

NEWPORT



Earth Conservancy

Dedicated to Mine Land Reclamation, Conservation, & Economic Development in the Wyoming Valley

2019

Master Plan

Newport Townshp Business Notices.

Ackerman, Albert...Carpenter,	P. O. Nanticoke.
Cole, Frank W...Foreman, L. C. & N. Co.	Wanamie.
Colvin, C. W...Master Mechanic, L. C. & N. Co.	"
Fairchild, John... Farmer,	P. O. Nanticoke.
Fairchild, S...	"
Fairchild, Abm...	"
Freed, John G...Prop'r Lines Hotel, Leemine Station,	P. O. Nanticoke.
Aaron...Foreman, L. C. & N. Co.	Wanamie.
Saums, S...Farmer,	P. O. Nanticoke.
Vandermark, Lyman J...Farmer,	P. O. Wanamie.

Newport Township

Earth Conservancy Lands





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Newport Townshp Business Notices.

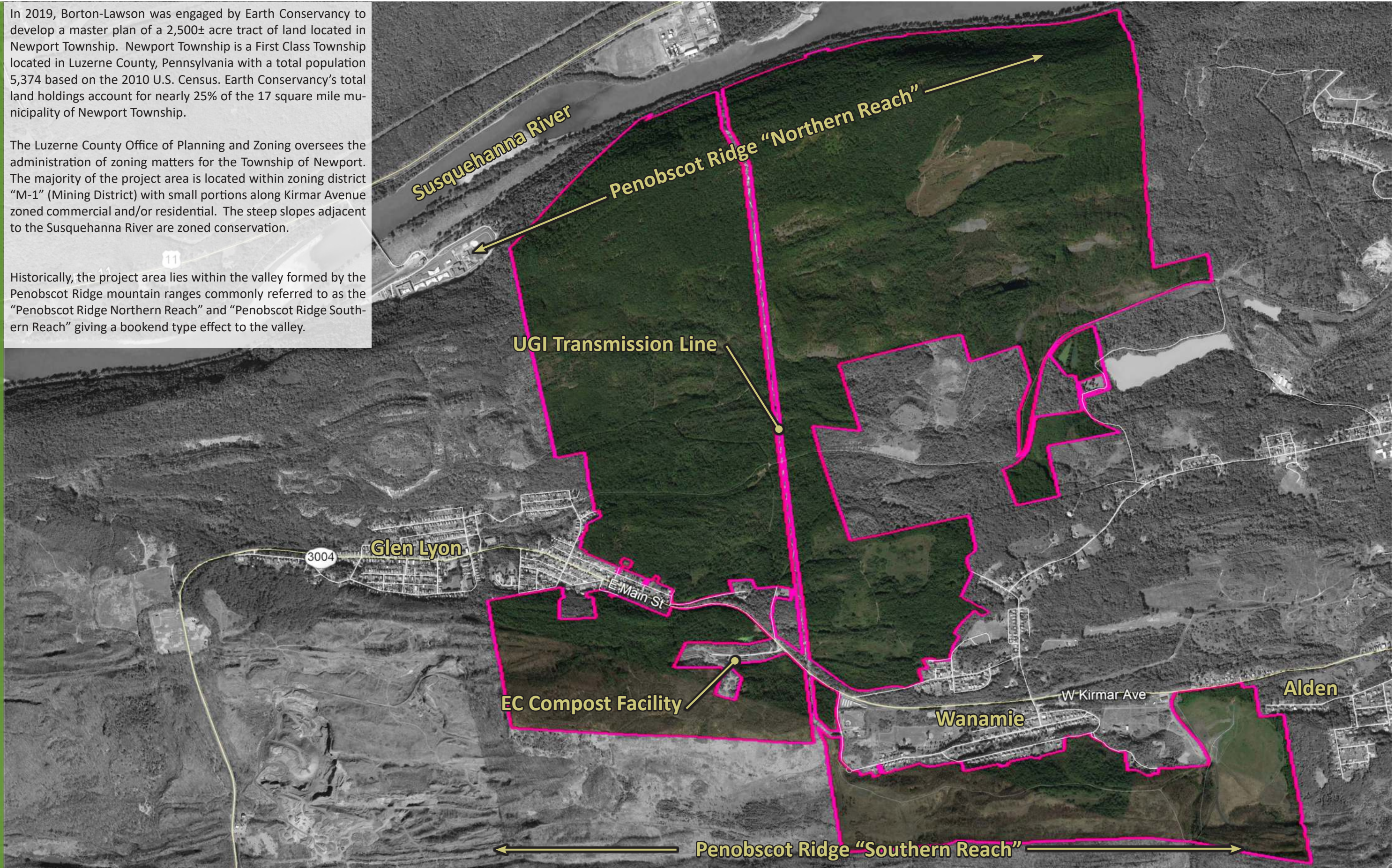
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Salmon, Samuel...Carpenter, Foreman. L. C. & N. Co. Waus. mic.
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In 2019, Borton-Lawson was engaged by Earth Conservancy to develop a master plan of a 2,500± acre tract of land located in Newport Township. Newport Township is a First Class Township located in Luzerne County, Pennsylvania with a total population 5,374 based on the 2010 U.S. Census. Earth Conservancy's total land holdings account for nearly 25% of the 17 square mile municipality of Newport Township.

The Luzerne County Office of Planning and Zoning oversees the administration of zoning matters for the Township of Newport. The majority of the project area is located within zoning district "M-1" (Mining District) with small portions along Kirmar Avenue zoned commercial and/or residential. The steep slopes adjacent to the Susquehanna River are zoned conservation.

Historically, the project area lies within the valley formed by the Penobscot Ridge mountain ranges commonly referred to as the "Penobscot Ridge Northern Reach" and "Penobscot Ridge Southern Reach" giving a bookend type effect to the valley.



Past Earth Conservancy planning efforts played an important role in development of the master plan, namely the 1996 Land Use Plan and the 1999 Lower Wyoming Valley Open Space Plan.

The 1996 Land Use Plan envisioned a significant portion of the project area being developed into industrial sites allocated adjacent to Kirmar Avenue, with residential pockets intermingled around open space/parklands in the upper reaches of the project boundary.

The 1996 Land Use Plan looked at not only at the lands within Newport Township, but the entirety of Earth Conservancy's holdings. The 1996 Land Use Plan noted that ex-

tensive reclamation work was needed within its boundary due to the past mining activities. The 1996 Land Use Plan studied more than 16,000 acres and determined some of the most costly reclamation efforts were found in Newport Township. These sites included "Newport 1" with a reclamation cost exceeding \$60 million dollars and a mine fire site located south of Glen Lyon with reclamation cost exceeding \$100 million dollars.

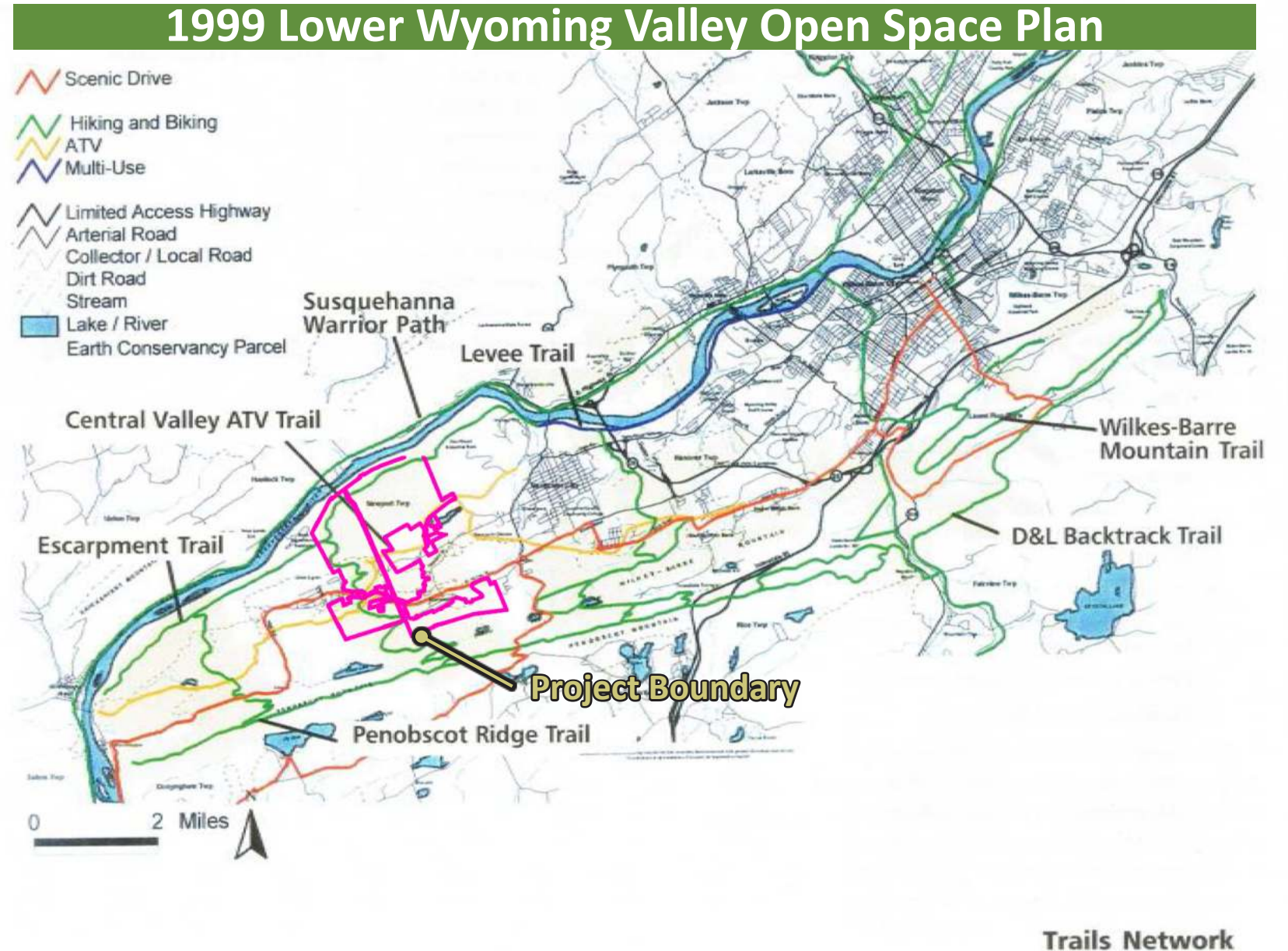
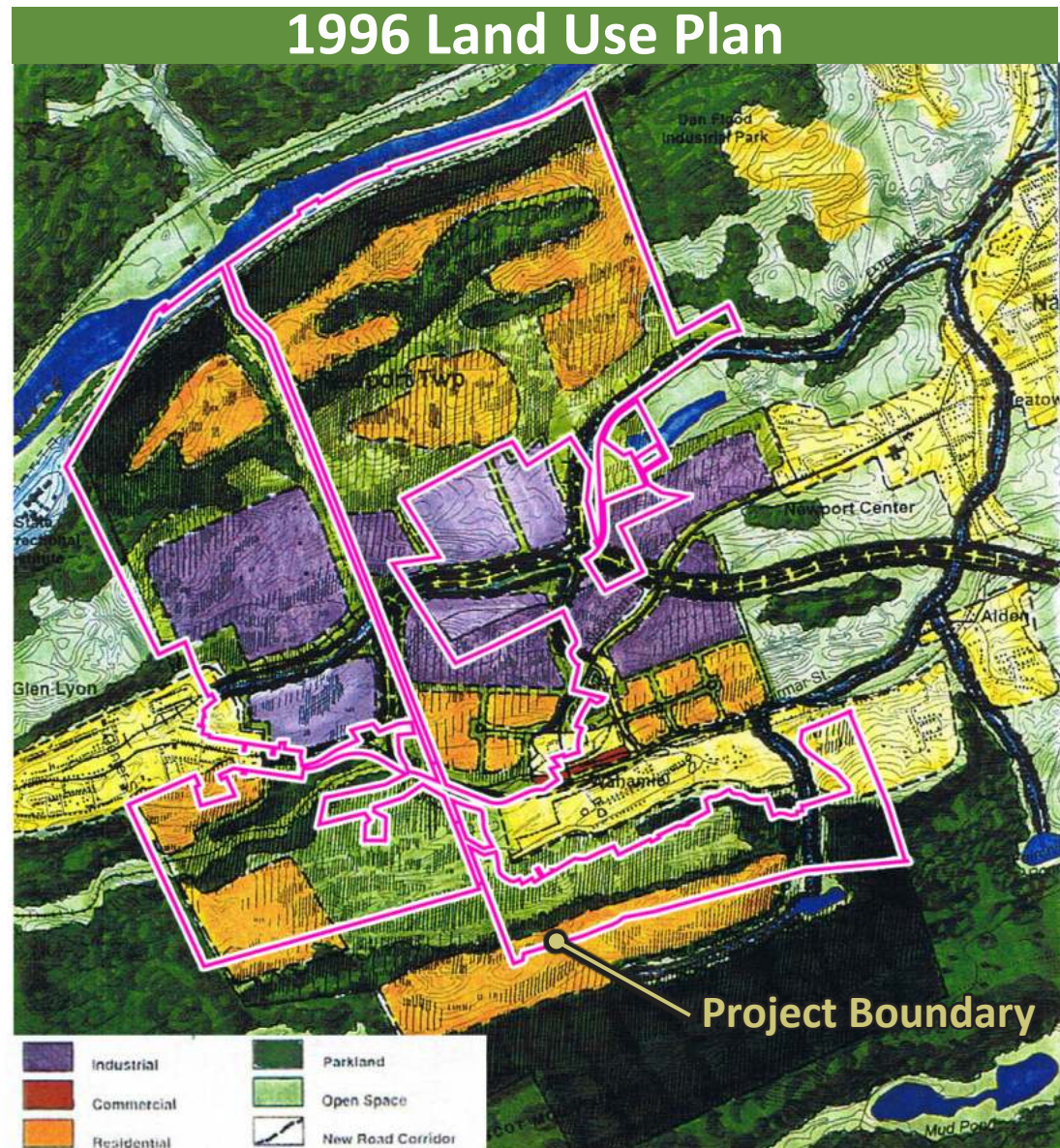
Although extensive reclamation efforts were required, the 1996 Land Use Plan proposed a roadway network to accommodate the proposed mixed land use development. The roadways were intended to utilize abandoned rail lines and existing haul roads.

The 1999 Lower Wyoming Valley Open Space Plan focused entirely on the 1996 Land Use Plans "open space / parklands". The 1999 plan conceptualized both passive and active recreation activities occurring within the project area. The plan also envisioned seven (7) parks located across the entirety of Earth Conservancy's holdings, one of which known as the Newport Motorsports Park to be located in the heart of the project area. The plan concluded that: "Significant slopes and mine-scarred land make the Newport area an ideal location for a motorsports park."

As a follow-up to the 1999 Open Space Plan's motorsports park recommendation, Earth Conservancy conducted an

All-Terrain Vehicle Feasibility Study in 2005. The report concluded that the establishment of a motorsports facility would reduce illegal ATV use and help to contribute to the local economy. The report further noted that the most difficult obstacle to the establishment of a motorsports park was finding an entity willing to own, operate, police, and maintain the motorports park. Operation and ownership of a motorsports park is not part of Earth Conservancy's mission.

Subsequent sections of this report will discuss the various other reports that also played an important role in shaping this Master Plan report.



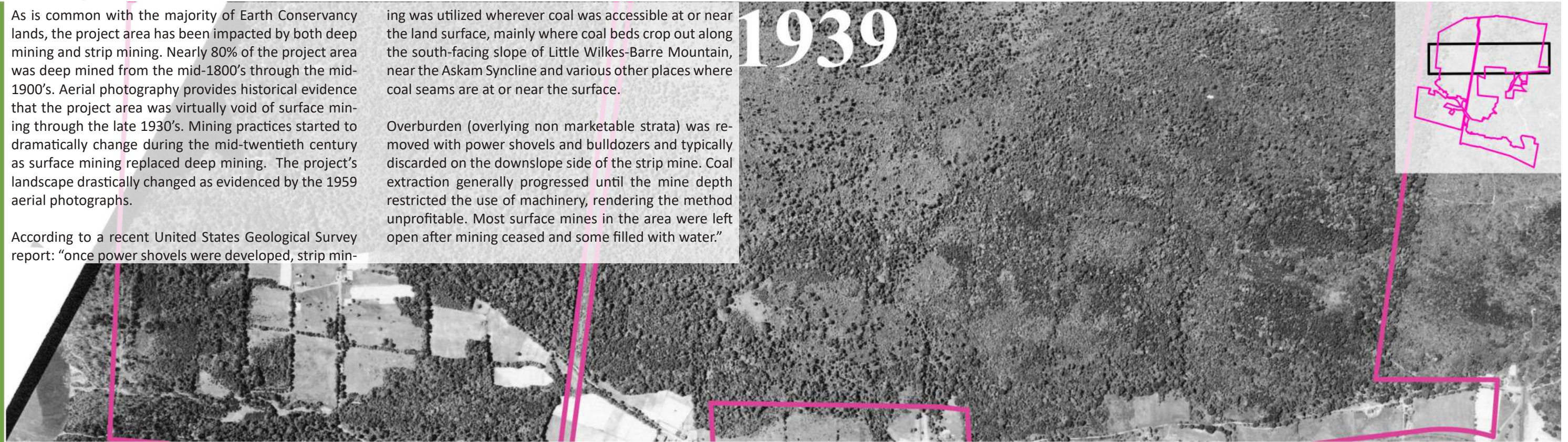
As is common with the majority of Earth Conservancy lands, the project area has been impacted by both deep mining and strip mining. Nearly 80% of the project area was deep mined from the mid-1800's through the mid-1900's. Aerial photography provides historical evidence that the project area was virtually void of surface mining through the late 1930's. Mining practices started to dramatically change during the mid-twentieth century as surface mining replaced deep mining. The project's landscape drastically changed as evidenced by the 1959 aerial photographs.

According to a recent United States Geological Survey report: "once power shovels were developed, strip min-

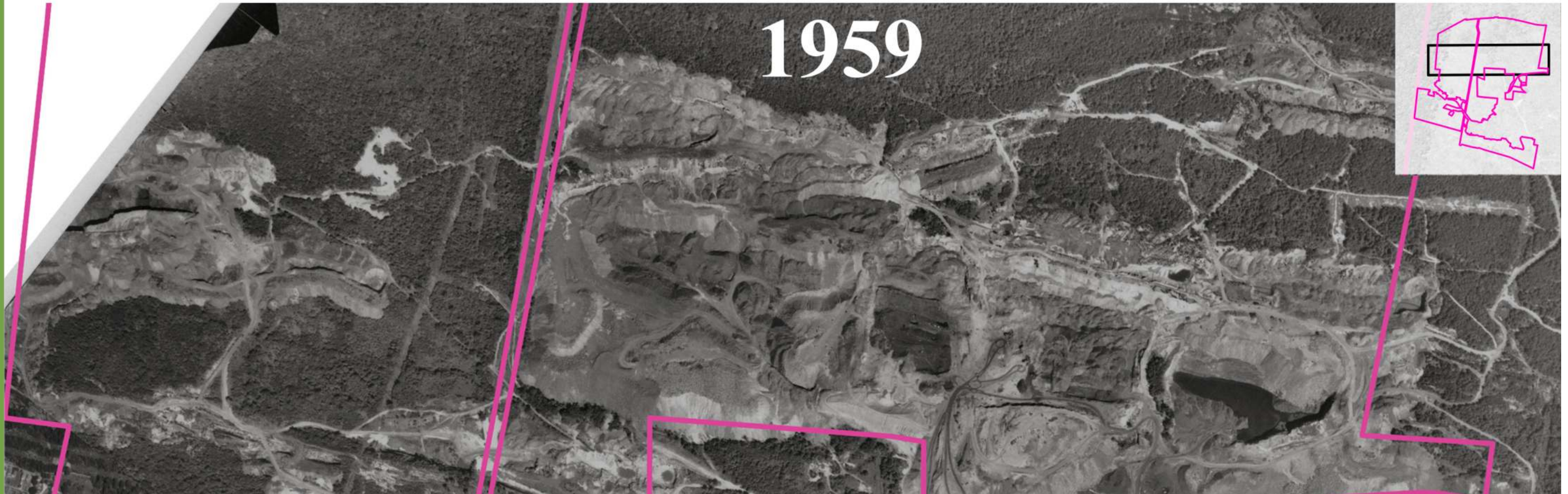
ing was utilized wherever coal was accessible at or near the land surface, mainly where coal beds crop out along the south-facing slope of Little Wilkes-Barre Mountain, near the Askam Syncline and various other places where coal seams are at or near the surface.

Overburden (overlying non marketable strata) was removed with power shovels and bulldozers and typically discarded on the downslope side of the strip mine. Coal extraction generally progressed until the mine depth restricted the use of machinery, rendering the method unprofitable. Most surface mines in the area were left open after mining ceased and some filled with water."

1939



1959

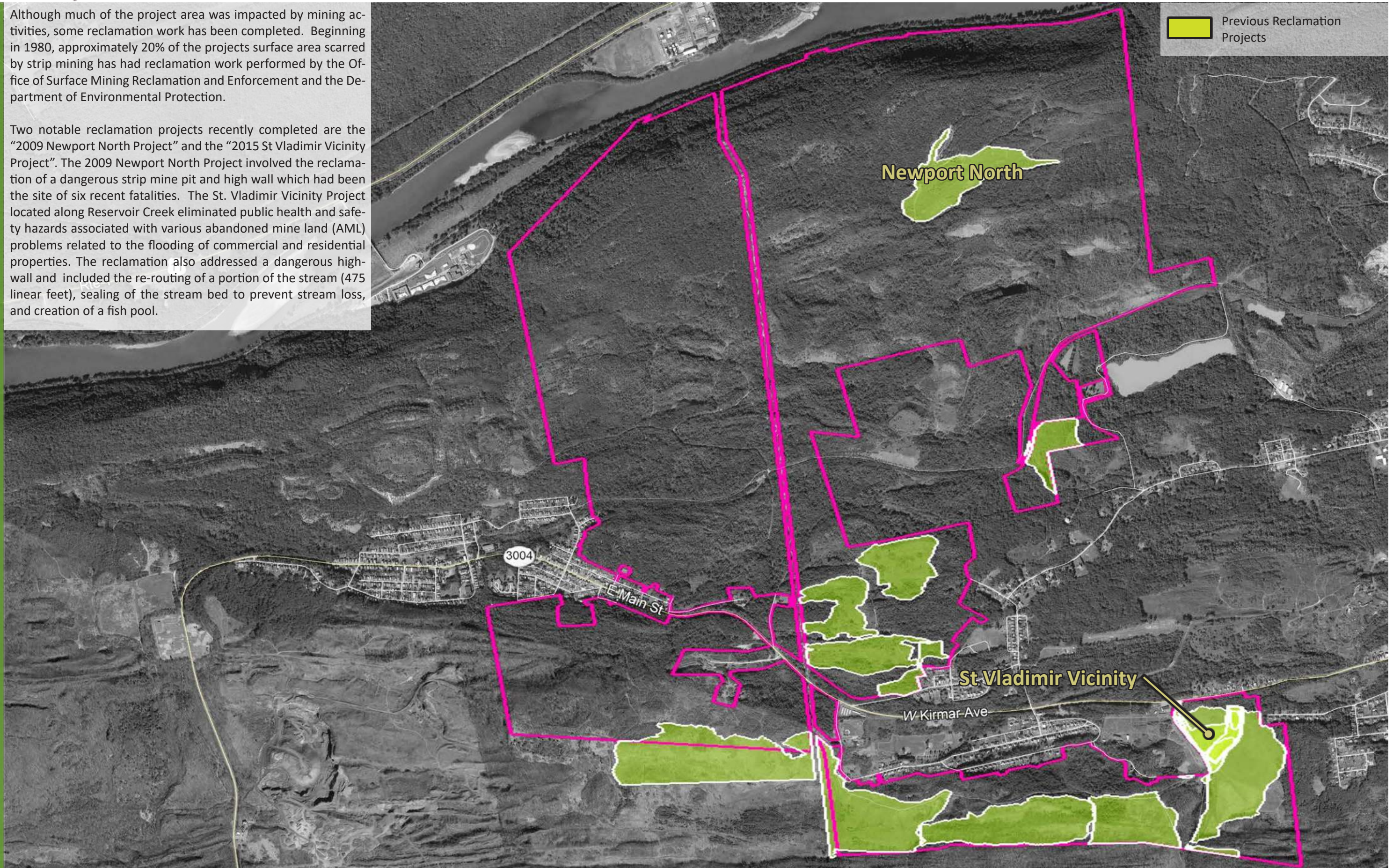


Past Reclamation Projects

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Although much of the project area was impacted by mining activities, some reclamation work has been completed. Beginning in 1980, approximately 20% of the project's surface area scarred by strip mining has had reclamation work performed by the Office of Surface Mining Reclamation and Enforcement and the Department of Environmental Protection.

Two notable reclamation projects recently completed are the "2009 Newport North Project" and the "2015 St Vladimir Vicinity Project". The 2009 Newport North Project involved the reclamation of a dangerous strip mine pit and high wall which had been the site of six recent fatalities. The St. Vladimir Vicinity Project located along Reservoir Creek eliminated public health and safety hazards associated with various abandoned mine land (AML) problems related to the flooding of commercial and residential properties. The reclamation also addressed a dangerous high-wall and included the re-routing of a portion of the stream (475 linear feet), sealing of the stream bed to prevent stream loss, and creation of a fish pool.



Existing AMLs

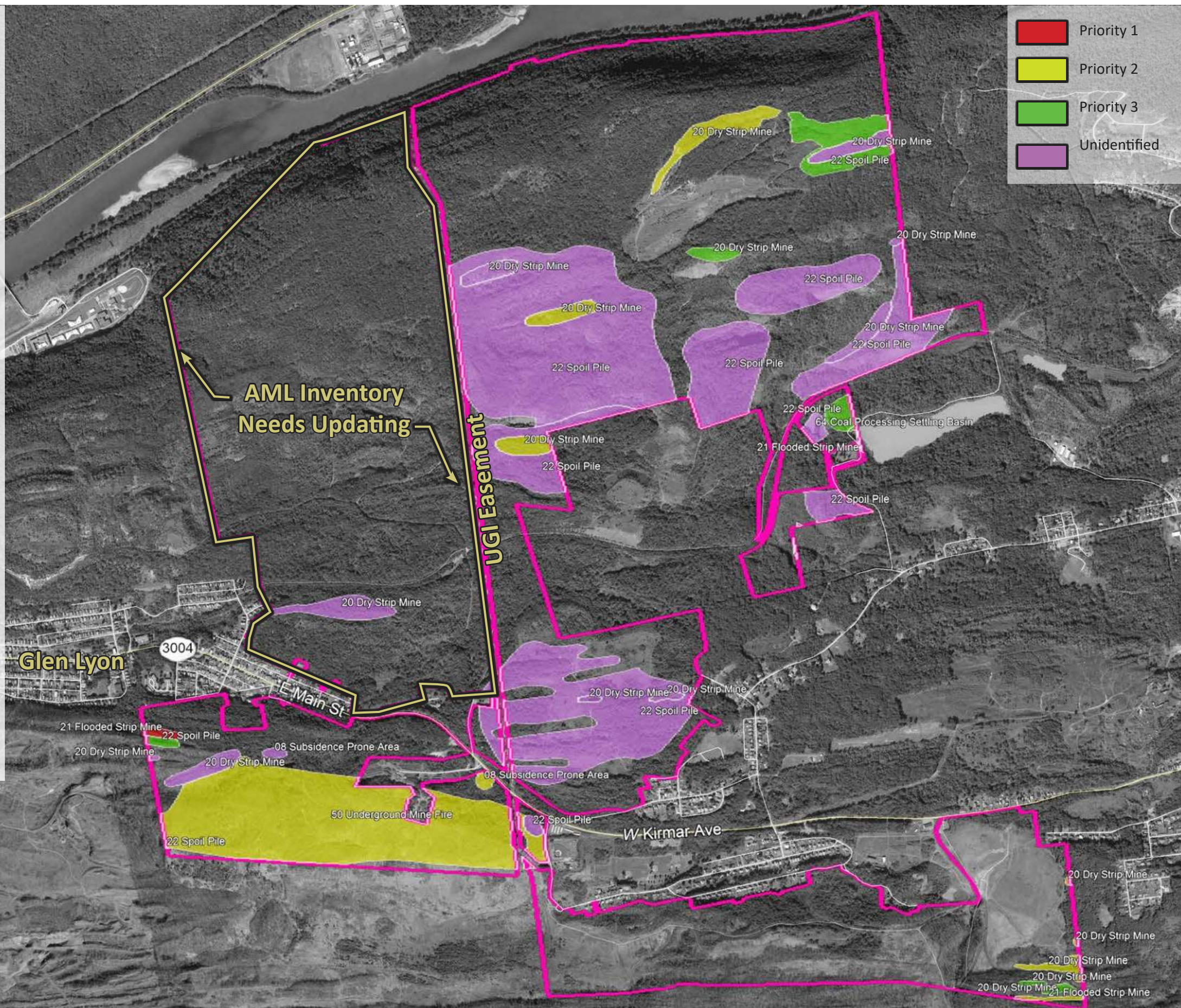
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Despite the fact that there have been many abandoned mined land (AML) reclamation projects since the 1980's, there are still a number of existing un-reclaimed AMLs. It is important to note that many of the most hazardous and dangerous AMLs have been tackled in previous reclamation efforts.

The Bureau of Abandoned Mine Reclamation (BAMR) is tasked with identifying and ranking these AML areas. The most serious AML problems are those posing a threat to health and safety of people (Priority 1 and Priority 2). Generally, "Priority 3" and "unidentified priority" areas do not pose a health and safety risk, yet they often contribute to the degradation of surrounding land and the associated aquifer. Currently, there is one (1) identified Priority 1 area identified as a small strip mine near Glen Lyon. A total of nine (9) Priority 2 areas exist, the largest of which is the previously mentioned mine fire. The 1996 Land Use Plan identified the mine fire to be financially cost prohibitive to mitigate at a cost of \$180,000,000+. Currently, there is little evidence that the identified fire still exists, but the stigma combined with the potential for subsidence requires further investigation be conducted prior should any development occur atop the once identified mine fire. A large portion of the site is covered with Priority 3 and unidentified priority areas, most of which are simply coal refuse piles.

In a recent meeting with the Bureau of Abandoned Mine Reclamation, it was noted that the AML inventory has not been updated since the early 1980s. Although little mining activity has occurred since the initial inventory, many areas were missed during the first assessment, as evidenced by lack of AMLs identified to the west of the UGI power easement. Therefore, a recommendation of BAMR, as well as the minimum recommendation of this report, is to update the AML inventory in the area to the west of the UGI easement and north of Kirmar Ave.

It is also worth pointing out that some AML areas pose little or no threat to the public, and in some cases, serve to remind visitors of the site's history. To be discussed in subsequent portions of this report, certain AML types can be beneficial to particular land uses.

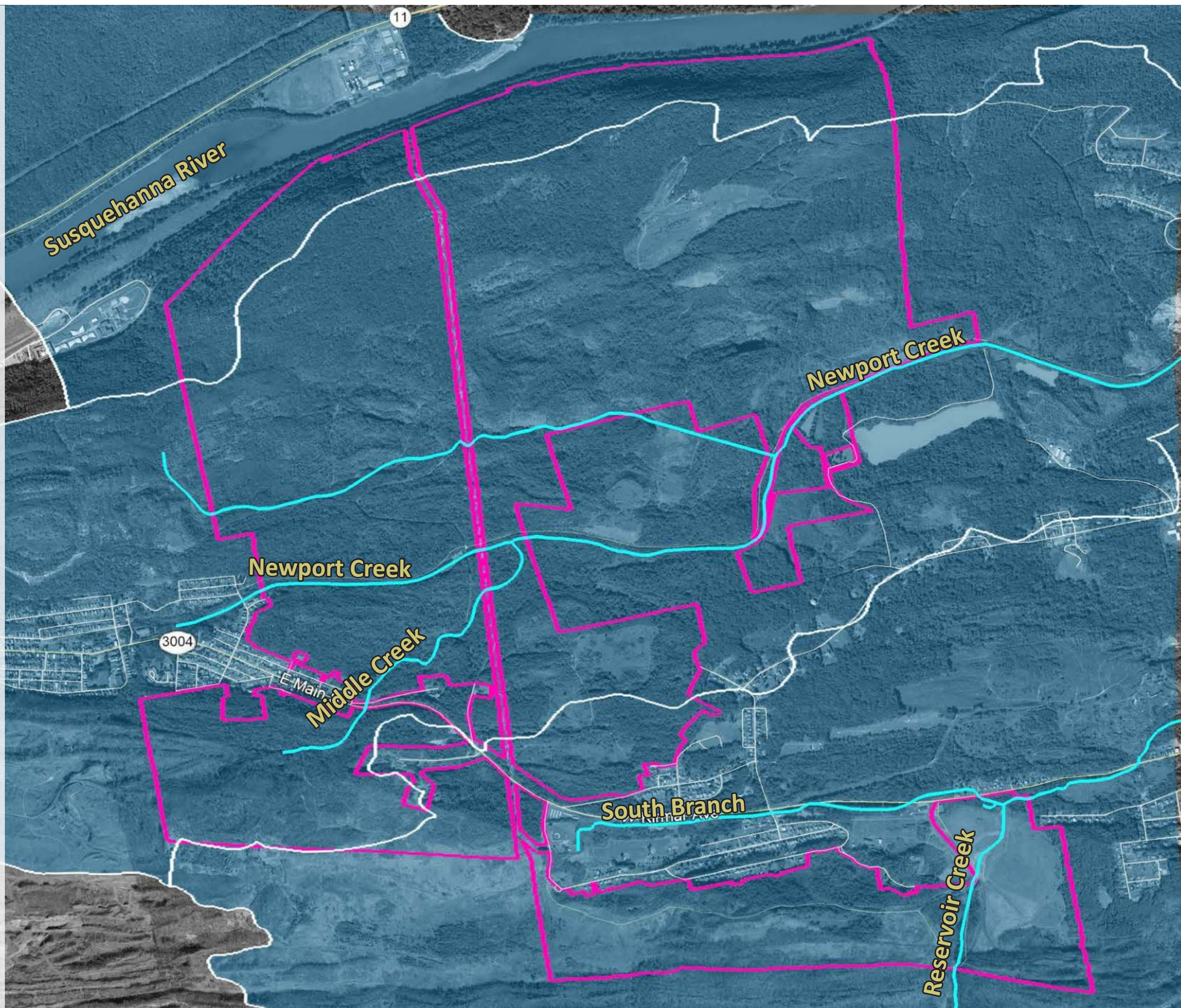


Almost the entire project area is located within the Newport Creek watershed with the only exception being a small portion that drains directly to the Susquehanna River. Earth Conservancy's holdings only account for a small percentage of the overall watershed (22%), yet a large percentage of the watershed suffers from acid mine drainage. According to a 2007 USGS report, "Underground mining of numerous coalbeds has resulted in a vast series of voids that are interconnected in many places, but may be isolated in others. These voids and associated tunnels, drifts, and shafts are collectively referred to as mine workings. During active mining, water had to be kept out of the workings to allow access to the coal. This generally was accomplished by construction of flumes to minimize stream-water infiltration and pumping to expel water from the underground workings. Presently, water is no longer pumped from the abandoned underground mines and substantial volumes of the interconnected workings have flooded, creating an underground mine pool. Flumes and streambeds are in disrepair and subsidence of the ground surface is common leaving open pits with some having connections to the mine pool." The report later goes on to say: "The water becomes loaded with acidity, metals, and sulfate in the mines."

In 2009, the Department of Environmental Protection prepared the Newport Creek Watershed Total Maximum Daily Load (TMDL) report. A TMDL is a regulatory term in the U.S. Clean Water Act, describing a plan for restoring impaired waters and identifying the maximum amount of a pollutant that a body of water can receive, while still meeting water quality standards. According to the report; "Newport Creek is listed as impaired for pH." In addition, high levels of metal impairments were discovered through field observation and laboratory analysis. All impairments resulted from abandoned coal mine drainage. The TMDL report addresses the three primary metals often associated with abandoned mine drainage: iron, aluminum, and manganese.

Of course, acid mine drainage and TMDL designated streams are nothing new to Earth Conservancy properties. Earth Conservancy has installed its fair share of wetlands and other treatment facilities to remediate acid mine drainage (AMD) on several of their other parcels. However, it must be noted, much of the watershed suffers from AMD, a large portion of which is not owned by Earth Conservancy.

The 2007 USGS report provides several remediation recommendations specific to the particular pollutants found within the Newport Creek watershed. In general, the recommendations were prescribed to deliver the most economical solution regardless of the property owner. Consequently, many of the solutions proposed by the report were not located on lands owned by Earth Conservancy.



Topography and Slopes

Topography and steep slopes often play a critical role in determining a site's constructability. The project area ranges in elevation from 1350 along the Penobscot Northern Ridgetop to an elevation of 620 near Kirmar Ave.

Like many Earth Conservancy parcels, a majority of the lands in Newport Township have steep slopes which render many types of development financially infeasible. Nearly one-third of the project area has a slope exceeding 20%. Generally, slopes exceeding 20% render most types of development uneconomical although certain types of development can thrive on steeper slopes.



Another key component of a site's constructability is the proximity to and capacity of existing utilities. Water and sewer hookups are available to lands in close proximity to Kirmar Ave.

Since the project area is much higher in elevation when compared to the existing sanitary sewer lines, it is anticipated that future sewer extension(s) could utilize a gravity sewer conveyance system. Gravity sewer systems are often preferred to the alternative "forced systems" for many reasons, several of which include: lower initial construction costs, less maintenance, and a reduced chance of malfunction. However, it must be noted that the existing sewer conveyance system was not sized to handle a large increase in flow; therefore, extensive development would increase sewage flows and would likely tax relatively small sized municipal sewer conveyance system.

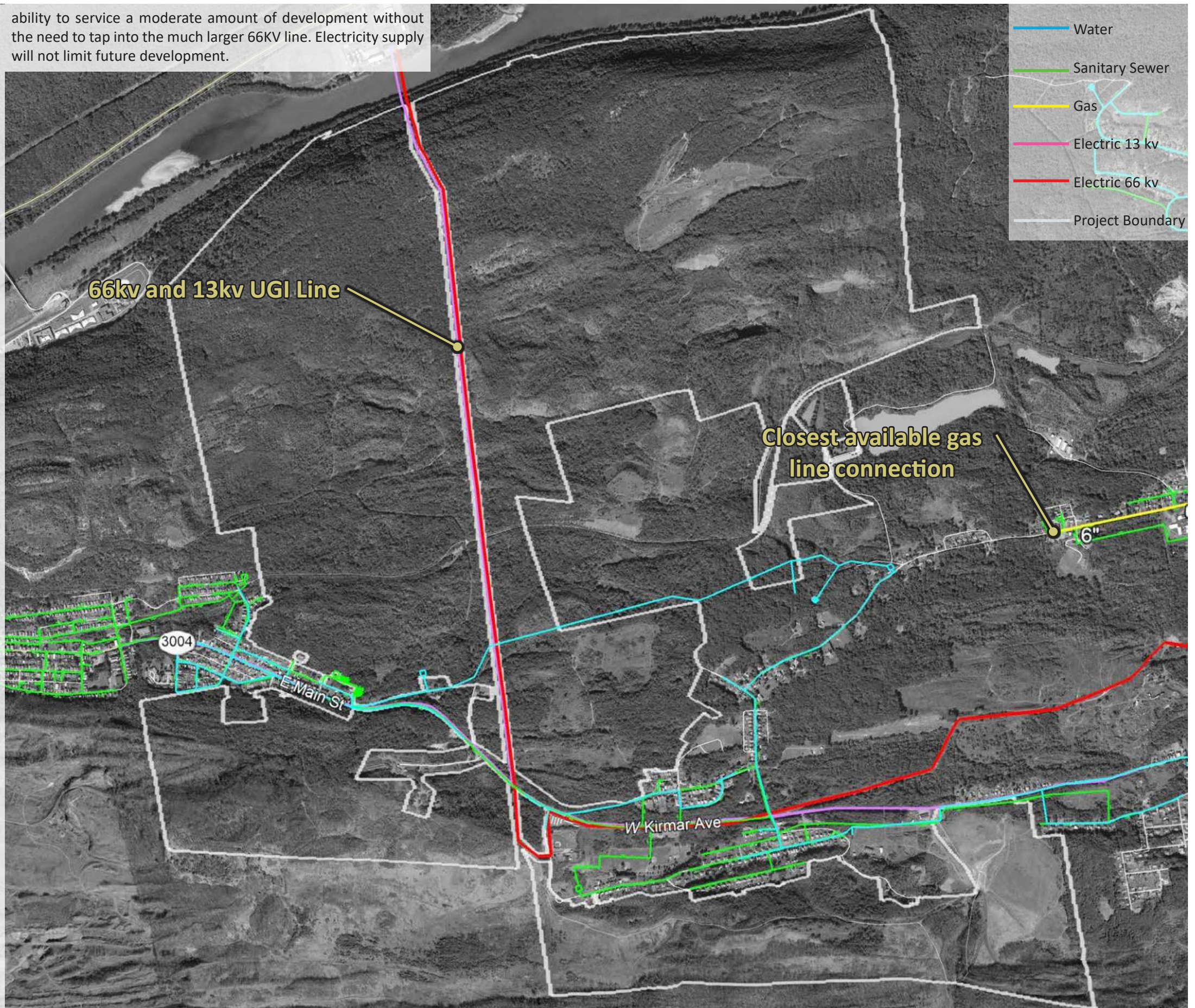
The site's higher elevation can be considered an advantage when discussing sewer connections. The opposite is true when considering a public water connection. The greater the elevation difference between the proposed development and the existing water main, the more likelihood that water pressure will be an issue. Although lack of water pressure can be overcome by using such amenities as water towers and pumping stations, these amenities come at a cost.

In general, any development above elevation 730 will have to find ways to compensate for the lack of water pressure. Pennsylvania American Water owns and operates all of the water lines and towers in the vicinity of the project area. Any work necessary to increase water pressure typically is at the developer's expense.

Penn American Natural Gas owns and operates the nearby gas lines. Unfortunately, the nearest gas line is a 6 inch main that terminates approximately one-half mile from the project area. In lieu of extending the gas lines from Nanticoke City, the 4" gas line that services CSI Retreat could be extended to the project area. It is difficult to determine if this alternate route would be a more economical way to obtain gas service, due to the substantial topographic challenges, but comparing the two alternatives may be irrelevant should the development require a service larger than a 4" gas main. Again, any extension of the gas line is typically at the developer's expense. Depending on the quantity of gas used by the proposed development, a percentage of the initial construction costs could potentially be recouped.

UGI is the public utility responsible for supplying electricity to the area. Although electricity is generated in several areas, UGI does have a nearby gas power plant in Hunlock Township. It is this 66KV transmission line that transects the site. Also found within this easement is a 13KV distribution line that, upon reaching Kirmar Ave, provides power to the community. This line has the

ability to service a moderate amount of development without the need to tap into the much larger 66KV line. Electricity supply will not limit future development.



11 Transportation - E. Kirmar Re-Alignment

Site access and the local transportation network are often the biggest contributing factors of a site's suitability to accommodate development. As a whole, the project area will be encumbered by the limited ability of the existing traffic network to handle new volumes. The main route through the project area is West Kirmar Avenue. This state route (SR 3004) traverses northward towards the City of Nanticoke while providing indirect access to the newly constructed South Valley Parkway.

The existing roadway network has the capacity to handle small increases in residential traffic and traffic generated by small commercial developments. Should even moderate growth occur in the area, offsite transportation improvements will likely be necessary.

Since a large percentage of any new development's traffic will be coming from or going to Interstate 81, the roadway

network to this highway is key to allowing for development. For example a 50+ lot subdivision, a large distribution center, or 25,000+ square feet of commercial development would likely generate the need for transportation improvements. Specifically, the intersections between West Kirmar Avenue and the South Valley Parkway are not conducive to free flowing traffic. The following East Kirmar Avenue re-alignment improvements would greatly improve traffic flow through that area (illustrated on the inset drawing):

- Extend East Kirmar Avenue (SR 2008) to West Kirmar Parkway (SR 3003), and construction of a three leg single lane roundabout.
- Create a cul-de-sac along the short stretch of West Kirmar Avenue (SR 3004), between SR 3003 and Alden Mountain Road (SR 3001).
- Remove Robert Street pavement, north of East Kirmar Avenue (SR 2008).

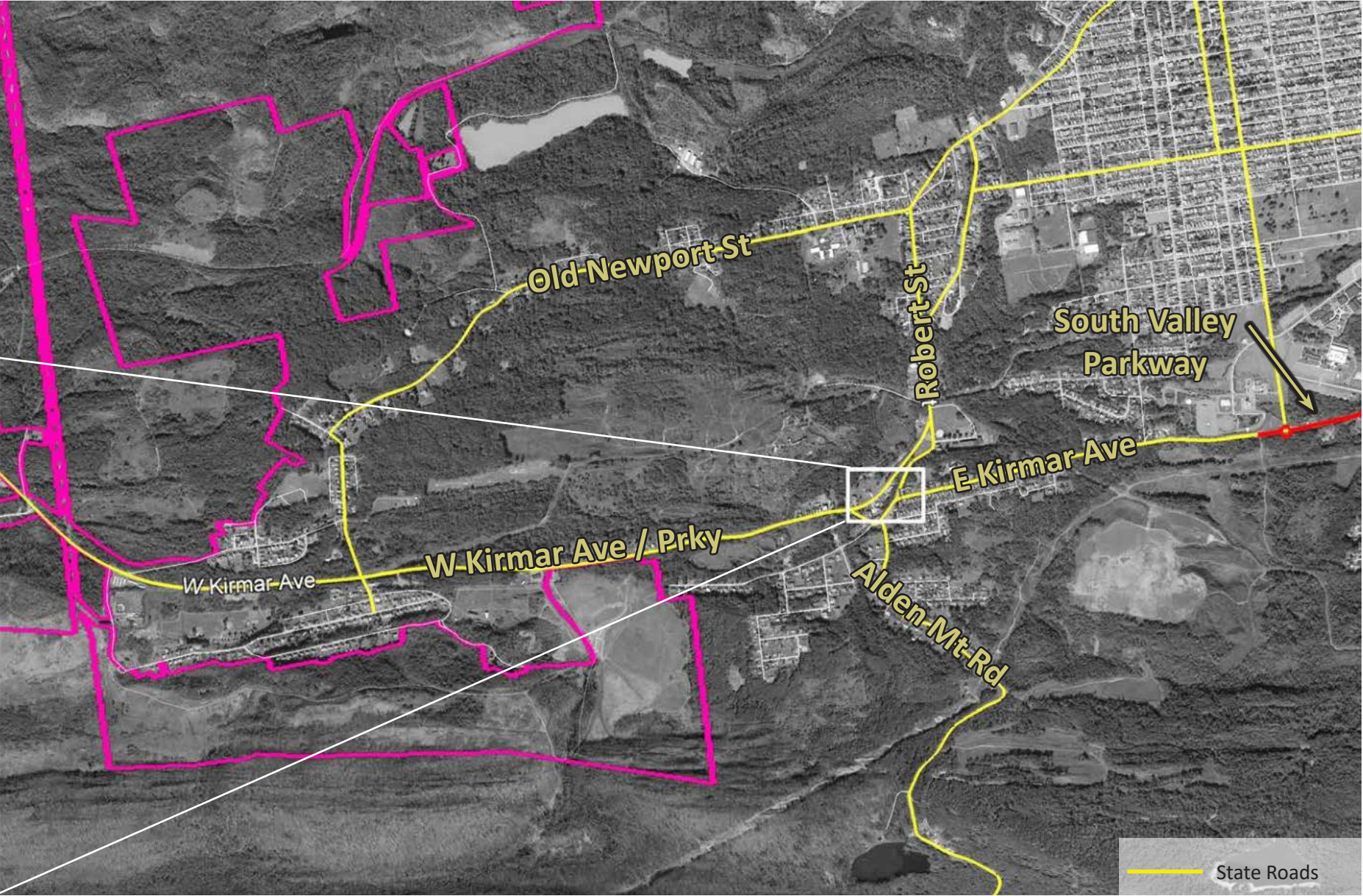
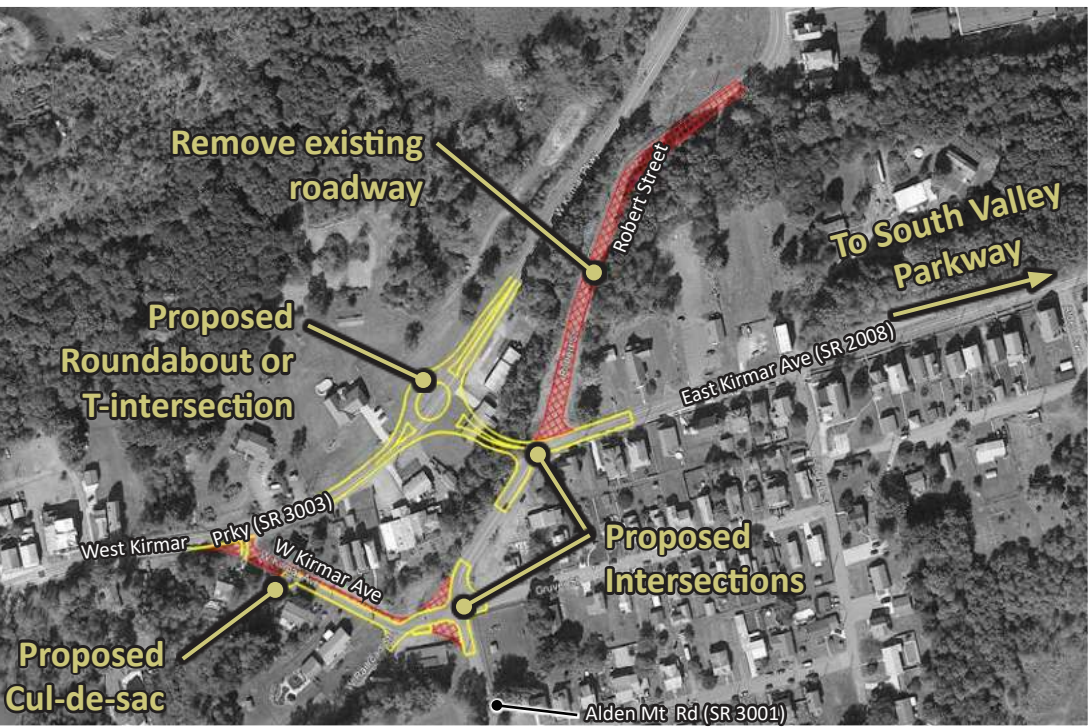
- Relocate Alden Mountain Road (SR 3001) / Robert Street with newly extended East Kirmar Avenue (SR 2008), constructing a new intersection.
- The existing pavement structure would need to be evaluated on East Kirmar from the termination of the new improvements (SR 3003) to Prospect Street. Pavement cores should be obtained to assess the strength of subgrade as well as determine the overall bituminous pavement structure thickness that would ultimately be supporting the increased truck traffic.
- A retaining wall may be justified on the northern side of the newly extended East Kirmar Avenue, to eliminate the possibility of any additional right-of-way needs.
- The environmental impacts would consist solely of tree removal. There are no impacts anticipated to school or cemetery property, wetlands or streams.

To accomplish the improved traffic flow recommendation,

the acquisition of one (1) residential property including its single story structure would be required. Additionally, two businesses and up to four residences may be impacted as a result of the roundabout.

In lieu of the proposed roundabout, a T-intersection could be constructed. Naturally, the T-intersection would be a less expensive alternative and also impact fewer adjoining property owners. However, in general, a T-intersection has less capacity than a roundabout and consequently may need to be supplemented with turn lanes and / or a signal if more development were to occur.

Recommended Traffic Improvements - E Kirmar Ave Re-Alignment (Roundabout Shown)



12 Transportation S Valley Pkwy Extension

In 2005, an Alternatives Analysis Report was completed for the South Valley Parkway which explored different roadway alignments to extend the South Valley to West Kirmar Parkway / Robert Street. As shown below, one option proposed taking the South Valley Parkway north of KM Smith Elementary School. This optional South Valley extension encountered some opposition from local residents that were concerned by the close proximity of the roadway to the elementary school. However, with the closing of the elementary school in June of 2018 and with no future plans for the building or the grounds, this concern was eliminated. This options also appears to be the least disruptive way to connect the South Valley Parkway to West Kirmar Parkway / Robert Street with two major advantages over the East Kirmar realignment. First, there would be fewer property impacts (property takes, etc.) and secondly many residences fronting on East Kirmar would not be exposed to the increase in traffic associated with the East Kirmar option.

In addition to the two major advantages above, there are also several key points to consider related to the South Valley Parkway extension:

- The alignment has already been vetted during the South Valley Parkway planning process
- A majority of the proposed extension would follow an old railroad bed currently under the ownership of one private owner, thus eliminating the need for negotiations and acquisitions from multiple private property owners.
- The South Valley Parkway extension would become the primary through route and East Kirmar will be a secondary route yielding to the South Valley traffic.
- The new roadway will terminate at West Kirmar Parkway / Robert Street with the construction of a T-intersection or a roundabout. Both types of intersections have certain advantages and disadvantages as previously discussed.

Unfortunately, this alternate alignment is potentially more costly than the East Kirmar extension and would provide minimal, if any, additional traffic capacity. Yet as noted above, this alignment has many advantages when compared to the East Kirmar re-alignment.

Undoubtedly, the combination of the two improvements would yield slightly higher traffic capacity. However, prior to congestion concerns arising in this area, numerous traffic concerns would likely arise downstream (i.e. at the roundabouts near Rt 29) before necessitating the implementation of both improvements. Therefore, if only one of the proposed improvements are implemented this area would no longer be the limiting factor concerning congestion.

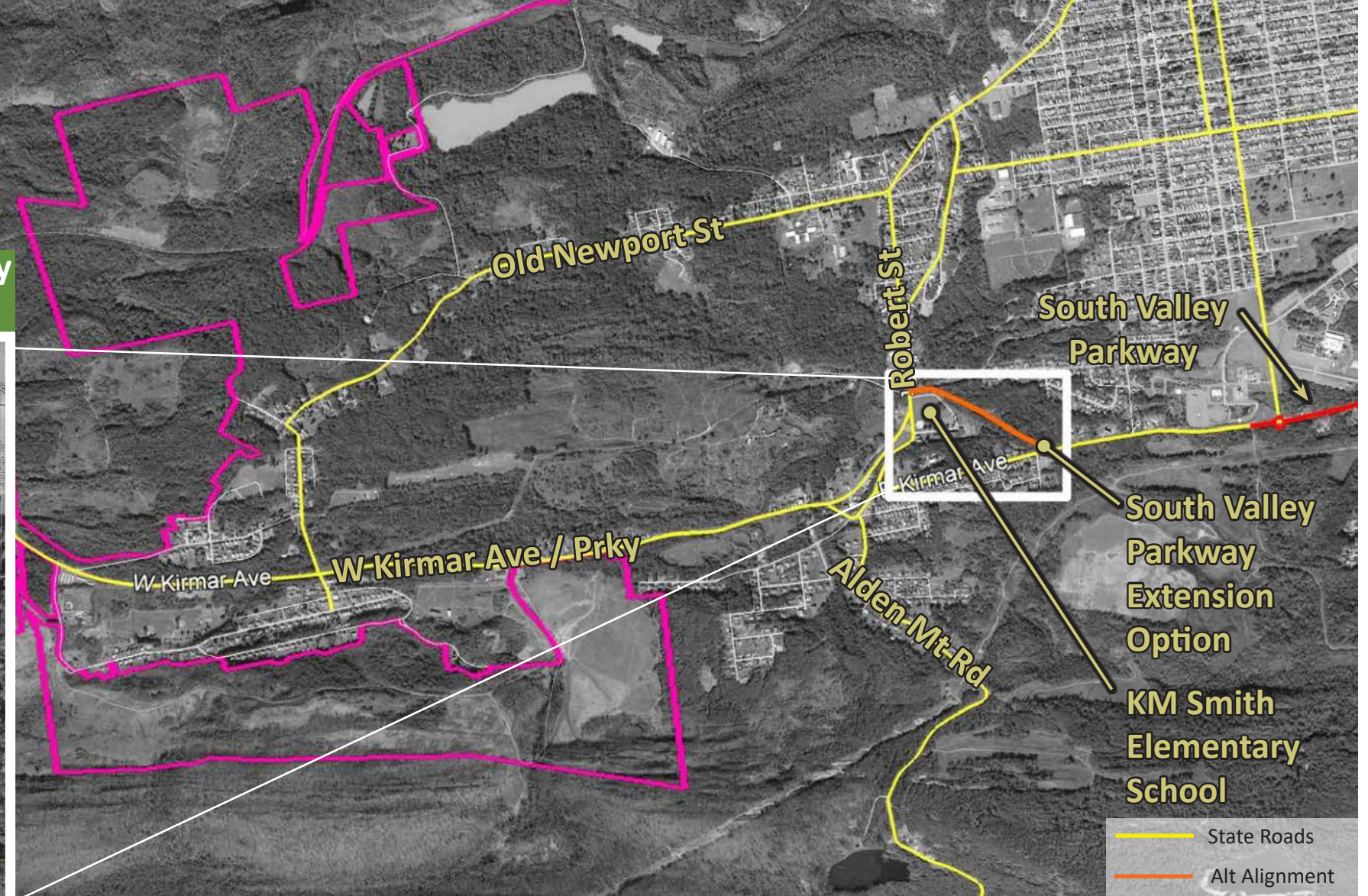
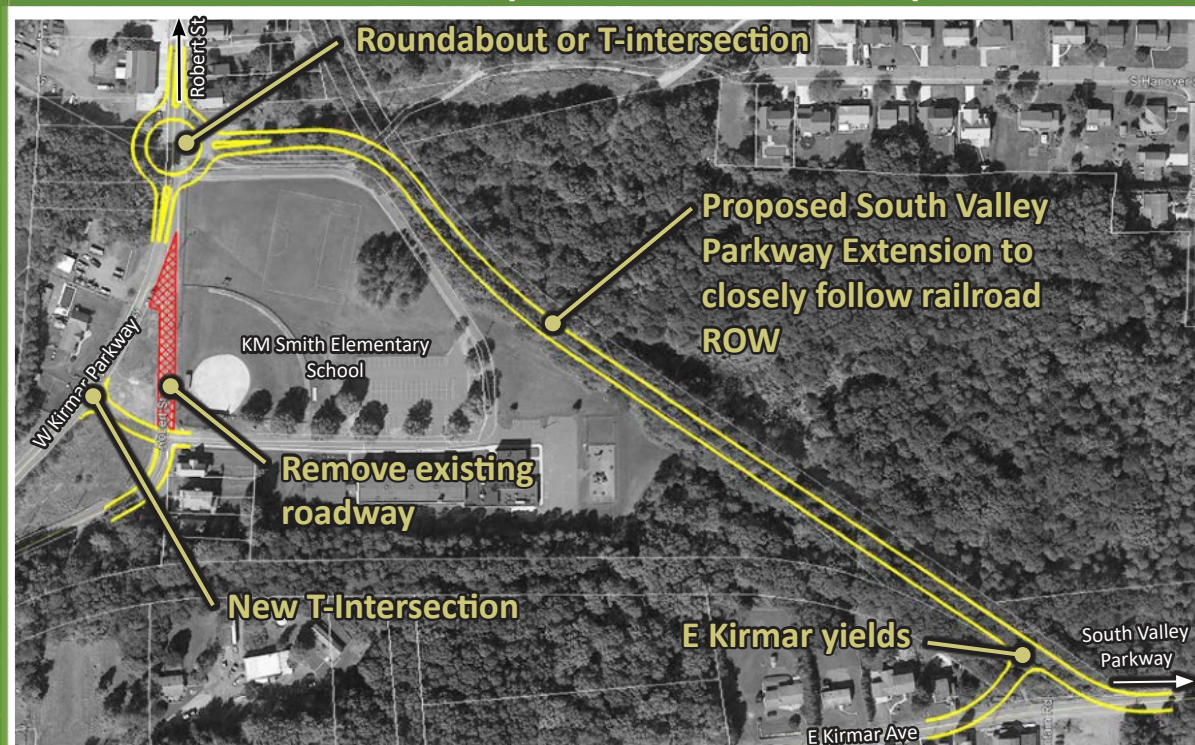
As is customary for any type of traffic planning, the type of traffic (i.e., trucks vs cars), timing of traffic (i.e., peak traffic hours), and direction of traffic (i.e., north vs south, east vs west travel) all play a role in traffic planning. Each use

type presents its own unique opportunities and constraints. Also, any new developments (after this report's finalization) along the previously mentioned key corridor leading to Interstate 81 could place unforeseen burden on the roadway network. Additional investigation will be required on an individual per use basis.

The Market Street to State Route 11 corridor is the only other significant transportation artery in the vicinity of the project area. Unfortunately, the existing roadway network leading to and from Route 11 would necessitate extensive upgrades that could include bridge and other structure improvements to accommodate substantial development.

It is important to note that if a large amount of development occurs within the project area, it is likely additional improvements will be required, such as upgrades to the Market Street to State Route 11 corridor, in addition to those previously referenced.

Recommended Traffic Improvements - South Valley Parkway Extension (Roundabout Shown)





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Taking into account the aforementioned remaining mining reclamation efforts, hydrology, topography, utilities, and existing transportation network, the following generalized development land uses have been delineated. The project boundary has been broken into three distinct areas: land suitable for development, lands with limited suitability, and lands best suited for conservation / recreation.

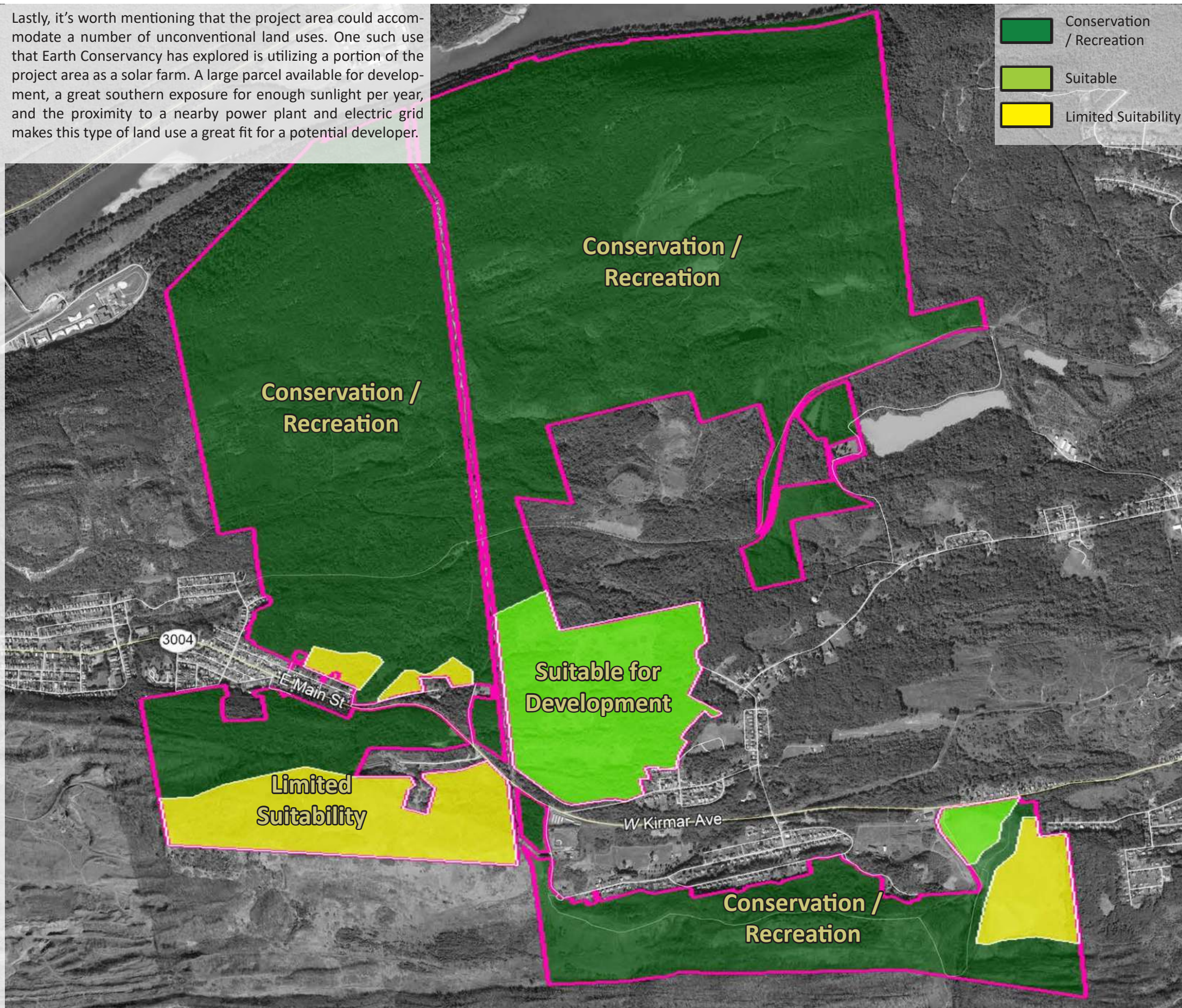
Two distinct areas have been delineated “suitable for development” which total approximately 200 acres. Both areas possess good access to Kirmar Ave, gentle or workable topography, access to utilities (with the exception of natural gas) and have limited mining and hydrologic constraints. The larger area of the two areas has potential to accommodate many types of development including, but not limited to, industrial, distribution, manufacturing, and a large lot residential community.

The smaller area is well-suited for small scale commercial applications. Small-scale commercial applications often tend to place a higher burden on existing infrastructure based on their development size. For example, a two acre restaurant site places a higher demand on water, sanitary, and transportation services on an acre per acre basis than a 100 acre distribution facility site. Therefore, due to the adequate existing infrastructure in this area, little additional work is needed to accommodate these specialized land uses.

Approximately 150 acres of land has been deemed as having “limited suitability for development”. Although similar to the “suitable for development” areas these lands are more remote than their counterparts and therefore will need a greater infusion of capital to prepare the site, extend utilities, and create transportation routes to the area. It must be noted that one of the areas identified as having limited suitability is atop the mine fire area. As noted earlier, the area gives little evidence of an existing mine fire, but further investigation is recommended before the area is developed.

A majority of the proposed project area has been set aside for conservation / recreation. Although these lands could accommodate many types of potential development, large capital infusions would be necessary to make these lands suitable for construction. It also must be noted that since the finalizing of the 1996 Land Use Plan, there has been little development demand in Newport Township. Not only will the setting aside of a large portion of the land for conservation / recreation coincide with Earth Conservancy’s mission statement, the proposed areas will fit nicely into the local and regional context. As will be seen in subsequent sections of this report, recreation and conservation in particular, have seen exponential growth in the area since the finalizing of the 1996 Land Use plan.

Lastly, it’s worth mentioning that the project area could accommodate a number of unconventional land uses. One such use that Earth Conservancy has explored is utilizing a portion of the project area as a solar farm. A large parcel available for development, a great southern exposure for enough sunlight per year, and the proximity to a nearby power plant and electric grid makes this type of land use a great fit for a potential developer.



The 1996 Land Use Plan incorporated conservation / recreation as major proposed land uses. The designated 2,200± acre conservation / recreation area could be further expanded by access permission from both private and public adjoining landowners. Currently, there are a total of five sizeable landowners who either abut or are near the project area and they include:

Pinchot State Forest

The Pinchot State Forest is managed by DCNR's Bureau of Forestry and the 3,300 ± acres in Conyngham Township known as the "Mocanaqua Tract" was sold in 2015 by Earth Conservancy to the Commonwealth of Pennsylvania and its citizens.

Earth Conservancy is currently leasing their only remaining tract of land in Conyngham Township to a private entity. At the expiration of the current lease, Earth Conservancy will convey this remaining tract to the Pinchot State Forest.

Another recent addition to the Pinchot State Forest in this area is the 1100± acre "Wannamie Tract" that was also sold by Earth Conservancy.

Pollock Tract

The largest private landowner in the vicinity of the project is Mr. Ken Pollock. Much of Mr. Pollock's land consists of mine scared land along the northern reaches of the Penobscot Ridge. Mr. Pollock also owns and operates a nearby quarry, "Newport Aggregate". As of this report, Mr. Pollock owns approximately 2,600 acres adjacent to the project area.

Kielar Lake Tract

Kielar Lake Inc. is the second major private land owner in the area with a total holdings of approximately 600 acres. Much of their land is adjacent to Kielar Lake along the southern reaches of the Penobscot Ridge.

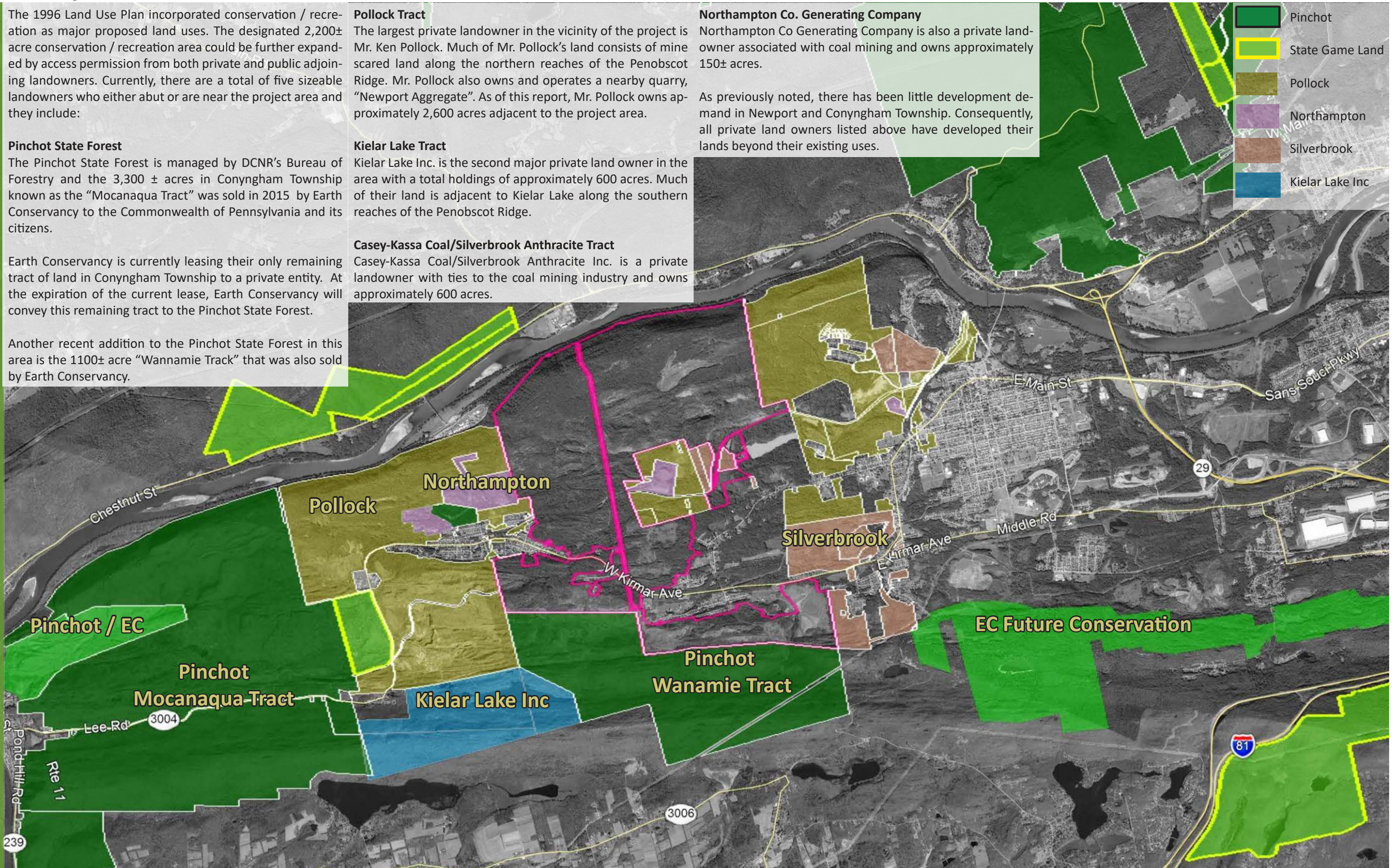
Casey-Kassa Coal/Silverbrook Anthracite Tract

Casey-Kassa Coal/Silverbrook Anthracite Inc. is a private landowner with ties to the coal mining industry and owns approximately 600 acres.

Northampton Co. Generating Company

Northampton Co Generating Company is also a private landowner associated with coal mining and owns approximately 150± acres.

As previously noted, there has been little development demand in Newport and Conyngham Township. Consequently, all private land owners listed above have developed their lands beyond their existing uses.



- Pinchot
- State Game Land
- Pollock
- Northampton
- Silverbrook
- Kielar Lake Inc

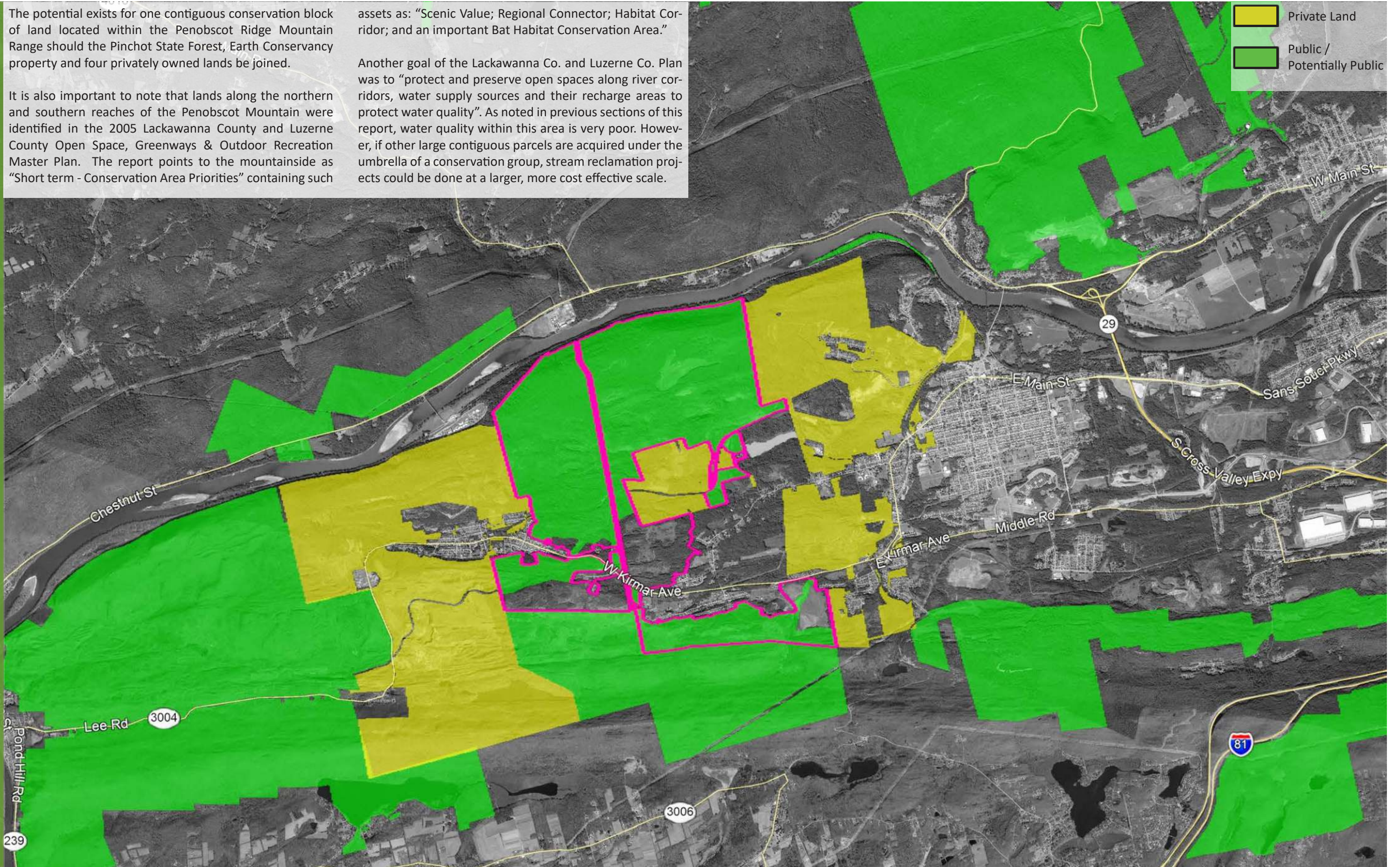
15 Adjoining Land Owners - Compiled

The potential exists for one contiguous conservation block of land located within the Penobscot Ridge Mountain Range should the Pinchot State Forest, Earth Conservancy property and four privately owned lands be joined.

It is also important to note that lands along the northern and southern reaches of the Penobscot Mountain were identified in the 2005 Lackawanna County and Luzerne County Open Space, Greenways & Outdoor Recreation Master Plan. The report points to the mountainside as "Short term - Conservation Area Priorities" containing such

assets as: "Scenic Value; Regional Connector; Habitat Corridor; and an important Bat Habitat Conservation Area."

Another goal of the Lackawanna Co. and Luzerne Co. Plan was to "protect and preserve open spaces along river corridors, water supply sources and their recharge areas to protect water quality". As noted in previous sections of this report, water quality within this area is very poor. However, if other large contiguous parcels are acquired under the umbrella of a conservation group, stream reclamation projects could be done at a larger, more cost effective scale.



Large contiguous tracts of lands lend themselves to implementation of a good trail network. Fortunately, several existing trails currently exist near the project area, including:

Warrior Trail

The existing 12.5 mile Warrior Trail follows along the Susquehanna River to the north of the project area. The trail is also adjacent to the old North Branch Canal, and other historical attractions. When completed, the Susquehanna Warrior Trail will extend 16 miles from the Riverlands Park in Salem Township to the Levee Trail in Plymouth Borough.

Levee Trail

Another nearby trail is the Luzerne County Levee Trail. This 12-mile paved path is comprised of four different reaches on either side of the Susquehanna River built atop the flood protection levees in the Wyoming Valley. According to the trail's website "designated bike lanes connect the system with the Back Mountain Trail. Future plans include connections to the D&L Trail and the Susquehanna Warrior Trail".

Mocanaqua Loop Trail

In 2003 Earth Conservancy established the Mocanaqua Loop Trail system on their 3,000± acre parcel located in Conyngham Township. It offers varying lengths and difficulties to provide visitors with numerous scenic vistas overlooking the Susquehanna Valley and the Borough of Shickshinny. As

previously noted, the Mocanaqua track, as well as the accompanying trail system, is now under the ownership of the ever-expanding Pinchot State Forest.

Penobscot Ridge Mountain Bike Trail

The Penobscot Ridge Mountain Bike Trail, constructed by Earth Conservancy in 2005, is the only formally demarcated trail within the project area. The bike/pedestrian trail is approximately two miles in length and is bookended by two trailheads with adjacent parking areas.

PROPOSED TRAILS

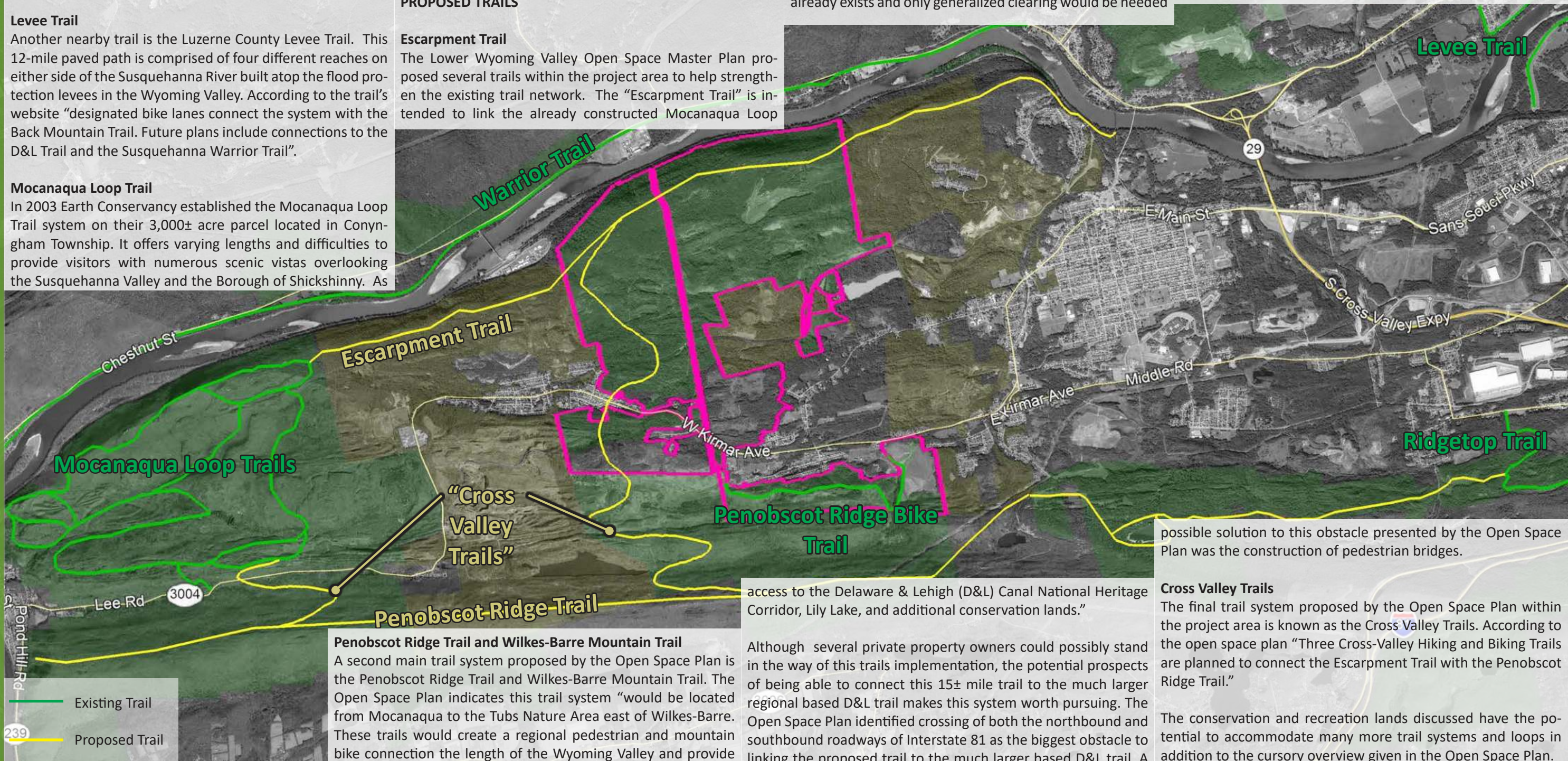
Escarpment Trail

The Lower Wyoming Valley Open Space Master Plan proposed several trails within the project area to help strengthen the existing trail network. The "Escarpment Trail" is intended to link the already constructed Mocanaqua Loop

Trail to the eastern reaches of the City of Nanticoke. The Escarpment Trail would be located on the upper reaches of a prominent ridge known as the Northern Reach of Penobscot Mountain that extends from Mocanaqua to Nanticoke along the Susquehanna River. Three trailhead facilities are planned as access points to the trail to be located near the communities of Mocanaqua, Nanticoke, and Glen Lyon. These trailhead facilities would include parking, access to the trail, and informational signage and/or material.

The Open Space Plan also stated that a majority of the trail already exists and only generalized clearing would be needed

to more "formerly demarcate the trail". The Escarpment Trail would be an unimproved hiking trail connected to a secondary set of hiking and technical trails looping back to the three trailheads. Following the rolling ridge from peak to peak, the trail would pass a series of rock outcroppings overlooking many beautiful natural views of the Susquehanna River. Similar to the Mocanaqua Loop Trails, this trail would provide many scenic vistas of the Lower Wyoming Valley. With the permission of a single private property owner (Ken Pollock) and the existing Pinchot State Forest Trails, the proposed Escarpment Trail would be approximately nine miles in length.



Penobscot Ridge Trail and Wilkes-Barre Mountain Trail

A second main trail system proposed by the Open Space Plan is the Penobscot Ridge Trail and Wilkes-Barre Mountain Trail. The Open Space Plan indicates this trail system "would be located from Mocanaqua to the Tubs Nature Area east of Wilkes-Barre. These trails would create a regional pedestrian and mountain bike connection the length of the Wyoming Valley and provide

access to the Delaware & Lehigh (D&L) Canal National Heritage Corridor, Lily Lake, and additional conservation lands."

Although several private property owners could possibly stand in the way of this trails implementation, the potential prospects of being able to connect this 15± mile trail to the much larger regional based D&L trail makes this system worth pursuing. The Open Space Plan identified crossing of both the northbound and southbound roadways of Interstate 81 as the biggest obstacle to linking the proposed trail to the much larger based D&L trail. A

possible solution to this obstacle presented by the Open Space Plan was the construction of pedestrian bridges.

Cross Valley Trails

The final trail system proposed by the Open Space Plan within the project area is known as the Cross Valley Trails. According to the open space plan "Three Cross-Valley Hiking and Biking Trails are planned to connect the Escarpment Trail with the Penobscot Ridge Trail."

The conservation and recreation lands discussed have the potential to accommodate many more trail systems and loops in addition to the cursory overview given in the Open Space Plan.

The 1999 Open Space Plan proposed several “active” recreation areas throughout the entirety of Earth Conservancy holdings. The Newport Motorsports Park was the “active” recreation park of choice within the Newport Township lands, due to the parcel’s “existing rugged terrain which appeals to many motorsports enthusiasts”. The open space plan envisioned the park to be a “full scale, income-producing, ATV and motorsports race course and trail system that would be a destination point for not only local ATV riders but also an attraction to motorsports enthusiasts on a more regional scale”.

In response to the 1999 Open Space Plan’s recommendation, Earth Conservancy prepared an ATV feasibility report exploring the possibility for the construction of a motorsports park. The report concluded that an ATV trail facility would reduce illegal ATV use on Earth Conservancy land (an

ever-growing problem) and contribute financially to the local economy.

The report identified two major concerns in establishing any ATV Park. The first being the cost of land acquisition and the second being the creation of a legal entity responsible for maintenance and oversight of the park. Earth Conservancy had a willingness to remedy the first problem (land) but the second major concern was left unanswered. The report recommended the ATV Park be owned by a “government entity or agency that allows for a high degree of participation in the planning, development and operation of the system by a local ATV club or consortium of clubs”. The report also recommended “the best model of what is possible in terms of ownership, club responsibility and commitment, the generation of capital, and good will is the Tower City Trail Riders, Inc.”. It should be noted that since the ATV re-

port was prepared, Tower City Trail Riders has continued to thrive, and even expanded to include off road Jeep courses. The two maps shown below are from two successful nearby ATV facilities: Rock Run in Cambria County and Anthracite Outdoor Recreation Area in Northumberland County.

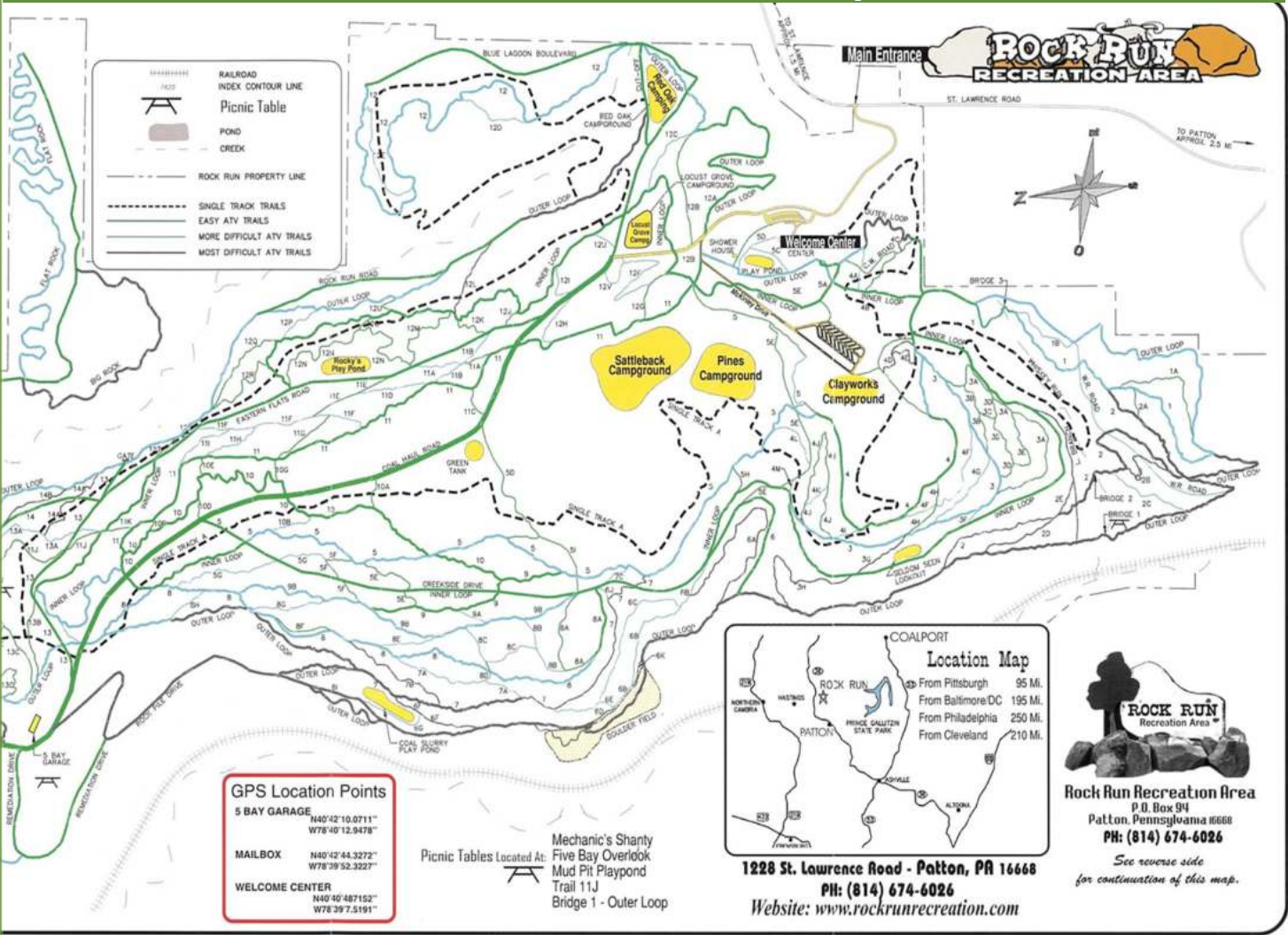
In the end, the report concluded “The most significant impediment to the establishment of a facility is the issue of ownership; however that issue is not viewed as insurmountable given the local government’s (Newport Township) openness to the concept of a regional ATV facility”. The report also noted that the yet to be developed Lackawanna and Luzerne County Open Space, Greenways and Outdoor Recreation Master Plan, may become an important factor in the location selection for an ATV trail facility.

The previously mentioned Lackawanna and Luzerne County

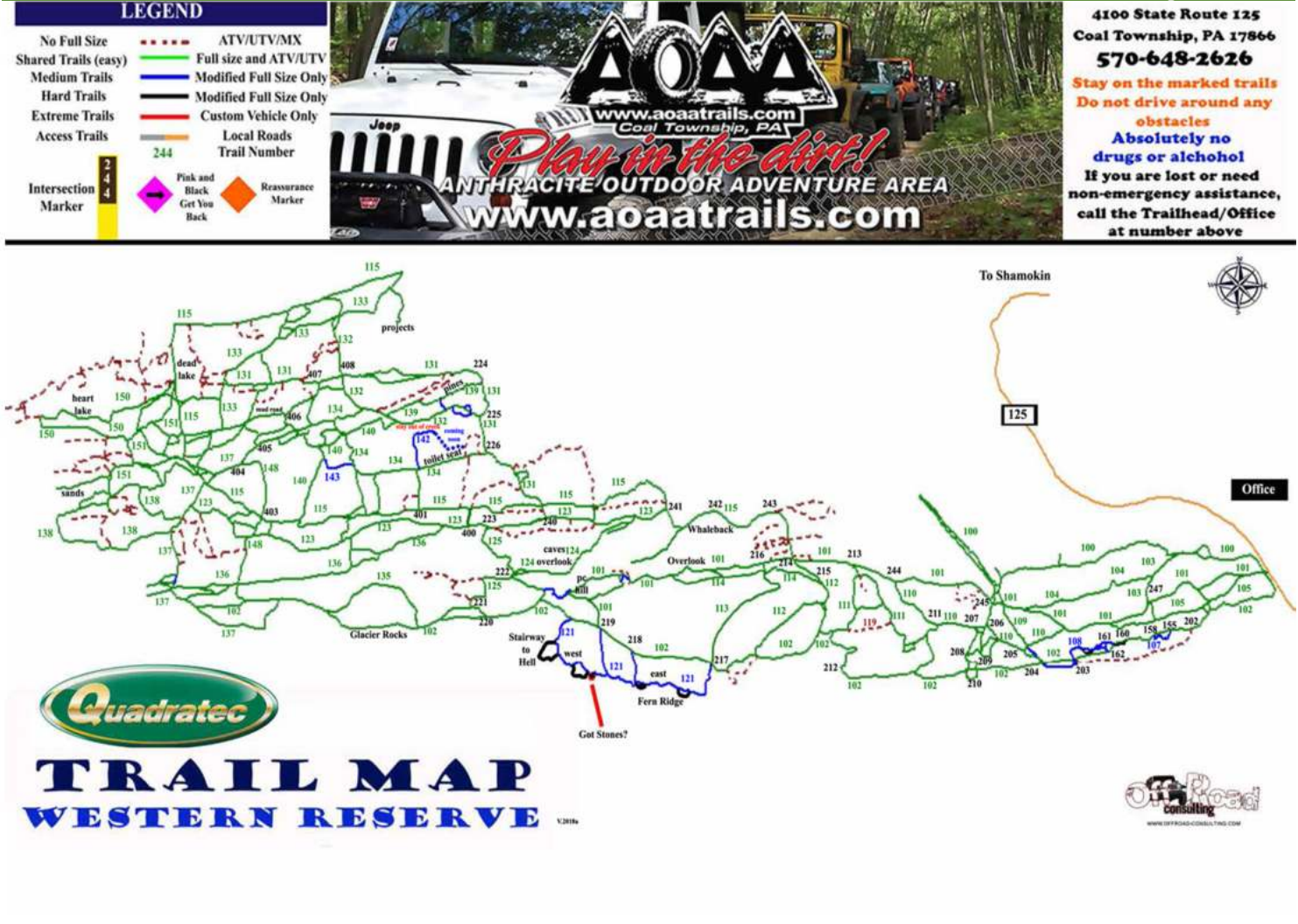
Open Space, Greenways and Outdoor Recreation Master Plan was also completed in 2005. Although the report did not specifically state where an ATV park should be located, the report consistently listed facilities for snowmobiling (winter) and ATV (summer) racing as of primary importance. A goal of the 200 page bi-county report was to “acquire land for a designated all-terrain vehicle facility”.

An ATV motorsports park, as well as previously proposed trail systems, are not the only possibilities for recreation within the conservation area. The 2005 plan also encouraged activities such as horseback riding, hunting, and cross country skiing as possible activities suitable for the project area.

Rock Run Trails Map



Anthracite Outdoor Recreation Area Trails Map





Local & Regional Context

- 18 - Pinchot State Forest Growth
- 19 - ATV Use in the State Forest
- 20 - Regional Context
- 21 - Development Intense Alternative
- 22 - Development Intense Alternative Cont.
- 23 - Conclusion

Newport Townshp Business Notices.

Ackerman, Albert...Carpenter, P. O. Nanticoke.
Cole, Frank W...Foreman, L. C. & N. Co. Wanamie.
Colvin, C. W...Master Mechanic, L. C. & N. Co. "
Fairchild, John... Farmer, P. O. Nanticoke.
Fairchild, S... " " "
Fairchild, Abm... " " "
Freed, John G...Prop'r Lines Hotel, Leemine Station, P. O. Nanticoke.

Gruver, Aaron...Foreman, L. C. & N. Co. Wanamie.
Gruver, J. A...Prop'r "What Cheer House," and Dealer in General Merchandise. P. O. Wanamie.
Smith, J. Ben...Sup't L. C. & N. Co. "
Salmon, Samuel...Carpenter, Foreman. L. C. & N. Co. Waus. mio.
Saums, S...Farmer, P. O. Nanticoke.
Vandermark, Lyman J...Farmer, P. O. Wanamie.

Certainly, a potential landowner for the conservation and recreation lands would be Pinchot State Forest. The Pinchot State Forest District is one of twenty state forest districts across the Commonwealth and DCNR Bureau of Forestry that has been tasked with managing the state forest.

In recent years the Pinchot State Forest has seen exponential growth. In 2005 the Pinchot State Forest District had 7,735 acres under their control. As of the date of this report (2019) the Pinchot State Forest is responsible for the management of 48,504 acres. As of the writing of this report, the Pinchot State Forest is in the midst of developing a Resource Management Plan to, among other things, guide its expansion efforts.

Pinchot's Commitment to Conservation

The Pinchot State Forest was named in honor of Gifford Pinchot, a revered Pennsylvania forester and conservation hero. Approximately two thirds of the entire Pinchot Forest District is comprised of forested land. Yet, only 10 percent of all forest land is in public ownership. Therefore

the conserved lands of the Pinchot State Forest are a valuable asset to the surrounding communities providing pure water, recreation, scenic beauty, plant and animal habitat, sustainable timber and natural gas.

It is also worth noting that the Pinchot State Forest has shown a willingness to take ownership of past mine areas, notably the Mocanaqua and Avondale tracts. As cited in the 2018 Resource Management Plan "In 2018, 100 acres of abandoned mines where reclaimed at Avondale to eliminate mine hazards, reduce AMD discharge, and control storm water runoff. This area was graded and sloped to natural contours and planted to native grasses, shrubs, and trees."

Recreation in the State Forest

The Bureau of Forestry's overarching goal is to provide "low-density outdoor recreation that can be obtained only through large contiguous blocks of forest". The more highly dense state parks are left to another branch of the Department of Natural Resources (DCNR) to manage, and there-

fore, are not the aim of the Bureau of Forestry's recreation efforts.

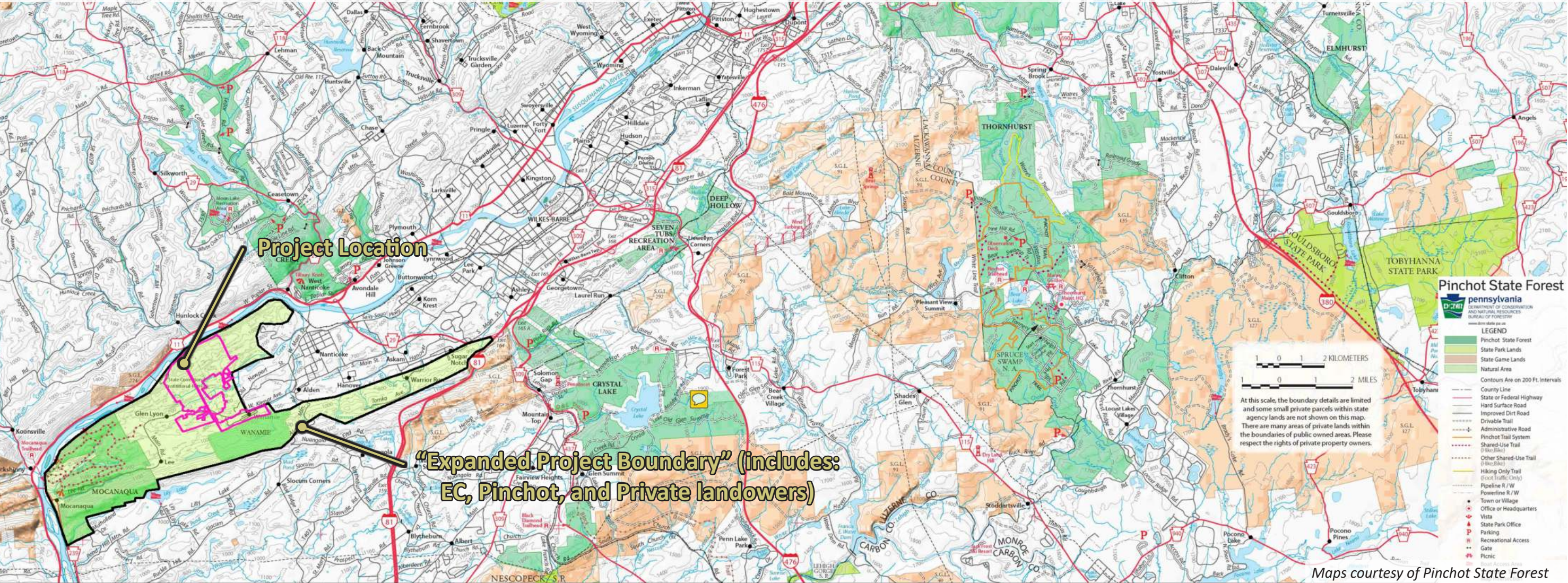
As noted earlier, the Pinchot State Forest is in the midst of creating a resource management plan. In late 2018, a draft of the plan was released noting "With so many new acquisitions within the Pinchot State Forest, it is important for district staff to carefully plan for potential recreational uses and conflicts."

Current recreation across the Pinchot State Forest is limited to trails and three areas of high density recreation areas: Manny Gordon, Moon Lake, Seven Tubs and numerous low density recreation opportunities. These highly dense recreation areas are not the norm for the Bureau of Forestry, yet the Pinchot State Forestry has had a willingness to manage these dense recreation areas. Also identified in the draft Resource Management Plan, snowmobiling is the dominant wintertime activity in the district with over 26 miles of riding opportunities in the Thornhurst Tract alone. Cross-country skiers utilize these shared-use trails, but

there are currently no designated ski trails in the district."

The draft report states "Overall, outdoor recreation is growing in popularity state-wide and while uses that were traditionally the norm such as hunting and hiking continue to see increased use, there are also new and unique user-groups coming to the forefront including mountain bikers and kayakers, and even more obscure uses such as bouldering, rock climbing, geocaching, gold panning, and metal detecting that are coming into play."

Currently within the Pinchot State Forest there is a significant amount of abandoned mine lands (AML). Similar to the previously discussed water quality issue, if the proposed conservation/recreation area and other large parcels were acquired under the umbrella of a conservation group such as the Pinchot State Forest, AML reclamation projects could be done at a larger and more cost effective scale.



ATV use has always been a concern within State Forest lands and the Pinchot State Forest is certainly not an exception. The Pinchot's 2018 Draft Forest Management Plan "The forest district struggles with illegal ATV usage in many of the tracts. Because ATV use was not discouraged by previous landowners, there has been an expectation that ATV use is permitted on the trails that were historically ridden which are now under Bureau of Forestry ownership."

The Pennsylvania's 2016 State Forest Resource Management Plan (Statewide) reports the state has seen a steady rise in the popularity and use of ATVs across the commonwealth and "With the increased number of ATV riders has come increased pressure on DCNR and other land managers to expand opportunities for safe riding. DCNR plays a multi-faceted role with ATVs: registering their use statewide; managing registration-generated fees for the maintenance, enhancement, and enforcement of existing recreational trail opportunities on state forest lands; and working with partners to provide new recreational ATV trails off of state forest lands. The department will continue to work with counties and other regional organizations to create new ATV recreational opportunities on other lands. The primary management focus on DCNR lands will continue to be to repair and maintain already designated ATV trails, as well as to curtail illegal riding activity through enforcement".

In response to the continued escalation of ATV use within state forests, DCNR (of which the Bureau of Forestry is under) finalized a 2019 study entitled "All Terrain Vehicle Area Suitability Study". The purpose of this study is to "evaluate the potential opportunities to expand ATV riding areas within the Commonwealth of Pennsylvania." Luzerne County was determined to have the fifth most ATV registrations of any County within the Commonwealth.

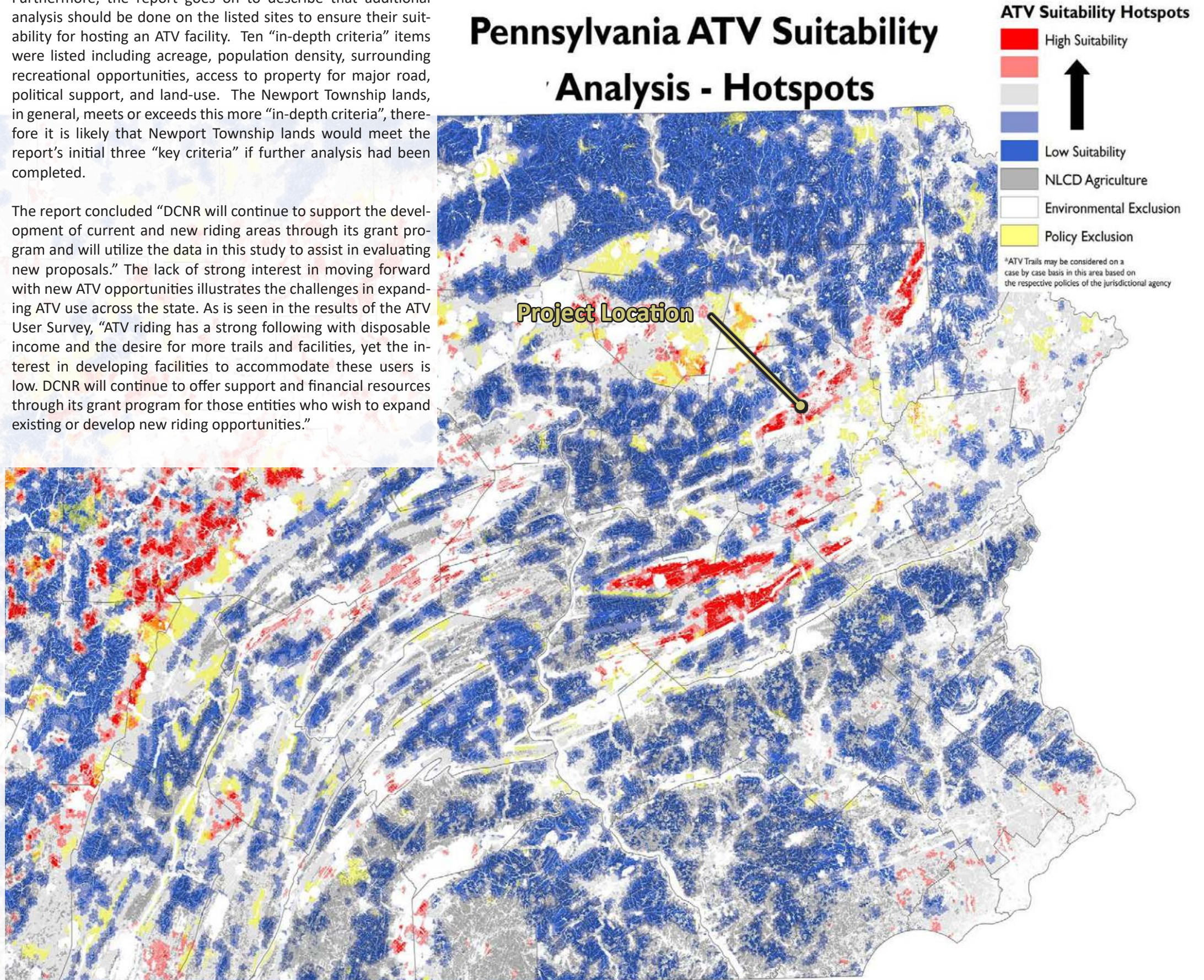
The report's overarching goal was to "identify opportunities for expanding and establishing additional ATV riding areas throughout the Commonwealth in a manner that is consistent with their mission and policy". A large number of criteria were utilized to compile a list of potential sites with the three most important "key criteria" being 1) suitable land; 2) local champion(s) to advocate and advance the planning process; and 3) willing partner/operator. In the end the report yielded: 19 high priority sites, 30 medium priority sites and 3 low priority sites.

Unfortunately, the Newport Township lands owned by Earth Conservancy were not identified as one of the priority sites. It is note-worthy that the report, by its own admission, was an extremely high-level look at the entire Commonwealth. A total of thirteen sites were listed as suitable possibilities for an ATV facility in Luzerne and Lackawanna County, suggesting the area's ability to support an ATV facility.

Furthermore, the report goes on to describe that additional analysis should be done on the listed sites to ensure their suitability for hosting an ATV facility. Ten "in-depth criteria" items were listed including acreage, population density, surrounding recreational opportunities, access to property for major road, political support, and land-use. The Newport Township lands, in general, meets or exceeds this more "in-depth criteria", therefore it is likely that Newport Township lands would meet the report's initial three "key criteria" if further analysis had been completed.

The report concluded "DCNR will continue to support the development of current and new riding areas through its grant program and will utilize the data in this study to assist in evaluating new proposals." The lack of strong interest in moving forward with new ATV opportunities illustrates the challenges in expanding ATV use across the state. As is seen in the results of the ATV User Survey, "ATV riding has a strong following with disposable income and the desire for more trails and facilities, yet the interest in developing facilities to accommodate these users is low. DCNR will continue to offer support and financial resources through its grant program for those entities who wish to expand existing or develop new riding opportunities."

Pennsylvania ATV Suitability Analysis - Hotspots



Maps courtesy of DCNR's All Terrain Vehicle Area Suitability Study".

As previously seen, the conservation lands harmonizes with local planning efforts and recent conservation trends in the area. Furthermore, the proposed conservation and recreation lands could extend to regional planning efforts.

The Susquehanna Greenway is a 500 mile long greenway network of conserved lands, trails, and communities that run along the Susquehanna River. According to the greenway's 2004 strategic plan "The Pennsylvania Greenways Action Plan recognizes the Susquehanna Greenway as the state's largest greenway. The purpose of the Greenway is to protect, value, and enjoy the exceptional resources of the river, creating an interconnected network of trails and natural areas traversing urban, sub-urban, and rural landscapes".

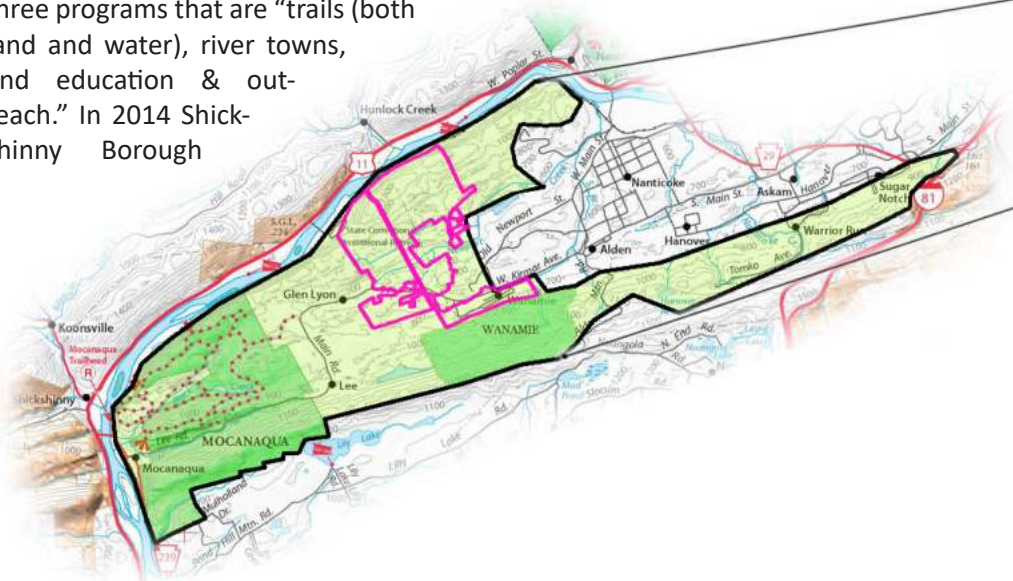
The current development and implementation of the 500 mile greenway is overseen by full time staff known as the "Susquehanna Greenway Partnership". The Susquehanna Greenway Partnership seeks to "determine the status of regional greenway efforts; build upon public participation activities previously conducted in the corridor; provide a diverse and inclusive program to maximize input from all segments of the population; and promote local ownership of the greenway plan and its implementation". The Susquehanna Greenway Partnership leverages its many partners, including but not limited to, PA Department of Conservation & Natural Resources, the PA Department of Transportation, and the PA Fish and Boat Commission all of which further the greenway's implementation.

Additionally, the Susquehanna Greenway Partnership seeks to implement the greenway via three programs that are "trails (both land and water), river towns, and education & outreach." In 2014 Shick-shinny Borough

participated in the Susquehanna Greenways Rivertowns Program. A Riverfront plan which received large input from local leaders and stakeholders will help guide the borough going forward. Potential exists for the proposed conservation / recreation area and surrounding land owner's to extend upon the Susquehanna Greenway's goals.

From a regional trails perspective, the proposed trail network in and around the project area has an opportunity to link to the 165 mile Delaware & Lehigh National Heritage Trail. According to the D&L trails website, "the D&L Corridor was established to preserve the historic pathway that carried coal and iron from Wilkes-Barre to Philadelphia. Stretching 165 miles from northeast Pennsylvania to the Delaware River port of Bristol, near Philadelphia, the D&L Trail is the "spine" passing through the Corridor's five counties: Luzerne, Carbon, Lehigh, Northampton and Bucks." Although there are a few existing gaps in the overall trail network, those lands needed to close those gaps will likely be secured in the near future.

It is most likely the Penobscot Ridge Trail and Wilkes-Barre Mountain Trail would be the trail system to make the physical connection to the D&L Trail. But, as noted earlier, there are currently several obstacles preventing this connection including private land owners and crossing Interstate 81.



"Expanded" Project Boundary



Maps courtesy of Susquehanna Greenway Partnership

21 Development Intense Alternative

As previously mentioned, site access and the local transportation network are often the biggest contributing factors to a site's suitability to accommodate development. Also discussed earlier, the Market Street to State Route 11 transportation artery (specifically the Access Rd → N Market Street → Market St → Route 11 route) has significant draw backs preventing any substantial development from utilizing this corridor. It is important to note that should significant transportation improvements be made to this corridor, new and important opportunities would most certainly become apparent to prospective developers.

Market Street to State Route 11 transportation improvements that would help spark interest in new development would include:

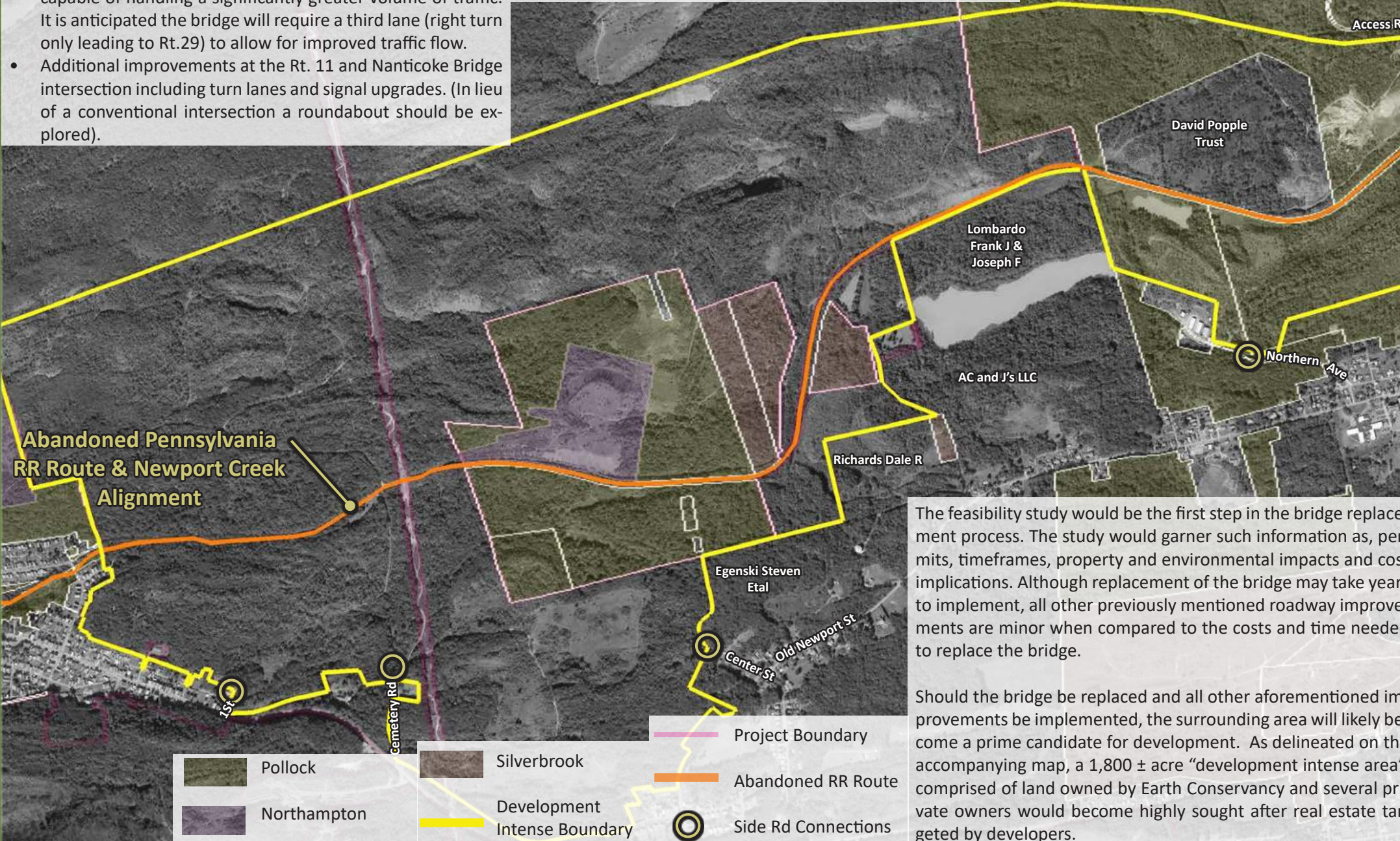
- The replacement of the Nanticoke Bridge with a new bridge capable of handling a significantly greater volume of traffic. It is anticipated the bridge will require a third lane (right turn only leading to Rt.29) to allow for improved traffic flow.
- Additional improvements at the Rt. 11 and Nanticoke Bridge intersection including turn lanes and signal upgrades. (In lieu of a conventional intersection a roundabout should be explored).

- Significant upgrades at the North Market Street and Market Street intersections including, but not limited to right-of-way takes, turn lane construction, and new signalization. (Again, in lieu of a conventional intersection a roundabout should be explored).
- Access Road/New Market Street intersection reconfiguration and possible signalization.
- Pavement structure improvements along Access Road, New Market Street and Market Street.

Of all the improvements mentioned, the lead domino is certainly the replacement of the Nanticoke Bridge. According to PennDOT's Onemap report, the bridge's deck is listed in satisfactory condition while both the superstructure and substructure condition are listed in poor condition. A sufficiently sized new

bridge would give developers confidence that this transportation artery would support their potential development needs.

Bridges of similar size and nature historically have taken five to seven years from initiation of the feasibility study to the ribbon cutting ceremony, excluding any delays for funding acquisition, historical investigations and environmental mitigations. Costs for a three lane (including walkway) bridge could range between 35 – 50 million (excluding escalation).



In addition to the offsite improvements, numerous opportunities exist to implement a comprehensive internal roadway network to accommodate future development. The Pennsylvania Rail Road's abandoned rail line of the which runs through the heart of the development intense area presents an opportunity to construct a gently sloping main access roadway traversing the project area. This new main access could connect to the previously discussed offsite improvements providing a virtually uninhibited transportation corridor to Interstate Route 81. Additionally, the development's secondary roads would branch from the main access road and connect to the existing local roadways such as 1st Street, Cemetery Road, Center Street, and Northern Ave.

The development area boasts another amenity, a spur rail line to the Norfolk Southern Railway that currently extends 1,800 ± feet into the development intense area. The spur rail line has the potential to be extended throughout the entire development area, approximately four miles, utilizing the abandoned Pennsylvania Rail Road bed. In regards to the current use of rail within the manufacturing/distribution industry, according to the US Bureau of Transportation Statistics rail freight continues to be the most economical way to ship goods long distances. Trucks typically carry most goods shipped less than 750 miles and rail is the leading form of transportation for shipments traveling 750 to 2,000 + miles.

The feasibility study would be the first step in the bridge replacement process. The study would garner such information as, permits, timeframes, property and environmental impacts and cost implications. Although replacement of the bridge may take years to implement, all other previously mentioned roadway improvements are minor when compared to the costs and time needed to replace the bridge.

Should the bridge be replaced and all other aforementioned improvements be implemented, the surrounding area will likely become a prime candidate for development. As delineated on the accompanying map, a 1,800 ± acre "development intense area", comprised of land owned by Earth Conservancy and several private owners would become highly sought after real estate targeted by developers.

22 Development Intense Alternative Cont.

Several other obstacles identified in the following discussion will need to be addressed to turn this area into a viable area for development. As often is the case, a good and reliable transportation system is the primary factor for creating a robust development site. Once this is solved all other concerns and obstacles usually quickly fall into place.

As discussed in previous sections of the report, Newport Creek, which closely parallels the abandoned rail line, has many challenges due to the past mining work in the area. Potential developers must keep in mind that as a part of the land development permitting process, the Department of Environmental Protection routinely requires the developer to remediate critical mining issues in order to develop land near the stream. Such remediation techniques may include stream bed restoration/sealing and riparian buffer installation. At a minimum, stream crossing culverts will need to be studied and sized to accommodate the stream flowing at a predetermined and regulated capacity. In addition to the stream impacts, further environmental concerns typically include the mitigation of wetland pockets and the re-routing of unnamed tributaries flowing to Newport Creek.

Utility upgrades will be required to facilitate future site develop-

ment. Due to the existing topography much of the development will be located at a significantly higher elevation than the existing water utilities. As a result, water tank(s) will likely be needed for both potable and fire protection supply. This endeavor includes not only water tanks but also pump stations and the associated cost is typically borne by the developer.

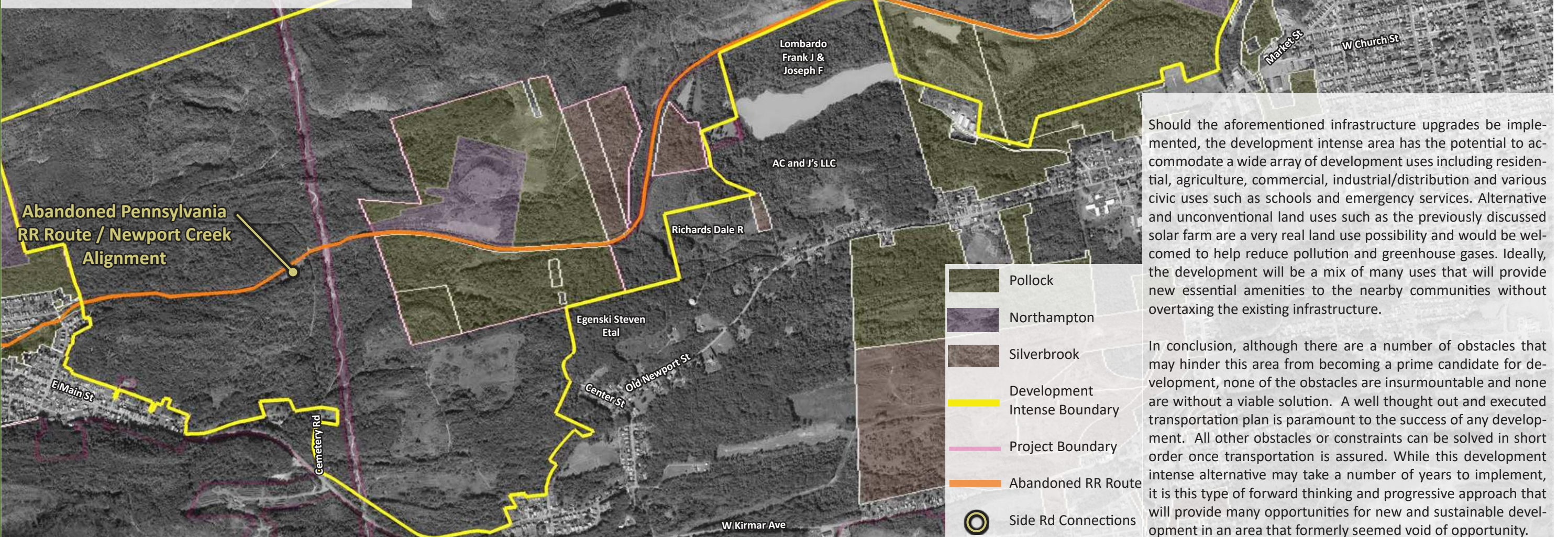
For the most part developers will be able to utilize gravity sewers to connect to the existing sewer mains in the surrounding urban areas. Installation of gravity sewers and appurtenances is more desirable and will be less expensive than a pressure sewer system. However, the sewer mains and accompanying pump stations have defined capacities and could require significant upgrades should the proposed development be a heavy user of the sanitary facilities.

As previously discussed, gas mains would need to be extended from the existing locations to provide service to the proposed development. UGI's cost/benefit ratio of customer usage may

determine if upgrades to their existing off-site infrastructures would be funded by UGI or if the developer would be required to contribute funding for the upgrade(s).

The nearby UGI power plant and numerous 13KV and 66KV lines in the area provide a readily available and adequate electric supply. Typically the electric utility company constructs above ground electric line extensions to the project area without cost to the developer.

Some additional constraints to be considered for development include challenging topography and an array of geotechnical considerations due to the site's previous mining history. Each of these constraints are manageable and can be overcome with various and proven engineering and construction methods.



Should the aforementioned infrastructure upgrades be implemented, the development intense area has the potential to accommodate a wide array of development uses including residential, agriculture, commercial, industrial/distribution and various civic uses such as schools and emergency services. Alternative and unconventional land uses such as the previously discussed solar farm are a very real land use possibility and would be welcomed to help reduce pollution and greenhouse gases. Ideally, the development will be a mix of many uses that will provide new essential amenities to the nearby communities without overtaxing the existing infrastructure.

In conclusion, although there are a number of obstacles that may hinder this area from becoming a prime candidate for development, none of the obstacles are insurmountable and none are without a viable solution. A well thought out and executed transportation plan is paramount to the success of any development. All other obstacles or constraints can be solved in short order once transportation is assured. While this development intense alternative may take a number of years to implement, it is this type of forward thinking and progressive approach that will provide many opportunities for new and sustainable development in an area that formerly seemed void of opportunity.

Although the project area will likely not take on the character once envisioned by the 1996 Land Use Plan, the project area can build upon recent ever expanding conservation efforts and implementation of previously proposed recreation ideas, all while adhering to Earth Conservancy's mission statement.

Local Context

Within the local context, the conservation and recreation areas have the potential to expand upon previous planning efforts as well as current market conditions. The two ridge-lines on the northern and southern end of the project boundary are identified as "short-term priority conservation areas" by a recent Luzerne County and Lackawanna County planning effort. Also, since there has been little development demand for the lands in and around the project area, an opportunity exists to approach adjoining landowners of large tracts of land to assess their willingness to participate in a conservation effort on an even larger scale.

The Pinchot State Forest District may be a willing conservationist of these lands. Over the past 15 years, the Pinchot State Forest has expanded at a much faster rate than almost all of the other twenty state forest districts in Pennsylvania. As noted in the 2018 Pinchot State Forest's draft Resource Management Plan, much of the land within the Pinchot State Forest's district (comprising Lackawanna, Luzerne and Wyoming counties among others) is forestland with only a small percentage (10%) actually protected. The remaining 90% is not protected from future development.

Abandoned mine lands (AMLs) occupy much of the project property as well as the neighboring private lands. The AMLs have scarred a once pristine landscape and continue to perpetuate environmental concerns such as the poor water quality noted in the Newport Creek Total Maximum Daily Load (TMDL) report. Should large contiguous tracts of land be assembled and managed under the umbrella of a larger organization, these AMLs and subsequent TMDLs could be rehabilitated at a much larger, more efficient and much more cost effective scale.

Regional Context

Not only do the conservation and recreation areas coincide within the local context, the proposed land use also dovetails nicely with regional goals and planning efforts.

The Bureau of State Forestry is continually looking to remedy the unregulated and illegal use of ATV's within Pennsylvania State Forests. The recent ATV study conducted by DCNR indicates the need for a large-scale ATV facility within the local area to help

alleviate this problem. Earth Conservancy has already taken the initiative by performing their own ATV study as well as being a willing land contributor. In addition, numerous studies point to the continued rise of ATV use and Luzerne County has been identified as one of the largest ATV communities across the state. With the existing rugged landscape across the project area, large tracts of proposed conservation/recreation lands and the potential acquisition of additional lands from private owners, the opportunity exists to provide a site that meets or exceeds DCNR's site criteria for an ATV rider facility.

The 500 mile Susquehanna Greenway is a monumental undertaking which will take decades to implement. The proposed recreation and conservation areas within the proposed Earth Conservancy project area provides the opportunity to further a regional Greenway initiative.

Additionally, there are potential linkages to the 165 mile D&L Trail through the implementation of a trail within the conservation/recreation area. The D&L Trail aims to provide regional recreation opportunity while celebrating the anthracite coal industry's powering of the country throughout the nineteenth and early twentieth centuries. The industrial, institutional and practical modernization of the United States was contingent on the labor and the lives both lived and lost in the Anthracite Coal Region. The influence of these immigrant populations is still strongly felt in the region with towns having ethnic character and cuisine.

In conclusion, the opportunity for development hinges on the replacement of the Nanticoke Bridge and the Route 11 transportation corridor improvements. Action to complete a feasibility study should be a first priority. Yet for the time being, a majority of the project area has been deemed best suited for conservation/recreation. The discussion on the potential for a major effort to provide conservation and recreation amenities should be held with the Department of Conservation and Natural Resources and adjacent land owners to determine if a detailed plan should be considered.

The potential to implement past conservation and recreation planning efforts, build upon recent localized conservation efforts and expand regional planning efforts serve to further justify the recommendation that conservation/recreation is a best use designation.

