processed across Blair County for our development community so that they may minimize accelerated erosion from construction sites.

Finally, with the development of NatureWorksPark, a 15 acre environmentally specific outdoor recreation and education area located in the Borough of Hollidaysburg, owned and operated by the District, an expansion of our conservation education program has commenced. The District hired our first full-time Education Specialist in



Photo 7-1. Amphitheatre at NatureWorks Park. Photo provided by Blair County Conservation District.

2023, and we look forward to increased programming at the park and across Blair County.

Stay tuned for the next 25 years!!

Huntingdon County Conservation District Snapshot (2020-2023)

- Preserved more than 327 acres of farmland
- Planted 57.5 acres of riparian forest buffer
- Provided technical assistance to 554 contacts
- Brought in more than \$2.5 million of funding into the county
- Improved more than 9 miles of dirt and gravel roads
- Restored more than 5,400 feet of eroding streambank
- Installed more than 11,000 of streambank fencing
- Installed numerous other agricultural BMPs such as fencing for rotational grazing systems, manure storage facilities, water troughs, stabilized stream crossings, roof runoff controls, cover crop incentives, and nutrient management plan review
- Engaged more than 1,300 students in educational programs
- Conducted stream monitoring

County and Regional Planning Commissions

Planning commissions play a vital role in planning and land use regulation in Pennsylvania. Planning commissions are advisors to their elected governing body concerning the physical development of the community. They provide policy advice on land use regulations such as zoning and subdivision controls and assist municipalities in adopting these land use regulations. Plans for recreation, open space, greenways, environmental protection, natural resources, agriculture, and forestry are prepared by planning commissions.

- Developed Alleghenies Ahead, the region's six-county Comprehensive Plan. It is a collaborative effort of the Southern Alleghenies Planning and Development Commission, along with the county planning commissions, to implement strategies that will boost the region's ability to create and compete for jobs, attract and retain residents, and become a place with stronger and more vital communities. The full plan can be found at <https://sapdc.org/alleghenies-ahead-comprehensive-plan/>
- Guided local municipalities to adopt more land use regulations and controls. Since the last plan was written, more municipalities now have zoning, subdivision, and comprehensive plans. Of the municipalities in the watershed a total of 60 have zoning ordinances, 97 have comprehensive plans, and 156 have subdivision ordinances.

Colleges and Universities

Colleges and universities in the watershed provide a unique opportunity for research, monitoring, and implementation of projects all while providing education and experience for their students.



Photo 7-2. Live Stakes Planted by Juniata College Students.

Juniata College Snapshot

- Assisted with 43.5 acres of riparian buffers
- Planted over 8,000 live stakes
- Leader in water quality monitoring and research in the watershed
 - Most notable are the 4-year comprehensive study of the Little Juniata River that included 47 sites for in-stream water quality, macroinvertebrate sampling, habitat assessments, fish community sampling, and a trout telemetry study in the Little Juniata River to determine migration within the stream corridor. These were completed in partnership with the Little Juniata River Association.
- Northern Map Turtle Research

Western Pennsylvania Conservancy

WPC has been saving exceptional places since 1932. The Conservancy protects and restores exceptional places to provide our region with clean waters and healthy forests, wildlife and natural areas for the benefit of present and future generations. The Conservancy creates green spaces and gardens, contributing to the vitality of our cities and towns, and preserves Fallingwater, a symbol of people living in harmony with nature. In 2008, the Conservancy opened the Juniata and Potomac Regional office to better serve constituents in central Pennsylvania. A map of our work can be found at <https://waterlandlife.org/maps-of-our-work/#wpc>.



Photo 7-3. Riparian Forest Buffer, Juniata County

- Restored more than **36 miles of stream** through Agricultural BMPs and stream restoration
- Completed 29 stream restoration projects
- Implemented more than 180 agricultural BMPs
- Planted more than 52 acres of riparian forest buffer
- Sponsor four community gardens in Altoona, Hollidaysburg, Huntingdon and Tyrone
- **Conserved more than 26,000 acres** of land through acquisition or easement
- House the Pennsylvania Natural Heritage Program (PNHP) whose purpose is to provide current, reliable, objective ecological data and analysis to help guide conservation work and land-use planning

Little Juniata River Association

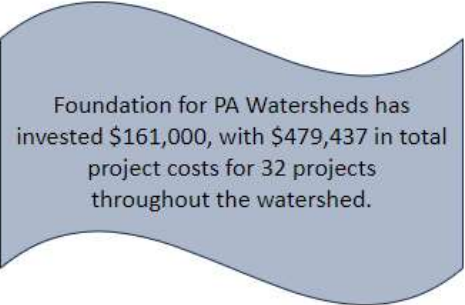
The Little Juniata River Association (LJRA) was first formed in 1998 by a small group of concerned local citizens following a major bug kill on the river. The original mission was to “Monitor the aquatic insect species and their population as they return to the river”. The cause of this almost total loss of trout food was never determined. From 1998 until 2003, LJRA efforts were limited to monitoring water quality and the rebound of mayfly and caddis species. During this time the LJRA was organized as a 501(C)3

Pennsylvania non-profit. In early 2004, current president, Bill Anderson led an effort to expand the LJRA mission from strictly monitoring to the current mission. Since that time the LJRA has received many awards from state agencies, environmental non-profits and national organizations for its effective protection and improvement of the river. LJRA's vision is for a fine Class A wild trout fishery extending from the headwaters near Altoona, 32 miles downstream to the junction with the Frankstown Branch. The goal is to achieve protection from pollution and degradation for the entire watershed by upgrading the PADEP Designated Use to High Quality Cold Water. LJRA now has over 700 members and through the efforts of its many volunteers, it continues to be a steadfast defender of the river. Here are some of the actions taken in the past 25 years:

- Successfully lobbied the Pennsylvania Fish and Boat Commission (PFBC) for Catch and Release regulations on 14 miles of river. Gave public testimony to the PFBC commissioners resulting in enactment of this no-kill policy.
- Stopped major sedimentation by repairing eight sites totaling 1400 feet of badly eroding banks in the upper river. Typical stream bank erosion site being repaired with large stone, root wads and log cribbing to stop erosion and produce excellent fish habitat.
- Planted over 1000 shrubs and trees to restore riparian buffers.
- Helped to persuade the AWA to install pollution abatement facilities to remove more than 90% of all phosphorous from the waste water stream.
- Paid landowners over \$200,000 for five miles of permanent public fishing easements.
- Monitored bugs and water temperatures for entire river (ongoing).
- Fought off unwise development on steep wooded slopes.
- Conducted annual clean-ups on more than 20 miles of river banks since 2005.
- Secured increased levels of protection through changes in Designated Use for Little Juniata tributaries.
- Encouraged PFBC to conduct a study on the effectiveness of the fingerling stocking program. This resulted in the designation of 13 miles of the Little Juniata as a Class A wild trout fishery and elimination of the hatchery stocking program.
- Assisted PFBC in acquiring 52 acres surrounding Sandy Run. This area contains the largest springs in the upper watershed and provides an essential shot of cold water for the Little Juniata. PFBC control will protect the area from development and misuse.

Other Significant Achievements

- Formation of Friends of Trough Creek and Warriors Path State Park
- Acquisition of last parcel necessary to connect the H&BT Rail Trail from outside Everett to Warriors Path State Park, projected completion of trail is Fall 2024, new facilities will be constructed near the path
- Saxton Borough is exploring expanding the H&BT trail from Saxton to Carbon Township building
- Acquisition of abandoned PA turnpike property in Bedford and Fulton County for trail development
- Completion of Bedford Springs restoration
- Completion of trail connecting Bedford Springs and Old Bedford Village
- AMD restoration efforts on Altoona Water Authority property near Horseshoe Curve
- Completion of Appalachian Regional Reforestation Initiative in Robertsdale



Foundation for PA Watersheds has invested \$161,000, with \$479,437 in total project costs for 32 projects throughout the watershed.

- Remining and reclamation in the area of Robertsdale
- Trough Creek restoration
- Renovation of former Seton Building outside of Saxton
- Updated Raystown Lake Master Plan
- Broad Top Township installation of AMD systems - Improved water quality seen in six Mile Run and Longs Run
- Formation of Changes in the Parkway (CHIP) committee in Saxton improving streetscaping, green space and “walkability” of the Main Street corridor



Photo 7-4. Trail connecting Bedford Springs to Old Bedford Village. Photo provided by Branden Diehl.

CHAPTER 8 - RECOMMENDATIONS

This section highlights recommendations to improve the quality of life for those who live, work, and play in the Juniata River watershed. These management recommendations were derived from input of local citizens and experts in various fields, gathered through public meetings, surveys, and correspondence. They are non-regulatory and available for use by any citizen, group, or agency. They build upon the goals and work completed since the Juniata Watershed Management Plan 2000 was adopted.

Juniata Forward: Building on 25 Years of Conservation sets forth goals for the wise use of land, water, biological and cultural resources of the region. Each goal is followed by suggested methods to achieve the goal, listing responsible parties, potential partners and possible funding sources (Table 8-1).

Table 8-1. Juniata Forward: Building on 25 Years of Conservation Goals

Project Area Characteristic Goals

Goal 1-1: Proactively plan for future development.			
<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Develop municipal or multi-municipal comprehensive plans in municipalities lacking plans in order to better guide the future direction of each municipality.	Planning Departments, Municipalities, Citizens, Counties, SAP&DC	Foundations, Private Sources, DCED	Medium
2. Develop land-use ordinances or subdivision regulations in accordance with municipal and county comprehensive plans to protect the character of communities and valuable resources from undesirable land uses.	Planning Departments, Municipalities, Citizens, Counties, SAP&DC	Foundations, Private Sources, DCED	Medium
3. Strengthen zoning and land-use regulations, so they are adhered to, and increase enforcement of these regulations.	Planning Departments, Municipalities, Citizens, SAP&DC, Counties	Foundations, Private Sources, DCED	Medium
4. Implement Alleghenies Ahead: Comprehensive Plan.	Planning Departments, Municipalities, Counties, SAP&DC	Foundations, Private Sources, DCED	Medium
5. Utilize responsible zoning to protect agricultural lands, without significantly impeding landowner rights.	Planning Departments, Conservation Districts, Municipalities, Counties, PDA	Foundations, Private Sources, DCED, PDA	Medium
Goal 1-2: Carefully plan development to ensure economic enhancement while preserving community character without adversely affecting quality of life.			
<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Plan for commercial or residential development, based upon limitations of the physical characteristics of the region, including the consideration of water-use limitation in permitting decisions, water quantity, soil type, nearness of high-quality habitat, etc.	Planning Departments, Conservation Groups, SAP&DC, Municipalities, PA DEP	Foundations, Private Sources, DCED	High
2. Utilize county and municipal comprehensive plans to guide development activities to occur in designated growth areas.	Planning Departments, Conservation Groups, SAP&DC, Municipalities, PA DEP	Foundations, Private Sources, DCED	High

3. Implement Smart Growth Principle practices when development opportunities arise to maintain natural setting in existing and new communities.	Planning Departments, Conservation Groups, SAP&DC, Municipalities, EPA	Foundations, Private Sources, DCED, EPA	High
4. Repopulate current downtown and small-town business.	Planning Departments, Municipalities, Counties	Foundations, Private Sources, DCED	High

Goal 1-3: Enhance transportation infrastructure.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Preserve and maintain existing road infrastructure.	Road Masters, PennDot	Foundations, Private Sources, PennDot, DCED	High
2. Include sound geologic and ecologic investigation and best management practices during maintenance and construction of roadways.	Conservation Groups, Road Masters, PennDot	Foundations, Private Sources, PennDot, DCED	Medium
3. Implement best management practices that protect water resources when improving and upgrading dirt and gravel and low-volume roads.	Conservation Groups, Penn State Center for DGR, Municipalities, Road Masters, PA DEP	Foundations, Private Sources, Conservation Districts, Penn State Center for DGR, PA DEP	High
4. Investigate alternative practices to using road salt and brine in order to protect water quality.	Conservation Groups, Universities, PennDot, PA DEP	Foundations, Private Sources, DCED, PennDot	Medium
5. Invest in public transportation systems to help alleviate traffic congestion.	Planning Commission, Counties, Municipalities, SAP&DC	Foundations, Private Sources, DCED	Medium
6. Upgrade rural road signage and increase warning and advisement of road concerns as they relate to commercial and large vehicle traffic.	Penn Dot, Counties, Municipalities	Foundations, Private Sources, DCED	Medium
7. Explore more runaway vehicle ramps to address rural commercial traffic and large vehicle traffic.	Penn Dot, Counties, Municipalities	Foundations, Private Sources, DCED	Medium
8. Explore traffic safety improvements that address RV, commercial, and large vehicle traffic increases.	Penn Dot, Counties, Municipalities	Foundations, Private Sources, DCED	Medium

Goal 1-4: Enhance support and services for emergency responders.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Regionalization of police force to assist with addressing illegal drug use and support increased tourism.	Emergency Service Providers	Foundations, Private Sources, DCED	Medium
2. Improve emergency services through additional funding (especially recreational funding), upgraded equipment, and training for volunteer and professional employees.	Emergency Service Providers	Foundations, Private Sources, DCED	Medium
3. Develop emergency action plan and app to assist responders to include mapping of agency access gates and point of contact for gate access in remote areas.	Emergency Service Providers	Foundations, Private Sources, DCED	Medium
4. Improve coordination between Lake Raystown with fire and EMS exercises.	Emergency Service Providers, US ACOE	Foundations, Private Sources, US ACOE	Medium

Goal 1-5: Increase communications and cooperation among municipalities and counties within the region to promote sharing of services and improve conditions collectively affecting watersheds.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
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1. Encourage municipalities to develop intermunicipal agreements for improving municipal services amidst limited funding.	Planning Commissions, Municipalities, Counties, SAP&DC	Private Sources, DCED	Medium
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Goal 1-6: Improve infrastructure for the community to be better able to access services.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Improve access to broadband and high-speed internet by implementing action items in Alleghenies Ahead Comprehensive Plan.	Planning Commissions, Municipalities, Counties, SAP&DC	Private Sources, DCED	High
2. Develop a plan to support future EV charging stations.	Planning Commissions, Municipalities, Counties, SAP&DC	Private sources, DCED, PennDot, Federal Infrastructure Grants	Medium
3. Implement Action Items in Alleghenies Ahead Comprehensive Plan to improve cellular coverage.	Planning Commissions, Municipalities, Counties, SAP&DC	Private sources, DCED, PennDot, Federal Infrastructure Grants	High

Goal 1-7: Educate stakeholders about benefits of watershed protection and the use of best management practices.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Conduct workshops and seminars about climate change for community leaders and constituents.	Conservation Groups, PSU Extension, PA DEP, Conservation Districts	Foundations, Private Sources, PA DEP	High
2. Conduct workshops, seminars and demonstrations for decision-makers, from developers to government leaders, emphasizing best management practices.	Conservation Districts, Conservation Groups, Planning Departments, Developers, PA DEP, Municipalities, DCNR	Foundations, Private Sources, PA DEP	High
3. Increase municipal awareness of the values of preserving, protecting, and restoring the natural resources within the watershed, and promote inter-municipal cooperation.	Conservation Districts, Conservation Groups, Municipalities	Foundations, Private Sources, PA DEP, DCNR	High

Land Resource Goals

Goal 2-1: Reduce impacts caused by dirt and gravel roadways.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Conduct updates to the dirt and gravel road inventory and prioritization on a biannual basis.	Conservation Districts, PA DEP, PSU Center for DGR	Conservations Districts, PSU Center for DGR, PA DEP, Foundations, Private Sources	High
2. Encourage municipalities to attend Environmental Sensitive Maintenance (ESM) course.	Conservation Districts, Municipalities, PSU Center for DGR	Conservations Districts, PSU Center for DGR, PA DEP, Foundations, Private Sources	High
3. Implement best management practices to improve road runoff in an environmentally sensitive way.	Conservation Districts, Municipalities, PSU Center for DGR	Conservations Districts, PSU Center for DGR, PA DEP, Foundations, Private Sources	High

Goal 2-2: Preserve agricultural lands and culture for future generations.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
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1. Encourage municipalities to create an ordinance for "solar farms."	Planning Commissions, Municipalities, PDA	Foundations, Private Sources, PDA, DCED	High
2. Look for alternatives to putting solar panels on prime farmland, such as putting panels on abandoned mine lands.	Planning Commissions, Municipalities, Landowners	Foundations, Private Sources	High
3. Enroll farms into county farmland preservation programs.	Conservation Districts, PSU Extension, NRCS, landowners	Foundations, Private Sources, PDA, NRCS, USDA	High
4. Participate in Agricultural Security Area Program.	Planning Commissions, Municipalities, Conservation Groups	Foundations, Private Sources, PDA, NRCS, USDA	High
5. Enroll agricultural lands in cost-incentive programs.	Conservation Districts, PSU Extension, NRCS	Foundations, Private Sources, PDA, NRCS, USDA	High

Goal 2-3: Establish or enhance incentives for land protection and conservation practice implementation.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Create tax incentives or other incentives for private landowners who implement conservation practices, such as conservation easements and riparian buffers.	Conservation groups, Legislators, PSU Extension, NRCS, DCNR, PA DEP	Legislature, Private Sources, Foundations, PA DEP, DCNR, NFWF	High
2. Encourage landowners to develop forest stewardship plans.	Conservation groups, PSU Extension, NRCS, DCNR, PA DEP	Private Sources, Foundations, PA DEP, DCNR, NFWF	High

Goal 2-4: Identify, inventory, cleanup illegal dumpsites, and prosecute violators using illegal dumpsites.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Reduce the amount of illegal dumping and litter being disposed of along roadways, hillsides, and streams by educating residents, monitoring existing dumpsites, and prosecuting violators.	Keep PA Beautiful, Solid Waste Authorities, Conservation Organizations, Municipalities, Law Enforcement, PA DEP	Foundations, Private Sources, PA DEP, Keep PA Beautiful	Medium
2. Clean up litter and illegal dumpsites.	Conservation Groups, Citizens, Civic Groups, Municipalities, Conservation Districts	Foundations, Private Sources, PA DEP, Keep PA Beautiful	High
3. Educate citizens about the impacts of illegal dumping has on water quality and the environment, aesthetics, health and human safety, and the economy.	Conservation Groups, Citizens, Municipalities, Conservation Districts, Keep Pa Beautiful, PA DEP, DCNR	Foundations, Private Sources, PA DEP, DCNR	High
4. Impose stiffer fines/penalties for illegal dumping.	Legislators, Municipalities	Private Sources	High
5. Install cameras at dumping areas.	Conservation Groups, Citizens, Keep Pa Beautiful	Foundations, Private Sources	Medium

Goal 2-5: Work with agricultural landowners to install best management practices on their farms to reduce impacts on livestock and area waterways.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Develop nutrient management plans, manure management plans and agricultural E&S plans to boost productivity and protect water resources on agricultural lands.	Farmers, Conservation Districts, NRCS, PA DEP, Conservation Groups	Foundations, Private Sources, NRCS, PA DEP, EPA, NFWF	High
2. Promote conservation practices that improve soil health and protect area waterways, such as cover crops, conservation tillage, crop residue, grassed waterways, riparian buffers, streambank fencing, etc.	Conservation District, NRCS, PA DEP, PDA, PSU Extension, Conservation Groups	Foundations, Private Sources, NRCS, PA DEP, NFWF	High
3. Stabilize barnyard and livestock areas to properly manage runoff.	Conservation District, NRCS, PA DEP, PDA, PSU Extension, Conservation Groups	Foundations, Private Sources, NRCS, PA DEP, NFWF	High
4. Focus efforts on whole-farm best management practices to address all resource concerns on the land.	Conservation District, NRCS, PA DEP, PSU Extension, Conservation Groups	Foundations, Private Sources, NRCS, PA DEP, NFWF	High
5. Promote farm tours as a showcase of conservation practices.	Conservation District, NRCS, PA DEP, PSU Extension, Conservation Groups	Foundations, Private Sources, NRCS, PA DEP, NFWF	High
6. Implement riparian buffer projects (along with streambank fencing, stabilized stream crossings, and alternative watering sources) in order to enhance riparian corridors with native vegetation to minimize nutrients and sediments from entering area waterways.	Conservation District, NRCS, PA DEP, PSU Extension, Conservation Groups, DCNR	Foundations, Private Sources, NRCS, PA DEP, NFWF, DCNR	High
3. Encourage farmers to implement Climate Smart practices.	Conservation groups, PSU Extension, NRCS, PA DEP	Private Sources, Foundations, PA DEP, NRCS, NFWF	High

Goal 2-6: Reclaim abandoned wells, mines, and quarries.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Inventory abandoned wells, quarries, and mines and develop a plan for remediation.	Conservation Groups, Conservation Districts, PA DEP	Foundations, Private Sources, PA DEP, EPA	Medium
2. Redevelop abandoned sites through programs similar to brownfield redevelopment.	Conservation Groups, Conservation Districts, PA DEP	Foundations, Private Sources, PA DEP, EPA	Medium
3. Plug orphan and abandoned wells to address environmental, health and safety concerns	Conservation Groups, Conservation Districts, PA DEP	Foundations, Private Sources, PA DEP, DCNR	Medium

Goal 2-7: Protect ecologically significant lands.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Work with land trusts to acquire or conservation easement purchase on ecologically significant areas.	Conservation Groups, Conservation Districts, Municipalities	Foundations, Private Sources, DCNR, NFWF	Medium

2. Encourage farmland/forestland tax matching programs to provide incentives to keep land in agriculture/forest and not convert it to residential use.	Conservation Groups, Municipalities, DCNR, Legislators, Counties, NRCS	Foundations, Private Sources, DCNR	High
3. Work with forest landowners to sustainably manage their property and encourage the development of forest management plans.	Conservation Groups, Conservation Districts, NRCS, DCNR, PGC	Foundations, Private Sources, DCNR, NRCS	Medium

Water Resource Goals

Goal 3-1: Implement current sub-watershed plans and initiatives.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Implement Countywide Action Plans (CAPs) in the watershed area to improve local water quality and help achieve nutrient and sediment reductions for the Chesapeake Bay.	Conservation Groups, Planning Commissions, Counties, Conservation Districts, PA DEP, HRG, Landstudies	Foundations, Private Sources, PA DEP, NFWF	High
2. Implement existing Watershed Implementation Plans (WIPs) that are focused on impaired waterways. Plans currently exist for Halfmoon Creek, Upper Kishacoquillas Creek, Hungry Run, Shoup Run, and Sixmile/Sandy Run.	Conservation Groups, Conservation Districts, PA DEP, EPA	Foundations, Private Sources, PA DEP, NFWF, EPA	High
3. Support Chesapeake Conservancy's rapid stream delisting initiative. Watersheds include Warrior's Mark Run East, Halfmoon Bald Eagle, Halfmoon Confluence, Halfmoon Loveville, Beaver Branch, North Branch Augwhick Creek, and Herod Run.	Conservation Groups, Conservation Districts, PA DEP, EPA, DCNR	Foundations, Private Sources, PA DEP, NFWF, EPA, DCNR	High
4. Implement Coldwater Heritage Conservation Plans in the watershed area.	Conservation Groups, Conservation Districts	Foundations, Private Sources, PA DEP, NFWF, CHP, DCNR	Medium
5. Develop plans for smaller sub-watersheds that are impaired.	Conservation Groups, Conservation Districts, PA DEP, EPA	Foundations, Private Sources, PA DEP, NFWF, CHP, DCNR	High

Goal 3-2: Minimize impacts from stormwater.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Support municipal efforts to develop stormwater plans or ordinances.	Planning Commissions, Municipalities, Conservation Districts, PA DEP	Foundations, Private Sources, DCED, PA DEP	High
2. Implement actions in the Blair County Collaborative TMDL and Pollution Reduction Plan.	Conservation District, Conservation Groups, Planning Commissions, ISC, Municipalities	Foundations, Private Sources, DCED, PA DEP	Medium
3. Educate municipal and county officials about planning for stormwater best management practice implementation.	Conservation District, Conservation Groups, Planning Commissions, ISC, Municipalities	Foundations, Private Sources, DCED, PA DEP	High

4. Educate homeowners about reducing stormwater on their properties through rain gardens, rain barrels, etc.	Conservation District, Conservation Groups, Planning Commissions, ISC, Municipalities, PSU Extension	Foundations, Private Sources, PA DEP	Medium
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Goal 3-3: Protect area waterways by promoting and planting riparian buffers.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Increase the number of acres of riparian forest buffers along waterways.	Conservation Groups, Conservation Districts, DCNR, PA DEP, PFBC	Foundations, Private Sources, PA DEP, DCNR, NFWF, NRCS, CAP	High
2. Use technology (i.e. Chesapeake Conservancy's riparian buffer analysis tool) to identify and prioritize riparian buffer gaps in the watershed.	Conservation Groups, Conservation Districts, DCNR, PA DEP, PFBC	Foundations, Private Sources, PA DEP, DCNR, NFWF	High
3. Educate citizens about riparian buffers, their benefits, and landscaping (for example not mowing to stream).	Conservation Groups, Conservation Districts, DCNR, PA DEP, PFBC	Foundations, Private Sources, PA DEP, DCNR, NFWF, NRCS	High

Goal 3-4: Reduce the amount of erosion and sedimentation entering waterways.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Install stream restoration structures that will stabilize eroding streambanks while providing fish habitat.	Conservation Groups, Conservation Districts, PFBC, PA DEP	Foundations, Private Sources, PFBC, PA DEP, CAP, NFWF	High
2. Educate agricultural landowners about the requirements for agricultural erosion and sedimentation plans. Ensure that they have the needed plans.	Conservation Districts, Conservation Groups, NRCS, PA DEP	Foundations, Private Sources, PA DEP, NFWF	High
3. Assist farmers with pasture management and barnyard best management practices to reduce the size of animal concentration areas.	Conservation Districts, Conservation Groups, NRCS, PA DEP	Foundations, Private Sources, PA DEP, NFWF	High
4. Increase enforcement of NPDES permits.	Conservation Districts, PA DEP, EPA	PA DEP, EPA	High
5. Establish streambank fencing and riparian corridors on active agricultural lands to reduce the amount of sediment entering waterways.	Conservation Groups, Conservation Districts, PA DEP, NRCS	Foundations, Private Sources, NRCS, PA DEP, CAP	High
6. Incorporate environmentally sensitive construction and maintenance techniques on dirt and gravel roads.	Conservation Groups, Conservation Districts, Municipalities, PSU Center for DGR	Foundations, Private Sources, PA DEP	High

Goal 3-5: Protect wetland habitats.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Protect wetland habitats and surrounding buffer areas for birds and wildlife by limiting development, storm runoff, and other disturbances.	Conservation Groups, Planning Commissions, DCNR, PA DEP	PA DEP, DCNR, Private Sources, Foundations	High
2. Modify municipal ordinances to protect wetland areas of biological importance.	Conservation Groups, Planning Commissions, DCNR, PA DEP	Private Sources, PA DEP, DCNR	High

3. Acquire or purchase conservation easements protecting important wetland habitats.	Conservation Groups, Planning Commissions, DCNR, PA DEP	Foundations, Private Sources, PA DEP, DCNR	Medium
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Goal 3-6: Minimize potential flooding damages by taking a proactive approach to managing floodplains.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Consult a hydrologist and discuss the potential use of natural stream channel design techniques to decrease the risk of flooding.	Conservation Groups, Municipalities, PEMA	Foundations, Private Sources, FEMA, PEMA, DCED, PA DEP	Medium
2. Properly size culverts and keep free of debris to alleviate flooding.	Conservation Groups, Municipalities, PEMA	Conservation Groups, Municipalities, Conservation Districts, PSU Center for DGR	High
3. Establish adequate riparian buffer and floodplain integrity to limit degradation of water quality.	Conservation Groups, Municipalities, Landowners, DCNR, CAP, PA DEP	Foundations, Private Sources, FEMA, PEMA, DCED, PA DEP	High
4. Implement channel improvement projects that use natural stream channel design to limit flooding.	Conservation Districts, Conservation Groups, PA DEP	Foundations, Private Sources, FEMA, PEMA, DCED, PA DEP	Medium
5. Develop an education program addressing flood issues, flood prevention, flood recovery, and floodplain protection.	Conservation Groups, Municipalities, Conservation Districts, PEMA, FEMA	Foundations, Private Sources, FEMA, PEMA, DCED, PA DEP	High

Goal 3-7: Establish, maintain, or upgrade sewage treatment facilities

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Encourage landowners with on-lot sewage or septic systems to conduct maintenance activities on a routine basis as needed by their system.	Conservation Districts, PA DEP, Municipalities	Foundations, Private Sources, PA DEP	Medium
2. Update Act 537 Sewage Facility Plans in municipalities where the plan is outdated in order to prepare for future development activities.	Conservation Districts, PA DEP, Municipalities, Municipal Authorities, DCED	Foundations, Private Sources, PA DEP, DCED	Medium
3. Work with municipalities and landowners to install proper septic tanks, wastewater treatment systems, or other alternatives to reduce the amount of untreated sewage entering streams.	Municipalities, Landowners, Conservation Groups, Municipal Authorities, PA DEP	Foundations, Private Sources, PA DEP, DCED	Medium
4. Explore consolidation of small municipal sewer systems.	Municipalities, Landowners, Conservation Groups, Municipal Authorities, PA DEP	Foundations, Private Sources, PA DEP, DCED	Medium
5. Repair failing sewage lines and add new infrastructure as identified in comprehensive plans.	Municipalities, Counties, Municipal Authorities	Foundations, Private Sources, PA DEP, DCED, Penn Vest	Medium

6. Design wastewater treatment systems to adequately serve communities, by separating stormwater from wastewater systems, in order to ease the occurrences of combined sewer overflows.

Municipal Authorities, Municipalities, PA DEP, DCED

Foundations, Private Sources, PA DEP, DCED, Penn Vest

High

Goal 3-8: Promote conservation practices to reduce water consumption.

Method to achieve goal

Potential Partners

Potential Funding

Priority

1. Educate citizens on the importance of water quantity and the benefits of water quality.

Conservation Districts, Conservation Groups, PSU Extension

Foundations, Private Sources, PA DEP

High

2. Work with landowners and developers to incorporate environmental water conservation practices in homes and businesses.

Conservation Groups, Developers, Landowners, PA DEP

Private Sources

High

3. Promote the use of rain barrels so homeowners have an alternative source to water gardens.

Conservation Districts, Conservation Groups, PSU Extension

Foundations, Private Sources

High

Goal 3-9: Protect waterways and wetlands that are designated as High Quality or Exceptional Value.

Method to achieve goal

Potential Partners

Potential Funding

Priority

1. Work with local and state agencies to better enforce regulations protecting water quality, particularly for High Quality and Exceptional Value designated streams and wetlands.

Conservation Groups, Conservation Districts, PA DEP

PA DEP

High

Goal 3-10: Maintain existing AMD treatment systems and investigate remediating untreated discharges.

Method to achieve goal

Potential Partners

Potential Funding

Priority

1. Explore funding to plan, develop, and treat Dudley Discharge.

Conservation Groups, Conservation Districts, BAMR, OSM, PA DEP

Private Sources, Foundations, OSM, BAMR, PA DEP

Medium

2. Investigate existing AMD treatment systems to complete maintenance activities and to ensure proper function. If systems have reached the end of their life, look into installing new systems to treat discharges.

Conservation Groups, Conservation Districts, BAMR, OSM, PA DEP

Private Sources, Foundations, OSM, BAMR, PA DEP

Medium

3. Complete abandoned mine land reclamation projects in the watershed.

Conservation Groups, Conservation Districts, BAMR, OSM, PA DEP

Private Sources, Foundations, OSM, BAMR, PA DEP

High

Goal 3-11: Provide educational programs educating residents about impacts and pollution sources.

Method to achieve goal

Potential Partners

Potential Funding

Priority

1. Host stream monitoring workshops or trainings for adult and student volunteers.

Conservation Groups, Conservation Districts, Stakeholders, PA DEP, PSU Extension

Foundations, Private Sources, PA DEP

Medium

2. Develop and implement education programs about point source pollution, how to report point source violations, and how to research permit information.

Conservation Districts, PA DEP

Foundations, Private Sources, PA DEP

Medium

3. Develop and implement education program about nonpoint source pollution discharges in the watershed and how to remediate them.

Conservation Groups, Conservation Districts, PSU Extension, PA DEP

Foundations, Private Sources, PA DEP

Medium

Goal 3-12: Establish, maintain, or upgrade water treatment facilities.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Repair failing water lines.	Municipalities, Counties, Municipal Authorities	Foundations, Private Sources, PA DEP, DCED	Medium
2. Encourage development of state water well drinking standards and driller certification for potable residential wells.	Conservation Groups, PA DEP, Legislators	Foundations, Private Sources, PA DEP, DCED	Medium
3. Promote educational outreach programs for private well owners, specifically concerning protecting ground water supplies and drinking water quality.	Conservation Districts, Conservation Groups, PSU Extension, PA DEP	Foundations, Private Sources, PA DEP	Medium

Biological Resources Goals

Goal 4-1 Reduce impacts caused by invasive species.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Promote invasive species removal and control on private lands.	Conservation Groups, Conservation Districts, DCNR, PSU Extension	Foundations, Private Sources, DCNR, PA DEP	Medium
2. Continue to educate the public about spotted lanternfly and how to control them.	Conservation Groups, Conservation Districts, DCNR, PSU Extension, PDA	Foundations, Private Sources, PA DEP	Medium
3. Incorporate an outreach program to educate citizens about invasive species and how they can be controlled and/or removed safely.	Conservation Groups, Conservation Districts, DCNR, PSU Extension	Foundations, Private Sources, DCNR, PA DEP	Medium

Goal 4-2: Identify and protect natural heritage areas.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Update outdated Natural Heritage Inventories.	Conservation Groups, PNHP, Planning Departments, DCNR	Foundations, Private Sources, DCNR	Medium
2. Restrict activities, such as grazing and off-road vehicles, and control invasive species in natural heritage areas.	Conservation Groups, Landowners, DCNR, PGC	Foundations, Private Sources, DCNR	Medium
3. Limit herbicide use and utilize alternative management techniques in right-of-ways by working with utility companies.	Conservation Groups, Adjacent Landowners, Utility Companies	Foundations, Private Sources, DCNR	Medium
4. Develop an incentive program to encourage and reward landowners who develop management plans, decrease development, and employ other conservation practices in and around natural heritage areas.	Conservation Groups, Landowners, DCNR, PGC	Foundations, Private Sources, DCNR	Medium

Goal 4-3: Protect rare, threatened, and endangered species and their habitats.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Develop monitoring strategies and management plans for species of concern that are particularly vulnerable to habitat destruction by working with Pennsylvania Natural Heritage Program.	Conservation Groups, Landowners, PNHP, DCNR, PFBC, PGC	Foundations, Private Sources, DCNR, NFWF	Medium

2. Protect or improve habitats that support threatened and endangered species and species of concern through acquisition, easements, and/or landowner education.	Conservation Groups, Landowners, PNHP, DCNR	Foundations, Private Sources, DCNR, NFWF	Medium
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Goal 4-4: Enhance aquatic habitats.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Improve aquatic habitat for fish, mussels, and other organisms by implementing best management practices and other restoration activities.	Conservation Groups, Landowners, PA DCNR, PFBC, PGC	Foundations, Private Sources, DCNR, PFBC, NFWF	High
2. Identify aquatic organism passage barriers by utilizing NAACC protocol to assess road/stream crossings.	Conservation Groups, Landowners, PA DCNR, PFBC, PGC	Foundations, Private Sources, DCNR, PFBC, NFWF	High
3. Replace culverts that are acting as an aquatic organism passage barrier.	Conservation Groups, Landowners, PA DCNR, PFBC, PGC	Foundations, Private Sources, DCNR, PFBC, NFWF	High
4. Remove dams that prohibit fish passage, particularly those identified in the Frankstown Branch and Raystown Branch watersheds.	Conservation Groups, Landowners, PA DCNR, PFBC, PGC, American Rivers	Foundations, Private Sources, DCNR, PFBC, NFWF	High
5. Incorporate aquatic habitat improvement projects into streambank stabilization projects.	Conservation Groups, Landowners, PA DCNR, PFBC, PGC	Foundations, Private Sources, DCNR, PFBC, NFWF	High

Goal 4-5: Develop, adopt, and implement management plans to protect forest and wildlife resources.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Develop and use forest stewardship or forest management plans and participate in the Pennsylvania Forest Stewardship Program.	Conservation Groups, Planning Departments, Landowners, DCNR	Foundations, Private Sources, DCNR	Medium
2. Adopt and utilize management plans that protect forest landscapes.	Conservation Groups, Planning Departments, Landowners, DCNR	Foundations, Private Sources, DCNR	Medium
3. Develop wildlife management plans.	Conservation Groups, Landowners, DCNR, PGC	Foundations, Private Sources, DCNR	Medium
4. Develop detailed management plans for landowners of natural heritage areas, including inventories of natural features and invasive or exotic species monitoring plans.	Conservation Groups, Landowners, DCNR, PGC	Private Sources, Foundations, DCNR, PGC	Medium
5. Conduct studies in conjunction with the Pennsylvania Natural Heritage Program to monitor biodiversity, including surveys for historical species of concern for which the current status is unknown.	Conservation Groups, DCNR, PGC, PNHP	Foundations, Private Sources, DCNR	Medium
6. Educate the public about the use and purpose of Natural Heritage Inventories in planning, with an additional focus on understanding the importance of the natural resources that exist.	Conservation Groups, Municipalities, Planning Commissions, PNHP	Private Sources, Foundations, DCNR	Medium

Goal 4-6: Implement best management practices to protect forest resources.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
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1. Promote tree plantings, sustainable harvesting, and other best management practices.	Conservation Groups, Landowners, DCNR	Foundations, Private Sources, DCNR	Medium
2. Work with Woodland Owner Associations to educate the public, restore degraded areas, and develop demonstration areas.	Conservation Groups, Landowners, DCNR	Foundations, Private Sources, DCNR	Medium
3. Discourage the use of high-grading practices, such as diameter limit harvest and selective cutting, and encourage timber harvesters to use sustainable best management practices based upon forest type under the direction of a professional forester.	Conservation Groups, Landowners, DCNR	Foundations, Private Sources, DCNR	Medium
4. Decrease forest fragmentation by maintaining contiguous forest tracts and/or travel corridors between existing non-contiguous forest tracts.	Conservation Groups, Landowners, DCNR	Foundations, Private Sources, DCNR	Medium

Goal 4-7: Identify and protect important habitats for plant and animal species.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Identify and protect additional environmentally sensitive areas and areas of high biodiversity.	Conservation Groups, Landowners, PNHP, PFBC, DCNR	Foundations, Private Sources, DCNR, NFWF	High
2. Encourage lawn to meadow conversion to provide habitat for wildlife.	Conservation Groups, Landowners, PNHP, DCNR	Foundations, Private Sources, DCNR, NFWF	High
3. Establish private backyard conservation areas to serve as wildlife habitat and travel corridors by providing activities and programs for landowners.	Conservation Groups, Landowners, PNHP, DCNR	Foundations, Private Sources, DCNR, NFWF	Medium
4. Maintain grassland habitat on public lands through practices, such as controlled burns and limited mowing activity.	Conservation Groups, Landowners, PNHP, DCNR, PGC	Foundations, Private Sources, DCNR	High
5. Identify exceptional value wetlands located in the watershed.	Conservation Groups, Landowners, PNHP, PFBC, DCNR	Foundations, Private Sources, DCNR	High
6. Continue to study white nose syndrome and ways to mitigate its impact on bat populations.	Conservations Groups, DCNR, PGC, USFWS	Foundations, Private Sources, DCNR, PGC	High
7. Encourage the use of the Forestry Habitat Plan for Bats on Pennsylvania State Game Lands, State Forests, and State Parks.	Conservation Groups, DCNR, PGC	Foundations, Private Sources, DCNR, PGC	High

Goal 4-8: Implement wildlife management practices to protect biodiversity.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Foster continued involvement in hunting activities among all age groups, and educate hunters on the importance of population control.	Conservation Groups, PGC, DCNR	Foundation, Private Sources, PGC	Medium
2. Continue to monitor chronic wasting disease in deer populations and expand deer management areas as necessary.	PGC, Conservation Groups	Foundations, Private Sources, PGC	High
3. Promote and support deer management strategies, such as special hunting tags and deer exclusion in natural areas.	Conservation Groups, PGC, DCNR	Foundations, Private Sources, PGC	Medium

4. Support laws and regulations to maintain whitetail deer populations at levels that will ensure healthy forests, productive agricultural lands, and healthy deer populations.	Conservation Groups, PGC, DCNR	Foundations, Private Sources, PGC	High
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Goal 4-9: Increase the use of native plants in landscaping and remediation projects.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Utilize native species in agricultural and landscaping projects.	Conservation Groups, Landowners, DCNR, Conservation Districts, PSU Extension	Foundations, Private Sources, DCNR, NFWF	High
2. Use native plants in landscaping, wildlife habitat plantings, and educational activities.	Conservation Groups, Landowners, DCNR, Conservation Districts	Foundations, Private Sources, DCNR, NFWF	High
3. Use native tree plantings in remediation projects, such as streambank fencing, streambank stabilization, or mine reclamation projects.	Conservation Groups, Landowners, DCNR, Conservation Districts, PSU Extension	Foundations, Private Sources, DCNR, NFWF	High

Cultural Resources Goals

Goal 5-1: Establish, expand, and improve area trails.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Seek funding to complete planning and development of the H&BT trails expanding to Tenley Park in Everett and to Saxton and Carbon Township.	Conservation Groups, Trail Groups, Municipalities	Foundations, Private Sources, DCNR	Low
2. Develop a conceptual plan to expand H&BT trail to Orbisonia.	Conservation Groups, Trail Groups, Planning Commission, Municipalities	Foundations, Private Sources, DCNR	Low
3. Explore strategic land preservation opportunities for future trail development.	Conservation Groups, Trail Groups, Planning Commission, Municipalities	Foundations, Private Sources, DCNR	Medium
4. Increase maintenance (to the trail, blazing, and signage) of trail corridors to provide a safer recreational opportunity.	Conservation Groups, Trail Groups, DCNR	Foundations, Private Sources, DCNR	Medium
5. Create county recreational authorities to help preserve and maintain parks and trails.	Planning Commission, Municipalities, Conservation Groups	Foundations, Private Sources, DCNR, DCED	Medium
6. Increase safety for trails along roadways by erecting more highway signage, alerting motorists of trails.	Municipalities, PennDot, Trail Groups	Foundations, Private Sources, DCNR, PennDot	Medium
7. Create more trails along the Juniata River. Install educational signage about conservation and local history.	Municipalities, Conservation Groups, Trail Groups	Foundations, Private Sources, DCNR	Medium

Goal 5-2: Improve recreational facilities and ensure availability and access.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Update water trail maps for the Juniata River and Raystown Branch with new information (i.e. boat launches, camping sites, etc.)	Conservation Groups, ARC, DCNR	Foundations, Private Sources, DCNR	Medium

2. Print water trail maps, similar to Purple Lizard maps, and sell maps to raise revenue for boating access maintenance and other programs.	Conservation Groups, ARC, DCNR	Foundations, Private Sources, DCNR	Medium
3. Print water trail maps in Spanish and other languages to make information available to all community members.	Conservation Groups, ARC, DCNR	Foundations, Private Sources, DCNR	Medium
4. Create more boating access points for non-motorized boats, especially near existing parks and trails (i.e. Lower Trail and Beaverdam Branch).	Conservation Groups, ARC, PFBC	Foundations, Private Sources, WPC, DCNR, PFBC, PEC	Medium
5. Work with PFBC to explore strategic land purchases for fishing and boating access.	Conservation Groups, PFBC	Foundations, Private Sources, PFBC, DCNR	Medium
6. Provide and enhance amenities, such as bathrooms and parking lots, at recreational facilities, including trail heads and municipal parks.	Community Groups, Municipalities, Conservation Groups	Foundations, Private Sources, DCNR	Medium
7. Update equipment and safety features at existing community parks.	Park and Recreation Authorities, Citizen Groups, Municipalities	Foundations, Private Sources, DCNR, PFBC	Medium
8. Provide more ADA fishing access and boat launches throughout the watershed.	Municipalities, Counties, PFBC	Foundations, Private Sources, DCNR	Medium

Goal 5-3: Enhance recreational opportunities for sportspeople and outdoor enthusiasts.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Identify new, and protect existing areas that are open to hunting.	Conservation Groups, Sportsmen Groups, Landowners, PGC	Foundations, Private Sources, PGC	Medium
2. Increase access to game lands for non-hunting recreational opportunities, such as wildlife viewing, bird watching, and hiking during non-hunting seasons.	Conservation Groups, Sportsmen Groups, PGC	Foundations, Private Sources, PGC	Medium
3. Protect and improve area waterways to maintain or expand fisheries and fishing opportunities.	Conservation Groups, Sportsmen Groups, PFBC, PA DEP	Foundations, Private Sources, PFBC, PA DEP	Medium
4. Provide more parking near fishable waters.	Conservation Groups, Sportsmen Groups, Landowners, PFBC	Foundations, Private Sources, PFBC, DCNR	Medium
5. Increase areas that are catch and release fishing in areas where it makes sense.	Conservation Groups, Sportsmen Groups, PFBC	PFBC	Medium
6. Create additional public access sites to area waterways for fishing and paddling.	Conservation Groups, Landowners, PFBC	Foundations, Private Sources, WPC, PFBC, PEC	Medium
7. Enhance area fisheries by installing fish habitat structures.	Conservation Groups, PFBC	Foundations, Private Sources, PFBC, PA DEP, NFWF	High

Goal 5-4: Highlight and preserve local history within the region.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Inventory historical sites throughout the watershed and preserve historical sites and landmarks.	Municipalities, Citizens, Historical Societies, PHMC	Foundations, Private Sources	Medium

2. Install interpretive signage at historical locations.	Municipalities, Citizens, Historical Societies, PHMC	Foundations, Private Sources	Medium
3. Establish driving, walking, and/or biking tours highlighting historical sites and structures to increase awareness of local history.	Municipalities, Citizens, Historical Societies	Foundations, Private Sources	Medium
4. Determine if local historical sites and structures could be added to the National Register.	Municipalities, Citizens, Historical Societies, PHMC	Foundations, Private Sources	Medium
5. Evaluate and restore historical buildings, such as the log cabin at Trough Creek State Park and Canal House in Mifflintown.	DCNR, PHMC, Historical Societies	Foundations, Private Sources	Medium

Goal 5-5: Encourage environmentally sound practices when operating recreational vehicles, and enforce existing laws to minimize intrusion on private lands.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Increase enforcement of illegal off-road vehicle use on private and public lands.	Police Departments, Municipalities, Counties, DCNR	Police Departments, Municipalities, DCNR, PGC	Medium
2. Conduct feasibility studies for development of recreational areas and trails for off-road vehicles.	Conservation Groups, Police Departments, Municipalities, Counties, DCNR, PGC	Foundations, Private Sources, DCNR	Low
3. Establish environmentally sound public trails or parks for off-road vehicles.	Conservation Groups, Police Departments, Municipalities, Counties, DCNR, PGC	Foundations, Private Sources, DCNR	Medium
4. Prohibit the use of recreational vehicles in areas at risk of being affected by their use, such as steep slopes, streambanks, and habitat for rare, threatened, or endangered species.	Conservation Groups, Police Departments, Municipalities, Counties, DCNR, PGC	Foundations, Private Sources, DCNR, PGC	Medium

Goal 5-6: Promote community involvement in conservation and educational initiatives.

<u>Method to achieve goal</u>	<u>Potential Partners</u>	<u>Potential Funding</u>	<u>Priority</u>
1. Involve students and citizens in watershed activities, such as water quality monitoring and stream cleanups.	Conservation Districts, Conservation Groups, School Districts	Foundations, Private Sources, PA DEP, DCNR	High
2. Establish environmental education opportunities for children and adults that lead toward action.	Conservation Districts, Conservation Groups, School Districts, PSU Extension	Foundations, Private Sources, PA DEP, DCNR	High
3. Hold township workshops to educate municipal officials about conservation issues.	Conservation Districts, Conservation Groups, Municipalities, PSU Extension	Foundations, Private Sources, PA DEP, DCNR	High
4. Partner with businesses and industries to support local watershed work.	Conservation Groups, Businesses	Private Sources	High
5. Identify opportunities to engage local citizens in conservation and stewardship efforts.	Conservation Districts, Conservation Groups	Private Sources, Foundations	High

6. Establish "Friends" groups to maintain public parks and trails.	Citizens, Conservation Groups, Municipalities, Counties, DCNR	Foundations, Private Sources	Medium
7. Create a Juniata River Watershed Day and hold it the same day each year.	Conservation Districts, Conservation Groups	Foundations, Private Sources	High
8. Hold a poster contest for students about conservation/watersheds/environment.	School Districts, Conservation Districts, Conservation Groups	Foundations, Private Sources, PA DEP, DCNR	Medium
9. Sponsor outings to natural areas to citizens in the watershed in order to educate them about the natural resources and the areas scenic areas.	Conservation Groups, Conservation Districts	Foundations, Private Sources	High
10. Increase funding for environmental education.	School Districts, Legislators	Foundations, Private Sources, PA DEP, Legislators	High
11. Funding to create public announcements for new laws affecting conservation in the region.	Conservation Groups, Legislators	Foundations, Private Sources	Medium

Specific Municipal Projects

Through the online municipal survey, municipal officials provided critical needs for their municipalities. Table 8-2 summarizes those needs as well as specific project needs.

Table 8-2. Municipal Project Needs

Municipality	Critical Needs	Project Needs
Logan Township Blair County	Budget shortfall to implement MS4 projects	Assistance with design & implementation, including funding related to the PRP (i.e. urban stream stabilization and restoration)
	Controlling stormwater on previously constructed large scale developments	Acid mine drainage abatement in the Kittanning Run area.
	Promoting and enforcing effective stormwater practices for new developments	
Williamsburg Borough Blair County	Stormwater	
	Funding	
Delaware Township Juniata County	Water Runoff	Farmland preservation
		Stormwater management
		Road improvements
Frankstown Township Blair County	Nuisance flooding outside of floodplain	Residential buy out of homes in the floodway
	Modification to structures in the floodplain	
	Continued use of existing residents in the floodway	

Altoona Blair County	Overdevelopment (flooding)	Flood control
	Horrible past planning	
Hollidaysburg Borough Blair County	Flooding	Canal Basin Park pedestrian cross over bridge
	Streambank erosion	
	Debris in channel	
Tyrone Borough Blair County	Levee deterioration	Levee improvements
	Gravel bar build-up	Removal of sanitary sewer lines intersecting the river
Antis Township Blair County	Stormwater management expense	Farmland conservation
	Flood zone infringements and maintenance	Source water protection ordinance (including wellhead protection)
	Erosion of over-grazed pastures and smaller streams	Continue to improve bike/pedestrian paths
	Malfunctioning onlot septic systems	Development zone boundaries to preserve agricultural land
	Preservation of unique environmental and historic amenities	
Huntingdon Borough Huntingdon County	Current area municipal water source	Land preservation and management
	Juniata River to become secondary source	Water quality
Broad Top Township Bedford County	AMD	Development
	Stormwater runoff	Water quality and quantity
Susquehanna Township Juniata County	Erosion control from DGR as well as private lanes	Preservation of farmland, possibly through the selling of development rights
	Need for buffer zones between farmland and water sources	Replanting trees on timbered land
	Stabilization of streambanks	Erosion control on streambanks
		Planting of trees along streams to establish a healthy environment for aquatic life
	Reaching out to farmers and landowners about the need for erosion/runoff control	
Henderson Township Huntingdon County	Road Management	Need for a development plan
	Water run off	Runoff control

	Sedimentation	Aquatic pollution from roads
		Better roads
		Parks
Fayette Township Juniata County	Malfunctioning onlot residential sewer systems	More strict guidelines regarding installation of commercial solar panels on agricultural land
	Potential groundwater contamination caused by lack of oversight either by private individuals, or the inability of local townships being able to enforce existing ordinances	Upgrades to the existing water supply lines from the McAlisterville Joint Authority
	Potential overdevelopment	Additional long-term funding for rural counties for transportation and roadway needs
Juniata Township Perry County	Stormwater	Farmland preservation
		Water quality
		Fish/small mouth bass in river
		Roads, culverts, bridges
Jackson Township Huntingdon	Septic issues	
Shirley Township Huntingdon		More development in industrial park while maintaining stormwater runoff to Juniata River
		Croghan Pike/SR 522 at industrial park widened to accommodate increase in truck/trailer traffic
Tyrone Township Blair County	Farm runoff	
	Culvert erosion	
	DEP permitting to do work	
Blair Township Blair County	Flooding in developments with substandard piping	Completion of the Beaver Dam project
	Large debris jams in river causing flooding	
	Worse and more storms than usual	
Millerstown Borough Perry County	Funding	Better access to public fishing on the Juniata River

	Stormwater management	More testing for pollutants and offenders fined
	Farm runoff	Farmers held more accountable for pesticides
	Upstream pollution	Preservation of waterway land
Bedford Township Bedford County	Stormwater	Intermunicipal sewage treatment leading to more available area for businesses
	Farm runoff	Adopt better stormwater runoff ordinance
	Onlot septic	Work with farms to get funding grants to educate and implement better environmental practices
		At one time years ago, there were small picnic areas with tables along the state roads. We need to have easy access areas that have good views for family time in mind without having to drive to a state park
Harris Township Centre County		Codified agricultural soil protections
		Riparian buffer enhancements/plantings
Derry Township Mifflin County	Updates to the Lewistown Wastewater Treatment Plant	Riparian buffers
		Rehabilitation to Kish Park/Kish Creek
		Road improvements
Warriors Mark Township Huntingdon County	Flooding	Farm land preservation
		Better management of residential and commercial development, especially controlling stormwater runoff. Limit development in prime agricultural areas. Preserving open land, controlling runoff, minimizing flooding and replenishing ground water resources.

		Continue to clean up the Little Juniata River quality to protect all aquatic life
		continue to identify and update access to the river for recreational canoeing/fishing/enjoying the unique environment the river and river basin provides to residents and visitors.
		Upgrade PA 453 and other routes that directly discharge vehicle produced and winter maintenance contaminates in the river basin
Juniata Township Bedford County	Cleaning of debris	Land use
	Pollution	
Fermanagh Township Juniata County	Septic management	
Liberty Township Bedford County	Flood management	Manure management
	Sewage plant concerns	Preserve Raven Run
	Stormwater management	Keep our wetlands
		More facilities on Liberty Twp. end of Raystown Lake
		Repair all of the outlying roads

CHAPTER 9 – REFERENCES

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APPENDIX A. MAJOR EMPLOYERS

Wal-Mart Associates Inc	Lake Raystown Resort
Recreational Equipment Inc	IFC Services Inc
New Enterprise Stone & Lime Company	Benchmark Therapies Inc
State Government	Master Woodcraft Cabinetry LLC
Omni Bedford Springs Resort	Empire Kosher Poultry Inc
Rockland Inc	Juniata County School District
JLG Industries Inc	Champion Modular Inc
John Corle Companies Inc	Plain & Fancy Custom Cabinetry LLC
UPMC Bedford Corp	Pennian Bank
Bedford Area School District	Sanitation Solutions Plus
UPMC Altoona	Weis Markets Inc
Sheetz Inc	Juniata County Commissioner
Federal Government	Geisinger-Lewistown Hospital
Sheetz Distribution Services LLC	Mifflin County School District
Altoona Area School District	Standard Steel LLC
DelGrosso's Amusement Park	Philips Ultrasound Inc
Giant Food Stores LLC	Trinity Plastics Inc
Pyramid Healthcare Inc	Geisinger Clinic
Fulton County Medical Center	First Quality Retail Services
JLG Equipment Services Inc	Overhead Door Corp
Mellott Company	Valley View Haven
Central Fulton School District	H E Rohrer Inc
Southern Fulton School District	West Perry School District
Terrascend USA Services LLC	Susquenita School District
County of Fulton	Karns Prime & Fancy Food Ltd
Juniata College	Perry County Commissioners
J C Blair Memorial Hospital	Newport School District
ACCO USA Inc	Harrisburg Home Health Holdings LLC
Huntingdon Area School District	Specialty Bakers LLC
Bonney Forge Company	

[County Profiles \(pa.gov\)](http://pa.gov)

APPENDIX B. LAND USE CONTROLS

Bedford County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Bedford Township	X		X	X	X
Bloomfield Township			X	X	
Broad Top Township			X	X	
Colerain Township			X	X	
Cumberland Valley Township			X	X	
East Providence Township			X	X	
East St. Clair Township			X	X	X
Harrison Township			X	X	
Hopewell Township			X	X	
Juniata Township			X	X	
Kimmel Township			X	X	X
King Township			X	X	X
Liberty Township			X		
Lincoln Township			X	X	X
Monroe Township	X		X	X	
Napier Township			X	X	X
Pavia Township			X	X	X
Snake Spring Township			X		
South Woodbury Township	X		X	X	
West Providence Township			X	X	
West St. Clair Township			X	X	X
Woodbury Township	X		X	X	
Bedford Borough		X	X	X	
Coaldale Borough			X		
Everett Borough	X		X	X	
Hopewell Borough			X		
Manns Choice Borough			X	X	
New Paris Borough			X	X	X
Pleasantville Borough			X		X
Rainsburg Borough			X	X	
Saxton Borough			X		
Schellsburg Borough			X	X	
St. Clairsville Borough			X		X
Woodbury Borough			X		
Source: Bedford County Department of Planning					

Juniata Forward: Building on 25 Years of Conservation

Blair County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Allegheny Township	X		X	X	X
Antis Township	X		X	X	X
Bellwood Borough					
Blair Township	X		X	X	X
Catharine Township	X		X		
City of Altoona	X	X	X	X	X
Duncansville Borough		X	X	X	
Frankstown Township	X	X	X	X	X
Freedom Township			X	X	
Greenfield Township			X	X	X
Hollidaysburg Borough	X	X	X	X	
Huston Township				X	
Juniata Township			X		
Logan Township	X	X	X	X	X
Martinsburg Borough	X	X			
Newry Borough			X		
North Woodbury Township	X		X	X	
Roaring Springs Borough	X	X		X	
Snyder Township	X			X	
Taylor Township			X	X	X
Tyrone Borough	X	X		X	
Tyrone Township				X	
Williamsburg Borough	X	X	X		
Woodbury Township	X		X	X	
Source: Blair County Planning Commission					

Cambria County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Cresson Township				X	X
Dean Township				X	
Gallitzin Township	X	X			
Portage Township	X		X	X	X
Reade Township					
Summerhill Township	X			X	X
Tunnelhill Borough				X	
Washington Township	X		X	X	X
Source: Cambria County Regional Planning Commission					

Juniata Forward: Building on 25 Years of Conservation

Centre County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Ferguson Township	X	X		X	X
Gregg Township	X	X	X	County	X
Halfmoon Township	X	X	X	X	X
Harris Township	X	X		X	X
Huston Township *	X	X		County	
Patton Township	X	X		X	X
Potter Township	X	X	X	County	X
Rush Township	X	X		X	
Taylor Township				County	
Worth Township *	X	X		County	
Source: Centre County Planning Commission					

Franklin County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Fannett Township	Joint		X	X	X
Metal Township *			X	X	
Peters Township *	Joint		X	X	X
Source: Franklin County Planning Commission					

Fulton County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Belfast Township*	X		X	X	X
Brush Creek Township	X			X	X
Dublin Township	X		X	X	X
Licking Creek Township*	X		X	X	X
Taylor Township	X		X	X	X
Todd Township	X		X	X	X
Union Township*	X		X	X	X
Wells Township	X		X		X
Valley-Hi Borough					
Source: Fulton County Planning Commission					

Juniata Forward: Building on 25 Years of Conservation

Huntingdon County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Alexandria Borough		X	X		
Barree Township			X	X	
Birmingham Borough			X		
Brady Township			X	X	
Broad Top City	X			X	
Carbon Township	X		X		
Cass Township			X	X	
Cassville Borough				X	
Clay Township	Plan to do		X	X	
Coalmont Borough	X		X		
Cromwell Township			X	X	
Dublin Township			X	X	
Dudley Borough	X		X		
Franklin Township			X		
Henderson Township		X	X	X	
Hopewell Township	X		X	X	
Huntingdon Borough	X	X	X	X	
Jackson Township			X	X	
Juniata Township			X	X	
Lincoln Township			X	X	
Logan Township			X	X	
Mapleton Borough			X		
Markelsburg Borough			X	X	
Mill Creek Borough			X		
Miller Township			X	X	
Morris Township			X	X	
Mount Union Borough	Updating	X	X	In progress	
Oneida Township	X	X	X	X	X
Orbisonia Borough	X	X	X		
Penn Township			X	X	
Petersburg Borough			X		
Porter Township			X	X	
Rockhill Borough	X		X		
Saltillo Borough	Plan to do		X		X
Shade Gap Borough		X			
Shirley Township			X	X	X
Shirleysburg Borough			X		
Smithfield Township	X	X	X	X	X
Springfield Township			X	X	
Spruce Creek Township			X	X	

Juniata Forward: Building on 25 Years of Conservation

Huntingdon County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Tell Township			X	X	
Three Springs Borough	Plan to do		X		
Todd Township			X	X	
Union Township			X	X	
Walker Township	X	X	X	X	
Warrior's Mark Township	X	X	X	X	X
West Township			X	X	
Wood Township	X		X	X	
Source: Huntingdon County Planning Commission					

Juniata County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Beale Township			X	X	
Delaware Township	County	X	X	X	X
Fayette Township	X	X	X	X	
Fermanagh Township	X	X	X	X	X
Greenwood Township	X	X	X	X	
Lack Township			X	X	
Mifflin Borough			X		
Mifflintown Borough		X	X		
Milford Township			X	X	
Monroe Township			X	X	
Port Royal Borough		X	X	X	
Spruce Hill Township			X	X	
Susquehanna Township*			X	X	
Thompstontown Borough	X	X	X	X	
Turbett Township			X	X	
Tuscarora Township			X	X	
Walker Township	X	X	X	X	
Source: Juniata County Planning Commission					

Juniata Forward: Building on 25 Years of Conservation

Mifflin County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Armagh Township	X		X	X	X
Bratton Township			X	County	
Brown Township	X	X	X	X	X
Burnham Borough	X	X	X	X	X
Decatur Township			X	X	X
Derry Township	X	X	X	X	X
Granville Township	X	X	X	X	X
Juniata Terrace Borough	X			County	X
Kistler Borough	X	X	X	County	
Lewistown Borough	X	X	X	X	X
McVeytown Borough		X	X	County	
Menno Township	X		X	X	X
Newton Hamilton Borough	X		X	County	
Oliver Township			X	X	X
Union Township	X	X	X	X	X
Wayne Township	X		X	County	
Source: Mifflin County Planning Commission					

Perry County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Buffalo Township	X		X	X	X**
Centre Township	County		X	X	X
Greenwood Township	X	X	X	X	X**
Howe Township	X	X	X	X	X**
Jackson Township	X		X	County	County
Juniata Township	X	X	X	X	X**
Liverpool Township	X	X	X	X	X**
Miller Township	County		X	X	X**
Northeast Madison Township	X		X	County	County
Oliver Township	X		X	X	X**
Penn Township	X	X	X	X	X**
Saville Township	County		X	X	X**
Southwest Madison Township	X		X	County	County
Toboyne Township	X		X	County	County
Tuscarora Township	X	X	X	X	X**
Tyrone Township*	X	X	X	X	X**
Watts Township	X	X	X	X	X**
Wheatfield Township	X	X	X	X	X**

Perry County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Bloomfield Borough*	X	X	X	X	X
Duncannon Borough*	X	X	X	X	X
Millerstown Borough	X	X	X	County	County
Newport Borough	X	X	X	X	X
Source: Perry County Planning Commission					

Snyder County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Spring Township*		X		X	
West Beaver Township			X		
West Perry Township			X		
Source: Snyder County Planning Commission					

Somerset County Municipality	Comprehensive Plan	Zoning Ordinance	Floodplain Ordinance	Subdivision Regulations	Stormwater Management
Allegheny Township					
Brothers Valley Township*					
Ogle Township*					
Shade Township*					
Stoneycreek Township*					
New Baltimore Borough					
Source: Somerset County Planning Commission					

* less than 1% of municipality is in the watershed

** stormwater covered in municipal subdivision and land development ordinance

County – these municipalities have adopted the county ordinances

APPENDIX C: PUBLIC MEETINGS

Altoona Public Meeting Visioning Session
Marzoni's in Greenwood
1830 East Pleasant Valley Boulevard, Altoona, PA 16602
May 17, 2023, 7:00 PM – 8:30 PM
14 participants

Positive votes – item is seen as a positive for the region

Negative/Needs improvement votes – item is seen as problematic or needing improvement in the region

Project votes – possible areas where projects are needed

Positive Aspects of the Watershed

- In regards to recreation, the watershed is one of the most visited areas in the state. Lots of opportunities, out of state folks come to this area for fishing opportunities. Lots of hiking, state parks, kayaking, and fishing. 9 positive votes.
- There is a lot of data for the area (i.e. DEP's integrated report is updated every 2 years).
- Located in the Ridge & Valley Province – North/South geography, undeveloped ridges, forests. Allows species to accommodate to climate change. 17 positive votes, 1 project vote.
- There are significant higher education institutions in the area. 7 positive votes.

Negative Aspects of the Watershed/Areas Needing Improvement

- Lots of landowners owning small parcels. Hard to connect trail systems. What do private property owners want to do? 5 needs improvement votes.
- Development near sensitive areas, i.e. floodplains, wetlands. 9 needs improvement votes.
- Not a lot of large public lands. State parks and state forests tend to be smaller than in other parts of the state. 9 needs improvement votes.
- Ridges are narrow and separated by vast amounts of farmlands. 17 needs improvement votes, 1 positive vote.
- Threat of solar being put on farms. 17 needs improvement votes, 1 project vote.
- Area is accessible with transportation system. This could be good or bad. 7 needs improvement votes, 2 positive votes.

Possible Projects

- Look for alternatives to putting solar panels on farms. 2 project votes.
- Poster contest for students about conservation/watersheds/environment. 4 positive votes, 2 project votes.
- Create Juniata Watershed Day. Hold same day each year. 7 positive votes. 5 project votes.
- Find way to put dollar amount to conservation. 9 project votes.
- Need more invasive species removal. 7 project votes. 2 needs improvement votes.
- Need wetland advocacy. 3 positive votes, 2 project votes.

Juniata Forward: Building on 25 Years of Conservation

- Outings to natural areas similar to ClearWater Conservancy's Centre Outdoors program.
- Hold township workshops about conservation.
- More funding for Natural Heritage Inventories. Possible Juniata watershed wide inventory. 2 positive votes, 2 project votes.
- Incorporate Chesapeake WIP & CAPs into water resources section. 2 positive votes.
- More easements for sensitive areas. 4 positive votes, 4 project votes, 1 needs improvement vote.
- Tax incentives for sensitive areas. 4 project votes, 1 needs improvement vote.
- More land use zoning laws. 6 project votes, 4 needs improvement votes.
- More bike trails along river. Help people appreciate rivers more. 3 positive votes, 6 project votes, 2 needs improvement votes.
- Protect PA's #1 industry: agriculture, i.e. AG land preservation. 7 positive votes, 5 project votes, 2 needs improvements votes.
- Need to emphasize wide stream buffers to allow connectivity to ridges, create wildlife corridors. 2 positive votes, 12 project votes.
- Inventory area for resources before development. 1 project vote
- Make watershed plan a living document. 1 positive vote, 4 project votes.
- Make Watershed Plan into a story map, similar to DEP's integrated water report. Highlight changes in last 25 years. 6 positive votes, 3 project votes.
- Develop unsuitable for mining petition (for proposed strip mine near Muleshoe Reservoir) - 1 positive vote, 2 project votes.

Port Royal Public Meeting Visioning Session

Friendship Fire Company

212 4th St, Port Royal, PA 17082

May 18, 2023, 7:00 PM – 8:30 PM

12 participants

Positive votes – item is seen as a positive for the region

Needs improvement votes – item is seen as problematic or needing improvement in the region

Project votes – possible areas where projects are needed

Positive Aspects of the Watershed

- Great Access for kayaking. 5 positive votes.
- Lots of natural resources – beauty of area, rivers, hunting, access to outdoors. 7 positive votes.
- Some townships are leading the way for stormwater, rain barrels, etc. Need to compliment them on what they are doing, while asking them to improve other areas: compliment sandwich. 5 positive votes, 1 needs improvement vote.
- Have seen a shift towards no-till farming. 4 positive votes, 2 project votes, 1 needs improvement vote.
- Department of AG - new fertilizer law in place: Act 83 of 2022. Follows MD and OH laws. Laws in place for application of phosphorus for all applicators, farmers, and homeowners. New labels on fertilizers. 2 positive votes, 2 project votes.
- There are a lot of resources for people to do the right thing with conservation, such as Trout Unlimited, 10 million trees, etc. 1 positive vote, 2 needs improvement votes, 2 project votes.
- Working to repopulate eel population. Installed 8 eel weirs. These weirs need to be preserved and recognized. 4 positive votes, 3 project votes.
- General incentives for other BMPs, such as impervious surfaces. Need funding stream for private landowners for stormwater needs. 3 positive votes, 3 needs improvement votes.

Negative Aspects of the Watershed/Areas Needing Improvement

- Private homeowners are requesting funding for private accesses.
- Big businesses, etc. grandfathered in. How do we accomplish anything if they are allowed to continue to pollute? 5 needs improvement votes.
- Chemicals that are sprayed on roads have become more of a problem. 9 needs improvement votes.
- Sewer plants not upgraded. Cheaper to pay fine than to upgrade. Some CSOs grandfathered in. 9 needs improvement votes.
- Fertilizer law is enforced by complaints. Folks have to call someone to make complaint, such as fertilizer left on road. 1 needs improvement.
- There aren't any/many township ordinances for requiring green infrastructure. 3 needs improvement votes, 1 project vote.
- Education for township supervisors on conservation issues is lacking. 4 needs improvement votes.

Possible Projects

- Canal House is a historic site that needs preserved. Currently owned by Penn Dot. Needs owner to take care of it. Possibly National Park Service, National Historic Site. 1 positive vote, 4 project votes.
- Need printed maps of boating corridors, such as Purple Lizard maps. 3 project votes.
- Should have ADA fishing piers on access maps. 1 positive vote, 1 project vote.
- Sell maps to raise revenue for programs. 1 positive vote, 1 project vote.
- More citizen science for water quality monitoring. 1 positive vote, 1 needs improvement vote, 3 project votes.
- Need increased public relations across many sectors/platforms (written, digital, etc.). 4 project votes.
- New developments should have bonds. 2 needs improvement votes.
- Need tangible projects. Clean-ups are a tangible activity where folks can see an outcome. Need that sort of messaging for other types of conservation, such as lawn fertilizing. 2 project votes.
- More invasive species removal. 5 project votes.
- Teach kids, kids can teach parents. 1 needs improvement vote, 1 project vote.
- More environmental education funding. 1 needs improvement vote, 1 project vote.
- Grants for public announcement about new laws, etc. 3 positive votes, 1 project vote.
- Need projects with high visibility, on business and private landowners. 2 positive votes, 5 project votes.
- Incentive payment or tax incentive for riparian buffers, open to more than farmers. 5 positive votes, 2 project votes.
- Need more access for ADA launches. 2 project votes.

Saxton Public Meeting Visioning Session

Saxton Fire Hall

504 8th Street, Saxton, PA 16678

May 23, 2023, 7:00 PM – 8:30 PM

3 participants

Positive votes – item is seen as a positive for the region

Needs improvement votes – item is seen as problematic or needing improvement in the region

Project votes – possible areas where projects are needed

Positive Aspects of the Watershed

- Lots of progress by Broad Top Township with AMD.
- A positive outcome from Covid is that people want to do more outdoors.
- Last few years there has been a push for outdoor activities: kayaking, hiking, biking, etc.

Possible Projects

- Should spend money on state parks in this area. Give attention to existing state parks (Warriors Path and Trough Creek).
- Work on trail from Reynoldsville to Warriors Path State Park.

Blair County Planning Commission Meeting

Altoona Water Authority Building

900 Chestnut Avenue, Altoona, PA 16601

June 29, 2023

Positive Aspects of the Watershed

- Water trails along the Little Juniata River and Frankstown Branch
- AG folks are working with agencies more than they used to on conservation projects
- Technical assistance is beneficial

Negative Aspects of the Watershed/Areas Needing Improvement

- Need to keep cattle out of streams
- More trees
- Overall protection of water
- Folks aren't aware that what we do affects the Bay. Need more education and awareness for AG BMPs that farmers are doing, especially in the cove.
- Need to combat invasive species, especially knotweed
- The AMD system on Glenn White is reaching the end of its lifespan. Need to start thinking about updating the system.
- Need natural resource inventory updates

APPENDIX D: MEDIA



News Release

WPC Invites Public Suggestions on Future Use and Improvements to the Juniata Watershed

Public meetings will be held May 17, 18 and 23

Hollidaysburg, Pa. – April 28, 2023 – Residents of the Juniata Watershed are invited to provide input and suggestions via public meetings and a community survey to help inform the Juniata Watershed Management Plan, a project of the Western Pennsylvania Conservancy with multiple partners.

Encompassing 3,400 square miles, the Juniata watershed's tributaries provide habitat for numerous fish and aquatic species as well as recreational opportunities such as swimming, paddling and fly fishing. Home to several state forests, state parks and state game lands, much of the land in the watershed is forested, providing abundant habitat for birds, wildlife and plants, including several rare and endangered plant species.

During the past 25 years, the Conservancy has partnered with conservation organizations, local government agencies and the public to improve water quality in the watershed. Projects have included planting riparian trees along streams to prevent erosion and decrease pollutant runoff, working with farmers to implement agricultural best management practices to manage nutrients, and removing stream barriers to encourage aquatic organism passage and support trout populations.

"Juniata Forward: Building on 25 Years of Conservation" seeks to build on that work with input and suggestions from people who live and work in the watershed about recreation, development and other uses. Funding for the project is provided by the Pennsylvania Department of Conservation and Natural Resources.

Residents are invited to attend any of three public meetings, all from 7-8:30 p.m.:

- [May 17 in Marzoni's Brick Oven and Brewing](#), 1830 East Pleasant Valley Blvd., Altoona, PA 16602
- [May 18 in Friendship Fire Company](#), 212 4th St., Port Royal, PA 17082
- [May 23 in Saxton Fire Hall](#), 504 8th St., Saxton, PA 16678

"We want to understand what residents of the communities within the Juniata watershed think of current conditions, and how they would like to see the watershed resources used in the future," says Jennifer Farabaugh, WPC's watershed manager. "Residents' input will guide our recommendations for the plan."

Participants are encouraged to share what they feel are the most important uses of the watershed, including recreational and educational activities, business or residential development, historic preservation and more. They should also bring questions, concerns or suggestions for watershed improvements.

Residents can also provide input anonymously on a short online survey at surveymonkey.com/r/WW2X6YL.

Anyone interested in attending one or more of the public meetings should register by contacting Jennifer Farabaugh at jfarabaugh@paconserve.org or 814-696-9356, or at Waterlandlife.org/events-volunteer-opportunities.

###

Photos of past projects within the watershed are available for media use courtesy of the Western Pennsylvania Conservancy: <https://we.tl/t-U7PxxQ9fxh>

About the Western Pennsylvania Conservancy:

The Western Pennsylvania Conservancy (WPC) enhances the region by protecting and restoring exceptional places. A private nonprofit conservation organization founded in 1932, WPC has helped establish 11 state parks, conserved more than a quarter million acres of natural lands, protected or restored more than 3,000 miles of rivers and streams, and assessed thousands of wildlife species and their habitats. The Conservancy owns and operates Frank Lloyd Wright's Fallingwater, which is on the UNESCO World Heritage List and symbolizes people living in harmony with nature. In addition, WPC enriches our region's cities and towns through 130 community gardens and other green spaces that are planted with the help of more than 7,000 volunteers. The work of the Conservancy is accomplished through the support of more than 10,000 members. For more information, visit WaterLandLife.org or Fallingwater.org.

Media Contact:

Jennifer Kissel
Communications Specialist
412-586-2328
jkissel@paconserve.org

<https://www.wtaj.com/news/local-news/public-asked-to-fill-out-survey-about-juniata-watershed-plan/>

Public asked to fill out survey about Juniata Watershed plan

by: [Courtney Murphy](#)

Posted: May 23, 2023 / 08:37 PM EDT

Updated: May 23, 2023 / 08:37 PM EDT

(WTAJ)—The Western Pennsylvania Conservancy is asking residents from the Juniata Watershed area to [participate in a survey](#) to help with their Juniata Watershed Management Plan.

This Juniata Watershed area includes parts of Bedford, Blair, Huntingdon, Fulton, Centre, and Juniata counties. The area comes to 3,400 square miles housing several state forests, parks, and game lands.

The conservancy initiated its management plan 25 years ago and hasn't updated it until now. Watershed Manager Jennifer Farabaugh said their new plan "Juniata Forward: Building on 25 Years of Conservation," looks to build around people's suggestions and input.

The conservancy heard input from three public meetings. Farabaugh said the community suggested better conservation education, better decision-making on where developments happen, updating stormwater plans for older buildings, etc.

"It's driven by what the public wants to see," Farabaugh said. "Having a plan with this much public input makes it a plan that would be more likely to be used and relevant to folks in the area. It'll be projects that they want to see."

Once they collect the information from the meetings and surveys, they'll discuss implementing a plan in the fall. Farabaugh said they'll have another round of public meetings showcasing their plan. Afterward, they'll need final approval from the Department of Conservation and Natural Resources.

Local

Public input sought on watershed plan

By ADAM WATSON For The Daily News

May 31, 2023

A brief meeting was held recently to give residents of the Juniata Watershed the opportunity to provide input and suggestions on the Juniata Watershed Management Plan. The meeting was held at the Saxton Fire Hall.

The plan is a project of the Western Pennsylvania Conservancy with multiple partners.

Encompassing 3,400 square miles in several states including Pennsylvania and several of its bordering state's, the Juniata watershed's tributaries provides habitat for numerous fish and aquatic species as well as recreational opportunities such as swimming, paddling and fly fishing. Home to several state forests, state parks and state game lands much of the land in the watershed is forested, providing an abundant habitat for birds, wildlife and plants, including several rare and endangered plant species.

During the past 25 years, the conservancy has partnered with conservation organizations, local government agencies, and the public to improve water quality in the watershed. Projects have included planting riparian trees along streams to prevent erosion and decrease pollutant runoff, working with farmers to implement agricultural best management practices to manage nutrients, and removing stream barriers to encourage aquatic organism passage and support trout populations.

"We want to understand what residents of the communities within the Juniata Watershed think of current conditions and how they would like to see the watershed resources used in the future. Residents' input will guide our recommendations for the plan" said Jennifer Farabaugh, WPC's watershed manager.

The Western Pennsylvania Conservancy (WPC) enhances the region by protecting and restoring exceptional places. A private non-profit conservation organization founded in 1932, WPC has helped establish 11 state parks, conserved more than a quarter million acres of natural lands, protected or restores more than 3,000 miles of rivers and streams, and assessed thousands of wildlife species and their habitats.

The conservancy owns and operates Frank Lloyd Wright's Fallingwater, which is on the UNESCO World Heritage List and symbolizes people living in harmony with nature. In addition, WPC enriches our region's cities and towns through 130 community gardens and other green spaces that are planted with the help of 7,000 volunteers.

The work of the conservancy is accomplished through the support of more than 10,000 members.

During her brief presentation, Farabaugh stated that a watershed is an area of land that drains streams to a common outlet. In this region, it involves Bedford, Blair, Huntingdon, Fulton, Juniata and Mifflin counties.

Adam can be reached at dnews@huntingdondailynews.com.

Altoona Mirror

Conservancy working on Juniata watershed plan

The Western Pennsylvania Conservancy is working on an update of its 2000 plan for the Juniata River watershed.

With the help of the existing plan, the conservancy has partnered with conservation groups, local governments and the public to improve water quality in the watershed by planting trees along streams to prevent erosion and to decrease pollutant runoff; by working with farmers on best management practices to prevent nutrients from reaching streams; and by removing stream barriers to allow for passage of aquatic organisms, while supporting trout habitat, according to a conservancy web page.

8/24/23, 6:55 PM

Conservancy working on Juniata watershed plan | News, Sports, Jobs - Altoona Mirror

The proposed new plan, “Juniata Forward: Building on 25 years of Conservation” will add to that work with the help of the people and organizations of the region, according to the web page and Jennifer Farabaugh, the conservancy’s watershed manager, who spoke about the plan at a recent meeting of the Intergovernmental Stormwater Committee, which is responsible for reducing sediment runoff in central Blair County streams.

Goals of the plan include evaluation of resources; identification of initiatives that could improve water quality, liveability and attractiveness in the watershed; identification of potential recreation projects; and identification of problems and concerns, Farabaugh said.

Among potential concerns in the watershed are sediment runoff, illegal dumping, invasive species, flooding and access for kayaking, she said.

Farabaugh said there is a steering committee and advisory committees are being set up.

The public can take part in an online survey at WaterLandLife.org/JWMP23. The responses will help the conservancy make recommendations, according to an introduction on the survey page.

The survey asks those who live in the watershed how they rank the importance of aspects of the region, including its natural settings, recreation opportunities, residential developments, historic sites and water quality. It also asks survey takers to list what recreational opportunities are

<https://www.altoonamirror.com/news/local-news/2023/08/conservancy-working-on-juniata-watershed-plan/>

2/4

8/24/23, 6:55 PM

Conservancy working on Juniata watershed plan | News, Sports, Jobs - Altoona Mirror

important to them, including boating, canoeing, kayaking, hunting, fishing, picnicking and hiking. And it provides opportunities for survey takers to list things they like and don't like about the area, along with things that could be done to improve it.

The conservancy has already held public meetings in the Altoona area to take comments.

Anyone with questions can contact Farabaugh at jfarabaugh@paconserve.org or 814-696-9356.

A grant from the Department of Conservation and Natural Resources is paying half the cost, Farabaugh said.

The plan is a guidance document with "no regulatory teeth," Farabaugh said.

The watershed is 3,400 square miles, and contains all of Blair County, she said.

Mirror Staff Writer William Kibler is at 814-949-7038.

NEWSLETTER

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APPENDIX E: GEOLOGY

Map Symbol	Name	Age
Pa	Allegheny Formation	Pennsylvanian
Dtr	Trimmers Rock Formation	Devonian
Dh	Hamilton Group	Devonian
Pcg	Glenshaw Formation	Pennsylvanian
St	Tuscarora Formation	Silurian
Oj	Juniata Formation	Ordovician
Obe	Bald Eagle Formation	Ordovician
Doo	Onondaga and Old Port Formations, undivided	Devonian
Dbh	Brallier and Harrell Formations, undivided	Devonian
Dciv	Irish Valley Member of Catskill Formation	Devonian
Or	Reedsville Formation	Ordovician
Sc	Clinton Group	Silurian
Dlh	Lock Haven Formation	Devonian
Dck	Catskill Formation	Devonian
Obf	Bellefonte Formation	Ordovician
Ocl	Coburn Formation through Loysburg Formation, undivided	Ordovician
DSkt	Keyser and Tonoloway Formations, undivided	Devonian and Silurian
Cgl	Lower members of Gatesburg Formation, undivided	Cambrian
Mmc	Mauch Chunk Formation	Mississippian
Cw	Warrior Formation	Cambrian
Oa	Axemann Formation	Ordovician
Cgm	Mines Member of Gatesburg Formation	Cambrian
Osl	Stonehenge/Larke Formation	Ordovician
On	Nittany Formation	Ordovician
Mb	Burgoon Sandstone	Mississippian
Swc	Wills Creek Formation	Silurian
MDr	Rockwell Formation	Mississippian and Devonian
Sbm	Bloomsburg and Mifflintown Formations, undivided	Silurian
Pp	Pottsville Formation	Pennsylvanian
Ocn	Coburn Formation through Nealmont Formation, undivided	Ordovician
Oba	Bellefonte and Axemann Formations, undivided	Ordovician
Ons	Nittany and Stonehenge/Larke Formations, undivided	Ordovician
Dcd	Duncannon Member of Catskill Formation	Devonian
DSkm	Keyser Formation through Mifflintown Formation, undivided	Devonian and Silurian
Dcsc	Sherman Creek Member of Catskill Formation	Devonian
Obl	Benner Formation through Loysburg Formation, undivided	Ordovician
Cg	Gatesburg Formation	Cambrian

Juniata Forward: Building on 25 Years of Conservation

Map Symbol	Name	Age
Cph	Pleasant Hill Formation	Cambrian
Ojb	Juniata and Bald Eagle Formations, undivided	Ordovician
Dosn	Shriver, Mandata, Corriganville, and New Creek Members of Old Port Formation, undivided	Devonian
Dor	Ridgeley Member of Old Port Formation	Devonian
Don	Onondaga Formation	Devonian
Mp	Pocono Formation	Mississippian
Ds	Scherr Formation	Devonian
MDsk	Spechty Kopf Formation	Mississippian and Devonian
Df	Foreknobs Formation	Devonian
Om	Martinsburg Formation	Ordovician
Swm	Wills Creek Formation through Mifflintown Formation, undivided	Silurian
Cwb	Waynesboro Formation	Cambrian
DSkc	Keyser Formation through Clinton Group, undivided	Devonian and Silurian
Oc	Chambersburg Formation	Ordovician
Osp	St. Paul Group	Ordovician
Pc	Conemaugh Group	Pennsylvanian

APPENDIX F. AGRICULTURAL SOILS

Prime Agricultural Soils

Soil Name	Map Symbol
Albrights silt loam, 3 to 8 percent slopes	AbB
Allegheny loam, 3 to 8 percent slopes	AeB
Allegheny loam, 3 to 8 percent slopes	AgB
Allegheny silt loam, 0 to 3 percent slopes	AgA
Allenwood and Washington soils, 3 to 8 percent slopes	AoB
Allenwood gravelly silt loam, 2 to 8 percent slopes	AdB
Ashton silt loam	As
Barbour fine sandy loam	Be
Barbour soils	Ba
Barbour soils	Bb
Barbour soils, high bottom	Bb
Basher fine sandy loam	Bf
Basher loam	Ba
Basher silt loam	Ba
Basher silt loam, neutral variant	Bc
Basher soils	Bc
Basher-Birdsboro complex, 0 to 8 percent slopes	BbB
Bedington channery silt loam, 3 to 8 percent slopes	BeB
Bedington channery silt loam, 3 to 8 percent slopes	BhB
Bedington shaly silt loam, 3 to 8 percent slopes	BdB
Birdsboro gravelly loam, 2 to 10 percent slopes	BnB
Birdsboro silt loam, 0 to 5 percent slopes	BoA
Birdsboro silt loam, rarely flooded	Bm
Buchanan cobbly loam, 3 to 8 percent slopes	BuB
Buchanan loam, 3 to 8 percent slopes	BtB
Chagrín soils	Ch
Chavies fine sandy loam	Ch
Chavies loam, 2 to 8 percent slopes	CaB
Chavies silt loam, 0 to 3 percent slopes	ChA
Clarksburg silt loam, 0 to 3 percent slopes	CkA
Clarksburg silt loam, 0 to 3 percent slopes	CsA
Clarksburg silt loam, 3 to 8 percent slopes	CbB
Clarksburg silt loam, 3 to 8 percent slopes	CkB
Clarksburg silt loam, 3 to 8 percent slopes	CsB

Prime Agricultural Soils

Soil Name	Map Symbol
Clymer loam, 3 to 8 percent slopes	CvB
Clymer sandy loam, 3 to 8 percent slopes	ClB
Cookport and Ernest soils, 0 to 3 percent slopes	CeA
Cookport and Ernest soils, 3 to 8 percent slopes	CeB
Cookport loam, 3 to 8 percent slopes	CoB
Duffield silt loam, 0 to 3 percent slopes	DuA
Duffield silt loam, 3 to 8 percent slopes	DuB
Edom silty clay loam, 3 to 8 percent slopes	EdB
Edom-Carbo silty clay loams, 3 to 8 percent slopes	EeB
Elliber very channery loam, 3 to 8 percent slopes	EIB
Elliber very channery silt loam, 3 to 8 percent slopes	EgB
Elliber very cherty silt loam, 3 to 8 percent slopes	EeB
Ernest silt loam, 0 to 8 percent slopes	ErB
Frankstown channery silt loam, 3 to 8 percent slopes	FrB
Gilpin channery silt loam, 3 to 8 percent slopes	GIB
Gilpin channery silt loam, 3 to 8 percent slopes	GpB
Gilpin silt loam, 3 to 8 percent slopes	GnB
Hagerstown silt loam, 0 to 3 percent slopes	HaA
Hagerstown silt loam, 3 to 8 percent slopes	HaB
Hagerstown silt loam, 3 to 8 percent slopes	HeB
Hagerstown silty clay loam, 3 to 8 percent slopes	HcB
Hagerstown-Carbo silty clay loams, 3 to 8 percent slopes	HbB
Hagerstown-Carbo silty clay loams, 3 to 8 percent slopes, very rocky	HcB
Hartleton channery silt loam, 3 to 8 percent slopes	HtB
Hazleton channery loam, 3 to 8 percent slopes	HhB
Hazleton channery sandy loam, 3 to 8 percent slopes	HaB
Hazleton channery sandy loam, 3 to 8 percent slopes	HeB
Hazleton channery sandy loam, 3 to 8 percent slopes	HgB
Hazleton channery sandy loam, 3 to 8 percent slopes	HhB
Hublersburg cherty silt loam, 3 to 8 percent slopes	HuB
Hublersburg cherty silt loam, 3 to 8 percent slopes	HxB
Hublersburg cherty silty clay loam, 3 to 8 percent slopes, eroded	HxB2
Hublersburg silt loam, 0 to 3 percent slopes	HuA
Hublersburg silt loam, 2 to 8 percent slopes	HuB
Hublersburg silt loam, 3 to 8 percent slopes	HuB
Huntington silt loam, 0 to 5 percent slopes	HuA
Jugtown-Lindside silt loams	Jg
Kreamer cherty silt loam, 0 to 3 percent slopes	KrA

Prime Agricultural Soils

Soil Name	Map Symbol
Kreamer cherty silt loam, 0 to 3 percent slopes	KrA
Kreamer cherty silt loam, 2 to 8 percent slopes	KrB
Kreamer cherty silt loam, 3 to 8 percent slopes	KrB
Laidig channery loam, 3 to 8 percent slopes	LaB
Laidig channery loam, 3 to 8 percent slopes	LdB
Laidig cobbly loam, 3 to 8 percent slopes	LdB
Laidig gravelly loam, 3 to 8 percent slopes	LaB
Laidig loam, 3 to 8 percent slopes	LaB
Leck kill channery silt loam, 3 to 8 percent slopes	LeB
Leck kill shaly silt loam, 3 to 8 percent slopes	LnB
Leck kill silt loam, 3 to 8 percent slopes	LkB
Leck kill-Calvin complex, 3 to 8 percent slopes	LkB
Linden soils	Lo
Lindside silt loam	Ls
Lindside soils	Lx
Lobdell loam	Lx
Lobdell silt loam	Lp
Meckesville gravelly loam, 3 to 8 percent slopes	McB
Meckesville silt loam, 3 to 8 percent slopes	McB
Mertz channery silt loam, 3 to 8 percent slopes	MnB
Mertz cherty silt loam, 3 to 8 percent slopes	MeB
Middlebury soils	Mf
Millheim silt loam, 2 to 8 percent slopes	MnB
Millheim silt loam, 3 to 8 percent slopes	MnB
Monongahela silt loam, 0 to 3 percent slopes	MnA
Monongahela silt loam, 0 to 3 percent slopes	MoA
Monongahela silt loam, 2 to 10 percent slopes	MoB
Monongahela silt loam, 3 to 8 percent slopes	MoB
Morrison channery sandy loam, 3 to 8 percent slopes	MrB
Morrison gravelly sandy loam, 3 to 8 percent slopes	MrB
Morrison sandy loam, 2 to 8 percent slopes	MrB
Morrison sandy loam, 2 to 8 percent slopes	MrB
Morrison sandy loam, 3 to 8 percent slopes	MoB
Morrison sandy loam, 3 to 8 percent slopes	MrB
Murrill channery loam, 0 to 3 percent slopes	MuA
Murrill channery loam, 3 to 8 percent slopes	MuB
Murrill channery silt loam, 0 to 3 percent slopes	MuA
Murrill channery silt loam, 3 to 8 percent slopes	MuB
Murrill gravelly loam, 0 to 3 percent slopes	MrA

Prime Agricultural Soils

Soil Name	Map Symbol
Murrill gravelly loam, 3 to 8 percent slopes	MrB
Murrill gravelly loam, 3 to 8 percent slopes	MuB
Murrill gravelly silt loam, 3 to 8 percent slopes	MuB
Neshaminy gravelly silt loam, 3 to 8 percent slopes	NeB
Nolin silt loam	Nd
Nolin silt loam	No
Nolin silt loam, local alluvium, 0 to 5 percent slopes	No
Philo and Basher silt loams	Ph
Philo and Basher silt loams, high bottom	Po
Philo silt loam	Ph
Philo silt loam, 0 to 3 percent slopes, occasionally flooded	Ph
Pope fine sandy loam	Pp
Pope fine sandy loam, 0 to 3 percent slopes, occasionally flooded	Po
Pope soils	Po
Raritan silt loam, 0 to 5 percent slopes	RaA
Rayne channery silt loam, 3 to 8 percent slopes	ReB
Rayne silt loam, 2 to 10 percent slopes	RaB
Rayne-Gilpin channery silt loams, 3 to 8 percent slopes	RgB
Sideling gravelly loam, 3 to 8 percent slopes	SeB
Tioga fine sandy loam	Ta
Tioga fine sandy loam, high bottom	Tg
Tioga soils	Tg
Ungers channery loam, 3 to 8 percent slopes	UmB
Watson gravelly silt loam, 2 to 8 percent slopes	WaB
Watson silt loam, 0 to 3 percent slopes	WbA
Watson silt loam, 3 to 8 percent slopes	WbB
Westmoreland channery silt loam, 3 to 8 percent slopes	WsB
Wharton silt loam, 3 to 8 percent slopes	WaB
Wharton silt loam, 3 to 8 percent slopes	WhB
Wurno-Nollville channery silt loams, 3 to 8 percent slopes	WuB

Farmland of Statewide Importance

Soil Name	Map Symbol
Albrights gravelly silt loam, 8 to 15 percent slopes	AbC
Albrights silt loam, 8 to 15 percent slopes	AbC
Allegheny loam, 8 to 15 percent slopes	AeC
Allenwood and Washington soils, 8 to 15 percent slopes	AoC
Allenwood gravelly silt loam, 8 to 15 percent slopes	AdC
Alvira silt loam, 0 to 3 percent slopes	ArA
Alvira silt loam, 2 to 8 percent slopes	AlB
Alvira silt loam, 3 to 8 percent slopes	ArB
Alvira silt loam, 8 to 15 percent slopes	ArC
Atkins silt loam	At
Atkins silt loam	Aw
Atkins silt loam, 0 to 3 percent slopes, frequently flooded	At
Atkins-Ernest complex, 0 to 8 percent slopes	Ax
Basher soils	Ba
Bedington channery silt loam, 8 to 15 percent slopes	BeC
Bedington shaly silt loam, 8 to 15 percent slopes	BdC
Bedington-Berks complex, 8 to 15 percent slopes	BcC
Berks channery silt loam, 3 to 8 percent slopes	BkB
Berks channery silt loam, 3 to 8 percent slopes	BeB
Berks channery silt loam, 8 to 15 percent slopes	BeC
Berks-Weikert channery silt loams, 3 to 8 percent slopes	BkB
Blairton channery silt loam, 0 to 3 percent slopes	BIA
Blairton channery silt loam, 3 to 8 percent slopes	BrB
Blairton channery silt loam, 3 to 8 percent slopes	BIB
Blairton channery silt loam, 3 to 8 percent slopes	BnB
Blairton channery silt loam, 8 to 15 percent slopes	BrC
Blairton silt loam, 2 to 8 percent slopes	BoB
Blairton silt loam, 3 to 8 percent slopes	BoB
Blairton silt loam, 3 to 8 percent slopes	BmB
Blairton silt loam, 3 to 8 percent slopes	BpB
Buchanan channery loam, 8 to 15 percent slopes	BuC
Buchanan cobbly loam, 8 to 15 percent slopes	BuC
Buchanan gravelly loam, 8 to 15 percent slopes	BuC
Buchanan gravelly silt loam, 8 to 15 percent slopes	BuC
Calvin channery loam, 3 to 8 percent slopes	CaB
Calvin channery silt loam, 3 to 8 percent slopes	CaB
Calvin channery silt loam, 8 to 15 percent slopes	CaC
Calvin shaly silt loam, 3 to 8 percent slopes	CaB

Farmland of Statewide Importance

Soil Name	Map Symbol
Calvin shaly silt loam, 8 to 15 percent slopes	CaC
Calvin-Berks shaly silt loams, 3 to 8 percent slopes	CbB
Calvin-Berks shaly silt loams, 8 to 15 percent slopes	CbC
Calvin-Klinesville shaly silt loams, 3 to 8 percent slopes	CaB
Calvin-Klinesville shaly silt loams, 8 to 15 percent slopes	CaC
Carbo silty clay loam, 8 to 15 percent slopes	CoC
Cavode silt loam, 3 to 8 percent slopes	CaB
Clarksburg silt loam, 8 to 15 percent slopes	CbC
Clymer channery loam, 8 to 15 percent slopes	CIC
Cookport and Ernest soils, 8 to 15 percent slopes	CeC
Duffield silt loam, 8 to 15 percent slopes	DuC
Dunning silty clay loam	Du
Edom silty clay loam, 8 to 15 percent slopes	EdC
Edom-Carbo silty clay loams, 8 to 15 percent slopes	EeC
Edom-Klinesville complex, 8 to 15 percent slopes	EeC
Edom-Opequon complex, 3 to 8 percent slopes	EeB
Edom-Weikert complex, 3 to 8 percent slopes	EmB
Edom-Weikert complex, 3 to 8 percent slopes	EgB
Edom-Weikert complex, 3 to 8 percent slopes	EfB
Edom-Weikert complex, 8 to 15 percent slopes	EmC
Edom-Weikert complex, 8 to 15 percent slopes	EgC
Edom-Weikert complex, 8 to 15 percent slopes	EfC
Elliber cherty silt loam, 8 to 15 percent slopes	EsC
Elliber very channery loam, 8 to 15 percent slopes	EIC
Elliber very channery silt loam, 8 to 15 percent slopes	EgC
Elliber very cherty silt loam, 8 to 15 percent slopes	EeC
Elliber very cherty silt loam, 8 to 15 percent slopes	EtC
Ernest channery silt loam, 3 to 8 percent slopes	ErB
Ernest channery silt loam, 8 to 15 percent slopes	ErC
Ernest silt loam, 2 to 8 percent slopes	ErB
Ernest silt loam, 3 to 8 percent slopes	EtB
Ernest silt loam, 8 to 15 percent slopes	ErC
Ernest silt loam, 8 to 15 percent slopes	EtC
Evendale cherty silt loam	Ev
Evendale cherty silt loam, 0 to 3 percent slopes	EvA
Evendale cherty silt loam, 3 to 8 percent slopes	EvB
Frankstown channery silt loam, 8 to 15 percent slopes	FrC
Gilpin channery silt loam, 8 to 15 percent slopes	GpC
Gilpin channery silt loam, 8 to 15 percent slopes	GIC

Farmland of Statewide Importance

Soil Name	Map Symbol
Gilpin-Rayne silt loams, 8 to 15 percent slopes	GtC
Hagerstown silt loam, 8 to 15 percent slopes	HeC
Hagerstown silt loam, 8 to 15 percent slopes	HaC
Hagerstown silty clay loam, 8 to 15 percent slopes	HgC
Hagerstown silty clay loam, 8 to 15 percent slopes	HcC
Hagerstown silty clay loam, 8 to 15 percent slopes, eroded	HcC3
Hagerstown-Carbo silty clay loams, 8 to 15 percent slopes	HbC
Hartleton channery silt loam, 8 to 15 percent slopes	HtC
Hazleton channery loam, 8 to 15 percent slopes	HaC
Hazleton channery loam, 8 to 15 percent slopes	HhC
Hazleton channery sandy loam, 8 to 15 percent slopes	HgC
Hazleton channery sandy loam, 8 to 15 percent slopes	HhC
Hazleton channery sandy loam, 8 to 15 percent slopes	HeC
Holly silt loam	Ho
Holly silt loam	Hv
Hublersburg cherty silt loam, 8 to 15 percent slopes	HuC
Hublersburg cherty silt loam, 8 to 15 percent slopes	HxC
Hublersburg silt loam, 8 to 15 percent slopes	HuC
Hustontown silt loam, 3 to 8 percent slopes	HwB
Klinesville channery silt loam, 3 to 8 percent slopes	KaB
Klinesville shaly silt loam, 3 to 8 percent slopes	KIB
Klinesville very shaly silt loam, 3 to 8 percent slopes	KnB
Kreamer cherty silt loam, 8 to 15 percent slopes	KrC
Kreamer cherty silt loam, 8 to 15 percent slopes	KmC
Laidig channery loam, 8 to 15 percent slopes	LaC
Laidig channery loam, 8 to 15 percent slopes	LdC
Laidig cobbly loam, 8 to 15 percent slopes	LdC
Laidig gravelly loam, 8 to 15 percent slopes	LaC
Laidig loam, 8 to 15 percent slopes	LaC
Leck kill channery silt loam, 8 to 15 percent slopes	LkC
Leck kill silt loam, 8 to 15 percent slopes	LkC
Leck kill-Calvin complex, 8 to 15 percent slopes	LkC
Meckesville gravelly loam, 8 to 15 percent slopes	McC
Meckesville gravelly silt loam, 8 to 15 percent slopes	MeC
Meckesville silt loam, 8 to 15 percent slopes	MeC
Melvin silt loam	Mm
Melvin silt loam	Me
Melvin silt loam	Ma
Mertz channery silt loam, 8 to 15 percent slopes	MhC

Farmland of Statewide Importance

Soil Name	Map Symbol
Mertz channery silt loam, 8 to 15 percent slopes	MnC
Mertz cherty silt loam, 8 to 15 percent slopes	MeC
Millheim silt loam, 8 to 15 percent slopes	MnC
Monongahela silt loam, 3 to 8 percent slopes	MoB
Monongahela silt loam, 3 to 8 percent slopes	MnB
Monongahela silt loam, 8 to 15 percent slopes	MnC
Morrison channery sandy loam, 8 to 15 percent slopes	MrC
Morrison gravelly sandy loam, 8 to 15 percent slopes	MrC
Morrison sandy loam, 8 to 15 percent slopes	MrC
Murrill channery loam, 8 to 15 percent slopes	MuC
Murrill channery silt loam, 8 to 15 percent slopes	MuC
Murrill gravelly loam, 8 to 15 percent slopes	MrC
Murrill gravelly silt loam, 8 to 15 percent slopes	MuC
Newark silt loam	Ne
Opequon clay loam, 3 to 8 percent slopes, eroded	OpB3
Opequon silty clay loam, 3 to 8 percent slopes	OpB
Opequon silty clay loam, 8 to 15 percent slopes	OuC
Opequon-Hagerstown complex, 3 to 8 percent slopes	OhB
Opequon-Hagerstown complex, 8 to 15 percent slopes	OhC
Penlaw silt loam	Pe
Penlaw silt loam, 0 to 3 percent slopes	Pg
Penlaw silt loam, 0 to 8 percent slopes	PeB
Raritan silt loam, 2 to 10 percent slopes	RaB
Rayne channery silt loam, 8 to 15 percent slopes	ReC
Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	RgC
Sideling gravelly loam, 8 to 15 percent slopes	SeC
Tilsit silt loam, 3 to 8 percent slopes	TaB
Tyler silt loam	Ty
Tyler silt loam, 0 to 3 percent slopes	TgA
Tyler silt loam, 3 to 8 percent slopes	TgB
Ungers channery loam, 8 to 15 percent slopes	UmC
Watson gravelly silt loam, 8 to 15 percent slopes	WaC
Watson silt loam, 8 to 15 percent slopes	WbC
Weikert channery silt loam, 3 to 8 percent slopes	WeB
Weikert channery silt loam, 8 to 15 percent slopes	WkC
Weikert very channery silt loam, 3 to 8 percent slopes	WeB
Westmoreland channery silt loam, 8 to 15 percent slopes	WsC
Wharton silt loam, 2 to 10 percent slopes	WhB
Wharton silt loam, 8 to 15 percent slopes	WhC

Farmland of Statewide Importance

Soil Name	Map Symbol
Wharton variant silt loam, 3 to 8 percent slopes	WvB
Wharton-Gilpin complex, 8 to 15 percent slopes	WgC
Wurno-Nollville channery silt loams, 8 to 15 percent slopes	WuC
Wyoming gravelly sandy loam, rarely flooded, 0 to 5 percent slopes	WyA

APPENDIX G. PUBLIC LANDS

Name	Acreage	Township	County
Raystown Lake	29700.0	Juniata/Penn/Lincoln/Hopewell/Liberty	Huntingdon
Point Access on Juniata River	3.3	Juniata	Huntingdon
Granville Access	10.1	Granville	Mifflin
Walker Access (Mexico)	4.4	Walker	Juniata
Amity Hall Access	1.0	Watts	Perry
Greenwood Access Area	8.8	Greenwood	Perry
Breezewood Access	1.3	East Providence	Bedford
Thompsontown Access	5.5	Delaware	Juniata
Mifflintown Access	10.8	Fermanagh	Juniata
Lewistown Narrows - PADOT	2.6	Fermanagh	Juniata
Sandy Run	50.0	Antis	Blair
Howe Township Access	4.3	Howe	Perry
Muskrat Springs Access	8.5	Walker	Juniata
Breezewood Access ROW	0.9	East Providence	Bedford
Clapper Property	4.8	Hopewell	Bedford
Whitman Property	3.4	Hopewell	Bedford
Sandy Run	1.2	Antis	Blair
Standing Stone Creek Access	3.0	Oneida	Huntingdon
Dopp Property	1.0	Porter	Huntingdon
Greene Hills Campground Property #2	0.9	Porter	Huntingdon
Ormsby Property - Little Juniata	1.0	Porter	Huntingdon
Allison Property - Parking Easement	0.1	Porter	Huntingdon
Ormsby Property - Little Juniata	4.7	Porter	Huntingdon
Greene Hills Campground Property #1	6.1	Porter	Huntingdon
Greene Hills Campground Property - Parking and footpath	0.1	Porter	Huntingdon
Allison Property	0.5	Porter	Huntingdon

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Greene Hills Campground Property #3	0.1	Porter	Huntingdon
Allison Property	5.7	Porter	Huntingdon
Tea Creek	1.6	Brown	Mifflin
Newton-Hamilton Access	0.0	Newton Hamilton	Mifflin
Piney Creek Springs	0.0	Woodbury	Blair
Reynoldsdale Fish Cultural Station	0.0	East St. Clair	Bedford
Little Buffalo	988.9	Centre/Juniata Townships	Perry
Penn Roosevelt	42.0	Harris Township	Centre
Reeds Gap	224.0	Armagh Township	Mifflin
Whipple Dam	249.5	Jackson Township	Huntingdon
Warriors Path	303.9	Liberty Township	Bedford
Cowans Gap	1113.7	Todd / Metal Townships	Fulton / Franklin
Shawnee	3749.7	Juniata/Napier Townships	Bedford
Blue Knob	6196.4	Kimmel/Lincoln/Pavia Townships	Bedford
Canoe Creek	959.1	Frankstown Township	Blair
Greenwood Furnace	418.0	Jackson Township	Huntingdon
Trough Creek	535.5	Cass/Penn/Todd Townships	Huntingdon
Tuscarora	93556.0	Multiple	Juniata/Mifflin/Perry/Huntingdon
Gallitzin	13861.2	Reade/West St. Clair	Cambria/Bedford
Buchanan	52181.3	Multiple	Fulton/Bedford
Rothrock	96280.6	Multiple	Huntingdon/Centre/Mifflin
Bald Eagle	76082.1	Multiple	Snyder/Mifflin
Moshannon	10.0	Rush	Centre
Sinking Valley Country Club	146.0	Altoona	Blair
Allensville Playground	2.0	Menno Township	Mifflin
Blairs Field	6.0	Huntingdon	Huntingdon
Calvary Independent Baptist Church Field	7.0	Huntingdon	Huntingdon
Huntingdon Country Club	158.0	Huntingdon	Huntingdon
Detwiler Memorial Field	7.0	Huntingdon	Huntingdon

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Iron Masters Country Club	136.0	Roaring Spring	Bedford
Lewistown Country Club	174.0	Granville	Mifflin
Naginey Playground	3.0	Armagh Township	Mifflin
Omni Bedford Springs Resort	151.0	Bedford	Bedford
Orbisonia Ball Field	7.0	Orbisonia Borough/Cromwell	Huntingdon
Park Hills Golf Club	110.0	Altoona	Blair
V.F.W. Memorial Field	14.0	Smithfield	Huntingdon
Siglerville Baseball Field	1.0	Armagh Township	Mifflin
Baileyville Softball Field	27.0	Franklin	Centre
War Veterans Memorial Field	11.0	Huntingdon Borough	Huntingdon
Bellwood Antis Park	10.0	Bellwood Borough	Blair
Hamilton Park	3.0	Altoona	Blair
Geesey Park	4.0	Altoona	Blair
Greenwood Park	64.0	Altoona	Blair
Canal Basin Park	5.0	Hollidaysburg	Blair
Chimney Rocks Park	105.0	Hollidaysburg	Blair
Washington Avenue Park	1.0	Altoona	Blair
Reservoir Park	60.0	Tyrone	Blair
Booker T. Washington Basketball Court	1.0	Altoona	Blair
Highland Park	15.0	Altoona	Blair
Jefferson Park	1.0	Altoona	Blair
North Park	1.0	Roaring Spring	Blair
Newburg Park	0.0	Logan	Blair
Garfield Park	8.0	Altoona	Blair
South 13th Street Park	9.0	Altoona	Blair
Veterans Field Baseball Park	12.0	Altoona	Blair
Riverside Park	7.0	Williamsburg	Blair
YMCA Park	3.0	Roaring Spring	Blair
Brush Run County Park	11.0	Logan	Blair

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Valley View County Park	33.0	Altoona	Blair
Cherry Street Park	2.0	Roaring Spring/Taylor	Blair
Garden Heights Basketball Courts	0.0	Altoona	Blair
Gospel Hill Park	2.0	Altoona	Blair
Mansion Park	7.0	Altoona	Blair
Fort Roberdeau	12.0	Tyrone Township	Blair
5th Street Park	1.0	Bellwood Borough	Blair
Cherry Street Park	1.0	Roaring Spring	Blair
Shawnee Park	18.0	Taylor	Blair
Tyrone Park	8.0	Tyrone	Blair
Tuckahoe Park	5.0	Altoona	Blair
East End Baseball	2.0	Altoona	Blair
Kelly Park	0.0	Hollidaysburg	Blair
Locust Hills Park - Sand Pit Park	1.0	Altoona	Blair
Haugh Family Farm	463.0	Patton	Centre
Gray's Woods Park	42.0	Patton	Centre
Diven Park	3.0	Mount Union	Huntingdon
Mill Creek Lions Park	15.0	Mill Creek	Huntingdon
Mount Union Lower Municipal Park	12.0	Mount Union	Huntingdon
Shirleysburg Community Center Park	6.0	Shirleysburg	Huntingdon
Warriors Mark Public Park	2.0	Warriors Mark Township	Huntingdon
Catholic Hill Park	6.0	Mount Union	Huntingdon
Mapleton Riverside Park	26.0	Brady	Huntingdon
Mount Union Riverside Park	8.0	Mount Union	Huntingdon
Robertsdale Park	1.0	Wood	Huntingdon
Saltillo Community Center	4.0	Saltillo	Huntingdon
Stone Valley Lions Park	17.0	Oneida Township	Huntingdon
Three Springs Pool & Park	5.0	Three Springs/Clay	Huntingdon
River Road Park	16.0	Mifflin/Milford	Juniata

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Licking Creek Road Park	31.0	Milford Township	Juniata
Moist Run Park	26.0	Mifflintown	Juniata
Haldeman Park	13.0	Thompsontown	Juniata
East Fourth Street Park	2.0	Port Royal	Juniata
Cedar Springs Road Park	20.0	Walker/Fermanagh	Juniata
Port Royal Park	21.0	Milford Township	Juniata
Sieber Property Acquisition	38.0	Fayette	Juniata
Stone Arch Bridge	1.0	Lewistown/Derry	Mifflin
Victory Park	6.0	Lewistown/Granville	Mifflin
Malta Park	15.0	Granville	Mifflin
Highland Park Elementary	14.0	Altoona	Blair
Mifflin County Youth Park	15.0	Brown	Mifflin
Milroy Park	11.0	Armagh Township	Mifflin
Mifflin County Library Park	17.0	Union	Mifflin
Derry Park	47.0	Burnham/Derry	Mifflin
Bender Park	2.0	Brown	Mifflin
Oak Street Park	5.0	Burnham	Mifflin
Little Kishacoquillas Restoration	3.0	Union	Mifflin
Steel Worx Pump Track	7.0	Burnham	Mifflin
Green Gables Park	7.0	Lewistown	Mifflin
Greenwood Park	10.0	Logan	Blair
Meadowfield Playground	6.0	Derry	Mifflin
Ickesburg Lions Club Park (Rt.17)	5.0	Saville Township	Perry
Canal Park	0.0	Alexandria	Huntingdon
Alexandria Ball Field	9.0	Porter	Huntingdon
Eldorado Ballfield	5.0	Allegheny	Blair
Logantown Tot Lot	0.0	Altoona	Blair
Garden Heights Basketball Courts & Baseball Field	3.0	Logan	Blair
Focus Park	1.0	Altoona	Blair

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Juniata Memorial Park and Pool	9.0	Altoona/Logan	Blair
Kustaborder Field	6.0	Altoona	Blair
Westfall Park	49.0	Logan	Blair
Iuzzolino Park	1.0	Altoona	Blair
Oakridge Ballfield	8.0	Altoona	Blair
10th Street Playground	0.0	Altoona	Blair
North 15th Street Playground	0.0	Altoona	Blair
Fairview Ballfield	4.0	Altoona	Blair
Westmont Ballfield	3.0	Altoona	Blair
Orchard Park & Tot Lot	0.0	Altoona	Blair
Prospect Park Pool	3.0	Altoona	Blair
Kittanning Reservoir	692.0	Logan	Blair
Altoona Open Space	412.0	Logan	Blair
Kipple Run Park	3.0	Altoona	Blair
Recreation Complex	11.0	Antis	Blair
Fort Bedford Riverfront Park	4.0	Bedford	Bedford
The Green	4.0	Bedford	Bedford
The Bedford Square	1.0	Bedford	Bedford
Bells Gap Railroad Trail	31.0	Antis	Blair
Fort Fetter Community Park Acquisition	2.0	Blair	Blair
Longfellow Playground	6.0	Bratton	Mifflin
Broad Top City Ball Field	3.0	Broad Top City	Huntingdon
Six Mile Run Community Park	4.0	Broad Top	Bedford
Riddlesburg Community Park	1.0	Broad Top	Bedford
Reedsville Park	5.0	Brown	Mifflin
Middletown Playground	11.0	Carbon	Huntingdon
Recreation Drive Park	34.0	Catharine	Blair
Yeagertown Hilltop Playground	9.0	Derry	Mifflin
Meadowfield Drive Ballfield	1.0	Derry	Mifflin

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Shade Gap Memorial Park	54.0	Dublin	Huntingdon
B & D Community Park	4.0	Dudley	Huntingdon
Duncansville Memorial Park	5.0	Duncansville	Blair
Henderson Park	1.0	East St. Clair	Bedford
Tenley Park and Community Pool	8.0	West Providence	Bedford
Ball Fields	12.0	Everett	Bedford
Lost Creek Community Park	5.0	Fayette	Juniata
Fairbrook Park	30.0	Ferguson	Centre
Meadows Park	2.0	Ferguson	Centre
Lewistown Narrows Canal Park	17.0	Fermanagh	Juniata
Middle Road Field	43.0	Granville	Mifflin
Claysburg Area Community Park	10.0	Greenfield	Blair
Millerstown Community Park	40.0	Greenwood	Perry
Halfmoon Township Community Park	11.0	Halfmoon	Centre
Autumn Meadow Park	10.0	Halfmoon	Centre
Hollidaysburg Borough Greenway	7.0	Hollidaysburg/Blair	Blair
Legion Memorial Park (Dell Delight)	43.0	Hollidaysburg	Blair
Mifflin Street Community Park	1.0	Hopewell Borough	Bedford
Portstown Park	8.0	Huntingdon	Huntingdon
West End Field	3.0	Huntingdon	Huntingdon
William Smith School Property Acquisition	2.0	Huntingdon	Huntingdon
Huntingdon Square Playground	3.0	Wood	Huntingdon
Mill Creek Playground	1.0	Mill Creek	Huntingdon
Petersburg Playground	1.0	Petersburg	Huntingdon
Cassville Community Center & Playground	3.0	Cassville	Huntingdon
Civic Club Playground	0.0	Markelsburg	Huntingdon
East End Playground	5.0	Juniata Terrace	Mifflin
Kimmel Township Community Park	4.0	Kimmel	Bedford
Imler Family Park	7.0	King	Bedford

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Nolan Road - Pine St Park	1.0	Kistler	Mifflin
Kistler Borough Ball Field	6.0	Kistler	Mifflin
Woodlawn Playground & Tennis Court	1.0	Lewistown	Mifflin
Lewistown Recreation Park	30.0	Lewistown	Mifflin
Juniata Legion Ballfield	4.0	Logan	Blair
Leopold Park	18.0	Logan	Blair
Mapleton Community Park	1.0	Mapleton	Huntingdon
Morrisons Cove Memorial Park	9.0	Martinsburg	Blair
McVeytown Community Park	1.0	McVeytown	Mifflin
Newport Veterans Memorial Park	7.0	Newport	Perry
Newton Hamilton Playground	1.0	Newton Hamilton	Mifflin
McVeytown Community Park	6.0	McVeytown	Mifflin
Oliver Township Park	9.0	Oliver	Perry
Gray's Woods Preserve	150.0	Patton/Halfmoon	Centre
Petersburg Ball Field	7.0	Logan	Huntingdon
Quaker Valley Road Recreation Park	11.0	West St. Clair	Bedford
Haugh Family Farm Community Garden	3.0	Patton	Centre
Liberty Street Community Park	2.0	Saxton	Bedford
Smithfield Riverside Park	7.0	Smithfield	Huntingdon
Snake Spring Community Park	27.0	Snake Spring	Bedford
Three Springs Square	0.0	Three Springs	Huntingdon
Shea Field	2.0	Tyrone Borough	Blair
Park Avenue Playground	1.0	Tyrone Borough	Blair
Reservoir Park Public Pool	3.0	Tyrone Borough	Blair
Fort Roberdeau Historic Site & Natural Area	185.0	Tyrone Township	Blair
Walker Township Municipal Park	14.0	Walker	Huntingdon
Walker Township Park	23.0	Walker	Juniata
Walker Township Ballfield	3.0	Walker	Juniata
Warriors Mark Ball Field	6.0	Warriors Mark Township	Huntingdon

Juniata Forward: Building on 25 Years of Conservation

Name	Acreage	Township	County
Wells Tannery Community Park	7.0	Wells	Fulton
Evendale Community Park	7.0	West Perry	Snyder
Shavers Creek Valley Community Park	10.0	West	Huntingdon
Lower Trail	4.0	Williamsburg	Blair
Lower Trail	38.0	Woodbury	Blair
J.A. Carney Athletic Field	6.0	Wood	Huntingdon
Woodbury Pike Community Center Playground	5.0	Woodbury	Bedford
Source: PA.Gov			

State Game Lands

SGL#	Acreage	Township	County
26	12347	Lincoln, Pavia, Greenfield, Adams, Portage, and Summerhill	Bedford/Cambria/ Blair
33	17753	Rush, Taylor and Worth	Centre
41	2972	Bloomfield and Woodbury	Bedford
48	11096	Bedford, Harrison, Cumberland Valley, and Londonderry	Bedford
49	6438	Mann, Monroe, and Union	Bedford/Fulton
60	8757	Snyder, Rush, and Taylor	Centre/Blair
65	6001	Brush Creek and Belfast	Fulton
67	5770	Carbon and Todd	Huntingdon
71	5204	Union and Shirley	Huntingdon
73	20814	Woodbury and Saxton	Bedford
81	4038	Springfield and Dublin	Huntingdon/Fulton
88	7005	Northeast Madison, Saville, Spruce Hill, and Tuscarora	Juniata/Perry
97	7624	Colerain Monroe, Snake Spring, Southampton and West Providence	Bedford
99	4471	Warriors Mark	Huntingdon
107	8264	Derry, Decatur, and Fermanagh	Juniata/Mifflin
108	22758	Chest, Clearfield, Dean, Reade, White, and Antis	Cambria/Blair
112	6633	Brady, Miller and Henderson	Huntingdon
113	523	Oliver and Granville	Mifflin

Juniata Forward: Building on 25 Years of Conservation

SGL#	Acreage	Township	County
118	6133	Catharine, Woodbury, Penn, Porter and Walker	Huntingdon/Blair
121	2234	Wood, Todd, and Clay	Huntingdon
131	309	Warriors Mark	Huntingdon
147	7946	Blair, Frankstown, Huston, Taylor, and Woodbury	Blair
158	17453	Antis, Snyder, and Reade	Blair/Cambria
166	11776	Catharine, Frankstown, Tyrone, and Morris	Blair/Huntingdon
171	1068	Delaware and Tuscarora	Juniata/Perry
176	6500	Halfmoon, Ferguson, and Patton	Centre
184	4607	Dean, Clearfield, and Logan	Cambria/Blair
198	8688	Allegheny, Juniata, Cresson	Blair /Cambria
215	1276	Lack and Tuscarora	Juniata
251	4229	Tell	Huntingdon
261	3220	Broad Top	Bedford
267	1044	Logan	Blair
278	1805	Snyder and Warriors Mark	Blair/Huntingdon
281	1647	Miller	Perry
290	1042	Penn	Perry
322	3149	Oneida	Huntingdon
Source: PA.Gov			

APPENDIX H. LAND RECYCLING PROGRAM SITES

COMPLETED SITES

COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Bedford	Bedford Boro	ASHBRIDGE OIL	Site-Specific Standard		NO	10/24/2018	Groundwater
Bedford	Bedford Boro	ASHBRIDGE OIL	Site-Specific Standard		NO	10/24/2018	Soil
Bedford	Bedford Boro	EICH GROUP REALTY	Statewide Health Standard		NO	05/25/2006	Soil
Bedford	Bedford Twp	BEDFORD FAMILY CHIRO	Statewide Health Standard	Fuel Oil No 2	NO	03/07/2024	Soil
Bedford	Bedford Twp	BEDFORD PA INDUSTRIAL PROP	Site-Specific Standard		NO	06/28/2021	Groundwater
Bedford	Bedford Twp	BEDFORD PA INDUSTRIAL PROP	Site-Specific Standard		NO	06/28/2021	Soil
Bedford	Bedford Twp	FORMER EXXON 2 4627	Site-Specific Standard	Unleaded Gasoline	<u>YES</u>	02/04/2009	Groundwater
Bedford	Bedford Twp	FORMER EXXON 2 4627	Site-Specific Standard	Unleaded Gasoline	<u>YES</u>	02/04/2009	Soil

Juniata Forward: Building on 25 Years of Conservation

COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Bedford	Bedford Twp	SAC OIL	Statewide Health Standard		NO	07/28/2022	
Bedford	Bedford Twp	SCHNEIDER NATL TERM	Statewide Health Standard	Diesel Fuel	<u>YES</u>	12/04/2001	Soil
Bedford	Bedford Twp	STD REGISTER PLT	Statewide Health Standard		NO	05/19/1998	Soil
Bedford	Bedford Twp	STD REGISTER PLT	Statewide Health Standard	Chlorinated Solvents	NO	05/19/1998	Groundwater
Bedford	East Saint Clair Twp	GLADYS HORNER PROP	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	12/02/2005	Soil
Bedford	Everett Boro	BLOODY RUN PUMPING STA	Statewide Health Standard	Diesel Fuel	NO	07/05/2002	Soil
Bedford	Juniata Twp	DENNIS CRUM PROPERTY- FUEL OIL SPILL	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	01/30/2012	Soil
Bedford	Liberty Twp	SHIRLEY HALL RES - HEATING OIL SPILL	Statewide Health Standard	Fuel Oil No 2	NO	03/17/2017	Soil

Juniata Forward: Building on 25 Years of Conservation

Bedford	Pavia Twp	CLAYSBURG AFS FORMERLY	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	08/20/2003	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Bedford	Pavia Twp	CLAYSBURG AFS FORMERLY	Statewide Health Standard	Other Organics	<u>YES</u>	08/20/2003	Soil
Bedford	Snake Spring Twp	BEDFORD VALLEY PETRO	Site-Specific Standard	Diesel Fuel	<u>YES</u>	12/29/2010	Soil
Bedford	Snake Spring Twp	BEDFORD VALLEY PETRO	Statewide Health Standard	Diesel Fuel	<u>YES</u>	12/29/2010	Groundwater
Bedford	Snake Spring Twp	PENELEC BEDFORD OFC	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	04/21/2017	Groundwater
Bedford	Snake Spring Twp	PENELEC BEDFORD OFC	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	04/21/2017	Groundwater
Bedford	Snake Spring Twp	PENELEC BEDFORD OFC	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	04/21/2017	Soil
Bedford	Snake Spring Twp	PENELEC BEDFORD OFC	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	04/21/2017	Soil
Bedford	Snake Spring Twp	UPMC BEDFORD MEM HOSP	Statewide Health Standard	Fuel Oil No 2	NO	04/23/2009	Soil

Juniata Forward: Building on 25 Years of Conservation

Bedford	West Providence Twp	ADVANTAGE TANK LINES LLC I-76 INCIDENT MM 158.2 EASTBOUND	Statewide Health Standard	New Motor Oil	<u>YES</u>	12/08/2016	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Bedford	West Providence Twp	DONNA BURKE RES - HEATING OIL RELEASE	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	11/14/2014	Soil
Blair	Allegheny Twp	ALTOONA NORTH TERM / MOBIL ALTOONA	Statewide Health Standard	Lead	NO	12/13/2013	Groundwater
Blair	Allegheny Twp	ALTOONA NORTH TERM / MOBIL ALTOONA	Statewide Health Standard	Other Organics	NO	12/13/2013	Groundwater
Blair	Allegheny Twp	ALTOONA NORTH TERM / MOBIL ALTOONA	Statewide Health Standard	PAH	NO	12/13/2013	Groundwater
Blair	Allegheny Twp	ALTOONA NORTH TERM / MOBIL ALTOONA	Site-Specific Standard	Lead	NO	12/13/2013	Soil

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Blair	Allegheny Twp	ALTOONA NORTH TERM / MOBIL ALTOONA	Site-Specific Standard	Other Organics	NO	12/13/2013	Soil
Blair	Allegheny Twp	ALTOONA NORTH TERM / MOBIL ALTOONA	Site-Specific Standard	PAH	NO	12/13/2013	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Allegheny Twp	BLAIR MARKETING / FORMER KATIE WATERS RES	Statewide Health Standard	Fuel Oil No 2	NO	10/27/2008	Groundwater
Blair	Allegheny Twp	BLAIR MARKETING / FORMER KATIE WATERS RES	Statewide Health Standard	Fuel Oil No 2	NO	10/27/2008	Soil
Blair	Allegheny Twp	FORMER FIORE MITSUBISHI ISUZU - LOGAN MEDICAL CTR	Site-Specific Standard	Other Organics	NO	02/28/2017	Groundwater
Blair	Allegheny Twp	FORMER FIORE MITSUBISHI ISUZU - LOGAN MEDICAL CTR	Site-Specific Standard	Other Organics	NO	02/28/2017	Soil

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Blair	Allegheny Twp	FORMER FIORE MITSUBISHI ISUZU - LOGAN MEDICAL CTR	Site-Specific Standard	PAH	NO	02/28/2017	Groundwater
Blair	Allegheny Twp	FORMER FIORE MITSUBISHI ISUZU - LOGAN MEDICAL CTR	Site-Specific Standard	PAH	NO	02/28/2017	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Statewide Health Standard	Other Organics	<u>YES</u>	02/10/2015	Groundwater
Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Statewide Health Standard	PAH	<u>YES</u>	02/10/2015	Groundwater
Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Site-Specific Standard	Lead	<u>YES</u>	02/10/2015	Soil

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Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Site-Specific Standard	Other Organics	<u>YES</u>	02/10/2015	Groundwater
Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Site-Specific Standard	Other Organics	<u>YES</u>	02/10/2015	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Site-Specific Standard	PAH	<u>YES</u>	02/10/2015	Groundwater
Blair	Allegheny Twp	GULF OIL LIMITED PARTNERSHIP ALTOONA TERM	Site-Specific Standard	PAH	<u>YES</u>	02/10/2015	Soil
Blair	Allegheny Twp	SMALL TUBE	Statewide Health Standard	Chlorinated Solvents	NO	05/08/2008	Groundwater

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Blair	Allegheny Twp	SMALL TUBE	Statewide Health Standard	Chlorinated Solvents	NO	05/08/2008	Soil
Blair	Allegheny Twp	SMALL TUBE	Statewide Health Standard	Inorganics	NO	05/08/2008	Groundwater
Blair	Allegheny Twp	SMALL TUBE	Statewide Health Standard	Inorganics	NO	05/08/2008	Soil
Blair	Allegheny Twp	SMALL TUBE	Statewide Health Standard	Other Organics	NO	05/08/2008	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Allegheny Twp	SMALL TUBE	Statewide Health Standard	Other Organics	NO	05/08/2008	Soil
Blair	Allegheny Twp	UPS ALTOONA CENTER	Site-Specific Standard		NO	08/15/2023	Groundwater
Blair	Allegheny Twp	UPS ALTOONA CENTER	Site-Specific Standard		NO	08/15/2023	Soil
Blair	Allegheny Twp	US FOODSERVICE ALTOONA	Statewide Health Standard	Other Organics	NO	06/18/2009	Soil
Blair	Allegheny Twp	US FOODSERVICE ALTOONA	Statewide Health Standard	PCB	NO	06/18/2009	Soil
Blair	Allegheny Twp	VEEDER ROOT	Site-Specific Standard	Chlorinated Solvents	<u>YES</u>	12/15/2005	Groundwater

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Blair	Allegheny Twp	VEEDER ROOT	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	12/15/2005	Groundwater
Blair	Allegheny Twp	VEEDER ROOT	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	12/15/2005	Soil
Blair	Allegheny Twp	VEEDER ROOT	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	12/15/2005	Soil
Blair	Allegheny Twp	VEEDER ROOT	Statewide Health Standard	PCB	<u>YES</u>	12/15/2005	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Allegheny Twp	VEEDER ROOT	Statewide Health Standard	PCB	<u>YES</u>	12/15/2005	Soil
Blair	Allegheny Twp	VEEDER ROOT	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	12/15/2005	Groundwater
Blair	Allegheny Twp	ZENITH ENERGY ALTOONA TERMINAL	Statewide Health Standard		NO	10/07/2020	Soil
Blair	Altoona City	509 E PLANK RD SITE	Site-Specific Standard	Chlorinated Solvents	NO	02/17/2017	Groundwater
Blair	Altoona City	A PLUS PRINTING	Background Standard	Unleaded Gasoline	NO	04/16/1997	Groundwater

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Blair	Altoona City	A PLUS PRINTING	Background Standard	Unleaded Gasoline	NO	04/16/1997	Soil
Blair	Altoona City	BON SECOURS HOLY FAMILY REG HEALTH SYS	Statewide Health Standard	Diesel Fuel	<u>YES</u>	08/14/2006	Groundwater
Blair	Altoona City	BON SECOURS HOLY FAMILY REG HEALTH SYS	Statewide Health Standard	Diesel Fuel	<u>YES</u>	08/14/2006	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	Chlorinated Solvents	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	Chlorinated Solvents	<u>YES</u>		Soil

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Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	Inorganics	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	Inorganics	<u>YES</u>		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	Lead	<u>YES</u>		Soil
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	PAH	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	PAH	<u>YES</u>		Soil

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Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 1	Special Industrial Area	PCB	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Chlorinated Solvents	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Chlorinated Solvents	<u>YES</u>		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Fuel Oil No 2	<u>YES</u>		Soil
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Inorganics	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Inorganics	<u>YES</u>		Soil

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Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Lead	<u>YES</u>		Groundwater
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Lead	<u>YES</u>		Soil
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Other Organics	<u>YES</u>		Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Other Organics	<u>YES</u>		Soil
Blair	Altoona City	CONRAIL SOUTH ALTOONA MATERIAL DISTR CTR PARCEL 2	Special Industrial Area	Unleaded Gasoline	<u>YES</u>		Soil
Blair	Altoona City	EASTERLY STP	Statewide Health Standard	Diesel Fuel	<u>YES</u>	09/11/2012	Groundwater

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Blair	Altoona City	EASTERLY STP	Statewide Health Standard	Diesel Fuel	<u>YES</u>	09/11/2012	Soil
Blair	Altoona City	EXXON STA #2-0312	Site-Specific Standard	Unleaded Gasoline	NO	10/10/2006	Groundwater
Blair	Altoona City	EXXON STA #2-0312	Site-Specific Standard	Unleaded Gasoline	NO	10/10/2006	Soil
Blair	Altoona City	EXXON STA #2-0312	Statewide Health Standard	Unleaded Gasoline	NO	10/10/2006	Groundwater
Blair	Altoona City	EXXON STA #2-0312	Statewide Health Standard	Unleaded Gasoline	NO	10/10/2006	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	FIRST STOP SHOP	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	07/27/2017	Groundwater
Blair	Altoona City	FIRST STOP SHOP	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	07/27/2017	Soil
Blair	Altoona City	FIRST STOP SHOP	Statewide Health Standard	Other Organics	<u>YES</u>	07/27/2017	Groundwater
Blair	Altoona City	FIRST STOP SHOP	Statewide Health Standard	Other Organics	<u>YES</u>	07/27/2017	Soil

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Blair	Altoona City	FIRST STOP SHOP	Statewide Health Standard	PAH	<u>YES</u>	07/27/2017	Groundwater
Blair	Altoona City	FIRST STOP SHOP	Statewide Health Standard	PAH	<u>YES</u>	07/27/2017	Soil
Blair	Altoona City	FORMER FISHER AUTO PARTS	Statewide Health Standard	Inorganics	<u>YES</u>	02/27/2013	Soil
Blair	Altoona City	FORMER FISHER AUTO PARTS	Statewide Health Standard	Lead	<u>YES</u>	02/27/2013	Soil
Blair	Altoona City	HR REALTY DIVISION LP	Site-Specific Standard		<u>YES</u>	11/04/2021	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	HR REALTY DIVISION LP	Site-Specific Standard	Leaded Gasoline	<u>YES</u>	11/04/2021	Soil
Blair	Altoona City	HR REALTY DIVISION LP	Site-Specific Standard	Other Organics	<u>YES</u>	11/04/2021	Soil
Blair	Altoona City	NORFOLK SOUTHERN RAILWAY JUNIATA LOCOMOTIVE REPAIR SHOP	Statewide Health Standard	Diesel Fuel	<u>YES</u>	09/15/2017	Soil

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Blair	Altoona City	NORFOLK SOUTHERN RAILWAY JUNIATA LOCOMOTIVE REPAIR SHOP	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	09/15/2017	Soil
Blair	Altoona City	REIGHARD'S SERVICE STATION	Site-Specific Standard		NO	05/03/2017	Groundwater
Blair	Altoona City	REIGHARD'S SERVICE STATION	Site-Specific Standard		NO	05/03/2017	Soil
Blair	Altoona City	SHEETZ @ CHESTNUT & 7TH	Special Industrial Area	Chlorinated Solvents	NO		Groundwater
Blair	Altoona City	SHEETZ @ CHESTNUT & 7TH	Special Industrial Area	Chlorinated Solvents	NO		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	SHEETZ @ CHESTNUT & 7TH	Special Industrial Area	Inorganics	NO		Groundwater
Blair	Altoona City	SHEETZ @ CHESTNUT & 7TH	Special Industrial Area	Inorganics	NO		Soil
Blair	Altoona City	SHEETZ @ CHESTNUT & 7TH	Special Industrial Area	Other Organics	NO		Soil

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Blair	Altoona City	SHEETZ @ CHESTNUT & 7TH	Special Industrial Area	PAH	NO		Soil
Blair	Altoona City	SHEETZ 38	Statewide Health Standard	Kerosene	NO	05/24/2006	Groundwater
Blair	Altoona City	SHEETZ 38	Statewide Health Standard	Kerosene	NO	05/24/2006	Soil
Blair	Altoona City	SHEETZ 38	Statewide Health Standard	Unleaded Gasoline	NO	05/24/2006	Groundwater
Blair	Altoona City	SHEETZ 38	Statewide Health Standard	Unleaded Gasoline	NO	05/24/2006	Soil
Blair	Altoona City	SHEETZ STORE #007R	Statewide Health Standard	Lead	<u>YES</u>	08/31/2005	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	SHEETZ STORE #007R	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	08/31/2005	Soil
Blair	Altoona City	SHEETZ STORE #007R	Statewide Health Standard	MTBE	<u>YES</u>	08/31/2005	Soil
Blair	Altoona City	SHEETZ STORE #007R	Statewide Health Standard	PAH	<u>YES</u>	08/31/2005	Soil

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Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Chlorinated Solvents	NO		Groundwater
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Chlorinated Solvents	NO		Soil
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Inorganics	NO		Groundwater
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Inorganics	NO		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDICATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Lead	NO		Groundwater
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Lead	NO		Soil

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Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Other Organics	NO		Groundwater
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	Other Organics	NO		Soil
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	PAH	NO		Groundwater
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	PAH	NO		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	Special Industrial Area	PCB	NO		Soil
Blair	Altoona City	SKF USA	Site-Specific Standard		<u>YES</u>	07/03/2008	Groundwater
Blair	Altoona City	SKF USA	Statewide Health Standard	Lead	<u>YES</u>	12/19/2008	Groundwater

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Blair	Altoona City	SKF USA	Statewide Health Standard	Lead	<u>YES</u>	12/19/2008	Soil
Blair	Altoona City	SKF USA	Statewide Health Standard	Other Organics	<u>YES</u>	12/19/2008	Groundwater
Blair	Altoona City	SKF USA	Statewide Health Standard	Other Organics	<u>YES</u>	12/19/2008	Soil
Blair	Altoona City	SKF USA	Statewide Health Standard	PAH	<u>YES</u>	12/19/2008	Groundwater
Blair	Altoona City	SKF USA	Statewide Health Standard	PAH	<u>YES</u>	12/19/2008	Soil
Blair	Altoona City	STATION MALL	Site-Specific Standard	Other Organics	<u>YES</u>	08/28/2009	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	STATION MALL	Site-Specific Standard	Other Organics	<u>YES</u>	08/28/2009	Soil
Blair	Altoona City	STATION MALL	Statewide Health Standard		<u>YES</u>	08/28/2009	Groundwater
Blair	Altoona City	STATION MALL	Statewide Health Standard		<u>YES</u>	08/28/2009	Soil
Blair	Altoona City	STATION MALL	Site-Specific Standard	Other Organics	<u>YES</u>	11/21/2014	Groundwater

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Blair	Altoona City	STATION MALL	Site-Specific Standard	Other Organics	<u>YES</u>	11/21/2014	Soil
Blair	Altoona City	STEICO INC PROP/DC GOODMAN & SONS RELEASE	Statewide Health Standard	Other Organics	<u>YES</u>	11/04/2016	Groundwater
Blair	Altoona City	STEICO INC PROP/DC GOODMAN & SONS RELEASE	Statewide Health Standard	Other Organics	<u>YES</u>	11/04/2016	Soil
Blair	Altoona City	STEICO INC PROP/DC GOODMAN & SONS RELEASE	Statewide Health Standard	PAH	<u>YES</u>	11/04/2016	Groundwater
Blair	Altoona City	STEICO INC PROP/DC GOODMAN & SONS RELEASE	Statewide Health Standard	PAH	<u>YES</u>	11/04/2016	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDICATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Altoona City	UNION TANK CAR	Site-Specific Standard	Chlorinated Solvents	<u>YES</u>	05/02/2008	Groundwater
Blair	Altoona City	UNION TANK CAR	Site-Specific Standard	Chlorinated Solvents	<u>YES</u>	05/02/2008	Soil
Blair	Altoona City	UNION TANK CAR	Site-Specific Standard	Other Organics	<u>YES</u>	05/02/2008	Groundwater
Blair	Altoona City	UNION TANK CAR	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	05/02/2008	Soil

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Blair	Altoona City	WALGREENS DEV SITE	Statewide Health Standard		<u>YES</u>	01/22/2009	Groundwater
Blair	Altoona City	WALGREENS DEV SITE	Statewide Health Standard		<u>YES</u>	01/22/2009	Soil
Blair	Altoona City	WALGREENS DEV SITE	Site-Specific Standard	Other Organics	<u>YES</u>	01/22/2009	Groundwater
Blair	Altoona City	WALGREENS DEV SITE	Site-Specific Standard	Other Organics	<u>YES</u>	01/22/2009	Soil
Blair	Antis Twp	BELLWOOD AMBULANCE SVC FAC	Site-Specific Standard	Unleaded Gasoline	<u>YES</u>	12/08/2009	Groundwater
Blair	Antis Twp	BELLWOOD AMBULANCE SVC FAC	Site-Specific Standard	Unleaded Gasoline	<u>YES</u>	12/08/2009	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Blair Twp	FORMER BP TERM 4567 - EASTERN PARCEL	Site-Specific Standard	Lead	<u>YES</u>	07/13/2016	Groundwater
Blair	Blair Twp	FORMER BP TERM 4567 - EASTERN PARCEL	Site-Specific Standard	Lead	<u>YES</u>	07/13/2016	Soil
Blair	Blair Twp	FORMER BP TERM 4567 - EASTERN PARCEL	Site-Specific Standard	Other Organics	<u>YES</u>	07/13/2016	Groundwater

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Blair	Blair Twp	FORMER BP TERM 4567 - EASTERN PARCEL	Site-Specific Standard	Other Organics	<u>YES</u>	07/13/2016	Soil
Blair	Blair Twp	FORMER BP TERM 4567 - EASTERN PARCEL	Site-Specific Standard	PAH	<u>YES</u>	07/13/2016	Groundwater
Blair	Blair Twp	FORMER BP TERM 4567 - EASTERN PARCEL	Site-Specific Standard	PAH	<u>YES</u>	07/13/2016	Soil
Blair	Blair Twp	FORMER BP TERM 4567 - WESTERN PARCEL	Site-Specific Standard	Lead	<u>YES</u>	07/13/2016	Groundwater
Blair	Blair Twp	FORMER BP TERM 4567 - WESTERN PARCEL	Site-Specific Standard	Lead	<u>YES</u>	07/13/2016	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Blair Twp	FORMER BP TERM 4567 - WESTERN PARCEL	Site-Specific Standard	Other Organics	<u>YES</u>	07/13/2016	Groundwater
Blair	Blair Twp	FORMER BP TERM 4567 - WESTERN PARCEL	Site-Specific Standard	Other Organics	<u>YES</u>	07/13/2016	Soil
Blair	Blair Twp	FORMER BP TERM 4567 - WESTERN PARCEL	Site-Specific Standard	PAH	<u>YES</u>	07/13/2016	Groundwater

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Blair	Blair Twp	FORMER BP TERM 4567 - WESTERN PARCEL	Site-Specific Standard	PAH	<u>YES</u>	07/13/2016	Soil
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Diesel Fuel	NO	09/11/2008	Groundwater
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Diesel Fuel	NO	09/11/2008	Soil
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Fuel Oil No 2	NO	09/11/2008	Groundwater
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Fuel Oil No 2	NO	09/11/2008	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Kerosene	NO	09/11/2008	Groundwater
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Kerosene	NO	09/11/2008	Soil
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Leaded Gasoline	NO	09/11/2008	Groundwater

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Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Leaded Gasoline	NO	09/11/2008	Soil
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Unleaded Gasoline	NO	09/11/2008	Groundwater
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Unleaded Gasoline	NO	09/11/2008	Soil
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Used Motor Oil	NO	09/11/2008	Groundwater
Blair	Blair Twp	PENNDOT MAINT FAC HOLLIDAYSBURG	Statewide Health Standard	Used Motor Oil	NO	09/11/2008	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Fuel Oil No 2	NO	06/23/2017	Groundwater
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Fuel Oil No 2	NO	06/23/2017	Soil
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Leaded Gasoline	NO	06/23/2017	Groundwater
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Leaded Gasoline	NO	06/23/2017	Soil
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Unleaded Gasoline	NO	06/23/2017	Groundwater

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Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Unleaded Gasoline	NO	06/23/2017	Soil
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Used Motor Oil	NO	06/23/2017	Groundwater
Blair	Blair Twp	STUCKEY FORD	Site-Specific Standard	Used Motor Oil	NO	06/23/2017	Soil
Blair	Duncansville Boro	DEGOL CARPET	Background Standard	Chlorinated Solvents	NO	10/15/1997	Groundwater
Blair	Duncansville Boro	DEGOL CARPET	Background Standard	Other Organics	NO	10/15/1997	Groundwater
Blair	Duncansville Boro	FL SMITHE MACH CO INC	Site-Specific Standard	Chlorinated Solvents	NO	02/20/2020	Groundwater
Blair	Duncansville Boro	FL SMITHE MACH CO INC	Background Standard	Chlorinated Solvents	NO	10/03/2013	Groundwater
Blair	Duncansville Boro	FL SMITHE MACH CO INC	Background Standard	Inorganics	NO	10/03/2013	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Duncansville Boro	FL SMITHE MACH CO INC	Background Standard	Other Organics	NO	10/03/2013	Groundwater
Blair	Frankstown Twp	CANOE CREEK QUARRY	Statewide Health Standard	Diesel Fuel	NO	01/12/2006	Groundwater
Blair	Frankstown Twp	CANOE CREEK QUARRY	Statewide Health Standard	Diesel Fuel	NO	01/12/2006	Soil
Blair	Frankstown Twp	CANOE CREEK QUARRY	Statewide Health Standard	Other Organics	NO	01/12/2006	Groundwater

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Blair	Frankstown Twp	CANOE CREEK QUARRY	Statewide Health Standard	PAH	NO	01/12/2006	Soil
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	Chlorinated Solvents	NO	11/01/2004	Groundwater
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	Chlorinated Solvents	NO	11/01/2004	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	Inorganics	NO	11/01/2004	Groundwater
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	Inorganics	NO	11/01/2004	Soil

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Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	Lead	NO	11/01/2004	Groundwater
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	Lead	NO	11/01/2004	Soil
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	PAH	NO	11/01/2004	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	PAH	NO	11/01/2004	Soil
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Statewide Health Standard	PCB	NO	11/01/2004	Soil

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Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Site-Specific Standard		NO	11/01/2004	Groundwater
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Site-Specific Standard		NO	11/01/2004	Soil
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	Chlorinated Solvents	NO		Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDICATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	Inorganics	NO		Groundwater
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	Inorganics	NO		Soil

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Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	Lead	NO		Soil
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	Other Organics	NO		Soil
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	PAH	NO		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Frankstown Twp	CONRAIL HOLLIDAYSBURG CAR SHOP & RECLAMATION PLT	Special Industrial Area	PCB	NO		Soil
Blair	Frankstown Twp	EDWARDS PROP	Statewide Health Standard	Fuel Oil No 2	NO	06/11/2009	Groundwater
Blair	Frankstown Twp	EDWARDS PROP	Statewide Health Standard	Fuel Oil No 2	NO	06/11/2009	Soil

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Blair	Freedom Twp	GREEN LAND ENTERPRISES	Statewide Health Standard	Fuel Oil No 2	NO	01/24/2020	Soil
Blair	Freedom Twp	RHONDA JOHNSTON RES	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	03/06/2017	Soil
Blair	Freedom Twp	RHONDA JOHNSTON RES	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	03/06/2017	Surface Water
Blair	Greenfield Twp	FRAMPTON RESIDENCE	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	11/22/2021	Soil
Blair	Hollidaysburg Boro	GPU ENERGY HOLLIDAYSBURG POLE STORAGE YD	Statewide Health Standard	Other Organics	NO	04/22/1998	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Hollidaysburg Boro	GPU ENERGY HOLLIDAYSBURG POLE STORAGE YD	Statewide Health Standard	PAH	NO	04/22/1998	Soil
Blair	Hollidaysburg Boro	GPU ENERGY HOLLIDAYSBURG POLE STORAGE YD	Site-Specific Standard	Inorganics	NO	05/28/1998	Soil
Blair	Logan Twp	CROWN AMER LOGAN VLY MALL	Statewide Health Standard	Leaded Gasoline	NO	11/07/2002	Groundwater

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Blair	Logan Twp	CROWN AMER LOGAN VLY MALL	Statewide Health Standard	MTBE	NO	11/07/2002	Groundwater
Blair	Logan Twp	CROWN AMER LOGAN VLY MALL	Site-Specific Standard	Leaded Gasoline	NO	05/29/2014	Soil
Blair	Logan Twp	CROWN AMER LOGAN VLY MALL	Site-Specific Standard	MTBE	NO	05/29/2014	Soil
Blair	Logan Twp	HAMPTON RES FUEL OIL SPILL	Statewide Health Standard	Fuel Oil No 2	NO	06/29/2010	Soil
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Chlorinated Solvents	<u>YES</u>		Groundwater
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Chlorinated Solvents	<u>YES</u>		Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDICATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Inorganics	<u>YES</u>		Groundwater
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Inorganics	<u>YES</u>		Soil
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Lead	<u>YES</u>		Soil
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Other Organics	<u>YES</u>		Groundwater

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Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	Other Organics	<u>YES</u>		Soil
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	PAH	<u>YES</u>		Groundwater
Blair	Logan Twp	POWELL PROP FORMERLY	Special Industrial Area	PAH	<u>YES</u>		Soil
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Site-Specific Standard	Inorganics	<u>YES</u>	03/25/2005	Groundwater
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Site-Specific Standard	Inorganics	<u>YES</u>	03/25/2005	Soil
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Site-Specific Standard	Other Organics	<u>YES</u>	03/25/2005	Groundwater
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Site-Specific Standard	Other Organics	<u>YES</u>	03/25/2005	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Site-Specific Standard	Pesticides	<u>YES</u>	03/25/2005	Groundwater
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Site-Specific Standard	Pesticides	<u>YES</u>	03/25/2005	Soil
Blair	North Woodbury Twp	AGWAY CURRYVILLE	Statewide Health Standard	Inorganics	<u>YES</u>	03/25/2005	Soil

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Blair	North Woodbury Twp	AGWAY CURRYVILLE	Statewide Health Standard	Pesticides	<u>YES</u>	03/25/2005	Soil
Blair	North Woodbury Twp	HOMEWOOD RETIREMENT CTR OF THE UCC	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	07/01/2004	Groundwater
Blair	North Woodbury Twp	HOMEWOOD RETIREMENT CTR OF THE UCC	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	07/01/2004	Soil
Blair	North Woodbury Twp	HOMEWOOD RETIREMENT CTR OF THE UCC	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	07/01/2004	Groundwater
Blair	North Woodbury Twp	HOMEWOOD RETIREMENT CTR OF THE UCC	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	07/01/2004	Soil
Blair	Roaring Spring Boro	MACINNIS GRP / PENNSTRESS FACILITY	Statewide Health Standard	Diesel Fuel	<u>YES</u>	08/03/2018	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Roaring Spring Boro	ROARING SPRING BOTTLED WATER	Statewide Health Standard	Chlorinated Solvents	NO	10/18/2010	Groundwater
Blair	Roaring Spring Boro	ROARING SPRING BOTTLED WATER	Statewide Health Standard	Chlorinated Solvents	NO	10/18/2010	Soil
Blair	Roaring Spring Boro	ROARING SPRING BOTTLED WATER	Statewide Health Standard	Other Organics	NO	10/18/2010	Groundwater

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Blair	Roaring Spring Boro	ROARING SPRING BOTTLED WATER	Statewide Health Standard	Other Organics	NO	10/18/2010	Soil
Blair	Roaring Spring Boro	ROARING SPRING BOTTLED WATER	Statewide Health Standard	PAH	NO	10/18/2010	Groundwater
Blair	Roaring Spring Boro	ROARING SPRING BOTTLED WATER	Statewide Health Standard	PAH	NO	10/18/2010	Soil
Blair	Taylor Twp	BRYAN AND KIM HORETSKY RES	Statewide Health Standard	Fuel Oil No 2	NO	09/12/2008	Groundwater
Blair	Taylor Twp	BRYAN AND KIM HORETSKY RES	Statewide Health Standard	Fuel Oil No 2	NO	09/12/2008	Soil
Blair	Taylor Twp	RODNEY WEYANT RES	Statewide Health Standard	Unleaded Gasoline	NO	12/03/2009	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDICATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Taylor Twp	RODNEY WEYANT RES	Statewide Health Standard	Unleaded Gasoline	NO	12/03/2009	Soil
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Statewide Health Standard	Other Organics	NO	12/30/1997	Groundwater

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Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Statewide Health Standard	Other Organics	NO	12/30/1997	Soil
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	Chlorinated Solvents	NO		Groundwater
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	Chlorinated Solvents	NO		Soil
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	Inorganics	NO		Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	Inorganics	NO		Soil
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	Other Organics	NO		Groundwater

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Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	Other Organics	NO		Soil
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	PAH	NO		Groundwater
Blair	Tyrone Boro	AMER EAGLE PAPER MILLS FORMERLY MEAD WESTVACO	Special Industrial Area	PAH	NO		Soil
Blair	Tyrone Boro	PA NATL GUARD-TYRONE ARMORY	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	10/25/2007	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Blair	Tyrone Boro	PA NATL GUARD-TYRONE ARMORY	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	10/25/2007	Soil
Blair	Tyrone Boro	TYRONE SOCIAL CLUB	Special Industrial Area		<u>YES</u>		Groundwater
Blair	Tyrone Boro	TYRONE SOCIAL CLUB	Special Industrial Area		<u>YES</u>		Soil
Blair	Tyrone Twp	KENNETH KRAMER PROP	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	04/27/2017	Soil

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Blair	Williamsburg Boro	OIP PIZZA	Statewide Health Standard		NO	02/04/2009	Soil
Fulton	Brush Creek Twp	MICHAEL GIBSON RES - FUEL OIL RELEASE	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	11/25/2014	Soil
Huntingdon	Cromwell Twp	WOODLAND RETIREMENT CTR	Site-Specific Standard	Fuel Oil No 2	<u>YES</u>	03/19/2009	Soil
Huntingdon	Cromwell Twp	WOODLAND RETIREMENT CTR	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	03/19/2009	Groundwater
Huntingdon	Dudley Boro	CORBIN RESIDENCE - LEAKING FUEL FILTER	Statewide Health Standard		NO	11/14/2022	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Huntingdon	Hopewell Twp	BRUCE KILHEFNER PROP	Statewide Health Standard		<u>YES</u>	06/11/2019	Groundwater
Huntingdon	Hopewell Twp	BRUCE KILHEFNER PROP	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	06/11/2019	Soil
Huntingdon	Huntingdon Boro	FORMER UNITAS NATL BANK	Site-Specific Standard		NO	06/23/2020	Groundwater

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Huntingdon	Huntingdon Boro	FORMER UNITAS NATL BANK	Statewide Health Standard		NO	06/23/2020	Soil
Huntingdon	Huntingdon Boro	HUNTINGDON ARMORY	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	03/17/2003	Groundwater
Huntingdon	Huntingdon Boro	HUNTINGDON ARMORY	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	03/17/2003	Soil
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	Chlorinated Solvents	NO	03/27/2017	Groundwater
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	Chlorinated Solvents	NO	03/27/2017	Soil
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	Inorganics	NO	03/27/2017	Groundwater
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	Inorganics	NO	03/27/2017	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	Other Organics	NO	03/27/2017	Groundwater
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	Other Organics	NO	03/27/2017	Soil
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	PAH	NO	03/27/2017	Groundwater
Huntingdon	Huntingdon Boro	HUNTINGDON FIBERGLASS	Site-Specific Standard	PAH	NO	03/27/2017	Soil

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Huntingdon	Huntingdon Boro	MUTUAL BENEFIT GROUP - HUNTINGDON	Statewide Health Standard	Diesel Fuel	<u>YES</u>	02/13/2007	Groundwater
Huntingdon	Huntingdon Boro	MUTUAL BENEFIT GROUP - HUNTINGDON	Statewide Health Standard	Diesel Fuel	<u>YES</u>	02/13/2007	Soil
Huntingdon	Huntingdon Boro	MUTUAL BENEFIT GROUP - HUNTINGDON	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	02/13/2007	Groundwater
Huntingdon	Huntingdon Boro	MUTUAL BENEFIT GROUP - HUNTINGDON	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	02/13/2007	Soil
Huntingdon	Huntingdon Boro	SHEETZ #10	Statewide Health Standard	Fuel Oil No 2	NO	01/22/2018	Soil
Huntingdon	Huntingdon Boro	SHEETZ #10	Statewide Health Standard	Kerosene	NO	01/22/2018	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Huntingdon	Huntingdon Boro	SHEETZ #10	Statewide Health Standard	Leaded Gasoline	NO	01/22/2018	Soil
Huntingdon	Huntingdon Boro	SHEETZ #10	Statewide Health Standard	Unleaded Gasoline	NO	01/22/2018	Soil
Huntingdon	Huntingdon Boro	SHEETZ #10	Statewide Health Standard	Used Motor Oil	NO	01/22/2018	Soil

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Huntingdon	Huntingdon Boro	SHEETZ #10	Site-Specific Standard	MTBE	NO	01/22/2018	Groundwater
Huntingdon	Mount Union Boro	ALLEGHENY VETERINARY HOSPITAL	Site-Specific Standard	Unleaded Gasoline	NO	04/08/2019	Groundwater
Huntingdon	Mount Union Boro	ALLEGHENY VETERINARY HOSPITAL	Site-Specific Standard	Unleaded Gasoline	NO	04/08/2019	Soil
Huntingdon	Mount Union Boro	MT UNION CREOSOTE	Site-Specific Standard	Inorganics	NO	02/05/2013	Soil
Huntingdon	Mount Union Boro	MT UNION CREOSOTE	Site-Specific Standard	Other Organics	NO	02/05/2013	Soil
Huntingdon	Mount Union Boro	MT UNION CREOSOTE	Site-Specific Standard	PAH	NO	02/05/2013	Soil
Huntingdon	Oneida Twp	DAVID LOGUE PROP	Statewide Health Standard	Leaded Gasoline	NO	03/06/2008	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Huntingdon	Oneida Twp	DAVID LOGUE PROP	Statewide Health Standard	Leaded Gasoline	NO	03/06/2008	Soil
Huntingdon	Shirley Twp	FORMER EXXON MOBIL OIL CORP MT UNION TERMINAL #37-058	Statewide Health Standard		NO	03/16/2020	Groundwater

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Huntingdon	Shirley Twp	FORMER EXXON MOBIL OIL CORP MT UNION TERMINAL #37-058	Statewide Health Standard		NO	03/16/2020	Soil
Huntingdon	Smithfield Twp	ELCO	Site-Specific Standard	Chlorinated Solvents	<u>YES</u>	06/26/2003	Groundwater
Huntingdon	Smithfield Twp	ELCO	Site-Specific Standard	Chlorinated Solvents	<u>YES</u>	06/26/2003	Surface Water
Huntingdon	Smithfield Twp	ELCO	Site-Specific Standard	Inorganics	<u>YES</u>	06/26/2003	Soil
Huntingdon	Smithfield Twp	ELCO	Site-Specific Standard	Other Organics	<u>YES</u>	06/26/2003	Soil
Huntingdon	Smithfield Twp	ELCO	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	06/26/2003	Groundwater
Huntingdon	Smithfield Twp	ELCO	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	06/26/2003	Surface Water
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Huntingdon	Smithfield Twp	ELCO	Statewide Health Standard	Inorganics	<u>YES</u>	06/26/2003	Groundwater
Huntingdon	Smithfield Twp	ELCO	Statewide Health Standard	Inorganics	<u>YES</u>	06/26/2003	Soil
Huntingdon	Smithfield Twp	ELCO	Statewide Health Standard	Other Organics	<u>YES</u>	06/26/2003	Groundwater

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Huntingdon	Smithfield Twp	FEAGLEYS SPORTING GOODS	Statewide Health Standard	Kerosene	NO	06/14/2005	Soil
Huntingdon	Smithfield Twp	FEAGLEYS SPORTING GOODS	Statewide Health Standard	Unleaded Gasoline	NO	06/14/2005	Soil
Huntingdon	Tell Twp	BUCKEYE LAUREL PIPE LINE RIGHT OF WAY	Statewide Health Standard		NO	11/10/2009	Soil
Huntingdon	Tell Twp	BUCKEYE LAUREL PIPE LINE RIGHT OF WAY	Statewide Health Standard		NO	11/10/2009	Surface Water
Huntingdon	Tell Twp	BUCKEYE LAUREL PIPE LINE RIGHT OF WAY	Statewide Health Standard	Unleaded Gasoline	NO	11/10/2009	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Huntingdon	Three Springs Boro	MCCOY RES	Statewide Health Standard	Fuel Oil No 2	NO	03/10/2008	Groundwater
Huntingdon	Three Springs Boro	MCCOY RES	Statewide Health Standard	Fuel Oil No 2	NO	03/10/2008	Soil
Huntingdon	Warriors Mark Twp	NEW ENTERPRISE STONE & LIME CO. INC. -TYRONE QUARRY	Statewide Health Standard	Diesel Fuel	<u>YES</u>	06/19/2018	Soil

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Juniata	Fermanagh Twp	ZIMMERMAN DIESEL SPILL	Statewide Health Standard		NO	05/19/2020	Soil
Juniata	Lack Twp	CROSS KEYS CH OF GOD	Statewide Health Standard	Fuel Oil No 2	NO	05/25/2007	Soil
Juniata	Thompsontown Boro	PPL THOMPSONTOWN SUBSTA 254	Statewide Health Standard	PCB	NO	03/02/1999	Soil
Juniata	Walker Twp	WALKER ELEMENTARY SCHOOL - HEATING OIL SPILL	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	07/26/2018	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Juniata	Walker Twp	WALKER ELEMENTARY SCHOOL - HEATING OIL SPILL	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	07/26/2018	Soil
Mifflin	Armagh Twp	KILGORE FAC	Site-Specific Standard	Chlorinated Solvents	NO	07/07/1997	Groundwater
Mifflin	Armagh Twp	KILGORE FAC	Statewide Health Standard	Chlorinated Solvents	NO	07/07/1997	Soil
Mifflin	Armagh Twp	MIFFLIN CNTY SUBARU MOTORS	Statewide Health Standard	PAH	<u>YES</u>	10/24/2000	Groundwater

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Mifflin	Armagh Twp	MIFFLIN CNTY SUBARU MOTORS	Statewide Health Standard	PAH	<u>YES</u>	10/24/2000	Soil
Mifflin	Armagh Twp	MIFFLIN CNTY SUBARU MOTORS	Site-Specific Standard	Lead	<u>YES</u>	10/24/2000	Soil
Mifflin	Bratton Twp	CROSSON RES	Statewide Health Standard	Fuel Oil No 2	NO	04/29/2008	Soil
Mifflin	Burnham Boro	STD STEEL LLC	Site-Specific Standard		<u>YES</u>	10/04/2011	Groundwater
Mifflin	Burnham Boro	STD STEEL LLC	Statewide Health Standard		<u>YES</u>	12/06/2010	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Mifflin	Burnham Boro	STD STEEL LLC	Statewide Health Standard	Diesel Fuel	<u>YES</u>	10/22/2012	Soil
Mifflin	Burnham Boro	STD STEEL LLC	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	10/22/2012	Soil
Mifflin	Burnham Boro	STD STEEL LLC	Statewide Health Standard	Diesel Fuel	<u>YES</u>	10/22/2012	Groundwater
Mifflin	Burnham Boro	STD STEEL LLC	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	10/22/2012	Groundwater

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Mifflin	Decatur Twp	LEMACH FOUNDRY	Statewide Health Standard	Lead	NO	08/25/2000	Soil
Mifflin	Derry Twp	EDWARD RIDINGS PROP	Statewide Health Standard		NO	01/11/2019	Soil
Mifflin	Derry Twp	JEFF STEINBACH PROP	Statewide Health Standard	Fuel Oil No 2	NO	04/07/2010	Groundwater
Mifflin	Derry Twp	JEFF STEINBACH PROP	Statewide Health Standard	Fuel Oil No 2	NO	04/07/2010	Soil
Mifflin	Derry Twp	JOY CURRY RES FUEL OIL SPILL	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	08/05/2003	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Mifflin	Derry Twp	LEFEVRE & WATSON RESIDENTIAL RELEASE	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	01/31/2014	Soil
Mifflin	Derry Twp	LEWISTOWN ARMORY	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	12/28/2006	Groundwater
Mifflin	Derry Twp	LEWISTOWN ARMORY	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	12/28/2006	Soil

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Mifflin	Derry Twp	LEWISTOWN ARMORY	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	12/28/2006	Groundwater
Mifflin	Derry Twp	LEWISTOWN ARMORY	Statewide Health Standard	Unleaded Gasoline	<u>YES</u>	12/28/2006	Soil
Mifflin	Derry Twp	OHESSON SENIOR LIVING/CARE FACILITY - HEATING OIL SPILL	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	08/31/2017	Soil
Mifflin	Granville Twp	LEAR FORMERLY MASLAND LEWISTOWN	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	12/03/2002	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDICATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Mifflin	Granville Twp	LEAR FORMERLY MASLAND LEWISTOWN	Statewide Health Standard	Chlorinated Solvents	<u>YES</u>	12/03/2002	Soil
Mifflin	Granville Twp	LEAR FORMERLY MASLAND LEWISTOWN	Statewide Health Standard	Other Organics	<u>YES</u>	12/03/2002	Groundwater
Mifflin	Granville Twp	LEAR FORMERLY MASLAND LEWISTOWN	Statewide Health Standard	Other Organics	<u>YES</u>	12/03/2002	Soil

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Mifflin	Lewistown Boro	CVS STORE NO 1677 - FUEL OIL SPILL	Statewide Health Standard	Fuel Oil No 2	NO	07/12/2017	Soil
Mifflin	Lewistown Boro	CVS STORE NO 1677 - FUEL OIL SPILL	Statewide Health Standard	Inorganics	NO	07/12/2017	Soil
Mifflin	Lewistown Boro	MANN EDGE TERRACE	Site-Specific Standard	Inorganics	<u>YES</u>	02/14/2011	Groundwater
Mifflin	Lewistown Boro	MANN EDGE TERRACE	Site-Specific Standard	Inorganics	<u>YES</u>	02/14/2011	Soil
Mifflin	Lewistown Boro	MANN EDGE TERRACE	Site-Specific Standard	PAH	<u>YES</u>	02/14/2011	Groundwater
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Site-Specific Standard	Inorganics	NO	10/16/2003	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Site-Specific Standard	Inorganics	NO	10/16/2003	Soil
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Site-Specific Standard	Other Organics	NO	10/16/2003	Groundwater
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Site-Specific Standard	Other Organics	NO	10/16/2003	Soil
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Site-Specific Standard	PAH	NO	10/16/2003	Groundwater

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Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Site-Specific Standard	PAH	NO	10/16/2003	Soil
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Statewide Health Standard	Inorganics	NO	10/16/2003	Groundwater
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Statewide Health Standard	Inorganics	NO	10/16/2003	Soil
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Statewide Health Standard	Other Organics	NO	10/16/2003	Groundwater
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Statewide Health Standard	Other Organics	NO	10/16/2003	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Statewide Health Standard	PAH	NO	10/16/2003	Groundwater
Mifflin	Lewistown Boro	PENN FUEL GAS LEWISTOWN MGP	Statewide Health Standard	PAH	NO	10/16/2003	Soil
Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Statewide Health Standard	Diesel Fuel	<u>YES</u>	04/13/2001	Groundwater
Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Statewide Health Standard	Diesel Fuel	<u>YES</u>	04/13/2001	Soil

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Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Statewide Health Standard	Kerosene	<u>YES</u>	04/13/2001	Groundwater
Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Statewide Health Standard	Kerosene	<u>YES</u>	04/13/2001	Soil
Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	04/13/2001	Groundwater
Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Statewide Health Standard	Leaded Gasoline	<u>YES</u>	04/13/2001	Soil
Mifflin	Lewistown Boro	RAY BYLER PROP FORMER OIL TERM	Site-Specific Standard	Leaded Gasoline	<u>YES</u>	04/13/2001	Groundwater
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Mifflin	Oliver Twp	LEE KNEPP RES - FUEL OIL SPILL	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	03/07/2016	Soil
Mifflin	Oliver Twp	WALTER STEIN RES	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	10/03/2006	Soil
Mifflin	Union Twp	CNH AMERICA LLC	Site-Specific Standard		NO	03/12/2024	
Mifflin	Wayne Twp	BRIAN RITCHEY RES FORMERLY OLGA KOHL RES	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	05/05/2015	Groundwater

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Mifflin	Wayne Twp	BRIAN RITCHEY RES FORMERLY OLGA KOHL RES	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	05/05/2015	Soil
Perry	Buffalo Twp	GARY HOKE RES HEATING OIL RELEASE	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	10/08/2014	Soil
Perry	Greenwood Twp	MILLERSTOWN MUNICIPAL AUTH WWTP	Statewide Health Standard		NO	11/21/2012	Groundwater
Perry	Greenwood Twp	MILLERSTOWN MUNICIPAL AUTH WWTP	Statewide Health Standard		NO	11/21/2012	Soil
Perry	Liverpool Twp	RICHARD BEERS RES	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	11/21/2017	Soil
COUNTY NAME	MUNICIPALITY NAME	SITE NAME	REMEDIATION STANDARD	CONTAMINANT CATEGORY	ACTIVITY & USE LIMITATION	APPROVAL DATE	MEDIA
Perry	Miller Twp	REBECCA KICHMAN PROP	Statewide Health Standard	Fuel Oil No 2	<u>YES</u>	09/19/2017	Soil
Perry	Newport Boro	357-359 N 4TH ST	Statewide Health Standard		NO	07/15/2010	Soil
Perry	Oliver Twp	KILHEFNER RESIDENCE KEROSENE SPILL	Statewide Health Standard	Kerosene	NO	06/24/2009	Soil

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Perry	Oliver Twp	PENNSY SUPPLY NEWPORT QUARRY - MINERAL INSULATING OIL	Statewide Health Standard	PCB	NO	06/16/2023	Soil
Perry	Toboyne Twp	BARRICK & STEWART MILK HAULING DIESEL FUEL RELEASE	Statewide Health Standard	Diesel Fuel	<u>YES</u>	01/28/2015	Soil
Perry	Tuscarora Twp	ELLIS RES FUEL OIL RELEASE	Statewide Health Standard	Fuel Oil No 2	NO	04/20/2010	Groundwater
Perry	Tuscarora Twp	ELLIS RES FUEL OIL RELEASE	Statewide Health Standard	Fuel Oil No 2	NO	04/20/2010	Soil

SITES IN PROGRESS

COUNTY NAME	MUNICIPALITY NAME	FACILITY ID	SITE NAME	LRP ACTIVITY #	NIR RECEIVED DATE	REMEDIATION STANDARD	CONTAMINANT CATEGORY	MEDIA
Bedford	Bedford Twp	818584	SAC OIL	50536	05/18/2017	Site-Specific Standard		Groundwater
Bedford	Bedford Twp	818584	SAC OIL	50536	05/18/2017	Site-Specific Standard		Soil
Bedford	Hyndman Boro	825112	CSXT HYNDMAN DERAILMENT SITE	51670	03/15/2018	Site-Specific Standard		Soil
Blair	Allegheny Twp	641514	UNIVAR USA INC ALTOONA FACILITY	51751	04/04/2018	Site-Specific Standard	Chlorinated Solvents	Groundwater

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Blair	Allegheny Twp	641514	UNIVAR USA INC ALTOONA FACILITY	51751	04/04/2018	Site-Specific Standard	Chlorinated Solvents	Soil
Blair	Allegheny Twp	641514	UNIVAR USA INC ALTOONA FACILITY	51751	04/04/2018	Site-Specific Standard	PAH	Groundwater
Blair	Allegheny Twp	641514	UNIVAR USA INC ALTOONA FACILITY	51751	04/04/2018	Site-Specific Standard	PAH	Soil
Blair	Altoona City	679255	FORMER HUCKS FASTENER FAC	36352	04/05/2006	Statewide Health Standard		Groundwater
Blair	Altoona City	679255	FORMER HUCKS FASTENER FAC	36352	04/05/2006	Statewide Health Standard		Soil
Blair	Altoona City	871835	PETERMANS GARAGE - PETROLEUM PROD RELEASE	59650	11/28/2023	Statewide Health Standard		Groundwater
COUNTY NAME	MUNICIPALITY NAME	FACILITY ID	SITE NAME	LRP ACTIVITY #	NIR RECEIVED DATE	REMEDATION STANDARD	CONTAMINANT CATEGORY	MEDIA
Blair	Altoona City	623445	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	51963	05/31/2018	Statewide Health Standard		Groundwater
Blair	Altoona City	623445	SILK MILL PROP INC / TITLEMAN WELFARE FUND PROP	51963	05/31/2018	Statewide Health Standard		Soil
Blair	Antis Twp	623465	PROCTOR SILEX	39832	12/12/2008	Site-Specific Standard		Groundwater

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Blair	Antis Twp	623465	PROCTOR SILEX	39832	12/12/2008	Site-Specific Standard		Soil
Blair	Blair Twp	814323	NORTH AMERICAN COMMUNICATIONS - NAC	49963	12/14/2016	Site-Specific Standard		Groundwater
Blair	Blair Twp	814323	NORTH AMERICAN COMMUNICATIONS - NAC	49963	12/14/2016	Site-Specific Standard		Soil
Blair	Duncansville Boro	838716	ANTIQUÉ DEPOT AND ADJACENT UNDEVELOPED PARCEL	54122	11/12/2019	Statewide Health Standard		Soil
Blair	Duncansville Boro	838716	ANTIQUÉ DEPOT AND ADJACENT UNDEVELOPED PARCEL	54123	11/12/2019	Site-Specific Standard		Groundwater
COUNTY NAME	MUNICIPALITY NAME	FACILITY ID	SITE NAME	LRP ACTIVITY #	NIR RECEIVED DATE	REMEDIATION STANDARD	CONTAMINANT CATEGORY	MEDIA
Blair	Duncansville Boro	727130	FL SMITHE MACH CO INC	41008	01/13/2010	Statewide Health Standard		Soil
Blair	Frankstown Twp	862396	BRUSH MTN RD - ARSENIC	58269	11/08/2022	Site-Specific Standard		
Blair	Frankstown Twp	770595	JOYCE SMITH EGER PROP / OTTS HEATING SVC	45701	10/25/2013	Statewide Health Standard		Soil
Blair	Hollidaysburg Boro	827098	TK'S SUBS & SIX PACK	52000	06/11/2018	Site-Specific Standard		Groundwater

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Blair	Hollidaysburg Boro	827098	TK'S SUBS & SIX PACK	52000	06/11/2018	Site-Specific Standard		Soil
Blair	Martinsburg Boro	827479	FORMER MARTINSBURG RV	52076	06/28/2018	Site-Specific Standard	Leaded Gasoline	Groundwater
Blair	Martinsburg Boro	827479	FORMER MARTINSBURG RV	52076	06/28/2018	Site-Specific Standard	Leaded Gasoline	Soil
Blair	Martinsburg Boro	827479	FORMER MARTINSBURG RV	52076	06/28/2018	Site-Specific Standard	Used Motor Oil	Groundwater
Blair	Martinsburg Boro	827479	FORMER MARTINSBURG RV	52076	06/28/2018	Site-Specific Standard	Used Motor Oil	Soil
Huntingdon	Brady Twp	731375	US SILICA	41364	05/10/2010	Site-Specific Standard	Diesel Fuel	Groundwater
COUNTY NAME	MUNICIPALITY NAME	FACILITY ID	SITE NAME	LRP ACTIVITY #	NIR RECEIVED DATE	REMEDIATION STANDARD	CONTAMINANT CATEGORY	MEDIA
Huntingdon	Brady Twp	731375	US SILICA	41364	05/10/2010	Site-Specific Standard	Diesel Fuel	Soil
Huntingdon	Clay Twp	865314	SPRING FARMS ELEM SCH - HEATING OIL REL	58717	03/07/2023	Statewide Health Standard		Groundwater
Huntingdon	Clay Twp	865314	SPRING FARMS ELEM SCH - HEATING OIL REL	58717	03/07/2023	Statewide Health Standard		Soil
Huntingdon	Franklin Twp	864648	THE COCA COLA CO - VOC CONTAMINANTS	58605	02/15/2023	Statewide Health Standard		Groundwater

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Huntingdon	Franklin Twp	864648	THE COCA COLA CO - VOC CONTAMINANTS	58605	02/15/2023	Statewide Health Standard		Soil
Huntingdon	Huntingdon Boro	622515	HUNTINGDON FORMER MGP SITE	37231	11/13/2006	Site-Specific Standard		Groundwater
Huntingdon	Huntingdon Boro	622515	HUNTINGDON FORMER MGP SITE	37231	11/13/2006	Site-Specific Standard		Soil
Huntingdon	Mount Union Boro	622521	MT UNION CREOSOTE	47487	02/11/2015	Site-Specific Standard		Groundwater
Huntingdon	Mount Union Boro	622521	MT UNION CREOSOTE	47487	02/11/2015	Site-Specific Standard		Surface Water
Juniata	Delaware Twp	825380	OAKHURST MANOR	51699	03/20/2018	Site-Specific Standard		Soil
Juniata	Fayette Twp	874283	CHARLENE KANE PROP - HEATING OIL RELEASE	59909	03/19/2024	Statewide Health Standard		Soil
COUNTY NAME	MUNICIPALITY NAME	FACILITY ID	SITE NAME	LRP ACTIVITY #	NIR RECEIVED DATE	REMEDIATION STANDARD	CONTAMINANT CATEGORY	MEDIA
Juniata	Fayette Twp	874147	HOWER SHARON - NO. 2 HEATING OIL RELEASE	59880		Statewide Health Standard		Soil
Mifflin	Armagh Twp	715315	EASTERN IND NAGINEY QUARRY	39860	12/19/2008	Statewide Health Standard		Soil
Mifflin	Armagh Twp	744149	VIRGINIA TRESSLER PROPERTY - HEATING OIL SPILL	42758	08/04/2011	Statewide Health Standard		Groundwater
Mifflin	Armagh Twp	744149	VIRGINIA TRESSLER PROPERTY - HEATING OIL SPILL	42758	08/04/2011	Statewide Health Standard		Soil

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Mifflin	Granville Twp	666427	MIFFLIN CNTY IND DEV CORP RECREATIONAL SITE	35061	04/19/2005	Site-Specific Standard		Groundwater
Mifflin	Granville Twp	666427	MIFFLIN CNTY IND DEV CORP RECREATIONAL SITE	35061	04/19/2005	Site-Specific Standard		Soil
Mifflin	Union Twp	868185	FORMER CNH INDL AMER LLC PAINT DISPOSAL AREA - METALS REL	59082	07/14/2023	Statewide Health Standard		Groundwater
Mifflin	Union Twp	868185	FORMER CNH INDL AMER LLC PAINT DISPOSAL AREA - METALS REL	59082	07/14/2023	Statewide Health Standard		Soil

<https://www.dep.pa.gov/Business/Land/LandRecycling/Pages/Program-Results.aspx>

APPENDIX I. TOXIC RELEASE INVENTORY FACILITIES

Facility ID	Facility Name	City	County
16602FDRTD6THAV	ALPHA ASSEMBLY SOLUTIONS	ALTOONA	BLAIR
1660WLTNTRBURNS	ALTOONA TERMINALS - DE LLC/ALTOONA TERMINAL	ALTOONA	BLAIR
16601MRWYN3701B	AMERWAY INC	ALTOONA	BLAIR
16673PPLTN100PA	APPVION OPERATIONS INC	ROARING SPRING	BLAIR
15522WSTNGRTS30	BEDFORD MATERIALS CO INC	MANNS CHOICE	BEDFORD
15522BDFRDRD2BO	BEDFORD REINFORCED PLASTICS INC	BEDFORD	BEDFORD
17066BNNYFRT522	BONNEY FORGE CORP	MOUNT UNION	HUNTINGDON
1552WCPTVR6CMME	CAPTIVEAIRE SYSTEMS INC	BEDFORD	BEDFORD
16673YNGSXFREDE	CARGILL FEED & NUTRITION MARTINSBURG	MARTINSBURG	BLAIR
1704WXCLHM1642S	CHAMPION HOME BUILDERS	LIVERPOOL	JUNIATA
16686CHCGRINDUS	CHICAGO RIVET & MACHINE CO	TYRONE	BLAIR
17044MRLTT30IND	CLAYTON LEWISTOWN	LEWISTOWN	MIFFLIN
15521CRTVPPLEAS	CREATIVE PULTRUSIONS INC	ALUM BANK	BEDFORD
1552WCRNMT172FR	CRONIMET SPECIALTY METALS USA INC	BEDFORD	BEDFORD
15522HDSTRSUNNY	DEFIANCE METAL PRODUCTS	BEDFORD	BEDFORD
1660WDPTFH32ECH	DEPT OF HOMELAND SECURITY	ALTOONA	BLAIR
17059MPRKSRD3RI	EMPIRE KOSHER POULTRY INC	MIFFLINTOWN	JUNIATA
1668WFRTDR13985	FORT DEARBORN CO/TYRONE	TYRONE	BLAIR
1552WJLGND45SUN	JLG INDUSTRIES INC. - SUNNYSIDE FACILITY	BEDFORD	BEDFORD
15522KNMTRD1CH	KENNAMETAL BEDFORD CASTING PLANT	BEDFORD	BEDFORD
17066WNSCRUSROU	NOV FIBER GLASS SYSTEMS - CONTAINMENT SOLUTIONS	MOUNT UNION	HUNTINGDON
17044HDCRP23IND	OVERHEAD DOOR CORP-PENNSYLVANIA DIV	LEWISTOWN	MIFFLIN
17084PHLPS1ECHO	PHILIPS ULTRASOUND INC.	REEDSVILLE	MIFFLIN
15522RXHTT7CORP	REX HEAT TREAT-BEDFORD INC	BEDFORD	BEDFORD
16603SMLLTSPRIN	ST PRODUCTS LLC (DBA SMALL TUBE PRODUCTS)	DUNCANSVILLE	BLAIR
17009STNDR500WA	STANDARD STEEL LLC	BURNHAM	MIFFLIN
17049HPMCGPARTE	STELLA - JONES CORP	MC ALISTERVILLE	JUNIATA

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Facility ID	Facility Name	City	County
16601PNNJC4601C	SYNTHEX ORGANICS LLC	ALTOONA	BLAIR
16603VDRRT6THAV	VEEDER-ROOT CO	DUNCANSVILLE	BLAIR
16686QLTYCINDUS	W R GRACE & CO	TYRONE	BLAIR
Source: US EPA			

APPENDIX J. IMPAIRED STREAMS

Stream Name	Reach Code	Aquatic Use	Source-Cause
Implertown Run	2050303000337	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303000556	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303000561	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303000562	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001932	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001941	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001942	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001960	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001984	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001991	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303001996	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002009	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002029	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002036	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002042	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002044	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002046	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002052	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002054	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002056	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002057	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002058	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002064	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002065	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002072	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002077	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002090	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION

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	2050303002126	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002128	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050303002144	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Spruce Creek	2050302000254	Aquatic Life	AGRICULTURE - SILTATION
Spruce Creek	2050302000255	Aquatic Life	AGRICULTURE - SILTATION
Warriors Mark Run	2050302000568	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Warriors Mark Run	2050302000571	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Warriors Mark Run	2050302000572	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000573	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Warriors Mark Run	2050302000574	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000575	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000909	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000914	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000915	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000917	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000932	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000942	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000945	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION

	2050302000954	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000958	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000969	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000978	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000995	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001583	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Kettle Creek	2050302000812	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION
Spring Run	2050302000093	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050304001529	Aquatic Life	AGRICULTURE - SILTATION
	2050304001531	Aquatic Life	AGRICULTURE - SILTATION
	2050304001532	Aquatic Life	AGRICULTURE - SILTATION
	2050304001533	Aquatic Life	AGRICULTURE - SILTATION
	2050304001534	Aquatic Life	AGRICULTURE - SILTATION
	2050304001539	Aquatic Life	AGRICULTURE - SILTATION
	2050304001540	Aquatic Life	AGRICULTURE - SILTATION
	2050304001541	Aquatic Life	AGRICULTURE - SILTATION
	2050304001097	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001098	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001099	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001100	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001101	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001543	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001096	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001102	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001553	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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Mill Run	2050302000374	Aquatic Life	RURAL (RESIDENTIAL AREAS) - SILTATION
	2050302000859	Aquatic Life	RURAL (RESIDENTIAL AREAS) - SILTATION
Sugar Run	2050302000388	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - METALS
Scotch Gap Run	2050302000387	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - SILTATION
Burgoon Run	2050302003335	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - SILTATION
	2050302000280	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050302000860	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050302000861	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050302001693	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050302001725	Aquatic Life	ACID MINE DRAINAGE - PH
	2050302001698	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - SILTATION
Spencer Run	2050302000389	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
Spencer Run	2050302000391	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050304001103	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
	2050304001556	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
	2050304001151	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001152	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001153	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001154	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001155	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001156	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION

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	2050304001971	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001979	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304001997	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
	2050304002025	Aquatic Life	AGRICULTURE - FLOW REGIME MODIFICATION ; AGRICULTURE - SILTATION
Kishacoquillas Creek	2050304001121	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Kishacoquillas Creek	2050304001122	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Kishacoquillas Creek	2050304001123	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Soft Run	2050304001138	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS ; AGRICULTURE - HABITAT ALTERATIONS
Soft Run	2050304001139	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS ; AGRICULTURE - HABITAT ALTERATIONS
	2050304001140	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS ; AGRICULTURE - HABITAT ALTERATIONS
	2050304001846	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS ; AGRICULTURE - HABITAT ALTERATIONS
	2050304001848	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS ; AGRICULTURE - HABITAT ALTERATIONS
	2050304001135	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001136	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001144	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001145	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001146	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001940	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001954	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Little Kishacoquillas Creek	2050304001955	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001958	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Little Kishacoquillas Creek	2050304001965	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304002005	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS

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	2050304003237	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050302000502	Aquatic Life	AGRICULTURE - SILTATION
Greens Valley Stream	2050304001108	Aquatic Life	ATMOSPHERIC DEPOSITION - PH
Lingle Stream	2050304001502	Aquatic Life	ATMOSPHERIC DEPOSITION - PH
Lingle Stream	2050304003205	Aquatic Life	ATMOSPHERIC DEPOSITION - PH
Lingle Stream	2050304003209	Aquatic Life	ATMOSPHERIC DEPOSITION - PH
Lingle Stream	2050304003210	Aquatic Life	ATMOSPHERIC DEPOSITION - PH
Muddy Run	2050304000762	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Muddy Run	2050304000763	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304000764	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001771	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050302000331	Aquatic Life	HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED) - SILTATION
	2050302000332	Aquatic Life	HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED) - SILTATION
	2050302000333	Aquatic Life	HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED) - SILTATION
	2050302001366	Aquatic Life	HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED) - SILTATION
Kishacoquillas Creek	2050304001120	Aquatic Life	AGRICULTURE - SILTATION ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
	2050304001148	Aquatic Life	AGRICULTURE - SILTATION
	2050304001149	Aquatic Life	AGRICULTURE - SILTATION
	2050304002200	Aquatic Life	AGRICULTURE - SILTATION
Kishacoquillas Creek	2050304001124	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Kishacoquillas Creek	2050304001125	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001147	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001150	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050304002056	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002094	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002116	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Kishacoquillas Creek	2050304003246	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Gregory Run	2050302000688	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Gregory Run	2050302000689	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Gregory Run	2050302000690	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Little Lost Creek	2050304001247	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Little Lost Creek	2050304001248	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001249	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001614	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001615	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001621	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Plum Creek	2050302000474	Aquatic Life	STREAMBANK MODIFICATIONS/DESTABILIZATION - SILTATION ; HIGHWAY/ROAD/BRIDGE RUNOFF (NON-CONSTRUCTION RELATED) - SILTATION
Frankstown Branch Juniata River	2050302000113	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000114	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000115	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000116	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
	2050302000119	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)

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	2050302000120	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000121	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000122	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000123	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000124	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
	2050302000496	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302000497	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
	2050302001809	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
	2050302001814	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
Frankstown Branch Juniata River	2050302001828	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)
	2050303000519	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; RURAL (RESIDENTIAL AREAS) - NUTRIENTS
	2050303002346	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; RURAL (RESIDENTIAL AREAS) - NUTRIENTS
	2050303002364	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; RURAL (RESIDENTIAL AREAS) - NUTRIENTS
	2050303002377	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; RURAL (RESIDENTIAL AREAS) - NUTRIENTS

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	2050303002387	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; RURAL (RESIDENTIAL AREAS) - NUTRIENTS
Little Kishacoquillas Creek	2050304001131	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; AGRICULTURE - SILTATION ; URBAN RUNOFF/STORM SEWERS - HABITAT ALTERATIONS ; AGRICULTURE - NUTRIENTS ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
Little Kishacoquillas Creek	2050304001132	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; AGRICULTURE - SILTATION ; URBAN RUNOFF/STORM SEWERS - HABITAT ALTERATIONS ; AGRICULTURE - NUTRIENTS ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
Little Kishacoquillas Creek	2050304001133	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; AGRICULTURE - SILTATION ; URBAN RUNOFF/STORM SEWERS - HABITAT ALTERATIONS ; AGRICULTURE - NUTRIENTS ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
	2050304001137	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; AGRICULTURE - SILTATION ; URBAN RUNOFF/STORM SEWERS - HABITAT ALTERATIONS ; AGRICULTURE - NUTRIENTS ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
	2050304001764	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; AGRICULTURE - SILTATION ; URBAN RUNOFF/STORM SEWERS - HABITAT ALTERATIONS ; AGRICULTURE - NUTRIENTS ; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION
	2050304001141	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001142	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001143	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001885	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001894	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001903	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001918	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Little Kishacoquillas Creek	2050304003236	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Wolf Run	2050304001546	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304003212	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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Wolf Run	2050304003213	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Hungry Run	2050304000432	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Hungry Run	2050304000433	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Hungry Run	2050304000434	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001074	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050304001653	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
Belltown Run	2050304001225	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; SILVICULTURE ACTIVITIES - SILTATION
	2050304001250	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001662	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001661	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001700	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001715	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Hungry Run	2050304000431	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001078	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001657	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001658	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001659	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001175	Aquatic Life	AGRICULTURE - SILTATION ; CONSTRUCTION - SILTATION
Schweyer Run	2050304000418	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
Schweyer Run	2050304000419	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION

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Schweyer Run	2050304000420	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
	2050304001265	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
	2050304001266	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
	2050304001737	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
	2050304001754	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
	2050304001759	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; CONSTRUCTION - SILTATION
	2050304001075	Aquatic Life	AGRICULTURE - SILTATION
	2050304001076	Aquatic Life	AGRICULTURE - SILTATION
	2050304001077	Aquatic Life	AGRICULTURE - SILTATION
	2050304001629	Aquatic Life	AGRICULTURE - SILTATION
	2050304001072	Aquatic Life	URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION ; URBAN RUNOFF/STORM SEWERS - SILTATION
	2050304001073	Aquatic Life	URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION ; URBAN RUNOFF/STORM SEWERS - SILTATION
Spring Run	2050304001036	Aquatic Life	AGRICULTURE - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Town Run	2050304001039	Aquatic Life	AGRICULTURE - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION

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	2050304002189	Aquatic Life	AGRICULTURE - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304002215	Aquatic Life	AGRICULTURE - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Jacks Creek	2050304001176	Fish Consumption	SOURCE UNKNOWN - POLYCHLORINATED BIPHENYLS (PCBS)
Jacks Creek	2050304001177	Fish Consumption	SOURCE UNKNOWN - POLYCHLORINATED BIPHENYLS (PCBS)
Jacks Creek	2050304001178	Fish Consumption	SOURCE UNKNOWN - POLYCHLORINATED BIPHENYLS (PCBS)
Jacks Creek	2050304001179	Fish Consumption	SOURCE UNKNOWN - POLYCHLORINATED BIPHENYLS (PCBS)
Jacks Creek	2050304001180	Fish Consumption	SOURCE UNKNOWN - POLYCHLORINATED BIPHENYLS (PCBS)
Jacks Creek	2050304001181	Fish Consumption	SOURCE UNKNOWN - POLYCHLORINATED BIPHENYLS (PCBS)
Cumberland Valley Run	2050303000330	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
Cumberland Valley Run	2050303000331	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
Cumberland Valley Run	2050303000332	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303000781	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303000782	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002361	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002403	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002406	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002413	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002433	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002453	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002464	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002465	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002471	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002475	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002478	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002490	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002495	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002499	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303002517	Aquatic Life	AGRICULTURE - SILTATION ; RURAL (RESIDENTIAL AREAS) - SILTATION
	2050303000695	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - NUTRIENTS

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	2050303000696	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - NUTRIENTS
	2050303000697	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - NUTRIENTS
	2050303002287	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - NUTRIENTS
	2050303002304	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - NUTRIENTS
Spicer Brook	2050303000338	Aquatic Life	AGRICULTURE - SILTATION
	2050303000721	Aquatic Life	AGRICULTURE - SILTATION
Spicer Brook	2050303000722	Aquatic Life	AGRICULTURE - SILTATION
Spicer Brook	2050303000723	Aquatic Life	AGRICULTURE - SILTATION
	2050303000724	Aquatic Life	AGRICULTURE - SILTATION
	2050303002457	Aquatic Life	AGRICULTURE - SILTATION
	2050303002468	Aquatic Life	AGRICULTURE - SILTATION
	2050303002484	Aquatic Life	AGRICULTURE - SILTATION
	2050303002502	Aquatic Life	AGRICULTURE - SILTATION
	2050303002524	Aquatic Life	AGRICULTURE - SILTATION
	2050303002538	Aquatic Life	AGRICULTURE - SILTATION
Bloody Run	2050303000525	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION
Beaver Creek	2050303000024	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000026	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000027	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000028	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000029	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000030	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000031	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000032	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303000033	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000898	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000899	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000900	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000901	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000902	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000903	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050303000904	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000905	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000906	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000907	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000908	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000909	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000910	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001692	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001693	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001719	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001729	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001738	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001754	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001760	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001762	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001763	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001764	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001765	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001767	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001768	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001773	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001777	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001781	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001784	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001785	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001787	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001789	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001792	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001793	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001794	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001798	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050303001799	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001800	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001801	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001804	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001805	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001806	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001807	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001808	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001809	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001812	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001813	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001814	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001817	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001820	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001821	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001822	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001823	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001828	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001829	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001832	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001833	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001835	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Beaver Creek	2050303001836	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001838	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001841	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001842	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001844	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001852	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001856	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001862	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001863	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050303001866	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001875	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001876	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001881	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001884	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001888	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001893	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001899	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001906	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001911	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001912	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001913	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001920	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001928	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Yellow Creek	2050303000017	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000018	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000019	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000020	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000021	Aquatic Life	AGRICULTURE - SILTATION
	2050303000022	Aquatic Life	AGRICULTURE - SILTATION
	2050303000023	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000341	Aquatic Life	AGRICULTURE - SILTATION
	2050303000865	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000866	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000867	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000868	Aquatic Life	AGRICULTURE - SILTATION
	2050303000870	Aquatic Life	AGRICULTURE - SILTATION
	2050303000871	Aquatic Life	AGRICULTURE - SILTATION
	2050303000872	Aquatic Life	AGRICULTURE - SILTATION
	2050303000873	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303000874	Aquatic Life	AGRICULTURE - SILTATION

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Yellow Creek	2050303000970	Aquatic Life	AGRICULTURE - SILTATION
	2050303000971	Aquatic Life	AGRICULTURE - SILTATION
Yellow Creek	2050303000981	Aquatic Life	AGRICULTURE - SILTATION
	2050303001002	Aquatic Life	AGRICULTURE - SILTATION
	2050303001372	Aquatic Life	AGRICULTURE - SILTATION
	2050303001380	Aquatic Life	AGRICULTURE - SILTATION
	2050303001385	Aquatic Life	AGRICULTURE - SILTATION
	2050303001398	Aquatic Life	AGRICULTURE - SILTATION
	2050303001401	Aquatic Life	AGRICULTURE - SILTATION
	2050303001403	Aquatic Life	AGRICULTURE - SILTATION
	2050303001407	Aquatic Life	AGRICULTURE - SILTATION
	2050303001412	Aquatic Life	AGRICULTURE - SILTATION
	2050303001420	Aquatic Life	AGRICULTURE - SILTATION
	2050303001432	Aquatic Life	AGRICULTURE - SILTATION
	2050303001461	Aquatic Life	AGRICULTURE - SILTATION
	2050303001463	Aquatic Life	AGRICULTURE - SILTATION
	2050303001470	Aquatic Life	AGRICULTURE - SILTATION
	2050303001473	Aquatic Life	AGRICULTURE - SILTATION
	2050303001484	Aquatic Life	AGRICULTURE - SILTATION
	2050303001486	Aquatic Life	AGRICULTURE - SILTATION
	2050303001488	Aquatic Life	AGRICULTURE - SILTATION
	2050303001520	Aquatic Life	AGRICULTURE - SILTATION
	2050303001531	Aquatic Life	AGRICULTURE - SILTATION
	2050303001578	Aquatic Life	AGRICULTURE - SILTATION
	2050303001588	Aquatic Life	AGRICULTURE - SILTATION
	2050303001656	Aquatic Life	AGRICULTURE - SILTATION
	2050303001677	Aquatic Life	AGRICULTURE - SILTATION
	2050303001685	Aquatic Life	AGRICULTURE - SILTATION
	2050303001747	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303000878	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303000879	Aquatic Life	AGRICULTURE - SILTATION

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	2050303000880	Aquatic Life	AGRICULTURE - SILTATION
	2050303000881	Aquatic Life	AGRICULTURE - SILTATION
	2050303000882	Aquatic Life	AGRICULTURE - SILTATION
	2050303000883	Aquatic Life	AGRICULTURE - SILTATION
	2050303000884	Aquatic Life	AGRICULTURE - SILTATION
	2050303000885	Aquatic Life	AGRICULTURE - SILTATION
	2050303000886	Aquatic Life	AGRICULTURE - SILTATION
	2050303000887	Aquatic Life	AGRICULTURE - SILTATION
	2050303000888	Aquatic Life	AGRICULTURE - SILTATION
	2050303000889	Aquatic Life	AGRICULTURE - SILTATION
	2050303000890	Aquatic Life	AGRICULTURE - SILTATION
	2050303000892	Aquatic Life	AGRICULTURE - SILTATION
	2050303001424	Aquatic Life	AGRICULTURE - SILTATION
	2050303001433	Aquatic Life	AGRICULTURE - SILTATION
	2050303001434	Aquatic Life	AGRICULTURE - SILTATION
	2050303001435	Aquatic Life	AGRICULTURE - SILTATION
	2050303001436	Aquatic Life	AGRICULTURE - SILTATION
	2050303001440	Aquatic Life	AGRICULTURE - SILTATION
	2050303001448	Aquatic Life	AGRICULTURE - SILTATION
	2050303001449	Aquatic Life	AGRICULTURE - SILTATION
	2050303001450	Aquatic Life	AGRICULTURE - SILTATION
	2050303001452	Aquatic Life	AGRICULTURE - SILTATION
	2050303001455	Aquatic Life	AGRICULTURE - SILTATION
	2050303001458	Aquatic Life	AGRICULTURE - SILTATION
	2050303001462	Aquatic Life	AGRICULTURE - SILTATION
	2050303001465	Aquatic Life	AGRICULTURE - SILTATION
	2050303001466	Aquatic Life	AGRICULTURE - SILTATION
	2050303001472	Aquatic Life	AGRICULTURE - SILTATION
	2050303001480	Aquatic Life	AGRICULTURE - SILTATION
	2050303001481	Aquatic Life	AGRICULTURE - SILTATION
	2050303001483	Aquatic Life	AGRICULTURE - SILTATION

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	2050303001497	Aquatic Life	AGRICULTURE - SILTATION
	2050303001515	Aquatic Life	AGRICULTURE - SILTATION
	2050303001516	Aquatic Life	AGRICULTURE - SILTATION
	2050303001527	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303001528	Aquatic Life	AGRICULTURE - SILTATION
	2050303001532	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303001536	Aquatic Life	AGRICULTURE - SILTATION
	2050303001548	Aquatic Life	AGRICULTURE - SILTATION
	2050303001556	Aquatic Life	AGRICULTURE - SILTATION
	2050303001566	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303001568	Aquatic Life	AGRICULTURE - SILTATION
	2050303001572	Aquatic Life	AGRICULTURE - SILTATION
	2050303001574	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303001575	Aquatic Life	AGRICULTURE - SILTATION
	2050303001577	Aquatic Life	AGRICULTURE - SILTATION
	2050303001579	Aquatic Life	AGRICULTURE - SILTATION
	2050303001581	Aquatic Life	AGRICULTURE - SILTATION
	2050303001585	Aquatic Life	AGRICULTURE - SILTATION
	2050303001586	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303001587	Aquatic Life	AGRICULTURE - SILTATION
	2050303001592	Aquatic Life	AGRICULTURE - SILTATION
	2050303001600	Aquatic Life	AGRICULTURE - SILTATION
Potter Creek	2050303001601	Aquatic Life	AGRICULTURE - SILTATION
	2050303001602	Aquatic Life	AGRICULTURE - SILTATION
	2050303001604	Aquatic Life	AGRICULTURE - SILTATION
	2050303001605	Aquatic Life	AGRICULTURE - SILTATION
	2050303001608	Aquatic Life	AGRICULTURE - SILTATION
	2050303001611	Aquatic Life	AGRICULTURE - SILTATION
	2050303001615	Aquatic Life	AGRICULTURE - SILTATION
	2050303001616	Aquatic Life	AGRICULTURE - SILTATION
	2050303001624	Aquatic Life	AGRICULTURE - SILTATION

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	2050303001626	Aquatic Life	AGRICULTURE - SILTATION
	2050303001629	Aquatic Life	AGRICULTURE - SILTATION
	2050303001630	Aquatic Life	AGRICULTURE - SILTATION
	2050303001639	Aquatic Life	AGRICULTURE - SILTATION
	2050303001647	Aquatic Life	AGRICULTURE - SILTATION
	2050303001659	Aquatic Life	AGRICULTURE - SILTATION
	2050303001662	Aquatic Life	AGRICULTURE - SILTATION
	2050303001675	Aquatic Life	AGRICULTURE - SILTATION
Three Springs Run	2050303000893	Aquatic Life	AGRICULTURE - SILTATION
	2050303000894	Aquatic Life	AGRICULTURE - SILTATION
Three Springs Run	2050303000895	Aquatic Life	AGRICULTURE - SILTATION
Three Springs Run	2050303000896	Aquatic Life	AGRICULTURE - SILTATION
	2050303000897	Aquatic Life	AGRICULTURE - SILTATION
	2050303001618	Aquatic Life	AGRICULTURE - SILTATION
	2050303001638	Aquatic Life	AGRICULTURE - SILTATION
	2050303001642	Aquatic Life	AGRICULTURE - SILTATION
	2050303001652	Aquatic Life	AGRICULTURE - SILTATION
	2050303001663	Aquatic Life	AGRICULTURE - SILTATION
	2050303001664	Aquatic Life	AGRICULTURE - SILTATION
	2050303001670	Aquatic Life	AGRICULTURE - SILTATION
	2050303001680	Aquatic Life	AGRICULTURE - SILTATION
	2050303001687	Aquatic Life	AGRICULTURE - SILTATION
	2050303001690	Aquatic Life	AGRICULTURE - SILTATION
	2050303001694	Aquatic Life	AGRICULTURE - SILTATION
	2050303001697	Aquatic Life	AGRICULTURE - SILTATION
	2050303001709	Aquatic Life	AGRICULTURE - SILTATION
	2050303001712	Aquatic Life	AGRICULTURE - SILTATION
	2050303001714	Aquatic Life	AGRICULTURE - SILTATION
	2050303001717	Aquatic Life	AGRICULTURE - SILTATION
	2050303001718	Aquatic Life	AGRICULTURE - SILTATION
	2050303001743	Aquatic Life	AGRICULTURE - SILTATION

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	2050303001751	Aquatic Life	AGRICULTURE - SILTATION
Three Springs Run	2050303001756	Aquatic Life	AGRICULTURE - SILTATION
	2050303001766	Aquatic Life	AGRICULTURE - SILTATION
	2050303001771	Aquatic Life	AGRICULTURE - SILTATION
Hickory Bottom Creek	2050303000858	Aquatic Life	AGRICULTURE - SILTATION
Hickory Bottom Creek	2050303000859	Aquatic Life	AGRICULTURE - SILTATION
Hickory Bottom Creek	2050303000860	Aquatic Life	AGRICULTURE - SILTATION
Hickory Bottom Creek	2050303000861	Aquatic Life	AGRICULTURE - SILTATION
	2050303000862	Aquatic Life	AGRICULTURE - SILTATION
	2050303000863	Aquatic Life	AGRICULTURE - SILTATION
	2050303001409	Aquatic Life	AGRICULTURE - SILTATION
	2050303001495	Aquatic Life	AGRICULTURE - SILTATION
	2050303001517	Aquatic Life	AGRICULTURE - SILTATION
	2050303001542	Aquatic Life	AGRICULTURE - SILTATION
	2050303001560	Aquatic Life	AGRICULTURE - SILTATION
	2050303001583	Aquatic Life	AGRICULTURE - SILTATION
	2050303001632	Aquatic Life	AGRICULTURE - SILTATION
	2050303003819	Aquatic Life	AGRICULTURE - SILTATION
Kittanning Run	2050302000383	Potable Water Supply	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - TOTAL DISSOLVED SOLIDS (TDS)
Kittanning Run	2050302001611	Potable Water Supply	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - TOTAL DISSOLVED SOLIDS (TDS)
Sandy Run	2050303000431	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Sandy Run	2050303000432	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001848	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001681	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001711	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001634	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001635	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001637	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303000318	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH

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Shreves Run	2050303000427	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303000428	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001673	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Pipers Run	2050303000846	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
	2050303001957	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
Coal Bank Run	2050303000417	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001504	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001439	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303000419	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001479	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303000978	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001464	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001485	Aquatic Life	ACID MINE DRAINAGE - PH
James Creek	2050303000973	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050303000974	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050303000975	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050303000976	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
James Creek	2050303001028	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050303001078	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050303001082	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050303000955	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - ORGANIC ENRICHMENT ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
Raystown Branch Juniata River	2050303004060	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - ORGANIC ENRICHMENT ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
	2050303001287	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Little Trough Creek	2050303000362	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS

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Wilson Run	2050303000398	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
Wilson Run	2050303000399	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
	2050303000400	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION ; GRAZING IN RIPARIAN OR SHORELINE ZONES - HABITAT ALTERATIONS
Little Trough Creek	2050303000363	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000364	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000365	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000366	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000367	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000368	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000369	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000370	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000371	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000372	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Little Trough Creek	2050303000373	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Miller Run	2050303000420	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - METALS
Miller Run	2050303000421	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - METALS
Miller Run	2050303000422	Aquatic Life	ACID MINE DRAINAGE - PH ; ACID MINE DRAINAGE - METALS
Bear Loop Run	2050302000159	Aquatic Life	ACID MINE DRAINAGE - METALS
Glenwhite Run	2050302000384	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001697	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302000386	Aquatic Life	ACID MINE DRAINAGE - METALS
Shoup Run	2050303000302	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Shoup Run	2050303000303	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Shoup Run	2050303000304	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Shoup Run	2050303000305	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Shoup Run	2050303000306	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Shoup Run	2050303000307	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Shoup Run	2050303000308	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH

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Shoup Run	2050303000309	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
	2050303001471	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Sixmile Run	2050303000315	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Sixmile Run	2050303000316	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Sixmile Run	2050303000317	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Sixmile Run	2050303000429	Aquatic Life	ACID MINE DRAINAGE - METALS ; ACID MINE DRAINAGE - PH
Little Juniata River	2050302000089	Aquatic Life	MUNICIPAL POINT SOURCE DISCHARGES - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN
Little Juniata River	2050302000090	Aquatic Life	MUNICIPAL POINT SOURCE DISCHARGES - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN
Little Juniata River	2050302000091	Aquatic Life	MUNICIPAL POINT SOURCE DISCHARGES - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN
Little Juniata River	2050302000092	Aquatic Life	MUNICIPAL POINT SOURCE DISCHARGES - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN
Beaverdam Branch	2050302000165	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Beaverdam Branch	2050302000166	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Beaverdam Branch	2050302000167	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
	2050302000366	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
	2050302000367	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
	2050302000368	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS

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Beaverdam Branch	2050302000370	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Beaverdam Branch	2050302000371	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Beaverdam Branch	2050302000372	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Beaverdam Branch	2050302000373	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Beaverdam Branch	2050302000811	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
	2050302001842	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
	2050302001843	Aquatic Life	COMBINED SEWER OVERFLOWS - ORGANIC ENRICHMENT ; URBAN RUNOFF/STORM SEWERS - CAUSE UNKNOWN ; ACID MINE DRAINAGE - METALS
Burgoon Run	2050302000380	Aquatic Life	ACID MINE DRAINAGE - METALS
Glenwhite Run	2050302000382	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001696	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001708	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001710	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001712	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001713	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001714	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001715	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001717	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001718	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001721	Aquatic Life	ACID MINE DRAINAGE - METALS

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	2050302001722	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001723	Aquatic Life	ACID MINE DRAINAGE - METALS
	2050302001724	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001742	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001760	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302001783	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302003334	Aquatic Life	ACID MINE DRAINAGE - METALS
Burgoon Run	2050302003336	Aquatic Life	ACID MINE DRAINAGE - METALS
Halter Creek	2050302000213	Aquatic Life	URBAN RUNOFF/STORM SEWERS - TOTAL SUSPENDED SOLIDS (TSS) ; SOURCE UNKNOWN - CAUSE UNKNOWN
Halter Creek	2050302000214	Aquatic Life	URBAN RUNOFF/STORM SEWERS - TOTAL SUSPENDED SOLIDS (TSS) ; SOURCE UNKNOWN - CAUSE UNKNOWN
Stone Creek	2050303000656	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
	2050303000657	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
Stone Creek	2050303000658	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
	2050303001864	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
	2050303001902	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
	2050303001922	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
	2050303001938	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION ; SOURCE UNKNOWN - NUTRIENTS
Pleasant Valley Run	2050303000546	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Pleasant Valley Run	2050303000547	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Pleasant Valley Run	2050303000548	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Pleasant Valley Run	2050303000549	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Pleasant Valley Run	2050303000550	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050303000552	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Implertown Run	2050303000335	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Implertown Run	2050303000336	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Implertown Run	2050303000337	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000557	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303000558	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303002008	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303002010	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001362	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; ANIMAL FEEDING OPERATIONS (NPS) - NUTRIENTS
	2050304001346	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; ANIMAL FEEDING OPERATIONS (NPS) - NUTRIENTS
	2050304001322	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001323	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001324	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001664	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001670	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304001694	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Cabala Run	2050304001337	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION ; RURAL (RESIDENTIAL AREAS) - NUTRIENTS ; CHANNELIZATION - HABITAT ALTERATIONS ; REMOVAL OF RIPARIAN VEGETATION - HABITAT ALTERATIONS
	2050304001364	Aquatic Life	AGRICULTURE - SILTATION ; REMOVAL OF RIPARIAN VEGETATION - HABITAT ALTERATIONS
	2050304001663	Aquatic Life	AGRICULTURE - SILTATION ; REMOVAL OF RIPARIAN VEGETATION - HABITAT ALTERATIONS
	2050304000594	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001276	Aquatic Life	AGRICULTURE - SILTATION
Cedar Spring Run	2050304001271	Aquatic Life	AGRICULTURE - SILTATION
Cedar Spring Run	2050304001272	Aquatic Life	AGRICULTURE - SILTATION
Cedar Spring Run	2050304001273	Aquatic Life	AGRICULTURE - SILTATION

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Cedar Spring Run	2050304001274	Aquatic Life	AGRICULTURE - SILTATION
	2050304001275	Aquatic Life	AGRICULTURE - SILTATION
	2050304001277	Aquatic Life	AGRICULTURE - SILTATION
	2050304001278	Aquatic Life	AGRICULTURE - SILTATION
	2050304001279	Aquatic Life	AGRICULTURE - SILTATION
	2050304001770	Aquatic Life	AGRICULTURE - SILTATION
	2050304001774	Aquatic Life	AGRICULTURE - SILTATION
	2050304001785	Aquatic Life	AGRICULTURE - SILTATION
	2050304001790	Aquatic Life	AGRICULTURE - SILTATION
	2050304001797	Aquatic Life	AGRICULTURE - SILTATION
	2050304001804	Aquatic Life	AGRICULTURE - SILTATION
	2050304001806	Aquatic Life	AGRICULTURE - SILTATION
	2050304001807	Aquatic Life	AGRICULTURE - SILTATION
	2050304001838	Aquatic Life	AGRICULTURE - SILTATION
	2050304001875	Aquatic Life	AGRICULTURE - SILTATION
	2050304000641	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002393	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002394	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002396	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Little Valley Creek	2050304000723	Aquatic Life	ATMOSPHERIC DEPOSITION - PH
Saddler Creek	2050304000998	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304000830	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Fort Run	2050304000429	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304000955	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304000956	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION

	2050304000916	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304000917	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304000918	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002989	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002994	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS ; CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002978	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050304002980	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050304002988	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - NUTRIENTS
	2050304000527	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304001884	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Doylestown Stream	2050304000339	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000340	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000341	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000342	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000343	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000344	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000345	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000346	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Doylestown Stream	2050304000347	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000686	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000687	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000688	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000689	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002778	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002790	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002796	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

	2050304002799	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002801	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002814	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002819	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002824	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000681	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000682	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000683	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000684	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000685	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002787	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002791	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002792	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002793	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002794	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002795	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002798	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002803	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002804	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002805	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002806	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002810	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002811	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000677	Aquatic Life	AGRICULTURE - SILTATION
	2050304000678	Aquatic Life	AGRICULTURE - SILTATION
	2050304000679	Aquatic Life	AGRICULTURE - SILTATION
	2050304002723	Aquatic Life	AGRICULTURE - SILTATION
	2050304002724	Aquatic Life	AGRICULTURE - SILTATION
	2050304002728	Aquatic Life	AGRICULTURE - SILTATION
	2050304002742	Aquatic Life	AGRICULTURE - SILTATION
	2050304002755	Aquatic Life	AGRICULTURE - SILTATION

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	2050304002756	Aquatic Life	AGRICULTURE - SILTATION
	2050304002770	Aquatic Life	AGRICULTURE - SILTATION
	2050304002772	Aquatic Life	AGRICULTURE - SILTATION
	2050304002774	Aquatic Life	AGRICULTURE - SILTATION
Panther Creek	2050304000367	Aquatic Life	AGRICULTURE - SILTATION
	2050304002249	Aquatic Life	AGRICULTURE - SILTATION
Warble Run	2050304000412	Aquatic Life	AGRICULTURE - SILTATION
Warble Run	2050304000413	Aquatic Life	AGRICULTURE - SILTATION
Warble Run	2050304000414	Aquatic Life	AGRICULTURE - SILTATION
Warble Run	2050304000415	Aquatic Life	AGRICULTURE - SILTATION
	2050304000735	Aquatic Life	AGRICULTURE - SILTATION
	2050304002270	Aquatic Life	AGRICULTURE - SILTATION
	2050304002287	Aquatic Life	AGRICULTURE - SILTATION
	2050304000733	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304002307	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304000748	Aquatic Life	AGRICULTURE - SILTATION
Hunters Creek	2050304000749	Aquatic Life	AGRICULTURE - SILTATION
Hunters Creek	2050304000750	Aquatic Life	AGRICULTURE - SILTATION
Hunters Creek	2050304000751	Aquatic Life	AGRICULTURE - SILTATION
Hunters Creek	2050304000752	Aquatic Life	AGRICULTURE - SILTATION
	2050304000758	Aquatic Life	AGRICULTURE - SILTATION
	2050304002036	Aquatic Life	AGRICULTURE - SILTATION
	2050304000754	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002144	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000759	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000760	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000761	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001999	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002004	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002010	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002078	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050304002084	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002095	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Markee Creek	2050304000460	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Markee Creek	2050304000461	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000614	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001906	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001907	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001922	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001944	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304001996	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002003	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002012	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304002026	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Markee Creek	2050304003238	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Markee Creek	2050304003239	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Markee Creek	2050304003241	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050304000737	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
	2050304000739	Aquatic Life	GRAZING IN RIPARIAN OR SHORELINE ZONES - NUTRIENTS ; GRAZING IN RIPARIAN OR SHORELINE ZONES - SILTATION
Great Trough Creek	2050303000977	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001665	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001666	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001689	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001723	Aquatic Life	ACID MINE DRAINAGE - PH
Great Trough Creek	2050303001734	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001603	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001621	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001623	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303000984	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001591	Aquatic Life	ACID MINE DRAINAGE - PH

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	2050303001599	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303001628	Aquatic Life	ACID MINE DRAINAGE - PH
	2050303000979	Aquatic Life	SOURCE UNKNOWN - CAUSE UNKNOWN
	2050303001519	Aquatic Life	AGRICULTURE - SILTATION
	2050303001459	Aquatic Life	AGRICULTURE - SILTATION
	2050303002827	Aquatic Life	AGRICULTURE - SILTATION
	2050303003820	Aquatic Life	AGRICULTURE - SILTATION
	2050303001551	Aquatic Life	AGRICULTURE - SILTATION
	2050303001552	Aquatic Life	AGRICULTURE - SILTATION
	2050303001558	Aquatic Life	AGRICULTURE - SILTATION
	2050303001563	Aquatic Life	AGRICULTURE - SILTATION
	2050303001757	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001770	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001774	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001786	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001830	Aquatic Life	AGRICULTURE - SILTATION ; AGRICULTURE - NUTRIENTS
	2050303001873	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050303001619	Aquatic Life	AGRICULTURE - SILTATION
	2050303001739	Aquatic Life	AGRICULTURE - SILTATION
	2050303001421	Aquatic Life	AGRICULTURE - SILTATION
Halfmoon Creek	2050302000555	Aquatic Life	AGRICULTURE - SILTATION
Halfmoon Creek	2050302000556	Aquatic Life	AGRICULTURE - SILTATION
	2050302000557	Aquatic Life	AGRICULTURE - SILTATION
	2050302000558	Aquatic Life	AGRICULTURE - SILTATION
	2050302000559	Aquatic Life	AGRICULTURE - SILTATION
Halfmoon Creek	2050302000560	Aquatic Life	AGRICULTURE - SILTATION
Halfmoon Creek	2050302000561	Aquatic Life	AGRICULTURE - SILTATION
Halfmoon Creek	2050302000562	Aquatic Life	AGRICULTURE - SILTATION
	2050302000563	Aquatic Life	AGRICULTURE - SILTATION
	2050302000564	Aquatic Life	AGRICULTURE - SILTATION
	2050302000565	Aquatic Life	AGRICULTURE - SILTATION

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	2050302000566	Aquatic Life	AGRICULTURE - SILTATION
	2050302000567	Aquatic Life	AGRICULTURE - SILTATION
Halfmoon Creek	2050302000868	Aquatic Life	AGRICULTURE - SILTATION
	2050302000869	Aquatic Life	AGRICULTURE - SILTATION
	2050302000870	Aquatic Life	AGRICULTURE - SILTATION
	2050302000871	Aquatic Life	AGRICULTURE - SILTATION
	2050302000872	Aquatic Life	AGRICULTURE - SILTATION
	2050302000875	Aquatic Life	AGRICULTURE - SILTATION
	2050302000878	Aquatic Life	AGRICULTURE - SILTATION
	2050302000882	Aquatic Life	AGRICULTURE - SILTATION
	2050302000885	Aquatic Life	AGRICULTURE - SILTATION
	2050302000888	Aquatic Life	AGRICULTURE - SILTATION
	2050302000890	Aquatic Life	AGRICULTURE - SILTATION
	2050302000901	Aquatic Life	AGRICULTURE - SILTATION
	2050302000902	Aquatic Life	AGRICULTURE - SILTATION
	2050302000905	Aquatic Life	AGRICULTURE - SILTATION
Tuscarora Creek	2050304000154	Fish Consumption	SOURCE UNKNOWN - MERCURY
Tuscarora Creek	2050304000155	Fish Consumption	SOURCE UNKNOWN - MERCURY
Tuscarora Creek	2050304000177	Fish Consumption	SOURCE UNKNOWN - MERCURY
Tuscarora Creek	2050304000178	Fish Consumption	SOURCE UNKNOWN - MERCURY
Tuscarora Creek	2050304000179	Fish Consumption	SOURCE UNKNOWN - MERCURY
Tuscarora Creek	2050304000180	Fish Consumption	SOURCE UNKNOWN - MERCURY
	2050304000615	Fish Consumption	SOURCE UNKNOWN - MERCURY
	2050304001984	Fish Consumption	SOURCE UNKNOWN - MERCURY
	2050304002052	Fish Consumption	SOURCE UNKNOWN - MERCURY
Plum Creek	2050302000476	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Plum Creek	2050302000477	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Plum Creek	2050302000478	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Plum Creek	2050302000479	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302000480	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302000481	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION

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	2050302000482	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002067	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002068	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002073	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002083	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002092	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002093	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002116	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002117	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002119	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002125	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002127	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002132	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
	2050302002141	Aquatic Life	AGRICULTURE - NUTRIENTS ; AGRICULTURE - SILTATION
Little Juniata River	2050302000087	Recreational	SOURCE UNKNOWN - PATHOGENS
Little Juniata River	2050302000088	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050302001396	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050302001398	Recreational	SOURCE UNKNOWN - PATHOGENS
Markee Creek	2050304002061	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002074	Recreational	SOURCE UNKNOWN - PATHOGENS
Markee Creek	2050304003242	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304003243	Recreational	SOURCE UNKNOWN - PATHOGENS
Doyle Run	2050304000285	Recreational	SOURCE UNKNOWN - PATHOGENS
Doyle Run	2050304000286	Recreational	SOURCE UNKNOWN - PATHOGENS
Doyle Run	2050304000287	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000625	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000626	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000627	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000628	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000629	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000630	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304000631	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000632	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000633	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002087	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002089	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002125	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002132	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002140	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002142	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002147	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002195	Recreational	SOURCE UNKNOWN - PATHOGENS
Doyle Run	2050304002199	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002202	Recreational	SOURCE UNKNOWN - PATHOGENS
Doyle Run	2050304002208	Recreational	SOURCE UNKNOWN - PATHOGENS
Doyle Run	2050304002209	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002212	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002214	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002225	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002227	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002230	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002237	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002243	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002268	Recreational	SOURCE UNKNOWN - PATHOGENS
Narrows Branch Tuscarora Creek	2050304000336	Recreational	SOURCE UNKNOWN - PATHOGENS
Narrows Branch Tuscarora Creek	2050304000337	Recreational	SOURCE UNKNOWN - PATHOGENS
Narrows Branch Tuscarora Creek	2050304000338	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002665	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002695	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304002696	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002697	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002705	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002709	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002712	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002713	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002715	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002716	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002722	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002729	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002731	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002733	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002739	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002741	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002749	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000237	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000238	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000239	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000240	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000241	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000242	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000245	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000246	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000696	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000697	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000698	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000700	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304000701	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002571	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002579	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002596	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304002597	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304002603	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304002606	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002607	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002608	Recreational	SOURCE UNKNOWN - PATHOGENS
Tuscarora Creek	2050304002610	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002613	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002619	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002620	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002626	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002636	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000742	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000743	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000744	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000745	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000746	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002187	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002191	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002213	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304002241	Recreational	SOURCE UNKNOWN - PATHOGENS
Frankstown Branch Juniata River	2050302000125	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
Frankstown Branch Juniata River	2050302000126	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
Frankstown Branch Juniata River	2050302000127	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
Frankstown Branch Juniata River	2050302000128	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
Frankstown Branch Juniata River	2050302000129	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
Frankstown Branch Juniata River	2050302000130	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION

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Frankstown Branch Juniata River	2050302000131	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
	2050302000488	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
	2050302001893	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
	2050302001895	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
	2050302001896	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
	2050302001901	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
	2050302001954	Aquatic Life	INDUSTRIAL POINT SOURCE DISCHARGE - SILTATION
Little Buffalo Creek	2050304000439	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - HABITAT ALTERATIONS
	2050304002082	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - HABITAT ALTERATIONS
Little Buffalo Creek	2050304000443	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
Little Buffalo Creek	2050304000444	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
Little Buffalo Creek	2050304000445	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
Lutman Run	2050304000521	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304000522	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002217	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002219	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002220	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION

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	2050304002222	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002224	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002229	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002240	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002277	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002286	Aquatic Life	AGRICULTURE - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
Lost Creek	2050304000446	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000447	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000448	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000449	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000450	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000451	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000452	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000453	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000454	Recreational	SOURCE UNKNOWN - PATHOGENS
Lost Creek	2050304000455	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001257	Recreational	SOURCE UNKNOWN - PATHOGENS
Laurel Run	2050304001258	Recreational	SOURCE UNKNOWN - PATHOGENS
Laurel Run	2050304001259	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001260	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001261	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001263	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001264	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001633	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001645	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304001671	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001676	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001677	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001678	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001679	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001680	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001681	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001683	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001684	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001685	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001686	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001688	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001701	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001707	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001708	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001714	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001716	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001721	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001722	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001724	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001733	Recreational	SOURCE UNKNOWN - PATHOGENS
Big Run	2050304003230	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001182	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001183	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001184	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001185	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001186	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001187	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001188	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001189	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001190	Recreational	SOURCE UNKNOWN - PATHOGENS

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Jacks Creek	2050304001191	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001192	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001193	Recreational	SOURCE UNKNOWN - PATHOGENS
Jacks Creek	2050304001194	Recreational	SOURCE UNKNOWN - PATHOGENS
Wagner Run	2050304001210	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001211	Recreational	SOURCE UNKNOWN - PATHOGENS
Wagner Run	2050304001212	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001213	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001214	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001216	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001217	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001218	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001219	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001220	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001221	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001222	Recreational	SOURCE UNKNOWN - PATHOGENS
Belltown Run	2050304001223	Recreational	SOURCE UNKNOWN - PATHOGENS
Belltown Run	2050304001224	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001226	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001227	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001228	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001519	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001535	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001537	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001538	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001547	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001549	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001570	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001573	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001575	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001585	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304001599	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001603	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001650	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304001196	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001197	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304001198	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304001199	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001200	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001201	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304001202	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001203	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001204	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304001205	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001207	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001208	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001229	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001230	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001231	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001232	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001562	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001572	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304001579	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001587	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001619	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001638	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001649	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001667	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001675	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001712	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001738	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001794	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304003216	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304003217	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304003218	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304003219	Recreational	SOURCE UNKNOWN - PATHOGENS
Meadow Creek	2050304003220	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304000022	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304000023	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304000024	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000025	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000026	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304000027	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304000028	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304001158	Recreational	SOURCE UNKNOWN - PATHOGENS
Buck Run	2050304001159	Recreational	SOURCE UNKNOWN - PATHOGENS
Buck Run	2050304001160	Recreational	SOURCE UNKNOWN - PATHOGENS
Buck Run	2050304001161	Recreational	SOURCE UNKNOWN - PATHOGENS
Buck Run	2050304001162	Recreational	SOURCE UNKNOWN - PATHOGENS
Buck Run	2050304001163	Recreational	SOURCE UNKNOWN - PATHOGENS
Buck Run	2050304001164	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001165	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001166	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001167	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001168	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001169	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001170	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001171	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001172	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001173	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304001174	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304001720	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001742	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304001788	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001824	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001843	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001859	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304004096	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000029	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000030	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000031	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000032	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000033	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000034	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000035	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000036	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304000037	Recreational	SOURCE UNKNOWN - PATHOGENS
Laurel Creek	2050304000312	Recreational	SOURCE UNKNOWN - PATHOGENS
Laurel Creek	2050304000313	Recreational	SOURCE UNKNOWN - PATHOGENS
Laurel Creek	2050304000314	Recreational	SOURCE UNKNOWN - PATHOGENS
Kishacoquillas Creek	2050304000389	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304000390	Recreational	SOURCE UNKNOWN - PATHOGENS
Tea Creek	2050304000393	Recreational	SOURCE UNKNOWN - PATHOGENS
Treaster Run	2050304000406	Recreational	SOURCE UNKNOWN - PATHOGENS
Treaster Run	2050304000407	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001079	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001080	Recreational	SOURCE UNKNOWN - PATHOGENS
Havice Creek	2050304001088	Recreational	SOURCE UNKNOWN - PATHOGENS
Honey Creek	2050304001095	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001104	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001111	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001456	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001560	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001567	Recreational	SOURCE UNKNOWN - PATHOGENS

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	2050304001569	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001577	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001578	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001581	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001602	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001620	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001627	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001636	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001643	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001644	Recreational	SOURCE UNKNOWN - PATHOGENS
	2050304001655	Recreational	SOURCE UNKNOWN - PATHOGENS
Juniata River	2050304000001	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000002	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000003	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000004	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000005	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000006	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000007	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000009	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000011	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000013	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000014	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000015	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000016	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000018	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000019	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000020	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000021	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000039	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000041	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000044	Aquatic Life	SOURCE UNKNOWN - PH

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Juniata River	2050304000045	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000046	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000047	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000048	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000049	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000051	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000052	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000053	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000054	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000056	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304000057	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001397	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001399	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001400	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001401	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001404	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001412	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001415	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001416	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001428	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001429	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001430	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001432	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001433	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001434	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001435	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001758	Aquatic Life	SOURCE UNKNOWN - PH
	2050304001810	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304001986	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304002013	Aquatic Life	SOURCE UNKNOWN - PH
Juniata River	2050304002045	Aquatic Life	SOURCE UNKNOWN - PH

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	2050304002211	Aquatic Life	SOURCE UNKNOWN - PH
	2050304002306	Aquatic Life	SOURCE UNKNOWN - PH
	2050304002316	Aquatic Life	SOURCE UNKNOWN - PH
	2050304002543	Aquatic Life	SOURCE UNKNOWN - PH
	2050304001998	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - HABITAT ALTERATIONS
	2050304002018	Aquatic Life	URBAN RUNOFF/STORM SEWERS - SILTATION ; HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - HABITAT ALTERATIONS
	2050304000485	Aquatic Life	AGRICULTURE - SILTATION
	2050304000486	Aquatic Life	AGRICULTURE - SILTATION
	2050304001382	Aquatic Life	AGRICULTURE - SILTATION
	2050304001876	Aquatic Life	AGRICULTURE - SILTATION
	2050304001880	Aquatic Life	AGRICULTURE - SILTATION
	2050304000560	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304000561	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304000562	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002315	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002324	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002325	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002327	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002330	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002341	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION

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	2050304002345	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002348	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304002367	Aquatic Life	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION - SILTATION
	2050304000525	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
	2050304000526	Aquatic Life	CROP PRODUCTION (CROP LAND OR DRY LAND) - SILTATION
Panther Creek	2050304000364	Aquatic Life	AGRICULTURE - SILTATION
Panther Creek	2050304000365	Aquatic Life	AGRICULTURE - SILTATION
Panther Creek	2050304000366	Aquatic Life	AGRICULTURE - SILTATION
	2050304000540	Aquatic Life	AGRICULTURE - SILTATION
	2050304000541	Aquatic Life	AGRICULTURE - SILTATION
	2050304000542	Aquatic Life	AGRICULTURE - SILTATION
	2050304000543	Aquatic Life	AGRICULTURE - SILTATION
	2050304000544	Aquatic Life	AGRICULTURE - SILTATION
	2050304000545	Aquatic Life	AGRICULTURE - SILTATION
	2050304000546	Aquatic Life	AGRICULTURE - SILTATION
	2050304000547	Aquatic Life	AGRICULTURE - SILTATION
	2050304000548	Aquatic Life	AGRICULTURE - SILTATION
	2050304002148	Aquatic Life	AGRICULTURE - SILTATION
	2050304002184	Aquatic Life	AGRICULTURE - SILTATION
	2050304002221	Aquatic Life	AGRICULTURE - SILTATION
	2050304002234	Aquatic Life	AGRICULTURE - SILTATION
	2050304002252	Aquatic Life	AGRICULTURE - SILTATION
	2050304002266	Aquatic Life	AGRICULTURE - SILTATION

Updated information can be found at:

<https://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/IntegratedWatersReport/Pages/2022-Integrated-Water-Quality-Report.aspx>

APPENDIX K. NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMITS

County	Municipality	Facility Name	Permit Number	Description
Bedford	Napier	AJ AUTO SALVAGE	PAR603567	Stormwater-Industrial
Bedford	Bedford Township	AREAS V & VI SANI SEW & WATER PROJ	PAD050013	Stormwater-Construction (Non-Phased)
Bedford	Bedford Borough	BEDFORD HIGH SCH CAMPUS & ATHLETIC FAC IMPROVEMENTS	PAD050008	Stormwater-Construction (Non-Phased)
Bedford	East Saint Clair	BEDFORD REINFORCED PLASTICS INC	PAR233536	Stormwater-Industrial
Bedford	Bedford Township	BEDFORD REINFORCED PLASTICS INC - SOUTH PLANT	NOEXSC316	Stormwater-Industrial
Bedford	Bedford Borough	BEDFORD STP	PA0022209	Sewage Publicly Owned (Muni)
Bedford	Napier	BEDFORD TECHNICAL PRODUCTS, LLC	PA0034011	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Bedford Township	BEDFORD WS	PA0087971	Industrial Waste
Bedford	West Providence	BLUE TRIANGLE HARDWOODS	PAR223524	Stormwater-Industrial
Bedford	Broad Top	BROAD TOP TWP HESS MHP STP	PA0246433	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	BROAD TOP TWP KEARNEY STP	PA0087335	Sewage Publicly Owned (Muni)
Bedford	Broad Top	BROAD TOP TWP LANGDONDALE STP	PA0087343	Sewage Publicly Owned (Muni)
Bedford	Bedford Township	BROOKWOOD COUNTRYSIDE COMM MHP	PA0110442	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Providence	BRUSH CREEK COUNTRY ESTATES MHP	PA0083887	Sewage Non-Publicly Owned (Non-Muni)

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County	Municipality	Facility Name	Permit Number	Description
Bedford	Juniata	BUENA RD SRSTP	PA0088641	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Saint Clair	CHESTNUT RIDGE AREA WWTP	PA0087661	Sewage Publicly Owned (Muni)
Bedford	Broad Top	COALDALE SIX MILE RUN WTP	PA0260479	Industrial Waste
Bedford	West Saint Clair	CREATIVE PULTRUSIONS INC	NNOEXSC94	Stormwater-Industrial
Bedford	Bedford Township	CRONIMET SPECIALTY METALS USA INC	NOEXSC381	Stormwater-Industrial
Bedford	Bedford Township	DEFIANCE METAL PRODUCTS BEDFORD PLANT	PAG033813	Stormwater-Industrial
Bedford	Broad Top	DUDLEY RD SRSTP	PA0261483	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Saint Clair	E ST CLAIR TWP FISHERTOWN STP	PA0082694	Sewage Publicly Owned (Muni)
Bedford	East Saint Clair	E ST CLAIR TWP STONE CR STP	PA0082732	Sewage Publicly Owned (Muni)
Bedford	East Providence	EAST PROVIDENCE TWP STP	PA0038733	Sewage Publicly Owned (Muni)
Bedford	Napier	EGOLF FINISHING FARM JOINT	PAG123854	Concentrated Animal Feed Operation
Bedford	Snake Spring	EVERETT BULK PLANT	PAG033728	Stormwater-Industrial
Bedford	Everett	EVERETT STP	PA0037711	Sewage Publicly Owned (Muni)
Bedford	West Providence	EVERETT WS	PA0009423	Industrial Waste
Bedford	Harrison	FAIR FAMILY FARM	PAG123893	Concentrated Animal Feed Operation
Bedford	Liberty	HAPPY HOLLOW RESTAURANT	PA0265969	Sewage Non-Publicly Owned (Non-Muni)

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Bedford	Liberty	HERITAGE COVE CAMPGROUND	PA0246522	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	Harrison	HERITAGE HOUSE WHITE SULPHUR SPRINGS	PA0261645	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Hopewell Borough	HOPEWELL STP	PA0082341	Sewage Publicly Owned (Muni)
Bedford	South Woodbury	JEREMY IMLER SWINE FARM	PA0281883	Concentrated Animal Feed Operation
Bedford	Bedford Township	JLG INDUSTRIES INC - SUNNYSIDE FACILITY	PAG033786	Stormwater-Industrial
Bedford	Bedford Township	JLG INDUSTRIES WEBER LANE	PAG033934	Stormwater-Industrial
Bedford	Bedford Township	KENNAMETAL BEDFORD DISTRIBUTION CTR	NNOEXSC113	Stormwater-Industrial
Bedford	Bedford Township	KENNAMETAL INC BEDFORD FACILITY	PAG033968	Stormwater-Industrial
Bedford	East Saint Clair	LANE ENTERPRISES LLC	PAG033691	Stormwater-Industrial
Bedford	Bedford Township	LB FOSTER COMPANY - BEDFORD PLANT	PAG033732	Stormwater-Industrial
Bedford	Napier	LIVING WATERS CAMP & CONF CENTER	PA0029041	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Harrison	MANNS CHOICE HARRISON TWP STP	PA0085243	Sewage Publicly Owned (Muni)
Bedford	Bedford Township	MERIT SI BEDFORD SOLAR PANEL PROJ	PAD050011	Stormwater-Construction (Non-Phased)
Bedford	East Providence	MICHAEL WILT & COREY WILT CAFO	PAG123837	Concentrated Animal Feed Operation
Bedford	Napier	MOUNTAIN BREEZE DUCK FARM	PAG123939	Concentrated Animal Feed Operation
Bedford	Snake Spring	NEW ENTERPRISE STONE AND LIME CO INC - ASHCOM PLANT	PAS213504	Stormwater-Industrial
Bedford	East Saint Clair	PA FISH COMM REYNOLDSDALE IW	PA0044059	Industrial Waste

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Bedford		PA TURNPIKE BTWN MP 149.5-155.5	PAD050015	Stormwater-Construction (Non-Phased)
Bedford	Broad Top	PETROCHOICE - RIDDLESBURG	PAG033676	Stormwater-Industrial
County	Municipality	Facility Name	Permit Number	Description
Bedford	Bedford Borough	PHASE 2 CAST IRON WATER LINE REPLACEMENT PROJ	PAD050016	Stormwater-Construction (Non-Phased)
Bedford	West Providence	RIVERVIEW ESTATES HOMEOWNERS ASSOC.	PA0083569	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Bedford Township	RUTTERS 85 TDA	0522201	Industrial Waste
Bedford	South Woodbury	S WOODBURY TWP STP	PA0088226	Sewage Publicly Owned (Muni)
Bedford	South Woodbury	SAC NORTHERN BEDFORD	PAD050012	Stormwater-Construction (Non-Phased)
Bedford	Broad Top	SANDY RUN LF	PA0083879	Industrial Waste
Bedford	Liberty	SAXTON STP	PA0025381	Sewage Publicly Owned (Muni)
Bedford	Saxton	SAXTON WS	PA0083143	Industrial Waste
Bedford	Bedford Township	SCHNEIDER NATL CARRIERS BEDFORD TRUCK TERM	NNOEXSC230	Stormwater-Industrial
Bedford	South Woodbury	SCOTT D BAKER POULTRY OPR	PAD050010	Stormwater-Construction (Non-Phased)
Bedford	Liberty	SFS BAKER, WILLIAM D	PAG043609	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS BAUMAN, JEREME	PAG043545	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Napier	SFS BEDFORD AREA AMBUL SVC	PAG043850	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Monroe	SFS BLANKLEY, GEORGE	PAG043649	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Saint Clair	SFS BOWSER, LORNE J	PAG043630	Sewage Non-Publicly Owned (Non-Muni)

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Bedford	West Providence	SFS BOYD, RODNEY W & KOONTZ, RICHARD	PAG043530	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	South Woodbury	SFS BRATTON, WILLIAM	PA0247707	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP ALLER & WILLIAMS	PAG043666	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP BANCO	PAG043636	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP BARTON	PAG043657	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP FIGARD	PAG043663	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP FISHER	PAG043662	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP FLECK/RIGHTNOUR	PAG043665	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP FOOR	PAG043647	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP GRIMES	PAG043667	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP KLINE/BARTON	PAG043639	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP MEYERS RESIDENCE	PAG043669	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP MORNINGSTAR	PAG043653	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP MUSSER-FOOR	PAG043627	Sewage Non-Publicly Owned (Non-Muni)

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Bedford	Broad Top	SFS BROAD TOP TWP PITTMAN	PAG043659	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	Broad Top	SFS BROAD TOP TWP PITTMAN, RUSS	PAG043661	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP RANKIN	PAG043628	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP RUNDE RESIDENCE	PA0261475	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP SHUKE, MICHAEL	PAG043689	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP SNYDER	PAG043717	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP WEAVER,JEFF & PENNY	PAG043677	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP WILLIAMS	PAG043589	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS BROAD TOP TWP, SIBIARKOFF	PAG043687	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Providence	SFS CLEAR RIDGE RD	PA0262099	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS CLOWSON, AMY	PAG043646	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Providence	SFS COLLEDGE, RUTH	PA0247499	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Saint Clair	SFS CRIST & KEGG	PAG043533	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Providence	SFS DAVIS, GILBERT	PAG043593	Sewage Non-Publicly Owned (Non-Muni)

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Bedford	Napier	SFS DEGAETA, JAMES	PAG043886	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	Juniata	SFS DEILY, CARRIE A	PAG043715	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Hopewell	SFS DETWILER, DANIEL	PAG043501	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Providence	SFS DIETZEL, WILLIAM C	PAG043606	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS DIVELY, TROY & LISA	PAG043883	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Napier	SFS DULL, DENNIS	PAG043563	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS FINNEGAN, DANIEL	PAG043626	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS GLASS, CLAIR B	PAG043525	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Providence	SFS GORSUCH, TODD	PAG043574	Sewage Non-Publicly Owned (Non-Muni)
Bedford	South Woodbury	SFS GUYER CORNER RD	PA0266388	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Providence	SFS HANN, THOMAS C	PAG043546	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Lincoln	SFS HARRIS, DANIEL & IDA	PA0266655	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Napier	SFS HILLEGASS, WILLIAM	PAG043641	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Snake Spring	SFS IMLER DANIEL	PAG043902	Sewage Non-Publicly Owned (Non-Muni)

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Bedford	West Providence	SFS JOHNSON, KAREN & SHIRLEY	PA0083534	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	West Saint Clair	SFS KAUFMAN, JAY AND HEATHER	PA0248118	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Saint Clair	SFS KNISLEY LOT 1	PAG043622	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Saint Clair	SFS KNISLEY LOT 2	PAG043623	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Monroe	SFS LAROSE, AMY S	PAG043684	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS LONG KENNETH	PAG043637	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Everett	SFS MICHAEL, CARL F III	PAG043529	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Liberty	SFS MILLER RESIDENCE	PAG043849	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFS MILLER ZELDA MAE	PA0266825	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Providence	SFS MILLER, MICHELE D	PAG043586	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Saint Clair	SFS MILLER, TRACEY	PAG043581	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Hopewell Township	SFS MORRISON, DENNIS E	PA0081108	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Saint Clair	SFS NICODEMUS, BRIAN	PA0248720	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Monroe	SFS PERCHARD, DAVID	PA0260746	Sewage Non-Publicly Owned (Non-Muni)

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Bedford	Napier	SFS POINT UMC PARSONAGE	PAG043553	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	Napier	SFS REBECCAS PERSONAL CARE HOME	PAG043722	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Juniata	SFS RIGHTENOUR, NINA	PAG043668	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Liberty	SFS SMITH, EUGENE & DEBRA	PAG043526	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Snake Spring	SFS SNYDER, RUSSELL & PENNY	PAG043506	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Harrison	SFS SPRUNG, JOHN W	PAG043598	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Kimmel	SFS WALTER, PAMELA	PAG043643	Sewage Non-Publicly Owned (Non-Muni)
Bedford	West Providence	SFS WEICHT, ZANE	PAG043676	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Harrison	SFS WILKINS, GARREN	PA0261289	Sewage Non-Publicly Owned (Non-Muni)
Bedford	East Providence	SFTF FRENCH CREEK RD	PA0266990	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SFTF HARDING, EARL AND MALINDA	PA0266949	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Napier	SHAWNEE STATE PARK	PA0032093	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Napier	SHELLBARK CAMPGROUND	PA0110931	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Broad Top	SIX MILE RUN STP	PA0088609	Sewage Publicly Owned (Muni)

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Bedford	Broad Top	SMITH, CODY RESIDENCE DBA 8418 PROPERTIES LLC	PA0291722	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Bedford	Snake Spring	SNAKE SPRING TWP STP	PA0084077	Sewage Publicly Owned (Muni)
Bedford	Bedford Township	SRSTP WILLIAM BAER	PA0294004	Sewage Non-Publicly Owned (Non-Muni)
Bedford	Hopewell Township	SUNNYSIDE STP	PA0247073	Sewage Publicly Owned (Muni)
Bedford	Hopewell Township	TATESVILLE STP	PA0247081	Sewage Publicly Owned (Muni)
Bedford	West Saint Clair	W ST CLAIR PLEASANTVILLE WS	PA0088960	Industrial Waste
Bedford	Bedford Township	WALMART DIST CTR 6047	NNOEXSC28	Stormwater-Industrial
Bedford	Monroe	WARRIOR RIDGE FARM	PAG123841	Concentrated Animal Feed Operation
Bedford	Bedford	XPO LOGISTICS FREIGHT INC - XJN	PAR803686	Stormwater-Industrial
Bedford	Monroe	ZACH AKERS FARM CAFO	PAG123800	Concentrated Animal Feed Operation
Bedford	South Woodbury	ZIMMERMAN FARM CAFO	PA0260053	Concentrated Animal Feed Operation
Blair	Frankstown	140 SWINGING BRIDGE RD SRSTP	PA0266906	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis	388 HOLLEN RD RES	PA0267317	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis	6DS PROP	PAD070015	Stormwater-Construction (Non-Phased)
Blair	Allegheny	A DUJE PYLE INC ALTOONA	PAG033860	Stormwater-Industrial
Blair	Allegheny	ABF FACILITY 263 - ALTOONA	NOEXSC238	Stormwater-Industrial

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Blair	North Woodbury	AGWAY RD PROP	PAD070032	Stormwater-Construction (Non-Phased)
County	Municipality	Facility Name	Permit Number	Description
Blair	Roaring Spring	ALLEGHENY MOUNTAIN SPRING WATER MANUFACTURING	PA0087904	Industrial Waste
Blair	Altoona	ALPHA METALS ALTOONA	PAG033739	Stormwater-Industrial
Blair	Allegheny	ALTOONA - SUNOCO	PAR803676	Stormwater-Industrial
Blair	North Woodbury	ALTOONA BLAIR CNTY AIRPORT	PAR803606	Stormwater-Industrial
Blair	Allegheny Twp	ALTOONA BULK PETROLEUM STORAGE TERMINAL	PAR803679	Stormwater-Industrial
Blair	Antis	ALTOONA C A / BELLWOOD WS	PA0085537	Industrial Waste
Blair	Logan	ALTOONA C A / HORSESHOE CURVE WS	PA0082538	Industrial Waste
Blair	Tyrone Twp	ALTOONA C A / KETTLE CR WS	PA0085812	Industrial Waste
Blair	Logan Twp	ALTOONA C A / MILL RUN WS	PA0085529	Industrial Waste
Blair	Juniata Twp	ALTOONA C A / PLANE NINE WTP	PA0085120	Industrial Waste
Blair	Antis Twp	ALTOONA C A / TIPTON WS	PA0085111	Industrial Waste
Blair	Logan Twp	ALTOONA EASTERLY STP	PA0027014	Sewage Publicly Owned (Muni)
Blair	Allegheny Twp	ALTOONA HAULING FACILITY	PAG033758	Stormwater-Industrial
Blair	Altoona City	ALTOONA METRO TRANSIT AUTHORITY BUS MTNC GARAGE	PAR803598	Stormwater-Industrial
Blair	Logan Twp	ALTOONA SOLID WASTE TRANSFER STATION	PAG033757	Stormwater-Industrial
Blair	Allegheny Twp	ALTOONA WESTERLY STP	PA0027022	Sewage Publicly Owned (Muni)
Blair	Altoona City	AMAZON.COM SERVICES LLC WOO1	NOEXSC392	Stormwater-Industrial
Blair	Frankstown Twp	AUTO WHOLESALERS USED TRUCKS AND PARTS	PAG033587	Stormwater-Industrial
Blair	Snyder Twp	BEASTONS RD SRSTP	PA0294047	Sewage Non-Publicly Owned (Non-Muni)
Blair	Blair Twp	BLAIR CHALET	PA0081523	Sewage Non-Publicly Owned (Non-Muni)

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Blair	Hollidaysburg Boro	BLAIR CNTY CONSERVATION DIST CONS PARK AND OFFICE COMPLEX	PAD070025	Stormwater-Phased Construction
County	Municipality	Facility Name	Permit Number	Description
Blair	Logan Twp	BLAIR CNTY STORAGE INC	PAD070023	Stormwater-Construction (Non-Phased)
Blair	Blair Twp	BLAIR COUNTY RECOVERY & TOWING INC	PAR603600	Stormwater-Industrial
Blair	Antis Twp	C & C AUTO SALVAGE YARD	PAR603579	Stormwater-Industrial
Blair	Frankstown Twp	CANOE CREEK STATE PARK	PA0044261	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	CARACCIOLO STEEL & METAL YARD	PAR603557	Stormwater-Industrial
Blair	Taylor Twp	CARGILL FEED AND NUTRITION MARTINSBURG	PAG033652	Stormwater-Industrial
Blair	Antis Twp	CARPENTER COMPANY ALTOONA PLANT	NNOEXSC29	Stormwater-Industrial
Blair	Williamsburg Boro	CENVEO WORLDWIDE LTD WILLIAMSBURG FAC	PAG033850	Stormwater-Industrial
Blair	Greenfield Twp	CHAMPION HOME BUILDERS PLANT 7	PAG033917	Stormwater-Industrial
Blair	Freedom Twp	CLARKS AUTO SALVAGE	PAR603537	Stormwater-Industrial
Blair	Antis Twp	COMMERCIAL ENVELOPE MANUFACTURING - ALTOONA	NOEXSC130	Stormwater-Industrial
Blair	Woodbury Twp	COVE FORGE TRMT CTR - STP	PA0087785	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	CURRY RAIL SERVICES	PAG033640	Stormwater-Industrial
Blair	North Woodbury Twp	CURRY SUPPLY CO	NNOEXSC249	Stormwater-Industrial
Blair	Duncansville Boro	DUNCANSVILLE STP	PA0032883	Sewage Publicly Owned (Muni)
Blair	Taylor Twp	EF SMITH GARAGE & WHSE	PAG033768	Stormwater-Industrial
Blair	Williamsburg Boro	ENVELOPE PRODUCT GROUP WEST PLANT	NNOEXSC97	Stormwater-Industrial
Blair	Greenfield Twp	EVERETT RAILROAD - CLAYSBURG FACILITY	PAR803682	Stormwater-Industrial
Blair	Blair Twp	EVERETT RAILROAD - DUNCANSVILLE FACILITY	PAG033517	Stormwater-Industrial
Blair	Allegheny Twp	FEDEX EXPRESS AOOA	NOEXSC257	Stormwater-Industrial

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Blair	Allegheny Twp	FEDEX GROUND ALTOONA	NOEXSC208	Stormwater-Industrial
Blair	Logan Twp	FORSHT PRODUCTS INC	PAR213562	Stormwater-Industrial
County	Municipality	Facility Name	Permit Number	Description
Blair	Snyder Twp	FORT DEARBORN - TYRONE PLANT	NOEXSC300	Stormwater-Industrial
Blair	Freedom Twp	FREEDOM TWP - STP	PA0110361	Sewage Publicly Owned (Muni)
Blair	Snyder Twp	G&R EXCAVATING AND DEMOLITION INC	PAG033702	Stormwater-Industrial
Blair	Frankstown Twp	GRANT SHAFFER RES	PAD070011	Stormwater-Construction (Non-Phased)
Blair	Greenfield Twp	GREENFIELD TWP MUNICIPAL AUTHORITY STP	PA0029106	Sewage Publicly Owned (Muni)
Blair	Catharine Twp	HEMLOCK LN CAFO	PAG123836	Concentrated Animal Feed Operation
Blair	Greenfield Twp	HIGH SCH ATHLETIC IMPROVEMENTS	PAD070020	Stormwater-Construction (Non-Phased)
Blair	Frankstown Twp	HOLLIDAYSBURG REGIONAL STP	PA0043273	Sewage Publicly Owned (Muni)
Blair	Allegheny Twp	HOLLIDAYSBURG VETERANS HOME	PAD070027	Stormwater-Construction (Non-Phased)
Blair	Frankstown Twp	HOPPER COMMONS DEV	PAD070019	Stormwater-Construction (Non-Phased)
Blair	Frankstown Twp	HORSE RIDING ARENA	PAD070028	Stormwater-Construction (Non-Phased)
Blair	Allegheny Twp	JIM NAGLES REBUILT TRUCK PARTS & SALES INC	PAR603503	Stormwater-Industrial
Blair	Hollidaysburg Boro	JOE KRENTZMAN & SON HOLLIDAYSBURG	PAR603531	Stormwater-Industrial
Blair	North Woodbury Twp	KULP FAMILY DAIRY CAFO	PAD070005	Stormwater-Construction (Non-Phased)
Blair	North Woodbury Twp	KULP FAMILY DAIRY CAFO	PA0088404	Concentrated Animal Feed Operation

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Blair	North Woodbury Twp	KULP FAMILY DAIRY HUNTSMAN LN	PAD070024	Stormwater-Construction (Non-Phased)
Blair	Snyder Twp	KUNZLER & CO INC TYRONE PLT	NOEXSC342	Stormwater-Industrial
County	Municipality	Facility Name	Permit Number	Description
Blair	Allegheny Twp	KWIK FILL FACILITY S-51	PAG053593	Groundwater Cleanup
Blair		LOCK MTN LEAD JOINT WATERLINE REPLACEMENT	PAD070022	Stormwater-Construction (Non-Phased)
Blair	Logan Twp	LOGAN TWP STP	PA0032557	Sewage Publicly Owned (Muni)
Blair		LOGAN VLY STREETCAR TRL & FIRST FRONTIER VLY TRL	PAD070008	Stormwater-Construction (Non-Phased)
Blair	Altoona City	MALLOWS SERVICE CENTER	PAG053608	Groundwater Cleanup
Blair	Martinsburg Boro	MARTINSBURG MILL NNOEX	NNOEXSC40	Stormwater-Industrial
Blair	Martinsburg Boro	MARTINSBURG STP	PA0028347	Sewage Publicly Owned (Muni)
Blair	Antis Twp	MCCAULLEY RES	PA0266604	Sewage Non-Publicly Owned (Non-Muni)
Blair	Allegheny Twp	MS4 ALLEGHENY TWP	PAG133693	Stormwater-Municipal
Blair	Altoona City	MS4 ALTOONA CITY	PAI133542	Stormwater-Municipal
Blair	Antis Twp	MS4 ANTIS TWP	PAI133521	Stormwater-Municipal
Blair	Bellwood Boro	MS4 BELLWOOD BORO BLAIR CNTY	PAG133664	Stormwater-Municipal
Blair	Hollidaysburg Boro	MS4 BLAIR CNTY	PAG133663	Stormwater-Municipal
Blair	Blair Twp	MS4 BLAIR TWP	PAG133597	Stormwater-Municipal
Blair	Duncansville Boro	MS4 DUNCANSVILLE BORO	PAG133585	Stormwater-Municipal
Blair	Frankstown Twp	MS4 FRANKSTOWN TWP	PAG133661	Stormwater-Municipal
Blair	Freedom Twp	MS4 FREEDOM TWP	PAG133760	Stormwater-Municipal
Blair	Hollidaysburg Boro	MS4 HOLLIDAYSBURG BORO	PAG133628	Stormwater-Municipal
Blair	Logan Twp	MS4 LOGAN TWP	PAI133534	Stormwater-Municipal
Blair	Altoona City	MS4 PA STATE UNIV ALTOONA CAMPUS	PAG133608	Stormwater-Municipal
Blair	Logan Twp	MUELLER'S AUTO RECYCLING & SALES	PA0247774	Stormwater-Industrial

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Blair	Logan Twp	NEW AMED STATION 480 FACILITY W/ PARK AVE ACCESS DR	PAD070007	Stormwater-Construction (Non-Phased)
Blair	Taylor Twp	NEW ENTERPRISE S&L/ROARING SPR	PA0027596	Industrial Waste
County	Municipality	Facility Name	Permit Number	Description
Blair	Antis Twp	NEW PIG CORPORATION	NOEXSC137	Stormwater-Industrial
Blair	Allegheny Twp	NEW PIG CORPORATION - DUNCANVILLE SITE	NOEXSC288	Stormwater-Industrial
Blair	Logan Twp	NORFOLK SOUTHERN RAILWAY CO - JUNIATA LOCOMOTIVE SHOP	PAR803614	Stormwater-Industrial
Blair	Logan Twp	NORFOLK SOUTHERN RAILWAY COMAPANY - ROSE YARD	PAR803615	Stormwater-Industrial
Blair	Antis Twp	NOYE RES	PA0291668	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	OAK GROVE PARTNERSHIP GRADING PROJ	PAD070017	Stormwater-Construction (Non-Phased)
Blair		OAKVIEW EST DEV	PAD070006	Stormwater-Construction (Non-Phased)
Blair	Allegheny Twp	OLD DOMINION FREIGHT LINE INC ALT	NOEXSC372	Stormwater-Industrial
Blair	Catharine Twp	PEF REAL ESTATE, LLC (CLOSED ASH SITE)	PA0080845	Industrial Waste
Blair	Catharine Twp	PENN ENGLAND CAFO	PA0265926	Concentrated Animal Feed Operation
Blair	Hollidaysburg Boro	PENNDOT ENG DIST 9 STOCKSITES	NNOEXSC26	Stormwater-Industrial
Blair	Antis Twp	PITTSBURGH GLASS WORKS LLC	PA0009458	Industrial Waste
Blair	North Woodbury Twp	PLEASANT VIEW FARMS CAFO	PA0281778	Concentrated Animal Feed Operation
Blair	Catharine Twp	POINT VIEW COTTAGE ASSOCIATION PERMIT# 2 SFTF	PA0262161	Sewage Non-Publicly Owned (Non-Muni)
Blair	Catharine Twp	POINT VIEW COTTAGE ASSOCIATION PERMIT#1 SFTF	PA0262153	Sewage Non-Publicly Owned (Non-Muni)
Blair	Allegheny Twp	RJ GLASS INC	NOEXSC272	Stormwater-Industrial

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Blair	Roaring Spring Boro	ROARING SPRING PARK	PA0008265	Industrial Waste
Blair	Roaring Spring Boro	ROARING SPRING STP	PA0020249	Sewage Publicly Owned (Muni)
County	Municipality	Facility Name	Permit Number	Description
Blair	Antis Twp	ROLLING FRITO-LAY SALES - ALTOONA BIN	PA0265870	Stormwater-Industrial
Blair	Frankstown Twp	ROLLING HLS OLDTOWN VLG SANI SEW REPLACEMENT PROJ	PAD070026	Stormwater-Construction (Non-Phased)
Blair	Antis Twp	RUTTERS 82	PAD070014	Stormwater-Construction (Non-Phased)
Blair	Allegheny Twp	SAIA LTL FREIGHT ALT	NOEXSC404	Stormwater-Industrial
Blair	Snyder Twp	SANDY RDG II WIND PROJ	PAD070009	Stormwater-Construction (Non-Phased)
Blair	Freedom Twp	SFS BAIRD JOSHUA	PAG043701	Sewage Non-Publicly Owned (Non-Muni)
Blair	Snyder Twp	SFS BOMBOY, BRET	PAG043913	Sewage Non-Publicly Owned (Non-Muni)
Blair	Greenfield Twp	SFS BRADLEY, JODY	PA0259951	Sewage Non-Publicly Owned (Non-Muni)
Blair	Freedom Twp	SFS CAMPBELL, DANIEL	PAG043591	Sewage Non-Publicly Owned (Non-Muni)
Blair	Allegheny Twp	SFS CIVILS, MICHAEL	PA0261238	Sewage Non-Publicly Owned (Non-Muni)
Blair	Huston Twp	SFS CLAPPERTOWN CMA CH	PA0260797	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFS CREANY, ALEXANDRA AND RICHARD DAVIS	PA0266792	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SFS FLEIG, HAROLD & BERNESE	PAG043936	Sewage Non-Publicly Owned (Non-Muni)

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Blair	Antis Twp	SFS FRYE, MELVIN & SANDRA	PAG043504	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFS HANNA, LOIS	PAG043937	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Blair	Greenfield Twp	SFS HARBAUGH, GEORGE	PAG043648	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SFS HENNAMAN, TONI	PAG043654	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SFS KENNER, ROBERT/KEHOE,ALLISON	PAG043873	Sewage Non-Publicly Owned (Non-Muni)
Blair	Freedom Twp	SFS KEPHART DAVID	PAG043864	Sewage Non-Publicly Owned (Non-Muni)
Blair	Logan Twp	SFS KRATER, KENNETH R JR	PAG043532	Sewage Non-Publicly Owned (Non-Muni)
Blair	Freedom Twp	SFS LANZENDORFER, JOSHUA	PAG043882	Sewage Non-Publicly Owned (Non-Muni)
Blair	Allegheny Twp	SFS MAHER, MICHAEL A	PAG043527	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SFS MCELRAVY, SHAWN AND TRACY	PAG043716	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SFS MCMILLEN TIM RESIDENCE	PA0266787	Sewage Non-Publicly Owned (Non-Muni)
Blair	Freedom Twp	SFS MILLER RES	PA0262111	Sewage Non-Publicly Owned (Non-Muni)
Blair	Freedom Twp	SFS OAKES JARED	PAG043901	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFS OWEN, CRISTI	PAG043658	Sewage Non-Publicly Owned (Non-Muni)

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Blair	Antis Twp	SFS SENSENIG JASON	PAG043905	Sewage Non-Publicly Owned (Non-Muni)
Blair	Juniata Twp	SFS STILLWELL, GARY AND CHRISTINE	PAG043721	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Blair	Antis Twp	SFS STONEBRAKER, ROBERT	PA0266779	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SFS SWOGGER, CHAD	PAG043900	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFTF 153 BURKET RD	PA0267571	Sewage Non-Publicly Owned (Non-Muni)
Blair	Snyder Twp	SFTF BONSELL, GEORGE RESIDENCE	PA0267121	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFTF DONALDSON, JASON	PA0267457	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFTF FOLTON, TYLER AND JEFFREY OGDEN RESIDENCE	PA0293938	Sewage Non-Publicly Owned (Non-Muni)
Blair	Greenfield Twp	SFTF GEORGE HARBAUGH	PA0293971	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFTF MILLER TYLER RESIDENCE	PA0281808	Sewage Non-Publicly Owned (Non-Muni)
Blair	Tyrone Twp	SFTF NAIL, EDWARD	PA0267597	Sewage Non-Publicly Owned (Non-Muni)
Blair	Frankstown Twp	SFTF NEELY, SCOTT RESIDENCE	PA0268686	Sewage Non-Publicly Owned (Non-Muni)
Blair	Juniata Twp	SHAMROCK MHP	PA0032034	Sewage Non-Publicly Owned (Non-Muni)
Blair	Greenfield Twp	SHEETZ LOGISTICS CTR/WHSE & DC EXPANSION	PAD070031	Stormwater-Construction (Non-Phased)

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Blair	Antis Twp	SRSTP SNOOK, MATTHEW	PA0293962	Sewage Non-Publicly Owned (Non-Muni)
Blair	Antis Twp	SRSTP TRENT, GARRETT	PA0293989	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Blair	Allegheny Twp	ST PRODUCTS, LLC	PA0034886	Industrial Waste
Blair	Huston Twp	STULTZ SWINE OPERATION	PAD070018	Stormwater-Construction (Non-Phased)
Blair	Allegheny Twp	SUNOCO PARTNERS ALTOONA TERMINAL	PAR803678	Stormwater-Industrial
Blair	Altoona City	SYNTHEX ORGANICS - CHEMICAL BLENDING FACILITY	NOEXSC263	Stormwater-Industrial
Blair	Tyrone Boro	TEAM TEN TYRONE MILL	PA0008893	Industrial Waste
Blair	Antis Twp	THOMPSON RES	PA0267309	Sewage Non-Publicly Owned (Non-Muni)
Blair	Snyder Twp	TYRONE AUTO SALVAGE	PAG033826	Stormwater-Industrial
Blair	Snyder Twp	TYRONE BOROUGH STP	PA0026727	Sewage Publicly Owned (Muni)
Blair	Allegheny Twp	UPS - ALTOONA	PAG033940	Stormwater-Industrial
Blair	Allegheny Twp	VEEDER ROOT CO	PA0010677	Industrial Waste
Blair	Allegheny Twp	VEEDER ROOT CO NO EXPOSURE CERT	NNOEXSC86	Stormwater-Industrial
Blair	Blair Twp	WALTERS AUTO WRECKING FAC	PA0266141	Stormwater-Industrial
Blair	Logan Twp	WARD TRUCKING LLC ALTOONA PA TERMINAL (ALT-001)	PAR803509	Stormwater-Industrial
Blair	Martinsburg Boro	WENGER FEEDS LLC -MARTINSBURG MILL	PAG033659	Stormwater-Industrial
Blair	Tyrone Boro	WF GRACE AND CO CONN	PAG033796	Stormwater-Industrial
Blair	Williamsburg Boro	WILLIAMSBURG STP	PA0021539	Sewage Publicly Owned (Muni)
Blair	Taylor Twp	YERTY AUTO SERVICES	PAG033661	Stormwater-Industrial

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Blair	Tyrone Twp	YODERS DR SFTF	PA0267414	Sewage Non-Publicly Owned (Non-Muni)
Cambria	Gallitzin Twp	WOJTAROWICZ SR STP	PAG046130	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Centre	Halfmoon Twp	AUTUMN MEADOW PARK REVITILAZATION IMPROVEMENTS	PAD140032	Stormwater-Construction (Non-Phased)
Centre	Patton Twp	GRAYS WOODS ELEM SCH	PAI041409015	Stormwater-Construction (Non-Phased)
Centre	Halfmoon Twp	HALFMOON ACRES SUBDIVISION	PAI041411001R	Stormwater-Construction (Non-Phased)
Centre	Halfmoon Twp	HALFMOON VALLEY RD SFTF	PA0228796	Sewage Non-Publicly Owned (Non-Muni)
Centre	Halfmoon Twp	HOUTZ SELF STORAGE	PAD140058	Stormwater-Construction (Non-Phased)
Centre	Halfmoon Twp	KEVIN M QUAY	PAG044983	Sewage Non-Publicly Owned (Non-Muni)
Centre	Halfmoon Twp	LOVEVILLE/MARENGO SITE DEVELOPMENT	PAD140093	Stormwater-Construction (Non-Phased)
Centre	Ferguson Twp	MANURE STACKING SHED	PAI041415015	Stormwater-Construction (Non-Phased)
Centre	Halfmoon Twp	ORCHARD PARK RD SRSTP	PA0209431	Sewage Non-Publicly Owned (Non-Muni)
Centre	Potter Twp	PA DEPT OF TRANSPORTATION	PAI041413006	Stormwater-Construction (Non-Phased)
Centre	Patton Twp	PATTON TWP	PAI041414005	Stormwater-Construction (Non-Phased)
Centre	Ferguson Twp	RIDER FARM	PAI041414004	Stormwater-Construction (Non-Phased)

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Centre	Halfmoon Twp	SHEARS SUBDIVISION	PAD140035	Stormwater-Construction (Non-Phased)
Centre	Halfmoon Twp	WEAVER FAMILY FARMS	PAD140033	Stormwater-Construction (Non-Phased)
County	Municipality	Facility Name	Permit Number	Description
Franklin	Fannett Twp	HOMER SRSTP	PAG043509	Sewage Non-Publicly Owned (Non-Muni)
Franklin	Fannett Twp	MELOY SRSTP	PAG043524	Sewage Non-Publicly Owned (Non-Muni)
Franklin	Fannett Twp	NEW HOPE FARM CAFO	PAG123834	Concentrated Animal Feed Operation
Franklin	Fannett Twp	SFS SMITH, SAMUEL J	PA0261742	Sewage Non-Publicly Owned (Non-Muni)
Franklin	Fannett Twp	WAGNER BROTHERS FARM CAFO	PAG123811	Concentrated Animal Feed Operation
Fulton	Taylor Twp	APPLEGREE PA WELCOME CTR LLC - SIDELING HILL TPK PLAZA	PA0083186	Sewage Non-Publicly Owned (Non-Muni)
Fulton	Dublin Twp	BURNT CABINS STP	PA0247227	Sewage Publicly Owned (Muni)
Fulton	Todd Twp	COWANS GAP STATE PARK	PA0032964	Sewage Non-Publicly Owned (Non-Muni)
Fulton	Brush Creek Twp	CRYSTAL SPRING HARDWOOD	PA0087718	Industrial Waste
Fulton	Dublin Twp	DUBLIN TWP FT LITTLETON STP	PA0246425	Sewage Publicly Owned (Muni)
Fulton	Taylor Twp	FORBES ROAD HS & ELEM	PA0083020	Sewage Non-Publicly Owned (Non-Muni)
Fulton	Taylor Twp	HUSTON HOLLOW FARM CAFO	PA0088242	Concentrated Animal Feed Operation

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Fulton	Brush Creek Twp	PA DOT - REST AREA 3 - I-70	PA0035653	Sewage Non-Publicly Owned (Non-Muni)
Fulton	Dublin Twp	PARKS STATION	PAG053607	Groundwater Cleanup
Fulton	Taylor Twp	SFS RIDDELL, SCOT D. & COLLEEN E.	PA0266396	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Fulton	Taylor Twp	Sideling Hill Service Truck Parking Lot Expansion	PA290001D	Erosion & Sedimentation Control
Huntingdon	Tell Twp	179222 SHADE VALLEY RD SRSTP	PA0261599	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Oneida Twp	4684 COLD SPRINGS RD SRSTP	PA0291595	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Morris Twp	6932 HUNGRY HOLLOW RD SRSTP	PA0281832	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Logan Twp	7024 WILLOW BROOK RD, SRSTP	PA0294187	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Shirley Twp	AC PRODUCTS - MT UNION PLANT	PAG033590	Stormwater-Industrial
Huntingdon	Porter Twp	ACCO BRANDS USA	PAG033683	Stormwater-Industrial
Huntingdon	Porter Twp	ALEXANDRIA PORTER STP	PA0043443	Sewage Publicly Owned (Muni)
Huntingdon	Porter Twp	ALEXANDRIA WS	PA0082457	Industrial Waste
Huntingdon	Huntingdon Boro	BAXTER MACHINE PRODUCTS INC	NNOEXSC167	Stormwater-Industrial
Huntingdon	Brady Twp	BIG VALLEY CONCRETE - MILL CREEK FACILITY	PAG033532	Stormwater-Industrial
Huntingdon	Cromwell Twp	BITTLE RES	PA0291706	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Mount Union Boro	BLEYER GIFT PACKS LLC	PA0087165	Industrial Waste
Huntingdon	Carbon Twp	BOLLMANS AUTO SALVAGE	PAR603573	Stormwater-Industrial
Huntingdon	Shirley Twp	BONNEY FORGE	PAS203502	Stormwater-Industrial

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Huntingdon		BRANDON FRANKHOUSER AG OP	PAD310014	Stormwater-Construction (Non-Phased)
Huntingdon	Broad Top City Boro	BROAD TOP CITY STP	PA0084883	Sewage Publicly Owned (Muni)
Huntingdon	Shirley Twp	CABINETWORKS GROUP MT UNION DOCK ADDITION & TRAILER PARKING	PAD310012	Stormwater-Construction (Non-Phased)
County	Municipality	Facility Name	Permit Number	Description
Huntingdon	Todd Twp	CAMP MANTOWAGAN	PA0082571	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Cass Twp	CASEY CAROWICK SWINE CAFO	PAG123892	Concentrated Animal Feed Operation
Huntingdon	Cass Twp	CASSVILLE STP	PA0087955	Sewage Publicly Owned (Muni)
Huntingdon	West Twp	COFFMAN SWINE BARN CONSTRUCTION	PAD310009	Stormwater-Construction (Non-Phased)
Huntingdon	Todd Twp	COOKS COUNTRY STORE	3122201	Industrial Waste
Huntingdon	Jackson Twp	CPAREG PROPERTY	PA0267210	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Dublin Twp	DANZER LUMBER NORTH AMERICA SHADE GAP	PAG033737	Stormwater-Industrial
Huntingdon	Jackson Twp	DAVID KAUFFMAN CAFO	PA0266582	Concentrated Animal Feed Operation
Huntingdon	Jackson Twp	DIGILIO RES	PA0267368	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Carbon Twp	DUDLEY CARBON COALMONT STP	PA0246727	Sewage Publicly Owned (Muni)
Huntingdon	Carbon Twp	DUDLEY-BARNETTSTOWN WS	PA0083003	Industrial Waste
Huntingdon	Franklin Twp	EVERGREEN FARMS INC	PA0088561	Concentrated Animal Feed Operation

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Huntingdon	Jackson Twp	GREENWOOD FURNACE ST PK	PA0031992	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Warriors Mark Twp	GRIER SCHOOL	PA0081345	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Union Twp	HARLEY BANGE CAFO	PAG123658	Concentrated Animal Feed Operation
County	Municipality	Facility Name	Permit Number	Description
Huntingdon	Porter Twp	HARTSLOG COURTS MHP	PA0082601	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Hopewell Twp	HOPEWELL TWP SHY BEAVER STP	PA0082759	Sewage Publicly Owned (Muni)
Huntingdon	Smithfield Twp	HUNTINGDON STP	PA0026191	Sewage Publicly Owned (Muni)
Huntingdon	Cromwell Twp	JESUS MINISTRIES AGAPE FARM CAMPGROUND	PA0082864	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Union Twp	JODY BELL SRSTP	PA0291536	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Cass Twp	JOHN CORNELIUS SWINE CAFO	PAG123857	Concentrated Animal Feed Operation
Huntingdon	Walker Twp	KAREN JOHNSON SFTF	PA0266973	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Lincoln Twp	KENNETH RHODES SRSTP	PA0294071	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Lincoln Twp	LAKE RAYSTOWN RESORT	PA0039730	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Logan Twp	LIGHTNER PROPERTY SRSTP	PA0267198	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Union Twp	MAPLETON AREA STP	PA0087513	Sewage Publicly Owned (Muni)

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Huntingdon	Marklesburg Boro	MARKLESBURG STP	PA0086673	Sewage Publicly Owned (Muni)
Huntingdon	Dudley Boro	MCGHEES USED CARS	PAG033767	Stormwater-Industrial
Huntingdon	Mill Creek Boro	MILL CREEK STP	PA0085740	Sewage Publicly Owned (Muni)
County	Municipality	Facility Name	Permit Number	Description
Huntingdon		MT UN SUBSTA HL VLY SUBSTA 46KV TRANS LINE PROJ	PAD310008	Stormwater-Construction (Non-Phased)
Huntingdon	Mount Union Boro	MT UNION BORO - STP	PA0020214	Sewage Publicly Owned (Muni)
Huntingdon	Shirley Twp	MT UNION SINGERS GAP WS	PA0088757	Industrial Waste
Huntingdon	Warriors Mark Twp	NEW ENTERPRISE STONE & LIME CO - TYRONE BATCH & BLACKTOP PLT	PAR213538	Stormwater-Industrial
Huntingdon	Shirley Twp	NOV MOUNT UNION	PAR233512	Stormwater-Industrial
Huntingdon	Orbisonia Boro	ORBISONIA/ROCKHILL MUNI AUTH - ROCKHILL STP	PA0021695	Sewage Publicly Owned (Muni)
Huntingdon	Petersburg Boro	PETERSBURG STP	PA0111350	Sewage Publicly Owned (Muni)
Huntingdon	Penn Twp	PLEASANT HILLS CAMPGROUND	PA0088684	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Penn Twp	RAYSTOWN LAKE US ARMY CORPS ENGR	PAG153504	Pesticides
Huntingdon	Walker Twp	SFS ANGELO, JAMES & BARBARA	PA0248568	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Smithfield Twp	SFS BETTS, ALLEN	PAG043599	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Walker Twp	SFS BRENNEMAN, JASON	PA0261220	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Shirley Twp	SFS DCNR JUNIATA HOUSE	PAG043537	Sewage Non-Publicly Owned (Non-Muni)

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Huntingdon	Hopewell Twp	SFS EAGLE'S ROOST NO.1	PAG043911	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Union Twp	SFS JACKSON, VICTOR J	PAG043605	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Huntingdon	Jackson Twp	SFS MCCLURE, DENNIS & JANICE	PA0246590	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Hopewell Twp	SFS, ALLEGRIPIES LLC	PAG043934	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Shade Gap Boro	SHADE GAP AREA STP	PA0084514	Sewage Publicly Owned (Muni)
Huntingdon	Clay Twp	SLATES SALVAGE	PAR603574	Stormwater-Industrial
Huntingdon	Dublin Twp	SNIDER SWINE CAFO	PAG123708	Concentrated Animal Feed Operation
Huntingdon	Clay Twp	SPRING CREEK STP	PA0082279	Sewage Publicly Owned (Muni)
Huntingdon	Clay Twp	SPRING FARMS ELEM SCH	PA0029947	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Jackson Twp	SPRINGBROOK FARM LLC	PA0266728	Concentrated Animal Feed Operation
Huntingdon	Jackson Twp	SPRINGBROOK FARM PROPOSED FINISHING BARN	PAD310004	Stormwater-Construction (Non-Phased)
Huntingdon	Oneida Twp	STANDING STONE RD RES	PA0267180	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Oneida Twp	STANDING STONE RD SFTF	PA0267023	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Dublin Twp	TANNERY RD SRSTP	PA0267651	Sewage Non-Publicly Owned (Non-Muni)

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Huntingdon	Todd Twp	TEXAS EASTERN TRANSMISSION - ENTRIKEN COMPRESSOR STATION	PAG103589	Industrial Waste
Huntingdon	Todd Twp	TEXAS EASTERN TRANSMISSION - ENTRIKEN COMPRESSOR STATION	PAG103589	Industrial Waste
County	Municipality	Facility Name	Permit Number	Description
Huntingdon	Todd Twp	TEXAS EASTERN TRANSMISSION- ENTRIKEN COMPRESSOR STATION	PA0087866	Groundwater Cleanup
Huntingdon	Oneida Twp	THURSTON-GRISWOLD RES	PA0267279	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Penn Twp	U S ARMY CORPS ENG - 7 POINTS REC AREA WWTP	PA0039748	Sewage Non-Publicly Owned (Non-Muni)
Huntingdon	Jackson Twp	VALUE AUTO SALVAGE	PA0247782	Stormwater-Industrial
Huntingdon	Todd Twp	WARNER CAFO	PAG123866	Concentrated Animal Feed Operation
Huntingdon	Lincoln Twp	WASON CAFO	PAG123880	Concentrated Animal Feed Operation
Huntingdon	Franklin Twp	WILLOW BEHRER FARM	PA0248312	Concentrated Animal Feed Operation
Huntingdon	Porter Twp	WINGERT FARMS INC	PA0261521	Concentrated Animal Feed Operation
Huntingdon	Wood Twp	WOOD-BROADTOP-WELLS STP	PA0085073	Sewage Publicly Owned (Muni)
Huntingdon	Todd Twp	YOUTH FORESTRY CAMP #3	PA0031968	Sewage Non-Publicly Owned (Non-Muni)
Juniata	Delaware Twp	AC PRODUCTS INC	PAR223528	Stormwater-Industrial
Juniata	Milford Twp	ANDREW HOOVER POULTRY OPERATION CAFO	PAG123925	Concentrated Animal Feed Operation
Juniata	Fermanagh Twp	ARCH ROCK DEV STP	PA0247669	Sewage Non-Publicly Owned (Non-Muni)

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Juniata	Delaware Twp	BENNER FAMILY FARM	PAG123628	Concentrated Animal Feed Operation
Juniata	Fermanagh Twp	BRIDGES AT BROOKLINE STP	PA0081043	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Juniata	Lack Twp	CHRISTIAN RETREAT CENTER CAMP	PA0111601	Sewage Non-Publicly Owned (Non-Muni)
Juniata	Fayette Twp	COCALAMUS CREEK DISPOSAL SERVICE	PAR603601	Stormwater-Industrial
Juniata	Spruce Hill Twp	COLTON DEPPEN SWINE CAFO	PAG123859	Concentrated Animal Feed Operation
Juniata	Fermanagh Twp	DARLING INGREDIENTS MIFFLINTOWN DIVISION	PAR123563	Stormwater-Industrial
Juniata	Walker Twp	DEAMER TRUCKING	PAG033607	Stormwater-Industrial
Juniata	Fayette Twp	EAST JUNIATA HS	PA0081817	Sewage Non-Publicly Owned (Non-Muni)
Juniata	Delaware Twp	EAST SALEM SEWER AUTH	PA0247618	Sewage Publicly Owned (Muni)
Juniata	Tuscarora Twp	EAST WATERFORD STP	PA0247677	Sewage Publicly Owned (Muni)
Juniata	Fayette Twp	ELVIN ZIMMERMAN FARM	PA0262056	Concentrated Animal Feed Operation
Juniata	Walker Twp	EMPIRE KOSHER POULTRY	PA0007552	Industrial Waste
Juniata	Walker Twp	ENERGEX AMERICAN INC	PAR223533	Stormwater-Industrial
Juniata	Fayette Twp	FINKBINER FARM CAFO	PAG123899	Concentrated Animal Feed Operation
Juniata	Lack Twp	GREENFIELD FARMS	PA0260169	Concentrated Animal Feed Operation
Juniata	Turbett Twp	HICKORY HILL TURKEY FARM	PAG123612	Concentrated Animal Feed Operation
Juniata	Walker Twp	JUNIATA CONCRETE CO - MIFFLINTOWN PLANT 2	PAR213541	Stormwater-Industrial

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Juniata	Walker Twp	LAVON ZIMMERMAN FARM	PAG123894	Concentrated Animal Feed Operation
Juniata	Fayette Twp	LAZY HOG FARM CAFO	PA0246603	Concentrated Animal Feed Operation
County	Municipality	Facility Name	Permit Number	Description
Juniata	Fayette Twp	LOST CREEK FARM CAFO	PAG123523	Concentrated Animal Feed Operation
Juniata	Lack Twp	Lewistown AC Mitigation	PA340001D	Stormwater-Construction (Non-Phased)
Juniata	Fayette Twp	MCALISTERVILLE STP	PA0023604	Sewage Publicly Owned (Muni)
Juniata	Milford Twp	MIFFLINTOWN WTP	PA0248070	Industrial Waste
Juniata	Fayette Twp	OAKLAND MILLS STP	PA0266817	Sewage Publicly Owned (Muni)
Juniata	Port Royal Boro	PORT ROYAL STP	PA0020648	Sewage Publicly Owned (Muni)
Juniata	Walker Twp	REINFORD FARMS INC	PAG123830	Concentrated Animal Feed Operation
Juniata	Monroe Twp	RICHFIELD AREA JT AUTH - STP	PA0087611	Sewage Publicly Owned (Muni)
Juniata	Delaware Twp	SFS DIEM IVAN C	PA0261157	Sewage Non-Publicly Owned (Non-Muni)
Juniata	Fayette Twp	SFS DOUGLAS DR	PA0248223	Sewage Non-Publicly Owned (Non-Muni)
Juniata	Fayette Twp	STELLA JONES CORP - MCALISTERVILLE DIVISION	PAG033887	Stormwater-Industrial
Juniata	Lack Twp	TEXAS EASTERN PERULACK COMPRESSOR STATION	PAG103585	Industrial Waste
Juniata	Lack Twp	TEXAS EASTERN PERULACK GWCU	PA0086291	Groundwater Cleanup
Juniata	Delaware Twp	THOMPSONTOWN STP	PA0111422	Sewage Publicly Owned (Muni)

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Juniata	Milford Twp	TWIN BOROUGHES STP	PA0023264	Sewage Publicly Owned (Muni)
Juniata	Walker Twp	ZUGSTEAD FARM	PAG123860	Concentrated Animal Feed Operation
County	Municipality	Facility Name	Permit Number	Description
Mifflin	Wayne Twp	BEACON LODGE CAMP	PA0029335	Sewage Non-Publicly Owned (Non-Muni)
Mifflin	Bratton Twp	BRATTON TWP STP	PA0088617	Sewage Publicly Owned (Muni)
Mifflin	Brown Twp	BROWN TWP STP	PA0028088	Sewage Publicly Owned (Muni)
Mifflin	Burnham Boro	BURNHAM STP	PA0038920	Sewage Publicly Owned (Muni)
Mifflin	Granville Twp	CLAYTON LEWISTOWN MARLETTE HOME MFG	PAG033977	Stormwater-Industrial
Mifflin	Union Twp	DRYHOUSE STONEWORKS	PAD440013	Stormwater-Construction (Non-Phased)
Mifflin	Decatur Twp	GOSS FARM CAFO	PAG123511	Concentrated Animal Feed Operation
Mifflin	Granville Twp	GRANVILLE TWP - STRODES MILLS STP	PA0084778	Sewage Publicly Owned (Muni)
Mifflin	Menno Twp	HARTZLER CAFO	PAG123864	Concentrated Animal Feed Operation
Mifflin	Armagh Twp	JARDEN PLASTIC SOLUTIONS REEDSVILLE	NNOEXSC117	Stormwater-Industrial
Mifflin	Decatur Twp	JOE KRENTZMAN & SON SCRAP YARD	PAR603594	Stormwater-Industrial
Mifflin	Granville Twp	JUNCTION WWTP	PA0032051	Sewage Publicly Owned (Muni)
Mifflin	Lewistown Boro	JUNIATA CONCRETE CO - LEWISTOWN PLANT 1	PAR213520	Stormwater-Industrial
Mifflin	Brown Twp	KISH BANK OPR CTR	PAD440004	Stormwater-Construction (Non-Phased)

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Mifflin	Union Twp	KISH VIEW FARM PARTNERSHIP	PA0281751	Concentrated Animal Feed Operation
Mifflin	Burnham Boro	KOVALCHICK CORPORATION BURNHAM SCRAP FACILITY	PA0265888	Stormwater-Industrial
County	Municipality	Facility Name	Permit Number	Description
Mifflin	Armagh Twp	LAUREL CREEK FILTRATION PLANT	PA0082481	Industrial Waste
Mifflin	Derry Twp	LAZY HOG FARM	PAG123684	Concentrated Animal Feed Operation
Mifflin	Lewistown Boro	LEWISTOWN STP	PA0026280	Sewage Publicly Owned (Muni)
Mifflin	Decatur Twp	LOHT FARM CAFO	PAG123507	Concentrated Animal Feed Operation
Mifflin	Decatur Twp	LUKENS FARM CAFO	PAG123704	Concentrated Animal Feed Operation
Mifflin	Brown Twp	MAINES ROOFING AT SHEETZ DR	PAD440021	Stormwater-Construction (Non-Phased)
Mifflin	Brown Twp	MARLIN PEACHEY CAFO	PAG123870	Concentrated Animal Feed Operation
Mifflin	Granville Twp	MCIDC PLAZA STORMWATER	PAR323511	Stormwater-Industrial
Mifflin	Oliver Twp	MCVEYTOWN BORO AUTH TDA	4422201	Industrial Waste
Mifflin	McVeytown Boro	MCVEYTOWN STP	PA0028983	Sewage Publicly Owned (Muni)
Mifflin	Brown Twp	MIFFLIN CNTY PENNDOT MAINT GARAGE	PAD440020	Stormwater-Construction (Non-Phased)
Mifflin		MIFFLIN CNTY SCH DIST SOLAR PANELS	PAD440014	Stormwater-Construction (Non-Phased)
Mifflin	Derry Twp	MIFFLIN CNTY SWA BARNER LDFL AND TRANSFER STATION	PAG033712	Stormwater-Industrial
Mifflin	Brown Twp	MIFFLIN COUNTY AIRPORT	PAS703502	Stormwater-Industrial

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Mifflin	Brown Twp	MILROY (322) DOLLAR GENERAL	PAD440018	Stormwater-Construction (Non-Phased)
Mifflin	Armagh Twp	MILROY AUTO & TRUCK SALVAGE	PAS603506	Stormwater-Industrial
County	Municipality	Facility Name	Permit Number	Description
Mifflin	Armagh Twp	MILROY BUS PARK	PAD440008	Stormwater-Construction (Non-Phased)
Mifflin	Armagh Twp	MILROY CENTRAL	PAD440001	Stormwater-Construction (Non-Phased)
Mifflin	Lewistown Boro	MINIT MART #232 GWCU	PAG053521	Groundwater Cleanup
Mifflin	Wayne Twp	MT UNION-LEWISTOWN 46 KV TRANS LINE REBUILD PROJECT MT UNION	PAD440024	Stormwater-Construction (Non-Phased)
Mifflin	Newton Hamilton Boro	NEWTON HAMILTON WATER SYSTEM MAIN	PAI034416003	Stormwater-Construction (Non-Phased)
Mifflin	Brown Twp	OLD CARRIAGE XING PHASE III	PAD440017	Stormwater-Construction (Non-Phased)
Mifflin	Granville Twp	OVERHEAD DOOR LEWISTOWN METAL DOOR MANUFACTURING	NNOEXSC240	Stormwater-Industrial
Mifflin	Lewistown Boro	PA STATE FIRE ACADEMY	PA0087149	Industrial Waste
Mifflin	Decatur Twp	PARSONS AUTO SALVAGE	PAR603550	Stormwater-Industrial
Mifflin	Granville Twp	PENN STATE CONSTRUCTION	PAD440016	Stormwater-Construction (Non-Phased)
Mifflin	Armagh Twp	PHILIPS ULTRASOUND	PA0294136	Stormwater-Industrial
Mifflin	Armagh Twp	PROPOSED RV CAMPSITES	PAD440019	Stormwater-Construction (Non-Phased)
Mifflin	Armagh Twp	REEDS GAP STATE PARK CLOSE STP REPLACE WITH SAND MOUNDS	PAI034415003	Stormwater-Construction (Non-Phased)
Mifflin	Brown Twp	REEDSVILLE OUTPATIENT CLINIC	PAD440011	Stormwater-Construction (Non-Phased)
Mifflin	Decatur Twp	ROSSMAN AUTO SALVAGE	PAR603553	Stormwater-Industrial

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Mifflin	Brown Twp	RTE 655 SEW EXT	PAD440006	Stormwater-Construction (Non-Phased)
County	Municipality	Facility Name	Permit Number	Description
Mifflin	Granville Twp	RYAN SNYDER FARM	PAG123738	Concentrated Animal Feed Operation
Mifflin	Armagh Twp	SHALAMAR GARDENS LAND DEVELOPMENT	PAD440023	Stormwater-Construction (Non-Phased)
Mifflin	Oliver Twp	SPRING RUN DAIRY FARM	PAD440022	Stormwater-Construction (Non-Phased)
Mifflin	Burnham Boro	STANDARD STEEL	PA0009164	Industrial Waste
Mifflin	Union Twp	UNION TWP STP	PA0024708	Sewage Publicly Owned (Muni)
Mifflin	Armagh Twp	UPS LEWISTOWN	PA0247651	Stormwater-Industrial
Mifflin	Union Twp	VALLEY VIEW HAVEN	PAI034414001(1)	Stormwater-Construction (Non-Phased)
Mifflin	Granville Twp	WILLOW BROOK FARM	PA0246441	Concentrated Animal Feed Operation
Perry	Oliver Twp	ASPEN PERRY FARM CAFO	PA0088846	Concentrated Animal Feed Operation
Perry	Jackson Twp	BEAVER RIDGE FARM CAFO	PA0246468	Concentrated Animal Feed Operation
Perry	Juniata Twp	CALVIN MUSSER POULTRY OPR	PAD500011	Stormwater-Construction (Non-Phased)
Perry	Centre Twp	COUNTRY VIEW VILLAGE MHP	PA0087459	Sewage Non-Publicly Owned (Non-Muni)
Perry	Centre Twp	D & J PALLET SVS	PAD500020	Stormwater-Construction (Non-Phased)
Perry	Southwest Madison Twp	DAVID S. MORROW FARM	PA0265934	Concentrated Animal Feed Operation

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Perry	Miller Twp	DEER CHASE MHP	PA0081221	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Perry	Buffalo Twp	FERRYBOAT CAMPSITES	PA0083852	Sewage Non-Publicly Owned (Non-Muni)
Perry	Jackson Twp	HICKORY LANE CAFO	PA0246859	Concentrated Animal Feed Operation
Perry	Northeast Madison Twp	HUBER SWINE FARM CAFO	PAG123569	Concentrated Animal Feed Operation
Perry	Oliver Twp	JUNIATA CONCRETE CO - NEWPORT PLANT 3	PAR213537	Stormwater-Industrial
Perry	Centre Twp	LEGENDARY LAND ACQUISITIONS SUBDIV	PAI035015001	Stormwater-Construction (Non-Phased)
Perry	Watts Twp	LIBERTY TRUCKSTOP, INC	PA0080489	Sewage Non-Publicly Owned (Non-Muni)
Perry	Juniata Twp	LITTLE BUFFALO STATE PARK	PA0031950	Sewage Non-Publicly Owned (Non-Muni)
Perry	Greenwood Twp	M&E FARM	PAG123736	Concentrated Animal Feed Operation
Perry	Penn Twp	MARSTELLAR CONCRETE INC	PAG033709	Stormwater-Industrial
Perry	Juniata Twp	MARTIN POULTRY BARN	PAD500017	Stormwater-Construction (Non-Phased)
Perry	Greenwood Twp	MATTER FAMILY FARMS	PAG123895	Concentrated Animal Feed Operation
Perry	Greenwood Twp	MILLERSTOWN STP	PA0021849	Sewage Publicly Owned (Muni)
Perry	Oliver Twp	MOUNTAIN VIEW EST RES SUBDIV	PAD500015	Stormwater-Construction (Non-Phased)
Perry	Buffalo Twp	MW SMITH FARM	PAG123853	Concentrated Animal Feed Operation

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Perry	Wheatfield Twp	MYERS USED AUTO PARTS	PAR603545	Stormwater-Industrial
Perry	Howe Twp	NEWPORT BOROUGH WELL #10 & #14	PA0266400	Industrial Waste
County	Municipality	Facility Name	Permit Number	Description
Perry	Newport Boro	NEWPORT STP	PA0021237	Sewage Publicly Owned (Muni)
Perry	Newport Boro	NEWPORT WATER TREATMENT PLANT	PA0261432	Industrial Waste
Perry	Buffalo Twp	OLD TRL CAMPGROUND	PAD500010	Stormwater-Construction (Non-Phased)
Perry	Oliver Twp	OLIVER RD SRSTP	PA0261939	Sewage Non-Publicly Owned (Non-Muni)
Perry	Penn Twp	OTTERBEIN UNITED METHODIST CHURCH DEV	PA0248231	Sewage Non-Publicly Owned (Non-Muni)
Perry	Wheatfield Twp	PARADISE MHP	PA0036790	Sewage Non-Publicly Owned (Non-Muni)
Perry	Penn Twp	PENN TWP COVE STP	PA0084701	Sewage Publicly Owned (Muni)
Perry	Penn Twp	PENN TWP KINKORA STP	PA0084123	Sewage Publicly Owned (Muni)
Perry	Jackson Twp	PERRY MEADOWS CAFO	PA0088064	Concentrated Animal Feed Operation
Perry	Jackson Twp	PLEASANT VIEW FARMS BLAIN	PA0266442	Concentrated Animal Feed Operation
Perry	Jackson Twp	PLEASANT VIEW FARMS PERRY CNTY	PAD500012	Stormwater-Construction (Non-Phased)
Perry	Saville Twp	PLEASANT VLY MENNONITE SCH	PAD500014	Stormwater-Construction (Non-Phased)
Perry	Southwest Madison Twp	PROPOSED DAIRY EXPANSION	PAD500016	Stormwater-Construction (Non-Phased)
Perry	Saville Twp	PROPOSED POULTRY BARNS & DWELLING	PAD500019	Stormwater-Construction (Non-Phased)

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Perry	Watts Twp	RANCH HOUSE RESTAURANT	PA0083984	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Perry	Penn Twp	ROHRER BUS SERVICE	PAR803659	Stormwater-Industrial
Perry	Greenwood Twp	RYAN BURKHOLDER	PAG123940	Concentrated Animal Feed Operation
Perry	Greenwood Twp	SFS CAMPBELL, DONALD	PAG043660	Sewage Non-Publicly Owned (Non-Muni)
Perry	Centre Twp	SFS EAVES, MATTHEW	PAG043921	Sewage Non-Publicly Owned (Non-Muni)
Perry	Buffalo Twp	SFS LAMOND, MARC	PAG043562	Sewage Non-Publicly Owned (Non-Muni)
Perry	Watts Twp	SFS SHULL, KENNETH	PAG043511	Sewage Non-Publicly Owned (Non-Muni)
Perry	Northeast Madison Twp	SFS SONSHINE MINISTRIES	PAG043862	Sewage Non-Publicly Owned (Non-Muni)
Perry	Penn Twp	SFS WEAVER, BARRY & TERESA	PAG043565	Sewage Non-Publicly Owned (Non-Muni)
Perry	Penn Twp	SFS ZITSCH, JUSTIN	PAG043960	Sewage Non-Publicly Owned (Non-Muni)
Perry	Penn Twp	SFTF ACD REALTY, LLC	PA0267104	Sewage Non-Publicly Owned (Non-Muni)
Perry	Howe Twp	SHADEWOOD FARMS CAFO	PAG123544	Concentrated Animal Feed Operation
Perry	Watts Twp	STARDUST MOTEL	PA0086941	Sewage Non-Publicly Owned (Non-Muni)
Perry	Penn Twp	STONEBRIDGE HEALTH & REHAB	PA0083488	Sewage Non-Publicly Owned (Non-Muni)

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Perry	Buffalo Twp	TJS RESTAURANT & BAR	PA0088340	Sewage Non-Publicly Owned (Non-Muni)
County	Municipality	Facility Name	Permit Number	Description
Perry	Jackson Twp	TROUT BROS FARM MANURE STORAGE POND	PAD500006	Stormwater-Construction (Non-Phased)
Perry	Jackson Twp	TROUT BROTHERS FARM	PA0266418	Concentrated Animal Feed Operation
Snyder	West Beaver Twp	PARTHEMER POULTRY BARN	PAD550006	Stormwater-Construction (Non-Phased)
Source: PA DEP				

CAFO – Concentrated Animal Feeding Operation

SFS – Small Flow System

SFTF – Small Flow Treatment Facility

APPENDIX L. BIRD SPECIES

Acadian Flycatcher	House Sparrow
Accipiter sp.	House Wren
Alder Flycatcher	Indigo Bunting
American Bittern	Kentucky Warbler
American Black Duck	Killdeer
American Coot	Least Flycatcher
American Crow	Least Sandpiper
American Goldfinch	Lesser Scaup
American Kestrel	Lesser Yellowlegs
American Pipit	Long-tailed Duck
American Redstart	Louisiana Waterthrush
American Robin	Magnolia Warbler
American Tree Sparrow	Mallard
American Wigeon	Merlin
American Woodcock	Mourning Dove
Bald Eagle	Nashville Warbler
Baltimore Oriole	new world warbler sp.
Bank Swallow	Northern Cardinal
Barn Owl	Northern Flicker
Barn Swallow	Northern Harrier
Barred Owl	Northern Mockingbird
Bay-breasted Warbler	Northern Parula
Belted Kingfisher	Northern Pintail
Black Vulture	Northern Rough-winged Swallow
Black-and-white Warbler	Northern Shoveler
Black-billed Cuckoo	Northern Waterthrush
blackbird sp.	Orchard Oriole
Blackburnian Warbler	Osprey
Black-capped Chickadee	Ovenbird
Blackpoll Warbler	Palm Warbler
Black-throated Blue Warbler	passerine sp.
Black-throated Green Warbler	peep sp.
Blue Jay	Peregrine Falcon
Blue-gray Gnatcatcher	Pied-billed Grebe
Blue-headed Vireo	Pileated Woodpecker
Blue-winged Teal	Pine Siskin
Blue-winged Warbler	Pine Warbler
Bobolink	Prairie Warbler
Bonaparte's Gull	Purple Finch
Broad-winged Hawk	Purple Martin

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Brown Creeper	Red Crossbill
Brown Thrasher	Red-bellied Woodpecker
Brown-headed Cowbird	Greater Scaup
Bufflehead	Greater Yellowlegs
Canada Goose	Greater/Lesser Scaup
Canada Warbler	Green Heron
Canvasback	Green-winged Teal
Cape May Warbler	gull sp.
Carolina Wren	Hairy Woodpecker
Caspian Tern	Hermit Thrush
Cedar Waxwing	Herring Gull
Cerulean Warbler	Hooded Merganser
Chestnut-sided Warbler	Hooded Warbler
Chimney Swift	Horned Grebe
Chipping Sparrow	Horned Lark
Clay-colored Sparrow	House Finch
Cliff Swallow	Golden-crowned Kinglet
Common Goldeneye	Golden-winged Warbler
Common Grackle	Grasshopper Sparrow
Common Loon	Gray Catbird
Common Merganser	Gray Flycatcher
Common Nighthawk	Great Blue Heron
Common Raven	Great Crested Flycatcher
Common Yellowthroat	Great Egret
Cooper's Hawk	Great Horned Owl
crow sp.	Brewster's Warbler (hybrid)
Dark-eyed Junco	Golden-winged/Blue-winged Warbler
Domestic goose sp. (Domestic type)	Orange-crowned Warbler
Double-crested Cormorant	Mourning Warbler
Downy Woodpecker	Red-necked Grebe
duck sp.	Eared Grebe
Dunlin	Sandhill Crane
Eastern Bluebird	Ruddy Turnstone
Eastern Kingbird	Black Tern
Eastern Meadowlark	Surf Scoter
Eastern Phoebe	Sharp-shinned/Cooper's Hawk
Eastern Screech-Owl	Carolina Chickadee
Eastern Towhee	Blue Grosbeak
Eastern Whip-poor-will	Field Sparrow
Eastern Wood-Pewee	Fish Crow
European Starling	Forster's Tern

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Red-breasted Merganser	Virginia Rail
Red-breasted Nuthatch	Warbling Vireo
Red-eyed Vireo	White-breasted Nuthatch
Redhead	White-crowned Sparrow
Red-headed Woodpecker	White-eyed Vireo
Red-shouldered Hawk	White-throated Sparrow
Red-tailed Hawk	Wild Turkey
Red-winged Blackbird	Willow Flycatcher
Ring-billed Gull	Wilson's Snipe
Ring-necked Duck	Wilson's Warbler
Ring-necked Pheasant	Winter Wren
Rock Pigeon	Wood Duck
Rose-breasted Grosbeak	Wood Thrush
Rough-legged Hawk	Worm-eating Warbler
Ruby-crowned Kinglet	Yellow Warbler
Ruby-throated Hummingbird	Yellow-bellied Sapsucker
Ruddy Duck	Yellow-billed Cuckoo
Ruffed Grouse	Yellow-billed/Black-billed Cuckoo
Rusty Blackbird	Yellow-breasted Chat
Savannah Sparrow	Yellow-rumped Warbler
Scarlet Tanager	Yellow-throated Vireo
Semipalmated Plover	Yellow-throated Warbler
Semipalmated Sandpiper	Cackling Goose
Sharp-shinned Hawk	Mallard x American Black Duck (hybrid)
shorebird sp.	Northern Bobwhite
Short-eared Owl	Common Gallinule
Snow Goose	Laughing Gull
Solitary Sandpiper	Least Bittern
Song Sparrow	Glossy Ibis
Sora	Buteo sp.
Spotted Sandpiper	Golden Eagle
Swainson's Thrush	Northern Saw-whet Owl
Swainson's Warbler	Empidonax sp.
Swamp Sparrow	Carolina/Black-capped Chickadee
Tennessee Warbler	swallow sp.
tern sp.	Marsh Wren
Tree Swallow	Lincoln's Sparrow
Tufted Titmouse	Fox Sparrow
Tundra Swan	Gadwall
Turkey Vulture	Vesper Sparrow
Veery	

APPENDIX M. RARE, THREATENED, AND ENDANGERED SPECIES (PNDI)

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Birds					
<i>Accipiter gentilis</i> *	Northern Goshawk		PE	G5	S1B,S3N,S2M
<i>Ardea herodias</i>	Great Blue Heron			G5	S5B,S4N,S4M
<i>Circus cyaneus</i> *	Northern Harrier		TE	G5	S2B,S3M
<i>Falco peregrinus</i> *	Peregrine Falcon		DL	G4	S1B,S5N,S4M
<i>Gallinula galeata</i> *	Common Gallinule			G5	S2B,S2M
<i>Haliaeetus leucocephalus</i> *	Bald Eagle		DL	G5	S4B,S5N,S4M
<i>Ixobrychus exilis</i> *	Least Bittern		PE	G4G5	S2B,S2M
<i>Lanius ludovicianus migrans</i> *	Migrant Loggerhead Shrike		PE	G4T3Q	S1B,S1M
<i>Melanerpes erythrocephalus</i> *	Red-headed Woodpecker			G5	S4B,S4N
<i>Parkesia noveboracensis</i> *	Northern Waterthrush			G5	S2B,S3M
<i>Podilymbus podiceps</i> *	Pied-billed Grebe			G5	S2B,S4N,S4M
<i>Porzana carolina</i> *	Sora			G5	S3B,S3M
<i>Thryomanes bewickii bewickii</i>	Appalachian Bewick's Wren			G5T1T3	SH
<i>Tyto alba</i> *	Barn Owl			G5	S2B,S3N
<i>Vermivora chrysoptera</i> *	Golden-winged Warbler			G4	S2B,S3M
Fish					
<i>Acipenser oxyrinchus</i> *	Atlantic Sturgeon	LE	PE	G3	S1
Insects					
<i>Acronicta dolli</i> *	Doll's Merolonche Moth			G3G4	S1S2
<i>Amblyscirtes vialis</i> *	Common Roadside Skipper			G5	S2S3
<i>Anax longipes</i> *	Comet Darner			G5	S2S3

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Insects (continued)					
<i>Anisota stigma</i> *	Spiny Oakworm Moth			G5	S3?
<i>Anthocharis midea</i> *	Falcate Orangetip			G5?	S2S3
<i>Caecidotea franzi</i> *	Franz's Cave Isopod			G2G4	S1
<i>Caecidotea pricei</i> *	Price's Cave Isopod			G5	S2S3
<i>Calephelis borealis</i> *	Northern Metalmark			G3	S1S2
<i>Callophrys gryneus</i> *	Juniper Hairstreak			G5	S3S4
<i>Callophrys henrici</i> *	Henry's Elfin			G5	S2S3
<i>Callophrys irus</i> *	Frosted Elfin			G2G3	S1S2
<i>Calopteryx amata</i> *	Superb Jewelwing			G5	S3
<i>Chlosyne nycteis</i> *	Silvery Checkerspot			G5	S3S4
<i>Cicindela patruela</i> *	Northern Barrens Tiger Beetle			G3	S2S3
<i>Cicinnus melsheimeri</i> *	Melsheimer's Sack Bearer Moth			G4	S3S4
<i>Coenagrion resolutum</i> *	Taiga Bluet			G5	S1S2
<i>Cordulegaster erronea</i> *	Tiger Spiketail			G4	S3
<i>Dichagyris grotei</i> *	Grote's Black-tipped Quaker Moth			G4	SH
<i>Dorocordulia lepida</i> *	Petite Emerald			G5	S2S3
<i>Enallagma boreale</i> *	Boreal Bluet			G5	S2S3
<i>Enallagma divagans</i> *	Turquoise Bluet			G5	S3S4
<i>Erastria coloraria</i> *	Broad-lined Erastria Moth			G3G4	S1S2
<i>Erynnis lucilius</i> *	Columbine Duskywing			G3	S1
<i>Erynnis persius</i> *	Persius Duskywing			G5	S1S2
<i>Euphydryas phaeton</i> *	Baltimore Checkerspot			G4	S3
<i>Euphyes conspicua</i> *	Black Dash			G4G5	S3S4
<i>Gomphaeschna furcillata</i> *	Harlequin Darner			G5	S3
<i>Gomphurus fraternus</i> *	Midland Clubtail			G5	S2S4
<i>Gomphurus lineatifrons</i> *	Splendid Clubtail			G4	SH
<i>Gomphurus ventricosus</i> *	Skillet Clubtail			G3	SH

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Insects (continued)					
<i>Helocordulia uhleri</i> *	Uhler's Sundragon			G5	S3S4
<i>Hemileuca maia</i> *	Eastern Buckmoth			G5	S2
<i>Hydraecia stramentosa</i> *	Figwort Borer Moth			G4	S1S2
<i>Hylogomphus abbreviatus</i> *	Spine-crowned Clubtail			G4	S2S3
<i>Ladona deplanata</i> *	Blue Corporal			G5	S3S4
<i>Lestes dryas</i> *	Emerald Spreadwing			G5	S3
<i>Lestes eurinus</i> *	Amber-winged Spreadwing			G5	S3S4
<i>Leucorrhinia glacialis</i> *	Crimson-ringed Whiteface			G5	S3S4
<i>Macaria promiscuata</i> *	Promiscuous Angle Moth			G4	S3
<i>Neoligia semicana</i> *	Northern Brocade Moth			G2G4	S1S2
<i>Nymphalis l-album</i>	Compton Tortoiseshell			G5	S3
<i>Phoberia ingenua</i> *	Uncommon Oak Moth			G3G4	S2
<i>Phyciodes batesii</i>	Tawny Crescent			G5	SX
<i>Progomphus obscurus</i> *	Common Sanddragon			G5	S1S2
<i>Properigea costa</i> *	Barrens Moth			G4	S2S3
<i>Pyrgus wyandot</i> *	Appalachian Grizzled Skipper			G1G2Q	S1
<i>Rhionaeschna mutata</i> *	Spatterdock Darner			G4	S3
<i>Satyrrium edwardsii</i> *	Edwards' Hairstreak			G4	S3S4
<i>Somatochlora elongata</i> *	Ski-tailed Emerald			G5	S3S4
<i>Somatochlora linearis</i> *	Mocha Emerald			G5	S2S3
<i>Somatochlora walshii</i> *	Brush-tipped Emerald			G5	S2S3
<i>Speyeria idalia</i> *	Regal Fritillary			G3?	S1
<i>Sphalloplana pricei</i> *	Refton Cave Planarian			G2G3	S1
<i>Stenogomphurus rogersi</i> *	Sable Clubtail			G4	S3
<i>Stygobromus allegheniensis</i> *	Allegheny Cave Amphipod			G5	S2S3
<i>Stygobromus stellmacki</i> *	Stellmack's Cave Amphipod			G1G2	S1
<i>Stylurus amnicola</i> *	Riverine Clubtail			G4	SH

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Insects (continued)					
<i>Sympetrum semicinctum</i> *	Band-winged Meadowhawk			G5	S3S4
<i>Tachopteryx thoreyi</i> *	Gray Petaltail			G4	S3
<i>Xylotype capax</i> *	Broad Sallow Moth			G4	S3
<i>Zale submediana</i> *	Gray Spring Zale Moth			G4	S2S3

Land Snails

<i>Allogona profunda</i> *	Broad-banded Forestsnail			G5	S2
<i>Anguispira alternata</i> *	Flamed Tigersnail			G5	S3
<i>Appalachina sayana</i> *	Spike-lip Crater			G5	S2
<i>Discus catskillensis</i> *	Angular Disc			G5	S3
<i>Discus patulus</i> *	Domed Disc			G5	S3
<i>Euconulus dentatus</i> *	Toothed Hive			G5	S1
<i>Euconulus fulvus</i> *	Brown Hive			G5	S3
<i>Gastrocopta armifera</i> *	Armed Snaggletooth			G5	S3
<i>Gastrocopta corticaria</i> *	Bark Snaggletooth			G5	S3
<i>Gastrocopta procera</i>	Wing Snaggletooth			G5	SNR
<i>Gastrocopta tappaniana</i> *	White Snaggletooth			G5	S1
<i>Hendersonia occulta</i> *	Cherrystone Drop			G4	S2
<i>Mesodon zaletus</i> *	Toothed Globe			G5	S3
<i>Pallifera fosteri</i> *	Foster Mantleslug			G5	S3
<i>Pomatiopsis lapidaria</i> *	Slender Walker			G5	S2
<i>Pupoides albilabris</i> *	White-lip Dagger			G5	S2
<i>Strobilops labyrinthicus</i> *	Maze Pinecone			G5	S3
<i>Strobilops texianus</i> *	Southern Pinecone			G5	S3
<i>Triodopsis juxtidentis</i> *	Atlantic Threetooth			G5	S1
<i>Triodopsis vulgata</i> *	Dished Threetooth			G5	S3
<i>Vertigo bollesiana</i> *	Delicate Vertigo			G4G5	S3

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
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Land Snails (continued)

<i>Vertigo cristata</i> *	Crested Vertigo			G5	S3
<i>Vertigo pygmaea</i> *	Pygmy Vertigo			G5	S3
<i>Vertigo tridentata</i> *	Honey Vertigo			G5	S3

Mammals

Bat Hibernaculum	Winter Bat Colony			GNR	S1
<i>Lasionycteris noctivagans</i> *	Silver-haired Bat			G3G4	S1
<i>Mustela nivalis</i>	Least Weasel			G5	S5
<i>Myotis leibii</i> *	Eastern Small-footed Bat		PT	G4	S2
<i>Myotis lucifugus</i> *	Little Brown Bat		PE	G3G4	S1
<i>Myotis septentrionalis</i> *	Northern Long-eared Bat	LT	PE	G2G3	S1
<i>Myotis sodalis</i> *	Indiana Bat	LE	PE	G2	S1
<i>Neotoma magister</i> *	Allegheny Woodrat		PT	G3G4	S2
<i>Perimyotis subflavus</i> *	Tricolored Bat		PE	G3G4	S1
<i>Sorex dispar</i> *	Long-tailed Shrew			G4	S4
<i>Sorex palustris albibarbis</i> *	Northern Water Shrew			G5T5	S3
<i>Sylvilagus obscurus</i> *	Appalachian Cottontail			G4	S1S2

Mussels

<i>Alasmidonta undulata</i> *	Triangle Floater			G4	S3
<i>Alasmidonta varicosa</i> *	Brook Floater			G3	S1S2
<i>Lasmigona subviridis</i> *	Green Floater			G3	S2S3
<i>Alasmidonta marginata</i> *	Elktoe			G4	S3S4
<i>Lampsilis radiata</i> *	Eastern Lampmussel			G5	S1

Juniata Forward: Building on 25 Years of Conservation

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants					
<i>Actaea podocarpa</i>	Mountain Bugbane		PR	G4	S3
<i>Actaea rubra</i>	Red Baneberry		N	G5	S2
<i>Adlumia fungosa</i>			N	G4	SNR
<i>Ageratina aromatica</i>	Small-Leaved White-Snakeroot		PT	G5	S2
<i>Allium tricoccum</i>	Ramp		N	G5	SNR
<i>Alopecurus aequalis</i>	Short-awn Foxtail		N	G5	S3
<i>Amelanchier humilis</i>	Serviceberry		TU	G5	S1
<i>Amelanchier sanguinea</i>	Roundleaf Serviceberry		TU	G5	S2
<i>Angelica triquinata</i>	Mountain Angelica		N	G4	S4
<i>Angelica venenosa</i>			N	G5	S5
<i>Antennaria virginica</i>	Shale Barren Pussytoes		N	G4	S3
<i>Anticlea glauca</i>	White Camas		PE	G5T4T5	S1
<i>Aplectrum hyemale</i>	Puttyroot		DL	G5	S4
<i>Arabis patens</i>	Spreading Rockcress		PT	G3	S2
<i>Arabis pycnocarpa</i>	Cream-flower Rockcress		N	G5T5	S1
<i>Arnoglossum reniforme</i>	Great Indian-plantain		PE	G4	S1
<i>Asclepias verticillata</i>	Whorled Milkweed		PT	G5	S2
<i>Asplenium ruta-muraria</i>			N	G5	SNR
<i>Astragalus neglectus</i>	Cooper's Milk-vetch		PE	G4	S1
<i>Aureolaria flava</i>	Smooth Yellow False Foxglove		N	G5	S2
<i>Bartonia paniculata</i> ssp. <i>paniculata</i>	Screw-Stem		PR	G5T5	S3
<i>Berberis canadensis</i>	American Barberry		PX	G3G4	SX
<i>Borodinia burkii</i>	Porter's Rockcress		N	G3G5	SNR
<i>Botrychium simplex</i>	Least Grape-fern		N	G5	S3S5
<i>Bouteloua curtipendula</i>	Tall Gramma		PT	G5	S2
<i>Brickellia eupatorioides</i> var. <i>eupatorioides</i>	False Boneset		N	G5T5	S2
<i>Bromus kalmii</i>	Brome Grass		PT	G5	S2

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Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Calamagrostis porteri</i>	Porter's Reedgrass		N	G4	S3S4
<i>Campanula rotundifolia</i>			N	G5	SNR
<i>Capnoides sempervirens</i>	Pale Corydalis		N	G5	S4
<i>Carex alata</i>	Broad-winged Sedge		PT	G5	S2
<i>Carex bebbii</i>	Bebb's Sedge		PE	G5	S2
<i>Carex buxbaumii</i>	Brown Sedge		PR	G5	S3
<i>Carex careyana</i>	Carey's Sedge		PE	G4G5	S1
<i>Carex crinita</i> var. <i>brevicrinis</i>	Short Hair Sedge		PE	G5T5	S1
<i>Carex cumberlandensis</i>	Cumberland Sedge		N	GNR	SH
<i>Carex disperma</i>	Soft-leaved Sedge		PR	G5	S3
<i>Carex eburnea</i>	Ebony Sedge		PE	G5	S1
<i>Carex hitchcockiana</i>			N	G5	S3
<i>Carex interior</i>	Sedge		N	G5	SNR
<i>Carex jamesii</i>	Sedge		N	G5	S4
<i>Carex lupuliformis</i>	False Hop Sedge		PE	G4	S1
<i>Carex molesta</i>	Sedge		N	G4	S4
<i>Carex nigromarginata</i>			N	G5	S4
<i>Carex oligocarpa</i>			N	G4G5	S4
<i>Carex oligosperma</i>	Few-seeded Sedge		PT	G5	S2
<i>Carex ormostachya</i>	Spike Sedge		N	G4G5	S1S2
<i>Carex prairea</i>	Prairie Sedge		PT	G5	S2
<i>Carex retrorsa</i>	Backward Sedge		PE	G5	S1
<i>Carex schweinitzii</i>	Schweinitz's Sedge		PE	G3G4	S1
<i>Carex sprengelii</i>	Sedge		N	G5	S3
<i>Carex tetanica</i>	A Sedge		PT	G4G5	S2
<i>Carex typhina</i>	Cattail Sedge		PE	G5	S2
<i>Carya laciniosa</i>	Shellbark Hickory		N	G5	S3S4

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Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Castilleja coccinea</i>	Scarlet Indian-paintbrush		PT	G5	S2
<i>Ceanothus americanus</i>			N	G5	SNR
<i>Celastrus scandens</i>			N	G5	SNR
<i>Cheilanthes lanosa</i>			N	G5	SNR
<i>Clematis occidentalis</i>	Purple Clematis		N	G5	S2
<i>Coeloglossum viride</i>	Long-bracted Green Orchid		PE	G5	S1
<i>Conioselinum chinense</i>	Hemlock-parsley		PE	G5	S1
<i>Convolvulus stans</i>	Shale Bindweed		N	G4G5T4	S4
<i>Corydalis aurea</i>	Golden Corydalis		N	G5	S1
<i>Crataegus dilatata</i>	A Hawthorn		N	G4	SU
<i>Crataegus mollis</i>	Downy Hawthorne		TU	G5	SU
<i>Crataegus uniflora</i>			N	G5	SNR
<i>Crocianthemum bicknellii</i>	Bicknell's Hoary Rockrose		PE	G5	S2
<i>Cryptogramma stelleri</i>	Slender Rock-brake		PE	G5	S1
<i>Cubelium concolor</i>	Green-violet		N	G5	SNR
<i>Cuscuta cephalanthi</i>	Button-bush Dodder		TU	G5	S2
<i>Cuscuta coryli</i>	Hazel Dodder		PX	G5?	SH
<i>Cuscuta polygonorum</i>	Smartweed Dodder		TU	G5	S2
<i>Cypripedium parviflorum</i> var. <i>makasin</i>	Northern Small Yellow Lady's-slipper		PE	G5T4T5	S1
<i>Cypripedium parviflorum</i> var. <i>parviflorum</i>	Southern Small Yellow Lady's-slipper		PE	G5T3T5	S1S2
<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Large Yellow Lady's-slipper		PV	G5T5	S4
<i>Cypripedium reginae</i>	Showy Lady's-slipper		PE	G4G5	S1
<i>Delphinium exaltatum</i>	Tall Larkspur		PE	G3	S1
<i>Desmodium obtusum</i>	Stiff Tick-trefoil		N	G4G5	S1
<i>Diarrhena obovata</i>	American Beakgrain		DL	G4G5	S4
<i>Dichanthelium boreale</i>	Panic-grass		TU	G5	S2S3
<i>Dichanthelium villosissimum</i>	White-hair Witchgrass		TU	G5	SNR

Juniata Forward: Building on 25 Years of Conservation

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Diplazium pycnocarpon</i>	Glade Fern		N	G5	SNR
<i>Dirca palustris</i>	Leatherwood		N	G4	SNR
<i>Dryopteris clintoniana</i>	Clinton's Wood Fern		N	G5	S2
<i>Eleocharis compressa</i>	Flat-stemmed Spike-rush		PE	G4	S1
<i>Eleocharis intermedia</i>	Matted Spike-rush		PT	G5	S2
<i>Elymus trachycaulus</i>	Slender Wheatgrass		N	G5	S3
<i>Endotropis lanceolata</i>	Lance-leaved Buckthorn		PE	G5	S1
<i>Epilobium strictum</i>	Downy Willow-herb		PR	G5	S3
<i>Erythronium albidum</i>	White Trout-lily		PR	G5	S3
<i>Euphorbia obtusata</i>	Blunt-leaved Spurge		PX	G5	S1
<i>Euphorbia purpurea</i>	Glade Spurge		PE	G3	S1
<i>Eurybia radula</i>	Rough-leaved Aster		N	G5	S2
<i>Galium boreale</i>			N	G5	S3
<i>Galium latifolium</i>	Purple Bedstraw		PT	G5	S2
<i>Galium trifidum</i>	Marsh Bedstraw		N	G5	S2
<i>Gaylussacia brachycera</i>	Box Huckleberry		PE	G3	S1
<i>Gentiana alba</i>	Yellow Gentian		TU	G4	SH
<i>Geranium bicknellii</i>	Cranesbill		PE	G5	S1
<i>Glyceria borealis</i>	Small-floating Manna-grass		DL	G5	S4
<i>Goodyera repens</i>	Lesser Rattlesnake-plantain		N	G5	S2
<i>Goodyera tessellata</i>	Checkered Rattlesnake-plantain		PE	G5	S2
<i>Gymnocarpium appalachianum</i>	Appalachian Oak Fern		TU	G3	S1
<i>Gymnocarpium x heterosporum</i>	A Fern Hybrid (Sterile Triploid)		N	GNA	SX
<i>Hieracium traillii</i>	Maryland Hawkweed		PE	G4	S1
<i>Hieracium umbellatum</i>	Umbellate Hawkweed		N	G5	S1
<i>Hydrastis canadensis</i>	Golden-seal		PV	G3G4	S4
<i>Hydrocotyle umbellata</i>	Many-flowered Pennywort		PX	G5	SH

Juniata Forward: Building on 25 Years of Conservation

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Hypericum gymnanthum</i>	Clasping-leaved St. John's-wort		PE	G4	S1
<i>Ilex opaca</i>	American Holly		PT	G5	S4S5
<i>Isoetes valida</i>	Quillwort		N	G4?	S1S3
<i>Isoetes x brittonii</i>	Quillwort		N	GNA	S1S2
<i>Jeffersonia diphylla</i>	Twinleaf		N	G5	SNR
<i>Juglans cinerea</i>	Butternut		N	G3	S4
<i>Juncus biflorus</i>	Grass-leaved Rush		PR	G5	S3
<i>Juncus debilis</i>	Weak Rush		N	G5	S3
<i>Juncus torreyi</i>	Torrey's Rush		PT	G5	S4
<i>Juniperus communis var. depressa</i>	Dwarf Juniper		N	G5T5	S1S2
<i>Lactuca hirsuta</i>	Downy Lettuce		N	G5?	S3
<i>Lathyrus ochroleucus</i>	Wild-pea		PT	G5	S1
<i>Lathyrus venosus</i>	Veiny Pea		N	G5	S2
<i>Lemna turionifera</i>	A Duckweed		TU	G5	S4
<i>Liatris scariosa</i>	Round-head Gayfeather		TU	G5?	S2
<i>Ligusticum canadense</i>	Nondo Lovage		PE	G4	SH
<i>Linnaea borealis</i>	Twinflower		PT	G5	S1
<i>Linum sulcatum</i>	Grooved Yellow Flax		PE	G5	S1
<i>Lithospermum canescens</i>	Hoary Puccoon		N	G5	S2
<i>Lithospermum latifolium</i>	American Gromwell		PE	G4	S4
<i>Lithospermum parviflorum</i>	False Gromwell		PE	G4G5T4	S1
<i>Lorinseria areolata</i>	Netted Chainfern		PR	G5	S3
<i>Lupinus perennis</i>	Lupine		PR	G5	S3
<i>Lycopodiella margueriteae</i>	Marguerite's Clubmoss		PE	G1G2	S1
<i>Lycopus rubellus</i>	Bugleweed		PE	G5	S1
<i>Lysimachia hybrida</i>	Lance-leaf Loosestrife		PE	G5	S1
<i>Magnolia tripetala</i>	Umbrella Magnolia		PT	G5	S2

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	White Adder's-mouth		TU	G5T4T5	S1
<i>Matelea obliqua</i>	Oblique Milkvine		PE	G4?	S1
<i>Melica nitens</i>	Three-flowered Melic-grass		PT	G5	S2
<i>Minuartia michauxii</i>			N	G5	S2
<i>Morus rubra</i>	Red Mulberry		N	G5	S2
<i>Nabalus serpentaria</i>	Lion's-foot		N	G5	S3
<i>Neottia cordata</i>	Heart-leaved Twayblade		PE	G5	S1
<i>Neottia smallii</i>	Kidney-leaved Twayblade		PE	G4	S1
<i>Oenothera argillicola</i>	Shale-barren Evening-primrose		PT	G3G4	S2
<i>Ophioglossum pycnostichum</i>	Adder's Tongue		PX	G5	S4
<i>Opuntia humifusa</i>	Prickly-pear Cactus		PR	G5	S3
<i>Orontium aquaticum</i>	Golden Club		PR	G5	S4
<i>Packera obovata</i>	Roundleaf Groundsel		N	G5	SNR
<i>Panax quinquefolius</i>	Wild Ginseng		PV	G3G4	S4
<i>Panicum flexile</i>	Wiry Witchgrass		TU	G5	S2S3
<i>Paronychia montana</i>			N	G4	SNR
<i>Pedicularis lanceolata</i>	Swamp Lousewort		N	G5	S2
<i>Pellaea atropurpurea</i>			N	G5	S4S5
<i>Penstemon canescens</i>	Beard-tongue		N	G4	S3
<i>Penstemon laevigatus</i>	Beard-tongue		N	G5	S3
<i>Persicaria amphibia</i> var. <i>stipulacea</i>	A Water Smartweed		TU	G5T5	S4
<i>Persicaria careyi</i>	Carey's Smartweed		PE	G4	S1
<i>Phacelia dubia</i>			N	G5	S3S4
<i>Phlox ovata</i>	Mountain Phlox		PE	G4	S1
<i>Phyla lanceolata</i>	Lance Fog-fruit		TU	G5	S4
<i>Pinus echinata</i>	Short-leaf Pine		N	G5	S1S2
<i>Platanthera blephariglottis</i>	White Fringed-orchid		N	G5	S2

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Platanthera ciliaris</i>	Yellow-fringed Orchid		PT	G5	S2
<i>Platanthera hookeri</i>	Hooker's Orchid		TU	G4	S1
<i>Poa languida</i>	Drooping Bluegrass		TU	G5T4Q	S2
<i>Podostemum ceratophyllum</i>	Riverweed		TU	G5	S4
<i>Polygala polygama</i>	Racemed Milkwort		TU	G5	S1S2
<i>Polygala senega</i>	Seneca Snakeroot		N	G4G5	S2
<i>Potamogeton gramineus</i>	Grassy Pondweed		PE	G5	S1
<i>Potamogeton hillii</i>	Hill's Pondweed		PE	G3	S1
<i>Potamogeton illinoensis</i>	Illinois Pondweed		N	G5	S4
<i>Potamogeton oakesianus</i>	Oakes' Pondweed		TU	G5	S1S2
<i>Potamogeton pulcher</i>	Spotted Pondweed		PE	G5	S1
<i>Potamogeton richardsonii</i>	Red-head Pondweed		PT	G5	S3
<i>Primula fassettii</i>	Fassett Jeweled Shooting-Star		PT	G4	S2
<i>Prunus alleghaniensis</i>	Alleghany Plum		N	G4	S2S3
<i>Prunus pumila</i> var. <i>depressa</i>	Low Sand Cherry		N	G5T5	S2
<i>Prunus susquehanae</i>	Susquehana Cherry		N	G5T4T5	S2
<i>Ptelea trifoliata</i>	Common Hop-tree		PT	G5	S2
<i>Pyrola chlorantha</i>			N	G5	S1
<i>Quercus macrocarpa</i>	Bur Oak		N	G5	S2S4
<i>Quercus muehlenbergii</i>	Chinquapin Oak		N	G5	S4
<i>Quercus shumardii</i>	Shumard's Oak		PE	G5	S2
<i>Ranunculus aquatilis</i> var. <i>diffusus</i>	White Water-crowfoot		TU	G5T5	S3
<i>Ranunculus flabellaris</i>	Yellow Water-crowfoot		N	G5	S2
<i>Ranunculus micranthus</i>	Small-flowered Crowfoot		PR	G5	S4
<i>Ranunculus pennsylvanicus</i>			N	G5	S3S4
<i>Rhamnus alnifolia</i>	Alder-leaved Buckthorn		TU	G5	S4
<i>Rhus aromatica</i>			N	G5	S4S5

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Ribes hirtellum</i>			N	G5	SNR
<i>Ribes lacustre</i>	Swamp Currant		TU	G5	S1
<i>Ripariosida hermaphrodita</i>	Sida		PE	G3	S2
<i>Rosa blanda</i>	Meadow Rose		N	G5	SU
<i>Salix candida</i>	Hoary Willow		PE	G5	S1
<i>Samolus parviflorus</i>	Pineland Pimpernel		TU	G5	S3
<i>Sanguisorba canadensis</i>			N	G5	S4
<i>Schoenoplectus subterminalis</i>	Water Bulrush		N	G5	S3
<i>Schoenoplectus torreyi</i>	Torrey's Bulrush		PE	G5?	S1
<i>Scirpus ancistrochaetus</i>	Northeastern Bulrush	LE	PE	G3	S3
<i>Scleria triglomerata</i>	Whip Nutrush		TU	G5	S1
<i>Selaginella rupestris</i>			N	G5	SNR
<i>Sisyrinchium montanum</i>	Strict Blue-eyed-grass		N	G5	S4
<i>Solidago erecta</i>	Slender Golden-rod		PE	G5	S1
<i>Solidago speciosa</i> var. <i>speciosa</i>	Showy Goldenrod		N	G5T5?	S2
<i>Solidago uliginosa</i>	Bog Goldenrod		PT	G5	S2
<i>Sparganium androcladum</i>	Branching Bur-reed		PE	G4G5	S1
<i>Sparganium angustifolium</i>	Bur-reed		N	G5	S2
<i>Spiranthes ovalis</i>	October Ladies'-tresses		PE	G5?	S1
<i>Sporobolus neglectus</i>			N	G5	S4
<i>Stellaria borealis</i>	Northern Stitchwort		PT	G5	S2
<i>Stylosanthes biflora</i>	Pencilflower		TU	G5	S2
<i>Symphoricarpos albus</i> var. <i>albus</i>			N	G5T5	S2
<i>Symphyotrichum ericoides</i>	White Heath Aster		TU	G5	S3
<i>Symphyotrichum oblongifolium</i>			N	G5	S4
<i>Thalictrum coriaceum</i>	Thick-leaved Meadow-rue		PT	G4	S2
<i>Tipularia discolor</i>	Crane-fly Orchid		DL	G4G5	S4S5

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Plants (continued)					
<i>Trifolium virginicum</i>	Kate's Mountain Clover		PE	G3	S1
<i>Trillium cernuum</i>	Nodding Trillium		N	G5	S2
<i>Trillium sessile</i>	Toadshade		N	G5	SNR
<i>Triphora trianthophora</i>	Nodding Pogonia		PE	G4?	S1
<i>Utricularia geminiscapa</i>	Bladderwort		N	G4G5	S4
<i>Veratrum latifolium</i>			N	G5	SNR
<i>Viburnum rafinesquianum</i>			N	G5	SNR
<i>Vicia americana</i>			N	G5	SNR
<i>Viola appalachiensis</i>	Appalachian Blue Violet		PT	G4	S3S4
<i>Woodsia ilvensis</i>			N	G5	SNR
<i>Zanthoxylum americanum</i>	Northern Prickly-ash		N	G5	S4
<i>Zizania aquatica</i>	Indian Wild Rice		PR	G5	S3
Reptiles					
<i>Agkistrodon contortrix</i> *	Eastern Copperhead			G5	S3S4
<i>Ambystoma jeffersonianum</i> *	Jefferson Salamander			G4	S3
<i>Ambystoma opacum</i> *	Marbled Salamander			G5	S3
<i>Anaxyrus fowleri</i> *	Fowler's Toad			G5	S3S4
<i>Carphophis amoenus amoenus</i> *	Eastern Wormsnake			G5T5	S2
<i>Clemmys guttata</i> *	Spotted Turtle			G5	S3S4
<i>Crotalus horridus</i> *	Timber Rattlesnake		DL	G4	S3S4
<i>Glyptemys insculpta</i> *	Wood Turtle			G3	S3S4
<i>Heterodon platirhinos</i> *	Eastern Hog-nosed Snake			G5	S3S4
<i>Lithobates pipiens</i> *	Northern Leopard Frog			G5	S2S3
<i>Plestiodon anthracinus anthracinus</i> *	Northern Coal Skink			G5T5	S3
<i>Pseudacris feriarum</i> *	Upland Chorus Frog			G5	S1
<i>Regina septemvittata</i> *	Queensnake			G5	S3S4

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Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Reptiles (continued)					
Scaphiopus holbrookii*	Eastern Spadefoot		PT	G5	S2S3
Sceloporus undulatus*	Eastern Fence Lizard			G5	S3
Terrapene carolina carolina*	Woodland Box Turtle			G5T5	S3S4
Thamnophis saurita*	Eastern Ribbonsnake			G5	S3

* Denotes a Species of Greatest Conservation Need (SGCN)

Updated information can be found at <https://www.naturalheritage.state.pa.us/SpeciesFeatures.aspx>

Global NatureServe Rank Codes and Definitions

Rank Code	Description	Definition
G1	Critically Imperiled	At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2	Imperiled	At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3	Vulnerable	At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4	Apparently Secure	Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5	Secure	Common; widespread and abundant.
G#G#	Range Rank	A numeric range rank (e.g., G2G3, G1G3) is used to indicate the range of uncertainty about the exact status of a taxon or ecosystem type.
GNR	Not Ranked	Not ranked at the global level. Applies to natural communities that have been designated at the state level but not yet reviewed globally.
GU	Unknown	Possibly in peril range wide but status uncertain; need more information.
GNA	Not Applicable	A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
GX	Presumed Extinct	Believed to be extinct throughout its range. Not located despite intensive searches of historic sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
GH	Possibly Extinct	Believed to be extinct throughout its range. Not located despite intensive searches of historic sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

Global Rank Qualifiers

Qualifier	Description	Definition
?	Inexact Numeric Rank	Denotes inexact numeric rank (e.g., G2?)
Q	Questionable Taxonomy	Taxonomic distinctiveness of this entity at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or the inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority conservation priority.
C	Captive or Cultivated Only	At present extant only in captivity or cultivation, or as a reintroduced population not yet established.
T	Intraspecific Taxon (trinomial)	The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above for global conservation status ranks. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T-rank cannot imply the subspecies or variety is more abundant than the species as a whole-for example, a G1T2 cannot occur. A vertebrate animal population, such as those listed as distinct population segments under the U.S. Endangered Species Act, may be considered an infraspecific taxon and assigned a T-rank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status.

State NatureServe Rank and Definitions

Rank Code	Description	Definition
S1	Critically Imperiled	Critically imperiled in the nation or state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2	Imperiled	Imperiled in the nation or state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state.
S3	Vulnerable	Vulnerable in the nation or state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	Apparently Secure	Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5	Secure	Common, widespread, and abundant in the nation or state.
S#S#	Range Rank	A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SNR	Not Ranked	State conservation status not yet assessed.
SU	Unknown	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SX	Presumed Extinct	Species or community is believed to be extirpated from the nation or state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
SH	Possibly Extinct (Historical)	Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years. A species or community could become NH or SH without such a 20-40 year delay if the only known occurrences in a nation or state were destroyed or if it had been extensively and unsuccessfully looked for. The NH or SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences.
SNA	Not Applicable	A conservation status rank is not applicable because the species is not a suitable target for conservation activities.

Breeding Status Qualifiers

Rank Code	Description	Definition
B	Breeding	Conservation status refers to the breeding population of the species in the nation or state/province.
N	Nonbreeding	Conservation status refers to the non-breeding population of the species in the nation or state/province.
M	Migrant	Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province.

State Legal Status Codes - Plants

Rank Code	Description	Definition
PE	Pennsylvania Endangered	Plant species which are in danger of extinction throughout most of their natural range within this Commonwealth, if critical habitat is not maintained or if the species is greatly exploited by man. This classification shall also include any populations of plant species that have been classified as Pennsylvania Extirpated, but which subsequently are found to exist in this Commonwealth.
PT	Pennsylvania Threatened	Plant species which may become endangered throughout most or all of their natural range within this Commonwealth, if critical habitat is not maintained to prevent their future decline, or if the species is greatly exploited by man.
PR	Pennsylvania Rare	Plant species which are uncommon within this Commonwealth because they may be found in restricted geographic areas or in low numbers throughout this Commonwealth.
PX	Pennsylvania Extirpated	Plant species believed by the Department to be extinct within this Commonwealth. These plants may or may not be in existence outside the Commonwealth. If plant species classified as Pennsylvania Extirpated are found to exist, the species automatically will be considered to be classified as Pennsylvania Endangered.
PV	Pennsylvania Vulnerable	Plant species which are in danger of population decline within Commonwealth because of their beauty, economic value, use as a cultivar, or other factors which indicate that persons may seek to remove these species from their native habitats.

TU	Tentatively Undetermined	A classification of plant species which are believed to be in danger of population decline, but which cannot presently be included within another classification due to taxonomic uncertainties, limited evidence within historical records, or insufficient data.
N		No current legal status, but is under review for future listing.

State Legal Status Codes – Wild Birds and Mammals

Rank Code	Description	Definition
PE	Pennsylvania Endangered	Species in imminent danger of extinction or extirpation throughout their range in Pennsylvania if the deleterious factors affecting them continue to operate. These are: 1) species whose numbers have already been reduced to a critically low level or whose habitat has been so drastically reduced or degraded that immediate action is required to prevent their extirpation from the Commonwealth; or 2) species whose extreme rarity or peripherality places them in potential danger of precipitous declines or sudden extirpation throughout their range in Pennsylvania; or 3) species that have been classified as "Pennsylvania Extirpated", but which are subsequently found to exist in Pennsylvania as long as the above conditions 1 or 2 are met; or 4) species determined to be "Endangered" pursuant to the Endangered Species Act of 1973, Public Law 93 205 (87 Stat. 884), as amended.
PT	Pennsylvania Threatened	Species that may become endangered within the foreseeable future throughout their range in Pennsylvania unless the casual factors affecting the organism are abated. These are: 1) species whose populations within the Commonwealth are decreasing or have been heavily depleted by adverse factors and while not actually endangered, are still in critical condition; 2) species whose populations may be relatively abundant in the Commonwealth but are under severe threat from serious adverse factors that have been identified and documented; or 3) species whose populations are rare or peripheral and in possible danger of severe decline throughout their range in Pennsylvania; or 4) species determined to be "Threatened" pursuant to the Endangered Species Act of 1973, Public Law 93205 (87 Stat. 884), as amended, that are not listed as "Pennsylvania Endangered".

State Legal Status Codes – Fish, Amphibians, Reptiles, and Other Aquatic Organisms

Rank Code	Description	Definition
PE	Pennsylvania Endangered	All species declared by: 1) the Secretary of the United States Department of the Interior to be threatened with extinction and appear on the Endangered Species List or the Native Endangered Species List published in the Federal Register; or 2) have been declared by the Pennsylvania Fish Commission, Executive Director to be threatened with extinction and appear on the Pennsylvania Endangered Species List published by the Pennsylvania Bulletin.
PT	Pennsylvania Threatened	All species declared by: 1) the Secretary of the United States Department of the Interior to be in such small numbers throughout their range that they may become endangered if their environment worsens, and appear on a Threatened Species List published in the Federal Register; or 2) have been declared by the Pennsylvania Fish Commission Executive Director to be in such small numbers throughout their range that they may become endangered if their environment worsens and appear on the Pennsylvania Threatened Species List published in the Pennsylvania Bulletin.
PC		Animals that could become endangered or threatened in the future. All of these are uncommon, have restricted distribution or are at risk because of certain aspects of their biology.
N		No current legal status, but is under review for future listing.

Federal Status Codes and Definitions

Rank Code	Description	Definition
LE	Listed Endangered	A species which is in danger of extinction throughout all or a significant portion of its range.
LT	Listed Threatened	Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

APPENDIX N. HISTORICAL SITES

Property Name	County	Municipality
Barclay House	Bedford	Bedford
Bedford County Alms House	Bedford	Bedford
Bedford Historic District	Bedford	Bedford
Bedford Springs Hotel Historic District	Bedford	Bedford
Bonnet's Tavern	Bedford	Bedford
Bridge in Snake Spring Township	Bedford	Bedford
Chalybeate Springs Hotel	Bedford	Bedford Borough
Chestnut Ridge and Schellsburg Union Church and Cemetery	Bedford	Napier Township
Coffee Pot, The	Bedford	Bedford Township
Cuppett's Covered Bridge	Bedford	Napier Township
Defibaugh Tavern	Bedford	Snake Spring Township
Diehls Covered Bridge	Bedford	Harrison Township
Dutch Corner Historic Agricultural District	Bedford	Bedford Township
Espy House	Bedford	Bedford
Everett Historic District	Bedford	Everett
Feltons Mill Covered Bridge	Bedford	East Providence Township
Halls Mill Covered Bridge	Bedford	Hopewell Township
Heirline Covered Bridge	Bedford	Harrison/Napier Townships
Jacksons Mill Covered Bridge	Bedford	East Providence Township
Juniata Woolen Mill and Newry Manor	Bedford	Snake Spring Township
Knisley, Dr., Covered Bridge	Bedford	West St. Clair Township
New Enterprise Public School	Bedford	South Woodbury Township
Osterburg Covered Bridge	Bedford	East St. Clair Township
Russell House	Bedford	Bedford
Ryot Covered Bridge	Bedford	West St. Clair Township
Schellsburg Historic District	Bedford	Schellsburg Borough
Site 36BD90	Bedford	Bedford

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Property Name	County	Municipality
Snooks Covered Bridge	Bedford	East St. Clair Township
Allegheny Furnace	Blair	Altoona
Allegheny Portage Railroad National Historic Site	Blair	Johnstown
Altoona Armory	Blair	Logan Township
Baker Mansion	Blair	Altoona
Blair County Courthouse	Blair	Hollidaysburg
Broad Avenue Historic District	Blair	Altoona
Central Trust Company Buildings	Blair	Altoona
Chimney Rocks	Blair	Hollidaysburg
Downtown Altoona Historic District	Blair	Altoona
Etna Furnace	Blair	Catharine Township
Fort Roberdeau	Blair	Tyrone Township
Highland Hall	Blair	Hollidaysburg
Hollidaysburg Historic District	Blair	Hollidaysburg
Horseshoe Curve	Blair	Altoona
Isett, Jacob, House and Store	Blair	Tyrone Township
Keith, D.S., Junior High School	Blair	Altoona
Knickerbocker Historic District	Blair	Altoona
Leap-the-Dips	Blair	Altoona
Llyswen Historic District	Blair	Altoona
Mishler Theatre	Blair	Altoona
Noble, J. L. School	Blair	Altoona
Penn Alto Hotel	Blair	Altoona
Roaring Spring Historic District	Blair	Roaring Spring
Royer, Daniel, House	Blair	Woodbury Township
St. John's Evangelical Lutheran Church	Blair	Tyrone Township
Tyrone Armory	Blair	Tyrone
Tyrone Borough Historic District	Blair	Tyrone
Williamsburg Historic District	Blair	Williamsburg
Ayres, Bucher, Farm	Centre	Pine Grove Mills

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Property Name	County	Municipality
Elder, Abraham, Stone House	Centre	Stormstown
Gray, John, House	Centre	Halfmoon Township
Burnt Cabins Gristmill Property	Fulton	Burnt Cabins
Burnt Cabins Historic District	Fulton	Dublin
Cowans Gap State Park Family Cabin District	Fulton	Chambersburg
Andrews, H. O., Feed Mill	Huntingdon	Union
Baker Bridge	Huntingdon	Newburg
Barree Forge and Furnace	Huntingdon	Alexandria
Birmingham Bridge	Huntingdon	Birmingham
Brumbaugh Homestead	Huntingdon	Marklesburg
Colerain Forges Mansion	Huntingdon	Franklinville
Corbin Bridge	Huntingdon	Huntingdon
East Broad Top Railroad	Huntingdon	Rockhill Furnace
Frehn Bridge	Huntingdon	Springfield
Greenwood Furnace	Huntingdon	McAlevys Fort
Greenwood Lake Dam	Huntingdon	Belleville
Harbison-Walker Refractories Company	Huntingdon	Mount Union
Hudson Grist Mill	Huntingdon	Saltillo
Huntingdon Armory	Huntingdon	Huntingdon
Huntingdon Borough Historic District	Huntingdon	Huntingdon
Huntingdon Furnace	Huntingdon	Franklinville
Juniata Iron Works	Huntingdon	Alexandria
Leas, Benjamin B., House	Huntingdon	Shirleysburg
Lloyd and Henry Warehouse	Huntingdon	Huntingdon
Marklesburg Historic District	Huntingdon	Marklesburg
Minersville Coke Ovens	Huntingdon	Coalmont
Monroe Furnace	Huntingdon	McAlevys Fort
Mount Union Historic District	Huntingdon	Mount Union Borough
Oyer, Christian, Jr., House	Huntingdon	Huntingdon
Paradise Furnace	Huntingdon	Entriken

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Property Name	County	Municipality
Pennsylvania Canal Guard Lock and Feeder Dam, Raystown Branch	Huntingdon	Springfield
Pennsylvania Furnace Mansion	Huntingdon	Pennsylvania Furnace
Pennsylvania Railroad Bridge over Shavers Creek	Huntingdon	Petersburg
Pennsylvania Railroad District	Huntingdon	Spruce Creek
Pennsylvania Railroad Old Bridge over Standing Stone Creek	Huntingdon	Huntingdon
Pulpit Rocks	Huntingdon	Huntingdon
Robb Farm	Huntingdon	Walker Township
Robertsdale Historic District	Huntingdon	Robertsdale
Runk Bridge	Huntingdon	Shirleysburg
Seeds, Hugh D. and Martha S., Farm	Huntingdon	Tyrone
Shade Gap Feed and Flour Mill	Huntingdon	Shade Gap
Smalley, Lewis, Homestead	Huntingdon	Allenport
Spruce Creek Rod and Gun Club	Huntingdon	Franklin Township
St. Mary's Covered Bridge	Huntingdon	Orbisonia
Warrior Ridge Dam and Hydroelectric Plant	Huntingdon	Petersburg
Whipple Dam State Park Day Use District	Huntingdon	Huntingdon
Woodvale Historic District	Huntingdon	Woodvale
Academia Pomeroy Covered Bridge	Juniata	Spruce Hill
Book Site (36 Jul)	Juniata	Beale
Dimmsville Covered Bridge	Juniata	Dimmsville
Lehman's, Port Royal Covered Bridge	Juniata	Port Royal
Tuscarora Academy	Juniata	Mifflintown
Embassy Theatre	Mifflin	Lewistown
Juniata Terrace Historic District	Mifflin	Borough of Juniata Terrace
Lewistown Armory	Mifflin	Lewistown
McCoy House	Mifflin	Lewistown
Mifflin County Courthouse	Mifflin	Lewistown
Montgomery Ward Building	Mifflin	Lewistown
Old Hoopes School	Mifflin	Lewistown
Old Stone Arch Bridge	Mifflin	Derry Township

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Property Name	County	Municipality
Pennsylvania Main Line Canal, Juniata Division, Canal Section	Mifflin	Granville Township
Wollner Building	Mifflin	Lewistown
Bridge in Newport Borough	Perry	Newport
Fleisher Covered Bridge	Perry	Oliver Township
Kochendefer Covered Bridge	Perry	Saville Township
Little Buffalo Historic District	Perry	Newport
Newport Historic District	Perry	Newport and Oliver Township
Saville Covered Bridge	Perry	Saville
New Baltimore Bridge	Somerset	Allegheny Township