

## **CHAPTER 3 AFFECTED ENVIRONMENT**

This chapter characterizes the project area's existing environment from a natural, cultural, and socioeconomic perspective. The project area encompasses parts of eight municipalities located in eastern Clearfield County and western Centre County, Pennsylvania. For purposes of this analysis, SEA has further defined the project study area to include the existing corridors of the former rail lines that make up the Proposed Action and the Modified Proposed Action. For the Local Road System Upgrade alternative, SEA has defined the project study area to include the existing roadway corridors of S.R. 0053 and S.R. 0144 from the Kylertown Exit of I-80 to the Snow Shoe Exit of I-80, and Gorton Road from Moshannon to Gorton.

Consistent with CEQ guidelines, a detailed description, which includes methodology and associated findings, of each environmental resource is provided to characterize the project area. This chapter establishes the basis for assessing the environmental implications of the Proposed Action and its alternatives, as discussed in Chapter 4, Environmental Impacts.

### **3.1 TRANSPORTATION AND SAFETY**

#### **3.1.1 Background**

This section describes the existing traffic delay at all highway/rail at-grade crossings and the associated operational and safety features currently applicable to the project area. For purposes of this EIS, highway/rail at-grade crossings are hereinafter referred to as grade crossings. FHWA and FRA have regulatory jurisdiction over safety at grade crossings under the Highway Safety Act (HSA) and the Federal Railroad Safety Act (FRSA), respectively. HSA governs the distribution of funds to states for the elimination of hazards at grade crossings. USDOT has promulgated regulations addressing grade crossing safety, and USDOT provides funding for the installation and improvement of warning devices. All warning devices installed at crossings must comply with FHWA's "Manual on Uniform Traffic Control Devices." This manual provides standards for the types of warning devices that must be installed at all grade crossings. Similarly, FRA has issued regulations under its railroad safety authority that impose minimum standards for grade crossings (49 C.F.R. Parts 234-36). FRA maintains information for each grade crossing based on information provided by states and railroads. Together, FRA and FHWA coordinate research efforts related to grade crossing accidents and solutions to grade crossing problems.

According to USDOT "Railroad-Highway Grade Crossing Handbook" (FHWA-TS-86-215, 2<sup>nd</sup> ed., 1986), "jurisdiction over highway/rail grade crossings resides primarily with the states." The states perform on-site inspections and order safety improvements, when necessary. USDOT maintains oversight and approval authority of state determinations. Within Pennsylvania, the Rail Safety Division of the Pennsylvania Public Utility Commission (PUC) has been granted regulatory authority over the construction of all new grade crossings pursuant to an agreement established with FRA under the provisions of FRSA.

Beyond grade crossings, FRA regulates most other aspects of railroad safety for common carrier railroads that are part of the general railroad system of transportation. In addition, several railroad associations, including the Association of American Railroads, the American Short Line and

Regional Railroad Association, and the American Railway Engineering Maintenance-of-Way Association, also develop and establish standards and practices for the industry. FRA regulations specify minimum safety requirements for rolling stock (i.e., locomotives and freight cars), track, signals, operating practices, and the transport of hazardous materials. Safety requirements address the design and inspection of railroad cars, tracks, and signal systems. Train crews are required to follow safe and appropriate operating rules, and the railroads and FRA conduct unannounced service testing of crews regarding operating rules. FRA regulations require that railroads inspect freight cars when they are placed in a train and that they inspect track and signals periodically. Railroad inspection records are reviewed by FRA for accuracy and thoroughness and are verified by independent inspections. Each railroad's operating rules must comply with FRA requirements and are reviewed by FRA inspectors. Additionally, FRA enforces USDOT regulations that require all hazardous materials shippers to transport hazardous materials in rail cars designed to safely transport the commodity being carried (49 C.F.R. Parts 171 through 180).

Railroad track safety standards (49 C.F.R. Part 213) are based upon classifications of track that determine maximum operating speed limits, inspection frequencies, maintenance tolerances, record keeping, and other requirements. The higher the class of track, the more stringent the maintenance tolerance and the faster the allowable maximum operating speed. In most cases, the railroads set their desired operating speeds for segments of track by means of timetables or train orders and are required to maintain those track segments according to FRA geometric and structural standards for specific classes of track that correspond to the desired train speeds. For example, lines that are maintained to Class 3 standards allow a maximum operating speed of 40 mph for freight trains and require track segments to be inspected at least weekly to verify that they meet FRA regulations. The number of daily trains or commodities carried is not a factor in establishing the track class.

### **3.1.2 Existing Conditions – Local Road Traffic/Grade Crossing Delay**

Other than RJCP's Wallaceton Subdivision Line, which the Proposed Action is proposed to be connected to and serviced from, there are no active railroad lines within the project area. The Proposed Action would involve the construction, operation, and reactivation of an approximate 20-mile segment of rail line. Traffic delay at railroad grade crossings presently does not occur within the project area, as there are no active grade crossings. Therefore, SEA expended minimal effort in assessing the existing conditions for this issue.

The Proposed Action would, however, involve the introduction of new grade crossings into the local road system. As previously mentioned, the Western Segment would require a number of public road and private driveway crossings. Specifically, the Proposed Action's Western Segment (via the Wallaceton to Munson Route) would require nineteen public road crossings, including nine crossings of numbered state routes and thirteen private driveway crossings. Of these nineteen public road crossings, only two would be grade-separated. The remaining seventeen public road crossings would consist of at-grade intersections. Of the thirteen private driveway crossings, only one would be grade-separated. The remaining twelve would be at-grade. Table 3-1 summarizes the public road crossings, including the functional classification and estimated average daily traffic (ADT) volumes (if known) for each roadway. Figure 3-1 shows the locations of both the public road and private driveway crossings associated with the Western Segment of the Proposed Action. Under current conditions, none of these at-grade public roads or private driveway crossings exist. Therefore, there is presently no traffic delay at these locations.

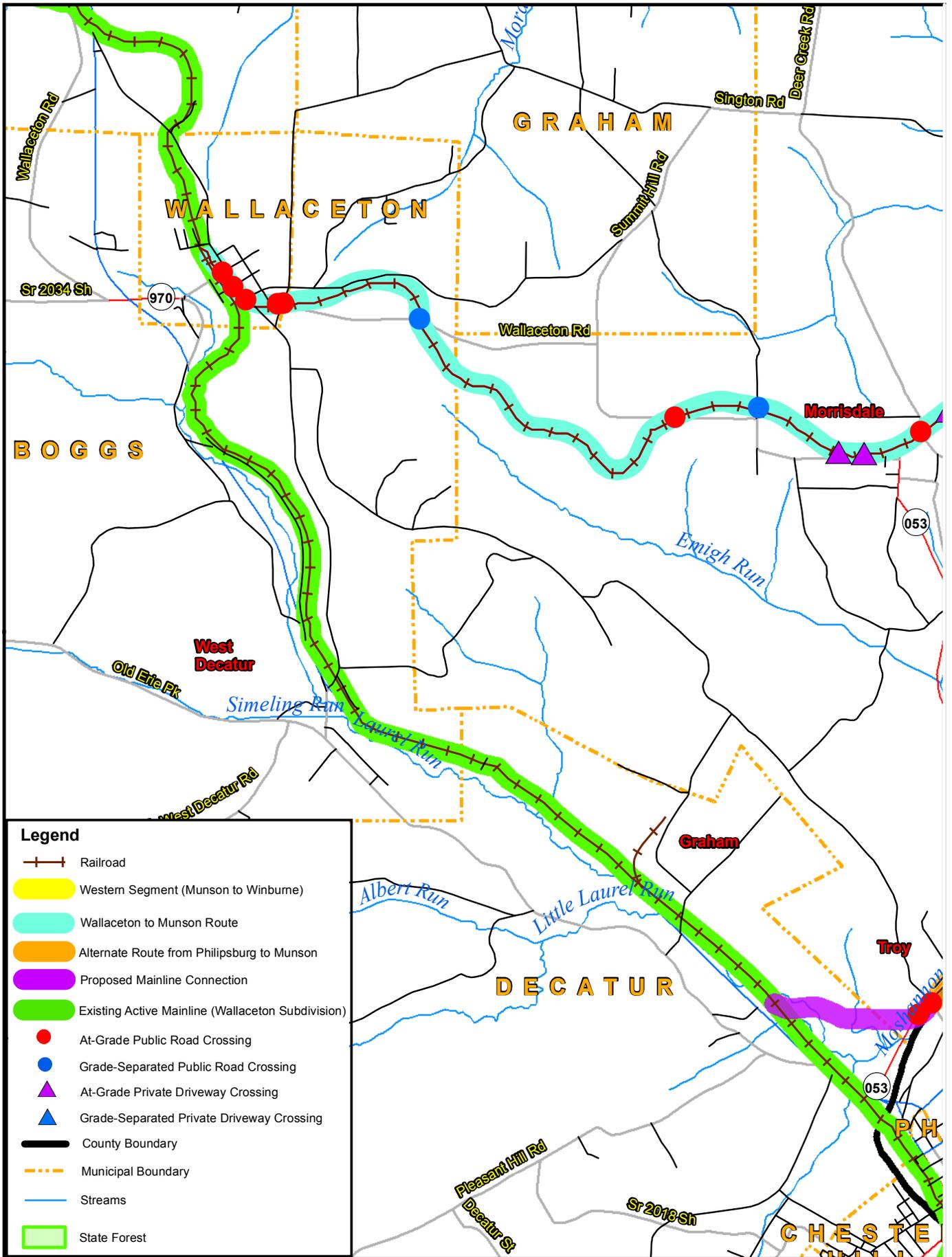
**TABLE 3-1  
PROPOSED ACTION  
WESTERN SEGMENT (WALLACETON TO MUNSON ROUTE)  
PUBLIC ROAD CROSSINGS**

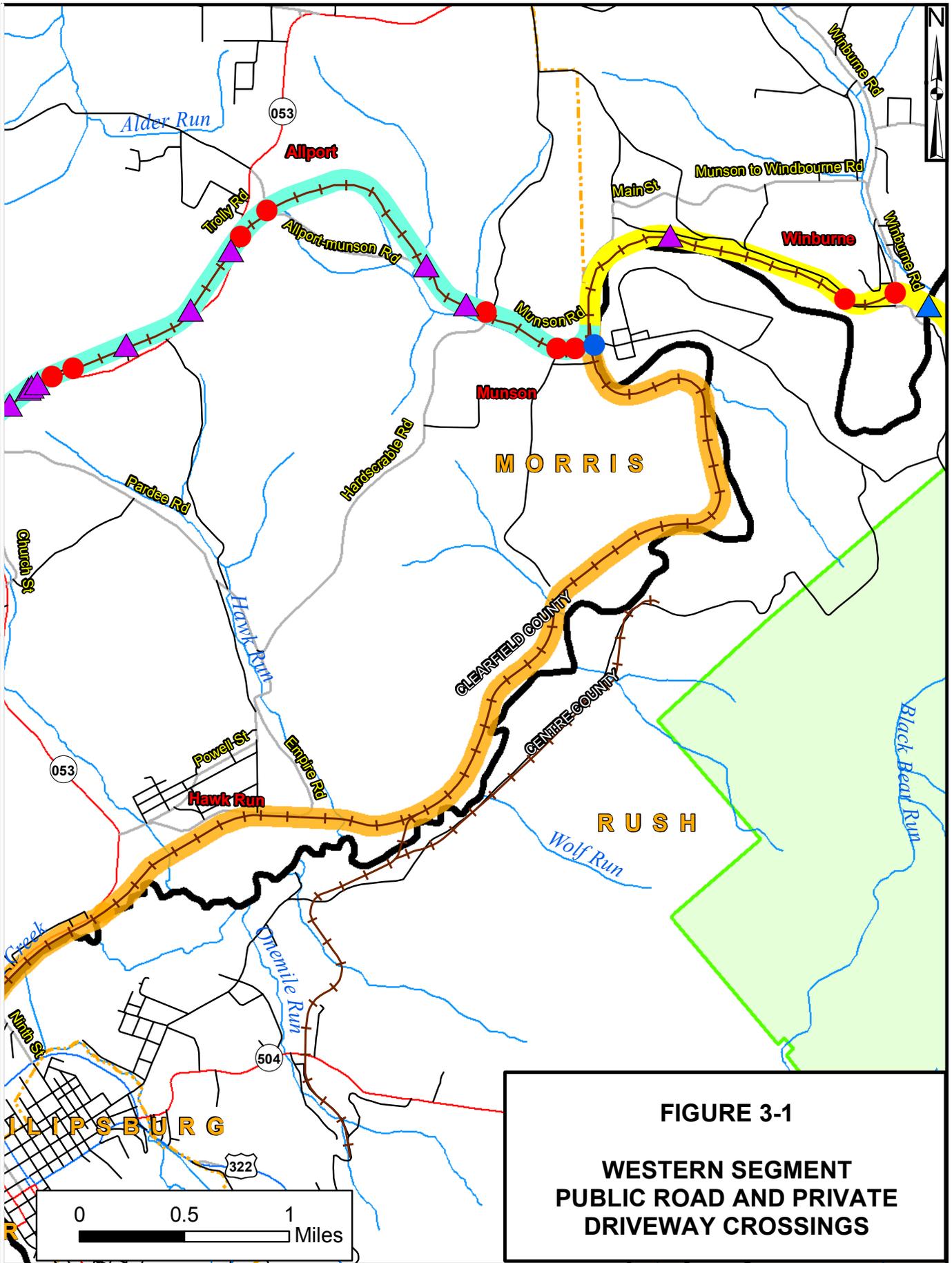
ID #	MUNICIPALITY	MILEPOST	ROAD NAME	FUNCTIONAL CLASSIFICATION	ADT
1	Wallaceton	75.18	Pine Street	Local Road	N/A
2	Wallaceton	75.02	Reed Street (S.R. 2034)	Minor Collector	N/A
3	Wallaceton	74.94	Baughman Street	Local Road	N/A
4	Wallaceton	74.85	Hilltop Road	Local Road	N/A
5	Wallaceton	74.70	Wallaceton Road (S.R. 2034)	Minor Collector	350
6	Wallaceton	74.66	Unnamed Gravel Road	Local Road	N/A
7	Boggs	73.87	Wallaceton Road (S.R. 2034)	Minor Collector	350
8	Morris	72.22	Wallaceton Road (S.R. 2034)	Minor Collector	350
9	Morris	71.80	Myers Road (T-682)	Local Road	N/A
10	Morris	70.93	Deer Creek Road (S.R. 1009)	Minor Collector	60
11	Morris	70.52	Jones Lane	Local Road	N/A
12	Morris	70.41	Jones Lane	Local Road	N/A
13	Morris	69.35	S.R. 0053	Minor Arterial	478
14	Morris	69.18	Old Turnpike Road (S.R. 2032)	Minor Collector	46
15	Morris	67.92	Main Street (S.R. 2035)	Minor Collector	59
16	Morris	67.43	Colorado Road (T-704)	Local Road	N/A
17	Morris	67.29	Casanova Road (T-958)	Local Road	N/A
18	Cooper	65.65	Sawmill Road (T-707)	Local Road	N/A
19	Cooper	65.38	Winburne Road (S.R. 2037)	Local Road	N/A

**Grade-Separated Crossing (Highway over Rail)**

In comparison, the Modified Proposed Action's Western Segment (via the Alternate Route from Philipsburg to Munson) would require only five public road crossings (four at-grade and one grade-separated) and two private driveway crossings (one at-grade and one grade-separated). Of these five public road crossings, three would occur at numbered state routes while the remaining two would occur at local township roads. Table 3-2 summarizes the public road crossings, including the functional classification and estimated ADT volumes (if known) for each roadway. Figure 3-1 shows the locations of both the public road and private driveway crossings associated with the Western Segment of the Modified Proposed Action. Under current conditions, none of these at-grade public road or private driveway crossings exist. Thus, there is presently no traffic delay at these locations. The only exception to this is the minor traffic delay associated with the operation of the signalized intersection at Ninth Street and S.R. 0053 in Morris Township.

For the Local Road System Upgrade alternative, roadway improvements would occur on S.R. 0053, S.R. 0144, Cherry Run Road and Gorton Road, as these roads serve as the direct connection to I-80 from RRLLC's proposed landfill/development site. I-80 is the major east-west route extending across the project area through both Clearfield County and Centre County. The two existing interchanges that provide access to the area include Exit 133 (S.R. 0053, Kylertown) in Clearfield





**TABLE 3-2**  
**MODIFIED PROPOSED ACTION**  
**WESTERN SEGMENT (ALTERNATE ROUTE FROM PHILIPSBURG TO MUNSON)**  
**PUBLIC ROAD CROSSINGS**

ID #	MUNICIPALITY	MILEPOST	ROAD NAME	FUNCTIONAL CLASSIFICATION	ADT
1A	Morris	N/A	S.R. 0053	Minor Arterial	6,973
2A	Morris	5.84	Ninth Street (S.R. 2043)	Local Road	7,120
3A	Morris	0.2	Casanova Road (T-958)	Local Road	N/A
18	Cooper	65.65	Sawmill Road (T-707)	Local Road	N/A
19	Cooper	65.38	Winburne Road (S.R. 2037)	Local Road	N/A
<b>Grade-Separated Crossing (Rail over Highway)</b>					

County and Exit 147 (S.R. 0144, Snow Shoe) in Centre County. S.R. 0053 extends north-south through Morris and Cooper Townships and connects I-80 to the Philipsburg area. It is classified as a minor arterial south of I-80 and a major collector north of I-80. Within the project area, S.R. 0144 intersects with S.R. 0053 in Moshannon and extends eastward through Snow Shoe to an interchange with I-80. Similar to S.R. 0053, this section of S.R. 0144 is classified as a major collector. Cherry Run Road is classified as a minor collector and serves as the connection between S.R. 0144 and I-80 east of Snow Shoe. Gorton Road connects to the intersection of S.R. 0053 and S.R. 0144 in Moshannon and serves as the primary access road to RRLLC's proposed landfill/development site. Gorton Road is a local township road. The portion of Gorton Road that extends into Rush Township and eventually becomes Peale Road has been abandoned by Rush Township (i.e., it is no longer maintained as a public roadway).

### 3.1.3 Existing Conditions – Rail Operations

Apart from RJCP's operations over its Wallaceton Subdivision Line, there are no operating rail lines within the project area. The Proposed Action would involve the construction, operation, and reactivation of approximately 20 miles of rail line. Therefore, SEA expended minimal effort in assessing the existing conditions for this issue.

### 3.1.4 Existing Conditions – Rail Operations Safety

Apart from RJCP's operations over its Wallaceton Subdivision Line, there are no operating rail lines within the project area. The Proposed Action would involve the construction, operation, and reactivation of approximately 20 miles of rail line. Therefore, SEA expended minimal effort in assessing the existing conditions for this issue.

## 3.2 LAND USE

### 3.2.1 Background/Methodology

NEPA regulations require an analysis of the Proposed Action's impacts on land use, including an assessment of the Proposed Action's consistency with existing land use plans. Thus, SEA

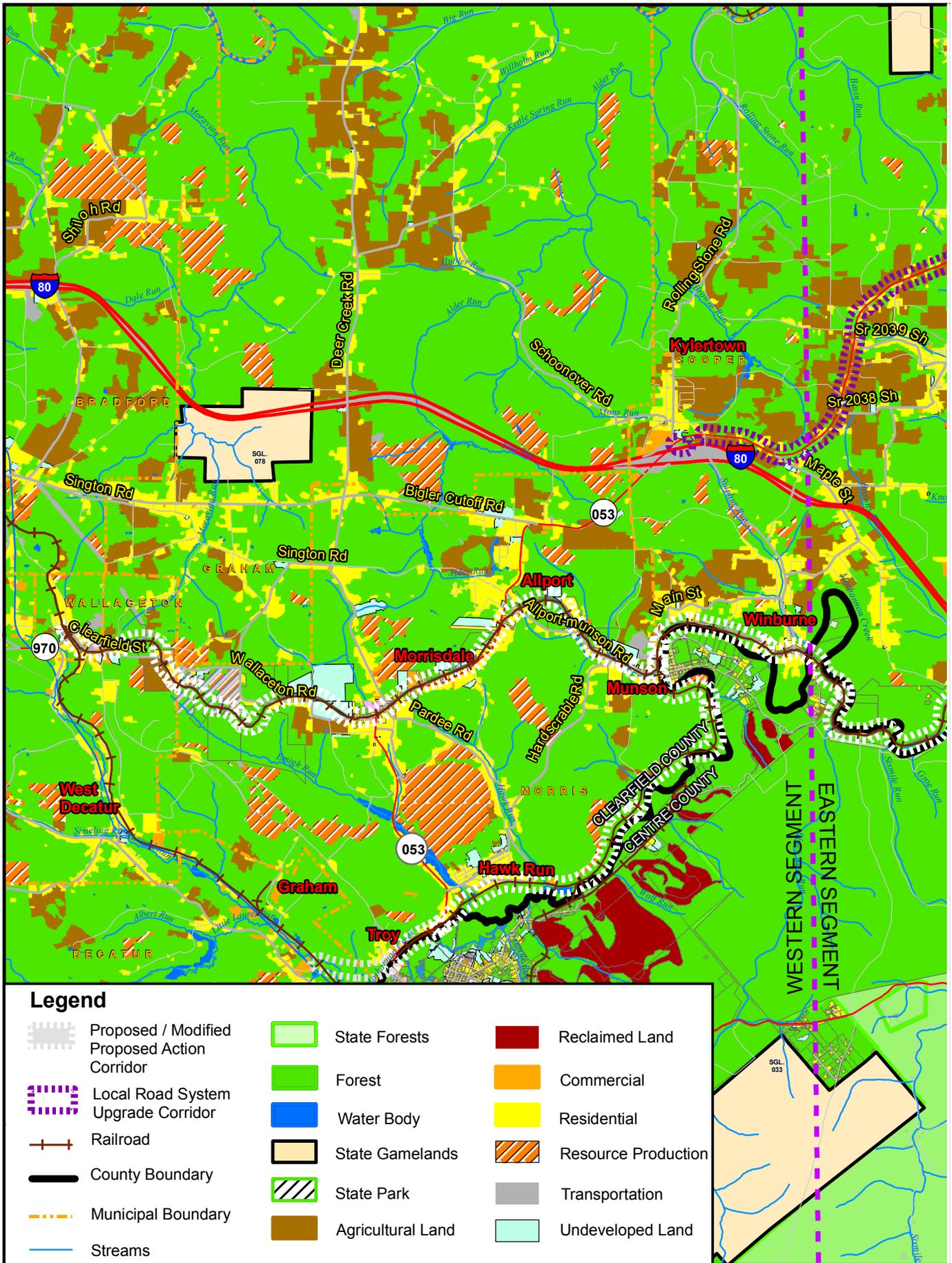
examined the project area's existing land use patterns, as well as the current status of land use planning efforts (i.e., Comprehensive Plans and Zoning Ordinances), at both the local (township) and regional (county) levels. SEA employed a combination of methods, including map analysis, field reconnaissance, air photo interpretation, and municipal coordination. Additionally, SEA contacted the Mapping Departments of both Clearfield and Centre Counties to acquire existing land use mapping for the project area in a GIS-based format. As a result, SEA developed a regional land use map (see Figure 3-2), which was further refined within the immediate project area. SEA also collected an accompanying inventory of existing land use planning documents at the local and regional level (see Table 3-3).

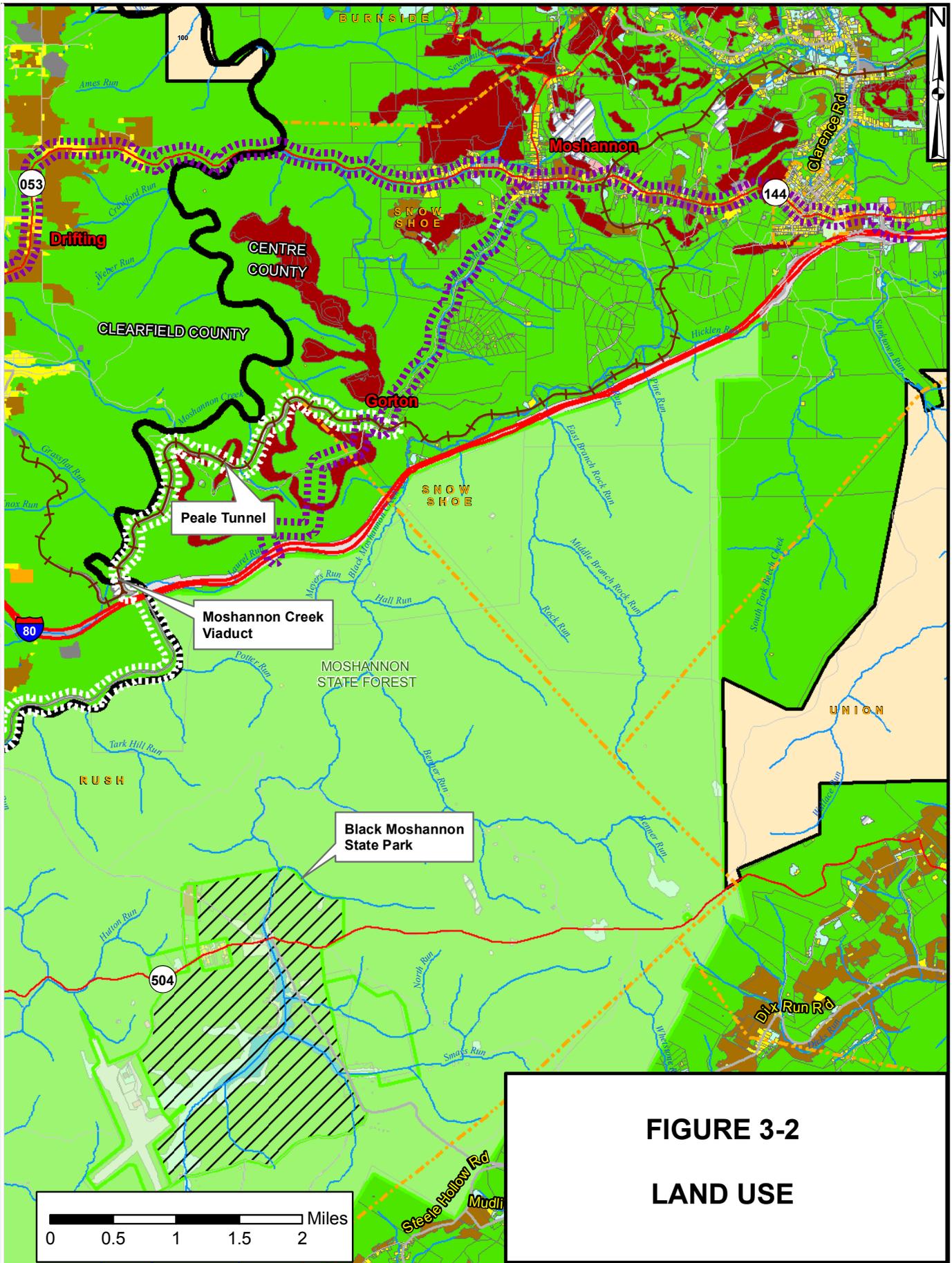
### 3.2.2 Existing Conditions

As evidenced by Figure 3-2, land use within the project area consists of a diverse and scattered mixture of residential, commercial, industrial (i.e., mining/resource production), and vacant/undeveloped land uses. Figure 3-2 also demonstrates the significant variation in adjacent land uses between both alternatives for the Western Segment and the Eastern Segment. In general, land use within the Proposed Action's Western Segment and the Modified Proposed Action's Western Segment consists of a diverse mixture of developed uses (i.e., residential, commercial, and industrial) clustered between, and to some extent scattered among, relatively larger tracts of undeveloped land consisting predominantly of former strip mining areas and privately owned woodlands. Land uses typical of small residential communities (i.e., single-family homes, small local businesses, churches, schools, municipal facilities, cemeteries, etc.) are concentrated in the more densely developed areas of Wallaceeton, Morrisdale, Allport, Troy, Hawk Run, Munson, and Winburne.

Conversely, land use within the Eastern Segment takes on a much more uniform appearance consisting almost exclusively of undeveloped forestland and reverting strip mine areas, including an approximate 4,400-foot section of the Moshannon State Forest. There are no public road or private driveway crossings within, nor are there any residential, commercial, or industrial buildings adjacent to, the 9.3-mile Eastern Segment. Thus, the Eastern and Western Segments consist of very different land uses.

Another substantial difference in land use between both alternatives of the Western Segment and the Eastern Segment is in the use and condition of the railroad bed itself. Within the Proposed Action's Western Segment and the Modified Proposed Action's Western Segment, the railroad right-of-way has been officially abandoned, and portions of the corridor have reverted back to private ownership. Thus, the condition of the former rail line within both alternatives of the Western Segment varies considerably along its length. The most notable example of this is along the Proposed Action's Wallaceeton to Munson Route between Mileposts 72.5 and 73.5 just east of Wallaceeton, where the former rail line passes through an active strip mining area. Within this strip mining area, the former rail line and all evidence of its graded corridor have been completely eliminated by the active mining operations. Further to the east, however, the former rail line and its graded corridor are a visible part of the landscape with vegetation filling certain sections over the years of non-use. Most of the rail bed within the Modified Proposed Action's Alternate Route from Philipsburg to Munson appears much the same as it did when the line was active, with the actual railroad ties still in place at some locations.





**FIGURE 3-2**  
**LAND USE**

Unlike the two alternatives for the Western Segment described above, the former right-of-way within the 9.3-mile Eastern Segment was never officially abandoned. Rather, this section of the project corridor was enrolled in the rail banking program and has subsequently been converted to interim trail use as the Snow Shoe Multi-Use Rail Trail. The entirety of the former rail corridor within the Eastern Segment is a visible landscape feature with little to no alteration from its days as an active line (minus the track and ties); the only notable difference is the current recreational use.

Land use in the immediate proximity of the Local Road System Upgrade alternative is very similar to the diverse mixture of developed and undeveloped uses described for both alternatives of the Western Segment. In general, land uses typical of small residential communities (i.e., single-family homes, small local businesses, churches, schools, municipal facilities, cemeteries, etc.) are concentrated in the more developed areas of Kylertown, Drifting, Moshannon, Gillintown, and Snow Shoe, which is the largest and most densely developed of these communities. The largest undeveloped tract within this corridor is located along S.R. 0053 between Drifting and Moshannon. This several-mile long section of roadway parallels a steep gorge leading down to the confluence of the Moshannon and Black Moshannon Creeks. No buildings are located along this section of S.R. 0053 due to the steep topography.

To assess the Proposed Action's consistency with existing land use plans, SEA coordinated with each project area municipality, as well as the Clearfield and Centre County Planning Departments, and acquired copies of all local and regional land use planning documents. SEA paid specific attention to Comprehensive Plans. The local and regional long-range land use planning goals outlined within these Comprehensive Plans serve as the basis for SEA's analysis of the Proposed Action's planning consistency. Table 3-3 lists an inventory of existing land use planning documents by jurisdiction.

**TABLE 3-3  
LOCAL AND REGIONAL LAND USE PLANNING DOCUMENTS**

<b>JURISDICTION</b>	<b>COMPREHENSIVE PLAN</b>	<b>ZONING</b>	<b>SALDO*</b>
<b>Clearfield County</b>	Yes	No	Yes
Wallaceton Borough	No	No	No
Boggs Township	No	No	Yes
Decatur Township	Yes	No	Yes
Morris Township	Yes	No	Yes
Cooper Township	Yes	No	Yes
<b>Centre County</b>	Yes	No	Yes
Rush Township	Yes	No	Yes
Snow Shoe Township	Yes	Yes	No
Snow Shoe Borough	Yes	Yes	No

\*SALDO = Subdivision and Land Development Ordinance

### **3.3 ENERGY RESOURCES**

#### **3.3.1 Background/Methodology**

CEQ regulations require an examination of the energy requirements as well as the conservation potential of the Proposed Action and its alternatives. This section describes the existing energy resources, recyclable commodities, and overall changes in energy efficiency as currently applicable to the project area.

#### **3.3.2 Existing Conditions**

Apart from RJCP's operations over its Wallaceton Subdivision Line, there are no active rail lines within the project area. The Proposed Action would involve the construction, operation, and reactivation of approximately 20 miles of rail line. Therefore, SEA expended minimal effort in assessing the existing conditions for this issue and focused the analysis on comparing energy related implications for the Proposed Action and its alternatives, as presented in Chapter 4, Environmental Impacts.

### **3.4 AIR QUALITY**

#### **3.4.1 Background/Methodology**

SEA's regulations found at 49 C.F.R. § 1105.7(e)(5) establish thresholds for analysis of anticipated effects on air emissions. The Board analyzes air impacts where there is an increase of at least eight trains per day, an increase in rail traffic of at least 100 percent, or an increase in rail yard activity. When the Proposed Action affects a non-attainment or maintenance area (as defined by the Clean Air Act), as is the case here, the Board analyzes air impacts if there is an increase of at least three trains per day, an increase in rail traffic of at least 50 percent, or a 20 percent increase in rail yard activity. Although the Proposed Action would not trigger the Board's thresholds with two trains per day (one train in and one train out), SEA decided to analyze the potential air quality impacts of the Proposed Action and its alternatives in response to concerns raised over potential impacts to air quality. The results of this analysis are presented in Chapter 4, Environmental Impacts.

#### **3.4.2 Existing Conditions – Air Quality**

There are six principal pollutants that serve as indicators of air quality in the United States: Carbon Monoxide (CO), Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>), Sulfur Dioxide (SO<sub>2</sub>), Nitrogen Oxides (NO<sub>x</sub>), Lead (Pb), and Ozone (O<sub>3</sub>). The Clean Air Act Amendments of 1990 (CAAA) refer to them as criteria pollutants and establish the National Ambient Air Quality Standards (NAAQS) which are the concentration thresholds for each principal pollutant. Areas of Pennsylvania where air pollution levels consistently stay below these standards are designated "attainment." Areas where air pollution levels persistently exceed these standards are designated "non-attainment." If an area was in non-attainment but is now in attainment and has a USEPA-approved plan to maintain the standard, it is designated a "maintenance" area. Clearfield and Centre Counties are in attainment for all NAAQS pollutants except Ozone. Both counties have been designated as maintenance for the 8-hour standard (i.e., 0.08 parts per million).

### 3.4.3 Existing Conditions – Odors

Concerns have been raised about potential odors derived from the Proposed Action and the associated transport of municipal solid waste. SEA has conducted a qualitative assessment for this issue. Currently, the project area does not contain any known or noticeable sources of objectionable odors above and beyond that which would be considered ordinary for a typical rural community. Therefore, SEA expended no further effort in assessing the existing conditions for this issue.

## 3.5 NOISE AND VIBRATION

### 3.5.1 Background/Methodology

The Board's regulations at 49 C.F.R. § 1105.7(e)(6) specify noise analysis where there is an increase of at least eight trains per day, an increase in rail traffic of at least 100 percent, or an increase in rail yard activity. Under the Proposed Action, RJCP estimates that two trains per day (one train in and one train out) would operate along the rail line. Consequently, no noise analyses would be required for this project. However, due to the public interest in this project, SEA performed a quantitative noise analysis to determine if the Proposed Action would result in either of the following conditions:

- An increase in community noise exposure as measured by Day-Night Average Noise Levels ( $L_{dn}$ ) of 3 A-weighted decibels (dBA) or more
- An increase to a noise level of 65 dBA  $L_{dn}$  or greater

The unit dBA is a measure of sound level used to describe the magnitude of a sound source.

A-weighting approximates the manner in which the human ear responds to sounds. The  $L_{dn}$  represents the energy average of A-weighted sound level over a 24-hour period and includes an adjustment factor for noise between 10 P.M. and 7 A.M. to account for greater sensitivity of most people to noise during the night.

This section describes the existing acoustical environment and vibration in the project area. The results of the noise analysis for the Proposed Action and its alternatives can be found in Chapter 4, Environmental Impacts. The following discussion describes the noise receptors that may be affected, the results of field reconnaissance, and the sound level measurements in the project area.

### 3.5.2 Existing Conditions – Noise

As previously mentioned, land use within the project area consists of a diverse and scattered mixture of residential, commercial, industrial (i.e., mining/resource production), and vacant/undeveloped land uses. Noise-sensitive residential areas are generally the primary focus of acoustical analysis. There is a significant variation in adjacent land uses between both alternatives for the Western Segment and the Eastern Segment. Generally, noise-sensitive land use within the Proposed Action's Western Segment and the Modified Proposed Action's Western Segment is clustered between relatively larger tracts of undeveloped land consisting predominantly of former strip mining areas and privately owned woodlands. Land uses typical of small residential communities (i.e., single-family homes, churches, schools, etc.) are concentrated in the more developed areas of Wallace, Morrisdale, Allport, Troy, Hawk Run, Munson, Winburne, Moshannon, and Snow Shoe. Conversely,

land use within the Eastern Segment takes on a much more uniform appearance consisting almost exclusively of undeveloped forestland and reverting strip mine areas. Generally, this type of land use is not considered noise-sensitive due to the infrequent human activity.

Transportation causes the existing noise within both alternatives of the Western Segment. Traffic on local roadways is currently the dominant noise source for the residential areas. Additional noise sources include typical community sounds (i.e., lawn mowing, construction activities, dog barking, etc.). The Eastern Segment is influenced by natural sounds (i.e., Moshannon Creek, insects, birds, etc.) as well as man-made noise emitted from I-80 traffic. Sporadic ATV traffic on the Snow Shoe Multi-Use Rail Trail is another intermittent noise source along the Eastern Segment.

SEA selected the noise measurement locations listed in Table 3-4 to encompass the project area geographically as well as to identify potential impacts at a variety of noise-sensitive receptors. These noise-monitoring locations are shown in Figure 3-3. These locations were selected in order to measure noise levels within the residential communities of the project area.

**TABLE 3-4  
AMBIENT NOISE MEASUREMENT LOCATIONS**

<b>LOCATION NUMBER</b>	<b>COMMUNITY</b>	<b>SOUND LEVEL (Ldn in dBA)</b>
1	Wallaceton	57
2	Morrisdale	62
3	Oak Grove	59
4	Munson	51
5	Gorton	59
6	Moshannon State Forest	51
7	Hawk Run	56
8	Troy	53
9	Philipsburg	58

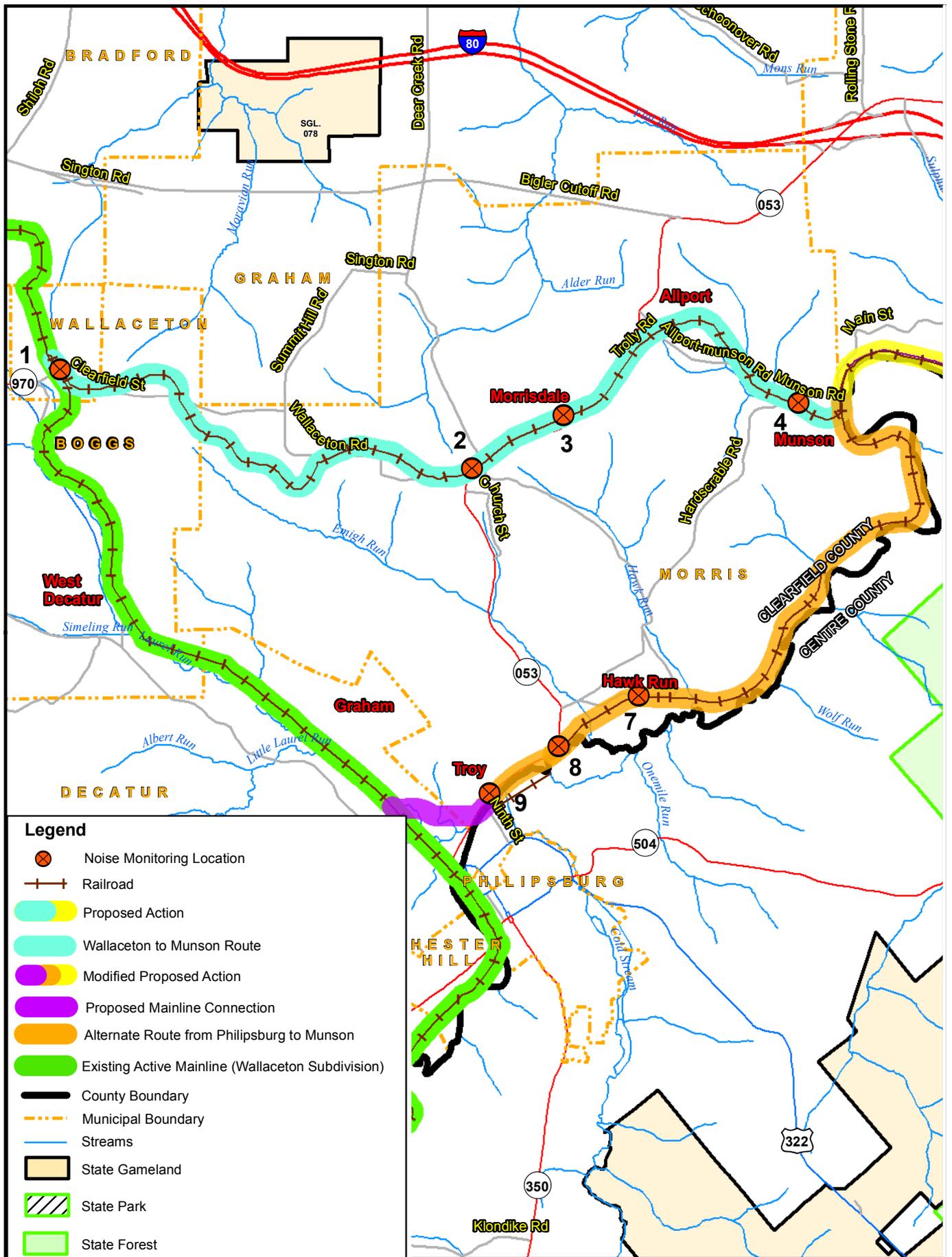
### **3.5.3 Existing Conditions – Vibration**

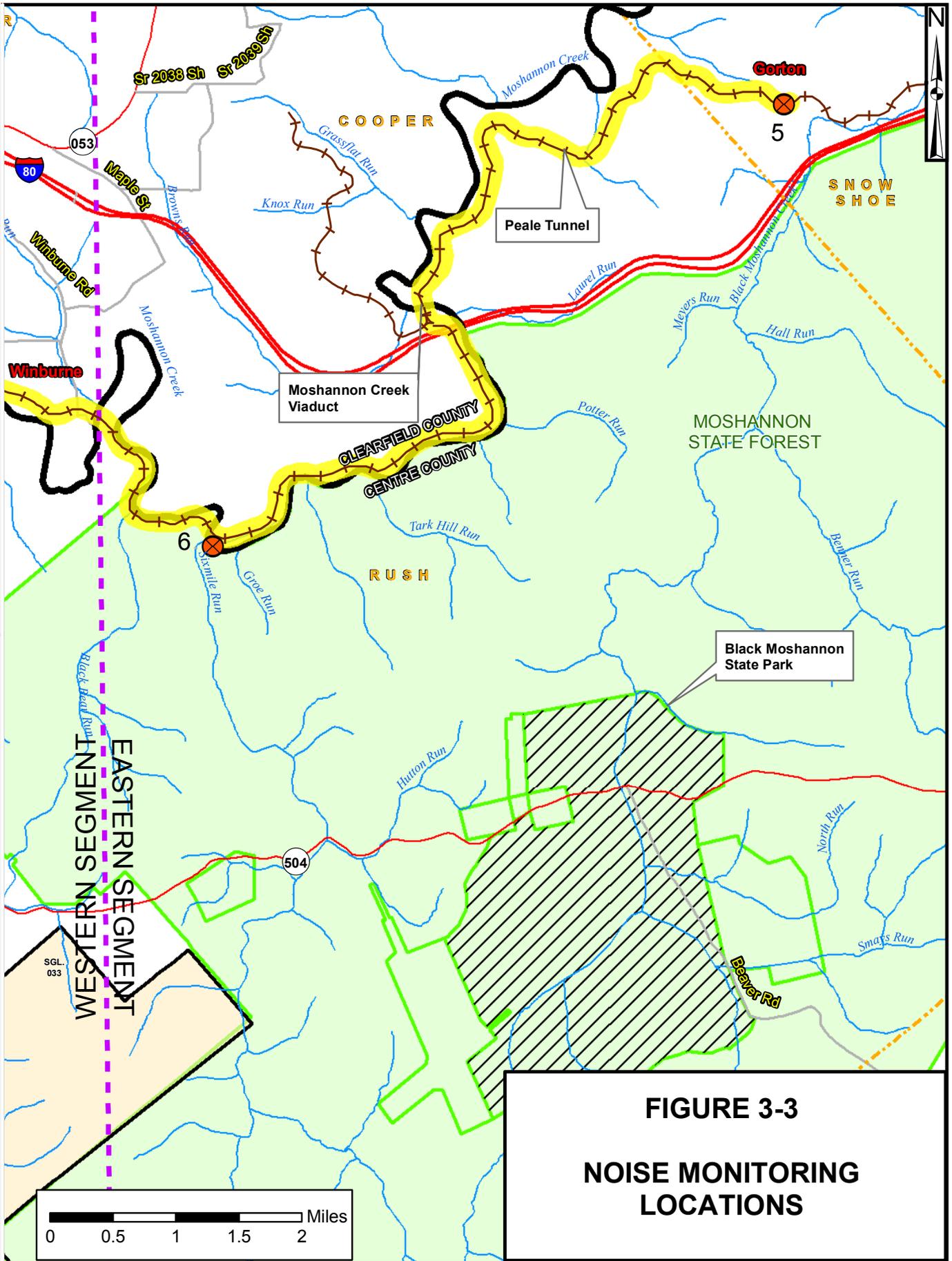
Vibration is generally not an issue when considering the impact of transportation on adjacent land uses. Vibrations stemming from rail or roadway traffic generally do not cause annoyance or property damage for adjoining landowners. There are no significant sources of existing vibration in the project area. Occasionally, blasting associated with local strip mining operations may result in vibrations within close proximity to the blast location.

## **3.6 BIOLOGICAL RESOURCES**

### **3.6.1 Background/Methodology**

SEA evaluated the biological resources potentially affected by the Proposed Action and its alternatives. The resources evaluated include the vegetative communities and associated wildlife/





**FIGURE 3-3**  
**NOISE MONITORING**  
**LOCATIONS**

habitats within the project area as well as the potential presence of threatened and endangered plant and animal species. The identification and assessment of biological resources are typically completed via detailed field reconnaissance/field survey supplemented, as necessary, by background research and agency coordination to establish existing conditions. For this project, SEA did not vary from this standard approach. SEA conducted extensive field reconnaissance and time-of-year specific field surveys to establish the project area's existing biological conditions and to assess the potential presence of threatened and endangered species, respectively. These extensive field exercises were preceded by preliminary background research, followed by coordination with the appropriate jurisdictional resource agencies. The resulting findings/conclusions are summarized below.

### **3.6.2 Existing Conditions – Vegetation and Wildlife**

The project area is located on the unglaciated portion of the Alleghany Plateau within the Moshannon Creek and West Branch of the Susquehanna River drainages. From an ecological community perspective, the area is mapped as part of the Central Appalachians Level III Ecoregion, as defined by USEPA. This area is generally characterized as a high, rugged plateau consisting of a diverse mixture of large, mostly intact forest interior habitat; smaller woodlots; bottomland wetland-riverine complexes; active and former mined areas; urban developed areas; and limited agricultural areas. These vegetative communities are described in more detail below.

Analysis of Clearfield and Centre Counties' Natural Heritage Inventories (i.e., documents prepared by the Western Pennsylvania Conservancy that identify the counties' most significant natural places) indicates that the project area contains several ecologically recognized areas. These areas include two Audubon Society Important Bird Areas, two Biological Diversity Areas, and one Landscape Conservation Area. The Audubon Society Important Bird Areas include those of the Moshannon State Forest (along an approximate 4,400-foot section of the Eastern Segment) and the Southern Sproul State Forest (along a portion of S.R. 0053 between Drifting and Moshannon). The two Biological Diversity Areas include the Snow Shoe Moshannon Biological Diversity Area, located in Snow Shoe Township along Black Moshannon Creek between S.R. 0053 and Gorton Road, and the Snow Shoe Swamp Biological Diversity Area, located immediately south of S.R. 0144 in Snow Shoe Borough. These Biological Diversity Areas are noted for the known population of Alleghany Woodrats (a PA Threatened Species) and the highbush blueberry – meadow-sweet shrub wetland community, respectively. The Black Moshannon Landscape Conservation Area, consisting of a dry oak-mixed hardwood forest community along Black Moshannon Creek, encompasses a significant portion of the Local Road System Upgrade alternative, including all of Gorton Road, all of S.R. 0053 in Centre County, and S.R. 0144 from Moshannon to Snow Shoe.

In general, the rail corridor within the Eastern Segment is a largely undeveloped tract of forest interior habitat containing a portion of the Moshannon State Forest and several large private landholdings along the Moshannon Creek and Black Moshannon Creek drainages, with significant portions having been subject to previous mining and logging operations. This land is now undergoing various stages of successional growth. Conversely, the rail corridor within both alternatives for the Western Segment consists of a diverse and scattered mixture of urban developed areas (i.e., Munson, Allport, Morrisdale, Hawk Run, Troy, and Wallaceton), small woodlots, and active/previous mining areas. One notable exception is the large wetland-riverine complex

associated with the Moshannon Creek floodplain along the Modified Proposed Action's Alternate Route from Philipsburg to Munson.

Under the Local Road System Upgrade alternative, the land cover consists of a mixed residential-agricultural corridor along S.R. 0053 and S.R. 0144 from Kylertown to Snow Shoe, including the small villages of Drifting, Moshannon and Gillintown. Two exceptions are the Moshannon/Black Moshannon gorge along S.R. 0053 west of the village of Moshannon and the Gorton Road area, which consist of forest interior habitat and previously mined areas. These vegetative communities and associated wildlife/habitat types are described below.

#### Forest Interior Habitat:

Within the project area, the majority of the forest interior habitat consists of a dry oak-mixed hardwood forest community with certain characteristics of the northern hardwood forest community (i.e., increased occurrence of black cherry and sweet birch) on the upper slopes and the hemlock (white pine) – northern hardwood forest community on the middle and lower slopes. This mixed-community forest interior habitat is common in this portion of the state and possesses only a few minor invasive corridors such as natural gas pipelines, electric power lines, and logging/mining haul roads. It provides ideal habitat for the typical Pennsylvania “big woods” mammal species, including black bear, white-tailed deer, eastern coyote, bobcat, and porcupine. Typical passerine species (perching birds) include warblers, thrushes, tanagers, nuthatches, kinglets, vireos, chickadees, and ravens. Typical non-passerine species include wild turkey, ruffed grouse, and various species of owls and woodpeckers. Predator species such as skunks, raccoons, and opossums are usually not found in these large forested tracts.

#### Woodlots:

Forested woodlots within the project area are composed of mixed hardwood (i.e., maple, locust, sweet birch, and black cherry) and oak species with dogwood and honeysuckle understories (i.e., the dense vegetative layer below the forest canopy). However, the overall diversity of many of these woodlots has been compromised due to invasive plant species such as bush honeysuckle and garlic mustard, which displace native species. These various sized woodlots support populations of white-tailed deer, cottontail rabbits, and grey squirrels along with the predator species of raccoons, skunks, and opossums. Typical passerine species (perching birds) include sparrows, finches, cardinals, blue jays, chickadees, catbirds, and mockingbirds. Non-passerines include various species of hawks, owls, and woodpeckers.

#### Moshannon Creek Wetland-Riverine Complex:

A major wetland and upland floodplain complex exists along the Moshannon Creek between Munson and Philipsburg. This complex is dominated by red maple, oaks, and hickories in the canopy and dogwoods, alders, and bush honeysuckle in the shrub layer. Much of the bottomland forest and shrub thickets are considered wetlands, but some well-drained oak stands are present along the floodplain corridor. Openings within the red maple and dogwood swamps are dominated by sedge marshes with interspersed open water pockets. Many parts of this complex are relatively inaccessible and, as a result, serve as significant refuges for species such as black bear, white-tailed deer, ruffed grouse, and wild turkey. The shrubby understory serves as habitat for numerous

songbirds and American woodcock. The open water pockets provide resting habitat for migrating ducks, geese, herons, and grebes.

#### Mined Areas:

Reclaimed strip mines and other areas of mine regrowth located within the project area provide variable wildlife habitat, depending on the current stage of successional growth. Reclaimed strip mine areas often provide open grassland habitat suitable for species such as eastern meadowlarks and horned larks. Reclaimed mine areas can also provide pine plantations that, with age, provide thermal habitat for a variety of wildlife species. Mine regrowth, although slow to develop, can provide excellent habitat for early succession species (i.e., species that are quick to colonize a recently disturbed area) such as ruffed grouse, white-tailed deer, and some songbird species. Dense pole-stage (15- to 30-foot tall trees) and sapling stands (trees less than 15 feet tall) overtopped by grapes can also attract other bird and mammal species seasonally.

### **3.6.3 Existing Conditions – Threatened and Endangered Species**

At the federal level, threatened and endangered species are regulated by USFWS pursuant to the Endangered Species Act (ESA). Initial coordination with the PA Field Office of USFWS indicated that no federally listed or proposed threatened and endangered species are known or likely to occur within the project area. However, in its October 26, 2009, correspondence (see Appendix B), USFWS indicates that the project (i.e., the Proposed Action, Modified Proposed Action and the Local Road System Upgrade alternative) is within the range of the Indiana Bat (*Myotis sodalis*), a species that is federally listed as endangered. Indiana bats hibernate in caves and abandoned mines during the winter months (November through March) and use a variety of upland, wetland, and riparian habitats during the spring, summer, and fall. USFWS requested more detailed project information to determine if the Proposed Action and its alternatives would impact the Indiana bat. Based on this request, SEA provided more detailed project information including proposed construction activities and anticipated construction impacts to the USFWS for further consideration. In its January 8, 2010, correspondence (see Appendix B), USFWS indicated that the proposed railroad project is not likely to adversely affect the Indiana bat because of the minimal tree removal.

At the state level, threatened and endangered species are regulated by several different entities. PGC has jurisdictional authority over state-listed birds and mammals; PFBC has jurisdictional authority over state-listed fish, reptiles, amphibians, and aquatic invertebrates; and PA DCNR has jurisdictional authority over state-listed plants and terrestrial invertebrates. Coordination with PGC indicated that there are no state-listed threatened and endangered birds or mammals known within the project area. However, in its October 19, 2009, correspondence (see Appendix B), PGC indicated that the Alleghany Woodrat (*Neotoma magister*), a PA threatened species, is known to exist within the general vicinity of the Local Road System Upgrade alternative. Coordination with PFBC and PA DCNR also revealed the potential presence of threatened and endangered species under their respective jurisdictions. Specifically, in its May 13, 2008, and October 14, 2009, correspondence (see Appendix B), PFBC indicated that the Timber Rattlesnake (*Crotalus horridus*), a PA candidate species, is known to exist within the general vicinity of both the Eastern Segment and the Local Road System Upgrade alternative. Additionally, PA DCNR indicated in its June 6, 2008, correspondence (see Appendix B) that the following plant species of concern are known to occur in the general vicinity of the project:

- Branching Bur-reed (*Sparganium androcladum*) – PA Endangered,
- Alleghany Plum (*Prunus alleghaniensis*) – PA Threatened (proposed),
- Carey’s Smartweed (*Polygonum careyi*) – PA Endangered,
- Mountain Starwort (*Stellaria borealis*) – undetermined status,
- Creeping Snowberry (*Gaultheria hispidula*) – PA Rare, and
- Mountain Fly Honeysuckle (*Lonicera villosa*) – PA Endangered.

PGC indicated that the segment of S.R. 0053, from Moshannon Summit east to the intersection with Gorton Road at Moshannon, and Gorton Road, from its intersection with S.R. 0053 in Moshannon south to the railroad crossing at Gorton, could contain potential suitable habitat for the Alleghany Woodrat. Suitable habitat for the woodrat includes steep rocky/talus slopes, boulder fields, and forest caves in the Appalachian mountain areas of Pennsylvania. As previously mentioned, the Centre County Natural Heritage Inventory has already identified the Snow Shoe Moshannon Biological Diversity Area, located in Snow Shoe Township along Black Moshannon Creek between S.R. 0053 and Gorton Road, as a habitat known to contain Alleghany Woodrats.

No individual specimens of the Timber Rattlesnake were observed, but field reconnaissance did reveal the presence of non-critical foraging habitat along much of the Eastern Segment and along the Gorton Road portion of the Local Road System Upgrade alternative. A known Timber Rattlesnake denning area has been confirmed in the area of RRLLC’s proposed landfill/development site south of RJCP’s proposed rail line.

For the various plant species identified by PA DCNR, SEA conducted detailed time-of-year specific field surveys of the respective habitats identified for each species throughout the entire project area. The purpose of these field surveys was two-fold; first, to determine the project area’s habitat suitability for each species and second, to determine if any individuals of the particular species were present. SEA surveyed the following habitat types for the indicated species:

- **Wetlands and Streams:** Branching Bur-reed, Mountain Starwort, Creeping, Snowberry, and Mountain Fly Honeysuckle;
- **Disturbed and Roadside Habitat:** Carey’s Smartweed and Alleghany Plum;
- **Rock Outcrops/Bluffs:** Alleghany Plum; and
- **Sandy-soil Woodlands:** Carey’s Smartweed.

Surveys conducted during the 2008 and 2009 field seasons revealed that the project area contains suitable habitat for each species. However, SEA did not find specimens of Mountain Starwort, Creeping Snowberry, Mountain Fly Honeysuckle, or Carey’s Smartweed. SEA observed one potential specimen of Alleghany Plum near the vicinity of the Gorton Road bridge over Black Moshannon Creek. Additionally, SEA observed a *Sparganium* species in a number of wetland habitats along both routes of the Western Segment. However, due to the critical flowering/fruitleting time period required for precise field identification of this genus, identification down to the species level was not possible. SEA will conduct additional field surveys during the 2010 flowering/fruitleting season to confirm if this *Sparganium* species is in fact Branching Bur-reed.

### **3.6.4 Existing Conditions – Vermin/Vectors for Disease**

Concerns have been raised about the potential for vermin/vectors for disease derived from the Proposed Action and the associated transport of municipal solid waste. SEA has conducted a qualitative assessment for this issue. Currently, the project area does not contain any known sources of vermin/vectors for disease beyond that which would be considered ordinary for a typical rural community. Therefore, SEA expended no further effort in assessing the existing conditions for this issue. Potential impacts related to increased vermin/vectors for disease associated with the Proposed Action and its alternatives are discussed in Chapter 4, Environmental Impacts.

## **3.7 WATER RESOURCES**

### **3.7.1 Background/Methodology**

Water resources are regulated under several federal, state, and local programs. Most notable of these programs is USACE's regulatory authority over wetlands and watercourses (any flowing body of water) pursuant to Section 404 of the Clean Water Act (CWA). USACE administers the CWA permit process for projects involving impacts to wetlands and watercourses. PA DEP administers the state permitting process for projects involving encroachments into wetlands and watercourses pursuant to its regulatory authority under PA Code Title 25, Chapter 105, PA Dam Safety and Waterway Management Regulations. Additionally, PA DEP has administrative authority under Section 401 of the CWA to ensure that projects impacting wetlands and watercourses are consistent with state water quality goals through the issuance of project-specific water quality certifications as part of the permitting process. PA DEP also has delegated authority under Section 402 of the CWA to ensure compliance with National Pollutant Discharge Elimination System (NPDES) goals through the issuance of separate storm water construction permits for projects involving a minimum threshold of earth disturbance activities. Within Pennsylvania, projects resulting in potential erosion and sedimentation impacts must also be approved by the local county conservation district pursuant to their delegated authority under PA Code Title 25, Chapter 102, Erosion and Sediment Control Regulations.

Given the regulatory framework, SEA conducted detailed investigations into the identification and assessment of wetlands and watercourses. These investigations included a combination of both on-site surveys and off-site reviews of secondary sources. SEA reviewed the following existing information: USGS topographic quadrangle mapping, county soil survey mapping, National Wetland Inventory (NWI) mapping, and aerial photographs. SEA conducted the on-site investigations (i.e., field surveys) in accordance with the Wetland Delineation Method described in USACE's Wetland Delineation Manual, Technical Report Y-87-1 (1987) and subsequent regulatory guidance, including the recommendations in the Regional Supplement to USACE's Wetland Delineation Manual: Eastern Mountains and Piedmont Region. As a result of these combined investigations, SEA developed a comprehensive mapping layer including all wetlands and watercourses identified within the project area.

Given their useful application, groundwater resources and public water supplies are important considerations in the NEPA process. Potential impacts to potable water supplies typically extend beyond the immediate project area and can result in regional implications at the aquifer and/or watershed level. An event or incident that results in the contamination of a potable water source can

impact every individual that relies on that particular water source and not just those in the immediate proximity of the particular event or incident. Thus, SEA has evaluated the existing project area conditions with respect to groundwater resources and public water supplies. To accomplish this assessment, SEA reviewed published literature (i.e., geologic maps, groundwater reports, hydrogeologic studies, etc.) to establish baseline environmental conditions regarding local and regional groundwater resources. Municipal coordination helped to identify public water supplies/suppliers.

FEMA maps floodplains as part of the National Flood Insurance Program (NFIP). The 100-year (or 1% annual chance) floodplain is considered the regulatory minimum for floodplain management purposes under the NFIP. The availability of federally subsidized flood insurance under the NFIP is contingent upon the particular community adopting and enforcing floodplain management regulations consistent with NFIP minimum standards for the protection of all new development within the 100-year floodplain. To assist local communities in meeting these minimum NFIP floodplain management regulations, FEMA provides Flood Insurance Rate Maps (FIRMs) showing the locations and boundaries of all 100-year floodplains on a community-specific basis. Within Pennsylvania, most 100-year floodplains are mapped on FIRMs as either a Zone A or a Zone AE floodplain. Zone A 100-year floodplains are not studied in detail, do not contain base flood elevations or floodway delineations (i.e., the anticipated depth or height of flooding and the portion of the floodplain containing maximum velocity flood flows, respectively), and are generally considered to be approximate in their mapped boundaries. Thus, 100-year floodplains of this designation are typically referred to as “approximate A zones.” These zones are typically found in rural areas with minimal development. In contrast to approximate A zones, Zone AE 100-year floodplains are studied in detail and contain both base flood elevations and floodway delineations. These zones are generally identified in more developed areas where the risk of property damage and potential impacts to public safety are more significant.

To identify regulatory floodplains within the project area, SEA analyzed the applicable FEMA FIRMs for Clearfield and Centre Counties. SEA also used GIS-based FEMA 100-year floodplain mapping data for those parts of the project area where FIRMs were unavailable.

### **3.7.2 Existing Conditions – Wetlands and Watercourses**

The project area is located primarily within the Moshannon Creek drainage, the fifth largest tributary to the West Branch of the Susquehanna River. The proposed rail line roughly parallels Moshannon Creek itself from Philipsburg northeast to Gorton. Small portions of the project area, namely the Wallacetown, northern Morrisdale, Kylertown, and Snow Shoe Borough areas, drain north directly to the West Branch of the Susquehanna River or east to the Beech Creek watershed. Within the project area, Moshannon Creek has a PA DEP Water Quality Classification for Trout Stocked Fishes (TSF) and Migratory Fishes (MF). However, PFBC does not stock this section of Moshannon Creek with trout due to the significant impact to water quality caused by acid mine drainage (AMD). This section of Moshannon Creek is locally known and referred to as the “Red Moshannon” due to the readily visible orange staining caused by AMD precipitate.

Other USGS-mapped watercourses identified within the immediate project area include Laurel Run, Emigh Run, Hawk Run, Black Bear Run, and Black Moshannon Creek. All of these streams are direct tributary drainages to Moshannon Creek. Table 3-5 summarizes the PA DEP water quality

**TABLE 3-5  
WATERCOURSE CLASSIFICATIONS**

<b>WATERCOURSE</b>	<b>PA DEP WQ CLASS</b>	<b>PFBC APPROVED TROUT WATER</b>	<b>PFBC SPECIAL REG WATER</b>	<b>CLASS A WILD TROUT</b>	<b>WILD. TROUT</b>	<b>NATURALLY REPRODUCING TROUT</b>
Moshannon Creek	TSE, MF	NO	NO	NO	NO	NO
UNTs to Moshannon Creek	CWF, MF	NO	NO	NO	NO	NO
Black Moshannon Creek	HQ-CWF, MF	YES	NO	NO	NO	NO
UNTs to Black Moshannon Creek	HQ-CWF, MF	NO	NO	NO	NO	NO
Black Bear Run	EV, MF	NO	NO	NO	NO	YES
Hawk Run	CWF, MF	NO	NO	NO	NO	NO
Emigh Run	CWF, MF	NO	NO	NO	NO	NO
Laurel Run	CWF, MF	NO	NO	NO	NO	NO

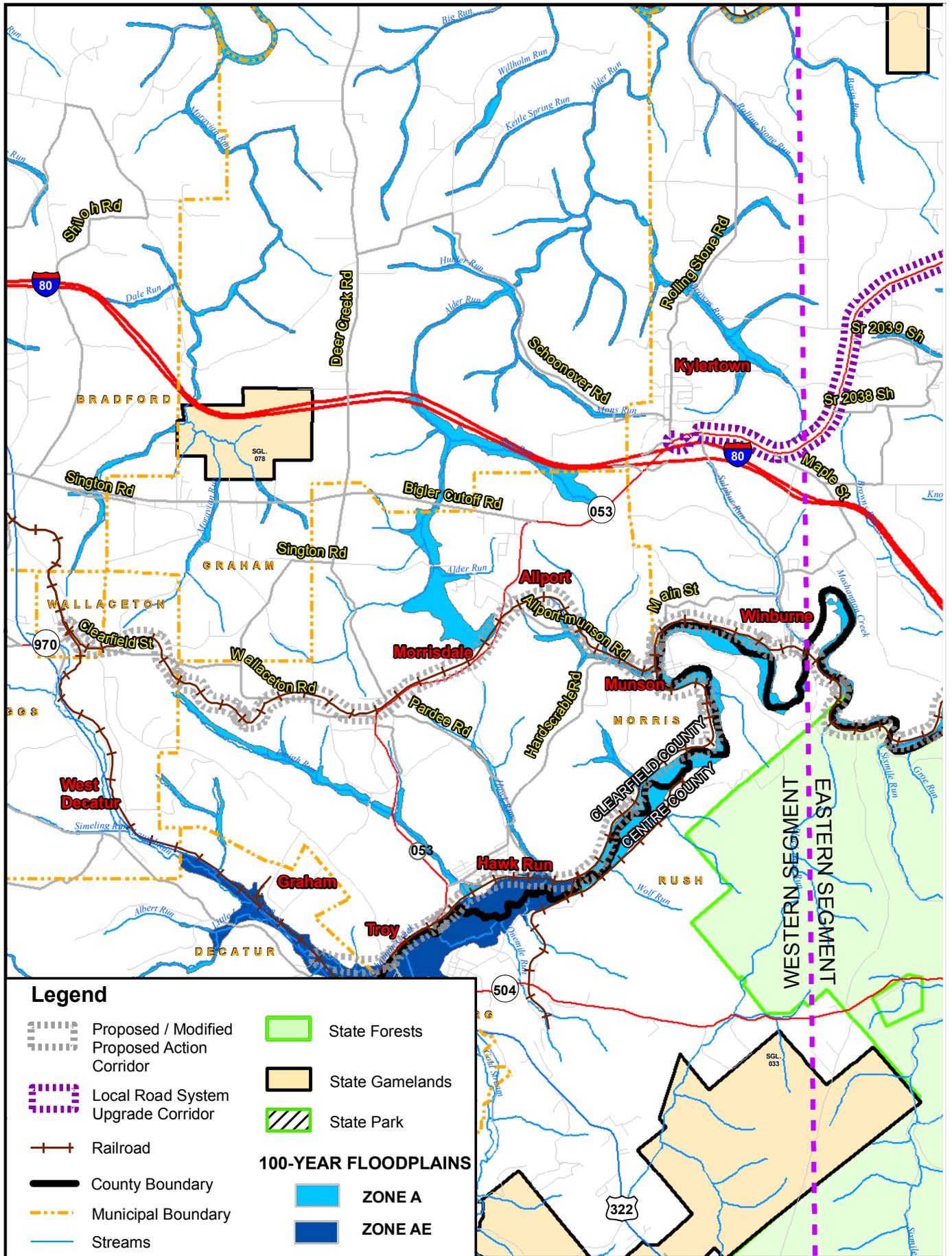
and PFBC trout classifications of these mapped streams as well as the numerous unnamed tributaries (UNT) identified within the immediate project area. Figure 3-4 shows the general locations of the larger USGS-mapped watercourses within the general project area. The Environmental Features Mapping in Volume 2 shows all watercourses identified within the project area.

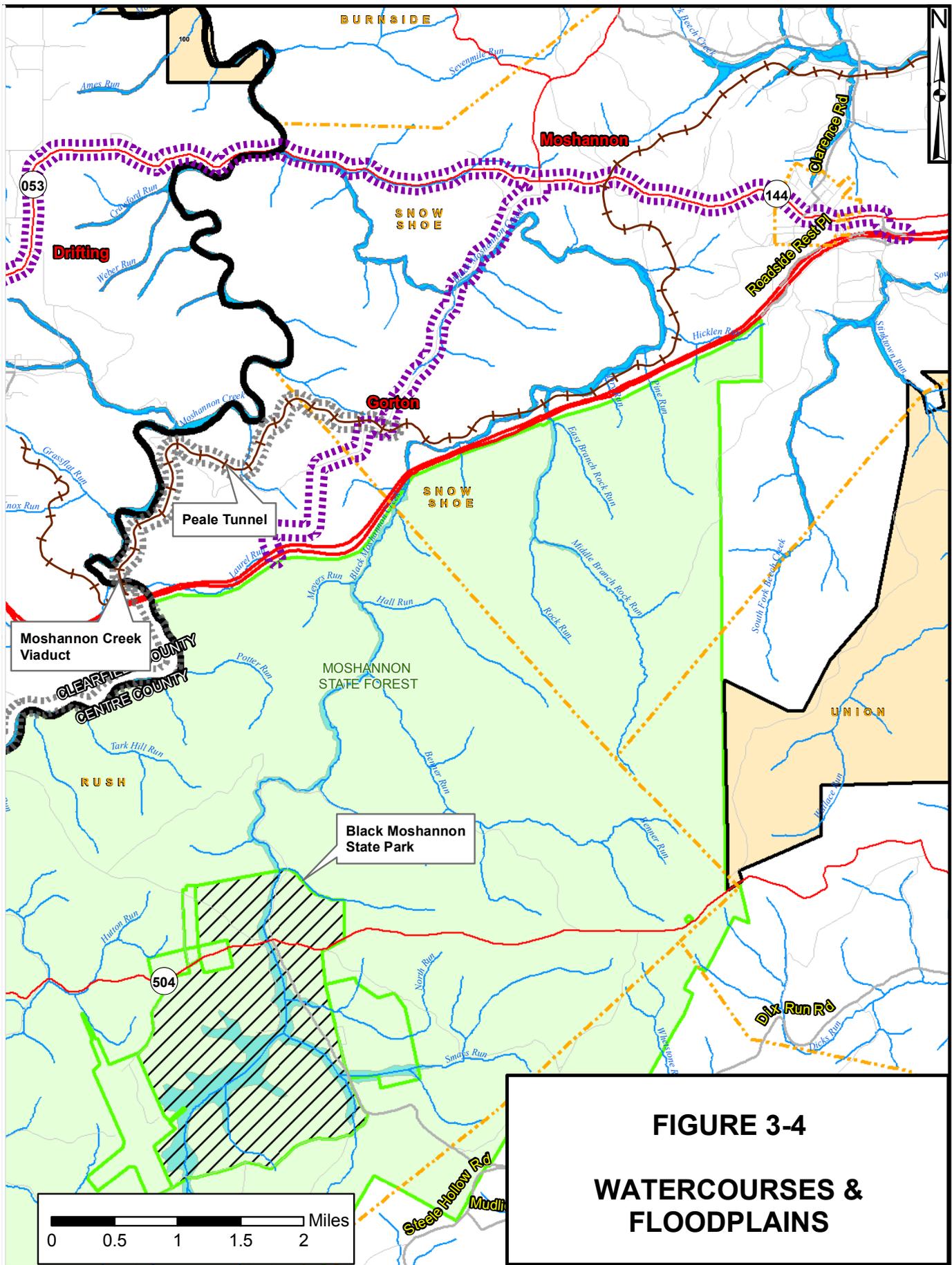
Of particular importance is the High Quality-Cold Water Fishes (HQ-CWF) water quality classification of Black Moshannon Creek and its unnamed tributaries. Even more noteworthy is the Exceptional Value (EV) designation of Black Bear Run and its recognition as containing naturally reproducing trout. None of these watercourses has been identified as federal or state wild and scenic rivers, determined navigable by USACE, or designated as a Water Trail by PFBC.

SEA identified and delineated more than fifty wetlands within the project area. As previously mentioned, SEA identified these wetlands through a combination of on-site surveys and off-site reviews. All wetlands identified within the immediate rail corridor with the potential to be impacted by the Proposed Action were delineated in the field and mapped to sub-meter accuracy using a GPS survey. Wetland boundaries adjacent to the right-of-way and unlikely to be impacted by the Proposed Action were identified based on air photo analysis and confirmed through field reconnaissance. All wetlands identified within the project area are shown on the Environmental Features Mapping in Volume 2.

SEA classified the wetlands delineated within the right-of-way of the proposed rail line according to the Cowardin System as Palustrine Emergent (PEM), Palustrine Forested (PFO), and Palustrine Scrub-Shrub (PSS) wetland habitats. Palustrine wetlands are characterized by the Cowardin System as being non-tidal wetlands substantially covered with emergent vegetation including trees, shrubs, forbs, grasses, and mosses. Within this general wetland category, individual wetlands can be classified as either emergent (i.e., herbaceous), forested, scrub-shrub, or open water (POW) based on the dominant type of vegetation. The majority of the wetlands delineated along the Proposed Action's Wallaceton to Munson Route consist of small PEM pockets of adverse drainage resulting from abandoned stormwater management facilities. While wetland vegetation varies by location, these small PEM pockets of adverse drainage tend to be dominated by rush (*Juncus sp.*) and sedge (*Carex sp.*) species. The majority of the wetlands delineated along the Modified Proposed Action's Alternate Route from Philipsburg to Munson consist of PEM-PSS complexes located in trackside ditches and depressions. These PEM-PSS wetland complexes tend to be dominated by rush, sedge, dogwood (*Cornus Sp.*), and alder (*Alnus Sp.*) species. Similar to the wetlands delineated along the Wallaceton to Munson Route, many of these PEM-PSS complexes were formed due to adverse drainage resulting from abandoned stormwater management facilities. Additionally, the Alternate Route from Philipsburg to Munson parallels the extensive Moshannon Creek wetland-riverine complex. This massive wetland complex is a combined PEM-PSS-PFO-POW system dominated by sedge, maple (*Acer sp.*), and dogwood species. From Munson east to Gorton on the Eastern Segment, the majority of the wetlands delineated within the project area consist of small PEM pockets of adverse drainage and several PSS-PFO hillside seeps dominated by maple and dogwood species.

Wetlands in the area of the Local Road System Upgrade alternative consist of groundwater discharge wetlands ranging in size from a few square feet to several acres. These wetlands are mainly PSS thickets, dominated by dogwood and alder species, and PFO swamps, dominated by maples and hemlocks. A number of these PFO swamps contain emergent pockets dominated by various sedge





**FIGURE 3-4**  
**WATERCOURSES & FLOODPLAINS**

and rush species. Many of these wetlands have been partially impacted by development activities, including driveways and power lines. A large groundwater discharge is located along S.R. 0053 between Drifting and Moshannon. This discharge has been developed into a commercial fish hatchery and aquaculture business. SEA mapped impoundments associated with this business as regulated waters (i.e., ponds), not as jurisdictional wetlands.

### **3.7.3 Existing Conditions – Groundwater and Public Water Supplies**

The overall quality and availability of groundwater in a given area are typically natural functions of the underlying bedrock geology. However, in certain situations, outside forces (usually anthropogenic in origin) can impact both the quality and quantity of groundwater resources. Such is the case for a significant portion of the project area, which has been adversely impacted by AMD conditions brought about through years of surface and subsurface coal mining activities. Despite these existing AMD conditions, SEA evaluated the project area's groundwater resources and public water supplies to establish baseline environmental conditions for the purpose of assessing the project's impacts.

As discussed later in Section 3.10.2 (Existing Conditions – Geology), the project area is geologically situated within the Pennsylvanian-aged sandstone, shale, and coal of the Alleghany and Pottsville Groups and the Mississippian-aged sandstone of the Pocono and Mauch Chunk Formations. Groundwater from the Pennsylvanian-aged Alleghany and Pottsville Groups is commonly high in iron, with well yields ranging from about 20 to 100 gallons per minute. Conversely, groundwater from the Mississippian-aged Pocono and Mauch Chunk Formations is usually soft and of good quality. Well yields generally range from about 3 to 70 gallons per minute, with some wells drilled in valley locations yielding several hundred gallons per minute.

Many residences in the project area are serviced by public water, but some isolated residences rely on private groundwater wells as their primary water supply. Municipal/public water suppliers within the project area include the Pennsylvania American Water Company, Cooper Township Municipal Authority, Snow Shoe Township Municipal Authority, and Mountaintop Area Water Authority. The Cooper Township Municipal Authority, whose water source is located in the headwaters of Black Bear Run, provides water to most of the residences in Cooper Township, with service lines also extending into Morris Township. The Borough of Wallacetown formerly maintained its own spring-fed water system using a source proximal to the proposed rail line, but the Pennsylvania American Water Company, whose source is located well outside the project area, recently absorbed the Wallacetown service area. The Snow Shoe Township Municipal Authority and the Mountaintop Area Water Authority provide water to the residences in the Centre County portion of the project area.

### **3.7.4 Existing Conditions – Floodplains**

Analysis of Figure 3-4 indicates that the project area contains a network of regulatory 100-year floodplains associated with the Moshannon Creek drainage. The largest and most expansive of these 100-year floodplains is that of Moshannon Creek itself, which flows in a meandering northeastern direction roughly parallel to the proposed rail line from Philipsburg to Gorton. Within the project area, FEMA mapped the majority of the Moshannon Creek floodplain as an approximate A zone floodplain. However, FEMA studied a small portion (i.e., Philipsburg downstream to Hawk Run) in detail and mapped it as a Zone AE floodplain. Within this detailed flood study area, FEMA

calculated base flood elevations at each cross section location, developed flood elevation profiles between cross section locations, and established a regulatory floodway for floodplain management purposes.

Beyond the main stem of the Moshannon Creek itself, FEMA identified and mapped 100-year floodplains on the following Moshannon Creek tributary streams:

- Laurel Run (Zone AE),
- Emigh Run (Zone A),
- Hawk Run (Zone A),
- Unnamed Tributary (referred to as Hardscrable Run) between Hawk Run and Munson (Zone A),
- Unnamed Tributary (referred to as Munson Run) at Munson (Zone A), and
- Black Moshannon Creek (Zone A).

In addition to these Moshannon Creek tributary streams, FEMA also identified a Zone A 100-year floodplain on Alder Run (a direct tributary to the West Branch of the Susquehanna River) within the project study area between Morrisdale and Allport.

### **3.8 SOCIOECONOMICS**

#### **3.8.1 Background/Methodology**

NEPA regulations (40 C.F.R. § 1508.14) require consideration of the socioeconomic impacts of a Proposed Action and its alternatives when “economic or social and natural or physical environmental effects are interrelated.” The courts have ruled that socioeconomic issues are closely linked to quality of life and should be studied under NEPA. Thus, SEA analyzed the existing socioeconomic environment and project area living conditions with respect to the proposed rail line and the alternative use of the existing local road system. SEA evaluated socioeconomic factors such as demographics and employment, community facilities and services, and parks and recreation facilities. SEA used municipal coordination, field reconnaissance, background data collection, map analysis, and review of existing local planning documents as research methods to analyze the socioeconomic environment.

#### **3.8.2 Existing Conditions – Demographics and Employment**

The project area is located in eight municipalities within Clearfield and Centre Counties. These municipalities include Wallacetown Borough, Boggs Township, Decatur Township, Morris Township, and Cooper Township in Clearfield County and Rush Township, Show Shoe Township, and Snow Shoe Borough in Centre County. Table 3-6 shows past and current population data for the project area municipalities and counties. Analysis of this table indicates that both Clearfield and Centre Counties experienced a moderate level of growth between 1990 and 2000 (6.8 and 9.7%,

**TABLE 3-6  
PROJECT AREA POPULATION DATA**

<b>JURISDICTION</b>	<b>1990 POPULATION</b>	<b>2000 POPULATION</b>	<b>1990-2000% CHANGE</b>	<b>2008 POPULATION ESTIMATE</b>
<b>Clearfield County</b>	78,097	83,382	6.8	82,896
Wallaceton Borough	319	350	9.7	327
Boggs Township	1,907	1,837	-3.7	1,807
Decatur Township	3,004	2,974	-1.0	4,507
Morris Township	2,680	3,063	14.3	2,969
Cooper Township	2,590	2,731	5.4	2,672
<b>Centre County</b>	123,786	135,758	9.7	144,779
Rush Township	3,411	3,466	1.6	3,884
Snow Shoe Township	1,756	1,760	0.2	1,700
Snow Shoe Borough	800	771	-3.6	774

respectively). Based on U.S. Census Bureau estimates<sup>1</sup>, Centre County has experienced an estimated 6.6% increase in population from 2000 to 2008, while Clearfield County has experienced an estimated 0.6% decrease in population during that same time period.

Populations of the individual project area municipalities are dynamic with some having increased and others having decreased between 1990 and 2000. The extremes of these variable population rates are reflected in Boggs Township with its -3.7% growth rate and the neighboring Morris Township with its 14.3% growth rate during the same ten-year period.

Table 3-7 shows selected 2000 Census housing data for the project area municipalities and counties. Analysis of this table indicates that, as of the 2000 Census, the majority (84.8-92.4%) of housing units in the project area municipalities are owner-occupied. On average, the median value of those owner-occupied homes was between \$10,000 and \$30,000 greater in the Centre County municipalities of Rush and Snow Shoe Townships and Snow Shoe Borough when compared to that of the project area municipalities located in Clearfield County.

Analysis of 2000 Census occupation/employment statistics (see Table 3-8) reveals some striking differences between Centre and Clearfield Counties. As a whole, just under 42% of Centre County residents are reported as being employed in some form of white collar management/professional occupation whereas just under 18% are reported as being employed in some form of blue collar construction/mining/production/transportation related occupation. For comparison purposes, just over 23% of Clearfield County residents are reported as being employed in some form of white collar management/professional occupation while nearly 36% are reported as being employed in some form of blue collar construction/mining/production/transportation related occupation. This

<sup>1</sup> 2008 population estimates are derived from the U.S. Census Bureau's Population Estimates Program. Estimates generally use data for births, deaths, and migration collected from various sources. The Population Estimates Program produces estimates annually for years after the last published decennial census (2000).

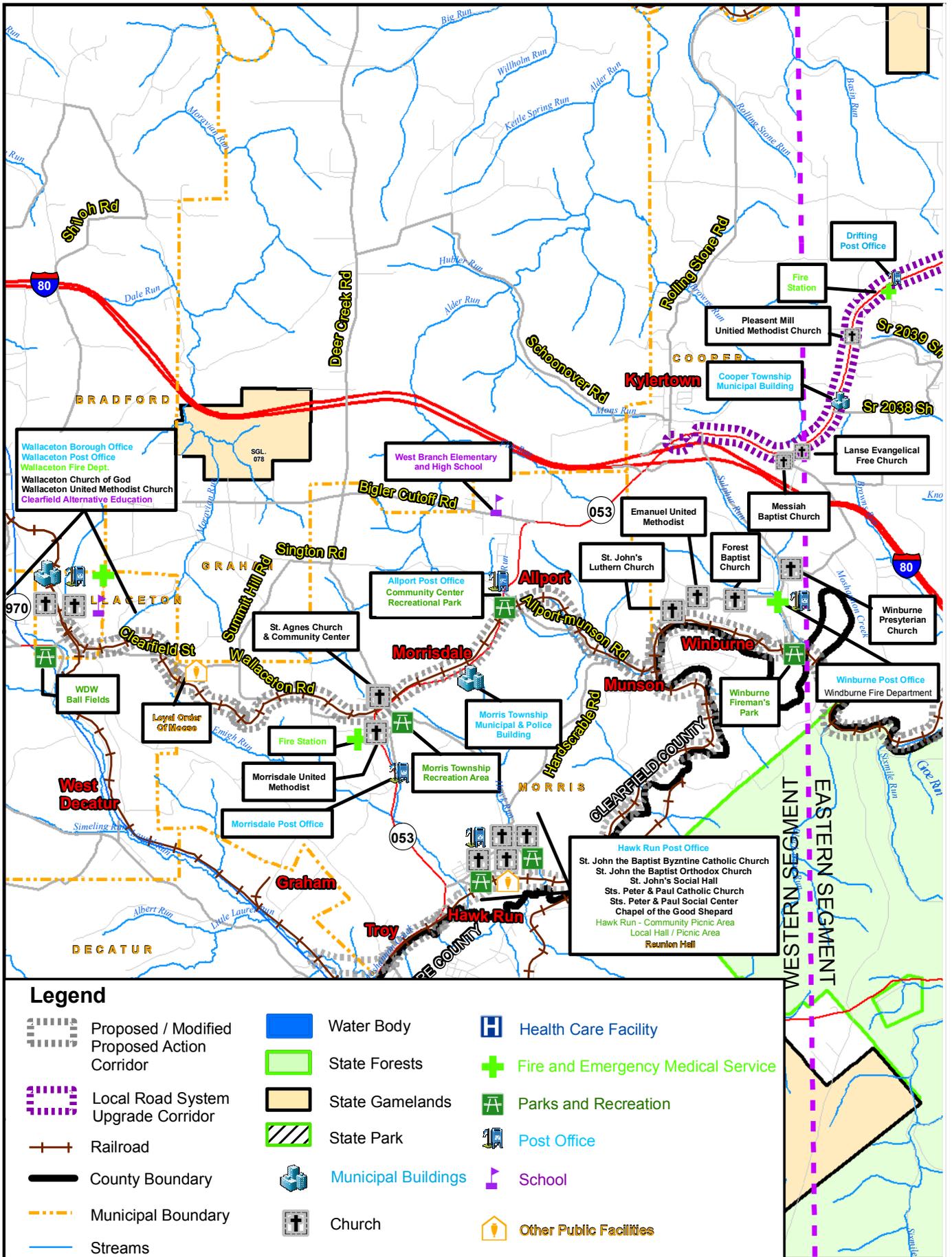
**TABLE 3-7  
PROJECT AREA HOUSING DATA**

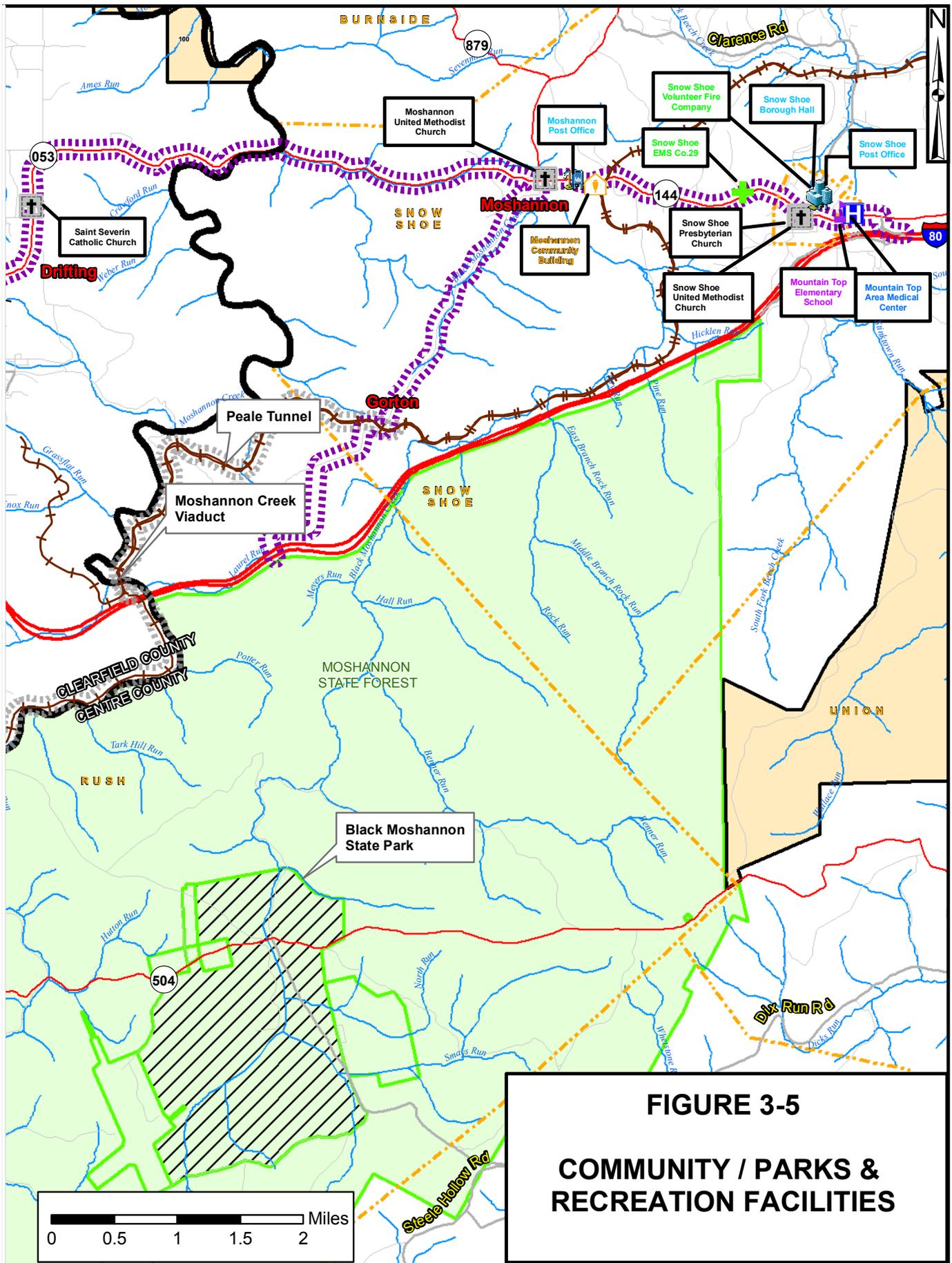
<b>JURISDICTION</b>	<b>TOTAL HOUSING UNITS</b>	<b>OCCUPIED HOUSING UNITS</b>	<b>% OWNER-OCCUPIED</b>	<b>MEDIAN VALUE OF OWNER-OCCUPIED UNITS</b>	<b>AVERAGE HOUSEHOLD SIZE</b>
<b>Clearfield County</b>	37,855	32,785	79.2	\$62,600	2.5
Wallaceton Borough	134	131	92.4	\$49,000	2.8
Boggs Township	791	736	89.8	\$60,800	2.5
Decatur Township	1,316	1,210	84.8	\$66,800	2.5
Morris Township	1,296	1,224	85.0	\$66,400	2.6
Cooper Township	1,211	1,056	88.2	\$64,600	2.6
<b>Centre County</b>	53,161	49,323	60.2	\$114,900	2.6
Rush Township	1,687	1,359	87.0	\$76,300	2.5
Snow Shoe Township	858	681	89.4	\$75,600	2.6
Snow Shoe Borough	305	286	89.2	\$80,800	2.7

notable disparity in traditional white collar-v.-blue collar jobs between Centre and Clearfield County is most likely attributable to Penn State University and other employers in the State College area of Centre County. When looking specifically at the individual project area municipalities, however, this white collar/blue collar employment disparity is not evident between the Centre County municipalities and the Clearfield County municipalities. In fact, Cooper Township, Clearfield County, reports a higher percentage of management/professional employed individuals and a lower percentage of construction/mining/production/transportation employed individuals than that of Snow Shoe Township, Centre County. This suggests that the project area municipalities located in Centre County may be located far enough away from the State College employment center that its respective occupation/employment trends have developed in a manner more typical of the neighboring Clearfield County municipalities.

### **3.8.3 Existing Conditions – Community Facilities and Services**

Community facilities and services identified within the project area include public school districts, emergency service providers (i.e., police, fire and ambulance), churches, post offices, municipal buildings, health care facilities, and public transportation services. Figure 3-5 shows the locations of the community facilities identified within the project area. The project area comprises parts of three public school districts: the Philipsburg-Osceola Area School District, the West Branch Area School District, and the Bald Eagle Area School District. Within the project area, Wallaceton Borough, Boggs Township, Decatur Township, and Rush Township are part of the Philipsburg-Osceola Area School District; Morris Township and Cooper Township are part of the West Branch Area School District; and Snow Shoe Township and Snow Shoe Borough are part of the Bald Eagle Area School District. The only school building located within close proximity of the Proposed Action is the former Wallaceton-Boggs Elementary School on Wilson Street in Wallaceton Borough along the Wallaceton to Munson Route of the Proposed Action's Western Segment. This former elementary





**FIGURE 3-5**  
**COMMUNITY / PARKS & RECREATION FACILITIES**

**TABLE 3-8  
PROJECT AREA PERCENT EMPLOYMENT BY OCCUPATION SECTOR**

<b>JURISDICTION</b>	<b>MGMT &amp; PROF.</b>	<b>SERVICE</b>	<b>SALES &amp; OFFICE</b>	<b>FARMING, FISHING &amp; FORESTRY</b>	<b>CONSTRUCTION, EXTRACTION &amp; MAINTENANCE</b>	<b>PRODUCTION &amp; TRANSPORT</b>
<b>Clearfield County</b>	23.1	15.3	24.9	0.9	11.7	24.1
Wallaceton Borough	18.3	16.2	26.8	1.4	14.8	22.5
Boggs Township	15.1	13.0	26.9	0.8	13.8	30.4
Decatur Township	16.7	17.0	24.5	1.4	9.9	30.5
Morris Township	12.3	14.6	30.6	0.0	15.8	26.7
Cooper Township	20.5	17.0	22.9	0.5	15.6	23.6
<b>Centre County</b>	41.6	16.5	23.5	0.6	6.7	11.1
Rush Township	25.6	14.1	21.4	0.0	17.5	21.5
Snow Shoe Township	18.2	18.9	19.7	0.4	14.9	27.9
Snow Shoe Borough	25.0	14.9	27.8	0.6	11.0	20.8

school building now serves as the Clearfield County Alternative Education building. Similarly, the only school building located within close proximity of the Local Road System Upgrade alternative is the Mountaintop Area Elementary School located along S.R. 0144 just east of Snow Shoe Borough.

Similar to many other rural locations in Pennsylvania, a combination of local and regional entities with overlapping primary and secondary response zones provide emergency response services in the project area. Morris-Cooper Joint Police Department, the Decatur Township Police Department, and the Pennsylvania State Police (Clearfield, Philipsburg, and Rockview Stations) provide police services. The Wallaceton Volunteer Fire Company, Morris Township Fire Company, Winburne Volunteer Fire Company, Philipsburg Reliance and Hope Fire Companies, and Snow Shoe Fire Company provide fire response services. Ambulance/Emergency Medical Service (EMS) providers covering the general project area include Mo-Valley EMS operating out of Philipsburg, Snow Shoe EMS operating out of Snow Shoe, and Centre Community EMS operating out of State College.

SEA identified a number of churches of varying denominations within the general project area. Figure 3-5 shows the following churches:

- Wallaceton Church of God (Wallaceton),
- Wallaceton United Methodist Church (Wallaceton),
- Morris United Methodist Church (Morrisdale),
- Saint Agnes Church (Morrisdale),
- St. Peter and Paul Roman Catholic Church (Hawk Run),
- St. John the Baptist Byzantine Catholic Church (Hawk Run),
- St. John the Baptist Orthodox Church (Hawk Run),
- Chapel of the Good Shepherd (Hawk Run),
- Winburne Presbyterian Church (Winburne),
- St. John's Lutheran Church (Winburne),
- Emanuel United Methodist Church (Winburne),
- Forest Baptist Church (Winburne),
- Snow Shoe United Methodist Church (Snow Shoe),
- Snow Shoe Presbyterian Church (Snow Shoe),
- Moshannon United Methodist Church (Moshannon),
- St. Severin's Catholic Church/Old Log Church (Drifting),
- Pleasant Mill United Methodist Church (Drain Lick),
- Lanse Evangelical Free Church (Lanse), and
- Messiah Baptist Church/Old Church (Lanse).

U.S. Post Offices are located in Wallaceton, Morrisdale, Allport, Hawk Run, Winburne, Drifting, Moshannon, and Snow Shoe. Two municipal buildings, the Morris Township Building and the Cooper Township Building, are located along S.R. 0053 between Morrisdale and Allport and between Kylertown and Drifting, respectively. One health care facility, Mountaintop Area Medical Center, was identified along S.R. 0144 just east of Snow Shoe. Public transportation services are provided in Kylertown, Grassflat, Morrisdale, Allport and Hawk Run via Clearfield County's Area Transportation Authority (ATA).

### 3.8.4 Existing Conditions – Parks and Recreation Facilities

There are no National Parks, National Forests, National Monuments, National Recreation Areas, or National Natural Landmarks within the project area. However, residents of the project area do have access to a number of state and local parks and recreation facilities (see Figure 3-5). The most notable of these recreational facilities are the Moshannon State Forest, Black Moshannon State Park, and the Snow Shoe Multi-Use Rail Trail.

The Moshannon State Forest consists of approximately 190,000 acres in several tracts in northern Clearfield, southern Elk, southern Cameron, and central Centre Counties. Like all Pennsylvania state forests, the Moshannon is managed for multiple uses, including passive recreational activities (i.e., hiking, hunting, fishing, wildlife watching, etc.). Within the immediate project area, the Moshannon State Forest consists of undeveloped forestland adjacent to the Moshannon Creek roughly situated between the Black Bear Run and Six-mile Run bridges within the Eastern Segment. Within this approximate 4,400-foot section, no developed recreational facilities exist other than the former roadbed itself (i.e., the Snow Shoe Multi-Use Rail Trail). Coordination with the District Manager of Moshannon State Forest (see Appendix B) indicates that the Allegheny Front Trail is located on the opposite side of Moshannon Creek several hundred feet south of the Snow Shoe Multi-Use Rail Trail. No state forest natural or wild areas are located within this section of Moshannon State Forest.

Located approximately three miles south of the project area, the Black Moshannon State Park consists of a public campground, lake, and other developed recreational features. This state park also contains the Black Moshannon Bog Natural Area. Both the Moshannon State Forest and Black Moshannon State Park are under the administrative jurisdiction of PA DCNR.

As previously mentioned, the Snow Shoe Multi-Use Rail Trail is the most evident recreational feature to be impacted by the Proposed Action. HCT (in cooperation with SSRTA) maintains and operates The Snow Shoe Multi-Use Rail Trail pursuant to a CITU issued to Conrail by the ICC in 1993. The Snow Shoe Multi-Use Rail Trail stretches approximately 19 miles from near Winburne eastward through Gorton to Gillintown. The regional popularity of the Snow Shoe Multi-Use Rail Trail appears to lie, in part, in the ability of registered SSRTA members to legally operate All-terrain Vehicles (ATVs) and snow mobiles over the entire 19-mile trail length.

In addition to these larger recreational facilities, a number of smaller public and private recreational facilities are located within the project area. These smaller recreational facilities include the WDW Ballfield in Wallacetown, the Morris Township Recreation Fields in Morrisdale, the Allport Recreational Park in Allport, the Winburne Fireman's Park in Winburne, and the Mountain Top Recreational Fields in Snow Shoe. Additionally, a number of churches, schools and social organizations within the project area maintain their own private recreational facilities.

Two other recreation/tourism-based facilities identified within the project area include the PA Wilds Elk Scenic Drive and PA Bicycle Route V. Neither of these facilities would be impacted by the proposed rail line, but both would potentially be impacted by the Local Road System Upgrade alternative. The PA Wilds Elk Scenic Drive is a 127-mile road tour highlighting potential viewing points of the wild elk herds located in north central and northwestern Pennsylvania. Within the project area, the PA Wilds Elk Scenic Drive begins at the Snow Shoe Interchange of I-80 and follows S.R. 0144 through Snow Shoe Borough to Moshannon. At Moshannon, the PA Wilds Elk Scenic

Drive follows S.R. 0144 north out of the project area. Similarly, PA Bicycle Route V follows S.R. 0144 through Snow Shoe Borough to Moshannon, where it then joins S.R. 0053 to Allport. From Allport, the PA Bicycle Route V heads north and west out of the project area.

### **3.9 ENVIRONMENTAL JUSTICE**

#### **3.9.1 Background/Methodology**

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, directs federal agencies to “promote nondiscrimination in Federal programs substantially affecting human health and the environment, and provide minority and low income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.” EO 12898 also directs agencies to identify and consider disproportionately high and adverse human health or environmental effects of their actions on minority and low-income communities and to provide opportunities for community input in the NEPA process, including input on potential effects and mitigation measures.

The first step in assessing Environmental Justice (EJ) at the individual project level is to determine if any minority or low-income populations are present within the designated project area. To accomplish this initial identification assessment, SEA relied on Year 2000 Census Data collected at the block group level for the applicable project area municipalities. Specifically, SEA analyzed data on race, persons receiving public assistance income, and persons below the poverty level to identify potential EJ populations.

#### **3.9.2 Existing Conditions**

Table 3-9 presents Year 2000 Census Data on minority and low-income populations down to the block group level for the project area municipalities and counties. Data are presented at the block group level, as they constitute the smallest geographical areas for which detailed census data are available. These data allow potential concentrations of EJ populations to be identified at the sub-municipal level, which represents the smallest practical geographical unit available for analysis. However, SEA recognizes that higher and lower percentages within these smallest practical geographical units do not automatically equate to a confirmed presence or absence of a concentrated EJ population within the immediate project study area. Rather, these data provide insight into the overall population characteristics of the project area, as related to the potential presence of an EJ population. For analysis purposes, broad assumptions can then be made from these baseline population statistics.

Analysis of Table 3-9 indicates that the project area does not appear to contain any minority-based EJ populations. This is evidenced by the low number of persons and percentages of minority individuals within each project area block group when compared to the respective county average. Therefore, SEA has concluded that, based on the available data, potential EJ issues related to disproportionately high and adverse human health or environmental effects on minority populations are not relevant to this project.

Regarding potential low income EJ populations, Table 3-9 indicates that there are several project area block groups with percentages of low-income populations and persons receiving public

**TABLE 3-9  
PROJECT AREA EJ POPULATION DATA**

JURISDICTION	TOTAL POPULATION	MINORITY <sup>1</sup>	LOW INCOME <sup>2</sup>	PUBLIC ASSISTANCE <sup>3</sup>
		Number of Persons (% of Total Population)		
<b>Clearfield County</b>	83,382	2,037 (2.4)	10,028 (12.0)	2,362 (2.8)
Wallaceton Borough/ Boggs Township	2,187	15 (0.7)	242 (11.1)	79 (3.6)
<i>Census Tract 3310, Block Group 3</i>	966	10 (1.0)	146 (15.1)	39 (4.0)
Decatur Township	2,974	31 (1.0)	407 (13.7)	22 (0.7)
<i>Census Tract 3309, Block Group 2</i>	1,694	7 (0.4)	238 (14.0)	22 (1.3)
Morris Township	3,063	29 (0.9)	215 (7.0)	43 (1.4)
<i>Census Tract 3308, Block Group 4</i>	3,063	29 (0.9)	215 (7.0)	43 (1.4)
Cooper Township	2,731	11 (0.4)	238 (8.7)	65 (2.4)
<i>Census Tract 3308, Block Group 2</i>	1,178	1 (0.1)	121 (10.3)	30 (2.5)
<i>Census Tract 3308, Block Group 3</i>	1,553	10 (0.6)	117 (7.5)	34 (2.2)
<b>Centre County</b>	135,758	11,438 (8.4)	22,742 (16.8)	1,495 (1.1)
Rush Township	3,466	23 (0.7)	229 (6.6)	54 (1.6)
<i>Census Tract 104, Block Group 1</i>	1,261	6 (0.5)	138 (10.9)	39 (3.1)
Snow Shoe Township	1,760	16 (0.9)	160 (9.1)	39 (2.2)
<i>Census Tract 102, Block Group 3</i>	619	4 (0.6)	86 (13.9)	26 (4.0)
Snow Shoe Borough	771	5 (0.6)	31 (4.0)	21 (2.7)
<i>Census Tract 102, Block Group 2</i>	771	5 (0.6)	31 (4.0)	21 (2.7)

<sup>1</sup> Minority population refers to “non-white” persons (i.e., Black, Hispanic, Asian American, Native Hawaiian or Other Pacific Islander, or American Indian/Alaskan Native, etc.).

<sup>2</sup> Low-Income population refers to persons with an annual household income at or below the Department of Health and Human Services poverty guidelines.

<sup>3</sup> Public Assistance raw census data is collected in number of households receiving public assistance through programs administered by the Department of Health and Human Services. Total number of individuals receiving public assistance was calculated by multiplying the number of households by the average household size for that particular municipality.

assistance that approach and even exceed the respective county average. This is true for both the Clearfield and Centre County project area municipalities. In particular, the project area block groups containing all or portions of Wallaceton Borough, Boggs Township, Decatur Township and Cooper Township in Clearfield County and Rush and Snow Shoe Townships in Centre County have low-income populations exceeding ten percent of their total population. The most notable of these block groups is Block Group 3 within Census Tract 3310, which covers part of Boggs Township and all of Wallaceton Borough, with its 15.1 percent low-income population. These block group-level percentages are potentially indicative of the presence of a low-income EJ population within the project area. Additionally, HUD-subsidized housing (Hawk Run Apartments) has been identified within the project area. Thus, SEA recognizes the potential for a low-income EJ population within the project area and has subsequently considered the potential EJ implications associated with the Proposed Action and its alternatives (see Chapter 4, Environmental Impacts).

### **3.10 GEOLOGY AND SOILS**

#### **3.10.1 Background/Methodology**

In general, rail construction projects have the potential to impact geology and soils due to the excavation, blasting, cutting/filling, and other earth-moving activities required to establish the grade of the proposed rail line. However, given the scope of the Proposed Action (i.e., constructing tracks over an existing graded roadbed), it is anticipated that this project would result in only a minor impact to local geology and soils. Despite this minor impact, SEA investigated the existing geologic and soil characteristics of the project area in order to establish baseline environmental conditions. The evaluation included a review of secondary data sources (e.g., published geologic literature, mapping products, and internet resources) supplemented through field reconnaissance. SEA did not use invasive methods (i.e., test pits or borings) to collect information or collect any soil, water, or rock samples for analysis.

#### **3.10.2 Existing Conditions – Geology**

The project area is located almost entirely within the Intermontane area of the Pittsburgh Low Plateau Section of the Appalachian Plateaus Physiographic Province, except for the portion of the Eastern Segment located south of I-80 along Moshannon Creek between Black Bear Run and Laurel Run, which is in the Alleghany Mountain Section. The Intermontane area of the Pittsburgh Low Plateau Section is characterized by broad, flat anticlinal (i.e., a fold in rock layers that is convex up) ridges having a gross relief of approximately 1,100 feet. The drainage pattern in this area is generally rectangular. By contrast, the Alleghany Mountain Section is characterized by long, high anticlinal ridges and broad synclinal (i.e., a fold in rock layers that is convex down) valleys producing a gross relief of approximately 2,300 feet. The drainage in this section forms a modified trellis pattern.

The structural geology of the local region is dominated by the Houtzdale – Snowshoe syncline and the Hyner anticline, which run in a general southwest to northeast direction through the project area. The rail corridor is generally situated on the northern limb of the syncline from its origin at Wallaceton/Philipsburg until it approaches the Munson area. Near Munson, the corridor crosses an offset segment of the synclinal axis onto the southeast limb of the structure. Rocks in this section of the corridor generally dip to the northwest. S.R. 0053 crosses the axial trace of the syncline near the

village of Moshannon. Bedding direction of the rocks in this area varies in relation to their positions within these structures. Rocks in the structural troughs or near the axial traces will be nearly horizontal, while rocks positioned on the flanks of the folds will dip gently to either the northwest or southeast. The Hyner anticline is generally located to the north of the S.R. 0053 corridor.

Near the core of the Houtzdale – Snowshoe syncline, surface geology of the rail corridor consists of Pennsylvanian-aged sandstone, shale, and coal of the Alleghany Group. Near Munson, the corridor traverses the Pottsville Group, consisting of sandstone, siltstone, shale, and minor coal. Continuing east, the rail corridor encounters the Mississippian-aged Pocono and Mauch Chunk Formations, consisting primarily of sandstone. The higher elevations of the S.R. 0053 and S.R. 0144 roadway corridors are situated within the Alleghany Group, while the lower elevations are situated within the Mississippian-aged sandstone and shale. Figure 3-6 shows the generalized locations of these geologic formations in relation to the project area.

From a geologic perspective, much of the region traversed by the rail roadway corridors has been extensively modified by coal mining activities dating back to the late 19<sup>th</sup> century and continuing to the present day. Coal was mined by both surface and subsurface methods in the Pennsylvanian-aged rocks of Clearfield and Centre Counties. Geologic maps of the area depict strip mines and deep mine entrances in close proximity to the rail corridor. Many of the strip-mined areas have been reclaimed and revegetated while other areas were simply abandoned. Similarly, some deep mine shafts and adits were closed when mining operations ceased while others were left open and intact. Exposure of surface rock layers containing iron sulfide minerals (i.e., pyrite) and coal refuse piles has resulted in the formation of AMD conditions throughout the area. In fact, a number of acidic seeps/discharges have been identified within the immediate project area.

There are no deep mines currently in operation in the region, but several strip mines are currently active. Within the Proposed Action's Wallaceton to Munson Route, a reclamation project operated by King Coal is currently underway approximately two miles east of Wallaceton. This strip mine reclamation effort has obliterated an approximate 0.8-mile portion of the former roadbed. A second working strip mine operation, A.W. Long Coal Co., is located adjacent to the Modified Proposed Action's Alternate Route from Philipsburg to Munson just east of Hawk Run. A.W. Long Coal Co. has expressed an interest in being a potential shipper should the proposed rail line be approved by the Board.

### **3.10.3 Existing Conditions – Soils**

SEA evaluated soil resources within the project area using the NRCS Web Soil Survey. SEA evaluated soils based on hydric rating (i.e., typical water content), farmland classification (see Figure 3-7), and depth to groundwater. The most abundant soil types identified within the project area are listed below by section.

#### Proposed Action/Modified Proposed Action – Western Segments:

- Cedar Creek extremely channery loam, moderately steep;
- Cookport channery loam;
- Gilpin channery silt loam;
- Atkins silt loam;

- Philo silt loam;
- Ernest silt loam, 8 to 15% slopes; and
- Hazleton very stony loam, 25 to 80% slopes.

Proposed Action/Modified Proposed Action – Eastern Segment:

- Hazleton very stony loam, 25 to 80% slopes;
- Hazleton-DeKalb Association soils, very steep; and
- Strip mine acid soils.

Local Road System Upgrade Alternative – S.R. 0053/0144:

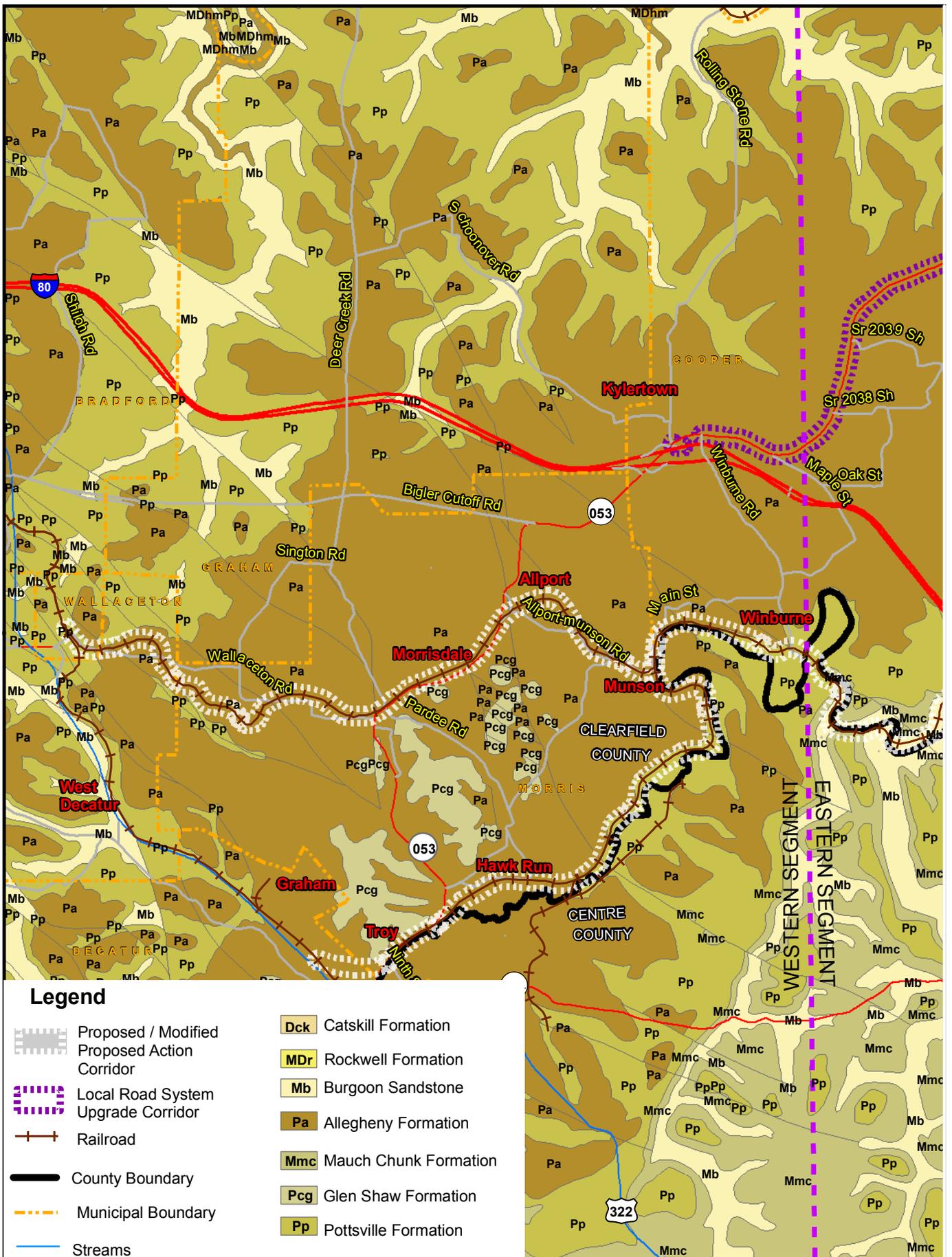
- Cookport channery loam, 3 to 8% slopes;
- Clymer channery loam, 3 to 8% slopes;
- Hazleton very stony loam, 25 to 80% slopes;
- Gilpin channery silt loam, 3 to 8% slopes;
- Wharton silt loam, 3 to 8% slopes;
- Varilla - Laiding complex, 25 to 60% slopes, very rubbly; and
- Strip mine acid soils.

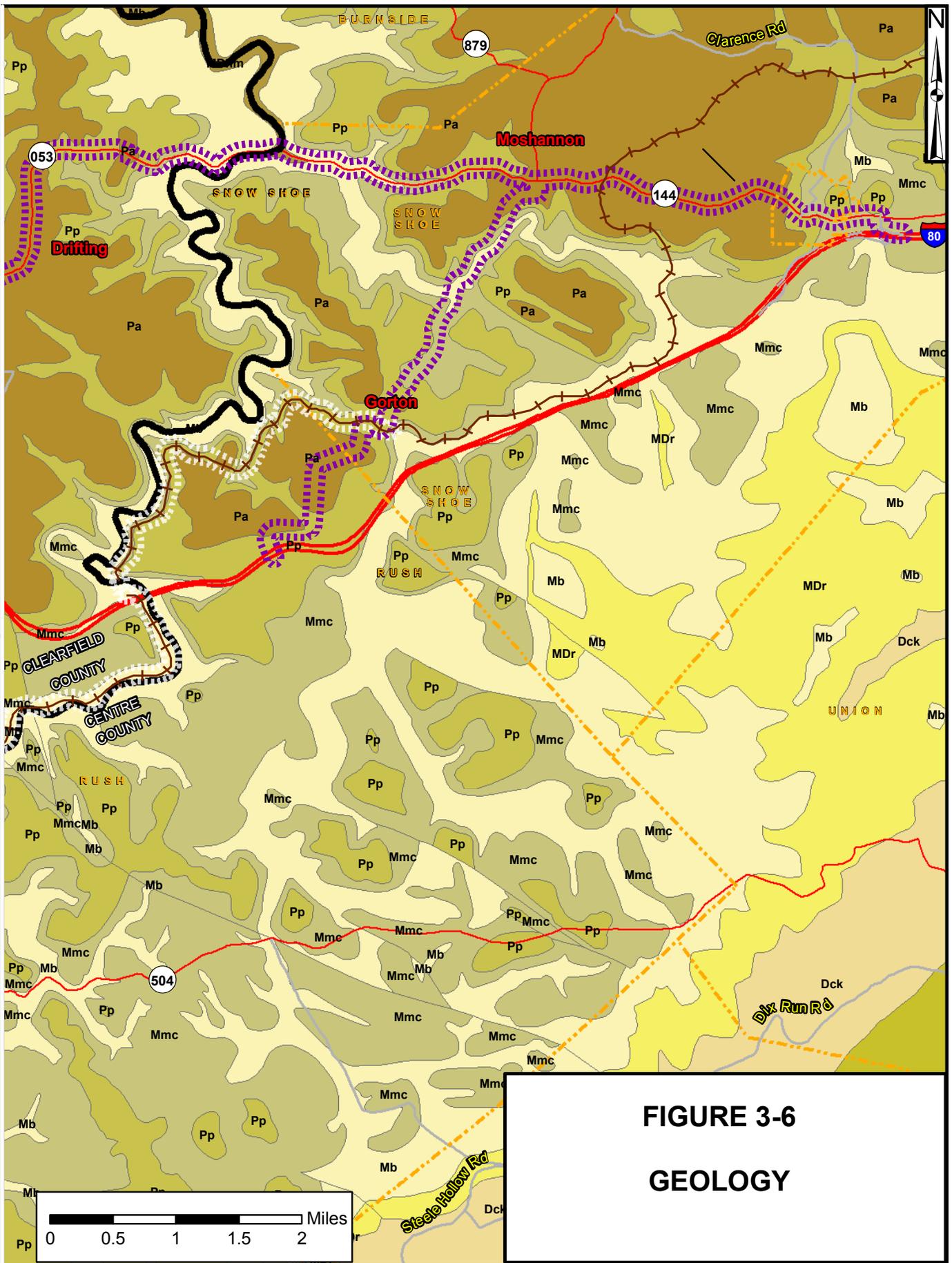
Local Road System Upgrade Alternative – Gorton Road:

- Wharton silt loam, 3 to 8% slopes;
- Cavode silt loam, 3 to 8% slopes;
- Varilla-Laiding complex, 25 to 60% slopes, very rubbly; and
- Strip mine acid soils.

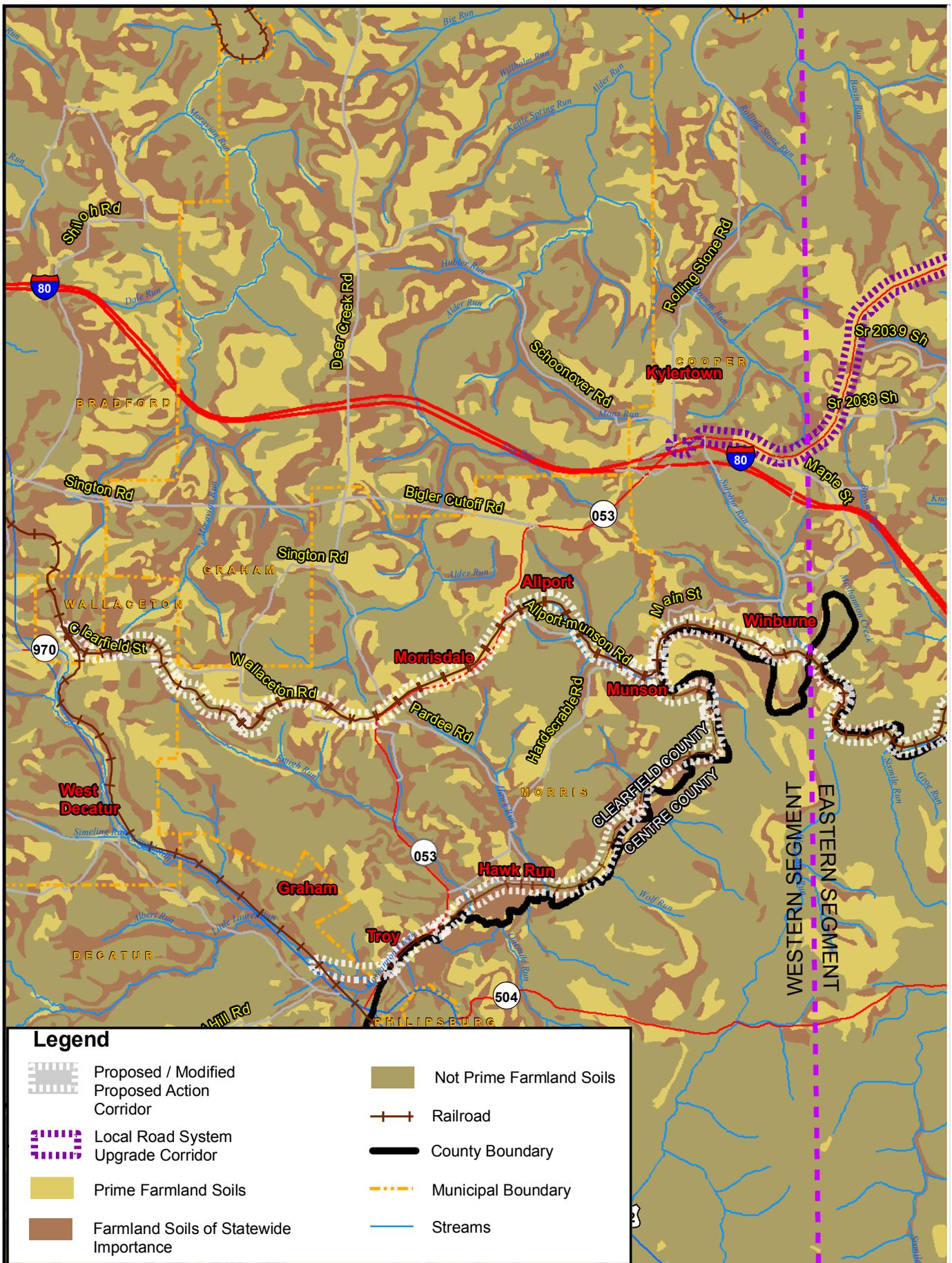
Based upon the soil suitability reports generated by the Web Soil Survey, SEA made the following general observations.

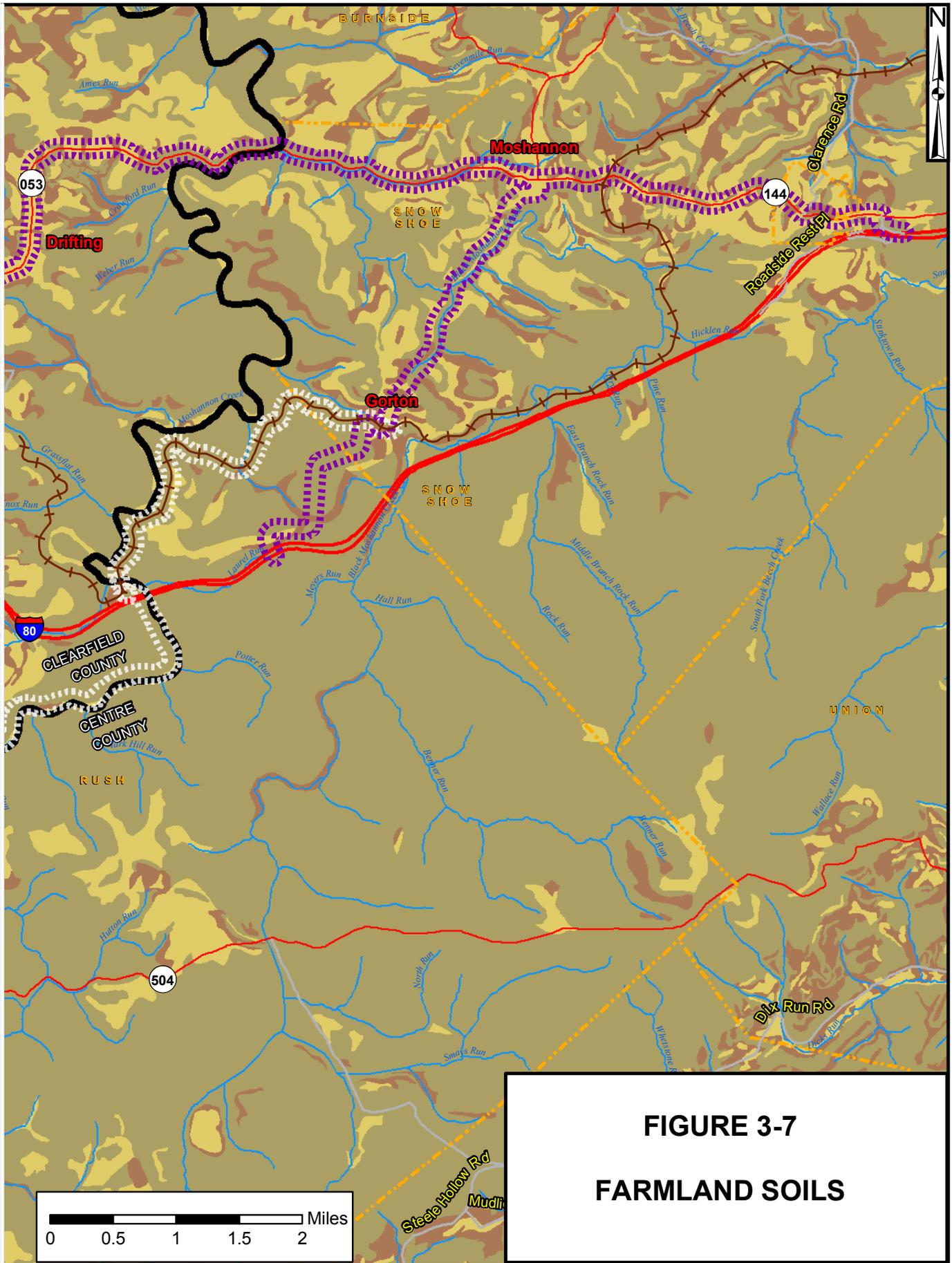
- Approximately 73% of the soils along the Alternate Route from Philipsburg to Munson of the Modified Proposed Action's Western Segment were rated as having saturated zones at depths less than 200 centimeters.
- Approximately 57% of the soils along the Alternate Route from Philipsburg to Munson of the Modified Proposed Action's Western Segment were rated as being hydric or partially hydric, compared to 35% along the Wallaceton to Munson Route of the Proposed Action's Western Segment and 40% along the Eastern Segment.
- Approximately 58% of the soils along both routes of the Western Segment were classified as either prime farmland soils or farmland soils of statewide importance, compared to only 16% along the Eastern Segment.
- Approximately 33% of the soils along the S.R. 0053 and S.R. 0144 corridor between Kylertown and Snowshoe were rated as having saturated zones at depths less than 200 centimeters, compared to 48% along Gorton Road.





**FIGURE 3-6**  
**GEOLOGY**





**FIGURE 3-7**  
**FARMLAND SOILS**

- Approximately 35-40% of the soils along the S.R. 0053 and S.R. 0144 corridor between Kylertown and Snowshoe were rated as being hydric or partially hydric, compared to 64% along Gorton Road.
- Approximately 73% of the soils along the S.R. 0053 and S.R. 0144 corridor between Kylertown and Snowshoe were classified as either prime farmland soils or farmland soils of statewide importance, compared to only 36% along Gorton Road.

### **3.11 HAZARDOUS WASTE SITES/HAZARDOUS MATERIALS TRANSPORT**

#### **3.11.1 Background/Methodology**

USDOT, USEPA, the Occupational Safety and Health Administration (OSHA) and PA DEP regulate the transportation, handling, storage, and use of all materials considered hazardous to human health and potentially damaging to the environment should an uncontrolled release occur. Additionally, USEPA and PA DEP keep records of known hazardous materials release sites and enforce stringent guidelines on the removal and treatment of contaminated substances (i.e., soils, groundwater, etc.) at these sites.

USDOT regulations focus on shipping and packaging containers containing hazardous materials, emergency response information, and training. Specifically, USDOT's Research and Special Programs Administration has established design standards and requirements, found at 49 C.F.R. § 171 and § 179, for railcars used for the transportation of hazardous materials. These regulations require:

- 1) facilities that build, repair, or ensure the structural integrity of railcars to develop and implement a quality assurance program;
- 2) railcars to be inspected and tested frequently, including pre-trip inspections;
- 3) railcars used for transportation of high-hazard materials to be equipped, as appropriate, with thermal protection systems (systems that protect a railcar and its contents from exposure to nearby fires) and head protection systems (devices that limit the potential for puncturing the end of a car in an accident); and
- 4) protective coatings to be used on insulated tank cars. USDOT regulations also include puncture resistance specifications for rail cars that haul certain high-hazard materials, including materials that are poisonous or toxic if inhaled and those determined by USEPA to pose health and environmental risks.

USEPA regulations address spill prevention and cleanup. Most USEPA regulations address only fixed facilities rather than transport activities. However, USEPA regulations under the Resource Conservation and Recovery Act (RCRA), found at 40 C.F.R. § 263, *Standards Applicable to Transporters of Hazardous Waste*, specify immediate response actions, discharge cleanup, and other requirements for transporters of hazardous waste. Additionally, pursuant to Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA), USEPA has promulgated regulations at 40 C.F.R. § 302 that require notification to USEPA whenever there is a release of a reportable quantity of any hazardous substance. Release into the environment is interpreted broadly to mean release into water, air, or land. USEPA also regulates some special hazardous materials under the Toxic Substances Control Act (TSCA), including polychlorinated biphenyls (PCBs) and asbestos, which have specific handling and transporting requirements.

OSHA regulations found at 29 C.F.R. § 1910.120, *Hazardous Waste Operations and Emergency Response*, specify emergency response and cleanup operations for releases, or substantial threats of releases, of hazardous substances.

At the state level, the PA DEP hazardous waste program regulates the generation, storage, transportation, treatment, and disposal of hazardous waste. PA DEP also has hazardous waste release notification requirements (25 PA Code 262.46) and specific requirements associated with reporting. The Hazardous Sites Cleanup Act (HSCA) provides PA DEP with the funding and the authority to conduct cleanup actions at sites where hazardous substances have been released. HSCA also authorizes PA DEP to force the persons who are responsible for releases of hazardous substances to conduct cleanup actions or to repay public funds spent on a PA DEP funded cleanup action.

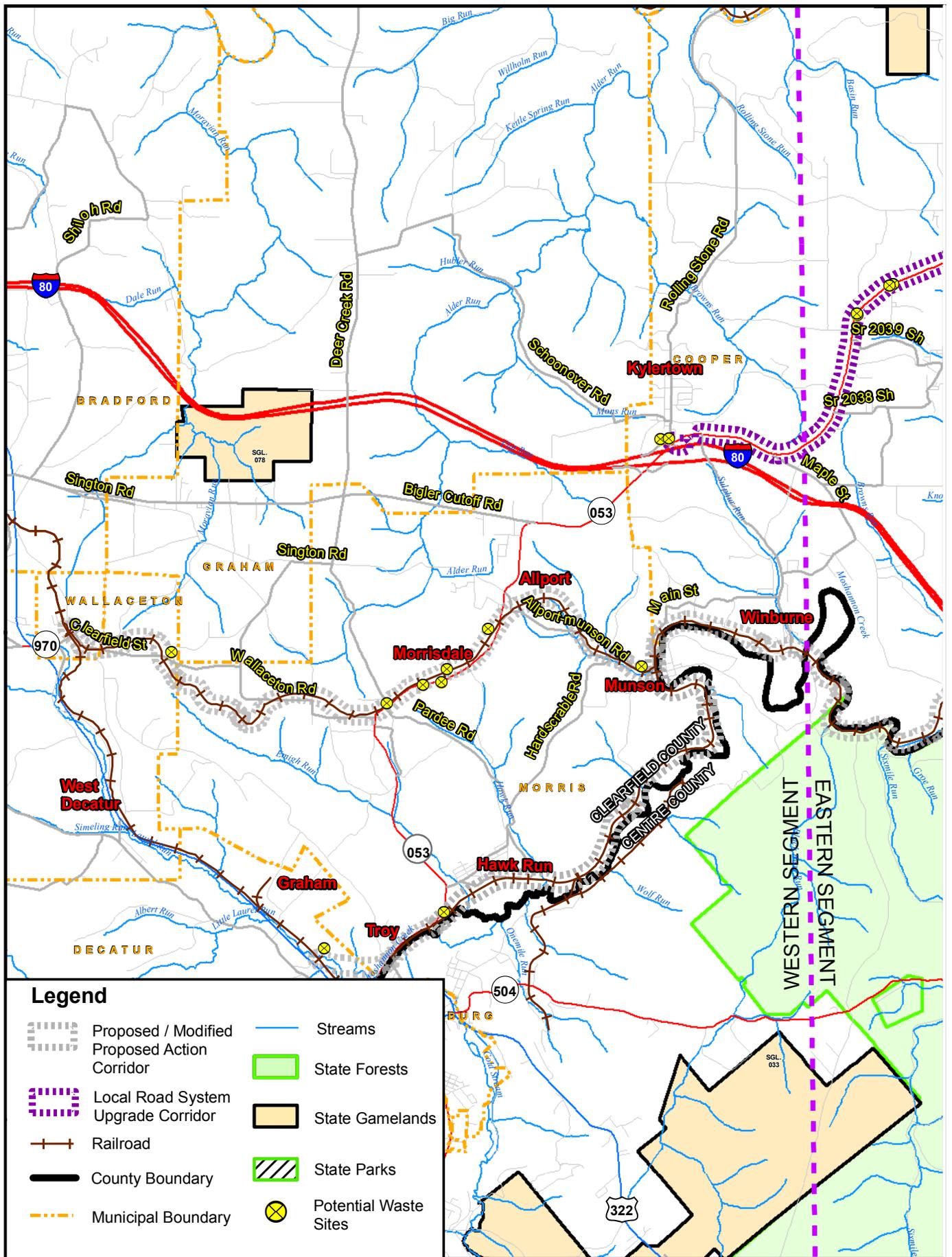
SEA conducted a waste site evaluation of the project area using a modified Phase I Environmental Site Assessment approach. SEA followed PennDOT Publication 281 “The Transportation Project Development Process Waste Site Evaluation Procedures Handbook” (updated May 2008), which establishes a standardized approach for conducting Phase I Environmental Site Assessments for linear corridor projects in accordance with industry-accepted standards. The waste site evaluation identified potential hazardous/residual waste sites located within the project area that would have the potential to impact, or be impacted by, the Proposed Action and its alternatives. The waste site evaluation included the following:

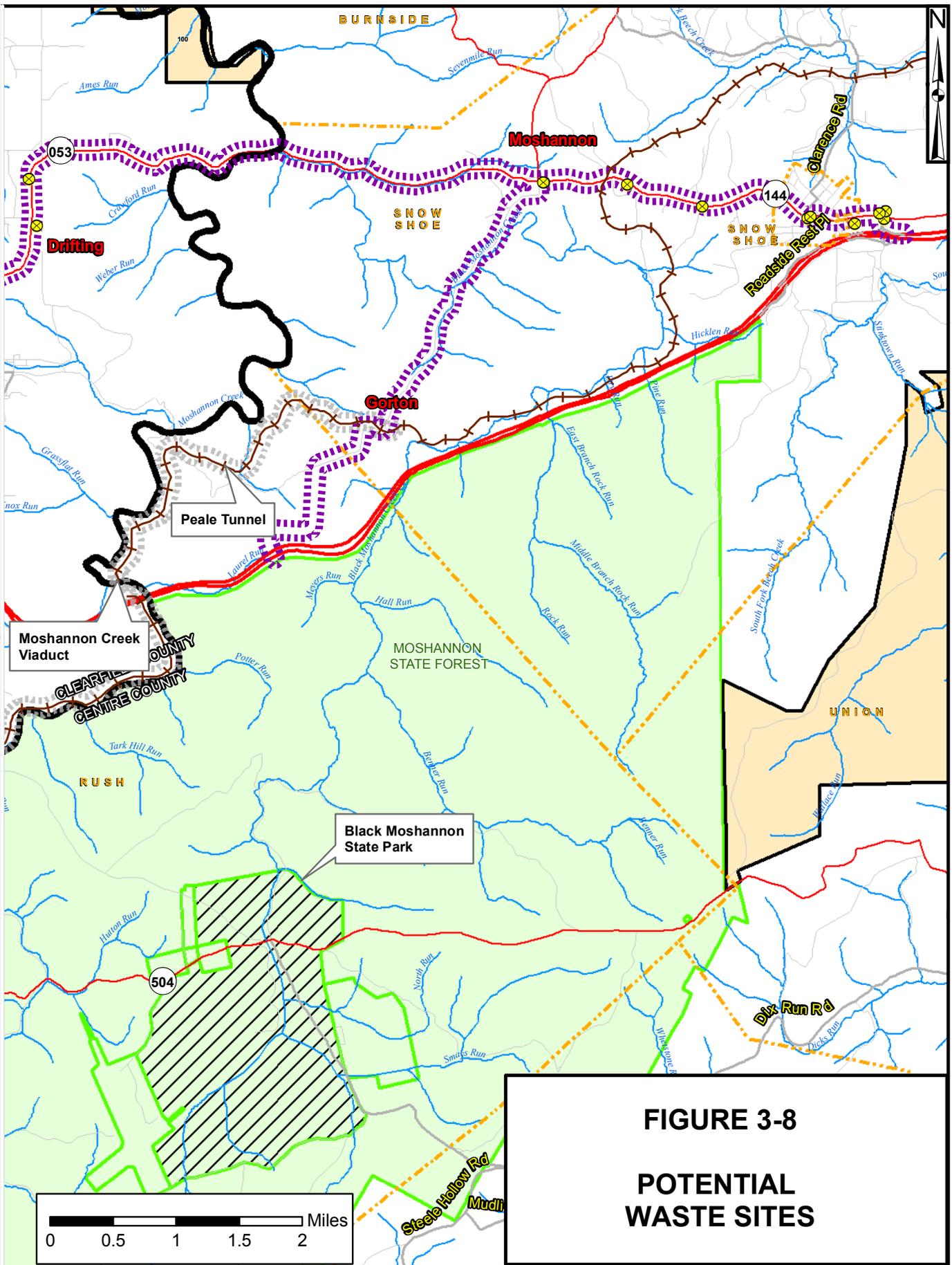
- Records review of various federal and state environmental listing databases,
- Interviews with knowledgeable persons of the project area,
- Review of historical aerial photographs,
- PA DEP file review, and
- Site reconnaissance.

The site reconnaissance involved viewing the project area for potential waste-related environmental concerns, including underground storage tanks (USTs), aboveground storage tanks (ASTs), waste disposal areas, hazardous substance use/storage facilities, stained surface areas, and stressed vegetation. Figure 3-8 shows the known potential hazardous/residual waste sites identified during the waste site evaluation, which are also included on the Environmental Features Mapping in Volume 2.

### **3.11.2 Existing Conditions – Hazardous Waste Sites**

Based on the results of the waste site evaluation, SEA identified a number of potential hazardous/residual waste sites within the project area. The majority of these potential hazardous/residual waste sites are located in the vicinity of the Local Road System Upgrade alternative and consist of current and former gas stations/automotive repair garages along S.R. 0053 and S.R. 0144.





**FIGURE 3-8**  
**POTENTIAL**  
**WASTE SITES**

Improper waste disposal (i.e., illegal dumping and littering) was observed at several locations along the abandoned roadbed within the residential-developed portions of both routes of the Western Segment. However, these improper waste disposal activities appeared to be superficial in nature with no apparent subsurface impact (i.e., soil and/or groundwater contamination are unlikely to have resulted from these surface depositions). The abandoned roadbed itself was identified as a potential waste-related concern due to potential unreported historic releases of hazardous materials and associated subsurface impacts. However, the potential for this type of impact is somewhat minimized by the railroad's documented history of primarily hauling coal from local mining operations. Several properties adjacent to the abandoned roadbed were also identified as potential hazardous/residual waste sites because of reported waste-related concerns or visibly evident materials with storage/handling issues. Figure 3-8 shows the locations of the known potential hazardous/residual waste sites identified within the project area during the waste site evaluation. These sites have also been included on the Environmental Features Mapping in Volume 2.

### **3.11.3 Existing Conditions – Hazardous Materials Transport**

Apart from RJCP's operations over its existing Wallaceton Subdivision Line, there are no operating rail lines within the project area. The Proposed Action would involve the construction, operation, and reactivation of approximately 20 miles of rail line. Thus, there is presently no rail transportation of hazardous materials within or through the project area. The only potential movement of hazardous materials within or through the project area is that which is transported by way of motor vehicle via I-80 and/or the existing local road system. Therefore, SEA expended minimal effort in assessing the existing conditions for this issue.

## **3.12 CULTURAL/HISTORIC RESOURCES**

### **3.12.1 Background/Methodology**

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to "take into account how each of its undertakings could affect historic properties." Historic properties include buildings, structures, objects, sites, districts, and archaeological resources that are at least fifty years of age and have been identified as being listed on or eligible for listing on the National Register of Historic Places (National Register). SEA initiated the Section 106 cultural resource process for this project by conducting background research and coordinating with PHMC (in its official capacity as Pennsylvania's State Historic Preservation Officer [SHPO]) and the Centre County Historical Society to determine if any historic properties had been previously surveyed and either listed on or determined to be eligible for listing on the National Register. Part of the background research included a review of PHMC's Cultural Resources Geographic Information System (CRGIS) database. This mapping database includes extensive information on previously listed and eligible historic properties across Pennsylvania.

Following this initial background research and agency coordination, SEA conducted field surveys of the project area to identify historic properties that might be eligible for listing on the National Register. SEA then evaluated the identified historic properties likely to be impacted by the proposed rail line in greater detail and submitted a Pennsylvania Historic Resource Survey (PHRS) form to PHMC. PHMC then determined the National Register eligibility status of each particular resource. The following text summarizes the findings of the cultural resources investigation completed for this project. Figure 3-9 shows the locations of all the National Register listed, eligible, and potentially

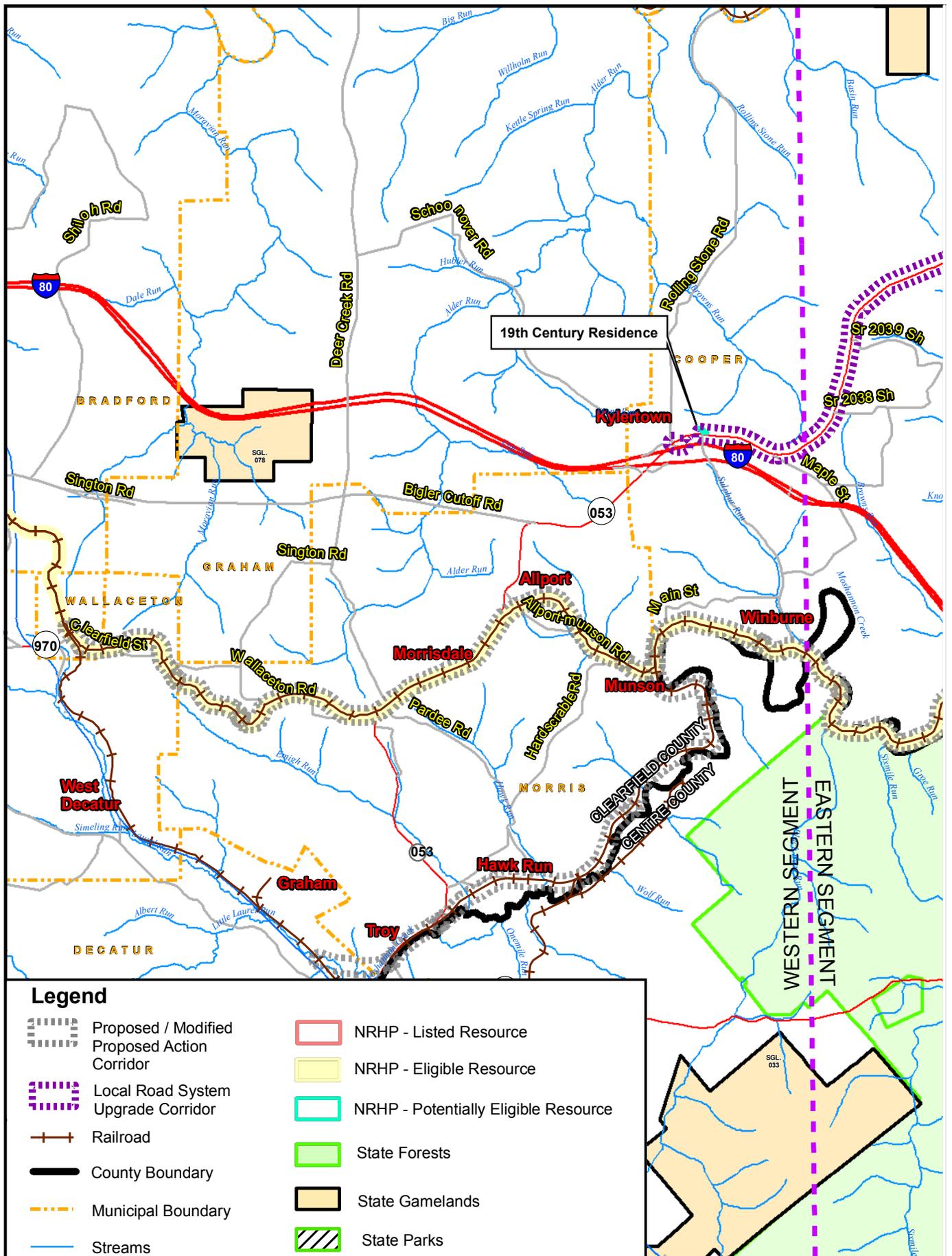
eligible historic properties identified within the project area. The locations of these properties have also been included on the Environmental Features Mapping in Volume 2.

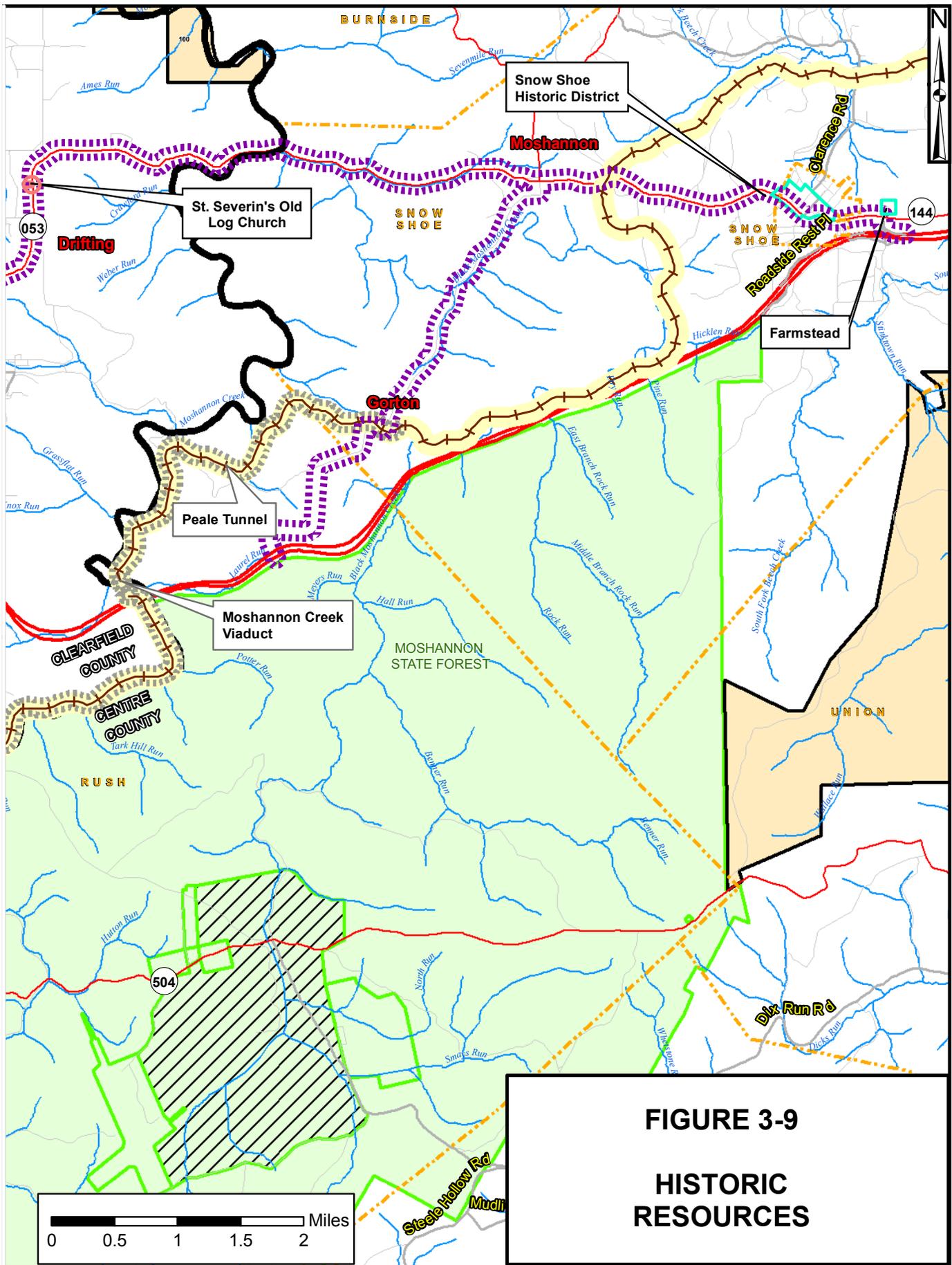
### 3.12.2 Existing Conditions

The Proposed Action would involve the construction, operation, and reactivation of an approximate 20-mile segment of the former Beech Creek Railroad. The former Beech Creek Railroad is a linear historic district, stretching 112 miles across central Pennsylvania from Mahaffey Junction in western Clearfield County to Jersey Shore in western Lycoming County. Originally constructed from 1883-1893 to service area coal mines, the Beech Creek Railroad eventually became part of the New York Central Railroad before being transferred to the Penn Central Railroad and then to Conrail, who abandoned the line in 1990. As part of the Section 106 historic resource investigation, SEA prepared a PHRS form for the Beech Creek Railroad. Railroad features such as culverts, bridges, sidings, tipples, signal-wire poles, and the Peale Tunnel were documented within the PHRS form. Other features, such as nearby buildings that may have served the railroad as stations and warehouses, and coal mine portals and facilities were also recorded. The survey found that the Beech Creek Railroad historic district, in part because of its size and complexity, should be determined eligible for listing on the National Register. In its February 20, 2009 correspondence (see Appendix B), PHMC concurred with this eligibility determination.

SEA also prepared a PHRS form to document the historic integrity and National Register eligibility status of the former Philipsburg Industrial Track, which serves as the primary corridor for the Modified Proposed Action's Alternate Route from Philipsburg to Munson. Similar to the PHRS form prepared for the Beech Creek Railroad, all significant railroad features (i.e., culverts, bridges, sidings, tipples, signal-wire poles, etc.) were documented within the PHRS form. The survey found that the former Philipsburg Industrial Track is not eligible for listing on the National Register due its short length (approximately six miles from Philipsburg to Munson) and its basic function as a connection between two longer more significant railroads (i.e., the Beech Creek Railroad and the former Pennsylvania Railroad's Tyrone and Clearfield Branch – now operated by RJCP as its Wallaceton Subdivision Line). In its June 18, 2009 correspondence (see Appendix B), PHMC concurred that the Philipsburg Industrial Track is not eligible for listing on the National Register. No other National Register listed or eligible historic properties were identified within the potential impact area of the proposed rail line.

Regarding the Local Road System Upgrade alternative, SEA conducted background research and a windshield survey of historic properties to identify any previously National Register listed and potentially eligible historic properties. This investigation revealed the presence of one National Register listed and three potentially National Register eligible properties within the potential impact area of the Local Road System Upgrade alternative. The most notable of these historic properties is the National Register listed St. Severin's Old Log Church. Located along S.R. 0053 in the area known as Cooper Settlement, St. Severin's Old Log Church was built in 1851 by early German Catholic settlers and was used for worship services until about 1880. The three potentially National Register eligible properties identified include a large nineteenth century residence at the intersection of S.R. 0053 and Winburne Road, a farmstead along S.R. 0144 just west of the I-80, Exit 147 Interchange and a portion of Snow Shoe Borough, which appears to constitute a historic district. Figure 3-9 shows the locations of these historic properties. The locations of these historic properties have also been included on the Environmental Features Mapping in Volume 2.





**FIGURE 3-9**  
**HISTORIC**  
**RESOURCES**

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