



Turtle Creek Greenway Plan

Final Plan—February 2011

Prepared for the Regional Trail Corporation

Prepared by  Mackin

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A sincere thank you to all the organizations, agencies, and individuals who dedicated their time and resources to make this plan a success. Our apologies to anyone we inadvertently omitted. In particular, the Turtle Creek Greenway Steering Committee consisted of a group of dedicated individuals who donated their time, resources, and expertise to guide the overall project.

-  Malcolm Sias—Westmoreland County Parks & Recreation and RTC
-  Diane Selvaggio—Turtle Creek Watershed Association
-  John Albertson—Representative John Pallone
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-  John Balicki—Parks & Recreation Consultant
-  Dr. Elisa Beck—Sustainable Monroeville
-  Mark Bowers—Environmental Consultant
-  Bruce Corna, Jr—Westmoreland Land Trust
-  Tom Dittman, Murrysville Recreation & Westmoreland Heritage Trail (WHT)
-  Chris Droste—Westmoreland County Conservation District
-  Chuck Duritsa—Westmoreland Land Trust
-  Christine Goswick—Allegheny County Planning
-  Alex Graziani—Smart Growth Partnership of Westmoreland County
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-  Rey Peduzzi—Trafford Borough
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-  Jesse Jon Salenskey—Bruce Construction/WCD
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Turtle Creek Greenway Plan



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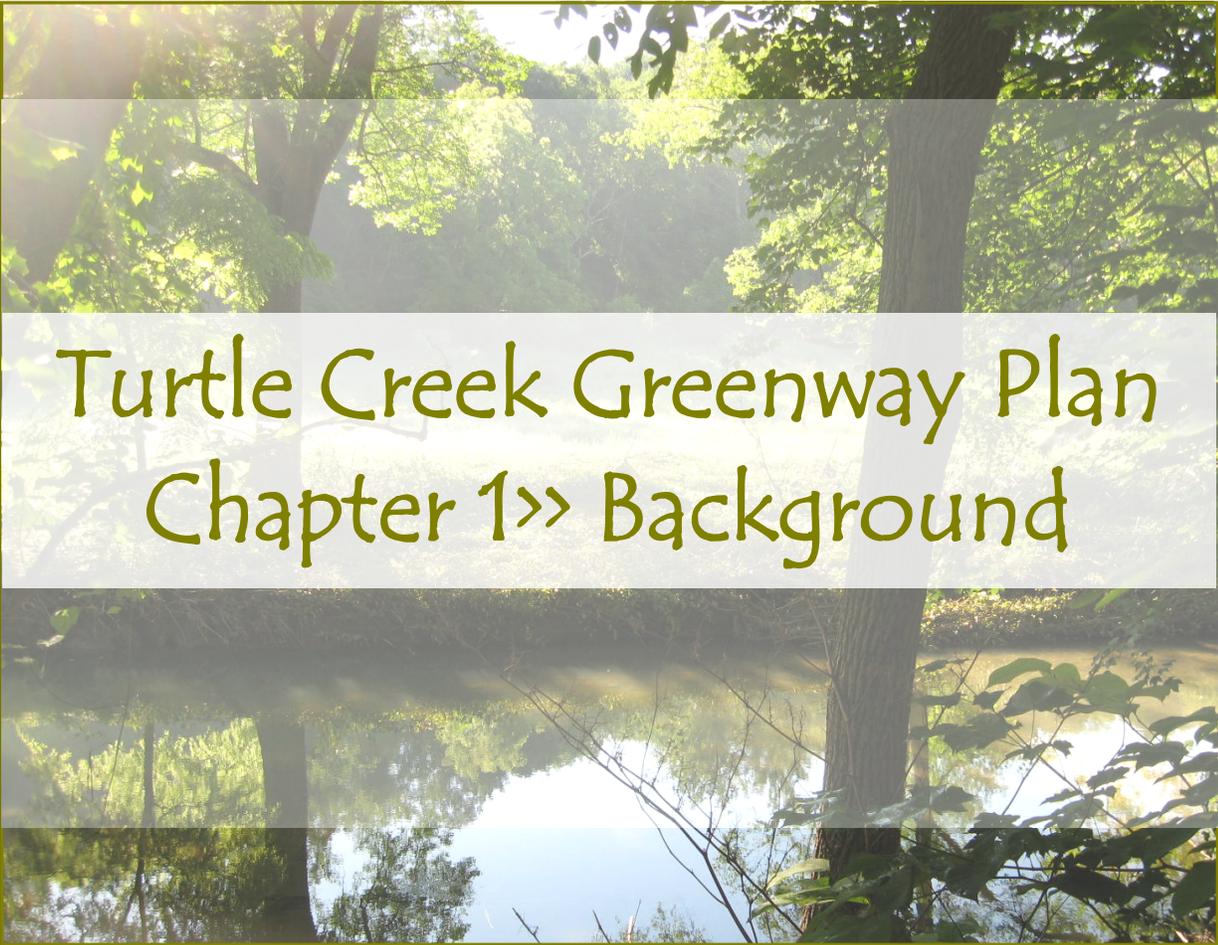
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ACCD – Allegheny County Conservation District
ACED—Allegheny County Economic Development
ACHD – Allegheny County Health Department
ACPD – Allegheny County Parks Department
ALT – Allegheny Land Trust
ASA – Agricultural Security Areas
ASWP – Audubon Society of Western Pennsylvania
BMP – Best Management Practices
CBC – Christmas Bird Count
CWF—Cold Water Fishery
DCED – Pennsylvania Department of Community and Economic Development
DCNR – Pennsylvania Department of Natural Resources
DEP or PADEP – Pennsylvania Department of Environmental Protection
EAC – Environmental Advisory Council
EASI – Environmental Alliance for Senior Involvement
EPA – United States Environmental Protection Agency
E&S – Erosion and Sedimentation
FEMA – Federal Emergency Management Agency
N/A – Not applicable
NRCS – Natural Resources Conservation Service
OSM – Office of Surface Mining
PAFBC or PFBC– Pennsylvania Fish & Boat Commission
PDA – Pennsylvania Department of Agriculture
PEMA – Pennsylvania Emergency Management Agency
PennDOT – Pennsylvania Department of Environmental Protection
PFBC—Pennsylvania Fish and Boat Commission
PGC – Pennsylvania Game Commission
PHMC – Pennsylvania Historic Museum Commission
PRC – Pennsylvania Resource Council
PSCE – Penn State Cooperative Extension
RTC – Regional Trail Corporation
SWPAHHW- Southwestern Pennsylvania Household Hazardous Waste
TCVCOG – Turtle Creek Valley Council of Government
TCWA – Turtle Creek Watershed Association
TSF—Trout Stocked Fishery
TU – Trout Unlimited
USACE – United States Army Corps of Engineers
USDA – United States Department of Agriculture
WCCD – Westmoreland County Conservation District
WCPD – Westmoreland County Parks Department
WLT – Westmoreland Land Trust
WPC – Western Pennsylvania Conservancy
WPCAMR – Western Pennsylvania Coalition for Abandoned Mine Reclamation
WWF—Warm Water Fishery



Turtle Creek Greenway Plan Chapter 1» Background

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Section B > Defining the Boundary pg 1-9

Section C > Public Participation pg 1-11

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Section A > Introduction

The Turtle Creek Greenway has long been recognized by many as a local treasure by the residents of the surrounding communities. Located in Allegheny and Westmoreland Counties in Southwestern Pennsylvania, the Turtle Creek Greenway encompasses approximately six (6) miles of the Turtle Creek stream valley, beginning at Duff Park in the Municipality of Murrysville, through Penn Township and the Municipality of Monroeville, ending in Trafford Borough. The Turtle Creek Greenway Project arose as a result of several planning efforts that had been completed in the region over the past several years and a growing concern that with continued development, the Greenway may be ruined for future generations. Partially funded through a planning grant from the Pennsylvania Department of Conservation and Natural Resources (DCNR), the Regional Trail Corporation (RTC) is leading the effort with hopes of eventually being able to extend the Westmoreland Heritage Trail through the Greenway.

The Turtle Creek Greenway is a beautiful natural area that offers wonderful opportunities for outdoor recreation and conservation. Squeezed in the middle of a rapidly developing area in Westmoreland and Allegheny Counties, the Greenway provides locations for healthy exercise, passive recreation, quiet contemplation, nature observation and environmental education.”

*—Malcolm Sias,
Parks Planning Coordinator
for Westmoreland County*

What is a Greenway?

The Pennsylvania Department of Conservation and Natural Resources (DCNR) defines a greenway in *Pennsylvania Greenways: An Action Plan for Creating Connections* (2001) as follows:

“A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wider corridors that incorporate diverse natural, cultural, and scenic features. They can incorporate both public and private property, and can be land- or water-based. They may follow old railways, canals, or ridge tops, or they may follow stream corridors, shorelines, or wetlands, and include water trails for non-motorized craft. Some greenways are recreational corridors or scenic byways that may accommodate motorized and non-motorized vehicles. Others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway will protect natural, cultural, and scenic resources, provide recreational benefits, enhance natural beauty and quality of life in neighborhoods and communities, and stimulate economic development opportunities.”

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While every greenway is unique in its purpose and function, all greenways benefit the local communities in which they are found. Common benefits include the preservation of natural resources; protection of water resources; conservation of historic and cultural resources; conservation of scenic resources; fostering of public recreation, health and fitness; creation of educational opportunities; and the promotion of sustainable development and sound land use.

Defining a Greenways Network

Pennsylvania has developed a “hubs and spokes” approach to greenways planning. The hubs are destination areas, which may consist of natural areas such as parks and nature preserves; cultural, historic and recreational sites; and urban and suburban areas such as cities, towns, and neighborhoods. The spokes are the greenways themselves which connect the various natural, historic, cultural, and recreational areas. The Greenways Network in Pennsylvania can be analyzed at three levels: Greenways of Statewide Significance, County Greenways, and Local Greenway Network.

Greenways of Statewide Significance

Greenways that make connections beyond local and regional boundaries, connect major destinations, and help conserve significant natural areas are considered to be greenways of statewide significance. Examples include existing and proposed water trails, millennium trails, bicycle routes, heritage corridors, and conservation areas. The Turtle Creek Greenway is not a greenway of statewide significance.

County Greenway Plans

Each of the 67 counties in Pennsylvania have been encouraged to complete countywide greenway plans. The greenway plans should include identification of open space, map existing and proposed greenway hubs and spokes, and should be integrated into overall planning and revitalization efforts. As the Turtle Creek Greenway spans both Allegheny and Westmoreland Counties, both of the county greenways plans were reviewed to ensure consistency.

Allegheny Places (2008)

Allegheny County completed a comprehensive plan in 2008 entitled *Allegheny Places*, which included a Parks, Open Space, and Greenways Plan. The plan identifies the Westmoreland Heritage Trail but does not discuss the project area.

New Horizons: A County-Wide Greenways and Blueways Network (2008)

Westmoreland County completed *New Horizons: A County-Wide Greenways and Blueways Network* in 2008, which is a companion document to the County's comprehensive land use, parks, recreation, and open space planning efforts. The plan identifies 21 proposed greenway and blueway Project Corridors; the highest priority of which is the Westmoreland Heritage Trail.

As proposed, the Westmoreland Heritage Trail is a 19-mile conservation corridor that begins near Saltsburg and runs west to Trafford. The Project Corridor is designated as an improved/maintained crushed aggregate/asphalt trail (type IV). The plan specifically notes the value of protecting the resources of the Turtle Creek Gorge and the high threat level as a result of the proximity to public water and sanitary service, densely populated area, and its location within the Westmoreland County Comprehensive Plan Development Triangle.

In addition to the Westmoreland Heritage Trail designated as a high priority project of the County, there are a number of other recommended actions that support the Turtle Creek Greenway Plan:

-  Support the formation and involvement of the Westmoreland Land Trust in the management of greenway projects
-  Promote the incorporation of appropriate greenway network and recreation provisions in County and Municipal planning efforts

Local Greenway Network

While it is important to plan for greenways at the state and county level, oftentimes, the local level is where projects are implemented. Local greenway planning initiatives create connections between neighborhoods and local destinations, such as public lands, town centers and schools, or between natural areas or environmentally significant areas (such as floodplains or streams).

Saltsburg to Trafford Trail Feasibility Study (2003)

The Regional Trail Corporation commissioned a trail feasibility study to be conducted along a 19-mile corridor that followed both an abandoned Penn Central Railroad line that ran from Saltsburg Borough (Indiana County) to Export Borough (Westmoreland County) and the active Turtle Creek Industrial Railroad (TCIRR) from Export to Trafford Borough (Allegheny and Westmoreland Counties). The study concluded that sections of the corridor were feasible for non-motorized trail development; however, the trail could not coexist with the active TCIRR due to narrow conditions and concern regarding liability.

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During the study, a few landowners along the corridor expressed an interest in donating portions of their land that was considered to be undevelopable. The corridor encompassed what is often referred to as the Turtle Creek Gorge, a section along Turtle Creek that is defined by steep cliffs and floodplains.

As of February 2010, five (5) miles of the Westmoreland Heritage Trail are constructed and open for use, from Saltsburg to Slickville. The trail is ideal for walking, jogging, bicycling, and cross-country skiing and is handicapped accessible; suitable for everyone regardless of age or physical ability.

The Westmoreland Heritage Trail connects to the West Penn Trail in Saltsburg and will continue to be built in segments as property and funding are obtained. Plans are underway for an additional four (4) miles to be constructed between Slickville and Delmont.

[Penn Township Comprehensive Recreation, Park and Open Space Plan \(1999\)](#)

In 1999, Penn Township adopted a Comprehensive Recreation, Park and Open Space Plan in order to address the need for recreation programs and facilities for current and future residents. The Township's Plan addresses the Turtle Creek Greenway in a number of areas, as summarized below:

- 🌲 Vegetation/Riparian Buffer Inventory (pg. 1-6): Lands adjacent to Turtle Creek offer opportunities to preserve the natural areas, although increasing demands of development have greatly affected the size and quality of this buffer.
- 🌲 Vision Statement Excerpt (pg. 3-5)“...Last weekend a large group of volunteers cleaned up the Lyons Run and Turtle Creek Greenways. These fragile riparian buffers form green connections between the Township, Murrysville and Monroeville. Over the years, the state has provided significant funds for the protection of these unique natural resources. Environmental classes from several adjacent school districts conduct research on water quality, plant communities, and wildlife habitat along these stream corridors, while the Township conducts popular plant identification and bird watching programs...”

[Monroeville Comprehensive Recreation, Park, and Open Space Plan \(2000\)](#)

In 2000, Monroeville completed a Comprehensive Recreation, Park and Open Space Plan along with a Heritage Park Master Plan. Although the plan does not specifically reference the Turtle Creek Greenway, the following excerpts address the concept of trails and

greenways:

- 🌲 Vision Statement Excerpt (pg. 1-5): *“...Residents and visitors often walk or ride bicycles along the comprehensive greenway network to any of the neighborhood parks or the new centralized community park...”*
- 🌲 Recommendations (pg 6-54)
 1. Publicize benefits of greenways and trails—form trail advisory board
 2. Develop trails through existing municipal parks and property
 3. Inventory and develop policies to preserve steep slopes, wetlands, riparian buffers, and other unique features in conjunction with comprehensive planning efforts
 4. Incorporate environmental message in education programs, fundraising, and volunteer efforts

Monroeville Comprehensive Plan (2006)

Monroeville adopted its Comprehensive Plan update in 2006, which provides a strategic direction for the future land use patterns and serves as a blueprint for implementation of policies related to development. The following are excerpts where the plan addresses or supports through policy the Turtle Creek Greenway:

- 🌲 Issues Identification (pg 1-6): Under Environment, Turtle Creek is identified as a “strength”.
- 🌲 Vision Statement Excerpt (pg. 1-7): *“...The Municipality of Monroeville is a thriving, proactive and cohesive community with unique and viable neighborhoods that access an extensive system of safe and well-maintained neighborhood parks, active recreation areas, and linear open space trails that meander through the Municipality's wooded hillsides...”*
- 🌲 Future Land Use (Map 2): The Turtle Creek Greenway is identified as “Open Space Linkages” within a residential area.

Murrysville Comprehensive Recreation, Park and Open Space Plan (2000)

In 2000, Murrysville adopted its Comprehensive Recreation, Park and Open Space Plan to help the Municipality identify the current and future needs in regards to recreation and open space. Currently, Murrysville is looking to update this plan; however, for purposes of this study, the 2000 plan was reviewed. The following bullets identify areas where the Turtle Creek Greenway was discussed in the plan or where the ideals of this plan reflect that of the Murrysville Plan:

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- ❁ Parks Inventory (pg. 1-42): Duff Park, 148-acre natural area, includes several trails, including the Funk Bikeway that runs along Turtle Creek.
- ❁ Vision Statement Excerpt (pg. 3-3): *"...We are very fortunate to have found a community so dedicated to the preservation of open space. The Municipality has identified key opportunities for the development of a greenway and open space network that will span the entire municipality. The elected officials have worked hard to put the plan into place in order to help preserve the natural resources and the rural character of our community. I am glad we chose to live in Murrysville and intend to stay here for years to come so that our family can continue to enjoy the wealth of recreational resources and the quality of life they inspire..."*

Trafford Borough Comprehensive Plan (1961)

As of 2010, Trafford Borough has not updated its 1961 comprehensive plan, nor does it have a comprehensive parks and recreation plan. The Borough was a part of the Saltsburg to Trafford Trail Feasibility Study and supports the Turtle Creek Greenway Project.

Section B > Defining the Boundary

As discussed earlier, the Turtle Creek Greenway has long been identified in county and local plans as a potential greenway that should be preserved. However, it is not the intent of the Greenway Plan to discourage growth in areas well-suited for development; rather to preserve the unique features found within the corridor and ultimately, open it to public use. Therefore, in order to move forward with implementation, a project boundary needed to be clearly defined.

Step 1: Identify Beginning and End Points

At the onset of this project, the Regional Trail Corporation in conjunction with Westmoreland County Parks and Recreation loosely identified the project area as encompassing Turtle Creek between B-Y Park in Trafford and Duff Park in Murrysville. Ultimately, it was decided to extend the boundary to include the Penn Forest Football Club land near the Westinghouse Complex as there may be long-term potential to connect the Westmoreland Heritage Trail with the larger trail network in Allegheny County via the Trafford Bridge along SR 130.

Step 2: Follow Turtle Creek Stream/Turtle Creek Industrial Railroad

The Turtle Creek stream and the Turtle Creek Industrial Railroad (TCIRR) are the base for the Greenway. For the most part, the Railroad follows the stream and ultimately offers the most realistic opportunity to provide public access within the Greenway. However, it should be noted that at this time, the Turtle Creek Industrial Railroad is active and is in no way open to the public.

Step 3: Encompass the Turtle Creek Floodplain

For the most part, Turtle Creek's floodplain is included within the Greenway, as development is not permitted. The four municipalities in the Turtle Creek Greenway, along with those downstream, are forced to spend millions of dollars to address flood damages for every severe flooding episode and tens of thousands for every modest flooding event when roads, bridges, and other municipal infrastructure are affected. In addition, the landowners are forced to spend private dollars to address direct property damage and often see decreased property values as a result. The floodplain and wetlands in the corridor provide natural stormwater management as well as protection against flooding.

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Step 4: Connect to Parks

It was very important that the Greenway provide a “connection” and tie into local municipal parks and public spaces. The following parklands were thereby identified as being important to include within the Greenway boundary:

-  Penn Forest Football Club (leased) in Trafford Borough
-  B-Y Park in Trafford Borough
-  Beechwood Park in Monroeville
-  Heritage Park in Monroeville
-  Valley Park in Monroeville
-  Bel Aire Pool
-  Alpine Park in Monroeville
-  Duff Park in Murrysville
-  Pleasant Valley Park in Murrysville

Note: Plan maps show Kelvington Park as the proposed Monroeville Inter-Park Trail System identifies a connection from the Greenway to Kelvington Park. However, the Project Boundary does not include a direct connection to this park.

Step 5: Follow 1,000 Foot Contours

As an initial starting point, 1,000 foot contours were used as a boundary following along the Turtle Creek stream and the TCIRR Corridor. Much of the corridor between Trafford and Duff Park is a gorge, with very steep slopes found alongside the creek and/or railroad.

Step 6: Finalize the Boundary

The boundary was adjusted to follow tax parcel boundaries, where deemed appropriate, to affect as few parcels as possible. In addition, the boundary was adjusted to ensure that if a trail would be developed in the Greenway, the view from the trail is one of the natural landscape and not of development. The final project boundary is shown on **Map 4.1: Project Location**.

Section C > Public Participation

As a greenway project, the scope spans different disciplines including recreation, conservation, restoration, and education. There are numerous organizations involved in the project and will be needed for successful implementation.

The Regional Trail Corporation is a non-profit organization that was formed in 1991 as a partnership between Allegheny County, Fayette County, and Westmoreland County to construct the Youghiogheny River Trail. Since then, the RTC has expanded its mission “to acquire, develop, and manage appropriate trail corridors in southwestern Pennsylvania and to create and promote opportunities for recreation, tourism, economic development, and historic and environment conservation.”

In conjunction with the RTC, the Turtle Creek Watershed Association (TCWA) partnered on this project in order to address the conservation aspects of the Greenway. The TCWA was incorporated in 1970, and received its non-profit status in 1971. It is the mission of the TCWA to address watershed issues and improve water quality in the 147 square-mile area of eastern Allegheny and northwestern Westmoreland Counties drained by Turtle Creek and its eleven major tributaries. In particular, key issues that the TCWA tries to address include abandoned mine drainage remediation, streambank stabilization, multi-municipal stormwater management and flood prevention, municipal assistance with MS4 implementation, and water quality monitoring (<http://tcwa.org>).

As stated earlier, the Turtle Creek Greenway spans four municipalities: Trafford Borough, Penn Township, the Municipality of Monroeville, and the Municipality of Murrysville. Municipal involvement and support is vital to the overall success of implementation. Many of the recommendations included in this plan are the responsibility of the municipality to implement.

In addition, the Greenway spans Allegheny County as well as Westmoreland County. Both counties have been integral in the development of the Turtle Creek Greenway project and will be relied on for assistance and support for implementation projects. Westmoreland County Parks and Recreation has taken the lead on trail development. If the Westmoreland Heritage Trail is to be extended through the Turtle Creek Greenway, the Westmoreland County Parks and Recreation Department will be a key player.

Steering Committee

A Project Steering Committee was pulled together comprised of representatives from each of the counties and municipalities as well as local organizations that have a vested interest in the Greenways Plan.

-  Malcolm Sias—Westmoreland County Parks and Recreation and the RTC
-  Diane Selvaggio—Turtle Creek Watershed Association
-  John Albertson—Representative John Pallone
-  Betsy Aiken—Murrysville Parks & Recreation Commission and the Westmoreland Land Trust
-  John Balicki—Parks and Recreation Consultant
-  Dr. Elisa Beck—Sustainable Monroeville
-  Mark Bowers—Environmental Consultant
-  Bruce Corna, Jr—Westmoreland Land Trust
-  Tom Dittman, Murrysville Parks & Recreation Commission and the Westmoreland Heritage Trail (WHT)
-  Chris Droste—Westmoreland County Conservation District
-  Chuck Duritsa—Westmoreland Land Trust
-  Christine Goswick—Allegheny County Planning
-  Alex Graziani—Smart Growth Partnership of Westmoreland County
-  Noel Grimm—Westmoreland Heritage Trail
-  Greg Holesh—Environmental Consultant
-  Amy Myers—Allegheny County Conservation District
-  Rob Hunter—Murrysville Recreation Director
-  Jim Kress—Turtle Creek Watershed Association
-  Bruce Light—Penn Township Manager
-  Rey Peduzzi—Trafford Borough
-  Les Race—Trafford Borough
-  Jesse Jon Salenskey—Bruce Construction and the WCD
-  John Turack—Penn State Cooperative Extension/Smart Growth Partnership of Westmoreland County
-  Marylyn Devlin—Sustainable Monroeville

The Committee met on a bi-monthly basis between May 2009 and July 2010 and was responsible for collecting data, providing review and feedback, assisting in the identification of needs/concerns as well as the development of recommendations. The Steering Committee also attended a field view on June 24, 2010 of the Greenway to assist in identifying potential opportunities and issues. Summaries of the meetings have been collected and are provided in **Appendix C: Steering Committee Meeting Summaries**.



Stakeholders

With assistance from the Project Steering Committee, over 40 stakeholders were identified and interviewed through the planning process. The stakeholders represented additional organizations who may not have been represented on the Steering Committee. Stakeholders were sent an initial survey and received follow-up phone calls to gather additional recommendations. Their responses have been assembled and are provided in **Appendix D: Stakeholder Interviews**.

Public Meetings

Three meetings were held during the planning process to gather input and feedback from the general public on the Turtle Creek Greenway Plan. The sign-in sheets, flyers, and summaries for the meetings are included in **Appendix E: Public Meetings**.

Public Meeting #1—February 2010

The first meeting was held on February 24, 2010 at the Murrysville Community Building. The meeting consisted of a presentation followed by a question/answer session. Attendees were also asked to review mapping of the Greenway and provide input related to recreation and conservation opportunities.

Public Meeting #2—June 2010

The second public meeting was held on June 17, 2010 at B-Y Park in Trafford. The meeting was designed as a public educational walk. Attendees gathered at the



Turtle Creek Greenway Plan

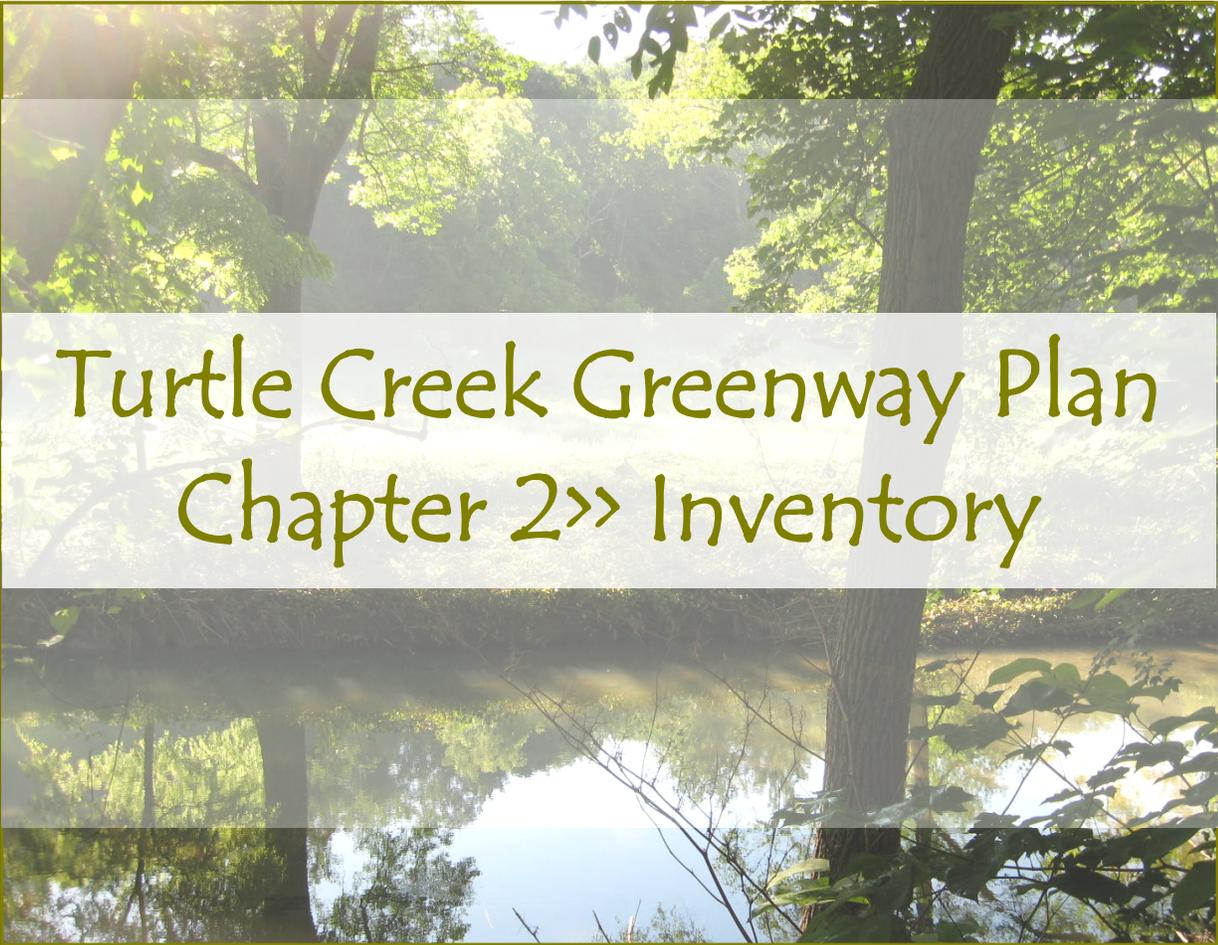


park for a cookout and project overview, followed by a 2.3 mile educational walk along the railroad in the Greenway from Saunders Station Road back to B-Y Park, and ended with a wrap-up where attendees were asked to complete a survey. The educational walk included stations where speakers presented on topics such as the importance and benefits of greenway conservation, streambank stabilization, erosion and sedimentation control, stormwater management, and invasive plant species.

The meeting was filmed by a local volunteer and a short, 20-minute video was developed to help promote the Greenway and educate residents about the value of conservation.

Public Meeting #3—January 27, 2011

A final meeting was held to present the draft plan and priority recommendations to the public on January 27, 2011 at 7:00pm in the Murrysville Council Chambers. The meeting consisted of a presentation that summarized the planning process and highlighted the high priority management strategies recommended by the plan. Approximately 13 people were in attendance and the meeting was broadcast live on the local Comcast Cable channel 19, which is available in Murrysville and Export along with parts of Delmont and Washington Township and is also available to watch online.



Turtle Creek Greenway Plan Chapter 2»» Inventory

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Section A › Manmade Resources

The Turtle Creek Greenway spans four municipalities: Trafford Borough, Penn Township, the Municipality of Monroeville and the Municipality of Murrysville.

Population

The four municipalities comprise a very urban area, with a population of 71,048 per the 2000 Census, as follows:

- 🌿 Trafford Borough – 3,236
- 🌿 Penn Township – 19,591
- 🌿 Monroeville – 29,349
- 🌿 Murrysville – 18,872

What is a manmade resource?

-A manmade resource includes anything that does not exist naturally. For purposes of this plan, manmade resources includes population, land use, parks and recreation, historic and cultural resources, and schools.

Existing Land Use

The Turtle Creek Greenway primarily consists of undeveloped land full of steep slopes, wetlands, floodplains, and open space. However, some of the parcels are classified as other land uses based on County Tax Assessment data and field views, as shown on **Map 2.1: Land Use**.

Agriculture

There are six parcels classified as agriculture. Five parcels are located within Murrysville and one is located in Penn Township. The parcel in Penn Township is approximately 65 acres and is enrolled as part of an Agricultural Security Area (ASA). ASAs are lands enrolled in a statewide designation program that was established to promote and conserve agricultural land as well as the agricultural lifestyle and heritage across the Commonwealth. Local municipalities work in cooperation with land owners to secure the land and the right to farm. An ASA can be comprised of several different farms, but each farm must be 10 acres each (they do not need to be adjacent) and collectively, the ASA must meet a minimum of 250 acres. To be considered part of an ASA, the land must be viable agricultural land including pasture, woodland, and cropland. ASA properties are reviewed every seven years to validate their eligibility. One ASA, which totals more than 64 acres, is located within the project area, as shown **Map 2.1: Land Use**.

Turtle Creek Greenway Plan



Commercial

There are five parcels classified as commercial and are located sporadically throughout the Greenway. Within Trafford and Murrysville, the Greenway Corridor is very narrow, due to the developed nature of the adjacent parcels, many of which are commercial in nature.

Industrial

There are four parcels classified as industrial (mini-storage facilities, etc.), located in Murrysville and Monroeville.

Public

There are 21 parcels classified as public, meaning that the property is owned by one of the municipalities. Each of the municipalities except for Penn Township owns public parkland within the Greenway.



Right-of-Way

The Turtle Creek Greenway encompasses the Turtle Creek Industrial Railroad (TCKR) corridor, which is an active rail line; in addition, a section in Trafford Borough is owned and operated by Norfolk Southern. The Greenway also spans the Pennsylvania Turnpike/Interstate 76 and as such, there are a number of parcels that are owned by the Pennsylvania Turnpike Commission as right-of-way.

Utility

There are five parcels classified as Utility, most of which are part of the Franklin Township Sanitary Authority's sewage treatment plant.

Single Family Residential

There are 27 parcels classified as single family residential within the Greenway. These are parcels that contain a single family home, whereby the Greenway only encompasses the undeveloped portion of the lot.

Vacant Land

There are 23 parcels classified as vacant land, which includes all land that is currently undeveloped. One of these parcels is owned by the Regional Trail Corporation (RTC), alongside Saunders Station Road in Monroeville, and provides public access to the Greenway.



Parks and Recreation

As mentioned earlier, each of the municipalities owns and operates public parks within the Greenway. The following is a description of each of the public recreation areas that can be found within the Turtle Creek Greenway, as shown on **Map 2.2: Parks and Recreation**.

Penn Forest Football Club (Trafford)

The Penn Forest Football Club is currently leasing the recreational fields, owned by CBS Corporation (formerly Westinghouse) in Trafford Borough. The multi-use recreational fields are located under the Westinghouse Bridge that carries S.R. 130 over Turtle Creek into Trafford.

B-Y Park (Trafford)

At almost 21 acres, Trafford's B-Y Park has been renovated into one of the showcase parks in the area. The Park is located on S.R. 130 with the main entrance across the street from the Christian Life Church. The beautiful B-Y pond is the centerpiece of the park and provides patrons with fishing and ice skating opportunities. Three pavilions are located within the park; each one contains picnic tables and has electric and water available for park visitors. The pavilions are managed by Trafford Borough and are available for rent during spring and summer months. Other amenities include picnic tables, barbecue pits, and all types of outdoor fun. As a volunteer recycling community, the Borough offers recycling containers for paper and cans at the back entrance of the park along Forbes Road (Trafford Borough, 2010).



Turtle Creek Greenway Plan

Kelvington Park (Monroeville)

While not within the Greenway's boundary, Kelvington Park is located just north of the boundary in Monroeville. As Monroeville's Inter-Park Trail System shows proposed trail connections between the Greenway and the Park, it is included on the maps in this plan. Kelvington is a 48-acre conservation park, which features baseball fields as well as a hiking trail.



Unnamed Parkland (Monroeville)

The Municipality of Monroeville owns a piece of property within the Greenway that is unnamed parkland.

Beechwood Park (Monroeville)

Located behind Ramsey School on Ramsey Road in Monroeville, Beechwood Park is an 83-acre community park that offers soccer fields, basketball courts, tennis courts, baseball fields, and a playground and picnic area.

Beechwood also features a hiking trail through wooded forests.

Bel Aire Pool (Monroeville)

Bel Aire Pool is located near Valley Park in Monroeville off Abers Creek Road. A special use park, Bel Aire is 16 acres and facilities include basketball courts, pavilions, playlots, a community pool, and volleyball courts.

Heritage Park (Monroeville)

Heritage Park is a 155-acre park located off Saunders Station Road on Cypress Drive in the Heritage Plan. A master site plan was completed for the park in 2000 as part of the Monroeville Comprehensive Recreation, Park, and Open Space Plan. A neighborhood park, Heritage Park offers basketball courts, baseball fields, tennis courts, and a playground and picnic area. Heritage Park also features a hiking trail, with access to the trail from Saunders Station Road.

Valley Park (Monroeville)

Valley Park, 17 acres, is located along Abers Creek Road in Monroeville. A special use park, facilities include a deck hockey rink, softball fields, and soccer fields.

Alpine Park (Monroeville)

Alpine Park, 69 acres, is located at the end of Altaview and Luzerne Drives in Monroeville. A neighborhood park, facilities include playgrounds, basketball courts, pavilions, softball fields, and tennis courts.



Pleasant Valley Park (Murrysville)

Pleasant Valley Park is a 262-acre park that features woodlands, open fields, hilltops, and remote valleys. Located in Murrysville off Pleasant Valley Road, the park is a new addition to Murrysville park system. Murrysville purchased the parkland in 1999 to meet the growing recreational needs of the community. Due to its topography, the park was not developed as an active park, but rather as a passive open area. A parking lot was constructed in 2005 and a network of trails is proposed, with a 2.5 mile section currently open for public use. While there has been discussion in the past about selling the land, Murrysville residents have expressed a desire to maintain the land as a passive recreation area. Currently, Westmoreland County and Murrysville are in the process of trying to acquire additional property that would connect Pleasant Valley Park with Duff Park and expand its greenway and open space network (see [Figure 2-1](#)).

Duff Park (Murrysville)

Duff Park is a 148-acre hilly and heavily wooded, natural area located in Murrysville and serves as the ending point for the Turtle Creek Greenway. The park parallels Route 22, with its main entrance located off of School Road, approximately 1,000 feet south of the intersection with Route 22. Known for its old growth deciduous forest and for its variety and numbers of native wildflowers, Duff Park was recently designated by DCNR as a Wild Plant Sanctuary.

Numerous trails offer park goers varying trail difficulties from a relaxing walk to a strenuous workout. For example, the Funk Trail provides a flat walking and biking route



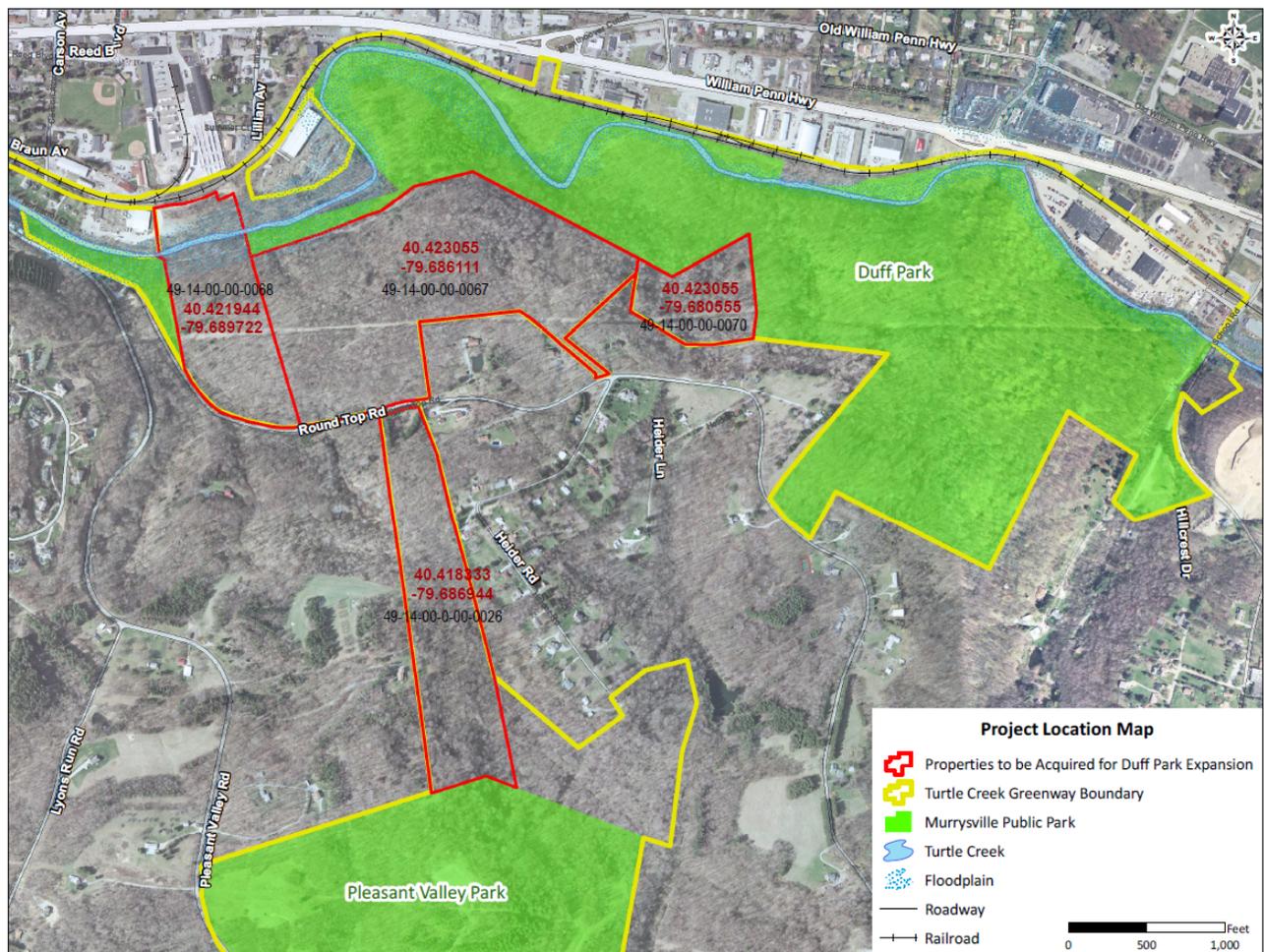
Turtle Creek Greenway Plan



along Turtle Creek for about 1.5 miles and then goes up an incline until it reaches Round Top Road. Connecting trails provide the walker or biker with easy walking or strenuous climbs depending on which one is selected. A pavilion provides a quiet site for a picnic, or it may be rented for group activities (Municipality of Murrysville, 2010).

Westmoreland County is planning to expand Duff Park through acquisition of additional parcels. In 2010, the County was approved for a grant through DCNR for acquisition funding. The proposed expansion is approximately 100 acres over four (4) separate parcels. The County is hoping to use the value of the one (1) donated parcel to provide matching funds for the other three (3). **Figure 2-1** shows the proposed expansion and the parcels to be acquired.

Figure 2-1: Proposed Duff Park Expansion



Historic and Cultural Resources

There are no eligible or listed historic resources located within the Turtle Creek Greenway.

Schools

The Greenway crosses through three school districts: Penn-Trafford, Franklin Regional, and Gateway.

Penn-Trafford School District

Penn-Trafford School District serves Penn Township and Trafford Borough (in addition to Penn Borough and Manor Borough) and had an enrollment of 4,370 in 2008-2009. Penn-Trafford includes one high school (Penn-Trafford High School), two middle schools (Penn Middle and Trafford Middle), and six elementary schools (McCullough, Level Green, Sunrise Estates, Trafford, Harrison P, and Ryan Hunton).

Franklin Regional School District

Franklin Regional School District serves Murrysville (in addition to Delmont and Export Boroughs) and had an enrollment of 3,728 in 2008-2009. Franklin Regional includes one high school (Franklin Regional High School), one middle school (Franklin Regional Middle School), and three elementary schools (Heritage, Newlonsburg, and Sloan). All of the schools are located at the campus in Murrysville at the intersection of School Road and Old William Penn Highway except for Sloan Elementary.

Gateway School District

Gateway School District serves Monroeville (as well as Pitcairn Borough) and had an enrollment of 4,067 in 2008-2009. Gateway has one high school (Gateway High School), two middle schools (Moss Side Middle School for grades 5 and 6 and Gateway Middle School for grades 7 and 8), and five elementary schools (Evergreen, Dr. Cleveland Steward, Jr., Pitcairn, Ramsey, and University Park). In 2007, Gateway reconstructed its high school complex, which also includes the Monroeville Public Library.

Future Land Use

Allegheny County, Westmoreland County, Monroeville, Murrysville and Penn Township all have adopted comprehensive plans, as well as comprehensive parks and recreation plans, which identify the need to preserve the Turtle Creek Greenway as open space and for public recreation. However, comprehensive plans are not enough to ensure that this Greenway remains undisturbed for future generations.

Penn Township and the Municipality of Murrysville experienced the largest population increases in Westmoreland County between 1990 and 2000 as well as over 700 new housing units, each. While Trafford Borough experienced a slight population decline, they saw an increase in homes as well. Monroeville had a slight population increase between 1990 and 2000 (less than 1%) but saw an increase of 515 housing units. All three Westmoreland County municipalities are located in the Urban/Suburban Development Triangle (Westmoreland County Comprehensive Plan).

The development pressure within these municipalities is likely to continue, despite the economic downturn. With so much of the Turtle Creek Greenway classified as vacant land, there is a real development threat to the Greenway, mostly as a result of new residential development.

Section B › Natural Resources

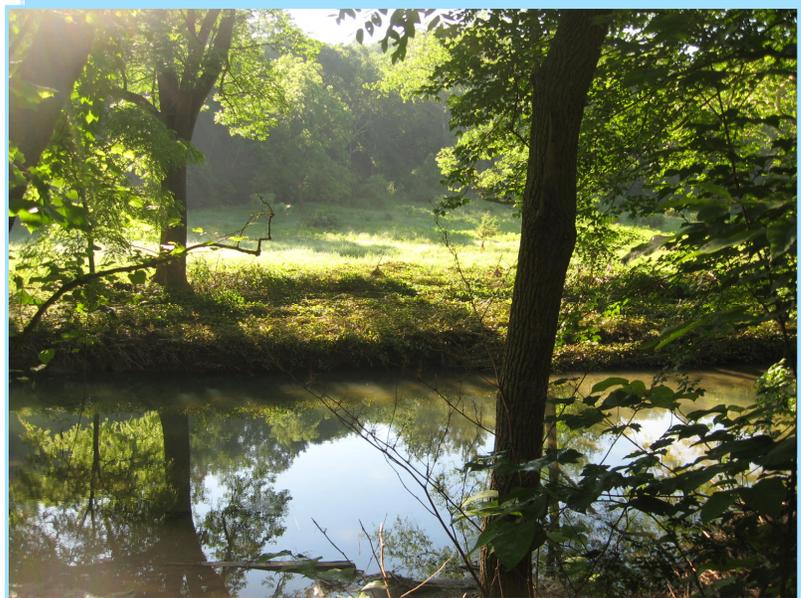
Water Resources

Precipitation is water that falls from the sky as rain or snow. The amount, duration, and location of precipitation across the watershed strongly influences the movement of the water. While much of the precipitation evaporates directly back into the atmosphere, some infiltrates the soil or flows over the earth's surface as runoff.

The amount and rate of infiltration depends upon vegetation, land cover, texture and porosity of the soil, steepness of the slopes, and intensity and duration of the precipitation event. Upon infiltrating into the soil, the subsurface water is either absorbed by the roots of vegetation or it continues to move and becomes part of the groundwater system.

The water that is absorbed by roots travels through the plant and transpires, which cools the air as it becomes available for condensation and cloud formation. This amount is not insignificant as the average mature shade tree releases between 34 and 70 gallons of water each warm weather day. This capability to remove subsurface water is useful when planning for stormwater infiltration because an area planted with trees or other vegetation will be able to accommodate more stormwater volume than one without trees—efficiently putting the water back into the atmosphere.

The precipitation that is not absorbed by plant roots percolates through the soil and fills the porous rock layers beneath the earth's surface, becoming an integral part of recharging the groundwater supply. The differing geologies of watersheds determines the volume of the groundwater that is stored; this stored water serves to recharge and supply well, seeps, springs, streams, and rivers.

***What are natural resources?***

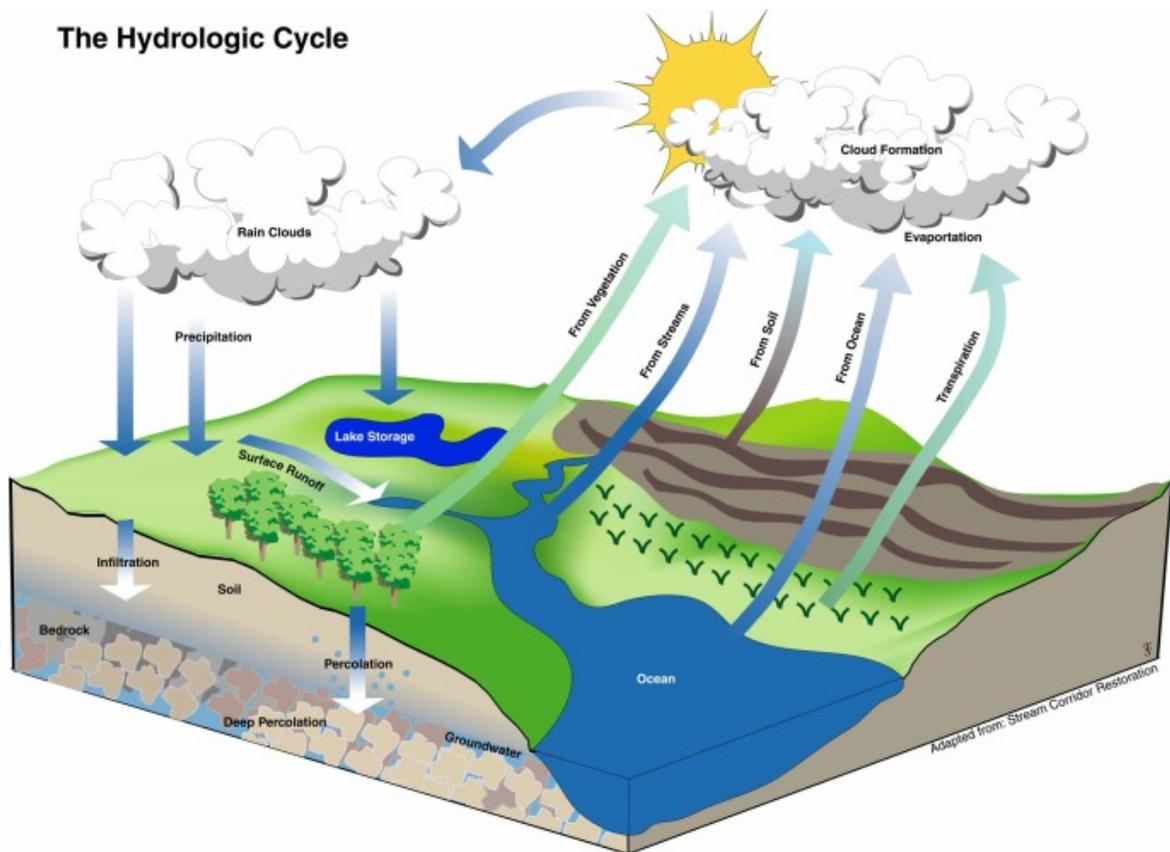
-Natural resources occur naturally within environments that exist relatively undisturbed by mankind, in a natural form. For purposes of this plan, they include water resources, natural areas, geology, soil, steep slopes and landslide prone areas, and ridge tops and scenic view sheds.

Turtle Creek Greenway Plan

The movement of water through a watershed strongly depends upon the precipitation in the region and the conditions across the landscape. Precipitation occurs year round within the humid continental region. According to the Natural Resource Conservation Service (NRCS), for Pittsburgh, the total annual precipitation is 37.8 inches with a yearly winter average of 17.13 inches and a yearly summer average of 20.0 inches (NRCS, 2010). There are exceptions, however, such as the very wet years of 2003–2004 and the drought years of 2001–2002.

Water resources are continuously recycled and reused (Figure 2-2) in the natural environment, sustaining the natural systems on and under the earth's surface (NRCS, 1998). In turn, this same water is a vital resource for humans for drinking, recreation, use in industry and growing crops.

Figure 2-2: The Hydrologic Cycle

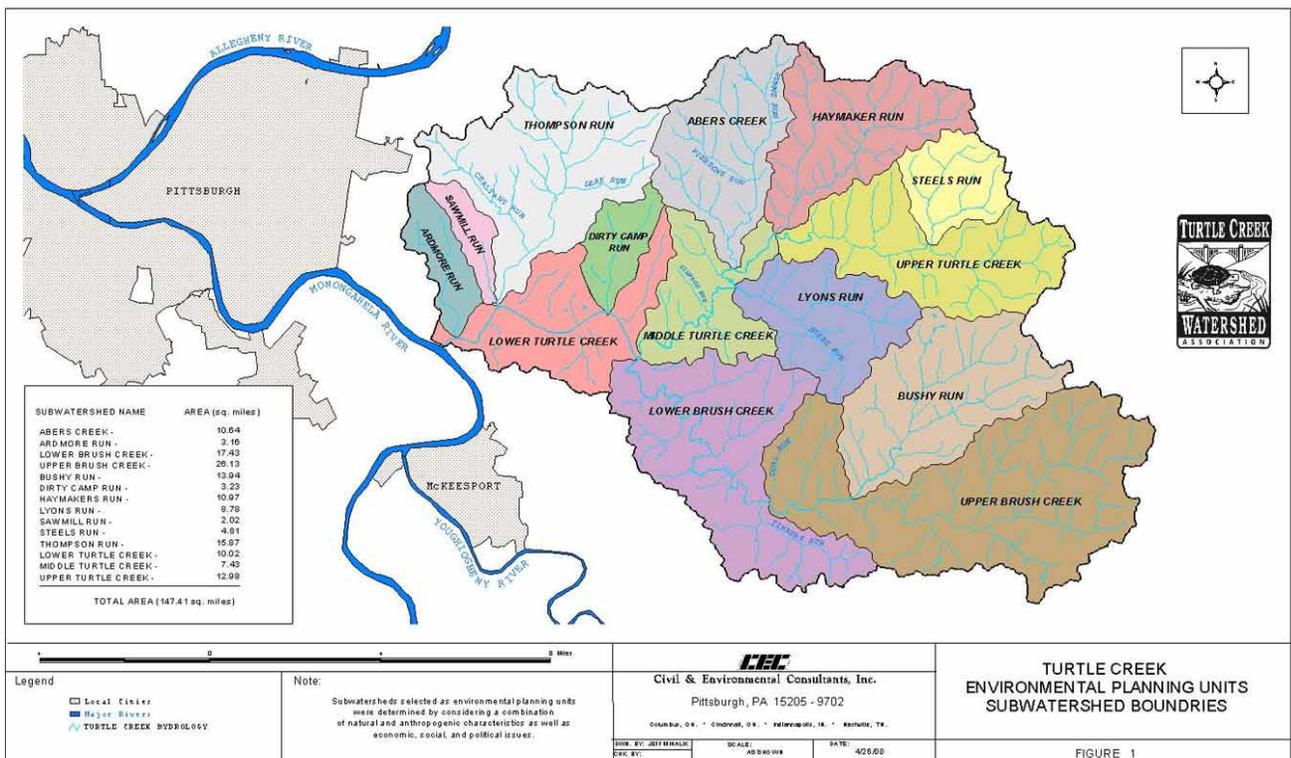


Watersheds

A watershed may be defined by connecting points highest in elevation (ridgetops) but it is made of the LAND within that boundary. What happens on that land and in the air above it is reflected in the water resources impacted by the land and air. Every river, stream, and tributary has an individual watershed, which then form larger watersheds. The project area is located within the Turtle Creek Watershed (**Figure 2-3**), which encompasses 147 square miles of drainage area and 33 communities from just east of Pittsburgh to the western edge of Greensburg (TCWA, 2010). The Turtle Creek Watershed is a part of the Monongahela River Watershed, the larger Ohio River Watershed, the Mississippi River Watershed, and ultimately the Gulf of Mexico Watershed. Thus, what happens in the Greenway affects the Gulf of Mexico.

In addition, the Turtle Creek Watershed is divided into 14 subwatersheds. Although the watershed is comprised of many waterways, the main watercourse through the project area is Turtle Creek, which flows through the center of the Turtle Creek Watershed from the east and empties into the Monongahela River. Thus, the Turtle Creek Greenway project area falls mostly within the Middle and Upper Turtle Creek Subwatersheds, with very small sections within the subwatersheds of Haymaker Run, Abers Creek, Lyons Run, Lower Turtle Creek, and Lower Brush Creek.

Figure 2-3: Turtle Creek Watershed Map



Turtle Creek Greenway Plan

The Middle Turtle Creek subwatershed contains 15.7 miles of streams and drains approximately 7.43 square miles of area within the municipalities of Trafford, Penn Township, Monroeville, and Murrysville. In 2001, the Middle Turtle Creek subwatershed had an impervious cover of 16.2% and was classified as an impacted stream (TCWRCP, 2002). An impacted stream is one that “possesses a watershed impervious cover ranging from 11 to 25 percent and shows clear signs of degradation due to watershed urbanization...stream banks become unstable...stream biodiversity declines to fair levels, with most sensitive fish and aquatic insects disappearing from the stream,” (Stormwatercenter.net, 2010).

The Upper Turtle Creek subwatershed contains 18.2 miles of streams and drains approximately 10.02 square miles within the municipalities of Delmont, Murrysville, Export, and Salem and Penn Townships. In 2001, the Upper Turtle Creek subwatershed had an impervious cover of 8.1% and was classified as a sensitive stream (TCWRCP, 2002). A sensitive stream is one that has “a watershed impervious cover of zero to 10 percent...sensitive streams are of high quality and are typified by stable channels, excellent habitat structure, good to excellent water quality, and diverse communities of both fish and aquatic insects,” (Stormwatercenter.net, 2010).

Surface Waters

Surface water is water found on the land surface such as rivers, streams, lakes, ponds, reservoirs, wetlands, seas, and oceans. Surface waters are in constant interaction with water stored below the surface in openings in rock material, called groundwater, which will be discussed later in more detail. Surface water, therefore, is influenced by the quality of the groundwater, as well as inputs from land-use practices associated with farming, forestry, mining, and other activities (Wikipedia, 2010). For purposes of this plan, we will

be discussing freshwater surface waters only—rivers, streams, lakes, ponds, reservoirs, and wetlands.



Rivers and Streams

The Pennsylvania Code, Chapter 93 sets forth water quality standards for the surface waters of Pennsylvania, including wetlands. The standards are regulated by the PA Department of Environmental Protection (PADEP) and are based upon water uses, which are to be protected and are

considered by the Department in implementing its authority under the Clean Streams Law and other statutes that authorize protection of surface water quality (Commonwealth of PA, 2010).

Streams within the project area were classified according to the following regulatory definitions, per the Clean Stream Streams Law of the Pennsylvania Code, and based on their condition at the time of fieldwork, which was conducted in the fall of 2010.

- Perennial streams exhibit defined bed and bank features, and continually transport flow throughout the year. Perennial streams generally support a wide variety of macroinvertebrate and vertebrate organisms.
 - ⇒ In the project area, Turtle Creek, Simpson Run, Lyons Run, and Abers Creek are classified as perennial streams, per USGS mapping. It should be noted; however, that due to significant erosion and deposition upstream, the channel of Simpson Run becomes full of sediment and debris, and at times, is not visible on the surface in the Greenway.
- Ephemeral streams are linear depressions or drainage ways that exhibit defined erosional features, such as defined bed and scoured banks, but only transport runoff during precipitation events and are dry throughout the remainder of the year. These streams are not capable of supporting benthic macroinvertebrates organisms.
 - ⇒ The identified ephemeral channels within the project area are a result of stormwater runoff from the surrounding uplands during precipitation events.
- Intermittent streams exhibit defined alluvial bed materials and bank features and transport flows periodically throughout the year. Intermittent streams are capable of supporting macroinvertebrate organisms during portions of their aquatic life cycle.
 - ⇒ Two intermittent channels were noted during field views along the steep slopes in the wooded area along the TCIRR right of way

Under Chapter 93, streams are assigned a protected water use. Included as sub-categorizations under the Aquatic life protected water use are Warm Water Fishes (WWF), a Cold Water Fishes (CWF), and Trout Stock Fishery (TSF). As the name warm suggests, WWF are those waters containing fish and other aquatic species indigenous to a warm water habitat; CWFs contain species indigenous to a cold water habitat; and TSF are streams that are conducive to stocking with trout by the Pennsylvania Fish and Boat Commission (PFBC) and typically contain species indigenous to a warm water habitat. Unlike WWFs and CWFs, impacts to TSF typically require coordination beyond the standard with the PFBC during permitting processes.

Turtle Creek Greenway Plan

As previously mentioned, Turtle Creek is the primary waterway within the project area (**Map 2.3: Water Resources**). According to the PADEP 25 PA Code Chapter 93 classifications, Turtle Creek from the source to the confluence with Brush Run at the western end of the project area is a TSF (Commonwealth of PA, 2010). From its confluence with Brush Run until it empties into the Monongahela River near Braddock, Turtle Creek is designated as a warm water fishery (WWF). This latter portion of Turtle Creek, however, is just outside the project area. As a TSF, Turtle Creek is protected under Pennsylvania’s Clean Streams Law of 1931 and maintained as a waterway suitable for trout survival and recreational fishing. The Pennsylvania Fish and Boat Commission (PFBC) stocks the stream with trout from February 15 to July 31 and maintains and propagates fish species and additional flora and fauna, which are indigenous to the warm water habitat.

The confluences of Simpson Run, Lyons Run, and Abers Creek with Turtle Creek are also located within the project area. Simpson Run flows southeast through Beechwood Park in Monroeville while Lyons Run flows northwest parallel to the PA Turnpike and along the border between Penn Township and Murrysville. Abers Creek flows into Turtle Creek near Valley Park along Abers Creek Road in Monroeville. These three perennial streams and the several Unnamed Tributaries (UNT) to Turtle Creek within the project area are classified and maintained as Trout Stocked Fisheries. Thus, they fall under the same protections and PFBC maintenance as Turtle Creek.

Haymaker Run, which empties into Turtle Creek west of the end of Duff Park and Steel’s Run, which hits Turtle Creek above north of Duff Park just outside of the Project Area, are high quality (HQ) CWF; the only ones in the Turtle Creek Watershed.

Lakes, Ponds, and Reservoirs

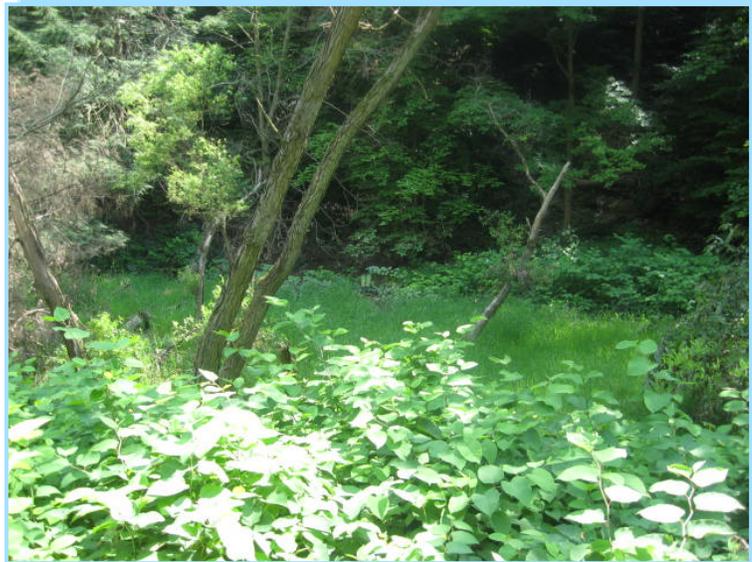
Lakes and ponds are inland bodies of water that form through natural processes, such as glacial, tectonic, and volcanic activities. In the United States, most natural lakes formed thousands of years ago when the advance of the glaciers caused great depressions to form, and over time, filled with water. There is no clear-cut difference between a lake and a pond; however, lakes generally tend to have visible waves, are deeper, have rooted plants that are only able to grow close to shore, and water temperatures vary based on the depth.

Natural lakes and ponds are uncommon and occur only in the northwestern and northeastern portions of Pennsylvania. Reservoirs, or impoundments, on the other hand, are quite common in Pennsylvania and involve the “impounding” of a stream or river by a man-made dam. Although they are not true natural forming lakes, reservoirs share many of the features of lakes and ponds and are often referred to as such. The purpose of a reservoir typically is to supply a community’s drinking water.

There are no lakes or reservoirs in the project area; however, there are four ponds: 1) underneath the bridge (Westinghouse Bridge) that carries S.R. 130 over the CBS/Westinghouse Property and Penn Forest Football Fields, 2) the pond in B-Y Park, 3) the pond near the overpass of the PA Turnpike, 4) a private pond on parcel in Monroeville near Alpine Park. See **Map 2.3: Water Resources** for their specific locations. The B-Y Park pond was also identified as a National Wetland Inventory (NWI) wetland by the U.S. Fish and Wildlife Service (USFWS). These ponds provide various functions in terms of wildlife habitat and stormwater management while the B-Y Park pond also serves as a recreational resource for local residents.

Wetlands

Wetlands are transitional areas between terrestrial and aquatic environments (Cowardin, Carter, Golet, & LaRoe, 1979) where the water table often exists at or near the surface, or where the land is inundated by water. Wetlands frequently exhibit a combination of physical and biological characteristics indicative of both terrestrial and aquatic systems. There are three (3) specific hydrological and natural features that identify a wetland system:



- 1) the presence of hydric soils,
- 2) inundated or saturated hydrologic conditions during part of the growing season, and
- 3) a predominance of hydrophytic (water-loving) vegetation (Environmental Laboratory, 1987).

Wetlands perform a myriad of functions that help to preserve and protect the health of the streams including (NRCS, 1996):

- 🌲 Streambank stabilization - wetland vegetation impedes the erosive force of floodwater and holds the soil in place;
- 🌲 Surface water storage – wetlands help to prevent flooding by temporarily storing water, allowing it to soak into the ground and/or evaporate;
- 🌲 Sub-surface water storage – wetlands serve as a reservoir for rainwater and runoff

by serving as a recharge area for water tables and aquifers;

- Nutrient cycling – wetlands enhance the decomposition of organic matter and incorporate the nutrients back into the food chain;
- Particle retention – wetlands filter out sediments and particles suspended in runoff water, thus preventing lakes, reservoirs, and other downstream water resources from being affected by sediment loading;
- Aquatic habitat – wetlands provide breeding, nesting, and feeding habitat for many species of birds, fish, and other wildlife.
- Values to society – wetlands provide opportunities for hunting, fishing, photography, education, and enjoyment.

The National Wetlands Inventory (NWI) is a U.S. Fish and Wildlife Service-maintained database developed from aerial photography that denotes those wetlands that are either visible from aerial photography or can be classified from infrared photography. The information is used by Federal, state and local agencies, academic institutions, and private industry for management, research, policy development, education and planning activities.

Map 2.3: Water Resources depicts the location of the two NWI wetlands within the project area. One NWI wetland is the pond at B-Y Park and the other is located at the current location of the Franklin Township Municipal Sanitary Authority (FTMSA). Seasonal and weather variations during the time of the NWI mapping, limits the validity of the mapping and can result in smaller, pocket wetlands not appearing in the inventory.

Field reconnaissance confirmed the location of one of the two NWI wetlands and revealed an additional ten (10) potential palustrine wetland systems within the project area. Palustrine wetlands include all “nontidal wetlands dominated by trees, shrubs, persistent emergent plants, or emergent mosses or lichens, as well as small, shallow open water ponds or potholes. Palustrine wetlands are often called swamps, marshes, potholes, bogs, or fens,” (Webster’s Dictionary, 2010). The B-Y Park pond was confirmed, while the NWI wetland identified at the location of the FTMSA was not verified. The additional wetlands identified were composed of palustrine emergent, scrub-shrub, forested, and open-water systems and were located adjacent to and/or associated with existing watercourses, mainly Turtle Creek. The assessment of these potential wetlands was only visual and did not involve an official evaluation to U.S. Army Corp of Engineer (USACE) standards. A detailed wetland inventory is needed to assess and identify the location and function of each of these potential wetlands.

Floodplains

Floodplains are the land directly adjacent to waterways, such as rivers and streams, that are subject to recurring inundation (OAS, 1991). As heavy or continuous rainfall exceeds the absorptive capacity of the land, the flow capacity of rivers and streams will be maximized causing the water to overflow the stream banks into the adjacent floodplains. Thus, floodplains function as temporary natural floodwater storage areas within a watershed. The soils of undisturbed/natural floodplains are deposited as floodwaters recede and function to absorb large amounts of water, thus mitigating flooding effects. When a stream overflows its banks, undisturbed floodplains capture the water, distribute the flow, and reduce the floodwater's velocity; thereby, reducing the erosive forces of the water on the stream channel. Another important function of floodplains is to allow streams to naturally meander. Meanders lengthen stream channels so they hold more water and reduce the downhill elevation gradient of the water flow, which reduces the kinetic energy and erosion potential.



Floodplain alterations, such as the removal of vegetation and encroachment by development, interrupt the natural relationship between the stream and its floodplain. The encroachments inhibit the normal water retention function of the floodplain, increasing the risk of significant upstream and downstream flood damage. In addition to reducing floodwaters, undisturbed floodplains exhibit a variety of ecological functions that directly benefit the health of the watershed including retention and release of groundwater, vegetative stabilization of stream banks, sediment and toxicant filtering from surrounding uplands, production of food sources, and cover and protection for wildlife.

The National Flood Insurance Act of 1968 made flood insurance available for the first time with the creation of the Federal Insurance Administration. The Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. These Acts were implemented to handle

issues of floodplain alterations and subsequent watershed flooding. The Federal Emergency Management Act (FEMA) was given the authority to administer the laws outlined in both Acts. FEMA also conducts routine flood insurance studies throughout the country to develop risk data that can be used during land use planning and floodplain management. In 1994, the Acts were expanded through the National Flood Insurance Reform Act and serve as a foundation for the Nation Floodplain Insurance Program (NFIP), which assists in community floodplain and flood insurance planning through the implementation of local floodplain management ordinances. All four municipalities within the project area participate in the NFIP and have adopted and enforce minimum NFIP floodplain management standards; however, some floodplain encroachment occurred prior to the development of these ordinances and, as a result, some business districts and residential areas experience routine flooding.

Floodplains within the project area are depicted on **Map 2.3: Water Resources**. Within the Turtle Creek Greenway, the functionality of the floodplains has been altered in several areas by commercial buildings, residential yards, and parking lots, leaving the floodplains with less vegetation and space to retain flood flows and sediment and provide habitat for riparian species. For example, the Turtle Creek Industrial Railroad is located within the floodplain of Turtle Creek at various points throughout the project area. This is most evident in areas where the streambanks directly abut the railroad corridor and wash outs during high water events have occurred. In Trafford Borough across from B-Y Park, commercial business parking lots have been constructed within the floodplain, and buffering vegetation is minimal to protect against flood waters. In Murrysville, floodplain encroachment occurs toward the eastern most extent of the project area where commercial businesses are prevalent along Route 22. Because the project boundary predominantly follows the railroad corridor rather than Turtle Creek, most floodplain encroachments within Murrysville occur directly adjacent to the Turtle Creek Greenway project area.

Riparian Areas

A riparian buffer is the land and vegetation adjacent to streams, rivers, and lakes that functions as a transitional zone between land and water to slow the velocity of surface runoff, reduce erosion, filter pollutants, absorb excess water, and provide habitat for various flora and fauna. Mowing or removing the vegetation from the riparian buffer increases flooding potential and reduces the capacity to perform crucial functions that help preserve stream health. A functioning riparian buffer can reduce flooding by retaining water in its vegetation and soil. The root system of the riparian vegetation prevents soil loss and bank failures. The woody debris and leaves from the riparian vegetation enter the stream and break down into the nutrients and organic matter utilized by aquatic organisms, such as macroinvertebrates and fish. The nutrients and organic matter provide much of the initial energy for the stream system, ultimately supporting the

aquatic organisms downstream (NCSU, 2010). Other advantages of riparian buffers include the ability of native vegetation along the banks to bend in high water and directly cover the banks, thus reducing erosion. Streamside trees and shrubs provide shade that reduces water temperatures. Cooler water holds more dissolved oxygen, reducing stress upon aquatic organisms, and that improves fishing. This is vital as much of Turtle Creek in the Greenway being stocked with trout that need cooler waters and higher dissolved oxygen levels.

The biggest threats to riparian areas in the project area are stormwater runoff, flooding, erosion and sedimentation, and invasive species. Flooding is a significant problem within the project area. During heavy rainfalls, stormwater runoff from the adjacent uplands is channeled through the numerous valleys and ephemeral channels into the Turtle Creek stream valley. The funneling of the water causes erosion and carries sediment down the hillsides into Turtle Creek. The addition of the upland runoff exacerbates already heightened water levels of the creek, creating erosive forces that wear away at the stream's banks. Some sediment is deposited along the low-lying floodplains, burying native species and allowing for opportunistic invasive plant species, such as Japanese knotweed (*Polygonum cuspidatum*) to thrive.



Groundwater

Groundwater is water stored beneath the land surface in pores and openings of soil and rock formations in the saturated zone. Commonly referred to as separate entities, groundwater and surface water are constantly interchanging as groundwater emerges to the surface in valleys and seeps and surface water percolates downward into underground storage areas of rock and soil, called aquifers. As a result of this exchange, the quality of streams and lakes can directly impact the quality of groundwater (CTIC, 2010).

Topography is the primary factor that dictates the pattern of water movement in a region. Water typically moves from areas of high elevation to lower elevation and from shallow to deeper aquifers. Water levels are most affected by precipitation patterns, with levels generally highest in early spring and fall and lowest during late spring, summer, and early winter.

In Pennsylvania, sources of groundwater contamination include pesticide application, above ground and under ground storage tanks, surface impoundments, landfills, hazardous waste sites, industrial facilities, mining and mine drainage, pipelines, sewer lines, and spills (Frey, 1996). All of these sources contain hazardous chemical compounds that can leach into the soil and subsequently contaminate groundwater supplies via infiltration and fluctuations in water table depths. \

In areas where groundwater is the source of drinking water, groundwater contamination can often impact public water supply. Within Allegheny County, drinking water supplies are primarily from surface water sources; only 10% comes from groundwater (ACED, 2008). Turtle Creek water is part of what Pennsylvania American Water takes in at their Hayes Mine intake on the Monongahela River. In Monroeville, the public water supply is provided by the Monroeville Water Authority, who obtains their water from local surface water.

In Westmoreland County, four (4) of the eight (8) water suppliers obtain at least part of their water from groundwater supplies (WCCP, 2005). Trafford's water is supplied by Penn-Wilkesburg Joint Water Authority, which obtains their water from the Allegheny River (Fluoride Now, 2010). The Westmoreland County Municipal Authority also obtains their water from local surface waters and provides water service to the Municipality of Murrysville and Penn Township (Penn Twp, 2010). In addition, private wells provide water in areas that are not served by public systems.

Natural Areas and Habitat

According to the PA Code, a natural area is an area of unique scenic, historic, geologic, or ecological value and of sufficient size and character for its maintenance to occur naturally through physical and biological processes, usually without direct human intervention (Commonwealth of PA, 2010). For purposes of this report, natural areas will include Natural Heritage Inventory sites, Important Bird Areas, and important habitats for species of conservation concern, including threatened and endangered species.

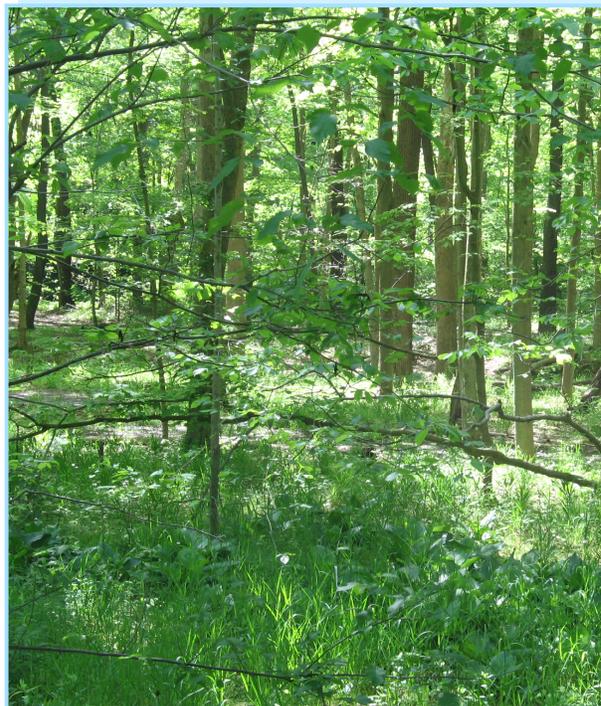
County Natural Heritage Inventory (NHI)

The Natural Heritage Inventories (NHI) for Allegheny and Westmoreland Counties, conducted and published by the Western Pennsylvania Conservancy (WPC) in 1994 and 1998 respectively, identify and map the most significant natural heritage areas, which include natural areas (NA), biological diversity areas (BDA), dedicated areas (DA), landscape conservation areas (LCA), other heritage areas (OHA) and managed lands. More specifically, the study identified plant and animal species and communities that are unique or uncommon in each county. The NHI also covered areas that are important for general wildlife habitat, education, and scientific study (WPC, 1994).

The NHI for Westmoreland County did not reveal any significant natural heritage areas within the project area (WPC, 1998). According to the NHI of Allegheny County, the Turtle Creek Greenway project area contains one (1) BDA—the Simpson Run BDA. Locations of the NHI areas are shown on **Map 2.4: Natural Areas**.

Simpson Run BDA

A BDA is an area of land that contains and supports state or federally protected plant or animal species of special concern, exemplary natural communities, or exceptional native biodiversity. This BDA has been documented as a special species habitat, which is located within the Mesic Central Forest Community on the lower southwestern slopes of the valley. This forest community is located along a northern tributary to Turtle Creek, Simpson Run, and qualifies this BDA as a high value site. Simpson Run enters Turtle Creek just downstream of the



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Saunders Station Road crossing. As a Mesic Central forest community, the canopy is characterized by tulip poplar (*Liriodendron tulipifera*), sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), and Eastern hemlock (*Tsuga canadensis*). The understory is predominantly saplings of the aforementioned trees, as well as black birch (*Betula lenta*), elm (*Ulmus sp.*), and white ash (*Fraxinus americana*).



As such, recommended conservation measures for this area include efforts to protect the unnamed identified state or federally protected plant species of special concern and habitat by assuring that unnecessary clearing does not occur in the upland and that erosion resulting from development is kept to a minimum. All Terrain Vehicles (ATVs) are a problem in the valley for the plants, natural forest community, and the stream; thus, to protect these natural resources, elimination of

ATVs in this valley is recommended. Logging in the forest at this site would be detrimental to the identified special species since light, soil, and moisture changes, as well as physical damage to plants would result. Further development within the BDA boundaries could result in further habitat loss for the special species, increased erosion, and the general need for infrastructure to accommodate development. Protection of the species could best be achieved if the forest is permitted to revert to a mature community on its own and disturbance is kept to a minimum (WPC, 1994). In order to protect this area, coordination with the property owners within the BDA would be necessary as the majority of the parcels within this area are privately owned.

Important Bird Areas (IBA)

Habitat loss and fragmentation are the most serious threats facing birds in Pennsylvania. To help curb these threats and reverse declining bird populations, the Important Bird Area (IBA) program was established by Birdlife International in Europe. While there are not any identified IBAs currently in the Turtle Creek Greenway project area, it is worth noting that the program helps to promote proactive habitat conservation, benefiting birds and biodiversity, by focusing attention on the most essential and vulnerable areas. The IBA program identifies large or small, public or private tracts of land that are part of a global

network of places recognized for their outstanding value to bird conservation. Even though it is a voluntary program, each IBA has to meet a set of objective criteria. The IBA program is carried out in the United States by the National Audubon Society.

Wildlife Habitat

The project area of the Turtle Creek Greenway Plan is 1,208 acres and comprised mostly of forested areas, but also floodplain, wetlands, streams, and ponds. All of which provide valuable habitat for wildlife as well as food, water, and shelter. The Turtle Creek Greenway project area is located within the Pittsburgh Plateau Ecoregion. Ecoregions are large contiguous tracts of land where local ecosystems reoccur more or less throughout the region in a predictable manner. Ecoregions provide a geographic framework for assessment, inventory, and overall management of environmental resources. To identify these areas, the Environmental Protection Agency (EPA) has developed ecoregion maps of North America based on patterns of abiotic and biotic factors that shape ecosystems, such as geology, physiography, climate, hydrology, soils, vegetation, wildlife, and land use (EPA, 2000).

The Pittsburgh Plateau Ecoregion, according to DCNR habitat quality studies (2001), ranked “poor” in terms of wildlife habitat (**Figure 2-4**). Overall for the ecoregion, stream and wetland quality were noted as degraded and forests are relatively fragmented. Grassland habitat was well represented. Even though only a moderate increase in development was noted, road densities for this ecoregion were some of the highest in the state. High deer abundance is an issue that is impairing forest quality and regeneration. Recommendations for this ecoregion include habitat conservation priorities, such as maintaining or improving grassland habitats, reclaiming surface mines as wildlife enhancement areas, limiting forest fragmentation, and providing connectivity along reforested riparian zones. Stream and water quality improvement were also recommended as a major focus to protect the highly diverse fish and amphibian fauna (DCNR, 2001).

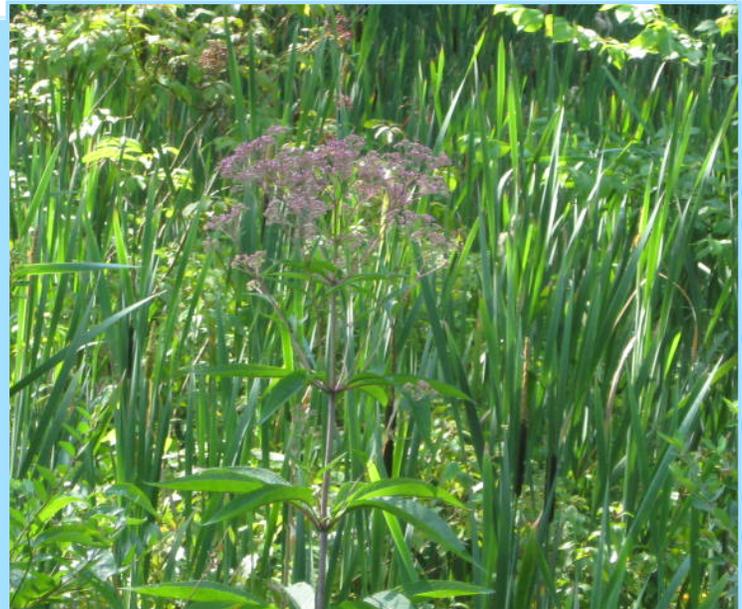
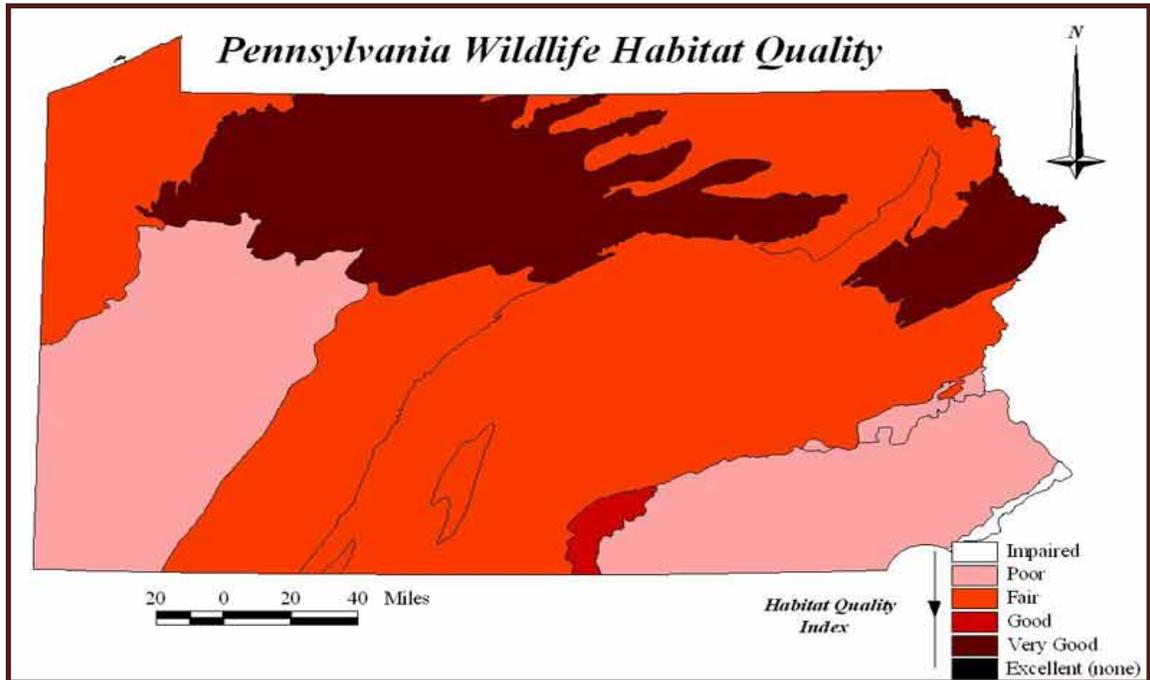


Figure 2-4: Pennsylvania Wildlife Habitat Quality



Forests and Woodlands

The Pittsburgh Plateau Ecoregion has historically been described as mostly Appalachian Oak Forest and also Mixed Mesophytic Forest (USFS, 1994). These forests are characterized by mixed oak forest, oak-hickory-chestnut forest, oak-pine forest, hemlock forest, floodplain forest, and swamp forest. Due to a history of timbering within the state, the current forests are second and third growth forests. During field reconnaissance, the predominant tree species noted were sugar maple, red maple, sycamore, black cherry, black walnut, tulip poplar, and hickory.

Today, forested areas account for approximately one-third of Allegheny County's landscape and provide many benefits, including slope stability, aesthetic value, habitat, recreation, stormwater runoff prevention, and water quality protection. Tree cover can significantly reduce both the quantity and velocity of surface runoff into local waterways, reducing sediment loads and flooding as well as improving water quality by trapping excessive nutrients and sediments. Tree cover within riparian areas shades waterways and wetlands, thereby maintaining a lower water temperature, which is important to aquatic ecosystems and habitats (ACED, 2008).

In Westmoreland County, forests cover approximately 331,700 acres. The Penn State School of Forest Resources estimates this forest land is mostly privately owned by

approximately 12,500 landowners and this standing timber is worth an estimated \$300 million. The county's forests are mainly deciduous with some coniferous cover. The primary species found are red oak, black oak, white oak, yellow poplar, sugar maple, beech, hemlock, white pine, ash, black cherry, and red maple (WCCP, 2005).



Forested habitat for wildlife is becoming more fragmented and impacted due to human-induced impacts such as development, encroachment, and pollution. Like other semi-urban areas, the project area is also threatened by these factors. Interstate 376 and State Route 22 provide easy access to Pittsburgh and have helped to encourage development. Since the early 1990's, the greatest population increases within Allegheny County have been in forested areas, according to the University of Pittsburgh's Center for Social and Urban Research (ACED, 2008). This trend is evident in the project area, where the general character is that of a highly-developed suburban landscape with pockets of green space and forested areas. The majority of the forested areas are located on steep slopes and ridges of stream and river valleys. Some of these areas are owned by the municipalities as part of their local park system, but the overwhelming majority of forested area is privately owned (ACED, 2008). Publicly-owned land, which includes public recreational parks, schools, municipal parks, preserved land, and random tracts of municipal properties, comprises 604 acres or 50% of land within project area, while the remaining 604 acres is privately-owned land.

In addition to reducing forest cover and fragmenting habitat, the interstates, local roads, and residential and commercial developments have altered the hydrological characteristics of watersheds. The flooding that has resulted has caused severe problems for the Turtle Creek Industrial



Railroad and downstream communities. With rural municipalities continuing to grow and develop, water management has become increasingly expensive, placing strain on limited economic resources. In response, municipalities have developed and updated stormwater management requirements to help compensate and prevent future flooding (See Act 167 below). However, the economic value of forested areas as natural flood control and prevention is often underestimated. Thus, maintaining adequate vegetative cover in critical locations and within the greenway along Turtle Creek will also be important to reduce flooding (ACED, 2008).

Aquatic Habitat - Wetlands / Open Water

As a stream valley, the Turtle Creek Greenway contains a fair amount of water resources including wetlands, streams, vernal pools, ponds, and groundwater seeps. These resources provide habitat and sustenance for a variety of aquatic and terrestrial species. Some species, such as fish, need water on a continual basis, whereas, waterfowl, reptiles, and amphibians rely on aquatic ecosystems for only a portion of their life cycle. For example, most salamanders require small wetlands and vernal ponds for breeding, and ultimately overall species survival.

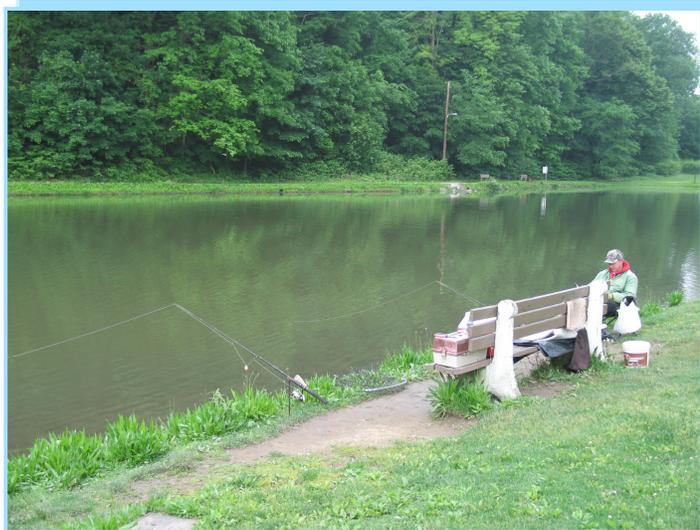
Like terrestrial wildlife populations, aquatic species are also threatened by direct habitat loss from development as well as habitat degradation from stormwater runoff, invasive species, pollution, and erosion and sedimentation. Regarding amphibian habitat, research suggests that habitat connectivity is as important as habitat availability for maintaining populations. Undeveloped corridors or conservation greenways, along waterways or through wooded areas are important for amphibian population dispersal and maintaining their communities. These greenways primarily serve to link and protect natural resources, and may incorporate both public and private land. Some species of salamanders, such as *Ambystoma* salamanders, have been found to utilize an area of forest up to 550 feet from their aquatic environment. Other species may utilize a greater distance of forest, but further research is needed to fully understand the habitat needs of amphibians (DCNR, 2001). Conservation of the Turtle Creek Greenway would help to preserve a corridor for amphibian populations along the stream as well as preserve habitat for a variety of wildlife.

Aquatic Habitat - Streams

As habitat, the approximately 37,400 feet of perennial stream within the project area provide habitat for both terrestrial and aquatic species as well as a water source for terrestrial species. Similar to many streams in Pennsylvania, Turtle Creek's stream habitat is threatened by declining water quality and loss of forest cover in riparian areas, due to development. Within the Turtle Creek Watershed, water quality degradation sources include abandoned mine drainage (AMD); non-point source pollution from roads and

development; Combined Sewer Outflows (CSO); and erosion and sedimentation from land development.

The diversity, number, and type of aquatic life present, including macroinvertebrates, fish, and freshwater mussels within a stream are often indicative of the stream's water quality. For example, macroinvertebrates are organisms that are generally associated with soil or stream substrates, lack backbones, and can be seen without magnification. In



streams, macroinvertebrates are typically insect larvae, which hatch from eggs laid in the summer, grow all year in the stream, and then emerge the following summer. Due to their presence in the stream throughout the year, limited mobility, and ease to collect, these organisms are a good way to evaluate the water quality of a stream. Moreover, macroinvertebrates differ in their tolerance to the amount and types of pollutions. For example, damselfly and dragonfly larvae are a sign of good water quality, whereas worms and midges are indicators of poor water quality (EPA, 2009).

Even though PADEP is required by Section 303(d) of the Federal Clean Water Act to identify all surface waters (i.e., streams and lakes) in the state that do not meet water quality standards, only 26 stream miles in the TCW have been designated as impaired, making them eligible for state clean-up plans. For impaired streams, PADEP develops a Total Maximum Daily Load (TMDL), which is an estimate of the maximum amount of point and nonpoint sources of pollution that can be assimilated by a stream without causing impairment or water quality standards to be violated.

Through the efforts of local volunteers, the Turtle Creek Watershed Association conducts water quality studies on Turtle Creek and other local waterways. Volunteers gather valuable and scientifically defensible water quality data to be used as the basis for new strategies and projects to improve water quality, reduce stormwater damage, create fishable streams, and bolster the local economy and competitiveness. The monitoring includes tests to determine dissolved oxygen levels, turbidity, pH, acidity, alkalinity, and metal values. In the spring and fall, volunteers also perform a survey of the macroinvertebrates living in the stream, which are also used as an indicator of water quality.

In addition to the water quality monitoring, the Turtle Creek Watershed Association also completed the Turtle Creek Watershed River Conservation Plan in 2002. The report

outlines the major threats to the water quality by subwatershed. The two major threats are AMD and urbanization. Since the Turtle Creek Greenway falls mostly within the Middle and Upper Turtle Creek Subwatersheds, only the water quality issues of these subwatersheds will be discuss in this report.

Middle Turtle Creek Subwatershed

The Middle Turtle Creek subwatershed contains 15.7 miles of stream and a drainage area of 7.4 square miles. Portions of Trafford, Penn Township, Monroeville, and Murrys ville comprise the subwatershed (see [Figure 2-3](#), page 2-13). In 2001, no abandoned mine land was present in the Middle Turtle Creek subwatershed and only 0.1% of the subwatershed had been mined for the Pittsburgh Coal (TCWRCP, 2002).

According to the RCP, 19.24 miles of the main stem of Turtle Creek, from its source in Delmont downstream to the confluence with Thompson Run, was listed on the Section 303 (d) List of Impaired Waters due to metals, pH, suspended solids, nutrients, and siltation impairment from acid mine drainage (15.78 miles); removal of vegetation, small residential runoff and bank modifications (2.68 miles); and urban runoff/storm sewers (0.78 miles) sources (TCWRCP, 2002).

The Wilksburg-Penn Joint Water Authority, the Monroeville Water Authority, and the Municipal Authority of Westmoreland County provide 48% of residents in the Middle Turtle Creek subwatershed with public drinking water. ALCOSAN and the Franklin Township Municipal Sanitary Authority provide 85% of the subwatershed area with public sewer service and discharge treated effluent into Middle Turtle Creek via the Meadowbrook Road Water Pollution Control Plant. In addition, ALCOSAN is responsible for three CSO regulators that discharge untreated sewage/stormwater to Middle Turtle Creek (TCWRCP, 2002).

Upper Turtle Creek Subwatershed

The Upper Turtle Creek subwatershed contains 29.0 miles of stream that drains a 13-square-mile area and encompasses portions of the municipalities of Delmont, Murrys ville, Export, and Salem and Penn Townships. In 2001, abandoned mine land comprised 1.78 square miles in the Upper Turtle Creek subwatershed; 56.3% of the subwatershed had been mined for the Pittsburgh Coal. 19.24 miles of the main stem of Turtle Creek, from its source in Delmont downstream to the confluence with Thompson Run, has been listed on the Section 303 (d) List because of metals, pH, suspended solids, nutrients, and siltation impairment from acid mine drainage (15.78 miles); removal of vegetation, small residential runoff, and bank modifications (2.68 miles); and urban runoff/storm sewers (0.78 miles).

Water quality data studies conducted by TCWA (1998) and by the USACOE showed a

severely depressed pH (as low as 3.09), which, except for the most tolerant macroinvertebrate taxa, are not typically supportive of most aquatic life (including fish). This portion of stream is classified as a TSF. Because of net acidic AMD inputs (e.g., Delmont and Export discharges), severe pollutant loads (i.e., elevated instream iron, aluminum, and acidity concentrations) impact the Upper Turtle Creek subwatershed. Qualitative benthic macroinvertebrate surveys conducted by PADEP (1998) and USACOE (1998) at several locations within the subwatershed revealed benthic communities composed of pollution tolerant taxa including Oligochaeta (segmented worms) and Chironomidae (midges). Likewise, fish surveys conducted by PAFBC revealed the absence of fish in Upper Turtle Creek (because of severe pH depression) (TCWRCP, 2002).

The Municipal Authority of Westmoreland County provides 72% of the Upper Turtle Creek subwatershed with public drinking water while the Franklin Township Municipal Sanitary Authority provides 60% of the residents with public sewer service. Five CSO regulators owned by the City of Export discharge untreated sewage/stormwater into Upper Turtle Creek.

To continue to maintain and protect the Turtle Creek’s water quality as a Trout Stocked Fishery, routine water quality studies by natural resource agencies as well as the TCWA are recommended.

Wildlife

The Turtle Creek Greenway project area is home to a variety of birds, mammals, amphibians, and reptiles that are typical of Southwestern Pennsylvania, as listed in **Table 2.1**. Comprehensive wildlife studies identifying all species present within the area have not been conducted; however, during field reconnaissance, Mackin environmental professionals observed signs of wildlife usage throughout the project area. Amphibians and reptiles seen included an American toad, garter snake, gray tree frog, and bullfrog. Evidence of wildlife utilization consisted predominantly of whitetail deer tracks, trails, and scat. Mackin environmental

Table 2.1: Wildlife Listing

| Common Name | Scientific Name |
|--|-------------------------------|
| White-tailed deer | <i>Odocoileus virginianus</i> |
| Ruffed grouse | <i>Bonasa umbellus</i> |
| Beaver | <i>Castor canadensis</i> |
| Woodpecker | <i>Picidae</i> |
| Porcupine | <i>Erethizon dorsatum</i> |
| Squirrels | <i>Sciurus spp.</i> |
| Wild turkey | <i>Meleagris gallopavo</i> |
| Eastern cottontail rabbit | <i>Sylvilagus floridanus</i> |
| Various raptors | <i>Falconiformes</i> |
| Various owls | <i>Strigiformes</i> |
| Ring-neck pheasant | <i>Phasianus colchicus</i> |
| Red fox | <i>Vulpes fulva</i> |
| Coyotes | <i>Canis latrans</i> |
| Raccoon | <i>Procyon lotor</i> |
| Opossum | <i>Didelphis virginiana</i> |
| <i>Source: Upper Crooked Creek River Conservation Plan, 2001</i> | |

Turtle Creek Greenway Plan



professionals also observed raccoon tracks near Turtle Creek and numerous squirrel nests in the upper branches of the tree canopy.

Land development, habitat loss, and habitat fragmentation are the primary threats to wildlife throughout the state. Overall habitat quality estimates suggest that less than 10% of the state is represented by good quality habitat for wildlife

(DCNR, 2001). As habitats become degraded, opportunistic wildlife flourish while other species' populations decline, need to relocate, or may be decimated. Fragmented habitats become more susceptible to degradation and wildlife populations become isolated. To maintain the resilience and longevity of an ecosystem, biodiversity is key.

Birds

A variety of avian species were also seen and heard such as American goldfinch, turkey vulture, great blue heron, mallards, crow, pileated woodpecker, American robin, cardinal, hawk, black-capped chickadee, Red-winged blackbird, starling, mourning dove, rose-breasted grosbeak, blue jay, and killdeer. The dense scrub-shrub understory and rolling topography provides cover for resting, mating, rearing, and foraging activities for many species of birds and mammals. Oak and cherry tree species also provide valuable food sources for whitetail deer and birds that are present within the project area.

The Audubon Society of Western PA (ASWP) holds a Christmas Bird Counts (CBC) to identify and count birds within a specific geographic region. The CBC is conducted annually during a Saturday around Christmas day. The count is organized in geographic circles; thus, the closest CBC conducted is the Pittsburgh CBC, which encompasses Pittsburgh and much of the North Hills of Allegheny County. This larger area is then subdivided into smaller areas that are assigned to teams consisting of bird experts and volunteers (ASWP, 2010). Currently, there is not a CBC held within the project area; however, the densely forested stream valleys of the project area are ideal bird habitat and could provide this wonderful educational opportunity. A full List of Birds of Pennsylvania can be found in [Appendix F: Official List of the Birds of Pennsylvania](#).

Reptiles and Amphibians

Started in 1997, the Pennsylvania Herpetological Atlas Project was a 6-year study examining the distribution of reptile and amphibian species within the state. Funded through the Pennsylvania Wild Resource Conservation Fund and private donations, volunteers from environmental organizations, colleges and universities, and state agencies documented species type, critical habitats, locations, and photographs for the project. In 2004, the Atlas project was revitalized as an on-line form for the public to participate and called the Pennsylvania Online Herpetological Atlas. **Table 2.2: Amphibians and Reptiles of Conservation Concern** lists the amphibian and reptile species of conservation concern found within Allegheny and Westmoreland Counties. For this project, the Amphibian and Reptile Technical Committee identified 36 species of conservation concern to focus on for data collection. These species were targeted for investigation due to evidence of declining populations, restricted and/or patchy distribution, and susceptibility to threats such as habitat destruction or over collection by humans (POHA, 2009).

No official studies of reptiles and amphibians species have been specifically conducted on the project area; however, during invasive species eradication efforts in Duff Park, several species were noted including the American Toad (*Bufo americanus*) and slimy salamander (*Plethodon glutinosus glutinosus*).

Threatened and Endangered Species

Threatened and endangered (T&E) plant and animal species within Pennsylvania are tracked through the Pennsylvania Natural Diversity Inventory (PNDI) database as part of the Pennsylvania Natural Heritage Program (PNHP). PNDI is a partnership between natural resource agencies, including the DCNR, PA Game Commission (PGC), PA Fish and Boat Commission (PAFBC), and U.S. Fish and Wildlife Service (USFWS). These agencies conduct inventories and collect data to identify rare, threatened, and endangered species in the state. The data is housed in the PNDI, which provides the most accurate and up-to-date data on ecological resources to allow for planning, conservation, and natural resource management of these areas.

Agency coordination and a review of the PNDI revealed two (2) Pennsylvania Rare, Threatened, or Endangered Species within the project area. DCNR identified the snow trillium (*Trillium nivale*) as a PA rare species (DCNR, 2010) while the PAFBC identified the American brook lamprey, a PA State Candidate Species, (PAFBC, 2010). The location and identification of individual species is not provided in order to protect this vulnerable species. The PGC and USFWS did not identify any threatened or endangered species within the project area. PNDI results are found in **Appendix G: PNDI Correspondence**.

Table 2.2: Amphibians and Reptiles of Conservation Concern

| Common Name | Scientific Name | County |
|---|---------------------------------------|--------|
| Four-toed salamander | <i>Hemidactylium scutatum</i> | B |
| Hellbender (salamander) | <i>Cryptobranchus alleganiensis</i> | B |
| Jefferson salamander | <i>Ambystoma jeffersonianum</i> | A |
| Marbled salamander | <i>Ambystoma opacum</i> | W |
| Fowler's toad | <i>Bufo fowleri</i> | B |
| Northern cricket frog | <i>Acris crepitans</i> | A |
| Northern leopard frog | <i>Rana pipiens</i> | B |
| Western chorus frog | <i>Pseudacris triseriata</i> | A |
| Mountain chorus frog | <i>Pseudacris brachyphona</i> | B |
| Common map turtle | <i>Graptemys geographica</i> | A |
| Eastern box turtle | <i>Terrapene carolina</i> | B |
| Spotted turtle | <i>Clemmys guttata</i> | B |
| Wood turtle | <i>Clemmys insculpta</i> | B |
| Eastern fence lizard | <i>Sceloporus undulatus</i> | B |
| Eastern hognose snake | <i>Heterodon platirhinos</i> | A |
| Eastern massasauga rattlesnake | <i>Sistrurus catenatus catenatus</i> | A |
| Eastern ribbon snake | <i>Thamnophis sauritus sauritus</i> | B |
| Kirtland's snake | <i>Clonophis kirtlandii</i> | B |
| Mountain earth snake | <i>Virginia pulchra</i> | W |
| Northern copperhead | <i>Agkistrodon contortrix mokasen</i> | B |
| Rough green snake | <i>Opheodrys aestivus</i> | B |
| Queen snake | <i>Regina septemvittata</i> | B |
| Shorthead garter snake | <i>Thamnophis brachystoma</i> | A |
| Smooth green snake | <i>Opheodrys vernalis</i> | B |
| Timber rattlesnake | <i>Crotalus horridus</i> | W |
| A = Allegheny; W = Westmoreland; B = Both Counties | | |
| Source: Pennsylvania Herpetological Atlas Project, 2004 | | |

Invasive Species

Like many natural areas, the Turtle Creek Greenway project area is susceptible to invasive plant and animal species. Invasive species are any non-native plant, animal, or other organism that is introduced into an ecological system that causes economic or environmental harm. Invasive species are one of the largest threats to wildlife habitat in the state. Not all introduced species are harmful to native species or ecosystems, but some can have severe ecological and economic impacts. The presence of invasive species can lead to a ripple effect throughout the ecosystem causing shifts in the food chain and reducing food availability for native species. Human influences such as development, ecosystem degradation, habitat fragmentation and pollution can all weaken natural systems and provide opportunity for invasive species to flourish.

Invasive Plant Species

Current estimates suggest that over one-third of all Pennsylvania plants are non-native (DCNR, 2001). Several invasive plant species common to Pennsylvania, as listed in **Table 2.3**, have been identified throughout the project area including Japanese knotweed (*Polygonum cuspidatum*) and Japanese stiltgrass (*Microstegium vimineum*). Japanese knotweed creates additional problems than other invasive plant species because its root system does not hold soil like many native riparian plants do. Bank erosion is more likely when it takes over, as is the case in much of the Greenway.



In Duff Park, volunteer groups such as the Murrysville Park Volunteers and Friends of Murrysville Parks (FOMP) have been attempting to eradicate Japanese knotweed, but it is an ongoing battle due to the need for repeat herbicide treatments and cutting down plants before they go to seed. To help them in their efforts, FOMP contracted for the 2008 assessment and mapping of eight (8) invasive plant species in Duff Park. The report from this survey includes GIS-mapped locations of populations of the eight (8) species of invasive plants as baseline data to track the success of ongoing efforts to eradicate those species within the park. The eight (8) species surveyed were: Japanese stiltgrass (*Microstegium vimineum*), garlic mustard (*Alliaria petiolata*), multiflora rose (*Multiflora*

Table 2.3: Invasive Plant Species

| Common Name | Scientific Name | Description |
|--------------------------|---------------------------------------|---|
| Garlic mustard | <i>Alliaria petiolata</i> | a woodland flower that crowds out spring ephemerals |
| Japanese knotweed | <i>Polygonum (Falopia) cuspidatum</i> | a large shrub that grows so dense nothing else will survive; frequently found along river banks, but grows nearly everywhere there is sunlight. |
| Tree of heaven | <i>Ailanthus altissima</i> | a fast-growing tree that chemically inhibits other trees from germinating near it |
| Asiatic bittersweet | <i>Celastrus orbiculatus</i> | a vine that overwhelms trees and displaces native, American bittersweet |
| Japanese honeysuckle | <i>Lonicera japonica</i> | a shrub that grows in forest understory |
| Japanese barberry | <i>Berberis thunbergii</i> | commonly planted for hedges, this thorny invasive crowds the forest understory |
| Burning bush | <i>Euonymus alatus</i> | a popular yard shrub that escapes into the woods to crowd the understory |
| Autumn olive | <i>Elaeagnus umbellata</i> | another shrub invading forests and old fields |
| Purple loosestrife | <i>Lythrum salicaria. L. virgatum</i> | a wetland invasive threatening delicate wetland ecosystems |
| Common Reed / Phragmites | <i>Phragmites australis</i> | a wetland plant that displaces native cattails, but has little wildlife value compared to cattails |
| Common Privet | <i>Ligustrum vulgare</i> | a shrub that escaped from cultivation and seeds are spread by birds. |
| Border Privet | <i>Ligustrum obtusifolium</i> | a shrub that was planted commonly in the past, but now is invasive |

rosa), Japanese and giant knotweed (*Polygonum cuspidatum* and *P. sachalinense*), Japanese barberry (*Berberis thunbergii*), Morrow's and Amur honeysuckle (*Lonicera morrowii*, *L. maackii*), privet (*Ligustrum vulgare*), and burning bush (*Euonymus alatus*).

The mapped area (the entirety of Duff Park and also some neighboring land) consists of 217 acres and is primarily a north-facing wooded slope with old growth characteristics. Most of the trees are mature and range in size from 1.5' to 2' diameter base height (dbh). The typical north-facing slopes are forested in sugar maple, northern red oak, white ash, and Eastern hemlock species. Red and white flowered trillium is also found on these slopes as well as mountain wood sorrel, yellow violet, wild stonecrop, and wild geranium. The northwest-facing slopes of the park, above the Funk Bikeway, have mature black birch, great laurel, and bishop's cap, particularly along watercourses. The north-facing steep slopes of Fernwood Trail have a strong representation of American beech and sugar maple. Virginia waterleaf and black cohosh are also common. In the mature wooded slopes of Duff Park, the study also found patches of Japanese stiltgrass. Along the trails,

burning bush seedlings are present, particularly along small tributaries. Many areas of the park have been heavily infiltrated by garlic mustard, especially in floodplain areas and along Turtle Creek.

The middle and upper elevations, particularly southern slopes, are dry oak woods populated by mature chestnut oaks, white oaks, and black oaks. Northern red oaks, black birch, and white ash are also frequently documented. The shrub layer in these areas consists of sassafras, black cherry saplings, witch hazel, Allegheny serviceberry, flowering dogwood, and deerberry. There are also low-lying layers of lowbush blueberry and greenbrier. The dry oak woodlands seem to suffer the least from invasions of garlic mustard, though patches do exist.

The northern boundary of the park lies in the floodplains of Turtle Creek, and as such the waterway often overflows and native species that thrive on such flooding are found throughout this part of the study area. These include wingstem, trumpetweed, green-headed coneflower, etc. Mature trees, such as elms and sycamores, also characterize the floodplain. Across Turtle Creek, the floodplain is heavily impacted by industrial and commercial uses and knotweed, Japanese stiltgrass, multi-flora rose, Japanese barberry, and privet are all typical.

The southern area of the park, the report indicates, is bounded by woodlots and private residences, and is comprised mostly of recovering pasture around the mid-slope of a southeastern hilltop, as evidenced by invasive shrubs. These include Japanese barberry, honeysuckles, and multiflora rose.

The study area also has immature woodlands along the Black Cohosh Trail. Sugar maple saplings 6" to 8" dbh with scattered black cherry characterize these immature woodlands. This area has frequent grapevine infestation as well as large patches of garlic mustard, often fifty to one hundred feet wide. There is also an old petroleum pipeline right-of-way along the Coronary Trail, and the vegetation along this corridor is mostly old-field vegetation consisting of common milkweed, Allegheny blackberry, white snakeroot, deertongue grass, and path rush. This right-of-way has extensive Japanese stiltgrass. A pine plantation is also present within the park and is infiltrated in many instances by patches of Japanese stiltgrass.

The maps are found in **Appendix H: Invasive Species Mapping for Duff Park**, which indicate the 2008 presence and location of the following invasive species within Duff Park:

-  Japanese stiltgrass (*Microstegium vimineum*)
-  Garlic mustard (*Alliaria petiolata*)
-  Multiflora rose (*Multiflora rosa*)

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- 🌿 Japanese and Giant Knotweed (*Polygonum cuspidatum* and *P. sachalinense*)
- 🌿 Japanese Barberry (*Berberis thunbergii*)
- 🌿 Morrow's and Arrur Honeysuckle (*Lonicera morrowii*, *L. maackii*)
- 🌿 Privet (*Ligustrum vulgare*)
- 🌿 Burning bush (*Euonymus alatus*)

In addition, the report also indicated several notable alien species in the Park:

- 🌿 Jetbead (*Rhodotypos scandens*) was identified in the Round Top pasture area
- 🌿 Linden Arrowwood (*Viburnum dilitatum*) was identified in the pine plantation and Round Top pasture area
- 🌿 Norway Maple (*Acer platanoides*) was found in the floodplains above the Funk Bikeway but appeared to be diseased
- 🌿 Narrowleaf bittercress (*Cardamine impatiens*) is identified along the Spring Beauty Trail
- 🌿 Dame's rocket (*Hesperis matronalis*) was found along the floodplains of Turtle Creek

A repeat survey is underway for 2010 and is also planned for 2012, to provide tracking of the distribution of these invasive plant populations within Duff Park over time. Eradication of invasive plant species within Duff Park is performed by volunteers and the development of the plan has allowed them to create a strategic plan of attack and focus of these efforts.

Invasive Animal Species

Invasive animals, insects, and pathogens can also be a threat to wildlife habitat and ecosystems. There are several common invasive invertebrate and vertebrate species, both aquatic (**Table 2.4**) and terrestrial (**Table 2.5**), in Pennsylvania; however, no specific studies on these species have been conducted in the Turtle Creek Greenway project area.

One species that has been identified in recent years and is currently being monitored as a threat to Pennsylvania's ash trees is the emerald ash borer (*Agrilus planipennies fairmaire*) (USFS, 2008). Native to Asia, these beetles feed on the inner bark and phloem of ash trees and can kill a tree within 3-4 years of infestation. The emerald ash borer (EAB) was originally detected in the Commonwealth in Cranberry Township, Butler County in June 2007.

The PA Department of Forestry and the PA Department of Agriculture have been working together to identify infested areas and to protect unaffected areas from infestation. DCNR conducted a statewide survey as part of a larger national survey to identify the presence of the EAB within the nation. To identify the leading edge of infestation within the state, emerald ash borer traps were placed throughout the state in 2009. These traps help to identify infested and uninfested areas while a public education program is helping to prevent future infestations. Natural resource agencies have requested that firewood not be transported from where it was harvested in order to prevent spreading the emerald ash borer to unaffected areas (PA Department of Agriculture, 2010).

As a result of this study, the seven counties—Allegheny, Mercer, Lawrence, Beaver, Butler, Westmoreland, and Mifflin—where the emerald ash borer has been found, are currently quarantined to prevent the spread of the emerald ash borer (DCNR, 2010). Thus, residents are asked not to transport any firewood from these counties to other areas and not to bring firewood into Pennsylvania.

Table 2.4: Invasive Animal—Aquatic

| Common Name | Scientific Name |
|----------------------|---|
| Bighead carp | <i>Hypophthalmichthys nobilis</i> |
| Black carp | <i>Mylopharyngodon piceus</i> |
| European rudd | <i>Scardinius erythrophthalmus</i> |
| Quagga mussel | <i>Dreissena rostriformis bugensis</i> |
| Round goby (fish) | <i>Apollonia (Neogobius) melanostomus</i> |
| Ruffe (fish) | <i>Gymnocephalus cermuus</i> |
| Rusty crayfish | <i>Orconectes rusticus</i> |
| Silver carp | <i>Hypophthalmichthys molitrix</i> |
| Snakehead (fish) | <i>Channa spp.</i> |
| Tubenose goby (fish) | <i>Proterorhinus semilunaris</i> |
| Zebra mussel | <i>Dreissena polymorpha</i> |

Table 2.5: Invasive Animal—Terrestrial

| Common Name | Scientific Name | Type |
|--------------------------------|---------------------------------------|------------------|
| Norway rat | <i>Rattus norvegicus</i> | Mammal |
| House mouse | <i>Mus musculus</i> | Mammal |
| Thirteen-lined ground squirrel | <i>Spermophilus tridecemlineatus</i> | Mammal |
| Rock dove or pigeon | <i>Columbia livia</i> | Bird |
| Ring-neck pheasant | <i>Phasianus colchicus</i> | Bird |
| European starling | <i>Sturnus vulgaris</i> | Bird |
| House sparrow | <i>Passer domesticus</i> | Bird |
| Mute swan | <i>Cygnus olor</i> | Bird |
| Red-eared slider | <i>Trachemys scripta elegans</i> | Reptile (Turtle) |
| Dutch gypsy moth | <i>Lymantria dispar</i> | Insect |
| Hemlock woolly adelgid | <i>Adelges tsugae</i> | Insect |
| Beech bark scale | <i>Cryptococcus fagisuga</i> | Insect |
| Emerald ash borer | <i>Agrilus planipennies fairmaire</i> | Insect |
| Asian longhorned beetle | <i>Anoplophora glabripennis</i> | Insect |
| Woodboring wasp | <i>Sirex noctilio</i> | Insect |

Geology

Geologically speaking, the TCGP project area is located within the Appalachian Plateau Physiographic Province. The Appalachian Plateau is the most extensive physiographic province in the Commonwealth, extending from Greene and Somerset Counties in the southwest, to Erie County in the northwest, and to Wayne and Pike Counties in the northeast. Characterized by highlands, the Plateau over time has been carved by water drainage patterns, forming the typical Pennsylvania landscape of rolling hills, deep valleys, and extensive stream systems (DCNR, 1996).

The project area lies within the Pittsburgh Low Plateau Section of the aforementioned province, which is characterized by the smooth, undulating upland areas, cut by narrow and relatively shallow valleys. During the Pennsylvanian period (299 – 318 million years ago), the bulk of the bituminous coal was formed along the upland areas of this physiographic section. Today, the landscape reflects the history of the mining industry—operating surface mines, old strip mined areas, and reclaimed strip mined areas. Elevation throughout the section varies from 660 to 1,700 feet. Due to the steepness of the valley sides, some areas in the southwestern part of the section are susceptible to landslides (DCNR, 2009).



Three different formations of the Pittsburgh Low Plateau section comprise the project area—Glenshaw, Casselman, and Allegheny formations, as shown on **Map 2.5: Geology**. The Glenshaw formation underlies the majority of the area, while the other two underlie much smaller sections. The Glenshaw formation consists of cyclic sequences of shale, sandstone, red beds, thin limestone, and coal. The Casselman formation consists of cyclic sequences of shale, siltstone, sandstone, red beds, impure limestone, and non-persistent coal. The red beds of these two formations are associated with landslides that occur within the region. The Allegheny formation consists of sandstone, shale, limestone, clay, and coal. This formation contains valuable clay deposits, Vanport limestone, and Freeport, Kittanning, and Brookville-Clarion coal (DCNR, 2009).

Soil

Soil is a complex mix of ingredients: minerals, air, water, and organic matter (both dead and alive), forming at the surface of land. The soil performs many critical functions in almost any terrestrial ecosystem (i.e. a farm, forest, prairie, or suburban watershed) (Soil Society of America, 2009). Understanding the soils within the project area is valuable to local government, municipal planners, developers, and farmers, among others so that effective land use practices can occur. According to the Soil Surveys of Allegheny (Newbury, et. al., 1981) and Westmoreland Counties (Taylor, et. al., 1992), the following soil associations are found within the project area; a brief description of each and their appropriate land use is provided. **Table 2.6** lists the specific soil types found within the project area.

According to the Soil Survey of Allegheny County (1981), the soil associations within the project area are:

- ✦ Urban land-Philo-Rainsboro association which is deep, moderately well drained soils and urban land on floodplains and terraces. This association is mainly on almost level bottom land adjacent to streams. The majority of this association is used for residential, commercial, and major industrial developments and for major highway and railroad routes.
- ✦ Gilpin-Upshur-Atkins association which is moderately deep and deep, well drained soils underlain by red and gray shale on uplands and deep, poorly drained soils on floodplains. This association is mostly wooded and on steep and very steep sides of valleys, but also includes narrow, nearly level floodplains. It has severe limitations in terms of use other than trees, predominantly because of the steepness and threat of landslides and hazard of flooding on the floodplains.

According to the Soil Survey of Westmoreland County (1995), the soil associations within the project area are:

- ✦ Philo-Monongahela-Atkins association which is deep, moderately well drained to poorly drained soils on terraces and flood plains. These soils are frequently flooded and have a seasonal high water table thus they are severely limited in terms of residential and industrial development and the disposal of septic-tank effluent.
- ✦ Upshur-Gilpin-Clarksburg association which is deep and moderately deep, well drained and moderately well drained soils over red and blown clay shale, siltstone, and sandstone. About three-fourths of this association is woodland, the rest is cropland or pasture. These soils are limited in terms of residential and industrial development due to instability, slow permeability, moderate depth, and seasonal high water table.

Agricultural Soils

Prime agricultural soil is any soil that belongs to Agricultural Capability Classes I, II, II, and IV as defined by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS); soil of statewide significance; and/or the individual county's listing of prime agricultural soil or additional importance soil.

As such, prime farmland soils are land that is naturally more suited for farming and is level to gently rolling. These soils are developed 36 inches or more to bedrock, fairly free of stones, and well drained. Water moves through prime farmland soils at an acceptable rate. Contrary to popular belief, these soils have nothing to do with fertility, as this can be improved with the addition of manure and fertilizers. Prime farmland soils comprise approximately 290 acres or 24% of soils within the project area and are summarized in **Table 2.6** and shown in **Map 2.6: Soils**. Soils of Statewide Importance are very similar to prime farmland soils; however, they typically have steeper slopes or are wetter soils.

The USDA reports that prime farmland is best suited for food, feed, forage, fiber, and oilseed crops, and produces the highest yields with minimal inputs of energy and economic resources. Consequently, utilizing prime farmland soils for farming purposes results in the least damage to the environment (WCCP, 2005).

Hydric Soils

As defined by the National Technical Committee for Hydric Soils (NTCHS), hydric soils are soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil. Under natural conditions, hydric soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation. Hydric soils are typically associated with wetlands or wet areas and are one of the three criteria—hydrophytic vegetation, hydric soils, and wetland hydrology—necessary to classify an area as a wetland (Environmental Laboratory, 1987). Hydric soils comprise approximately 215 acres or 17% of soils within the TCGP project area and are summarized in **Table 2.6** and shown in **Map 2.6: Soils**.

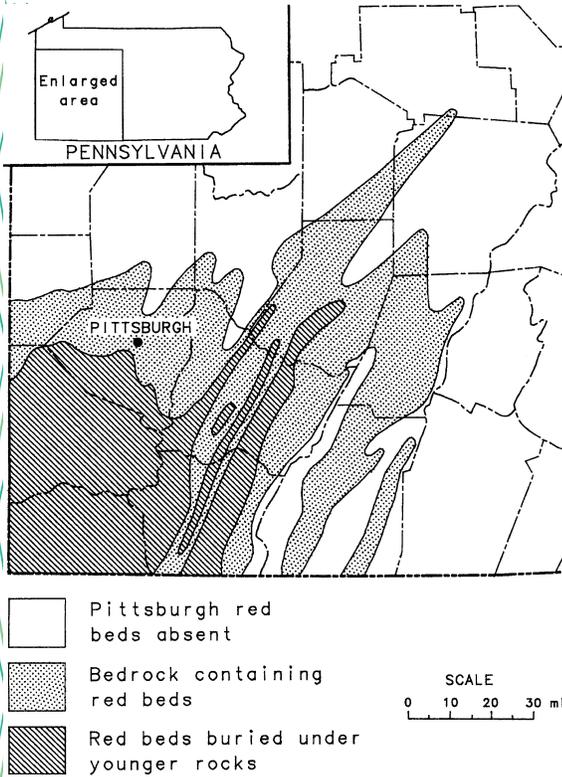
Due to their association with typically wet areas or wetlands, hydric soils are found in floodplains, valleys, and depressional areas where water collects. The high moisture content does not make the soil well suited for development or roadways because of frost action, during which the water expands and contracts. This action can cause cracks and stress on construction materials. Likewise, areas where hydric soils typically occur are prone to flooding and have a high water table; thus land uses that would benefit from such conditions are best suited for these areas. For example, wildlife habitat, green space, and natural flood control are some congruent land uses (Newbury, et. al., 1981).

Table 2.6: Soils

| Symbol | Name | Slope Characteristics | Hydric | Prime Farmland |
|----------------------------|------------------------------------|--------------------------|--------|----------------|
| Allegheny County | | | | |
| At | Atkins silt loam | | √ | |
| BrB | Brinkerton silt loam | 2 to 8 percent slopes | √ | |
| ErC | Ernest silt loam | 8 to 15 percent slopes | √ | √ |
| EvC | Ernest-Vandergrift silt loam | 8 to 15 percent slopes | √ | √ |
| GIB | Gilpin silt loam | 2 to 8 percent slopes | | √ |
| GIC | Gilpin silt loam | 8 to 15 percent slopes | | √ |
| GID | Gilpin silt loam | 15 to 25 percent slopes | | |
| GpC | Gilpin-Upshur complex | 8 to 15 percent slopes | | √ |
| GpD | Gilpin-Upshur complex | 15 to 25 percent slopes | | |
| GQF | Gilpin-Upshur complex | Very steep | | |
| GvC | Guernsey-Vandergrift silt loam | 8 to 15 percent slopes | √ | |
| HaC | Hazleton loam | 8 to 15 percent slopes | | √ |
| .HTE | Hazleton loam | Steep | | |
| Ph | Philo silt loam | | √ | √ |
| UB | Urban land | | | |
| UCD | Urban land-Culleoka complex | Moderately steep | | |
| UCE | Urban land-Culleoka complex | Steep | | |
| UWB | Urban land-Wharton complex | Gently sloping | √ | |
| UWD | Urban land-Wharton complex | Moderately steep | | |
| WhB | Wharton silt loam | 2 to 8 percent slopes | √ | √ |
| WhC | Wharton silt loam | 8 to 15 percent slopes | √ | √ |
| Westmoreland County | | | | |
| CaB | Calvin silt loam | 3 to 8 percent slopes | √ | √ |
| GcC | Gilpin channery silt loam | 8 to 15 percent slopes | | √ |
| GcD | Gilpin channery silt loam | 15 to 25 percent slopes | | |
| GoF | Gilpin-Rock outcrop complex | 45 to 100 percent slopes | | |
| GuC | Gilpin-Upshur complex | 8 to 15 percent slopes | | √ |
| GuD | Gilpin-Upshur complex | 15 to 25 percent slopes | | |
| GuF | Gilpin-Upshur complex | 25 to 75 percent slopes | | |
| GwF | Gilpin-Weikert channery silt loam | 25 to 75 percent slopes | | |
| Lo | Lobdell silt loam | | √ | √ |
| MoB | Monongahela silt loam | 2 to 6 percent slopes | | √ |
| ShF | Shelocta-Gilpin channery silt loam | 25 to 75 percent slopes | | |
| UaB | Udorthents | 0 to 8 percent slopes | | |
| UaD | Udorthents | 8 to 25 percent slopes | | |
| UdA | Urban land | 0 to 3 percent slopes | | |
| UdB | Urban land | 3 to 8 percent slopes | | |
| UgB | Urban land-Gilpin complex | 0 to 8 percent slopes | | |
| UgD | Urban land-Gilpin complex | 8 to 25 percent slopes | | |
| UmB | Urban land-Monongahela complex | 0 to 8 percent slopes | | |
| UuB | Urban land-Upshur complex | 0 to 8 percent slopes | | |
| UuD | Urban land-Upshur complex | 8 to 25 percent slopes | | |
| UwB | Urban land-Wharton complex | 0 to 8 percent slopes | | |
| UwD | Urban land-Wharton complex | 8 to 25 percent slopes | | |
| VaC | Vandergrift silt loam | 8 to 15 percent slopes | | √ |
| WeA | Weikert shaly silt loam | 0 to 5 percent slopes | √ | √ |
| WrD | Wharton silt loam | 15 to 25 percent slopes | | |

Steep Slopes and Landslide Prone Areas

Figure 2-5: Red Beds



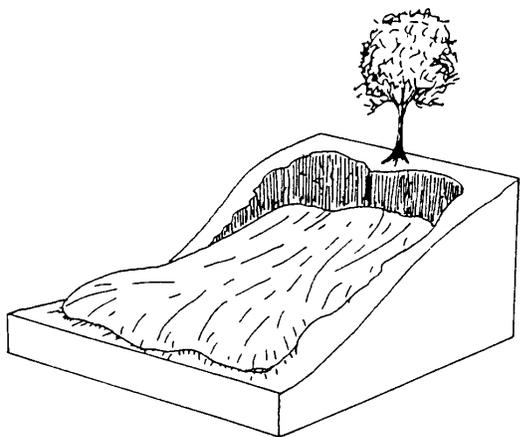
Source: <http://www.pittsburghgeologicalsociety.org/landslide.pdf>

Landslides are common in Pennsylvania because of the hilly terrain, geologic formations, soil types, and steep slopes. **Map 2.7: Steep Slopes** shows steep slopes (15-25%, 25-40%, <40%) within the Greenway.

Many factors can contribute to landslides such as stream erosion, weakened or fractured rock, soil characteristics, earthwork, mining activities, and excess weight on a slope from precipitation and/or ice (Pittsburgh Geological Society, 2009).

Located within the Pittsburgh Low Plateau physiographic region, the majority of the Turtle Creek Greenway project area is underlain with Casselman and Glenshaw formations, both of which consist of cyclic sequences of Pittsburgh red beds. Pittsburgh red beds are a thick, 40- to 60-foot rock layer that consists of a series of mostly reddish, greenish, and grayish claystones and shales. Red beds tend to weather deeply where they occur on hillsides throughout large portions of western Pennsylvania (**Figure 2-5**) and cause earthflow landslides (**Figure 2-6**) defined as “visible, down-slope movement of soil and weathered rock acting as a thick, sticky fluid, typically flowing over bedrock or a layer of clay.” This type of landslide is very common in the Pittsburgh area (Pittsburgh Geological Society, 2009).

Figure 2-6: Earthflow Landslide



Source: <http://www.pittsburghgeologicalsociety.org/landslide.pdf>

Consequently, many municipalities enact land use regulations that restrict development on landslide prone areas, such as steep slopes and areas containing red beds; **Section C: Land Use Regulations** discusses the regulations the project area municipalities have in place. However, unpredictable natural weather events and constantly changing conditions can add an element of uncertainty to identifying prone areas and preventing landslides.

Ridge Tops and Scenic Views

With the Turtle Creek Industrial Railroad paralleling Turtle Creek, a corridor has already been cleared which provides scenic views of the adjacent waterway, wetlands, floodplains, and forested hillsides. The development of the project area was partially based on the vantage point of a person standing within the railroad corridor and looking as far as the eye can see. From that perspective, the Turtle Creek Greenway is in itself a scenic viewshed with its dense, mature forest covering the steep hillsides and stream winding through the valley. Even though residents on the ridgetops typically cannot see the stream valley floor, the vista of the forested edge along their backyard provides seclusion and natural beauty in a semi-urban area. This country feel and privacy is valued among local residents (Landowner Meeting, 2010).

Known to local residents as the Turtle Creek Gorge, this area is encompassed within the Turtle Creek Greenway and includes the mostly undeveloped land and stream valley between Robert's Architectural Products (near B-Y Park) in Trafford Borough east through Penn Township and Monroeville to Thermal Industries in Murrysville. The gorge got its name as the area of Allegheny County with the greatest elevation change within the shortest distance. The gorge is the primary green space within the project area, other than the local and municipal parks and open space. Preserving the natural beauty of the gorge will be a benefit to all area residents as an opportunity to enjoy the recreational and natural beauty the greenway has to offer.

For the most part, the recommended areas for protection include steep slopes, floodplains, wetlands, and forested tracts of land. Thus, from an ecological perspective, this greenway is valuable to protect to preserve its current functions which include wildlife habitat, stormwater and flood control, and hillside stabilization. The economic value of these functions provided by the land is often underestimated and underappreciated.



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Section C › Land Use Regulations

Land use regulations were reviewed for each of the four communities as they pertain to the Turtle Creek Greenway. Municipal zoning ordinances and subdivision and land development ordinances (SALDO) were reviewed to identify existing requirements that are consistent with the goals of the Turtle Creek Greenway Plan—particularly with regards to conservation, open space preservation, stormwater management, landscaping, buffers, etc.

Municipality of Monroeville

The Department of Community Development in Monroeville is in charge of overseeing development within the Municipality through its land use regulations. The Department is responsible for the enforcement of the Municipal Zoning Ordinance, administration of the Municipal Subdivision Ordinance, reviewing subdivision and site plan applications, and developing and implementing the Municipal Comprehensive Plan.

Monroeville adopted their Municipal Zoning Ordinance in 1984, as amended. The Ordinance contains the following requirements that pertain to the Greenway:

-  Zoning Districts—the following zoning districts are encompassed by the Greenway within Monroeville:
 - ⇒ S Conservancy District—Permitted uses include agriculture, cemetery, nature preserve, one-family residential, parks and recreation, and accessory uses. Conditional uses include church and school, golf course, group dwelling A, heliport, major excavation, major timbering and logging operation, public building, public school, stable, and utility substation. Minimum lot area is 20,000 square feet. The majority of the land in in the Greenway is zoned Conservancy.
 - ⇒ R-1 One Family Residential—Permitted uses include agriculture, one-family residential, parks and recreation, and accessory uses. Conditional uses include church and school, dependent dwelling, golf course, group dwelling A, major excavation, major timbering and logging operation, public building, public school, recreation club, and utility substation. Planned residential developments are also permitted. Minimum lot area is 10,000 square feet. The land nearest the brickyard is zoned R-1.
 - ⇒ R-2 One Family Residential—Permitted uses include agriculture, one-family residential, parks and recreation, and accessory uses. Conditional uses include church and school, dependent dwelling, golf course, group dwelling A, major excavation, major timbering and logging operation, public building, public school, recreation club, and utility substation. Planned residential

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developments are also permitted. Minimum lot area is 7,500 square feet. The land between Valley Park and Alpine Park is zoned R-2.

⇒ M-1 Planned Industrial—Permitted uses include agriculture, ancillary cafeteria, distribution center, light manufacturing, offices, research laboratory, warehousing, and accessory uses. Conditional uses include billboards, commercial communication tower, commercial communication antenna, community Use, freight terminal, gas station, personal care home, hospital, major excavation, major timbering and logging operation, manufacturing, public use, utility substation, and vehicle services. Planned group units are also permitted. The land along the eastern boundary of the Greenway in Monroeville is zoned M-1.

- 🌳 Currently has no specific landscaping standards, buffers, or tree requirements in place (with the exception of one tree for every 5 parking spaces in the case of parking lots)
- 🌳 Currently refers all stormwater to the Stormwater Management Ordinance

Monroeville adopted their Municipal Subdivision Ordinance in 1971, as amended. The Ordinance contains the following requirements in regards to land conservation/sensitive area preservation:

- 🌳 Restricts hillside subdivisions and gives the Planning Commission power to apply stricter standards (beyond the basic regulations) to those subdivisions whose average slope is greater than 15%.
- 🌳 Gives the Planning Commission power to mandate conservation of natural features in an effort to protect from erosion, i.e., existing vegetation, trees, etc.
- 🌳 Any subdivision of five (5) lots or more and/or with an average slope more than 10% must submit plans to the U.S. Soil Conservation Service for review and comment.
- 🌳 Also includes extensive land disturbance standards (applicable to all subdivision and land developments) which seek to reduce or eliminate unnecessary filling or grading.
- 🌳 Timbering and logging is also controlled in an effort to reduce runoff and protect floodplains and wildlife habitats.

Monroeville enacted a Stormwater Management Ordinance in 2005. The following provisions are in place:

- 🌳 Requires compliance with the Turtle Creek Stormwater Management Plan, which was adopted in 1991.

- ✦ Contains extensive and progressive regulations regarding best management practices (BMP's), including requiring compliance with current PA DEP suggested BMP's as well as any techniques outlined in the Turtle Creek Stormwater Management Plan.
- ✦ Includes innovative provisions for alternative “low-impact development” approaches to stormwater, well-outlined provisions for protecting natural depression storage areas, reducing the use of storm sewers, routing roof runoff over lawns, reducing street and sidewalk widths, using permeable surface materials, and constructing cluster developments.

Municipality of Murrysville

In Murrysville, the Community Development Department is responsible for the administration and coordination of planning, zoning, construction permits, code enforcement, and subdivision and land development within the Municipality.

Murrysville enacted their Zoning Ordinance in 2005, as amended. The Ordinance contains the following requirements that pertain to the Greenway:

- ✦ Zoning Districts—the following zoning districts are encompassed by the Greenway within Murrysville:
 - ⇒ R-2 Medium Density Residential District—The purpose of the Medium Density Residential District is to provide an alternative in the choice of housing areas for those persons who desire a relatively low density of single-family development but do not wish to obtain a minimum of one-acre lot and a variety of housing types in the planned residential development. It is expected that off-site sewer and water services would be required because of the density of development provided. The land between the Railroad Corridor and Meadowbrook Road is included in this District.
 - ⇒ B Business District—The purpose of the Business District is to provide areas for the location of commercial and industrial uses in areas of the Municipality where infrastructure can support such uses; to develop and operate these uses in such a manner as to minimize the impact of these uses on that infrastructure and surrounding properties; and to develop and operate these uses consistent with the goals and objectives of the Municipality. There are only a few parcels within the Greenway that fall within this District, located near Duff Park. In addition, some of these parcels are also included in the General Business Overlay. The purpose of the Overlay is to promote and maintain a sustainable mixture of commercial and residential development.

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- ⇒ R-R Rural Residential District—This District is intended to protect environmentally sensitive areas and portions of the Municipality that are not otherwise suitable for development at higher densities. Single-family residential uses on large lots where needs for traffic facilities and utilities are low and where it is appropriate to reserve the rural atmosphere of the Municipality are primary considerations. The land within the “Gorge” along Round Top Road near Duff Park is included in this District.
- ⇒ P-L Public Land District—This District is intended to protect publicly owned land where preservation of land and where land uses are designed to benefit the public interest. Schools, park and conservation areas owned and operated by a governmental entity shall be identified and mapped as public land. Duff Park is encompassed by this District.

-  Steep slope regulations allow certain types of development to occur on specific percentages of land with slopes greater than 25% and less than 40%, and permits / encourages such land to be used in a natural-like state, such as open space or passive recreation / horticulture
-  Permits limited conditional uses in areas with slopes greater than 40%.
-  Requires a landscaping plan to be submitted for any development utilizing a stormwater detention pond/basin, but does not specify standards/performance criteria.
-  Requires buffering between “incompatible” uses and districts but does not currently have any water protection or riparian protection buffer standards in place.

Murrysville adopted their Subdivision and Land Development Ordinance in 2005, as amended. The Ordinance contains the following requirements in regards to land conservation/sensitive area preservation:

-  Requires a mandatory dedication of open space, parks, etc. or a fee-in-lieu of, and includes provisions for how much of that land can be environmentally sensitive; also permits either passive or active space (i.e., can be woodlands, pasture, wetlands, etc.).
-  Erosion and Sedimentation Control standards require adherence to current BMP’s and also restrict timbering activities and require agricultural tilling activities to submit plans to Westmoreland County Conservation District.
-  Also includes specific regulations regarding residential development in floodplain districts, such as special design standards aimed at protecting watersheds, distinct review criteria, and regulations addressing impacts such as grading, streets, sanitary sewers, utility connections, etc.

Murrysville enacted a Stormwater Management Ordinance in 2006, as amended. The following provisions are in place:

- ✦ Includes good performance standards for stormwater management, including a requirement to meet the regulations of the Turtle Creek Stormwater Management Plan.
- ✦ Also includes design criteria that incorporate good techniques based upon current BMP's recommended by DEP.

Penn Township

Penn Township enacted their Zoning Ordinance in 1995, as amended. The Ordinance contains the following requirements that pertain to the Greenway:

- ✦ Zoning Districts—the following zoning districts are encompassed by the Greenway within Penn Township:
 - ⇒ R-1 Residential District—Permitted uses include single-family detached dwellings, accessory uses, agriculture / horticulture, boarding stables, hobby farms, home gardening, private stables, municipal uses and essential services. Minimum lot size for a single-family home in this district is 30,000 square feet. Most of the Greenway falls within this District.
 - ⇒ A-1 Agricultural District—Permitted uses include agriculture, all types of farming (including dairy cooperatives, greenhouses / nurseries, farm markets, etc.), single-family detached dwellings, stables, public parks and playgrounds, municipal uses, and essential services. Minimum lot size for a single-family home in this district is 1.5 acres.
 - ⇒ M-1 District—Permitted uses include warehouses, self-storage, research and testing laboratories, and business or professional offices.
- ✦ No significant regulations regarding landscape buffers / watershed protections / steep slopes, etc.

Penn Township adopted their Subdivision and Land Development Ordinance in 1993 as amended. The Ordinance contains the following requirements in regards to land conservation/sensitive area preservation:

- ✦ Includes requirement for mandatory open space / parks dedication or fee-in-lieu-of for all subdivisions and land developments (using a ratio calculation specified in the regulations, thus most minor subdivisions would not qualify).
- ✦ Includes requirements for easements along streams, though no dimension is specified, just says, “adequate.”

Turtle Creek Greenway Plan

Penn Township enacted a Stormwater Management Ordinance in 2004, as amended. The following provisions are in place:

- 🌲 Extensive regulations that follow DEP’s Model Ordinance and Pennsylvania’s Stormwater Best Management Practices Manual very closely.
- 🌲 Includes detailed requirements regarding what is to be shown on the plan, as well as agreements for maintenance and operations (using language from DEP’s Model Ordinance).
- 🌲 The general performance standards, prohibited discharges, rate controls, and so forth all follow DEP recommendations.
- 🌲 Additionally, Penn requires a “no harm evaluation” which is often recommended as a best practice but not often implemented in ordinances.
- 🌲 Requires conformance to all Turtle Creek Stormwater Management District standards.
- 🌲 Includes illustrative “plates” regarding requirements for the design of stormwater facilities (the design criteria and standards are based upon the Pennsylvania Stormwater Best Management Practices Manual).
- 🌲 Recommends the use of “typical” calculation methods encouraged by DEP (i.e., TR-20, TR-55, HEC-1, PSRM, Rational).
- 🌲 Requires redevelopment projects to evaluate the possibility of reducing site impervious area by 20%.
- 🌲 Includes appendices that outline Low-Impact Development Techniques, BMP Maintenance, and detailed Runoff Curve numbers and Runoff Factors (all based on current standards recommended for use by DEP).

In addition, Penn Township allows for “stormwater credits,” a very good practice that encourages better and more naturally designed stormwater drainage systems (see Section 144-18 (I) for more info):

- 🌲 If natural areas are conserved per the requirements, the applicant may use this as a “credit” when calculating their runoff volume, thus reducing the amount of runoff that needs to be stored and treated (i.e., reducing their Water Quality Volume calculation, or WQv).
- 🌲 Some of the techniques that the Township allows to be used for “credit” include: natural area conservation, stream buffers, disconnection of runoff either rooftop or non-rooftop, grass channels, and “environmentally sensitive development.”

Trafford Borough

Trafford Borough enacted their Zoning Ordinance in 2008, as amended. The Ordinance contains the following requirements that pertain to the Greenway:

- Zoning Districts—the following zoning districts are encompassed by the Greenway within Penn Township:
 - ⇒ R-1 Single-Family Residential District—Permitted uses include single-family dwelling only; educational or religious use not conducted as a gainful business, when permitted as an exception and on a street classified as other than minor - marginal access; nursery-kindergarten grades one through six may be on a minor - marginal access street.; park, playground; home gardening without the sale of products, provided that no dust, odor or injurious chemical substance or use shall be permitted; private garage and no other accessory uses; and private swimming pool and no accessory uses. The land north of the railroad along Turtle Creek is zoned R-1.
 - ⇒ C-2 Heavy Commercial District—Permitted uses include all heavy commercial activities permitted, except processes or operations which may be noxious or injurious by reason of dust, odor, smoke, refuse material, gas, fumes, noise, vibration or danger from explosion; all uses permitted in the C-1 District, except secondary uses; and the following or comparable uses (boat and trailer sale, wholesale, storage, building material, except stone-crushing and concrete-mixing, cleaning, dyeing, distributing plant, parcel delivery, ice storage, locker service, beverage distribution or bottling plant, retail lumber sales in a fire-resistant building, major garage, auto repair, filling station, contractor, equipment storage when placed in an opaque enclosure, utility substation, volume- or pressure-control station when screened by organic plantings having a thickness of at least three feet or fire-resistant material to the full height of the equipment attached or resting on the ground, monument works, provided that the process is done within a structure). The small parcel south of the railroad at the intersection of Forbes Road and US 130 is zoned C-2.
 - ⇒ I-2 Heavy Industrial District—Permitted uses include steel fabricators; chemical industries employing more than 10 employees; asphalt manufacture or refining; wrecking or dismantling of motor vehicles, storage of the parts and materials from such operations and the storage of other junk, only within a completely enclosed building or if surrounded by an opaque fence at least seven feet in height; and premix concrete plant.. The Penn Forest Football Club land is zoned I-2.

Turtle Creek Greenway Plan

⇒ P Permanent Preserve District—Areas so classified on the Zoning Districts Map are generally areas of excessive slope, inaccessible land or remnants of land not suited for general uses. These areas may be used for the following purposes or comparable purposes if, in the opinion of the Zoning Hearing Board, they are suited to the characteristics of the land and are not detrimental to adjacent land uses: recreational uses, tree nursery or commercial forest, and landfill when permitted by special exception and when approved by the proper health authorities. The remainder of the land in the Greenway in Trafford is zoned Permanent Preserve.

 No major parameters regarding landscaping, stormwater, buffers, etc.

Trafford Borough adopted their Subdivision and Land Development Ordinance in 1989 with Stormwater Management Standards adopted in 2004. The Ordinance contains the following requirements in regards to land conservation/sensitive area preservation:

 Includes provisions for the Borough to require open space, recreation, or woodland/natural area conservation if a development is deemed “large-scale” and/or “not anticipated” as part of the current Comprehensive Plan/Future Land Use Map.

 Includes good erosion and sedimentation controls.

 Includes provisions for BMP’s.

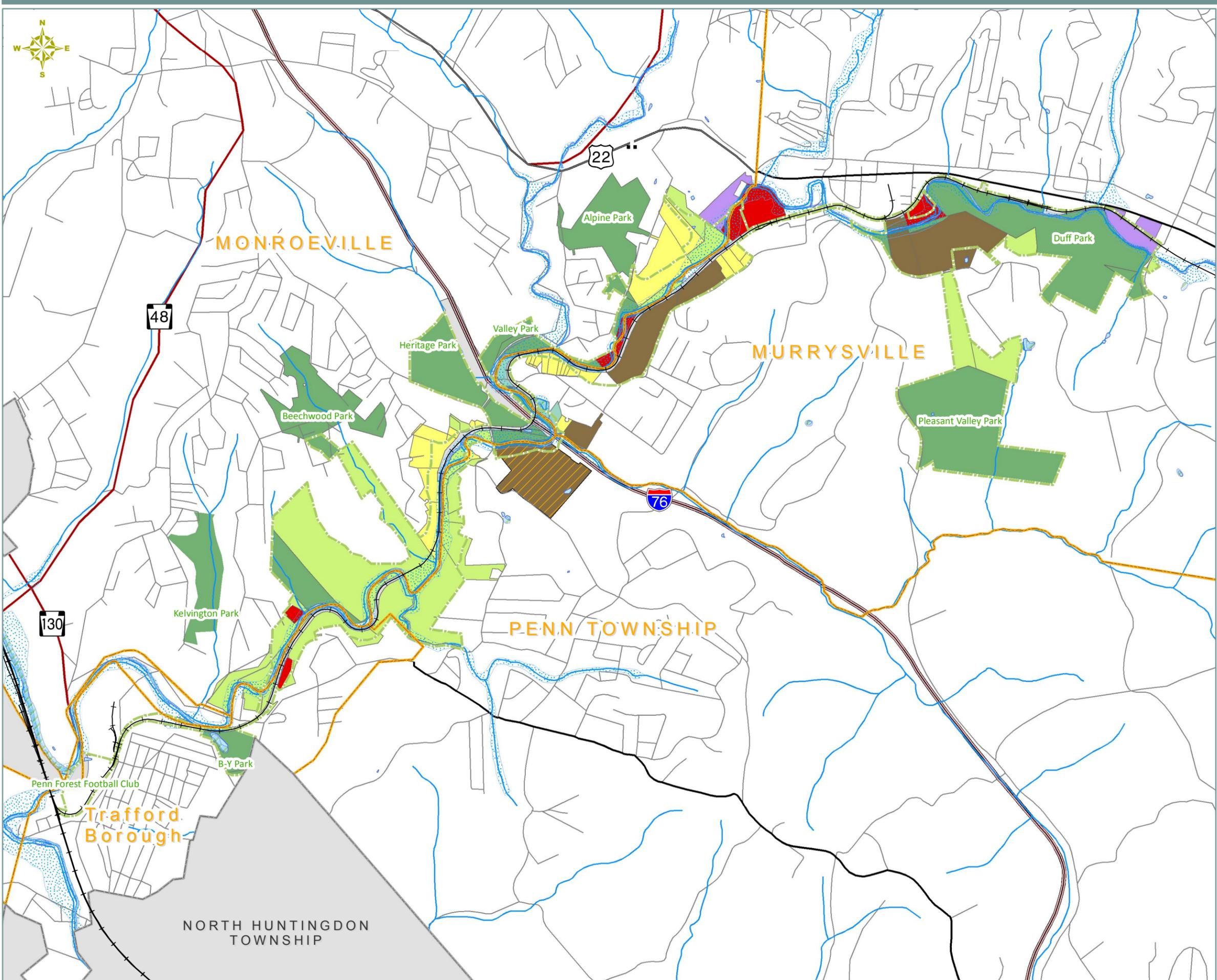
 Includes Low-Impact Development Techniques identical to those described in Monroeville’s ordinance earlier.

 No reference to Turtle Creek Stormwater Management Plan.

Stormwater Management Act (Act 167)

In 1978 in response to the impacts of accelerated stormwater runoff resulting from land development, the state enacted Pennsylvania's Stormwater Management Act (Act 167). The Act requires counties to prepare and adopt watershed based stormwater management plans, which municipalities are required to use to adopt and implement ordinances to regulate development. Allegheny County is in the preliminary stages of their Act 167 Plan and Westmoreland County is doing Phase I. The Act 167 Plan for the Turtle Creek Watershed was originally written in 1991.

Up until 2009, PA DEP provided technical, administrative, and financial assistance for the preparation of Stormwater Management Plans and funded 75% of the associated costs that the counties incur. At the municipal level, DEP also reimbursed municipalities for 75% of the allowable costs for enacting, administering, and implementing stormwater ordinances. However, Act 167 funding was eliminated from the 2009-10 and 2010-11 Pennsylvania budgets. Consequently, progress on watershed-wide stormwater planning has been slowed.



Turtle Creek Greenway Plan

Map 2.1 > Land Use

Legend

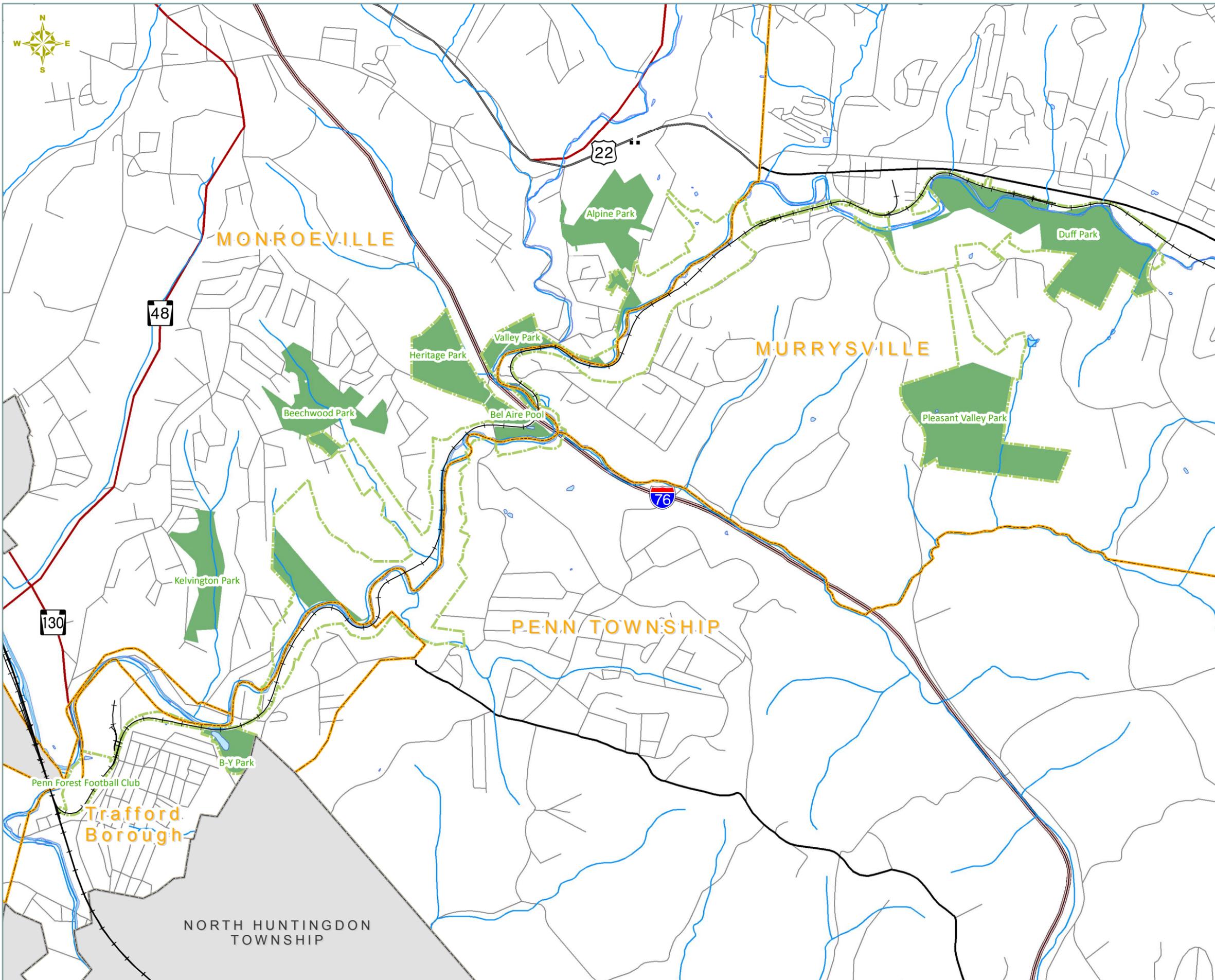
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- NWI Wetland
- Waterway
- Floodplain
- Existing Land Use Category**
- Agriculture
- Commercial
- Industrial
- Public Park
- Right-of-Way
- Utility
- Single Family Residential
- Undeveloped Land/Open Space
- Agricultural Security Area (ASA)
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

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Turtle Creek Greenway Plan

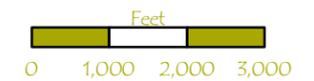
Map 2.2 > Parks and Recreation



Legend

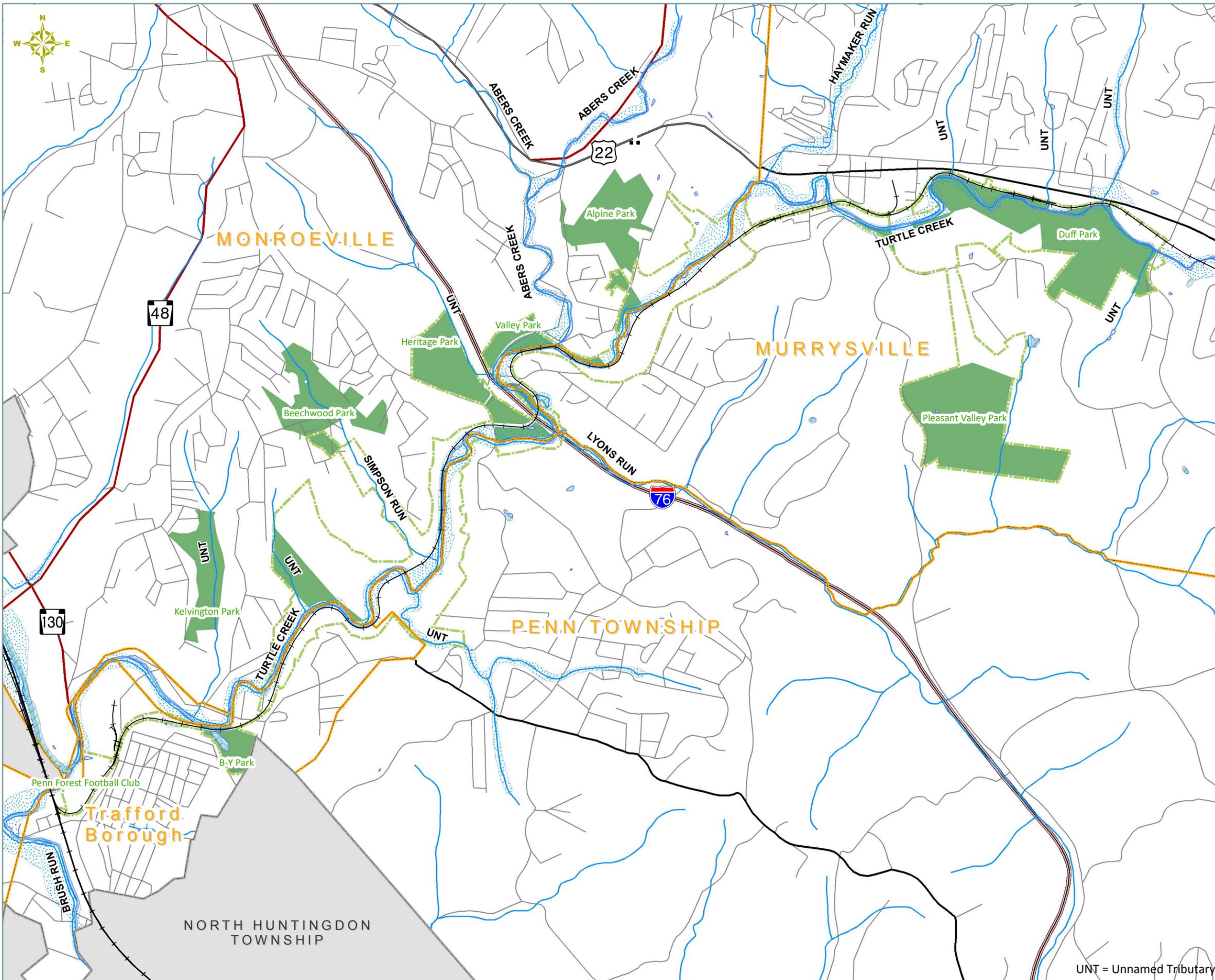
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Waterway
- Public Park
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan

Map 2.3 > Water Resources



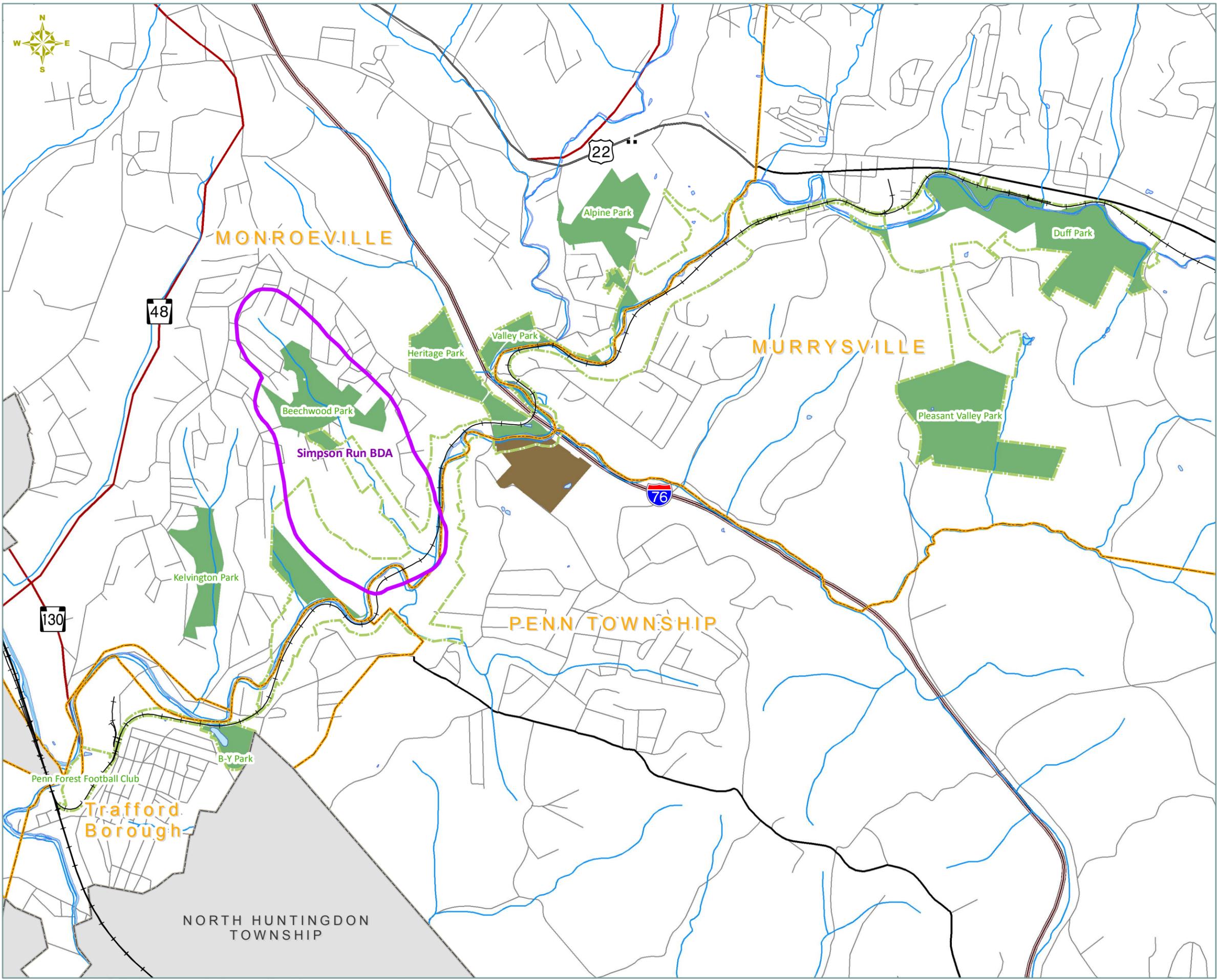
Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- NWI Wetland
- Waterway
- Floodplain
- Public Park
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



UNT = Unnamed Tributary



Turtle Creek Greenway Plan

Map 2.4 > Natural Areas

Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Waterway
- Public Park
- Agricultural Security Area (ASA)
- Natural Heritage Area
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

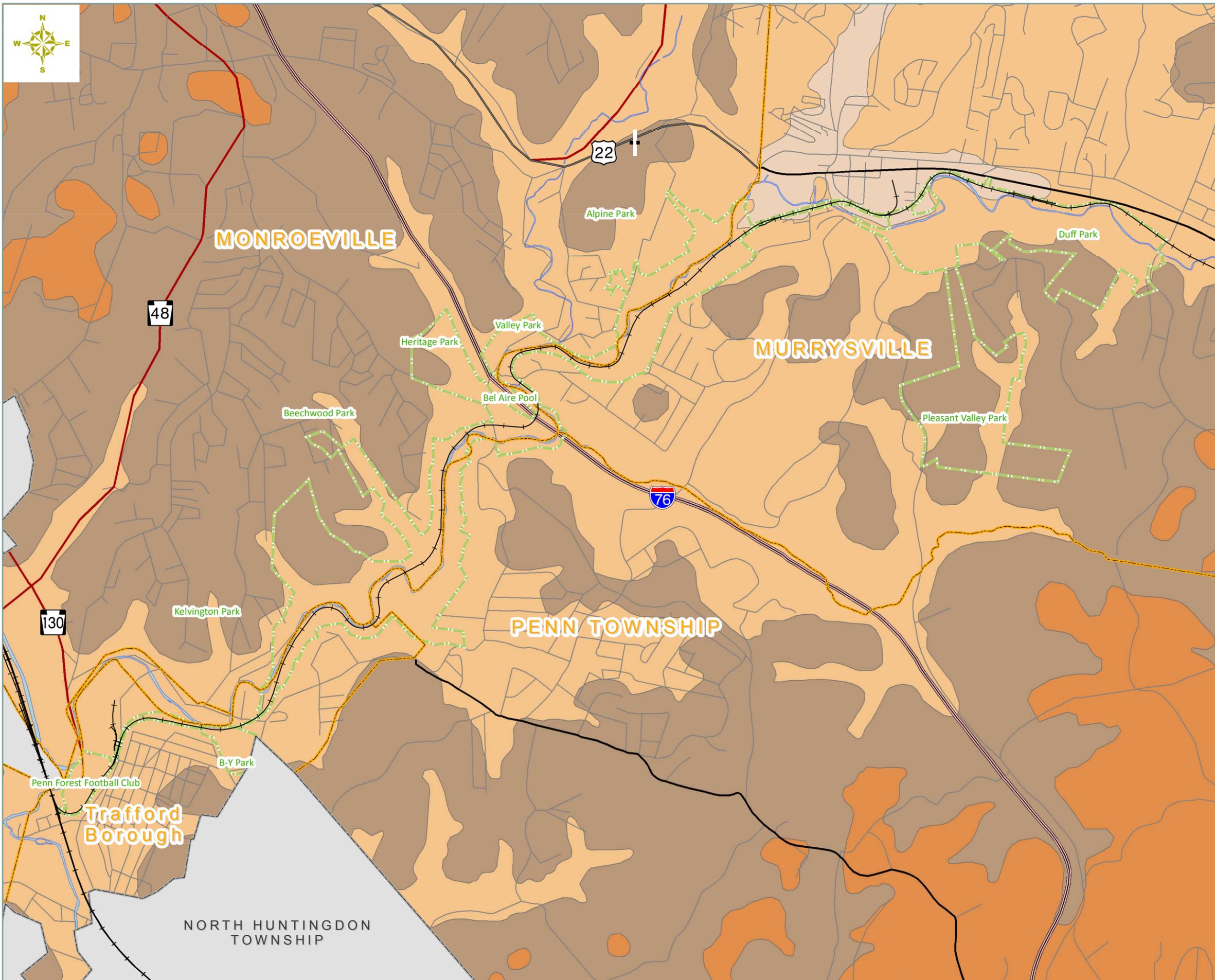
Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

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Turtle Creek Greenway Plan

Map 2.5 > Geology



Legend

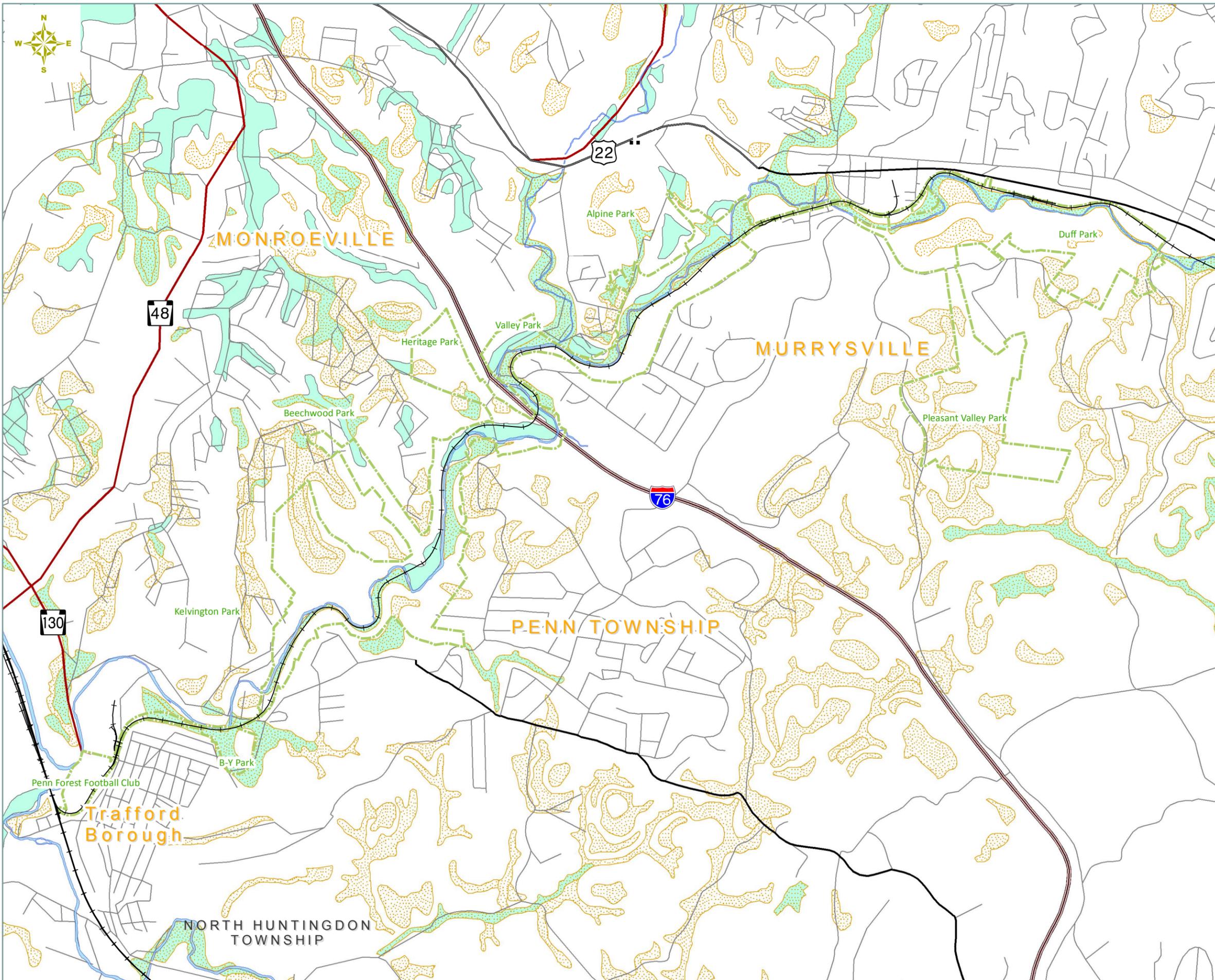
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Waterway
- Allegheny Formation
- Casselman Formation
- Glenshaw Formation
- Monongahela Formation
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

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Turtle Creek Greenway Plan

Map 2.6 > Soils

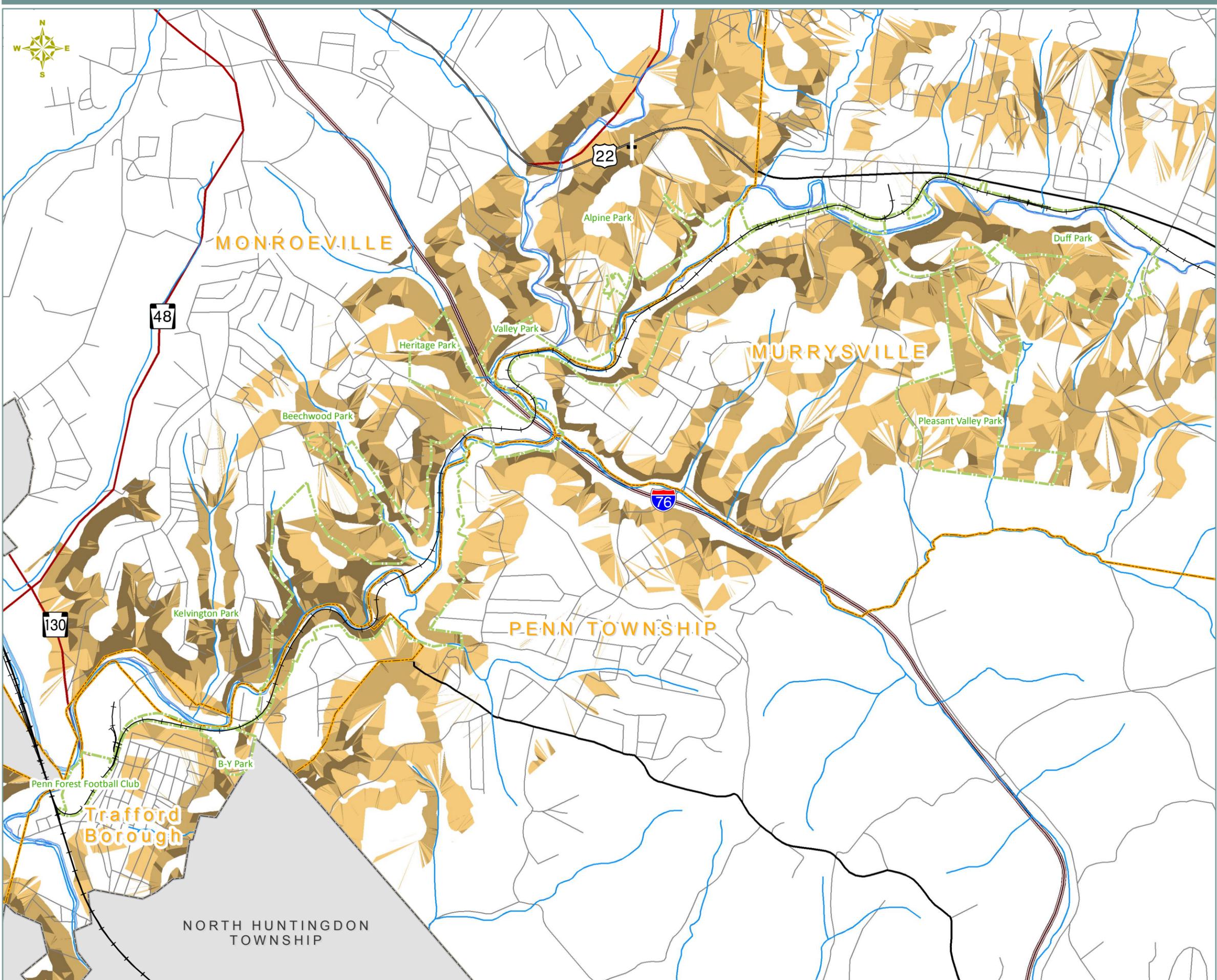


Legend

- Project Boundary
- Waterway
- Prime Farmland Soils
- Hydric Soils
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.





Turtle Creek Greenway Plan

Map 2.7 > Steep Slopes

Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Waterway

Steep Slopes

- >15-25%
- >25-40%
- >40%

- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

0 1,000 2,000 3,000 Feet



Turtle Creek Greenway Plan Chapter 3» Landowners

Section A > Landowner Coordination pg 3-3

Section B > Criteria Ranking pg 3-7

Section C > Acquisition Options pg 3-9

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Section A > Landowner Coordination

While a portion of the Turtle Creek Greenway is already under public ownership and part of the participating communities' parks and recreation systems, most of the Greenway is privately owned. Therefore, a key aspect of this project was to coordinate with the landowners to determine their level of interest in the Greenway and potential acquisition and/or partnerships.

Landowners within the Greenway were identified using tax assessment data from geographical information systems (GIS) digital mapping from both Allegheny County and Westmoreland County. Information collected through GIS was reviewed and updated where necessary by the municipal representatives.

Greenway Parcels

Maps 3.1A through 3.1D depict the parcels within the Turtle Creek Greenway while **Table 3.1** is a listing of each parcel along with the

- 🌲 **Project ID** (a unique parcel identifier that corresponds to the maps),
- 🌲 **Tax Parcel Number** (the County tax identification number)
- 🌲 **Size** (in acres)
- 🌲 **Owner information** (name and known mailing address)
- 🌲 **Land Value** (the County assessed value of the land only—not including structures or improvements)
- 🌲 **Current Land Use** (County assessment and field verified)

Railroad Right-of-Way (ROW)

The Greenway follows the Turtle Creek Industrial Railroad (TCKR) ROW from Trafford Borough to Duff Park in Murrysville. The portion of the ROW in Trafford Borough is owned by Norfolk Southern and leased to the Dura-Bond Protective Coating Company. The remainder of the ROW is owned by Dura-Bond.

Trafford Borough Parcels

There are five (5) parcels located within the Greenway in the Borough.

- 🌲 **Public Ownership:** one (1) parcel is owned by Trafford Borough: B-Y Park. A

Turtle Creek Greenway Plan

second parcel is leased to the Penn Forest Football Club and used as soccer fields.

- 🌲 Private Ownership: two (2) landowners own the remaining three (3) parcels.

Penn Township Parcels

There are nine (9) parcels located within the Greenway in the Township.

- 🌲 Public Ownership: one (1) parcel is owned by the Regional Trail Corporation (RTC), which was donated to the RTC by a private landowner and used as public access for fishing at Saunders Station Road.
- 🌲 Private Ownership: Four (4) landowners own the remaining seven (7) parcels . One parcel is an easement for the Penn Township Sewage Authority.

Murrysville Parcels

There are 36 parcels located within the Greenway in Murrysville.

- 🌲 Public Ownership: Five (5) parcels are owned by the Municipality of Murrysville. Four (4) of those comprise Duff Park while the fifth is Pleasant Valley Park.
- 🌲 Private Ownership: Three (3) parcels are owned by the Franklin Township Municipal Sanitary Authority, one (1) is owned by West Penn Power, and the remaining 27 are privately owned.

Monroeville Parcels

There are 33 parcels located within the Greenway in Monroeville.

- 🌲 Public Ownership: 14 parcels are owned by the Municipality of Monroeville. One parcel is not part of an official park but contains the old brickyard, eight (8) parcels comprise the Bel Aire Pool recreation area, two (2) parcels form Valley Park, two (2) parcels form Alpine Park, and one parcel is Beechwood Park. In addition, one (1) parcel is owned by the Pennsylvania Turnpike Commission and is the right-of-way for the PA Turnpike/I-76.
- 🌲 Private Ownership: One (1) parcel is owned by Peoples Natural Gas and the remaining 17 are under private ownership.

Contact Methods

Once the Landowners for the Greenway were identified, various methods were used in an attempt to contact each and determine their level of interest in the project and associated conservation and/or recreation efforts.

Landowner Meeting

An open house meeting was held on Wednesday, November 18, 2009 at the Murrysville Community Building from 3:00pm to 7:00pm. Invitations were mailed to all landowners within the Greenway along with a project description and information regarding the benefits of greenways. The purpose of the meeting was to discuss the project and potential partnership opportunities that may be of interest to the landowners in regards to conservation and recreation efforts.

Approximately 20 landowners attended the meeting. Maps of the Greenway and impacted parcels were available and landowners were asked to provide any potential opportunities or issues related to recreation and conservation. In addition, a brief survey was distributed that gathered specific information on each parcel. The meeting summary is included in **Appendix I: Landowner Meeting Summary**.

Survey

After the Landowners Meeting was held, a follow-up letter and survey was sent on December 9, 2009 to all of the landowners who did not attend the meeting. In total, 12 surveys were completed and returned, either at the meeting or mailed in. The completed surveys are included in **Appendix J: Landowner Surveys**.

Public Meetings

To ensure that the landowners were involved throughout the project, mailed invitations were extended for each of the public meetings that were held. The public meeting summaries are included in **Appendix E: Public Meeting Summaries**.

Landowner Interest

Map 3.2: Landowner Interest depicts the results of the discussions with the landowners in the Greenway regarding their level of interest in either acquisition or partnerships for recreation and/or conservation projects. The results were categorized as follows:



Public Park (21 parcels): Represents all land that is publicly owned within the Greenway.



Railroad ROW: The Railroad ROW is shown separately as discussions continue to be held with the owner.



Unknown Interest (40 parcels): Represents all landowners who did not respond to contact attempts during the planning process.



Acquisition/Partnership Interest (18 parcels): Represents the landowners who expressed an interest in possible donation, conservation easement, lease, and/or sale and those interested in partnering on future recreation and/or conservation efforts.



Possible Interest (2 parcels): Represents the landowners who expressed a possible interest in the donation/easement/lease/sale option but would like more information and may be interested in partnering to provide on future recreation and/or conservation projects.



No Acquisition Interest—May Partner (8 parcels): Represents the landowners who at this time, are not interested in the donation/easement/lease/sale option, but may be willing to partner with an organization for recreation and/or conservation projects.



No Interest (1 parcel): Represents the landowners who at this time, have no interest in pursuing any type of acquisition or partnership.

Section B > Criteria Ranking

In addition to knowing the landowner interest in recreation and/or conservation, it was also important to establish criteria to rank the parcels to help prioritize recreation/conservation projects. Therefore, two sets of criteria were developed to distinguish high priority parcels for recreation/conservation opportunities from high priority parcels for enhancement opportunities. The full ranking criteria form is included in **Appendix K: Criteria Ranking Form**.

Each parcel was then ranked according to the criteria, based upon information provided by the landowners, at public meetings, and through field views. A database was developed in both Excel Spreadsheet format as well as linked to the parcel data in GIS (ArcView) to allow future organizations to update and/or revise the criteria and rankings as needed in the future.

Note: All parcels, including those owned by public entities, were ranked in order to provide a base for potential improvements. While Tables 3.1A and 3.2A include the publicly owned parcels in the tally, Maps 3.3A-D and 3.4A-D do not show the ranking results for these parcels in order to depict the publicly owned land in context with high priority areas for acquisition/conservation. The results are included in Tables 3.2B and 3.3B.

Ranking Criteria for Natural, Cultural and/or Recreational Value

There were 12 criterion developed to rank the Greenway parcels for their natural, cultural and/or recreational value. Parcels received a score of a “1”, “2”, or “3” for each criterion, where a “3” represents the highest potential for natural, cultural and/or recreational value, and then the values were added together for a total score. **Maps 3.3A-D** depict the Natural, Cultural and/or Recreational prioritization results of the Greenway parcels.

1. *Meets stated project goals.*
2. *Provides recreational access to the greenway and/or stream.*
3. *Provides active recreational opportunities (i.e. facilities required).*
4. *Provides passive recreational opportunities (i.e. no facilities required).*
5. *Provides natural beauty/greenway.*
6. *Contains site of cultural, historic, or natural significance.*
7. *Habitat enhancement opportunities.*
8. *Provides natural flood control/protection.*
9. *Proximity to preserved land or publicly owned land.*
10. *Opportunity as educational area or for interpretive signage.*
11. *Likelihood of future development.*

12. Cost to implement projects.

Table 3.2A: Natural, Cultural and/or Recreational Summary

| | Priority Level | Score | # of Parcels |
|--|----------------|-------|--------------|
| | High | 25-36 | 37 parcels |
| | Medium | 18-24 | 37 parcels |
| | Low | 0-17 | 11 parcels |

Ranking Criteria for Restoration Opportunities

There were six (6) criterion developed to rank the Greenway parcels for their restoration potential. Parcels received a score of a “-1”, “-2”, or “-3” for each criterion, where a “-3” represents the highest need for restoration, and then the values were added together for a total score. **Maps 3.4A-D** depict the Restoration Opportunities prioritization results of the Greenway parcels.

1. Litter and/or illegal dumping present.
2. Contains area of erosion and/or wash out problems.
3. Source of erosion and/or wash out present on parcel.
4. Contains potential to install erosion and sedimentation (E&S) control/flood control measure.
5. Presence of invasive plant species.
6. Cost to implement projects.

Table 3.3A: Restoration Opportunities Summary

| | Priority Level | Score | # of Parcels |
|--|----------------|-----------|--------------|
| | High | -13 — -18 | 13 parcels |
| | Medium | -9 — -12 | 9 parcels |
| | Low | -1 — -8 | 63 parcels |

Section C > Acquisition Options

There are four (4) main methods to acquire property for recreation and/or conservation. Ultimately, it is up to the property owner and the implementing organization to determine which is the best option for both parties.

Land Donation

Land Donation is the gift of land from the owner to another person or organization without receiving financial or other compensation. In terms of the Turtle Creek Greenway Plan, donated land will be held by a land trust or other not-for-profit organization and protected for conservation and recreation purposes.

Benefits:

- Income tax deduction;
- Can be structured to allow the owner to continue to live on the land or to receive a life income.

Possible Benefits from Land Donation

If a landowner would like to protect land by donating it to a land trust, but need to receive income during his or her lifetime, a charitable gift annuity could be used. In a charitable gift annuity, the landowner agrees to transfer certain property to a charity, and the charity agrees to make regular annuity payments to one or two beneficiaries for life. The gift of land usually qualifies for a charitable income tax deduction at the time of the gift, based on the value of the land less the expected value of the annuity payments.

Another option for donating property and receiving regular income is a charitable remainder unitrust. The land is placed in a trust, first putting a conservation easement on it if it is to be protected. Then the trustee sells the land and invests the net proceeds from the sale. One or more beneficiaries receive payments each year for a fixed term or for life, then the trustee turns the remaining funds in the trust over to the land trust. The gift qualifies for a charitable income tax deduction when the land is put in the trust, based on the value of the land less the expected value of the payments. Charitable gift annuities and charitable remainder unitrusts are most useful for highly appreciated land, the sale of which would incur high capital gains tax (Land Trust Alliance, 2010).

Conservation Easement

Conservation Easement is a legal agreement between the property owner and a qualified land trust or other qualified organization. The property owner continues to own and use the land, but the land's uses are limited to protect the property's conservation value. The owner is still able to sell the land or pass it on to heirs, but the terms of the conservation easement are included in the deed, thus future owners inherit those easement terms.

- Benefits:**
- Income tax deduction;
 - Reduced property and estate taxes;
 - Can be structured to meet the financial and personal needs of the landowner while protecting the land's conservation value.

Possible Tax Benefits from Conservation Easements

Federal Income Tax Benefits

Donors of land and conservation easements may claim an income tax deduction under §170 of the Internal Revenue Code. The exact amount of tax savings depends on several factors:

- 🌲 How long the donor has owned the property (benefits are generally greater if owned for more than one year);
- 🌲 How the donor has used the property (residence, investment, agricultural);
- 🌲 The income of the donor (the higher one's income, the more one will save on taxes); and
- 🌲 The value of the donated property (the more valuable the property, the bigger the deduction).

Federal Estate Tax Benefits

Under §2031(c) of the Internal Revenue Code, up to \$500,000 may be excluded from one's taxable estate if he or she had donated a qualifying conservation easement. Similar to the income tax benefits, the larger the value of the donated easement, the more the estate tax deduction.

Under the American Farm and Ranch Protection Act of 1997, a landowner's estate may totally exclude from federal estate taxation up to 40% of the value of the land in conservation easement, with a cap of \$500,000. A landowner can donate an easement prior to death, or the heirs have a limited time after the landowner's death to donate the easement and to receive the associated tax benefits.

Lease

A lease is a financial agreement in which the property owner rents their land to an organization/party for a fee during a specified period of time, usually long-term. The property owner still owns the land, but permits the lessee to certain uses on the property as dictated by a legal contract.

Benefits: —Provides the owner with cash.

Sale

Bargain Sale of Land is another way of selling land, where the owner sells the land for less than its fair market value. In this case, the land is more affordable for a land trust or non-profit organization to purchase the land.

Benefits:

- Provides the owner with cash;
- Avoids some capital gains tax;
- Entitles seller to a charitable income tax deduction based on the difference between the property's fair market value and its sale price.

Table 3.1: Greenway Parcels

RAILROAD RIGHT-OF-WAY

| Project ID | Tax Parcel Number | Size (acres) | Owner | Address1 | Address2 | Assessed Valuation (Land Only) | Current Land Use |
|------------|-------------------|--------------|--------------------------------------|--|---------------------------|--------------------------------|-------------------------------------|
| RR | multiple | n/a | Dura-Bond Protective Coating Company | 5 Forbes Road | Export, PA 15632 | n/a | RR ROW |
| RR | 749-D-12 | 6.96 | Pennsylvania Railroad Company | Centre City Towers 650 Smithfield Street | Pittsburgh, PA 15222-3900 | \$5,700 | PURTA Exempt - RR used in operation |

TRAFFORD BOROUGH

| Project ID | Tax Parcel Number | Size (acres) | Owner | Address1 | Address2 | Assessed Valuation (Land Only) | Current Land Use |
|------------|-------------------|--------------|-------------------------------|---------------------------|---------------------|--------------------------------|-------------------|
| TB 1 | 36-03-03-00-0001 | 14.44 | CBS | | | | |
| TB 2 | 36-01-16-00-0129 | 13.36 | TRAFFORD BORO | | | \$22,210 | Public - B-Y Park |
| TB 3 | 36-01-16-00-0013 | 10.26 | J J A P INC | 407 N. 5th Street | Youngwood, PA 15697 | \$4,480 | Vacant Land |
| TB 4 | 36-02-09-00-0102 | 0.77 | Drakulik, John, Jr. & Janet E | 1075 1st Street Extension | Trafford, PA 15085 | \$3,740 | Commercial |
| TB 5 | 36-02-09-00-0086 | 28.39 | J J A P INC | 407 N. 5th Street | Youngwood, PA 15697 | \$15,700 | Vacant Land |

PENN TOWNSHIP

| Project ID | Tax Parcel Number | Size (acres) | Owner | Address1 | Address2 | Assessed Valuation (Land Only) | Current Land Use |
|------------|-------------------|--------------|--------------------------------|---------------------------|-----------------------|--------------------------------|-------------------|
| Penn 1 | 55-02-00-00-0103 | 31.56 | Houston Starr Company | 300 Brushton Avenue | Pittsburgh, PA 15222 | \$5,700 | Vacant Land |
| Penn 2 | 55-02-00-00-0009 | 2.69 | Penn Township Sewage Authority | 1032 Nike Site Road | IRWIN, PA 15642 | \$1,440 | Sewage ROW |
| Penn 3 | 55-02-00-00-0010 | 43.68 | Houston Starr Company | 300 Brushton Avenue | Pittsburgh, PA 15221 | \$5,850 | Vacant Land |
| Penn 4 | 55-02-00-00-0158 | 21.71 | Shaffer, Gregory L | 102 Lynwood Lane | Trafford, PA 15085 | \$8,200 | Vacant Land |
| Penn 5 | 55-02-00-00-0174 | 8.52 | Shaffer, Gregory L | 102 Lynwood Lane | Trafford, PA 15085 | \$2,300 | Vacant Land |
| Penn 6 | 55-02-00-00-0167 | 8.62 | Alaia, Marc & Tracy | 272 Saunders Station Road | Trafford, PA 15085 | \$2,600 | Vacant Land |
| Penn 7 | unknown | 8.52 | Shaffer, Gregory L | 102 Lynwood Lane | Trafford, PA 15085 | | Vacant Land |
| Penn 8 | 55-02-00-00-0171 | unknown | Regional Trail Corporation | PO Box 95 | West Newton, PA 15089 | | Vacant Land |
| Penn 9 | 55-02-00-00-0023 | 66.49 | Deutsch, Melvin & Susan | 888 Meadowbrook Road | Trafford, PA 15085 | \$12,110 | Agriculture - ASA |

MUNICIPALITY OF MURRYSVILLE

| Project ID | Tax Parcel Number | Size (acres) | Owner | Address1 | Address2 | Assessed Valuation (Land Only) | Current Land Use |
|------------|-------------------|--------------|--|-----------------------|-----------------------|--------------------------------|---|
| Murry 1 | 49-13-00-00-0006 | 6.20 | Boehm, George F & Cheryl J | 3317 Boehm Lane | Murrysville, PA 15668 | \$7,090 | Agriculture |
| Murry 2 | 49-13-15-00-0048 | 2.36 | Chunko, Thomas F & Roberta A | 3111 Hope Court | Murrysville, PA 15669 | \$1,200 | SFR |
| Murry 3 | 49-13-00-00-0092 | 2.98 | Franklin Township Municipal Sanitary Authority | 3001 Meadowbrook Road | Murrysville, PA 15670 | | Utility |
| Murry 4 | 49-13-00-00-0009 | 2.82 | Franklin Township Municipal Sanitary Authority | 3001 Meadowbrook Road | Murrysville, PA 15671 | \$500 | Utility |
| Murry 5 | 49-13-00-00-0011 | 5.35 | Franklin Township Municipal Sanitary Authority | 3001 Meadowbrook Road | Murrysville, PA 15672 | \$780 | Utility |
| Murry 6 | 49-13-00-00-0060 | 19.83 | Byers, William A & Carol | 3104 Meadowbrook Road | Murrysville, PA 15673 | \$7,710 | SFR |
| Murry 7 | 49-13-00-00-0060 | 1.96 | Dean, Daniel R & Marcia | 3174 Meadowbrook Road | Murrysville, PA 15674 | \$4,300 | SFR |
| Murry 8 | 49-13-00-00-0015 | 3.32 | Tyler, Michael K Brandt & Dorothy | 3216 Meadowbrook Road | Murrysville, PA 15675 | \$4,870 | SFR |
| Murry 9 | 49-13-00-00-0073 | 0.98 | Fiscus, Peter E & Ruth E | 3224 Meadowbrook Road | Murrysville, PA 15676 | \$6,880 | SFR |
| Murry 10 | 49-13-00-00-0016 | 0.82 | Angelo, David L & Michele C | 3228 Meadowbrook Road | Murrysville, PA 15677 | \$6,300 | SFR |
| Murry 11 | 49-13-00-00-0074 | 0.67 | Hill, Ernest F, Jr & Barbara | 3232 Meadowbrook Road | Murrysville, PA 15678 | \$6,300 | SFR |
| Murry 12 | 49-13-00-00-0017 | 1.50 | Scarcelli, Ross | 3244 Meadowbrook Road | Murrysville, PA 15679 | \$4,110 | SFR |
| Murry 13 | 49-13-00-00-0018 | 2.65 | McDonough, Elizabeth R et al | 3505 Mayer Drive | Murrysville, PA 15680 | \$500 | SFR |
| Murry 14 | 49-13-00-00-0019 | 0.83 | McIntyre, Clarence R Jr & Jeann | 3288 Mayer Drive | Murrysville, PA 15681 | \$7,190 | Vacant Land - SFR on parcel fronting Mayer Dr |
| Murry 15 | 49-13-00-00-0020 | 1.22 | Gebrosky, Robert J & Margeret E | 3003 Utah Court | Export, PA 15632 | \$500 | Vacant Land |
| Murry 16 | 49-13-00-00-0078 | 0.72 | Hill, Frank K & May M | 3351 Meadowbrook Road | Murrysville, PA 15681 | \$500 | Vacant Land |
| Murry 17 | 49-13-00-00-0041 | 30.15 | West, Mary Jane et al c/o Elizabeth McDonough | 3505 Mayer Drive | Murrysville, PA 15681 | \$18,400 | Agriculture |
| Murry 18 | 49-13-00-00-0043 | 11.07 | Farmer, Evelyn c/o Bonnie Miller | 6 Garden Center Drive | Greensburg, PA 15601 | \$1,340 | Agriculture |
| Murry 19 | 49-13-00-00-0044 | 2.73 | Lutz, Robert J & Margaret M | 3646 Meadowbrook Road | Murrysville, PA 15681 | \$2,130 | SFR |
| Murry 20 | 49-13-00-00-0045 | 3.50 | Lutz, Robert J & Margaret M | 3654 Meadowbrook Road | Murrysville, PA 15681 | \$3,110 | SFR |
| Murry 21 | 49-13-00-00-0046 | 1.71 | Duquette, Mary c/o Barbara Gebauer | 8403 Holly Street | Laurel, MD 20707 | \$500 | SFR |
| Murry 22 | 49-13-00-00-0047 | 1.71 | Vitek, James A & Danita K | 3678 Meadowbrook Road | Murrysville, PA 15681 | \$3,030 | SFR |
| Murry 23 | 49-13-00-00-0049 | 19.72 | Mine Safety Appliances, LLC c/o Tax Department | 3880 Meadowbrook Road | Pittsburgh, PA 15230 | \$345,930 | Commercial |

Denotes the parcel is publicly owned; SFR = Single Family Residential; RR ROW = Railroad Right-of-Way; ASA = Agricultural Security Area

Table 3.1: Greenway Parcels

MUNICIPALITY OF MURRYSVILLE (continued)

| Project ID | Tax Parcel Number | Size (acres) | Owner | Address1 | Address2 | Assessed Valuation (Land Only) | Current Land Use |
|------------|--------------------|--------------|--------------------------------------|----------------------|-----------------------|--------------------------------|---------------------------------------|
| Murry_24 | 49-14-00-00-0068 | 17.61 | Dyma-Craft Industries Inc | 4060 Norbatrol Court | Murrysville, PA 15681 | \$3,330 | Agriculture |
| Murry_25 | 49-14-00-00-0138 | 0.14 | West Penn Power Company | 800 Cabin Hill Drive | Greensburg, PA 15601 | \$1,370 | Utility |
| Murry_26 | 49-14-00-00-0069 | 10.68 | Delmar Leasing Company | 3000 Lilian Avenue | Murrysville, PA 15681 | \$22,180 | Commercial, partially vacant building |
| | 49-14-00-00-0135 | 2.77 | MURRYSVILLE | | | \$1,270 | Public - Duff Park |
| | 49-14-05-00-0101 | 2.47 | MURRYSVILLE | | | \$2,200 | Public - Duff Park |
| | 49-14-00-00-0071 | 154.28 | MURRYSVILLE | | | \$100,040 | Public - Duff Park |
| Murry_27 | 49-14-00-00-0072 | 2.87 | MURRYSVILLE | | | | Public - Duff Park |
| Murry_28 | 49-14-00-00-0067 | 54.68 | Van De Venne, Theo & Pia | 4040 Round Top Road | Murrysville, PA 15681 | \$9,560 | Agriculture |
| Murry_29 | 49-14-00-00-0070 | 8.74 | Yerick, Cynthia J c/o Cynthia Lorenz | 483 | Pittsburgh, PA 15239 | | Vacant Land |
| Murry_30 | 49-14-00-00-0100 | 1.72 | Matcuk, Robert C & Suzanne | 3538 | Murrysville, PA 15681 | \$1,960 | Vacant Land |
| Murry_31 | 49-14-00-0-00-0026 | 22.08 | Manno, John C Jr & Diana A | 4500 | Export, PA 15632 | \$3,420 | Vacant Land |
| Murry_32 | 49-14-00-00-0133 | 17.63 | Whitehead, Daniel L & Lenore R | 5207 | Durham, NC 27713 | \$3,500 | Vacant Land |
| Murry_33 | 49-06-044-00000 | 186.40 | MURRYSVILLE | | | | Public - Pleasant Valley Park |

MUNICIPALITY OF MONROEVILLE

| Project ID | Tax Parcel Number | Size (acres) | Owner | Address1 | Address2 | Assessed Valuation (Land Only) | Current Land Use |
|------------|-------------------|--------------|--------------------------------|----------------------------------|----------------------------|--------------------------------|----------------------------|
| Mon_1 | 861-H-185 | 32.26 | Houston Starr Company | 300 Brushton Avenue | Pittsburgh, PA 15221-0000 | \$77,600 | Vacant Land |
| Mon_2 | 981-N-78 | 3.07 | Peoples Natural Gas | 501 Martindale Street, Suite 500 | Pittsburgh, PA 15212-5832 | \$338,800 | Commercial / Utility |
| Mon_3 | 981-P-40 | 1.79 | Houston Starr Company | 300 Brushton Avenue | Pittsburgh, PA 15221-0000 | \$40,000 | Vacant Land |
| Mon_4 | 981-K-159 | 31.73 | MONROEVILLE | | | \$2,430 | Public - Brickyard |
| Mon_5 | 981-G-34 | 135.67 | Houston Starr Company | 300 Brushton Avenue | Pittsburgh, PA 15221-0000 | \$260,000 | Vacant Land |
| Mon_6 | 981-D-283 | 10.26 | Jovanovich, Mary | 222 Urick Lane | Monroeville, PA 15146-4928 | \$35,000 | SFR |
| Mon_7 | 980-S-282 | 8.51 | Chough, Lawrence & Linda | 219 Urick Lane | Monroeville, PA 15146-4927 | \$25,000 | SFR |
| Mon_8 | 980-M-281 | 14.40 | Marino, Richard & Justina | 127 Bee Lane | Monroeville, PA 15146-4917 | \$50,000 | SFR |
| Mon_9 | 1109-J-266 | 1.18 | Urlick, Michael & Dorothy | 407 Urick Lane | Monroeville, PA 15146-4923 | \$16,600 | SFR |
| Mon_10 | 1109-E-291 | 1.57 | Scheuermann, Paul & Dorothy | 4990 Cherry Lane | Murrysville, PA 15668-1505 | \$4,200 | Vacant Land |
| Mon_11 | 1109-E-36 | 1.72 | Scheuermann, Paul & Dorothy | 4990 Cherry Lane | Murrysville, PA 15668-1505 | \$35,300 | Vacant Land - Builders Lot |
| Mon_12 | 1109-E-24 | 0.55 | Lieb, Martin & Alice | 123 Bel Aire Drive | Monroeville, PA 15146-4930 | \$31,700 | SFR |
| Mon_13 | 1109-E-22 | 0.84 | Griffith, William & Karen | 127 Bel Aire Drive | Monroeville, PA 15146-4930 | \$32,700 | SFR |
| Mon_14 | 980-D-223 | 55.62 | MONROEVILLE | | | \$3,885,000 | Public - Heritage Park |
| | 1109-F-73 | 10.41 | MONROEVILLE | | | \$893,500 | Public - Bel Aire Pool |
| | 1109-K-355 | 7.79 | MONROEVILLE | | | \$57,500 | Public - Bel Aire Pool |
| | 1109-G-353 | 0.18 | MONROEVILLE | | | \$73,100 | Public - Bel Aire Pool |
| | 1109-G-329 | 1.12 | MONROEVILLE | | | \$34,800 | Public - Bel Aire Pool |
| | 1109-L-380 | 1.32 | MONROEVILLE | | | \$161,300 | Public - Bel Aire Pool |
| Mon_15 | 1109-G-347 | 0.44 | MONROEVILLE | | | \$90,100 | Public - Bel Aire Pool |
| Mon_16 | 856-H-396 | 34.40 | PA Turnpike Commission | PO Box 67676 | Harrisburg, PA 17106-7676 | \$6,641,100 | Turnpike ROW |
| Mon_17 | 1109-F-385 | 3.91 | MONROEVILLE | | | \$36,900 | Public - Bel Aire Pool |
| | 1109-B-379 | 11.13 | MONROEVILLE | | | \$65,300 | Public - Valley Park |
| Mon_18 | 1108-P-47 | 14.95 | MONROEVILLE | | | \$114,000 | Public - Valley Park |
| Mon_19 | 1109-D-132 | 9.50 | Marschik, Herman & Mary | PO Box 305 | Murrysville, PA 15668 | \$52,000 | Vacant Commercial Land |
| | 1245-J-317 | 5.12 | MONROEVILLE | | | \$84,500 | Public - Alpine Park |
| Mon_20 | 1108-H-334 | 4.99 | MONROEVILLE | | | \$484,200 | Public - Alpine Park |
| Mon_21 | 1245-J-248 | 17.49 | Marschik, Herman & Mary | PO Box 305 | Murrysville, PA 15668 | \$58,100 | Vacant Land |
| Mon_22 | 1245-E-314 | 33.48 | Krut, William & Cynthia | 1480 Cavitt Road | Monroeville, PA 15146-3704 | \$70,300 | SFR |
| Mon_23 | 1245-B-1 | 14.64 | Haberstroh, Earl Jr & Kathleen | 1494 Cavitt Road | Monroeville, PA 15146-3704 | \$66,700 | SFR |
| Mon_24 | 1244-P-1 | 10.52 | Haberstroh, Earl Jr & Kathleen | 1494 Cavitt Road | Monroeville, PA 15146-3704 | \$49,900 | Vacant Land |
| Mon_25 | 1244-L-82 | 17.60 | RJD Enterprises | 3249 Miracle Drive | Murrysville, PA 15668-1838 | \$1,463,200 | Mini-Warehouse |
| Mon_26 | 980-K-144 | 76.94 | MONROEVILLE | | | \$383,200 | Public - Beechwood Park |

Denotes the parcel is publicly owned; SFR = Single Family Residential; RR ROW = Railroad Right-of-Way; ASA = Agricultural Security Area

Table 3.2B: Natural, Cultural and/or Recreational Value Prioritization Matrix

RAILROAD RIGHT-OF-WAY

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_1 | Criteria_2 | Criteria_3 | Criteria_4 | Criteria_5 | Criteria_6 | Criteria_7 | Criteria_8 | Criteria_9 | Criteria_10 | Criteria_11 | Criteria_12 | Total Score | Priority Level |
|------------|-------------------|--------------|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|----------------|
| RR | multiple | n/a | RR ROW | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 26 | High |
| RR | 749-D-12 | 6.96 | PURTA Exempt - RR used in operation | 2 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 27 | High |

TRAFFORD BOROUGH

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_1 | Criteria_2 | Criteria_3 | Criteria_4 | Criteria_5 | Criteria_6 | Criteria_7 | Criteria_8 | Criteria_9 | Criteria_10 | Criteria_11 | Criteria_12 | Total Score | Priority Level |
|------------|-------------------|--------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|----------------|
| TB_1 | 36-03-03-00-0001 | 14.44 | | 3 | 2 | 1 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 2 | 29 | High |
| TB_2 | 36-01-16-00-0129 | 13.36 | Public - B-Y Park | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 26 | High |
| TB_3 | 36-01-16-00-0013 | 10.26 | Vacant Land | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 15 | Low |
| TB_4 | 36-02-09-00-0102 | 0.77 | Commercial | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 15 | Low |
| TB_5 | 36-02-09-00-0086 | 28.39 | Vacant Land | 2 | 2 | 1 | 1 | 3 | 2 | 1 | 1 | 3 | 1 | 1 | 3 | 25 | High |

PENN TOWNSHIP

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_1 | Criteria_2 | Criteria_3 | Criteria_4 | Criteria_5 | Criteria_6 | Criteria_7 | Criteria_8 | Criteria_9 | Criteria_10 | Criteria_11 | Criteria_12 | Total Score | Priority Level |
|------------|-------------------|--------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|----------------|
| Penn_1 | 55-02-00-00-0103 | 31.56 | Vacant Land | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 15 | Low |
| Penn_2 | 55-02-00-00-0009 | 2.69 | SEWAGE ROW | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 15 | Low |
| Penn_3 | 55-02-00-00-0010 | 43.68 | Vacant Land | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 25 | High |
| Penn_4 | 55-02-00-00-0158 | 21.71 | Vacant Land | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 3 | 3 | 20 | Medium |
| Penn_5 | 55-02-00-00-0174 | 8.52 | Vacant Land | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 3 | 3 | 20 | Medium |
| Penn_6 | 55-02-00-00-0167 | 8.62 | Vacant Land | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 3 | 3 | 20 | Medium |
| Penn_7 | | 8.52 | Vacant Land | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 3 | 18 | Medium |
| Penn_8 | 55-02-00-00-0171 | 0.00 | Vacant Land | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 17 | Low |
| Penn_9 | 55-02-00-00-0023 | 66.49 | AG - ASA | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 18 | Medium |

MUNICIPALITY OF MURRYSVILLE

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_1 | Criteria_2 | Criteria_3 | Criteria_4 | Criteria_5 | Criteria_6 | Criteria_7 | Criteria_8 | Criteria_9 | Criteria_10 | Criteria_11 | Criteria_12 | Total Score | Priority Level |
|------------|-------------------|--------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|----------------|
| Murry_1 | 49-13-00-00-0006 | 6.20 | AG | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 3 | 3 | 1 | 1 | 3 | 20 | Medium |
| Murry_2 | 49-13-15-00-0048 | 2.36 | SFR | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 25 | High |
| Murry_3 | 49-13-00-00-0092 | 2.98 | Utility | 3 | 2 | 1 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 2 | 29 | High |
| Murry_4 | 49-13-00-00-0009 | 2.82 | Utility | 1 | 3 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 3 | 21 | Medium |
| Murry_5 | 49-13-00-00-0011 | 5.35 | Utility | 3 | 1 | 2 | 2 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 3 | 23 | Medium |
| Murry_6 | 49-13-00-00-0060 | 19.83 | SFR | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 3 | 2 | 30 | High |
| Murry_7 | 49-13-00-00-0060 | 1.96 | SFR | 3 | 2 | 1 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 2 | 29 | High |
| Murry_8 | 49-13-00-00-0015 | 3.32 | SFR | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 | 1 | 3 | 3 | 2 | 30 | High |
| Murry_9 | 49-13-00-00-0073 | 0.98 | SFR | 3 | 2 | 1 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 2 | 29 | High |
| Murry_10 | 49-13-00-00-0016 | 0.82 | SFR | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 15 | Low |
| Murry_11 | 49-13-00-00-0074 | 0.67 | SFR | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 26 | High |
| Murry_12 | 49-13-00-00-0017 | 1.50 | SFR | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 2 | 1 | 3 | 21 | Medium |
| Murry_13 | 49-13-00-00-0018 | 2.65 | SFR | 3 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 2 | 3 | 25 | High |
| Murry_14 | 49-13-00-00-0019 | 0.83 | Vacant Land - SFR on parcel fronting Mayer Dr | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 14 | Low |
| Murry_15 | 49-13-00-00-0020 | 1.22 | | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 18 | Medium |
| Murry_16 | 49-13-00-00-0078 | 0.72 | | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 26 | High |
| Murry_17 | 49-13-00-00-0041 | 30.15 | Agriculture | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 2 | 3 | 1 | 3 | 24 | Medium |
| Murry_18 | 49-13-00-00-0043 | 11.07 | Agriculture | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 1 | 2 | 26 | High |
| Murry_19 | 49-13-00-00-0044 | 2.73 | SFR | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 2 | 3 | 1 | 3 | 24 | Medium |
| Murry_20 | 49-13-00-00-0045 | 3.50 | SFR | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 16 | Low |
| Murry_21 | 49-13-00-00-0046 | 1.71 | SFR | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 26 | High |
| Murry_22 | 49-13-00-00-0047 | 1.71 | SFR | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 26 | High |
| Murry_23 | 49-13-00-00-0049 | 19.72 | Commercial | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 30 | High |

Denotes the parcel is publicly owned; SFR = Single Family Residential; RR ROW = Railroad Right-of-Way; ASA = Agricultural Security Area

Table 3.2B: Natural, Cultural and/or Recreational Value Prioritization Matrix

MUNICIPALITY OF MURRYSVILLE (continued)

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_1 | Criteria_2 | Criteria_3 | Criteria_4 | Criteria_5 | Criteria_6 | Criteria_7 | Criteria_8 | Criteria_9 | Criteria_10 | Criteria_11 | Criteria_12 | Total Score | |
|------------|--------------------|--------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|--------|
| Murry_24 | 49-14-00-00-0068 | 17.61 | Agriculture | 3 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | 29 | High |
| Murry_25 | 49-14-00-00-0138 | 0.14 | Utility | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 25 | High |
| Murry_26 | 49-14-00-00-0069 | 10.68 | Commercial, partially vacant building | 3 | 2 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 3 | 23 | Medium |
| | 49-14-00-00-0135 | 2.77 | Public - Duff Park | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 3 | 2 | 22 | Medium |
| | 49-14-05-00-0101 | 2.47 | Public - Duff Park | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 3 | 21 | Medium |
| | 49-14-00-00-0071 | 154.28 | Public - Duff Park | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | 2 | 27 | High |
| Murry_27 | 49-14-00-00-0072 | 2.87 | Public - Duff Park | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | 2 | 27 | High |
| Murry_28 | 49-14-00-00-0067 | 54.68 | Agriculture | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 26 | High |
| Murry_29 | 49-14-00-00-0070 | 8.74 | Vacant Land | 3 | 2 | 2 | 3 | 3 | 1 | 3 | 3 | 3 | 2 | 1 | 3 | 29 | High |
| Murry_30 | 49-14-00-00-0100 | 1.72 | Vacant Land | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 27 | High |
| Murry_31 | 49-14-00-0-00-0026 | 22.08 | Vacant Land | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 27 | High |
| Murry_32 | 49-14-00-00-0133 | 17.63 | Vacant Land | 2 | 1 | 2 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 24 | Medium |
| Murry_33 | 49-06-044-00000 | 186.40 | Public - Pleasant Valley Park | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 27 | High |

MUNICIPALITY OF MONROEVILLE

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_1 | Criteria_2 | Criteria_3 | Criteria_4 | Criteria_5 | Criteria_6 | Criteria_7 | Criteria_8 | Criteria_9 | Criteria_10 | Criteria_11 | Criteria_12 | Total Score | |
|------------|-------------------|--------------|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|--------|
| Mon_1 | 861-H-185 | 32.26 | Vacant Land | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 2 | 2 | 31 | High |
| Mon_2 | 981-N-78 | 3.07 | Commercial / Utility | 3 | 1 | 1 | 1 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 3 | 22 | Medium |
| Mon_3 | 981-P-40 | 1.79 | Vacant Land | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 1 | 2 | 3 | 25 | High |
| Mon_4 | 981-K-159 | 31.73 | Public | 3 | 1 | 1 | 2 | 3 | 3 | 2 | 3 | 1 | 2 | 1 | 2 | 24 | Medium |
| Mon_5 | 981-G-34 | 135.67 | Vacant Land | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 32 | High |
| Mon_6 | 981-D-283 | 10.26 | SFR | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 3 | 21 | Medium |
| Mon_7 | 980-S-282 | 8.51 | SFR | 2 | 1 | 1 | 1 | 3 | 1 | 3 | 3 | 1 | 3 | 2 | 2 | 23 | Medium |
| Mon_8 | 980-M-281 | 14.40 | SFR | 3 | 1 | 1 | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 2 | 3 | 22 | Medium |
| Mon_9 | 1109-J-266 | 1.18 | SFR | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 17 | Low |
| Mon_10 | 1109-E-291 | 1.57 | Vacant Land | 1 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 22 | Medium |
| Mon_11 | 1109-E-36 | 1.72 | Vacant Land - Builders Lot | 2 | 1 | 1 | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 3 | 3 | 22 | Medium |
| Mon_12 | 1109-E-24 | 0.55 | SFR | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 17 | Low |
| Mon_13 | 1109-E-22 | 0.84 | SFR | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 17 | Low |
| Mon_14 | 980-D-223 | 55.62 | Public - Heritage Park | 2 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 1 | 2 | 3 | 24 | Medium |
| | 1109-F-73 | 10.41 | Public - Bel Aire Pool | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 3 | 22 | Medium |
| | 1109-K-355 | 7.79 | Public - Bel Aire Pool | 3 | 1 | 1 | 3 | 3 | 1 | 3 | 3 | 1 | 2 | 1 | 2 | 24 | Medium |
| | 1109-G-353 | 0.18 | Public - Bel Aire Pool | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 18 | Medium |
| | 1109-G-329 | 1.12 | Public - Bel Aire Pool | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 18 | Medium |
| | 1109-L-380 | 1.32 | Public - Bel Aire Pool | 3 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 2 | 26 | High |
| Mon_15 | 1109-G-347 | 0.44 | Public - Bel Aire Pool | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 18 | Medium |
| Mon_16 | 856-H-396 | 34.40 | ROW | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 19 | Medium |
| Mon_17 | 1109-F-385 | 3.91 | Public - Bel Aire Pool | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 21 | Medium |
| | 1109-B-379 | 11.13 | Public - Valley Park | 1 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 1 | 2 | 3 | 21 | Medium |
| Mon_18 | 1108-P-47 | 14.95 | Public - Valley Park | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 1 | 1 | 27 | High |
| Mon_19 | 1109-D-132 | 9.50 | Vacant Commercial Land | 3 | 3 | 1 | 3 | 3 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 24 | Medium |
| | 1245-J-317 | 5.12 | Public - Alpine Park | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 3 | 1 | 1 | 1 | 3 | 19 | Medium |
| Mon_20 | 1108-H-334 | 4.99 | Public - Alpine Park | 3 | 1 | 3 | 3 | 3 | 1 | 2 | 3 | 1 | 3 | 1 | 2 | 26 | High |
| Mon_21 | 1245-J-248 | 17.49 | Vacant Land | 3 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 3 | 1 | 2 | 23 | Medium |
| Mon_22 | 1245-E-314 | 33.48 | SFR | 2 | 2 | 1 | 3 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 26 | High |
| Mon_23 | 1245-B-1 | 14.64 | SFR | 2 | 1 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 3 | 21 | Medium |
| Mon_24 | 1244-P-1 | 10.52 | Vacant Land | 2 | 2 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 3 | 22 | Medium |
| Mon_25 | 1244-L-82 | 17.60 | Mini-Warehouse | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 27 | High |
| Mon_26 | 980-K-144 | 76.94 | Public - Beechwood Park | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 3 | 26 | High |

Denotes the parcel is publicly owned; SFR = Single Family Residential; RR ROW = Railroad Right-of-Way; ASA = Agricultural Security Area

Table 3.3B: Restoration Opportunities Prioritization Matrix

RAILROAD RIGHT-OF-WAY

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_13 | Criteria_14 | Criteria_15 | Criteria_16 | Criteria_17 | Criteria_18 | Total Score | Priority Level |
|------------|-------------------|--------------|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| RR | multiple | n/a | RR ROW | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| RR | 749-D-12 | 6.96 | PURTA Exempt - RR used in operation | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |

TRAFFORD BOROUGH

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_13 | Criteria_14 | Criteria_15 | Criteria_16 | Criteria_17 | Criteria_18 | Total Score | Priority Level |
|------------|-------------------|--------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| TB_1 | 36-03-03-00-0001 | 14.44 | | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| TB_2 | 36-01-16-00-0129 | 13.36 | Public - B-Y Park | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| TB_3 | 36-01-16-00-0013 | 10.26 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| TB_4 | 36-02-09-00-0102 | 0.77 | Commercial | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| TB_5 | 36-02-09-00-0086 | 28.39 | Vacant Land | -2 | -1 | -1 | -1 | -2 | -2 | -9 | Medium |

PENN TOWNSHIP

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_13 | Criteria_14 | Criteria_15 | Criteria_16 | Criteria_17 | Criteria_18 | Total Score | Priority Level |
|------------|-------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Penn_1 | 55-02-00-00-0103 | 31.56 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Penn_2 | 55-02-00-00-0009 | 2.69 | SEWAGE ROW | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Penn_3 | 55-02-00-00-0010 | 43.68 | Vacant Land | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |
| Penn_4 | 55-02-00-00-0158 | 21.71 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Penn_5 | 55-02-00-00-0174 | 8.52 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Penn_6 | 55-02-00-00-0167 | 8.62 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Penn_7 | unknown | 8.52 | Vacant Land | -1 | -3 | -1 | -3 | -3 | -2 | -13 | High |
| Penn_8 | 55-02-00-00-0171 | unknown | Vacant Land | -1 | -3 | -1 | -3 | -3 | -2 | -13 | High |
| Penn_9 | 55-02-00-00-0023 | 66.49 | AG - ASA | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |

MUNICIPALITY OF MURRYSVILLE

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_13 | Criteria_14 | Criteria_15 | Criteria_16 | Criteria_17 | Criteria_18 | Total Score | Priority Level |
|------------|-------------------|--------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Murry_1 | 49-13-00-00-0006 | 6.20 | AG | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_2 | 49-13-15-00-0048 | 2.36 | SFR | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |
| Murry_3 | 49-13-00-00-0092 | 2.98 | Utility | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_4 | 49-13-00-00-0009 | 2.82 | Utility | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_5 | 49-13-00-00-0011 | 5.35 | Utility | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_6 | 49-13-00-00-0060 | 19.83 | SFR | -1 | -3 | -3 | -3 | -2 | -3 | -15 | High |
| Murry_7 | 49-13-00-00-0060 | 1.96 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_8 | 49-13-00-00-0015 | 3.32 | SFR | -1 | -3 | -3 | -3 | -2 | -3 | -15 | High |
| Murry_9 | 49-13-00-00-0073 | 0.98 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_10 | 49-13-00-00-0016 | 0.82 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_11 | 49-13-00-00-0074 | 0.67 | SFR | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| Murry_12 | 49-13-00-00-0017 | 1.50 | SFR | -3 | -1 | -2 | -2 | -2 | -2 | -6 | Low |
| Murry_13 | 49-13-00-00-0018 | 2.65 | SFR | -1 | -1 | -2 | -1 | -2 | -2 | -9 | Medium |
| Murry_14 | 49-13-00-00-0019 | 0.83 | Vacant Land - SFR on parcel fronting Mayer Dr | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_15 | 49-13-00-00-0020 | 1.22 | | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_16 | 49-13-00-00-0078 | 0.72 | | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| Murry_17 | 49-13-00-00-0041 | 30.15 | Agriculture | -1 | -3 | -2 | -1 | -1 | -2 | -10 | High |
| Murry_18 | 49-13-00-00-0043 | 11.07 | Agriculture | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| Murry_19 | 49-13-00-00-0044 | 2.73 | SFR | -1 | -1 | -1 | -1 | -3 | -2 | -9 | Medium |
| Murry_20 | 49-13-00-00-0045 | 3.50 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_21 | 49-13-00-00-0046 | 1.71 | SFR | -1 | -3 | -1 | -3 | -1 | -2 | -11 | Medium |
| Murry_22 | 49-13-00-00-0047 | 1.71 | SFR | -1 | -3 | -1 | -3 | -1 | -2 | -11 | Medium |
| Murry_23 | 49-13-00-00-0049 | 19.72 | Commercial | -1 | -1 | -1 | -1 | -3 | -1 | -8 | Low |

Denotes the parcel is publicly owned; SFR = Single Family Residential; RR ROW = Railroad Right-of-Way; ASA = Agricultural Security Area

Table 3.3B: Restoration Opportunities Prioritization Matrix

MUNICIPALITY OF MURRYSVILLE (continued)

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_13 | Criteria_14 | Criteria_15 | Criteria_16 | Criteria_17 | Criteria_18 | Total Score | Priority Level |
|------------|--------------------|--------------|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Murry_24 | 49-14-00-00-0068 | 17.61 | Agriculture | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_25 | 49-14-00-00-0138 | 0.14 | Utility | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_26 | 49-14-00-00-0069 | 10.68 | Commercial, partially vacant building | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| | 49-14-00-00-0135 | 2.77 | Public - Duff Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| | 49-14-05-00-0101 | 2.47 | Public - Duff Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| | 49-14-00-00-0071 | 154.28 | Public - Duff Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_27 | 49-14-00-00-0072 | 2.87 | Public - Duff Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_28 | 49-14-00-00-0067 | 54.68 | Agriculture | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| Murry_29 | 49-14-00-00-0070 | 8.74 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_30 | 49-14-00-00-0100 | 1.72 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_31 | 49-14-00-0-00-0026 | 22.08 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_32 | 49-14-00-00-0133 | 17.63 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Murry_33 | 49-06-044-00000 | 186.40 | Public - Pleasant Valley Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |

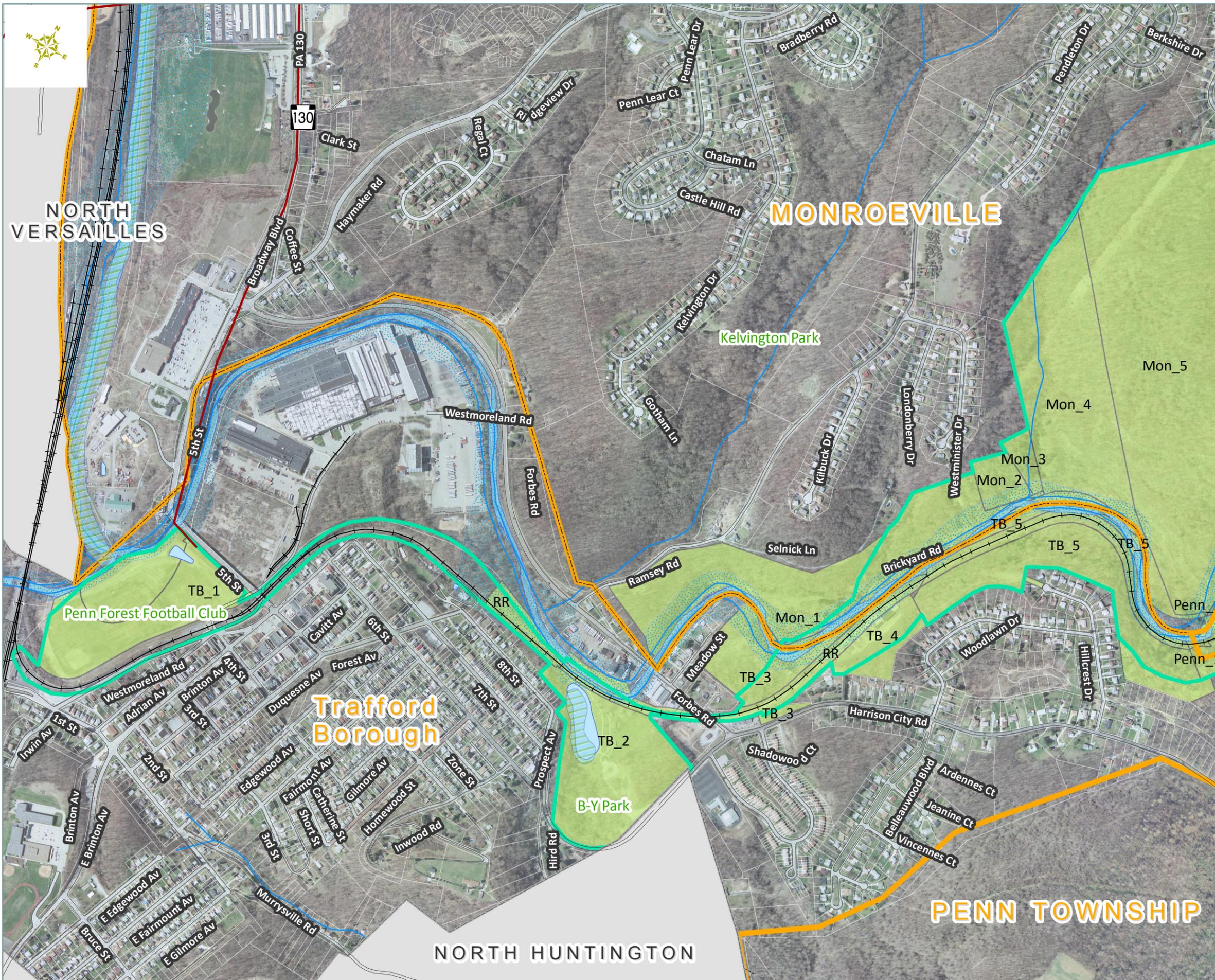
MUNICIPALITY OF MONROEVILLE

| Project ID | Tax Parcel Number | Size (acres) | Owner | Criteria_13 | Criteria_14 | Criteria_15 | Criteria_16 | Criteria_17 | Criteria_18 | Total Score | Priority Level |
|------------|-------------------|--------------|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Mon_1 | 861-H-185 | 32.26 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_2 | 981-N-78 | 3.07 | Commercial / Utility | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |
| Mon_3 | 981-P-40 | 1.79 | Vacant Land | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |
| Mon_4 | 981-K-159 | 31.73 | Public | -1 | -1 | -1 | -1 | -2 | -1 | -7 | Low |
| Mon_5 | 981-G-34 | 135.67 | Vacant Land | -2 | -3 | -3 | -3 | -3 | -3 | -17 | High |
| Mon_6 | 981-D-283 | 10.26 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_7 | 980-S-282 | 8.51 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_8 | 980-M-281 | 14.40 | SFR | -1 | -2 | -1 | -2 | -1 | -2 | -9 | Medium |
| Mon_9 | 1109-J-266 | 1.18 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_10 | 1109-E-291 | 1.57 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_11 | 1109-E-36 | 1.72 | Vacant Land - Builders Lot | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_12 | 1109-E-24 | 0.55 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_13 | 1109-E-22 | 0.84 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_14 | 980-D-223 | 55.62 | Public - Heritage Park | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |
| | 1109-F-73 | 10.41 | Public - Bel Aire Pool | -1 | -1 | -1 | -1 | -3 | -2 | -9 | Medium |
| | 1109-K-355 | 7.79 | Public - Bel Aire Pool | -1 | -1 | -1 | -1 | -3 | -2 | -9 | Medium |
| | 1109-G-353 | 0.18 | Public - Bel Aire Pool | -2 | -1 | -1 | -2 | -1 | -1 | -8 | Low |
| | 1109-G-329 | 1.12 | Public - Bel Aire Pool | -2 | -1 | -1 | -2 | -1 | -1 | -8 | Low |
| | 1109-L-380 | 1.32 | Public - Bel Aire Pool | -1 | -1 | -1 | -1 | -2 | -1 | -7 | Low |
| Mon_15 | 1109-G-347 | 0.44 | Public - Bel Aire Pool | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_16 | 856-H-396 | 34.40 | ROW | -2 | -1 | -1 | -2 | -1 | -1 | -8 | Low |
| Mon_17 | 1109-F-385 | 3.91 | Public - Bel Aire Pool | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| | 1109-B-379 | 11.13 | Public - Valley Park | -2 | -1 | -1 | -2 | -2 | -1 | -9 | Medium |
| Mon_18 | 1108-P-47 | 14.95 | Public - Valley Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_19 | 1109-D-132 | 9.50 | Vacant Commercial Land | -1 | -2 | -1 | -1 | -1 | -2 | -8 | Low |
| | 1245-J-317 | 5.12 | Public - Alpine Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_20 | 1108-H-334 | 4.99 | Public - Alpine Park | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_21 | 1245-J-248 | 17.49 | Vacant Land | -1 | -3 | -1 | -3 | -2 | -3 | -13 | High |
| Mon_22 | 1245-E-314 | 33.48 | SFR | -1 | -2 | -1 | -1 | -1 | -1 | -7 | Low |
| Mon_23 | 1245-B-1 | 14.64 | SFR | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_24 | 1244-P-1 | 10.52 | Vacant Land | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_25 | 1244-L-82 | 17.60 | Mini-Warehouse | -1 | -1 | -1 | -1 | -1 | -1 | -6 | Low |
| Mon_26 | 980-K-144 | 76.94 | Public - Beechwood Park | -1 | -1 | -1 | -1 | -1 | -2 | -7 | Low |

Denotes the parcel is publicly owned; SFR = Single Family Residential; RR ROW = Railroad Right-of-Way; ASA = Agricultural Security Area

Turtle Creek Greenway Plan

Map 3.1A > Greenway Parcels

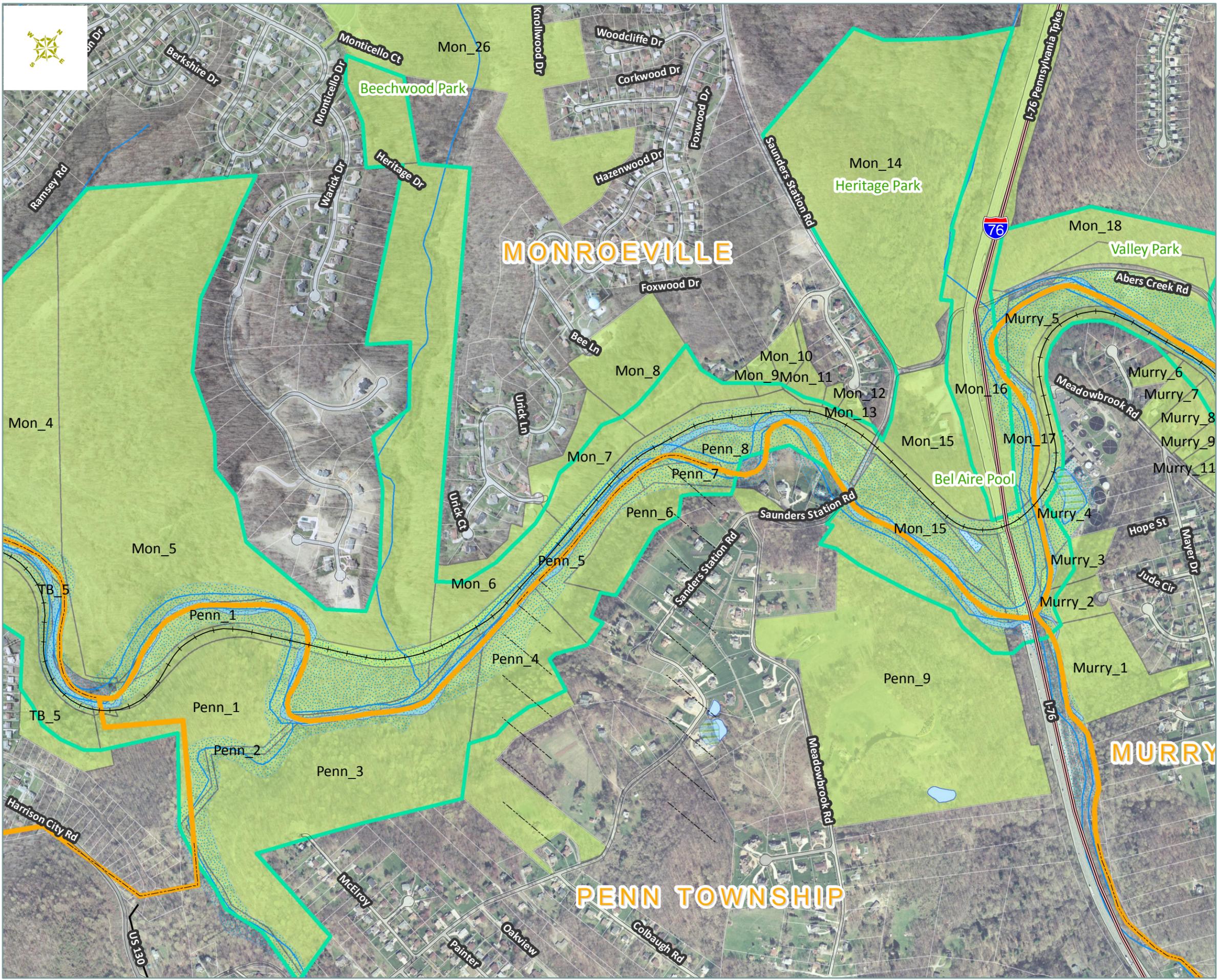


Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Parcel
- Greenway Parcel
- NWI Wetland
- Waterway
- Floodplain
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.





Turtle Creek Greenway Plan

Map 3.1B > Greenway Parcels

Legend

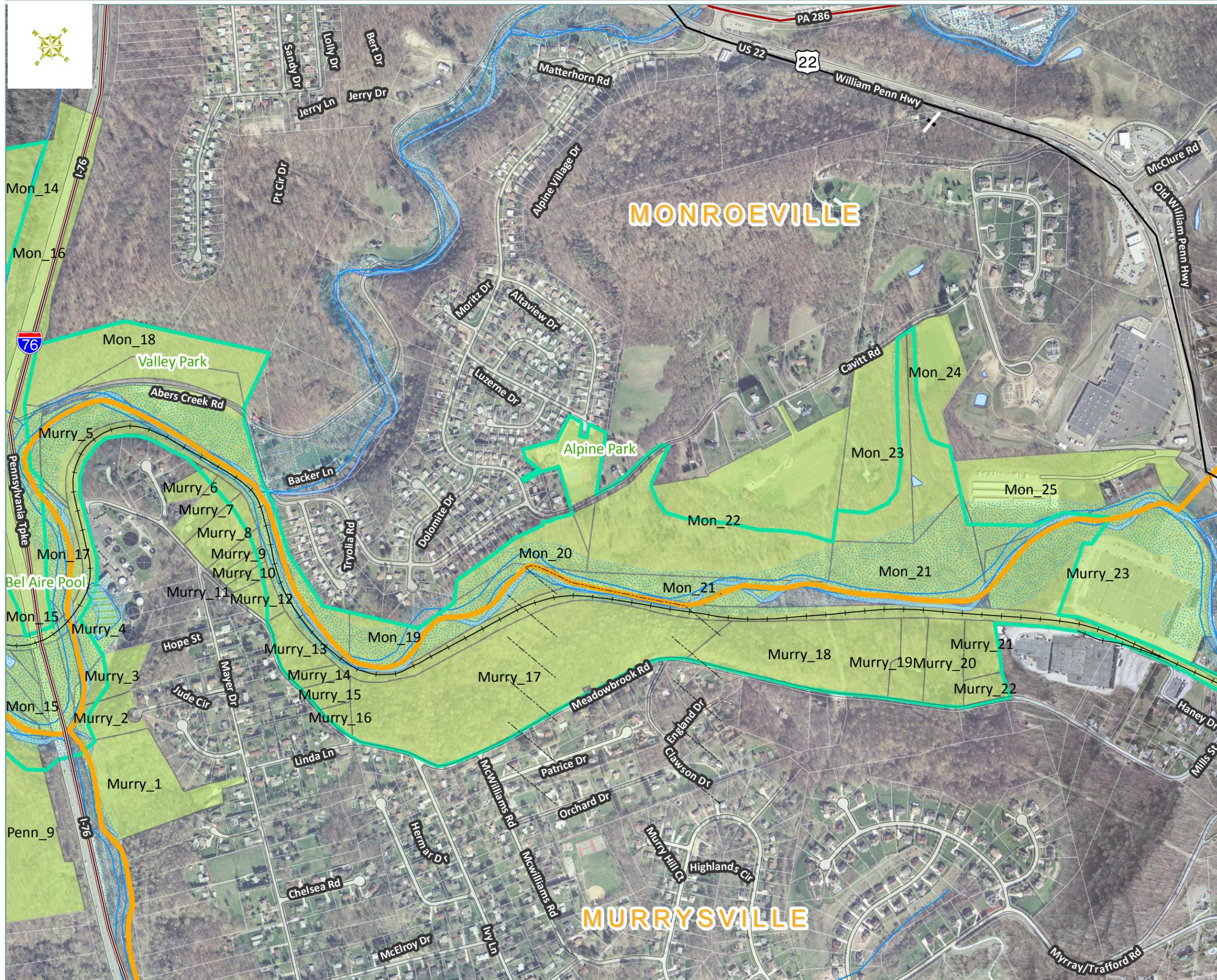
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Parcel
- Greenway Parcel
- NWI Wetland
- Waterway
- Floodplain
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan

Map 3.1C > Greenway Parcels

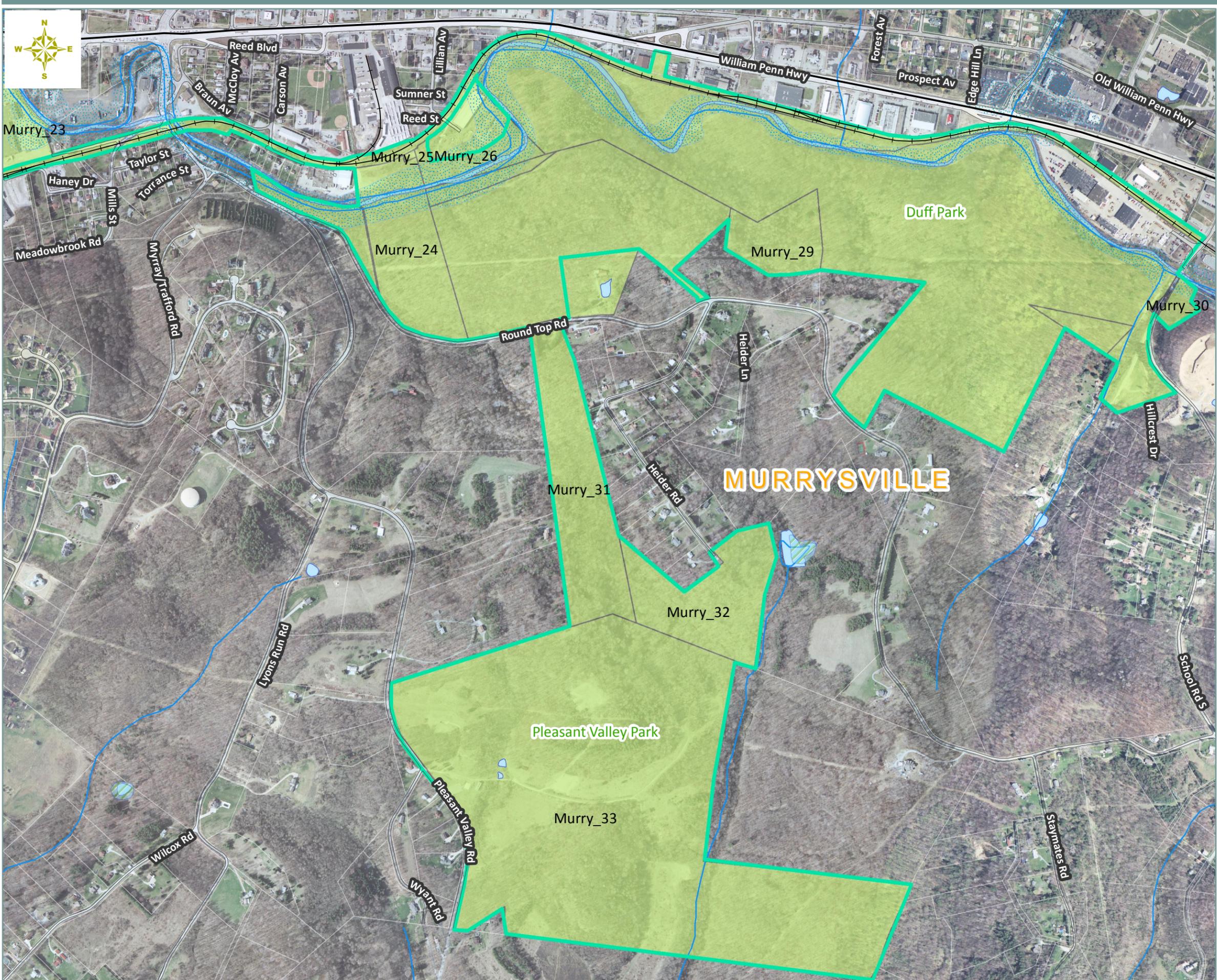


Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Parcel
- Greenway Parcel
- NWI Wetland
- Waterway
- Floodplain
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.





Turtle Creek Greenway Plan

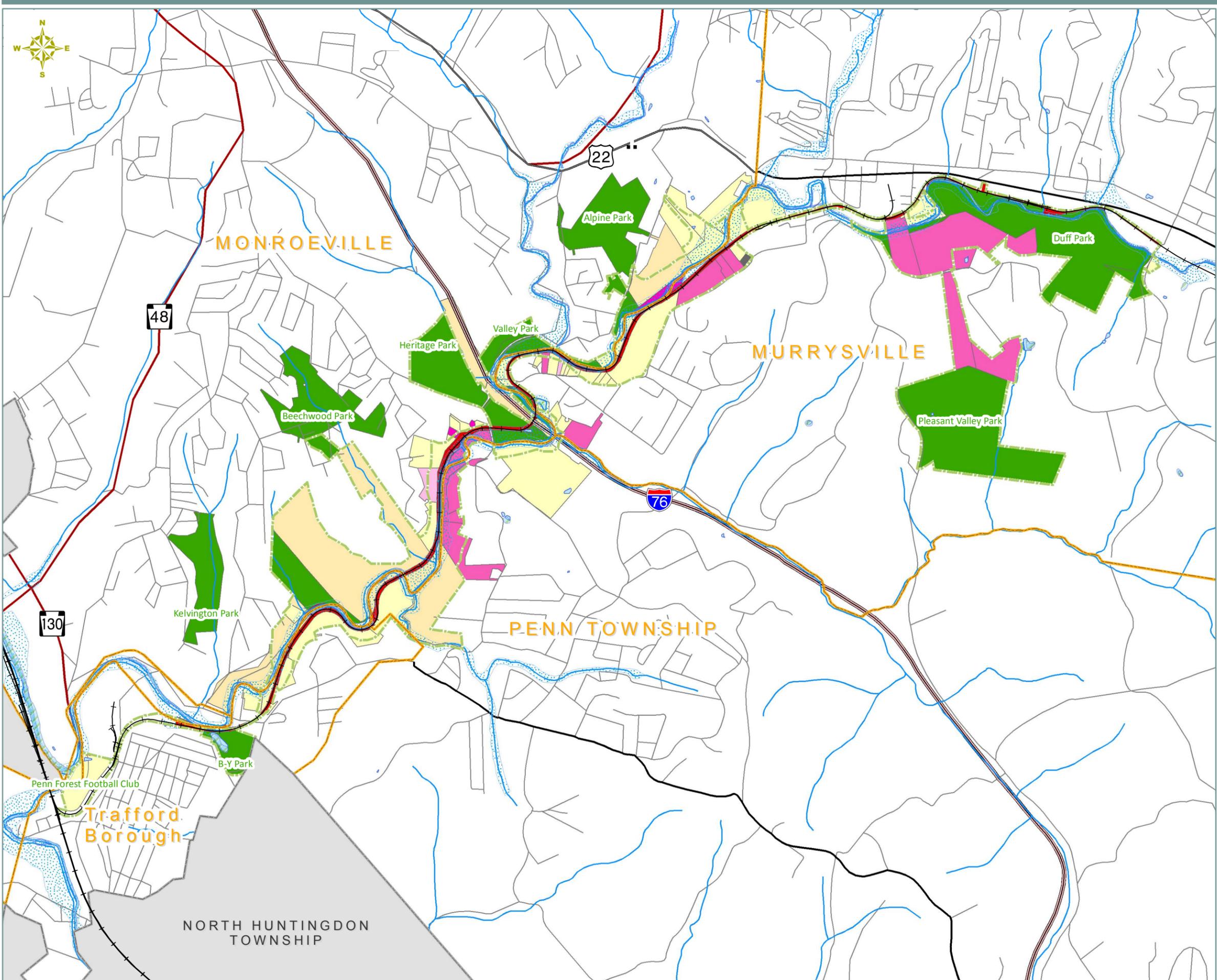
Map 3.1D > Greenway Parcels

Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Parcel
- Greenway Parcel
- NWI Wetland
- Waterway
- Floodplain
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

0 1,000 Feet



Turtle Creek Greenway Plan

Map 3.2 > Landowner Interest

Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- NWI Wetland
- Waterway
- Floodplain

Landowner Interest

- Public Park
- Railroad ROW
- Unknown Interest
- Acquisition/Partnership Interest
- Possible Interest
- No Acquisition Interest - May Partner
- No Interest

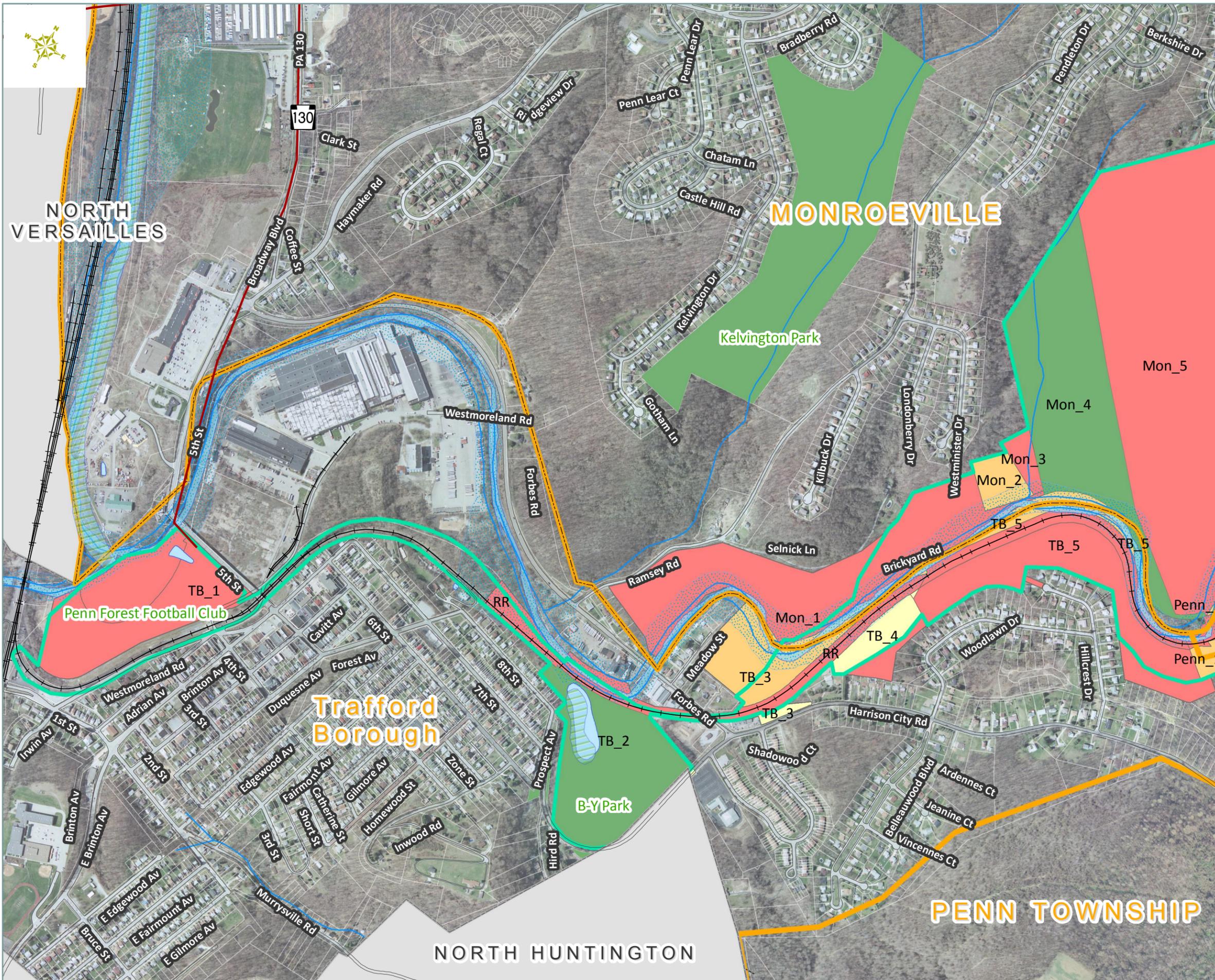
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

0 1,000 2,000 3,000 Feet

Turtle Creek Greenway Plan

Map 3.3A > Criteria Ranking Natural, Cultural, Recreational



Legend

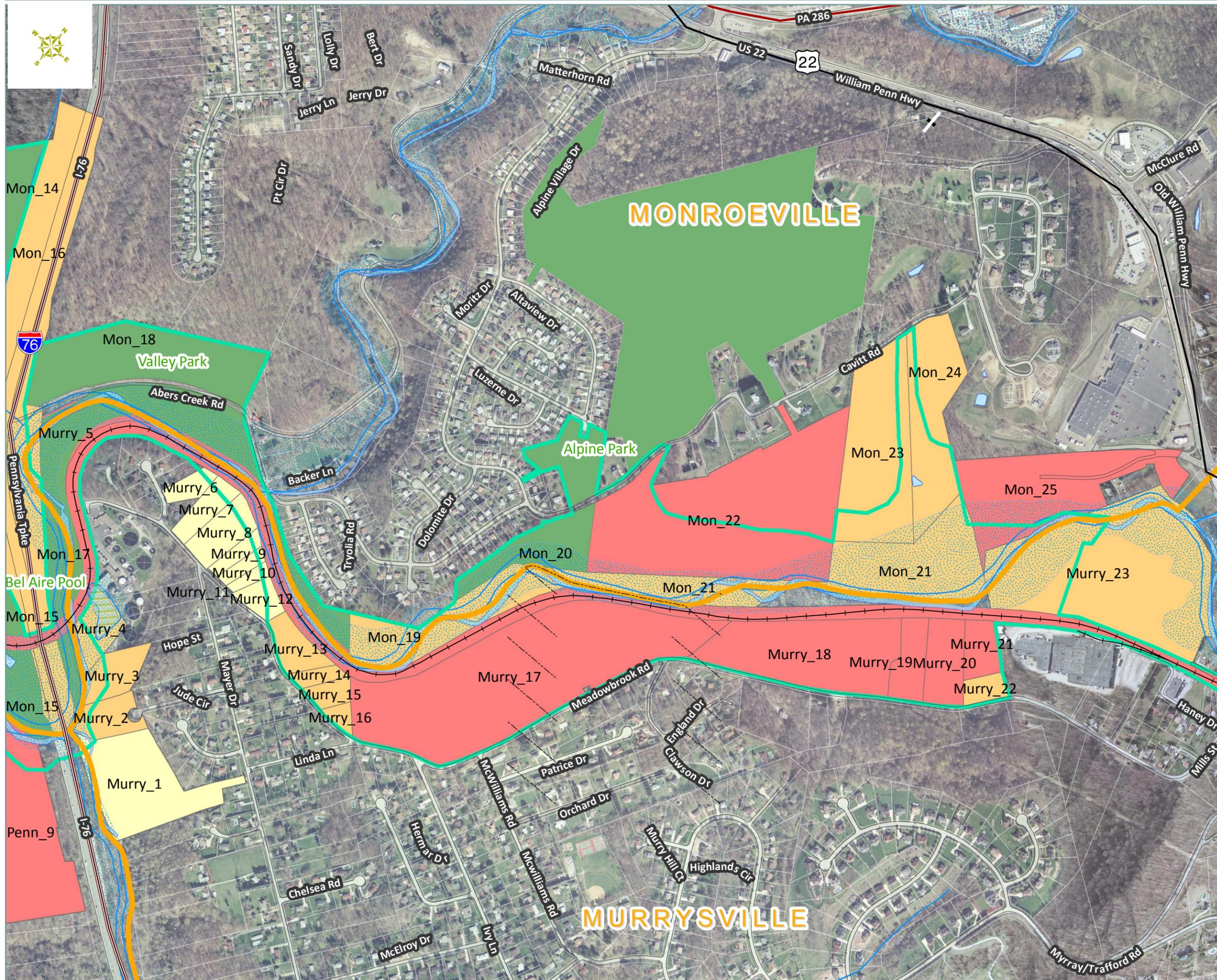
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- NWI Wetland
- Waterway
- Floodplain
- Criteria Ranking**
- High
- Medium
- Low
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan

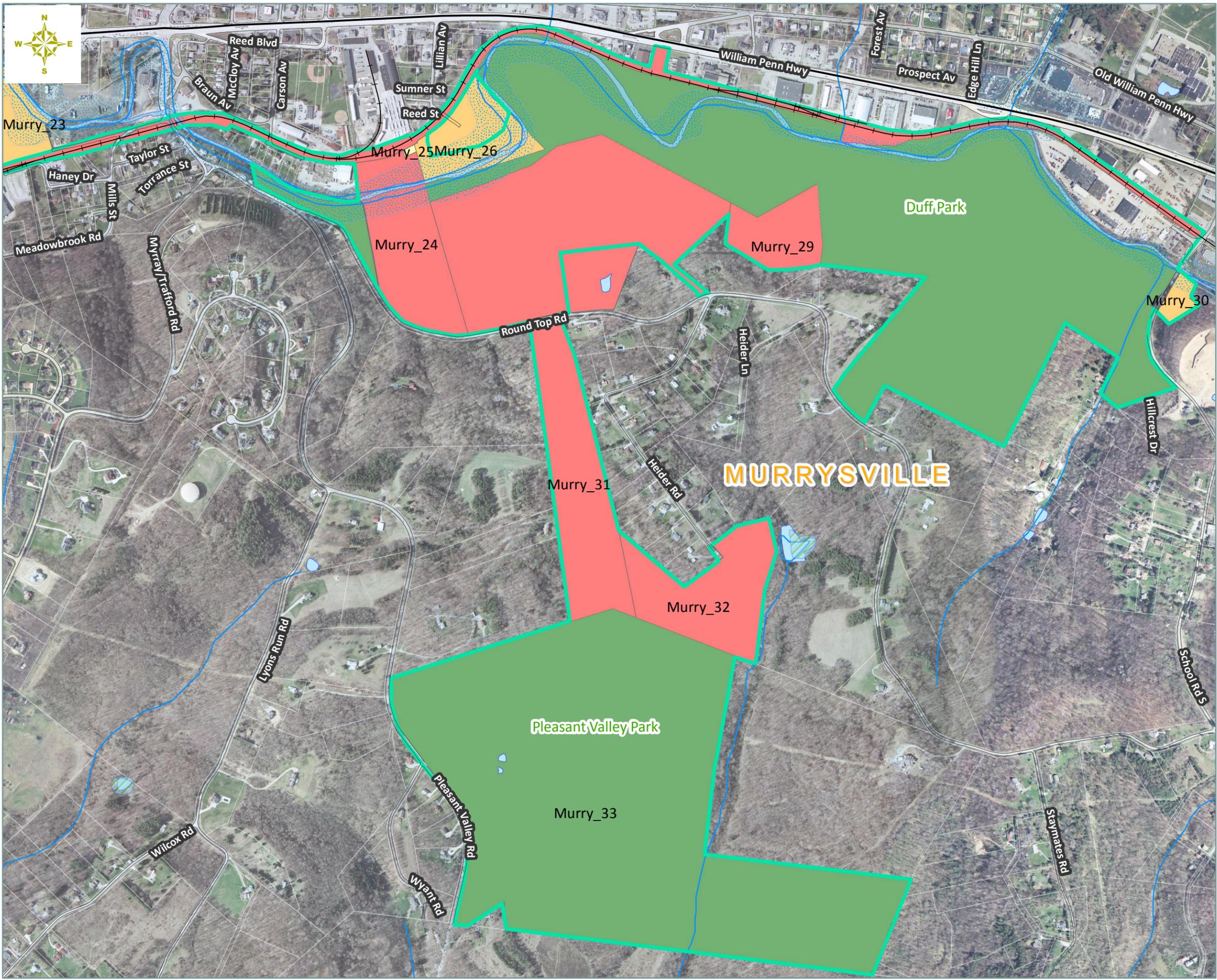
Map 3.3C > Criteria Ranking Natural, Cultural, Recreational



Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- NWI Wetland
- Waterway
- Floodplain
- Criteria Ranking**
- High
- Medium
- Low
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan

Map 3.3D > Criteria Ranking Natural, Cultural, Recreational

Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- NWI Wetland
- Waterway
- Floodplain

Criteria Ranking

- High
- Medium
- Low

Infrastructure

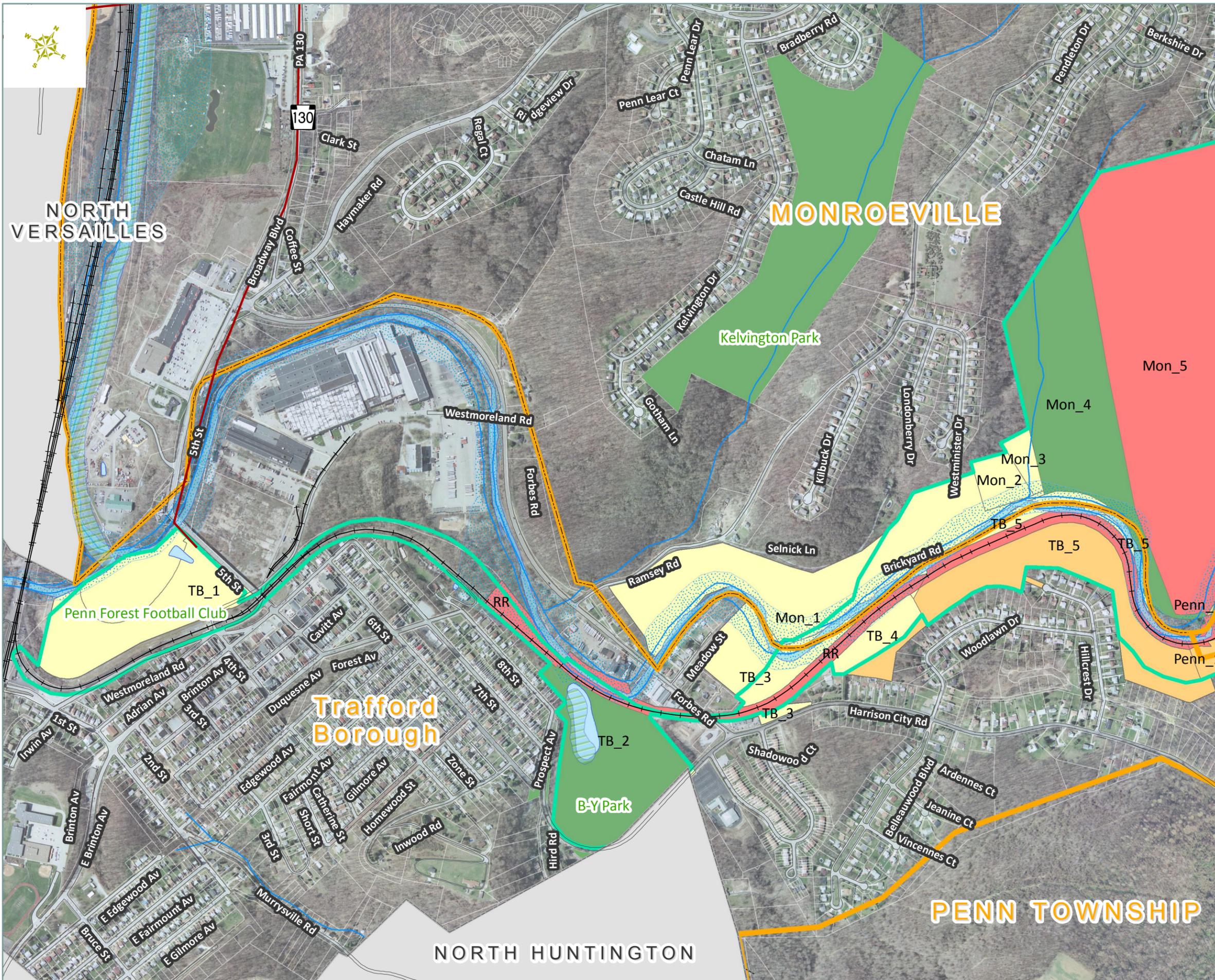
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

0 1,000 Feet

Turtle Creek Greenway Plan

Map 3.4A > Criteria Ranking Restoration Opportunities



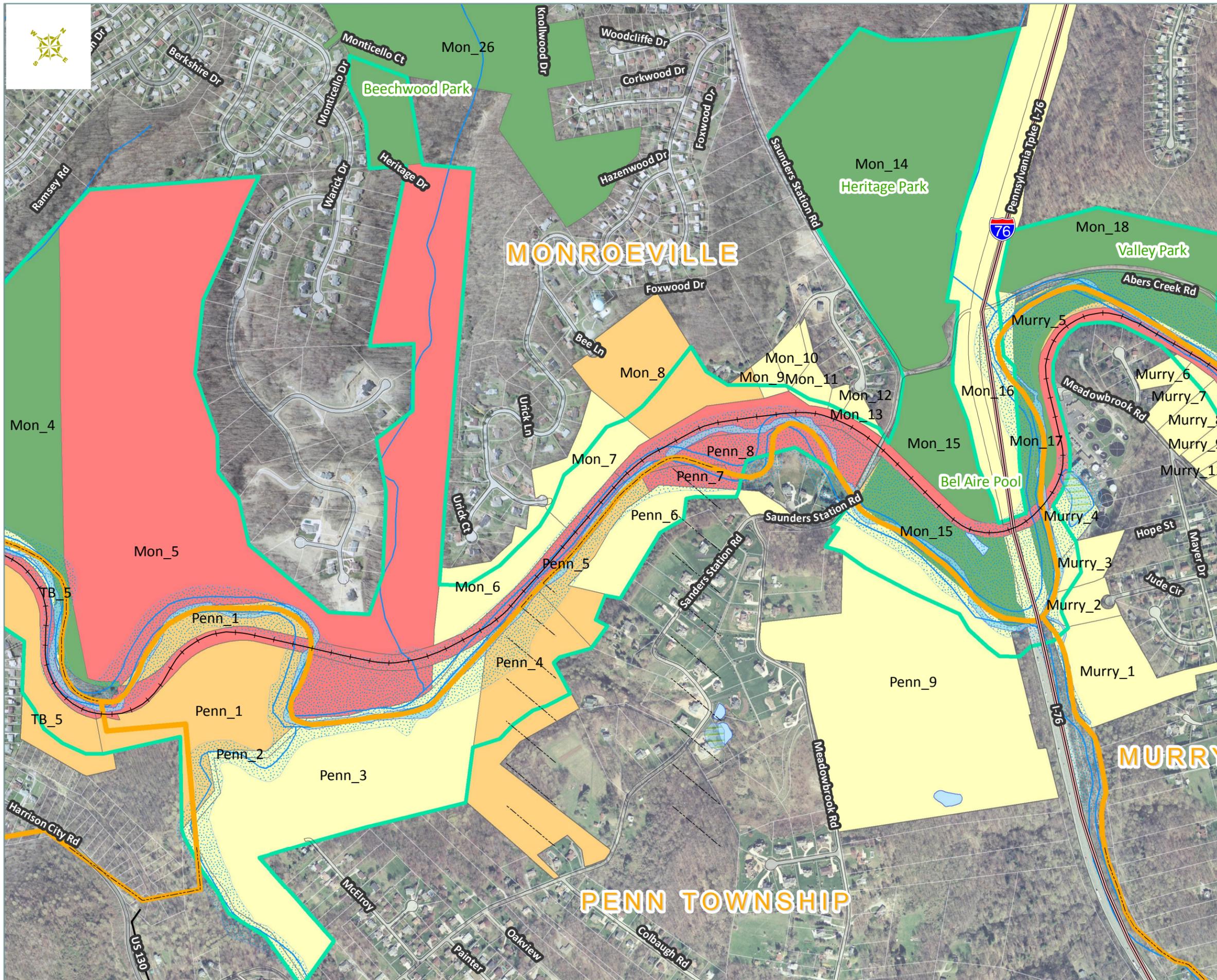
Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- Criteria Ranking**
- High
- Medium
- Low
- NWI Wetland
- Waterway
- Floodplain
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

Turtle Creek Greenway Plan

Map 3.4B > Criteria Ranking Restoration Opportunities



Legend

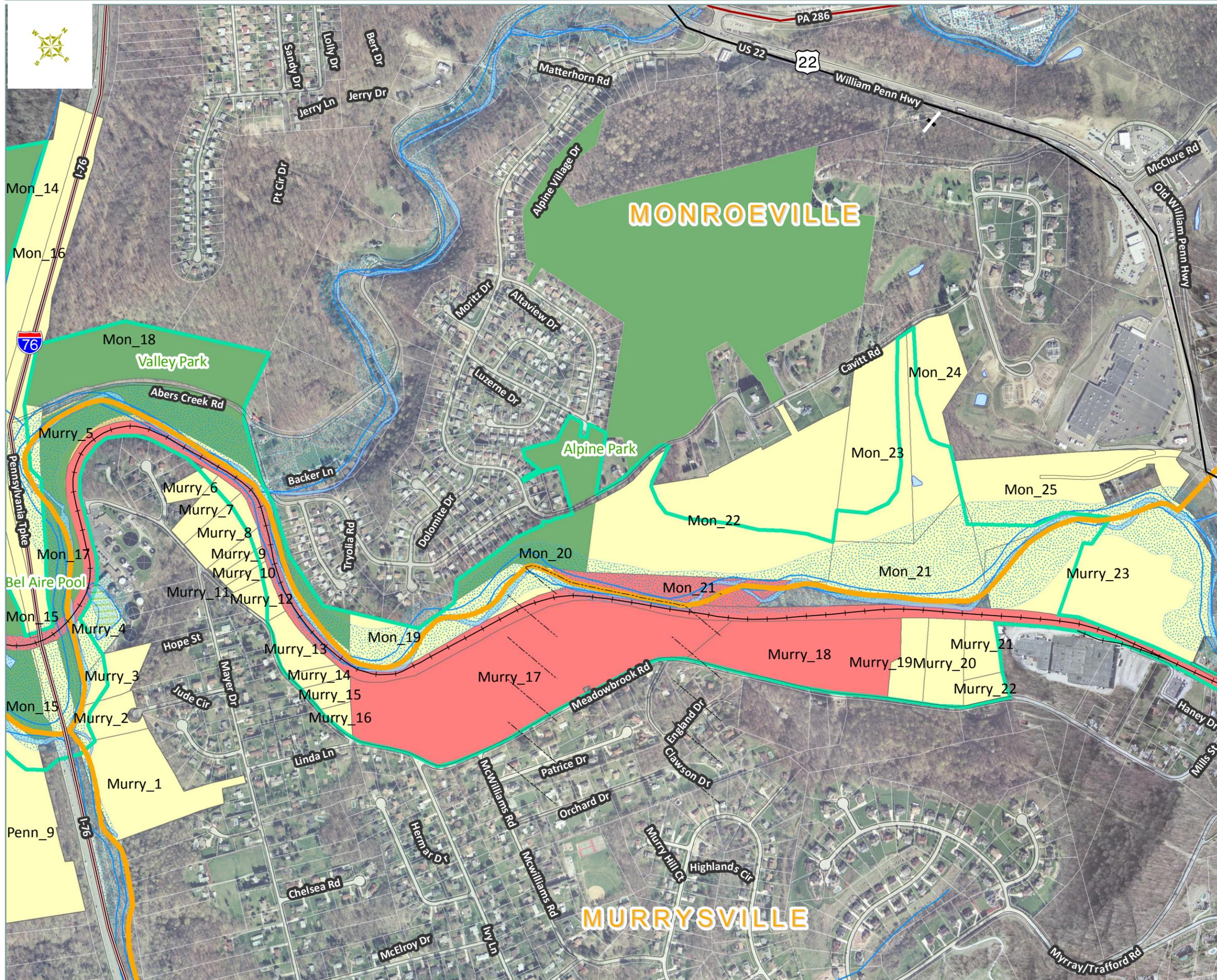
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- NWI Wetland
- Waterway
- Floodplain
- Criteria Ranking**
- High
- Medium
- Low
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan

Map 3.4C > Criteria Ranking Restoration Opportunities



Legend

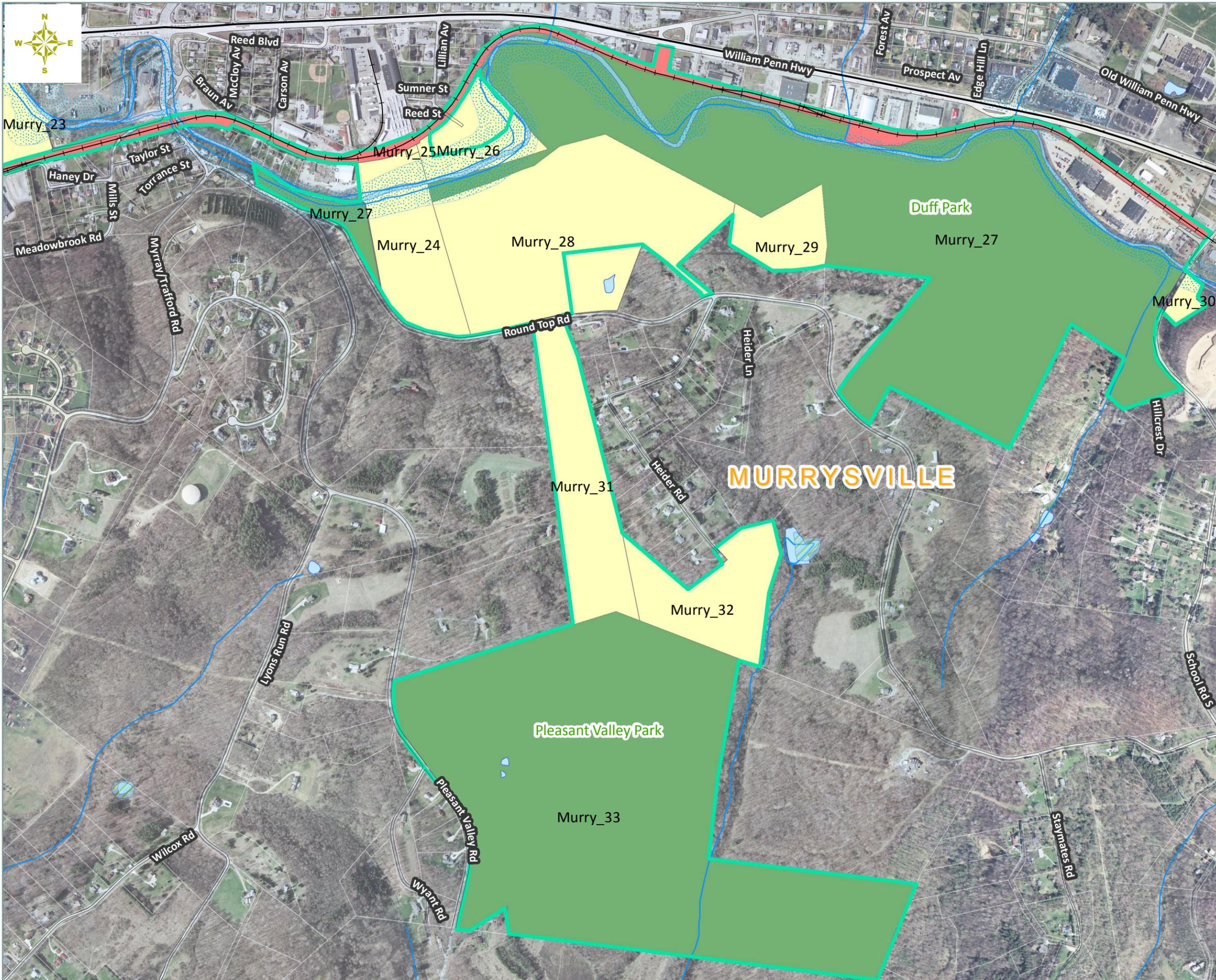
- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- NWI Wetland
- Waterway
- Floodplain
- Criteria Ranking**
- High
- Medium
- Low
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan

Map 3.4D > Criteria Ranking Restoration Opportunities



Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- Public Park
- NWI Wetland
- Waterway
- Floodplain
- Criteria Ranking**
- High
- Medium
- Low
- I-76/PA Turnpike
- US Route
- Major State Route
- Roadway
- Railroad

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.



Turtle Creek Greenway Plan Chapter 4» Implementation

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Section A > Vision & Goals

The Turtle Creek Greenway encompasses a stream valley, floodplains, forested steep slopes, open space, public parks, private property, and an active railroad through two counties and four municipalities. The Regional Trail Corporation, with support from the Turtle Creek Watershed Association, undertook the development of a Greenway Plan in order to identify management strategies designed to preserve and enhance the integrity of the natural, recreational, and cultural resources within the Turtle Creek Greenway, while protecting landowners' interests. The project has served to garner public support for the preservation of the Greenway as a regional asset for all residents and visitors to enjoy.

The goal of this planning process is to encourage the consideration of all the recreation and conservation opportunities by the local residents and the community leaders and finally to develop an action-oriented plan that will assist them to achieve their wishes.

Assets, Opportunities, and Threats

Through a combination of field views and public involvement efforts, the following assets were identified as unique to the Turtle Creek Greenway:

- 🌿 The “Turtle Creek Gorge” - encompassed within the Greenway, the Gorge offers a wilderness feeling; an escape from its suburban surroundings
- 🌿 Scenic Beauty—Turtle Creek stream valley, plants, trees, birds, wildlife, etc.
- 🌿 Natural Area—greenway accessible from nearby residential and commercial development
- 🌿 Quiet—rustic, peaceful, remote setting
- 🌿 Biodiversity—Simpson Run BDA, geological formations

In order to build upon the assets, potential opportunities were identified within the Greenway in terms of recreation and conservation:

- 🌿 Trail Development—the Greenway could offer a biking/hiking/walking trail that long-term, could connect to the Westmoreland Heritage Trail.
- 🌿 Connections to Parks—the Greenway offers a natural connection between many local parks and recreation areas, including B-Y Park in Trafford, a number of Monroeville Parks, and Duff Park/Pleasant Valley Park in Murrysville.
- 🌿 Flood Control/Stormwater Management—the Greenway encompasses natural floodplains, riparian buffers, and wetlands and there may be opportunities to install

Turtle Creek Greenway Plan

stormwater collection areas, infiltration zones, etc. that could assist in flood control measures.

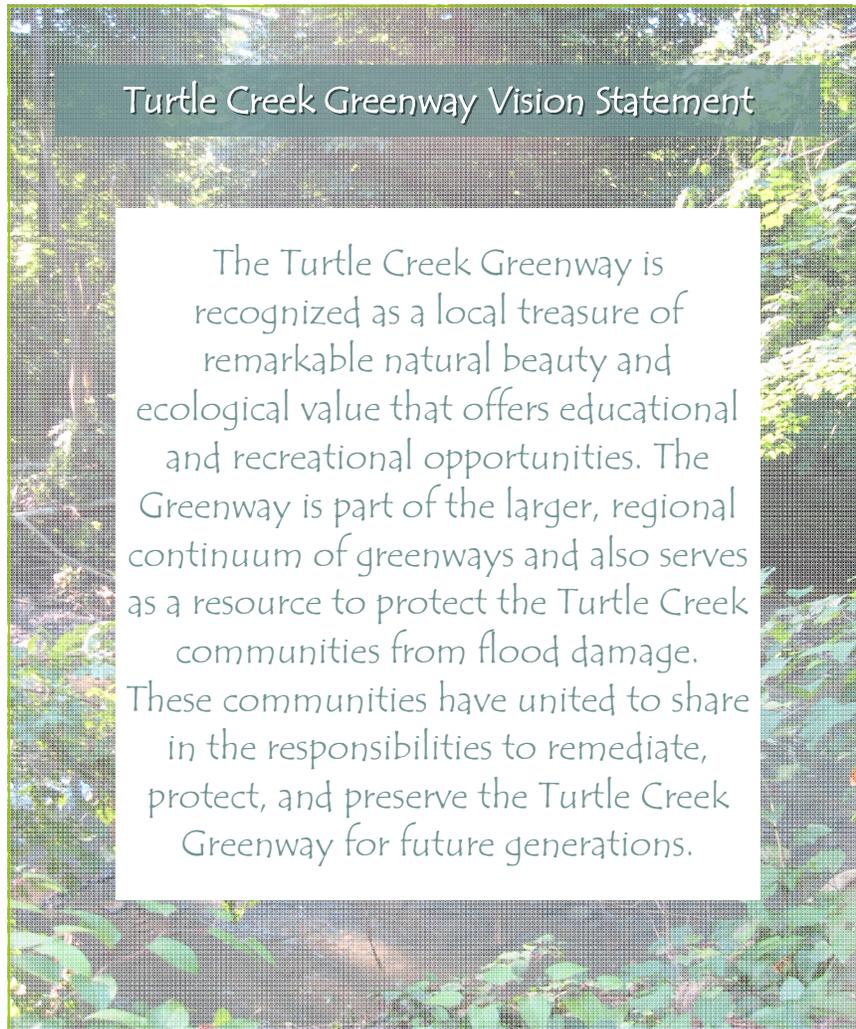
- 🌲 Streambank Stabilization—many of the streambanks within the Greenway are eroding and there could be an opportunity to rehabilitate these areas.
- 🌲 Passive Recreation—in addition to a potential trail, the Greenway could offer picnic areas and enhanced fishing access sites.
- 🌲 Environmental Education—the location of the Greenway, which spans three school districts, offers an opportunity to serve as an outdoor classroom, observation of nature, interpretive signing, etc.
- 🌲 Economic Benefit—the Greenway offers the local communities economic benefit through preservation of open space and reduced stormwater management costs, increased tourism, increased property values, etc.

Finally, threats were identified that could potentially limit the development and/or enhancement of the Greenway's assets and opportunities:

- 🌲 Lack of Public Access—while there are a few areas that are open to the public within the Greenway, currently, most of it is privately owned which limits the opportunities for recreation and conservation.
- 🌲 Flooding/Erosion/Stormwater Management—many areas in the Greenway are continually damaged from storms, runoff, and erosion causing major destruction to the railroad, streambank, hillsides, etc. Excess stormwater runoff carries land-based pollutants and eroded soil materials that also threaten Turtle Creek's fishery status and recreational value as well as local safety.
- 🌲 Invasive Species—much of the Greenway is overrun by Japanese knotweed, which chokes out native plants and contributes to the erosion of the streambanks.
- 🌲 Water Quality—abandoned mine drainage (AMD) and other pollutants continue to threaten the viability of Turtle Creek as a trout stocked fishery and its recreational value.
- 🌲 Funding—with municipal budgets tight, federal/state grant funds shrinking, and nonprofit organizations spread thin, it will be difficult to undertake many of the recommended improvements to the Greenway.
- 🌲 Administration—spanning four municipalities and two counties, there is no organization at this time that can take on the responsibility of overseeing implementation.

Vision Statement

The primary goal of a vision statement is to provide a focus for the future of the Turtle Creek Greenway. A vision statement offers a glimpse of what the Greenway will be in 10 or 20 years from now and reflects the most important values. It is a result of the assets, opportunities, and threats that were identified through the public involvement process, during which the Project Steering Committee, Stakeholders, and the general public had a chance to discuss and identify the most important features they would like to see preserved as a part of the Turtle Creek Greenway.



Turtle Creek Greenway Plan

Goals

Once the Vision Statement was created, Project Goals were developed to implement the Vision. These Project Goals represent the specific areas of focus for the Turtle Creek Greenway Plan.

1. Preserve the integrity of the natural, recreational, and cultural resources of the Turtle Creek Greenway.
2. Manage adverse impacts within the Greenway and its ecosystem as a result of stormwater damage from nearby development.
3. Raise public awareness and encourage stewardship of the valuable natural resources present within the Turtle Creek Greenway.
4. Enhance the Turtle Creek Greenway by offering additional recreational opportunities.
5. Develop a prioritized plan to secure land within the Greenway through fee simple, conservation easements, and/or donations to be used for trail development and the protection of green space and natural resources.
6. Utilize the Greenway as an educational resource for school children and the general public alike.
7. Promote the Greenway as a destination within and throughout the region to help the local communities realize economic benefits through ecotourism.

Section B › Benefits of Preservation

The benefits of greenways and trails are often only seen as recreational or environmental. However, in truth, trails and greenways can offer communities benefits related to public health, environmental, economic, and transportation. “When seen as a whole, the evidence about the far-reaching benefits of trails and greenways is compelling, especially given the minimal public investment involved compared to other undertakings with the same community goals,” (Rails to Trails Conservancy, 2010).

Benefit #1: Protection of Natural Habitats and Species

Greenways provide important opportunities to protect and manage wildlife habitats, forest systems, and local ecology and hydrology. Greenways can become vital corridors connecting natural areas – making possible a wider variety of plant life and wildlife species by providing food and water along an accessible “route” (PA DCNR & Greenways Partnership Commission, 2000, Benefits of Greenways: A Pennsylvania Study). Greenways can improve air quality, as well, as tree preservation produces greater oxygen. Greenways also absorb noise and thermal pollution as a rich plant life can absorb heat and sound (PA DCNR & Greenways Partnership Commission, 2000).

Benefit #2: Waterways Protection

Perhaps the most important protection that comes with greenways is that of waterways. Greenways protect water resources by buffering non-point sources of pollution (PA DCNR & Greenways Partnership Commission, 2000). Vegetative buffers not only help curb excessive runoff but also provide improved visual appeal and recreational amenities in communities. Greenways also provide important recharge areas for local groundwater aquifers (PA DCNR & Greenways Partnership Commission, 2000).

Benefit #3: Conservation of Historic and Cultural Resources

In many cases, greenways can be combined with an existing historic feature, which allows an opportunity to experience a moment in history – such as an historic site – and enjoy nature (PA DCNR & Greenways Partnership Commission, 2000). They can serve as connections to local heritage not only by preserving historic places but also by providing access to them. Greenways can also provide a sense of place and understanding of past events by drawing focus and public attention to historic locations and events (http://www.railstotrails.org/resources/documents/resource_docs/tgc_historic.pdf). These sites and locations can include battlegrounds, bridges, buildings, and canals that would

otherwise be difficult to access or interpret. By recognizing, honoring, and connecting these features, the combined results serve to enhance cultural awareness and community identity, potentially attracting tourism (http://www.railstotrails.org/resources/documents/resource_docs/tgc_historic.pdf).

Benefit #4: Public Recreation, Health, and Fitness

Greenways provide recreation opportunities for families and individuals of all ages and abilities and are a core component of strategies to foster health and wellness - especially with regard to aging populations (PA DCNR & Greenways Partnership Commission, 2000). Fitness opportunities are afforded in the context of safe, accessible, attractive, and low or no cost places to bike, walk, run, and hike.

According to the Centers for Disease Control and Prevention (CDC), “Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic” (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1996, Physical Activity and Health: A Report of the Surgeon General). In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2002, Guide to Community Preventive Services). This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits (Rails-to-Trails Conservancy, 2006, Health and Wellness Benefits). Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community. Many public agencies are teaming up with foundations, universities, and private companies to launch a new kind of health campaign that focuses on improving people’s options instead of reforming their behavior. A 2005 Newsweek Magazine feature, *Designing Heart-Healthy Communities*, cites the goals of such programs (italics added): “The goals range from updating restaurant menus to restoring mass transit, but the most visible efforts focus on making the built environment more conducive to walking and cycling.” (Newsweek Magazine, 10/3/2005, *Designing Heart-Healthy Communities*). Clearly, the connection between health and trails is becoming common knowledge.

Benefit #5: Educational Opportunities

Greenways present educational opportunities as they bring the general public into direct contact with the natural environment and cultural and historical places. Providing trail or greenway signage can help inform users about historical events or water quality issues particular to a watershed (PA DCNR & Greenways Partnership Commission, 2000). Such

signs could also include tips on how to improve water quality. Similarly, a greenway can serve as a hands-on environmental classroom for people of all ages to experience natural landscapes, furthering environmental awareness.

Benefit #6: Encouragement of Sound Land Use Practices

Many communities face threats to their quality of life and the character of their built environment in the form of unplanned or poorly planned development such as suburban sprawl. Greenways present a significant opportunity to guide land use and help ensure that as communities continue to grow, protected green space and recreational opportunities are built into the future (PA DCNR & Greenways Partnership Commission, 2000). Greenways can also act as a redevelopment tool to help “green” brownfields and urbanized areas (PA DCNR & Greenways Partnership Commission, 2000).

Benefit #7: Alternate Means of Transportation

Greenways can create links and connections in places that would otherwise be reached only through automobile use (PA DCNR & Greenways Partnership Commission, 2000). Creating a system of links between residential areas, open green spaces, parks, and even commercial areas can help communities create a sophisticated system that reduces traffic congestion and encourages alternative means of transportation such as walking, bicycling, or running. Greenways can also be used as a way of harmonizing various means of transportation and interweaving the interaction of pedestrians and automobiles (PA DCNR & Greenways Partnership Commission, 2000).

Benefit #8: Increased Inter-Municipal Cooperation

Greenways enhance the sense of place in a community or region. Greenways have many stakeholders and beneficiaries. The planning and development of greenways naturally lead to the formation of broad-based partnerships, bringing together civic groups, regional planners, community leaders, educators, business owners and others (PA DCNR & Greenways Partnership Commission, 2000). The partnership approach not only provides resources but also builds public support or “community capital” and consensus for more greenways investment (PA DCNR & Greenways Partnership Commission, 2000).

Benefit #9: Economic Benefits

Increased Property Values

There are many examples, both nationally and locally, that affirm the positive connection between greenways and property values.

🌿 Residential properties will realize a greater gain in value the closer they are located to trails and greenways. According to a 2002 survey of recent homebuyers by the National Association of Home Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices. Additionally, the study found that ‘trail availability’ outranked 16 other options including security, ball fields, golf courses, parks, and access to shopping or business centers. (National Association of Realtors and National Association of Home Builders, 2002, Consumer’s Survey on Smart Choices for Home Buyers).

🌿 Findings from the Trust for Public Land’s Economic Benefits of Parks and Open Space, and the Rails-to-Trails Conservancy’s Economic Benefits of Trails and Greenways illustrate how this value is realized in property value across the country (Rails to Trails Conservancy, 2005, Economic Benefits of Trails and Greenways):

- ⇒ Apex, NC: The Sheppard’s Vineyard housing development added \$5,000 to the price of 40 homes adjacent to the regional greenway – and those homes were still the first to sell.
- ⇒ Front Royal, VA: A developer who donated a 50-foot-wide, seven-mile-long easement along a popular trail sold all 50 parcels bordering the trail in only four months.
- ⇒ Salem, OR: land adjacent to a greenbelt was found to be worth about \$1,200 and acre more than land only 1000 feet away.
- ⇒ Oakland, CA: A three-mile greenbelt around Lake Merritt, near the city center, was found to add \$41 million to surrounding property values.
- ⇒ Dayton, OH: Five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that open space.

Trail Tourism

🌿 The Outer Banks, NC: Bicycling is estimated to have an annual economic impact of \$60 million and 1,407 jobs supported from the 40,800 visitors for whom bicycling was an important reason for choosing to vacation in the area. The annual return on bicycle facility development in the Outer Banks is approximately nine times higher than the initial investment (NCDOT and ITRE., 2006, Bikeways to Prosperity: Assessing the Economic Impact of Bicycle

Facilities).

- 🌲 Damascus, VA: At the Virginia Creeper Trail, a 34-mile trail in southwestern Virginia, locals and non-locals spend approximately \$2.5 million annually related to their recreation visits. Of this amount, non-local visitors spend about \$1.2 million directly in the Washington and Grayson County economies (Virginia Department of Conservation, 2004, *The Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics*).
- 🌲 Morgantown, WV: The 45-mile Mon River trail system is credited by the Convention and Visitors Bureau for revitalizing an entire district of the city, with a reported \$200 million in private investment as a direct result of the trail (Rails to Trails, Danzer, 2006, *Trails and Tourism*).
- 🌲 Tallahassee, FL: The Florida Department of Environmental Protection Office of Greenways & Trails estimate an economic benefit of \$2.2 million annually from the 16-mile St. Marks Trail (Rails to Trails, Danzer, 2006, *Trails and Tourism*).
- 🌲 San Antonio, TX: Riverwalk Park, created for \$425,000, has surpassed the Alamo as the most popular attraction for the city's \$3.5-billion tourism industry (American Planning Association, 2002, *How Cities Use Parks for Economic Development*).

Expenditures by Residents

Spending by local residents on greenway related activities supports recreation oriented businesses and employment as well as other businesses that are patronized by greenway and trail users.

- 🌲 A 2004 Study of the 45- mile long Washington & Old Dominion Trail (W & OD), a transportation and recreation corridor running from Arlington to Purcellville, VA, finds that an estimated 1.7 million adult W&OD users put about \$7 million directly in the northern Virginia economy (Rory Robinson, National Park Service - Rivers, Trails and Conservation Assistance – May 2007).
 - ⇒ The estimated 1.6 million local visits accounted for about \$5.3 million of spending directly related to the use of the W&OD.
- 🌲 According to a Fall 2006 publication by the Outdoor Industry Foundation (Rory Robinson, National Park Service - Rivers, Trails, and Conservation Assistance – May 2007):
 - ⇒ The Active Outdoor Recreation Economy is a \$730 Billion annual contribution to the U. S. Economy.
 - ⇒ In sales comparisons, active outdoor recreation retail sales are second only to the telecommunications industry.
 - ⇒ Active outdoor recreation supports nearly 6.5 million jobs across the U. S.

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Participation by numbers: Bicycling (paved, road and off-road)—60 million; paddling—24 million; trail (running on unpaved trail, day hiking, backpacking and rock climbing)—56 million; wildlife viewing—66 million.

⇒ In Los Angeles County hikers supported a \$300 million hiking equipment industry.

Public Cost Reduction

According to the American Planning Association, “perhaps one of the greatest values of an interconnected green space system is the financial benefit that may be gained through the reduction of the need for the built environment.” In fact, the National Park Service found that the public costs for greenways is far less than other infrastructure (Rory Robinson, National Park Service - Rivers, Trails, and Conservation Assistance – May 2007):

- ✦ The least cost substitute for the water quality services provided the wetlands of Congaree Bottomland Hardwood Swamp in South Carolina would be a water treatment plant costing \$5 million.
- ✦ American Forests estimates that the 187,767 acres of tree canopy in the Washington, D. C. metro region provides 949 million cubic feet in avoided storage of water - value \$4.7 billion.
- ✦ The tree canopy in Charlotte, North Carolina, covers 53% of the county’s land area. This urban forest removes 17.5 million pounds of pollutants from the air each year; a benefit American Forests estimates is worth \$43.8 million each year.
- ✦ According to U.S. Rep. James Oberstar (D-MN), constructing one mile of urban freeway costs an average of \$46,000,000 a mile (Rory Robinson, National Park Service - Rivers, Trails, and Conservation Assistance – May 2007). Comparatively, costs for: 12-foot shared paths = \$128,000/mile; 5-foot bicycle lanes = \$189,000/mile; 5-foot paved shoulders on rural roads = \$102,000/mile.
- ✦ As far back as 1993, Maryland's Northern Central Rail-Trail found that while the trail's management and maintenance cost to the public was \$191,893, the trail-related tax income to the state totaled \$303,750.
- ✦ The annual economic impact of cyclists at the North Carolina Outer Banks is 9 times the one-time cost of building the facilities.

Section C > Management Strategies

As part of the Turtle Creek Greenway Plan, management strategies were developed for each of the goals. The strategies are designed to assist implementing organizations and project partners in their recreation and conservation efforts. **Table 4.1: Management Strategies** contains the recommendations for each of the project goals. Typically, a plan would identify responsible parties, project partners, and priority levels for each of the strategies. However, it became apparent that the Turtle Creek Greenway Plan is unique for a few reasons.

Issue #1: Implementing Party

The first issue is that there is no overarching organization who can take on implementation. The Greenway spans two counties, four municipalities, and several different interests. The Steering Committee discussed and agreed upon the need for a lead organization, who would ultimately be in charge of overseeing the Greenway, applying for funding, planning projects, setting up partnerships, etc. The following organizations were discussed as potential candidates:

There is no existing organization that has the capacity, time, resources, etc. to dedicate towards implementation of the Turtle Creek Greenway Plan. Who will be responsible for implementation?

-  **Regional Trail Corporation**—as the lead entity for the Turtle Creek Greenway Plan, the RTC was considered as the implementing party. However, the biggest issue is that at this time, there is no trail within the Greenway and is therefore, outside of the RTC’s mission.
-  **Turtle Creek Watershed Association**—as one of the only organizations whose mission covers the entire project area, the TCWA was a leading candidate. However, the TCWA has no paid staff and has been an all-volunteer organization since 2008. This situation is not expected to change until the local and state economies improve substantially. With such a large watershed to oversee, the TCWA lacks the capacity to dedicate its resources to implementing the Turtle Creek Greenway Plan. The TCWA does however have interest in partnering with other organizations regarding implementation, particularly in organizing events to generate publicity and interest in the Greenway. If the TCWA could find the money to support paid staff position(s), the TCWA would be willing to take the lead.
-  **Penn’s Corner**—Penn’s Corner Resource Conservation and Development Council (RC&D) is western Pennsylvania’s RC&D. Members are drawn from the conservation districts and county planning commissions of eight (8) western

Pennsylvania counties, including Allegheny and Westmoreland Counties. One advantage of Penn's Corner is that it is a multi-county organization, and as such is able to provide coordination on multi-county projects. If there are no other non-profit organizations who are able or willing to oversee implementation, but there is a group of interested citizens/volunteers (for example, like the Friends of the Murrysville Parks), Penn's Corner could assist by serving as a grant applicant and providing technical assistance.

- 🌲 **Westmoreland Land Trust**—the WLT is charged with acquiring and preserving open space and natural areas within Westmoreland County. While many of the projects recommended for the Greenway fall outside of this mission, the WLT will be an important role player in acquiring property within the Greenway for either recreation or preservation. Currently, the WLT is working with Westmoreland County on the potential Duff Park expansion project.
- 🌲 **Allegheny Land Trust**—similar to the WLT, the ALT has the same mission in Allegheny County. Again, many of the projects fall outside the realm of the ALT, but they will be an important role player in the future.
- 🌲 **Municipalities**—all four municipalities were involved in the Greenway Plan to the extent that they chose to participate. While all support the project and the overall goals, none of the municipalities at this time has the capacity or resources available to dedicate to the implementation of the Greenway Plan. Also, with four municipalities, it is important for an outside organization to take the lead and then involve the municipalities as needed. Some of the strategies will need to have municipal support in order to implement, such as ordinance updates, and therefore they will be important partners moving forward.
- 🌲 **Counties**—both Allegheny County and Westmoreland County have been very involved in and support the development of the Turtle Creek Greenway Plan, which is an implementation project of the counties' greenways plans. The Counties are willing to partner and play a role in implementation; however, again will need to rely on an outside organization to help with overall coordination and management.

Issue #2: Public Access

The second, and perhaps larger issue at hand, is that the Turtle Creek Greenway lacks public access to the majority of areas. Many of the management strategies are dependent on having public access. Currently, public access areas exist only at the public parks and at the RTC property on Saunders Station Road. The rest of the Greenway is privately owned. The Steering Committee agreed that a trail is needed in the Greenway to provide public access as well as unite the various organizations to begin implementing the management strategies. The Committee felt that without a trail, the likelihood of implementation is slim.

The Turtle Creek Industrial Railroad (TCIRR) owns the railroad corridor throughout the Greenway. The 2001 Saltsburg to Trafford Feasibility Study found that due to the narrowness of the corridor and the presence of the creek, floodplains and steep slopes, there is no room for a rail-with-trail.

The TCIRR has been contacted from time to time since that study to see if there is potential to one day, convert the railroad into a trail. Through personal correspondence, the owners have stated that at this time, they are interested in maintaining ownership of the ROW, but are willing to discuss possibilities to share the corridor. The following possibilities should be discussed with the TCIRR further:

 **Rail-with-Trail**—while the Feasibility Study found this to not be a viable option for the length of the corridor, it may be possible in smaller sections within the Greenway.

- **Benefits** the TCIRR would retain ownership and operation of the railroad; a trail would be developed alongside the rail line
- **Obstacles** the narrowness of the corridor in some areas presents a safety and liability concern to the railroad; lack of public access via roadways may present a hazard; need separation from the active rail line for safety; funding would be needed to acquire, design, and construct the trail

One of the biggest issues facing implementation is that there is a lack of public access to the Greenway. The development of a trail would provide the access needed as well as a reason for the municipalities, counties, and local organizations to work together on implementation.

 **Share the Corridor**—another possibility discussed was to share the corridor and alternate times of use as a railroad and a trail. For example, the railroad could operate at night or on certain days of the week, leaving the trail open for use during the day or during the days where the railroad is not operating.

- **Benefits** the TCIRR would retain ownership and operation of the railroad; a trail would be open for use during the “off” hours
- **Obstacles** potential liability concerns; the railroad bridges would need to be replaced to be suitable for pedestrian use

 **Rail-to-Trail**—the TCIRR has not been in operation for approximately a year, partly due to damage to the rail line during the June 2009 storm and subsequent storms. Erosion and stormwater runoff necessitate constant and expensive repairs, reducing the viability of the corridor as a rail line. While the TCIRR has maintained a desire to continue operating the line, there may come a time where this is no longer financially feasible or viable. At that time, the rail line could be purchased and converted into a rail-to-trail, which would provide the needed public access to the Greenway and spur implementation of other recreation and conservation efforts.

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- **Benefits** the Greenway would feature a rail-to-trail, which could be extended to connect to the Westmoreland Heritage Trail; public access would be provided to the Greenway, making many of the management strategies viable projects
- **Obstacles** the TCIRR is not interested in this option at this time; funding would be needed to acquire, design, and construct the trail

The Steering Committee agreed that these two issues go hand in hand and that once a trail is developed, the trail organization (possibly RTC, the Westmoreland Heritage Chapter, or another subsidiary) would become the implementing organization for the Turtle Creek Greenway. Once formed, the trail chapter could form subgroups to focus on the different areas of the plan—recreation, conservation, education, etc.

A listing of local, regional, state and federal agencies and their mission is included in **Appendix L: Organizations**. Once the trail organization is formed, they can begin contacting each organization to partner on specific projects as needed. In addition, potential funding sources are included in **Appendix M: Funding Sources**.

Issue #3: Stormwater and Drainage

One of the biggest threats to the Turtle Creek Greenway both now and to its future is stormwater. Flooding and erosion have plagued the Greenway and will continue to do so unless addressed at a regional, watershed-wide level.



Stormwater is a daunting problem facing all communities, particularly in Southwestern Pennsylvania. Before addressing the concerns within the Turtle Creek Greenway, it is important to understand not only what stormwater is, but why it is such a big issue.

To start with, stormwater is defined as “water that accumulates on land as a result of storms, and can include runoff from urban areas such as roads and roofs” (<http://www.water-technology.net/glossary/stormwater.html>). In addition to contributing to flooding and erosion concerns, stormwater runoff is the most common cause of water pollution as it carries untreated pollutants directly into rivers and streams. As little as 1/10” of rain can cause sewage overflow, while an average Pittsburgh rainfall is 1/4” (3 Rivers Wet Weather, 2010).

The evidence of the stormwater issues were apparent in the Turtle Creek Greenway after the June 2009 storm. The railroad corridor was rife with wash out areas under the tracks, downed trees, streambank erosion, and drainage pools. Much of this would have to be addressed during trail

construction in order to have the trail last longer than the first big rain. Money will be needed to be spent on ditching and cross drains, much more than on regular trail construction. The trail chapter will need to have equipment such as a backhoe, that can be used to keep ditches and pipes open after each storm. While under normal circumstances \$200,000 per mile would cover the cost for trail construction, this corridor may need \$250,000 to \$300,000 per mile to allow for additional work relative to these issues. The Turtle Creek Greenway will be a very expensive corridor to construct and difficult to maintain until some of these runoff problems are solved.

There are many reasons to address the stormwater issues, ranging from flood prevention, water quality, and quality of life; but one of the most sensible reasons is financial. Preventing flood damage is more cost effective than repairs. Additional financial benefits of managing stormwater include (StormwaterPA, 2010):

- 🌿 Stormwater management techniques that effectively control soil erosion will reduce the amount of downstream sedimentation. This reduces the cost of dredging and water treatment, while increasing recreational opportunities and business and residential property values. Sedimentation also fills stream channels, reducing the amount of water they can carry, thus increasing future flood potential;
- 🌿 Taking a site planning approach that maintains or restores wetlands rather than removing them controls and treats wastes, reduces flooding, and improves habitat for wildlife and aquatic species;
- 🌿 Minimizing stormwater runoff can prevent costly investment in sewage treatment infrastructure to deal with excessive flows reaching combined sewers. The resulting effective treatment of human and industrial waste protects rivers, beaches, and human health;
- 🌿 Innovative stormwater management techniques help developers save money by replacing pipes, basins, and other infrastructure with less costly BMPs, by minimizing land clearing and grading costs, and by using less land area for stormwater management than required by traditional basins;
- 🌿 Low impact development (LID) is often less expensive than conventional development because “clustering” can reduce the cost of maintenance and

“Pennsylvania abounds in natural beauty, its landscape entwined with 83,161 miles of streams and more than 3,900 lakes, reservoirs, and ponds. Water is the lifeblood of the Commonwealth, supporting vast forests, abundant fish and wildlife, and a wide array of human uses that draw more than four billion gallons of ground and surface water per day. This wealth of water is a blessing, but population growth has radically altered the natural systems that manage rainfall through transpiration, infiltration, and gradual runoff into surface waters—leading to everything from poor water quality to flooding, severe erosion, and droughts. The solution lies in comprehensive stormwater management, which offers tremendous rewards to local economies, the environment, and quality of life.”

—StormwaterPA
2010

Turtle Creek Greenway Plan

municipal services such as sewer and water, trash removal, lighting, and street maintenance;

- 🌳 LID can also increase property values and marketability because of natural landscaping, open space, wetlands, and waterways.
- 🌳 Trees reduce energy costs, clean air and water, and help protect human health. Over a 50 year period, it is estimated that the average tree provides \$30,000 worth of oxygen, \$35,000 worth of clean water, and \$60,000 worth of air pollution removal.
- 🌳 Researchers at the University of California at Davis have estimated that for every 1,000 deciduous trees in California’s Central Valley, annual stormwater runoff is reduced nearly 1 million gallons—a value of almost \$7,000.
- 🌳 Conserving forested land on sites increases property values by an average of 6 to 15% and increases the rate at which units are sold.
- 🌳 A subdivision in Bucks County, PA that preserved 23% of its land as open space became the fastest selling subdivision in its price range, despite lot sizes that were significantly smaller than those found in competing development.
- 🌳 Studies in Maryland and Illinois have shown that new residential developments using “green infrastructure” stormwater management techniques saved \$3,500 to \$4,500 per quarter- to half-acre lot when compared to developments using conventional methods.
- 🌳 Porous paving can save up to 38% compared to a detention basin.
- 🌳 Air Pegasus Airport in Maryland saved \$25,000 in infrastructure costs by retrofitting an existing sand filter to include a bio-retention area that captured additional runoff and provided added water quality benefits.

“With researchers estimating that population growth in the U.S. will add more than one million new single family homes and some 10,000 miles of new roadways to the landscape every year over the coming decade, the potential savings and value added by proper stormwater management is hard to ignore,”

—StormwaterPA, 2010

Preserving the Turtle Creek Greenway can help to reduce stormwater and contribute to the solution, rather than the problem.

Table 4.1: Management Strategies

| | |
|---|---|
| <p>Goal #1: Preserve the integrity of the natural, recreational and cultural resources of the Turtle Creek Greenway.</p> | |
| <p><i>Objective #1.1: Improve the ecological value of the Greenway and Turtle Creek</i></p> | |
| #1.1A | Continue to work with the volunteers and Turtle Creek Watershed Association (TCWA) to monitor the water quality of Turtle Creek and its tributaries. |
| #1.1B | Hold annual water monitoring training for interested residents, establish a watershed monitoring program, and organize weekend workshops to conduct monitoring. Use the program with the EASI group as a model. |
| #1.1C | Coordinate with PFBC to conduct water quality and fish studies on the tributaries to Turtle Creek to utilize as baseline data for pollution prevention and stormwater management plans. |
| #1.1D | Conduct a Wetland Identification and Delineation study to verify wetland locations and determine functionality of these areas. |
| #1.1E | Update the Natural Heritage Inventory for Allegheny County (1994) to verify accuracy of previous findings as well as identify any new biologically significant areas that may exist within the greenway. |
| #1.1F | <p>Enhance the Simpson Run BDA</p> <ul style="list-style-type: none"> 🌲 Establish signs at entrance points along Greenway (noted on Map 4.1) – do not disturb nature 🌲 Develop as an educational resource <ul style="list-style-type: none"> ⇒ Coordinate with the WPC to establish parameters of public access and use ⇒ Add low impact trails/picnic tables 🌲 Add interpretive signing marking unique features within the BDA |
| #1.1G | <p>Enhance wildlife habitat areas</p> <ul style="list-style-type: none"> 🌲 Enhancements may consist of bird boxes, snags, etc. 🌲 Potential locations noted on Map 4.1 |
| #1.1H | Coordinate with the Amphibian and Reptile Technical Committee for the PA Herpetological Atlas program to conduct studies on amphibian and reptile species within the greenway to determine if any there are any species of concern or at risk populations. |
| #1.1I | Lobby federal and state agencies (Army Corps, DEP, etc.) to complete a restoration project along Turtle Creek, similar to the Nine Mile Run Project in Pittsburgh. |

Turtle Creek Greenway Plan

Goal #1: Preserve the integrity of the natural, recreational and cultural resources of the Turtle Creek Greenway. (cont.)

Objective #1.1: Improve the ecological value of the Greenway and Turtle Creek (cont)

Create a forest management plan and vegetation management plan to eradicate the invasive species, allowing native vegetation to grow and thrive to protect the banks from erosion. Use Duff Park/Friends of Murrysville Parks GIS mapping as model for removal.

- #1.1J
 - 🌲 Japanese knotweed
 - ⇒ Found in B-Y Park; along both sides of corridor to Saunders Station Road
 - ⇒ High priority areas for eradication:
 - Sections every 100/200 yards or so for views of creek between B-Y Park and Saunders Station Road
 - Within the Simpson Run BDA
 - Near Cavitt Road in Murrysville to stop spreading east
 - Near MSA in Murrysville
 - Other small areas noted on Map 4.1
 - 🌲 Japanese Stiltgrass
 - 🌲 Garlic Mustard
 - ⇒ Found in small patches; one section near Cavitt Road
 - ⇒ Priority: eradicate before it spreads
 - 🌲 Tree of Heaven
 - ⇒ Found near residential wall at Forbes Road in Trafford
 - ⇒ Priority: eradicate to stop spreading

Coordinate with Allegheny CleanWays and Westmoreland CleanWays to clean-up identified illegal dumpsites within the greenway.

- #1.1K
 - 🌲 Site off Selnick Lane in Monroeville
 - 🌲 Truck near Cavitt Road in Monroeville
 - 🌲 Truck in Turtle Creek

#1.1L Organize a semi-annual “Litter Walk” to clean debris within the Greenway

Implement beautification projects within the Greenway.

- #1.1M
 - 🌲 Public access areas (i.e. Saunders Station Road parking lot)
 - 🌲 Urban areas – screening via fencing, trees, plantings, etc.
 - ⇒ Along corridor near industrial business in Trafford
 - ⇒ Murrysville along Railroad Street, near Braun Avenue, along corridor between Community Building and School Road
 - 🌲 Local parks (B-Y Park, Duff Park, etc.)
 - 🌲 Interpretive sites as noted on Map 4.1

Goal #1: Preserve the integrity of the natural, recreational and cultural resources of the Turtle Creek Greenway. (cont.)

Objective #1.2: Enhance existing recreational areas

- Improve signing at public parks

 - #1.2A
 - 🌲 Provide higher visibility signs for Duff Park from US 22 and at entrance on School Road South

– sign should be oriented to vehicles traveling along the road
 - 🌲 Provide higher visibility signs for B-Y Park from Forbes Road and US 130 and at entrance

– sign should be oriented to vehicles traveling along the road
 - 🌲 Interpretive signing could be added within both parks to identify trees, plants, wildlife, etc. and used for educational purposes
- #1.2B

Maintain the water quality of Turtle Creek as a Trout Stocked Fishery.
- #1.2C

Improve areas of Turtle Creek to maintain or expand fisheries and fishing opportunities

 - 🌲 Enhancements may include rock deflectors, log vains, fish ladders, riparian plantings/ improvements, etc.
 - 🌲 Develop informal trails from Saunders Station Parking Lot that avoid wetland areas
- #1.2D

Establish an Audubon Society of Western Pennsylvania (ASWP) Christmas Bird Count within the greenway to identify bird species that frequent the area.

Objective #1.3: Enhance cultural areas

- #1.3A

Include interpretive signage at the historic brickyard in Monroeville and promote this area as a local historical site through Monroeville’s website and public education materials on existing local historical/cultural resources.

 - 🌲 This area is on the opposite side of the creek from the RR
 - 🌲 Site along the RR near old bridge abutments

 - ⇒ Clear the landing for a small picnic area
 - ⇒ Interpretive signs—history of brickyard
 - ⇒ Beautification—plant wildflowers, etc.
 - ⇒ Viewshed of creek

Objective #1.4: Update local codes and ordinances to preserve the Greenway

- #1.4A

Develop an Environmental Advisory Council (EAC) in communities that do not have one

 - 🌲 Municipality of Monroeville
 - 🌲 Trafford Borough
 - 🌲 Penn Township (this has been discussed for many years but not supported)
- #1.4B

Update Monroeville’s subdivision and land development ordinance to include a mandatory recreation/fee-in-lieu of provision
- #1.4C

Adopt an Official Map in each municipality to identify the greenway as future parkland/open space preservation.

 - 🌲 Murrysville is working on one
 - 🌲 Monroeville, Penn Township and Trafford should consider similar

Turtle Creek Greenway Plan

Goal #1: Preserve the integrity of the natural, recreational and cultural resources of the Turtle Creek Greenway. (cont.)

Objective #1.4: Update local codes and ordinances to preserve the Greenway (cont.)

Update local zoning and subdivision and land development ordinances to address the following (see [Appendix N: Recommended Updates to Municipal Land Use Ordinances](#) for more municipal-specific recommendations):

- #1.4D  Require a minimum 100-foot buffer surrounding wetland habitats for birds and wildlife.
-  Create design guidelines that encourage "green" techniques in new developments (e.g. low-impact development, sustainable practices, smart growth principles, conservation subdivision) for upland areas surrounding the greenway to protect greenway from stormwater runoff.
-  Restrict development on red bed soils and steep slopes to prevent landslides and erosion.
-  Restrict development of steep slopes, stream headwaters, wetlands, floodplains, woodlands, wildlife corridors, and other natural areas.
-  Require a minimum 150-foot riparian buffer along streams.
-  Require a 150-foot buffer around headwater areas within the Turtle Creek Watershed.
-  Require the replacement of timbered areas with native species to protect forested areas.
-  Include a list of native plant species to use for landscaping within the ordinances and distribute to landowners, developers, etc.
-  Offer incentives (such as density bonuses, relaxed parking requirements, etc.) to use permeable surfaces for sidewalks, driveways, etc.

Goal #2: Manage adverse impacts within the Greenway and its ecosystem as a result of stormwater damage from nearby development.

#2.1 As a cooperative Allegheny and Westmoreland County effort to protect homes and businesses, update the Turtle Creek Watershed Stormwater Management Plan (Act 167) every 5 years, as required by state law.

#2.2 Update/enforce stormwater management Best Management Practices (BMPs), particularly storage– or infiltration-based practices, as outlined in DEP’s Pennsylvania Stormwater BMPs Manual, especially for new construction to reduce stormwater volumes and improve water quality at the discharge point.

#2.3 Implement fluvial geomorphic-based restoration approaches such as Natural Stream Design, where appropriate, to achieve channel and streambank stability, restore sediment transport, reduce erosion and sedimentation, and improve water quality and aquatic habitats.

-  Pilot project – parcels Penn_7 and Penn_8
-  Additional locations between Saunders Station Road and Duff Park (noted on Map 4.1)

#2.4 Restore the Simpson Run stream channel to Turtle Creek by removing sediment

Goal #2: Manage adverse impacts within the Greenway and its ecosystem as a result of stormwater damage from nearby development.

- #2.5 Develop a multi-municipal protocol for removing downed trees and/or potential obstructions and debris from streams to alleviate flooding.
 - 🌲 Every spring municipal public works crews should check problem areas (bridges and culverts that get jammed with debris) and ensure these areas are cleared.
- #2.6 Partner with the Westmoreland County Conservation District to implement a rain barrel and rain garden program (see [Appendix O](#) for more information on rain gardens).
 - 🌲 Potential Pilot Project: Murrysville Neighborhood near Meadowbrook Road/Clawson Drive (noted on Map 4.1)
 - 🌲 Have the homeowners sign a contract whereby the rain barrels are installed and field checked.
 - 🌲 Rain barrel pricing could be as follows: free to homeowners in study area, \$100 within watershed, \$275 outside watershed
 - 🌲 Audubon Society of Western Pennsylvania – Native Plants Garden Series “Rain Gardens for Homeowners” workshops teach homeowners how to size, design and install a rain garden and provides participants with \$200 certificate for rain garden plants.
- #2.7 Work with homeowners within/adjacent to the greenway to take advantage of GreenLink’s TreeVitalize, a tree planting program, to reduce erosion.
- #2.8 Utilize the Urban Eco Steward Program for volunteers to assist in improvement projects within the greenway.

Goal #3: Raise public awareness and encourage stewardship of the valuable natural resources present within the Turtle Creek Greenway.

- #3.1 Publicize the PA Resource Council educational programs on watersheds and the importance in protecting streamside areas such as riparian buffers, wetlands, and floodplains.
 - 🌲 Encourage municipal officials/public to attend
 - 🌲 Educational flyers can be posted on municipal, TCWA, and the Turtle Creek Greenway websites
- #3.2 Develop more educational programs tailored toward connecting local residents with the outdoors, especially kids, within Duff Park to improve the park’s chances of receiving the Green Park Award. The Audubon Society of Western PA has kid’s education programs that can be used as a model.
- #3.3 Publicize Audubon Society of Western Pennsylvania – Native Plants Garden Series and/or host similar program.
 - 🌲 Encourage participants to register their rain garden for free with Three Rivers Rain Garden Alliance (<http://raingardenalliance.org/garden>) to track and report performance
 - 🌲 Publicize the rain barrel/rain garden programs through email blasts, neighborhood canvassing, newsletters, postcards, flyers, etc.
- #3.4 Develop/distribute educational materials (municipal websites) to landowners within/adjacent to the Greenway on conservation practices, such as rain gardens, freedom lawns (no chemical treatments), rain barrels, compost bins, invasive species management, etc.

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Goal #3: Raise public awareness and encourage stewardship of the valuable natural resources present within the Turtle Creek Greenway.

- Develop an educational program to teach users how to be good land stewards while utilizing the greenway system.
- #3.5  Encourage a "carry-in, carry-out" ethic to discourage littering.
 - #3.5  Educate users on the "Leave No Trace Principles of Outdoor Ethics" (<http://www.lnt.org/index.php>).
 - #3.5  Post signs requiring dog owners to use leashes on their pets at all times and to pick up and properly dispose of pet wastes.
- #3.6 Encourage landowners to develop a backyard wildlife habitat program, such as the National Wildlife Federation and Audubon Society of Western PA programs.
- Work with local water treatment facilities and water suppliers to educate community residents about common point and non-point sources of pollution within the greenway and associated threats to the public water supply, how to report point source violations, and how to research permit information.
- #3.7  Educational flyers can be created and included with monthly bills.
 - #3.7  Establish partnerships between the TCWA and water suppliers/treatment facilities to offer educational programs.
 - #3.7  Provide an interpretative sign along the trail (once developed) outside the location of the treatment plants within the project area.
- Hold semi-annual Greenway events to encourage community involvement that incorporate volunteer activities with social networking.
- #3.8  Potential events can include:
 - ⇒ Trail maintenance events in local parks/trail systems
 - ⇒ Litter clean-up
 - ⇒ Tree/plant plantings
 - ⇒ Invasive species removal
 - ⇒ Hikes/walks that educate participants about conservation activities
 - ⇒ Turtle Creek Greenway Fun Run/Walk
 - #3.8  Promote these events through the Turtle Creek Watershed website and Turtle Creek Greenway website, if created.
 - #3.8  Utilize Pittsburgh Cyclist Group as a model to engage the public and obtain volunteers for events by incorporating social events in addition to volunteer activities.
- #3.9 Partner with local school districts to offer service projects within the Greenway that help students fulfill their Community Service graduation requirement.
- #3.10 Develop a Turtle Creek Greenway Newsletter that is published on a semi-annual basis (can be an online newsletter).
- #3.11 Update the Turtle Creek Watershed Association website.
- #3.12 Create and maintain a database of community organizations and volunteers to use as a list-serve for upcoming events, clean-ups, projects, etc. related to the Greenway.

Goal #4: Enhance the Turtle Creek Greenway by offering additional recreational opportunities.

| | |
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| | <p>Organize a Committee to formally meet with the TCIRR to discuss trail options and negotiate acquisition of the railroad corridor and develop a walking/biking trail that connects to the Westmoreland Heritage Trail.</p> <ul style="list-style-type: none"> 🌲 Trail signs needed at all road crossings <ul style="list-style-type: none"> ⇒ Dangerous sight distance at Murray/Trafford Road crossing |
| #4.1 | <ul style="list-style-type: none"> 🌲 Replace decking on railroad bridges 🌲 Develop trailheads <ul style="list-style-type: none"> ⇒ B-Y Park ⇒ Duff Park ⇒ Murrysville Community Building or at Lillian Avenue ⇒ Saunders Station Road |
| #4.2 | <p>If a Rails-to-Trails is not an option, partner with the TCIRR to develop a Rail-with-Trail in areas where feasible.</p> <ul style="list-style-type: none"> 🌲 Highest potential is between B-Y Park and Saunders Station Road <ul style="list-style-type: none"> ⇒ Pinch points (noted on Map 4.1) |
| #4.3 | <p>Work with the PA Fish & Boat Commission to designate fishing areas and create habitat enhancement structures along Turtle Creek within the greenway.</p> <ul style="list-style-type: none"> 🌲 Potential areas noted on Map 4.1 |
| #4.4 | <p>Implement the Monroeville Inter-Park Trail System.</p> <ul style="list-style-type: none"> 🌲 Connects local parks to the Greenway |
| #4.5 | <p>Complete the Murrysville Trail Network Mapping and adopt it as an amendment to the comprehensive plan.</p> |
| #4.6 | <p>Formalize the trail connection from the Duff Park Trail Network to the Greenway</p> <ul style="list-style-type: none"> 🌲 Informal trail connects near Elite business on US 22 |
| #4.7 | <p>Expand the trail system in Duff Park to connect to the trails within Pleasant Valley Park.</p> |
| #4.8 | <p>Develop a network of hiking trails within the Greenway in locations noted on Map 4.1</p> <ul style="list-style-type: none"> 🌲 Within public property 🌲 Through agreements with property owners (i.e. parcel TB_5, Mon_5, etc.) 🌲 Connect to residential neighborhoods <ul style="list-style-type: none"> ⇒ One potential area near the Brickyard (noted on Map 4.1) in Penn Township |
| #4.9 | <p>Establish passive recreation areas, including picnic areas and benches, within the Greenway.</p> <ul style="list-style-type: none"> 🌲 Potential locations noted on Map 4.1 |

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Goal #5: Develop a prioritized plan to secure land within the Greenway through fee simple, conservation easements, and/or donations to be used for trail development and the protection of green space and natural resources.

| | |
|-------|---|
| | Maintain an updated database of landowners within the Greenway. |
| #5.1 | <ul style="list-style-type: none"> Include information such as owner name, contact information, existing land use, future development plans (if any), land value, etc. |
| | Prioritize the list on an annual or semi-annual basis. |
| #5.2 | <ul style="list-style-type: none"> Utilize the criteria established in the Turtle Creek Greenways Plan. Conduct field views regularly to update information at the parcel level. Coordinate with Allegheny Land Trust and Westmoreland Land Trust to ensure consistency with their high priority areas, such as the high priority areas identified in the ALT's GREENPRINT |
| #5.3 | Partner with Allegheny Land Trust and Westmoreland Land Trust to raise money and acquire high priority properties, as noted on Maps 3.3A, Map 3.3B, Map 3.3C, and Map 3.3D. |
| #5.4 | Acquire the parcels adjacent to Duff Park to expand the park and provide a continuous greenway to Pleasant Valley Park, as shown on Map 4.2. |
| #5.5 | Preserve the land within the identified Simpson Run BDA by coordinating with the landowners and encouraging conservation easements, land donations, and conservation-based land management practices (i.e. sustainable timbering, freedom lawns, wildlife enhancements, etc.) |
| #5.6 | Publicize programs such as Clean and Green and Agricultural Security Areas (ASA) to encourage landowners to preserve their land. |
| #5.7 | Encourage ASA participants to preserve their farmland permanently through an agricultural conservation easement. |
| #5.8 | Establish a municipal-level conservation fund supported through a dedicated percent from the annual local real estate revenues to purchase land for conservation. |
| #5.9 | <p>Contact the landowners on an annual/semi-annual basis to determine interest in land donations and/or conservation easements to permanently protect riparian areas, forested slopes, and land within the greenway.</p> <ul style="list-style-type: none"> Include information on the benefits of donation, conservation easements, etc. |
| #5.10 | <p>Seek grant funding for the acquisition of high priority lands.</p> <ul style="list-style-type: none"> Utilize the value of donated lands as a match for new acquisition. |
| #5.11 | <p>Organize an annual fund drive to secure donations to purchase high priority lands.</p> <ul style="list-style-type: none"> If no other organization exists, develop a "Friends of the Turtle Creek Greenway" 501(c)3 nonprofit organization to accept donations on behalf of the greenway. |
| #5.12 | <p>Develop agreements with property owners who wish to retain ownership that outlines a management plan for resource conservation.</p> <ul style="list-style-type: none"> Agreement should establish a "management" entity, activities to be permitted, etc. |

Goal #6: Utilize the Greenway as an educational resource for school children and the general public alike.

| | |
|------|--|
| #6.1 | <p>Develop partnerships between schools and local environmental groups to utilize the greenway as environmental education opportunity.</p> <ul style="list-style-type: none"> 🌲 i.e. PRC, TCWA, WPC, Penn State Cooperative Extension, and Penn Trafford School District, Gateway School District, and Franklin Regional School District |
| #6.2 | <p>Continue to work with Franklin Regional to utilize Duff Park as an “outdoor classroom.”</p> |
| #6.3 | <p>Develop partnerships with Penn Trafford to use B-Y Park and the Greenway as an “outdoor classroom.”</p> |
| #6.4 | <p>Develop partnerships with Gateway School District to utilize the Greenway and Monroeville’s parks as an “outdoor classroom.”</p> |
| #6.5 | <p>Place interpretive signs throughout the Greenway. Potential locations are noted on Map 4.1.</p> <ul style="list-style-type: none"> 🌲 Historic/Cultural sites <ul style="list-style-type: none"> ⇒ Brickyard in Monroeville ⇒ History of TCIRR 🌲 Erosion Control/Streambank Restoration <ul style="list-style-type: none"> ⇒ Areas in need of restoration ⇒ Locations where restoration activities have occurred 🌲 Invasive Species <ul style="list-style-type: none"> ⇒ Duff Park: highlight as success story of eradication of invasive species ⇒ Areas of successful eradication in the Greenway ⇒ Areas of high importance to stop the spreading 🌲 Geology <ul style="list-style-type: none"> ⇒ Rock outcrops 🌲 Biology <ul style="list-style-type: none"> ⇒ Wetland areas ⇒ Simpson Run BDA ⇒ Locations of unique plant/animal species 🌲 Entrances to the “gorge” |
| #6.6 | <p>Promote the greenway as an environmental resource to educate the general public about local conservation and environmental issues specific to the Turtle Creek Watershed and Greenway. Site can also be utilized by local school districts.</p> |
| #6.7 | <p>Hold an annual wildflower walk with a botanist or naturalist in Duff Park in the spring time.</p> <ul style="list-style-type: none"> 🌲 Partner with local organizations to find a qualified botanist/naturalist 🌲 Designate a section of the park as a Wildflower Reserve <ul style="list-style-type: none"> ⇒ Utilize Raccoon Creek State Park’s Wildflower reserve and activities/programs as a model |
| #6.8 | <p>Partner with Westmoreland Conservancy and Friends of Murrysville Parks to promote the use of local parks and the Greenway for photography, wildlife watching, hiking, and other outdoor leisure activities.</p> |

Turtle Creek Greenway Plan

Goal #7: Promote the Greenway as a destination within and throughout the region to help the local communities realize economic benefits through ecotourism.

- | | |
|------|---|
| #7.1 | Develop a logo for the Turtle Creek Greenway and use on all signage, publications, and advertisements. |
| #7.2 | Develop wayfinding signs that direct visitors to public access areas along the Turtle Creek Greenway. |
| #7.3 | Develop a pamphlet promoting the Turtle Creek Greenway. <ul style="list-style-type: none">🌲 Get local businesses to sponsor/advertise🌲 Distribute through municipalities, tourism organizations, etc. |
| #7.4 | Develop a website for the Turtle Creek Greenway that contains trail mapping, user information, and recreational guidance for the area (i.e. fishing, kayaking, hunting, picnicking, trails, lodging, restaurants, etc.). <ul style="list-style-type: none">🌲 Utilize the Turtle Creek Gorge Facebook site |
| #7.5 | Include either a link to the Greenway's website or include information on municipal websites for the Turtle Creek Greenway. |
| #7.6 | Update municipal websites to include more information about the local parks and the amenities and recreational opportunities they provide. |

Section D > Action Plan

Table 4.2: High Priority Management Strategies contains the high priority strategies that once implemented, will provide public access, conserve additional land, and/or address immediate environmental concerns. Where possible, responsible parties, organizations to involve, and opinions of probable cost are identified to assist in implementation.

Map 4.1: Implementation Plan depicts locations of high priority projects and potential opportunities for recreation and conservation enhancement projects. Many projects identified are on private property or are dependent upon a trail being constructed through the Greenway. This map is intended to serve as a long-term plan for potential implementation projects once a trail is developed. Private landowners will need to be contacted as needed to determine their interest in implementing these projects.

Table 4.2: High Priority Management Strategies

| | |
|---|---|
| <p>Strategy #1: Organize a Committee to formally meet with the TCIRR to discuss trail options and negotiate acquisition.</p> <p><i>The majority of management strategies recommended for the Turtle Creek Greenway are dependent on public access being provided. If the railroad corridor can be acquired, a pedestrian/bicycle trail can be developed, with additional recreation enhancements as shown on Map 4.1. Long-term, there is potential for the trail to connect to the Westmoreland Heritage Trail.</i></p> | |
|  | |
| <i>Responsible Party</i> | Westmoreland County Department of Parks and Recreation |
| <i>Organizations to Involve</i> | Allegheny and Westmoreland County Economic Development organizations; Allegheny County Parks and Recreation Department; Municipalities, RTC |
| <i>Opinion of Probable Cost</i> | <p>Acquisition of Railroad: approx. \$900,000;</p> <p>Design: approx. \$60,000—\$100,000</p> <p>Construction: approx. \$250,000—\$300,000 per mile plus \$250,000—\$300,000 per structure (lower if prefabricated bridges are used). Note: the cost per mile is higher than the average \$200,000 per mile due to the extensive drainage issues and stormwater problems in the Corridor.</p> |

Strategy #2: Begin negotiations with the property owners in the Greenway who indicated an interest in either a donation or conservation easement.

A number of landowners noted interest in either donating their land or a conservation easement during the Greenway Plan, as shown on Map 4.1. In particular, funding for the proposed Duff Park expansion should be pursued. DCNR provides funding for 50% of acquisition costs for parks and open space preservation.

| | |
|----------------|---|
| Key Properties | Penn_4, Penn_5, Penn_6, Penn_7 Mon_7, Mon_9, Mon_12, Mon_21, Murry_6, Murry_9, Murry_18, Murry_24, Murry_29, Murry_31, Murry_32 |
|----------------|---|

| | |
|-------------------|---|
| Responsible Party | Westmoreland Land Trust, Allegheny Land Trust |
|-------------------|---|

| | |
|--------------------------|---------------------------|
| Organizations to Involve | Municipalities, RTC, TCWA |
|--------------------------|---------------------------|

| | |
|--------------------------|--|
| Opinion of Probable Cost | Properties and/or conservation easements should be pursued as donations. Associated costs may include assessment fees. |
|--------------------------|--|

Strategy #3: Maintain a database of community organizations and volunteers to use as a list-serve for future projects.

Many people expressed interest in the Greenway during the planning process. A database should be maintained and as future projects arise, these people can be contacted to volunteer and/or attend events.

| | |
|-------------------|-----------------------------|
| Responsible Party | Unknown—possibly RTC, TCWA, |
|-------------------|-----------------------------|

| | |
|--------------------------|--|
| Organizations to Involve | All local organizations, TCGP stakeholders, public meeting attendees, landowners, volunteers |
|--------------------------|--|

| | |
|--------------------------|---|
| Opinion of Probable Cost | No cost; volunteer time required to maintain updated database |
|--------------------------|---|

Strategy #4: Conduct water quality and fish studies on the tributaries to Turtle Creek to utilize as baseline data for pollution prevention and stormwater management plans.

With recent spills in Turtle Creek, water quality and fish studies need to be conducted immediately.

| | |
|-------------------|------|
| Responsible Party | TCWA |
|-------------------|------|

| | |
|--------------------------|------------------|
| Organizations to Involve | PFBC, Volunteers |
|--------------------------|------------------|

| | |
|--------------------------|------------------|
| Opinion of Probable Cost | \$5,000—\$10,000 |
|--------------------------|------------------|



Strategy #5: Conduct a wetland identification and delineation study to verify wetland locations and determine functionality of these areas.

Map 4.1 notes locations of potential wetlands; however, these should be verified through an official identification and delineation study.



Responsible Party TCWA

Organizations to Involve Volunteers

Opinion of Probable Cost \$10,000

Strategy #6: Lobby federal and state agencies to complete a restoration project along Turtle Creek, similar to the Nine Mile Run project in Pittsburgh.

Many communities in the Turtle Creek Watershed, including those outside of this plan, experience heavy flooding. The TCWA has been lobbying for a stream restoration project; however, to date funding has not been available.

Responsible Party TCWA

Organizations to Involve Army Corps of Engineers, PA DEP, Municipalities, legislators

Opinion of Probable Cost Unknown—the Nine Mile Run Project was estimated at \$7-8 million.

Strategy #7: Implement fluvial geomorphic-based restoration approaches such as Natural Stream Design along Turtle Creek.

This project needs to consider the future stream channel, not the existing one, in order to achieve channel and streambank stability, restore sediment transport, reduce erosion and sedimentation, and improve water quality and aquatic habitat. High priority areas are noted on Map 4.1; coordination with landowners would be needed.

Responsible Party Westmoreland County Conservation District, Property Owners

Organizations to Involve TCWA, Municipalities

Opinion of Probable Cost Unknown—dependent on project scope



Strategy #8: Update the Turtle Creek Watershed Stormwater Management Plan (Act 167) and municipal stormwater management ordinances to be in compliance.

Stormwater was identified as one of the biggest issues facing the Turtle Creek Greenway. The Turtle Creek Watershed’s Stormwater Management Plan was last completed in 1991. Although the municipalities have incorporated PA DEP’s best management practices (BMP) in their stormwater management ordinances, it is recommended that once Allegheny County and Westmoreland County complete Phase II of their Act 167 plans, the municipalities need to update their ordinances accordingly.



| | |
|---------------------------------|--|
| <i>Responsible Party</i> | Allegheny County, Westmoreland County |
| <i>Organizations to Involve</i> | TCWA, PA DEP, Westmoreland Conservation District, Allegheny County Conservation District |
| <i>Opinion of Probable Cost</i> | \$10,000—\$20,000 per municipality |

Strategy #9: Implement a rain garden and rain barrel program that targets nearby residential neighborhoods to help address stormwater issues within the Greenway.

A potential target area is identified on Map 4.1 in Murrysville near Meadowbrook Road/Clawson Drive.

| | |
|---------------------------------|--|
| <i>Responsible Party</i> | Westmoreland County Conservation District |
| <i>Organizations to Involve</i> | TCWA, Municipalities, Homeowners, Three Rivers Rain Garden Alliance, Audubon Society of Western Pennsylvania |



| | |
|---------------------------------|---|
| <i>Opinion of Probable Cost</i> | <p>Rain gardens range from \$3 to \$5 per square foot.</p> <p>Rain barrels could be provided free to homeowners in study area, \$100 within the Watershed and \$275 outside the Watershed.</p> <p>http://www.ninemilerun.org/rain-barrel-initiative/</p> |
|---------------------------------|---|



Strategy #10: Protect and enhance the Simpson Run BDA.

Much of the Simpson Run BDA is under private ownership, as shown on Map 4.1, and coordination with the landowners would be needed. Potential enhancements could include interpretive signage, low impact trails, picnic areas, etc.



Responsible Party County Conservation Districts, Land Trusts

Organizations to Involve TCWA, Municipalities, Landowners

Opinion of Probable Cost Conservation easements or partnership agreements should be worked out with the landowners. Projects vary in scope and cost but could be done mostly by volunteers and/or local nonprofit organizations.

Strategy #11: Implement a forest management plan and vegetation management plan to eradicate invasive plant species and allow native vegetation to grow and thrive.

Friends of Murrysville Parks has a plan in place that should be used as a model for invasive plant species management. While Japanese knotweed is found throughout much of the Greenway, high priority areas to target eradication are shown on Map 4.1.



Responsible Party Municipalities (on public lands), Long-term: if a trail is developed, the trail organization should take responsibility throughout the Greenway

Organizations to Involve Conservation Districts, Landowners

Opinion of Probable Cost Cornerstone (EPA 42750-60-1381) active ingredient glyphosate 41% (2.5 gallons, approx. \$45); Round up Concentrate Plus (EPA 71995-29) active ingredient glyphosate 18% (16 oz, approx. \$20); Volunteers can provide labor

Turtle Creek Greenway Plan

Strategy #12: Organize semi-annual clean-ups along the Turtle Creek Greenway to address areas of litter and illegal dumping.

As much of the Greenway is under private ownership, coordination with landowners would be needed. High priority areas to target clean-ups are shown on Map 4.1.

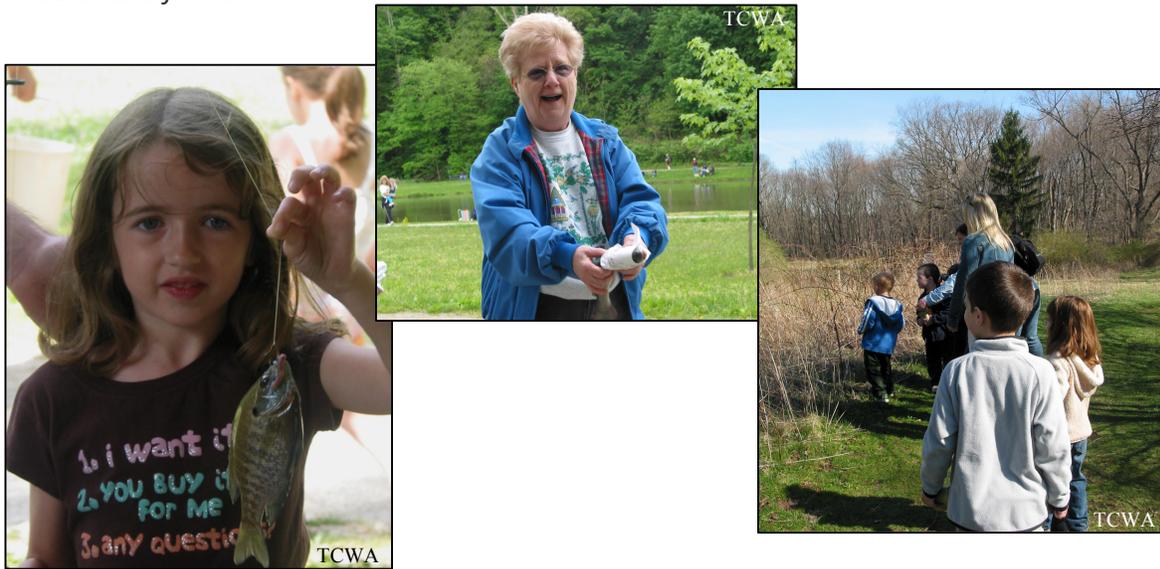


| | |
|---------------------------------|--|
| <i>Responsible Party</i> | TCWA, Municipalities, Landowners |
| <i>Organizations to Involve</i> | Local Sportsmen’s Associations, Conservation Districts, PA CleanWays Affiliates (Allegheny CleanWays & Westmoreland Cleanways) |
| <i>Opinion of Probable Cost</i> | The approximate removal cost per ton of trash is between \$800 and \$1,000. Volunteer time required to organize/coordinate clean-ups |

Section E > What If We Do Nothing?

—By Diane Selvaggio, Executive Director of the Turtle Creek Watershed Association

“Greenways and trails across Pennsylvania and other states have repeatedly demonstrated a variety of advantages for their communities. The same holds true for our area. We’ve seen the potential for the Turtle Creek Greenway to become a beautiful place for people to enjoy outdoor recreation close to home – very important as national attention is centered on health and fitness.



We’ve seen the potential boost to the local economy for small local businesses from an expanded patron base. We’ve seen the potential for local communities to become more appealing places to live and work, bringing increased property values for land near the greenway.



Turtle Creek Greenway Plan

Consequently, many people will find the idea of a greenway along Turtle Creek a very good one. Some won't have any interest one way or another. And others will feel it is a complete waste of money and effort – after all, we in this region have heard for decades the mantra: "It's either the economy or the environment, but not both," often never questioning its validity.

Because of that underlying attitude, anything "green" is seen as rather frivolous by many regional decision-makers – a waste of money or resources. Wasting money in this time of economic hardship is something few of us can abide, so there may be adequate support to consider halting this project.

The question then becomes, "What if we do nothing?"

For anyone who has walked along the proposed greenway path, or for anyone living near any of our local streams, several answers to that question are starkly apparent. In addition to losing the proven benefits to local communities and the local economy that a greenway brings, the Turtle Creek valley shows that we are already spending a lot of tax dollars and private dollars to very ineffectively cope with our present, and rapidly growing, stormwater runoff problems.

This is an issue fundamentally about the money.

This is about how the greenway can serve as a community focal point to solve some very expensive problems that a few of us pay for directly, but all of us pay for with our tax dollars, our utility bills, and our insurance premiums.



Conventional practices focus upon rainfall as a waste product that needs to be removed from a developed site as fast as possible. Little consideration is given to what happens downstream when all that water hits a stream. When only a small percentage of land is developed this way, the problems are small. But as more land is developed, the problems grow – becoming chronic and severe.

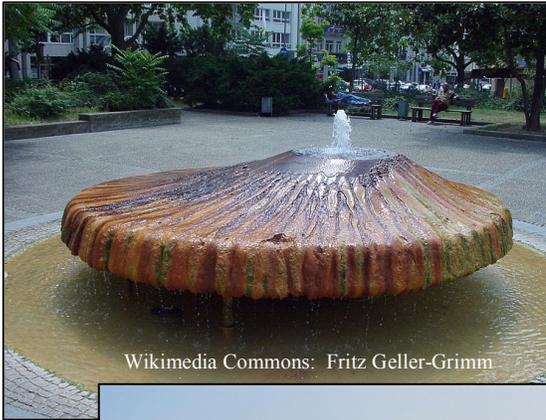
Small storms now cause damage where none occurred historically. Someone pays for that. Damage from every large storm demands that hundreds of thousands of local, county, and state tax dollars come out of already burdened government budgets. These are our tax dollars.

While flooding is a natural process, there are also natural systems that mitigate any damaging effects. Conventional development and stormwater management practices damage these mitigating systems, referred to as “natural infrastructure,” thus forcing destructive flooding events. Progressive practices recognize the low cost/high performance capabilities of natural infrastructure and put that to good use to reduce flood potential. By valuing these low-impact practices and the improvements they could make in every



Turtle Creek Greenway Plan

community across the Turtle Creek watershed, we can implement and retro-fit them to reduce the damage we sustain. We can adopt them all the way from the backyard level up to the regional level.



Wikimedia Commons: Fritz Geller-Grimm



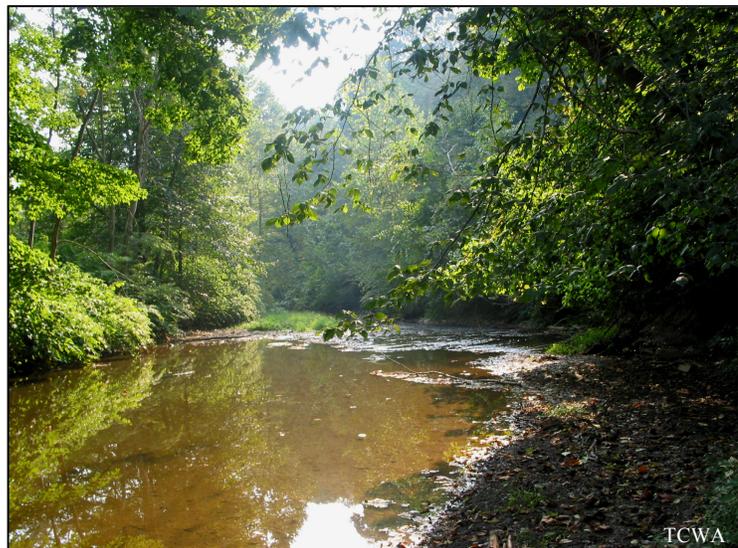
Wikimedia Commons



TCWA

Whether we do that to reduce tax dollar and private dollar expenses, to protect the quality of our water supplies, or to preserve the Turtle Creek Greenway as a community asset, all of us will see the benefits.

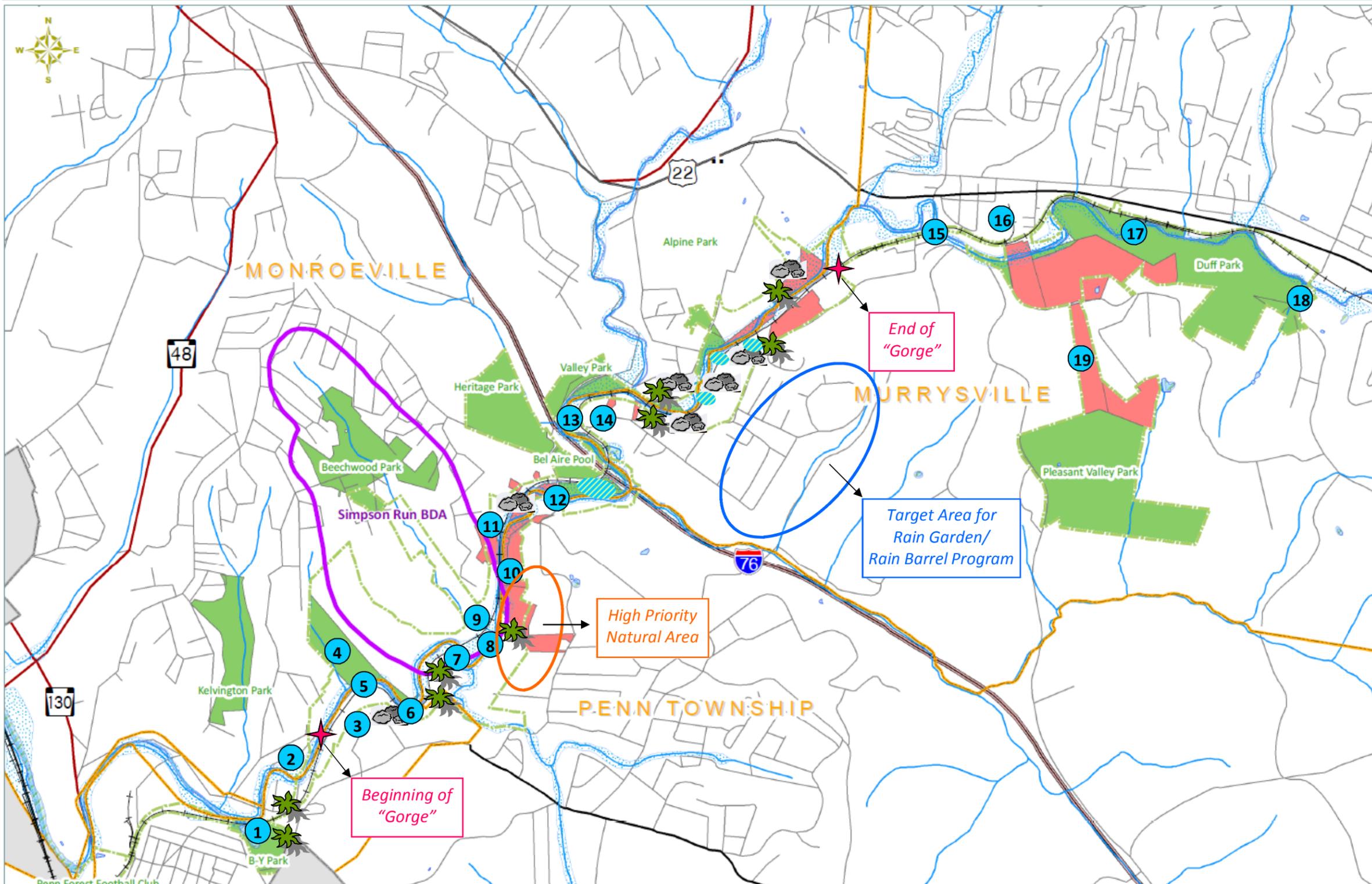
So, if we do nothing, the damages and their associated costs will continue to climb. But, if we pursue this project, then we will achieve a great deal more than just a greenway. Not a bad bargain!"



TCWA

Turtle Creek Greenway Plan

Map 4.1 > Implementation Plan



Legend

- Municipal Boundary
- Project Area Municipality
- Project Boundary
- NWI Wetland
- Waterway
- Floodplain
- Public Park
- Natural Heritage Area
- Road
- I-76/PA Turnpike
- US Route
- Major State Route
- Railroad

Implementation Projects

- High Priority Parcels
- Streambank Stabilization
- Invasive Plant Species Removal
- Wetland Interpretive Site
- Recreation/Conservation Project

| | | | | |
|--|---|--|--|---|
| High Priority: Develop a hiking/biking/walking trail along the RR | | 5 Passive recreation: Picnic tables; Interpretive signage (brickyard, railroad) | 10 Passive recreation: Potential fishing access | 15 Trail crossing: Dangerous at-grade crossing (Murray-Trafford Road); Replace RR bridge |
| 1 B-Y Park: Habitat enhancement, Interpretive signage; Trailhead | 6 Wetland: Interpretive signage; Habitat enhancement | 11 Rock outcrop: Interpretive signage | 16 Trailhead: Murrysville Community Building | 17 Duff Park: Connect trail to inter-park hiking/biking trail network |
| 2 Clean Up: Storage of outdoor materials | 7 Turtle Creek: Redirect flow at RR bridge crossing (scour, stabilization, J hooks) | 12 Saunders Station Road Parking Lot: Fishing access; Wetland; Trails | 18 Duff Park: Improve entrance sign; Trailhead | 19 Potential Duff Park expansion: Acquire parcels to connect to Pleasant Valley Park |
| 3 Hiking Trail: Connect Greenway to the housing development | 8 Simpson Run BDA: Habitat enhancement; Trails; Birding; Fishing; Interpretive signage | 13 Passive recreation: Picnic area | | |
| 4 Old Brickyard: Possible historic site; Interpretive signage | 9 Simpson Run: Need to remove debris from Simpson Run to repair stream bed | 14 Geologic formation: Interpretive signage | | |

Data used is courtesy of PASDA, Allegheny County, Westmoreland County and PennDOT.

Feet

0 1,000 2,000 3,000



Appendix A—References

3 Rivers Wet Weather. Website accessed: November 3, 2010.
http://www.3riverswetweather.org/d_weather/d_overview.stm

Allegheny County Economic Development (ACED). Allegheny County Comprehensive Plan – Allegheny Places. 2008. <http://www.alleghenyplaces.com/plan/index.asp>

Allegheny County Economic Development (ACED). Allegheny County Comprehensive Plan – Allegheny Places. Parks, Open Space, and Greenways Plan. 2008.
<http://www.alleghenyplaces.com/docs/DraftPlan/Chapter4E.pdf>

Allegheny Land Trust. Website last modified November 29, 2009. Website accessed March 15, 2010. <http://www.alleghenylantrust.org/properties/index.html>

Audubon Society of Western Pennsylvania (ASWP). ASWP Christmas Bird Count. Website accessed March 18, 2010. <http://www.aswp.org/cbc.html#results>

Commonwealth of Pennsylvania. *The Pennsylvania Code*. §93.2. Scope. Fry Communications, Inc. January 9, 2010. Website accessed March 15, 2010.
<http://www.pacode.com/secure/data/025/chapter93/s93.2.html>

Conservation Technology Information center (CTIC). *Groundwater & Surface Water: Understanding the Interaction. A Guide for Watershed Partnerships*. Website accessed March 15, 2010. <http://www.ctic.purdue.edu/KYW/Brochures/GroundSurface.html>

Cowardin, L.M., V. Carter, F.C. Golet, & E.T. LaRoe. *Classification of Wetlands and Deepwater Habitats of the United States*. Washington, D.C.: U.S. Fish and Wildlife Service. 1979.

Environmental Laboratory. (1987). *Corps of Engineers Wetland Delineation Manual*, Technical Report Y-87-1. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.

Environmental Protection Agency (EPA). Biological Indicators of Watershed Health. Invertebrates as Indicators. Last updated Friday, December 4, 2009. Website accessed December 17, 2009. <http://www.epa.gov/bioiweb1/html/invertebrate.html>

Flouride Now. *PA Water Supply listing*. Website accessed March 24, 2010.
http://www.pafluoridenow.org/PDA_listing.shtml

Frey, R. F. (Ed.). *Commonwealth of Pennsylvania 1996 Water Quality Assessment* (Section 305(b), Federal Clean Water Act) (Report No. 3610-BK-DEP2003). Harrisburg, PA: Pennsylvania Department of Environmental Protection.

Friends of Murrysville Park (FOMP). *Invasive Species Mapping and Assessment for Duff Park*. Duff Park, Murrysville, PA. March 23, 2009.

Land Trust Alliance. *Conservation Options for Landowners*. Website accessed November 23, 2010. <http://198.66.224.63/conserve/options.htm>

Landowner Meeting. Meeting Summary. October 2009. Murrysville Community Center. Murrysville, PA.

Mullin& Lonergan Associates. Westmoreland County Comprehensive Plan. January 2005. Website accessed March 24, 2010.

http://www.co.westmoreland.pa.us/westmoreland/lib/westmoreland/compplan/final_document.pdf

Municipality of Murrysville. *Emergency Telephone Numbers*. July 17, 2003. Website accessed March 24, 2010. http://www.murrysville.com/documents/community_phone_numbers.pdf

Municipality of Murrysville. Municipal Parks-Duff Park, Heritage Park. Website accessed April 5, 2010.

http://www.murrysville.com/muni_parks.html

Natural Resources Conservation Service. (NRCS). Pittsburgh Annual Precipitation Data. Website accessed April 5, 2010.

<http://www.wcc.nrcs.usda.gov/ftpref/support/climate/taps/pa/42003.txt>

Natural Resources Conservation Service (NRCS). United States Department of Agriculture. *Hydric Soils – Overview*. Website accessed September 20, 2010.

<http://soils.usda.gov/use/hydric/overview.html>

Natural Resources Conservation Service (NRCS). *The Water Cycle Figure*. Federal Interagency Stream Corridor Restoration Handbook. 1998. Website accessed March 17, 2010.

http://www.nrcs.usda.gov/technical/stream_restoration/chap2.html

Natural Resources Conservation Service (NRCS). *Wetlands Functions and Values Fact Sheet*. Interim Final Rule for Highly Erodible Land and Wetland Conservation. Federal Register, September 6, 1996. Website accessed March 17, 2010.

www.nrcs.usda.gov/programs/farmland/1996/FuncFact.html

National Park Service. 1995. *Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors*. Website accessed November 2, 2010. http://www.nps.gov/pwro/rtca/econ_all.pdf.

Newbury, R. L., Belz, D.J., & Grubb, R.G. (1981). *Soil Survey of Allegheny County, Pennsylvania*. United States Department of Agriculture. Soil Conservation Service. Washington, D.C.: National Cooperative Soil Survey.

North Carolina State University. *Riparian Buffers*. Website accessed March 24, 2010. <http://www.soil.ncsu.edu/publications/BMPs/buffers.html>

Organization of American States (OAS). Department of Regional and Environment Executive Secretariat for Economic and Social Affairs. Washington D.C. 1991. Website accessed March 16, 2010. <http://www.oas.org/USDE/publications/Unit/oea66e/ch08.htm>

Penn Township. *Water Supply*. Website accessed March 24, 2010. <http://www.penntwp.org/utility.html>

Pennsylvania Audubon. Audubon Pennsylvania Birds Conservation. *The Important Bird Area Program in Pennsylvania*. Website accessed March 18, 2010. <http://pa.audubon.org/iba/>

Pennsylvania Department of Agriculture. *2008 Farmland Preservation Annual Report*. Bureau of Farmland Preservation. 2008. http://www.agriculture.state.pa.us/agriculture/lib/agriculture/farmlandfiles/annual_report.pdf

Pennsylvania Department of Agriculture (PDA). Terrestrial invasive species. Website accessed March 18, 2010. [http://www.agriculture.state.pa.us/agriculture/lib/agriculture/pdfdocs/Terrestrial Invasive Species Component December 06 Draft.pdf](http://www.agriculture.state.pa.us/agriculture/lib/agriculture/pdfdocs/Terrestrial_Invasive_Species_Component_December_06_Draft.pdf)

Pennsylvania Department of Conservation and Natural Resources (DCNR). Bureau of Topographic and Geologic Survey. 1996. *The Geological History of Pennsylvania: DCNR Educational Series 4*. Harrisburg, PA. <http://www.dcnr.state.pa.us/topogeo/education/es4.pdf>

Pennsylvania Department of Conservation and Natural Resources (DCNR). Website accessed October 14, 2009. <http://www.dcnr.state.pa.us/topogeo/map13/13plps.aspx>

Pennsylvania Department of Conservation and Natural Resources (DCNR). Bureau of Forestry. *T&E Letter Response*. February 16, 2010.

Pennsylvania Department of Conservation and Natural Resources (DCNR). Bureau of Forestry, Division of Forest Pest Management. "2009 Forest Insect and Disease Conditions in Pennsylvania". 2009.

Pennsylvania Department of Conservation and Natural Resources (DCNR). Bureau of Forestry. "What is the Emerald Ash Borer?" Educational Brochure. Revised January 2008. Website accessed March 18, 2010. http://www.dcnr.state.pa.us/forestry/EAB_info.pdf

Pennsylvania Department of Conservation and Natural Resources (DCNR). Bureau of Forestry. Emerald Ash Borer Information and Management Plan. Emerald ash borer and trap photos. Website accessed March 18, 2010. http://www.dcnr.state.pa.us/forestry/fpm_invasives_EAB.aspx

Pennsylvania Department of Conservation and Natural Resources (DCNR). "Wildlife Habitat in Pennsylvania: Past, Present, and Future". 2001. Website accessed March 18, 2010. <http://www.dcnr.state.pa.us/wlhabitat/toc.aspx>

Pennsylvania Department of Education (September 2009). Enrollment Public School 2008-09.xls. Website accessed April 27, 2010. <http://www.education.state.pa.us>.

Pennsylvania Fish and Boat Commission (PFBC). Division of Environmental Services, Natural Diversity Section. *T&E Letter Response*. March 17, 2010.

Pennsylvania Game Commission (PGC). Cooperative Farm-Game Program. Website updated 2006. Website accessed March 14, 2010. <http://www.portal.state.pa.us/portal/server.pt?open=514&objID=620379&mode=2>

Pennsylvania On-line Herpetological Atlas (POHA). *Species of Conservation Concern*. Website accessed March 18, 2010. <http://www.paherpatlas.org/>

Pennsylvania Farmland Preservation Association. Agricultural Security Areas. Website accessed Oct. 16, 2009. <http://www.pafarmland.org/agsecareas.htm>

Pittsburgh Geological Society. "Landsliding in Western Pennsylvania." Website accessed December 1, 2009. <http://www.pittsburghgeologicalsociety.org/landslide.pdf>

Rails to Trails Conservancy. *Benefits of Rail-Trails*. Website accessed November 2, 2010. <http://www.railstotrails.org/ourWork/trailBasics/benefits.html>.

Stormwater Manager's Resource Center. Website accessed November 2, 2010. <http://www.stormwatercenter.net/monitoring%20and%20assessment/imp%20cover/impercovr%20model.htm>

StormwaterPA. Benefits. Website accessed November 3, 2010. <http://www.stormwaterpa.org/financial.html>

StormwaterPA. Act 157 Status and Information. Website accessed August 5, 2010.
<http://www.stormwaterpa.org/act-167.html>

Taylor, David C., et. al. (1992). *Soil Survey of Westmoreland County, Pennsylvania*. United States Department of Agriculture. Soil Conservation Service. Washington, D.C.: National Cooperative Soil Survey.

Trafford Borough. B-Y Park Information. Website accessed April 5, 2010.
<http://home.comcast.net/~fbtunes/TraffordBYParkLocationInformationandImages1.htm>

Turtle Creek Watershed Association (TCWA). Website accessed March 15, 2010.
<http://tcwa.org/A/Service%20Area.htm>

United States Census Bureau (2000). Census 2000 Population Statistics.
<http://www.census.gov/main/www/cen2000.html>.

USDA Forest Service (USFS). Ecoregions. 1994.
<http://www.fs.fed.us/land/pubs/ecoregions/intro.html>

USDA Forest Service (USFS). Ecoregions. 1994.
<http://www.fs.fed.us/land/pubs/ecoregions/intro.html>

Wikipedia. Surface water definition. Website accessed March 15, 2010.
http://www.ask.com/wiki/Surface_water

Western Pennsylvania Conservancy (WPC). *Allegheny County Natural Heritage*. Inventory. February 1994. Website accessed March 18, 2010.
http://www.naturalheritage.state.pa.us/CNAI_PDFs/Allegheny%20County%20NHI%201994%20WEB.pdf

Westmoreland County. *Window to Westmoreland*. October 2, 2009. Website accessed April 8, 2010. <http://www.co.westmoreland.pa.us/westmoreland/cwp/view.asp?a=7&q=622135>

Westmoreland Land Trust (WLT). Website accessed April 8, 2010.
<http://www.wcdpa.com/landtrust/>

Tables

Table 2-1: Wildlife Listing

Upper Crooked Creek River Conservation Plan. "Chapter 4: Biological Resources." December 2001. Website accessed December 14, 2009.

<http://www.dcnr.state.pa.us/brc/rivers/riversconservation/registry/56crooked/Sec4-Bio.pdf>

Table 2-2: Amphibians and Reptiles of Conservation Concern

Pennsylvania Herpetological Atlas Project. Amphibians and Reptiles. Website accessed December 14, 2009. <http://www.paherpatlas.org/amphibians>.

Table 2-3: Invasive Plant Species

Audubon Society of Western Pennsylvania (ASWP). Invasive Plants Information. Website accessed December 14, 2009. <http://www.aswp.org/invasives.html>

Department of Conservation of Natural Resources (DCNR). Invasive Plants in Pennsylvania. Website accessed December 14, 2009.

<http://www.dcnr.state.pa.us/forestry/wildplant/invasivelist.aspx>

Table 2-4: Invasive Animal – Aquatic

Pennsylvania Department of Agriculture (PDA). Aquatic Invasive Species Management Plan. October 2006. Website accessed December 2, 2009.

http://www.agriculture.state.pa.us/portal/server.pt/gateway/PTARGS_0_2_24476_10297_0_43/AgWebsite/Files/General/piscfiles/PA_AISMP.pdf

Table 2-5: Invasive Animal – Terrestrial

PA Department of Agriculture (PDA). Last updated Nov. 2, 2009. Website accessed December 2, 2009. <http://www.agriculture.state.pa.us/agriculture/cwp/view.asp?a=3&Q=144707&PM=1>

Table 2-6: Soils

GIS soil Data and On-line Web Soil Survey, Farmland Soil and Hydric Soil Listings. Website accessed April 14, 2010. <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

Figures

Figure 2-1: Proposed Duff Park Expansion

Mackin Engineering Company. Duff Park Expansion Map. April 2010.

Figure 2-2: The Hydrologic Cycle

NRCS. "In Stream Corridor Restoration: Principles, Processes and Practices". October 1998. Website accessed April 5, 2010.

http://www.nrcs.usda.gov/technical/stream_restoration/Images/scriimage/chap2/fig2-02.jpg

Figure 2-3: Turtle Creek Watershed

TCWA. Turtle Creek Watershed Map. Website accessed April 5, 2010.

<http://tcwa.org/A/images/TCWAMap.jpg>

Figure 2-4: Pennsylvania Wildlife Habitat Quality Map

DCNR. "Wildlife Habitat in Pennsylvania: Past, Present, and Future". 2001. Websites accessed April 5, 2010. <http://www.dcnr.state.pa.us/wlhabitat/toc.aspx> (Report)

<http://www.dcnr.state.pa.us/wlhabitat/forward/regional.aspx> (Map)

Figure 2-5: Redbeds Location within the Region

Pittsburgh Geological Society. "Landsliding in Western Pennsylvania." Website accessed December 1, 2009. <http://www.pittsburghgeologicalsociety.org/landslide.pdf>



Appendix B—Letter of Support (MTA)



Murrysville Trail Alliance
Murrysville, Pennsylvania
www.murrysvilletrails.org

Amy (Senopole) Wiles
Mackin Engineering Company
117 Industry Drive
Pittsburgh, PA 15275

March 22, 2010

Dear Ms. Wiles,

The Murrysville Trail Alliance (MTA) would like to express its support for the Turtle Creek Greenway Plan.

In addition to the potential future extension of the Westmoreland Heritage Trail, the MTA requests that sustainable singletrack trails for recreational hiking and mountain biking also be included as part of the plan. These trails on land and hillsides flanking Turtle Creek will greatly expand access to the greenway for recreation, nature study, and education, and will be a valuable recreational amenity for walkers, mountain bikers, and others. They would be especially worthwhile in providing recreational access to parts of the greenway in advance of the possible eventual extension of the Westmoreland Heritage Trail (WHT), and then to serve as an exceptional complement to the WHT if/when it is extended.

The undeveloped nature of the area will allow for a property planned system of trails *designed* to be sustainable, unlike the existing network of poorly laid out social (i.e., unplanned) trails in so many local parks. Well-designed trails could be machine built by a professional trail contractor, or could be hand-built by volunteers.

The opportunity for the Greenway project to build connections between seven existing parks - including a connection between Murrysville's Duff Park and Pleasant Valley Park - through conservation of the connecting land is extraordinary, and the MTA supports this effort wholeheartedly.

Please look upon the MTA as an enthusiastic supporter of conservation of the Greenway, and please feel free to distribute or quote from our letter of support.

Sincerely yours,

Joseph M. Galvin
(for the Murrysville Trail Alliance)

cc: Malcolm Sias, Parks Planning Coordinator, Westmoreland County
Diane Selvaggio, Executive Director, Turtle Creek Watershed Association



Appendix C—Steering Committee Meeting Summaries

Turtle Creek Gorge Greenway Plan

Steering Committee Kick Off Meeting

1:30pm – Wednesday, May 27, 2009 – Murrysville Community Center
Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and reviewed the project background, which is a result of the Saltsburg to Trafford Trail Feasibility Study that was completed in 2003. Malcolm asked that the attendees introduce themselves and the organization(s) each is representing. The following Steering Committee (SC) members were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * John Balicki, Monroeville Parks & Recreation Director and John Balicki and Associates, LLC
- * Dr. Elisa Beck, Sustainable Monroeville
- * Bruce Corna, Jr., Bruce Construction, LLC and Westmoreland Land Trust
- * Chuck Duritsa, Westmoreland Land Trust
- * Christine Goswick, Allegheny County Economic Development – Planning Division
- * Alex Graziani, Smart Growth Partnership of Westmoreland County
- * Noel Grimm, Westmoreland Heritage Trail Chapter
- * Greg Holesh, Watershed Manager – PADEP
- * Bruce Light, Penn Township Manager
- * Carrie Martin, Murrysville Parks & Recreation
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)

Additional participants included:

- * Lori Beatty for Joe Markosek, PA House of Representatives
- * John Turack, PSU Cooperative Extension and Smart Growth Partnership

Mackin Engineering Company is the consultant that was hired to complete the Turtle Creek Gorge Greenway Plan. The following representatives were in attendance:

- * Amy Senopole, AICP, Lead Senior Planner & Project Manager
- * Jennifer Yeckel, Senior Environmental Scientist

2. Steering Committee

A sign-in sheet was passed around containing the contact information for the SC and everyone was asked to ensure their contact information is correct. Email was noted to be the preferred method of contact – therefore members should expect to receive all meeting notifications and project information via the email address they provided.

The roles and responsibilities expected of the SC were reviewed.

- * Commit to attend the scheduled project meetings
- * Respect other people's opinions and follow the proper decorum even when disagreeing.
- * Turn off mobile phones or set to vibrate to avoid interruptions.
- * Review all project materials given to you and provide comments and feedback in a timely manner

Turtle Creek Gorge Greenway Plan Steering Committee Kick Off Meeting

1:30pm – Wednesday, May 27, 2009 – Murrysville Community Center
Meeting Summary

- * Serve as a liaison between the SC and the organization each member is representing to ensure that the organization (particularly municipal planning commissions and governing bodies) is aware of the project status and receiving updates

The project is expected to be completed within 12 months, which is a tentative completion date of June of 2010. Meetings will be held on a bi-monthly basis.

3. Review Scope of Work

Copies of the project scope of work were distributed and reviewed. The following questions and/or comments were raised:

- * "Recreation leads to conservation" – possible focus of plan
- * Water quality was identified as an issue. The plan will not include water quality testing; however, Mackin will review reports already completed and incorporate them in to the plan.
- * Even though the County Recreation Plan (New Horizons) identified general costs to construct trails, the cost estimates did not include acquisition of property for greenways / conservation
- * As the SC is a large group, representatives of organizations such as Sportsman's Clubs and Trout Unlimited can be included in the process as stakeholders, who will be interviewed as part of the study. Other stakeholders may include large landowners, business representatives, recreation providers, etc.

Action: SC members are to email Amy (asenopole@mackinengineering.com) with contact information (organization, contact name, phone number, email address, etc.) for key stakeholders.

4. Data Collection

Mackin asked the Committee for any previously completed plans and studies that may be pertinent to the project.

- * Comprehensive Plans
- * Comprehensive Parks, Recreation, and Open Space Plans
- * Trail Feasibility Studies (other than Saltsburg to Trafford)
- * Zoning Ordinances
- * Subdivision and Land Development Ordinances (SALDO)
- * Water Quality Reports
- * Stormwater Management Plans / Ordinances

The following plans have already been collected:

- * Penn Township Comprehensive Plan
- * Penn Township Zoning Ordinance
- * Penn Township SALDO
- * Map of Shaffer Plan (Penn Township)

Turtle Creek Gorge Greenway Plan Steering Committee Kick Off Meeting

1:30pm - Wednesday, May 27, 2009 - Murrysville Community Center
Meeting Summary

- * Westmoreland County Recreation / Greenways Plan (available online)
- * Monroeville Trails Plan (map)
- * Allegheny County Comprehensive Plan and Greenways Plan "Green Print" (available online)

Action: SC members are to email Amy (asenopole@mackinengineering.com) plans or studies or the appropriate website links. For hard copies, please contact Amy to make arrangements for pick up.

5. Visioning – Goals & Priorities

A visioning session was conducted to identify some initial goals and priorities of the plan.

- * Trail connections
 - o Westmoreland Heritage Trail
 - Turtle Creek Industrial Railroad is active at this time, but may sell the ROW in the future
 - o Monroeville (proposed) trail system
 - o Boyce Park
 - o Duff Park trail system
 - o Look at possible equestrian use
 - o Possible navigable stream in high waters
- * Preserve greenway as a natural area
 - o Preserve steep slopes
 - o Maintain vegetation along the waterways to minimize erosion (Riparian areas)
 - o Address invasive species
 - o Stormwater management is issue along the gorge
 - Turtle Creek Watershed is currently working on an Act 167 for the watershed
 - Water conservation and education (i.e. Rain barrels, etc.)
 - o Off Highway Vehicles (OHV) is a problem in the gorge
- * Improve water quality
 - o AMD issues
 - o Iron / aluminum
 - o Future fishing area / destination
- * Incorporate conservation into local ordinances
 - o Murrysville has a committee to work on an official map
 - o Monroeville has "weak" mandatory dedication / fee in lieu of requirement in SALDO
 - o Penn Township and Murrysville have effective provisions in their SALDO and have used
 - o Trafford does not have recreation plan or provision in SALDO

Turtle Creek Gorge Greenway Plan Steering Committee Kick Off Meeting

1:30pm - Wednesday, May 27, 2009 - Murrysville Community Center
Meeting Summary

6. Mapping Exercise

Committee members gathered around maps that depict the general project area and were asked to identify any issues or features that Mackin should be aware of prior to the field view.

- * The Committee will assist in defining the boundary of gorge for study – 1,000 foot contours and Duff Park and Trafford are the initial starting points, but they will need to be revised
- * Monroeville
 - o Potential historic area near Kelvington Park
 - o Simpson Run has fossils
 - o Potential trailhead near Turnpike / Saunders Station Road
 - o OHVs issue near Valley Park
- * Penn Township
 - o Shaffer Plan (see plan provided)

Action: Amy will mail copies of the maps to each municipality for additional identification of issues, etc. prior to the next meeting.

7. Next Meeting

A field view of the project area is scheduled for Wednesday, June 24, 2009 at 8:00am. All committee members are invited to attend in order to better understand the project area and the purpose of the study.

Action: Amy will email the SC with details regarding the field view and interested persons will be asked to RSVP.

NOTE: The next SC meeting will take place on Wednesday, July 29, 2009 at 1:30pm in the Murrysville Community Center.

9. Adjourn

The meeting was adjourned at 3:10pm.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm - Wednesday, July 29, 2009 - Murrysville Community Center
Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and asked that the attendees introduce themselves and the organization(s) each is representing. The following people were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * Christine Goswick, Allegheny County Economic Development – Planning Division
- * Noel Grimm, Westmoreland Heritage Trail Chapter
- * Tom Dittman, Murrysville Recreation & Westmoreland Heritage Trail (WHT)
- * Greg Holesh, Watershed Manager – PADEP
- * Brian Lawrence, Smart Growth Partnership Intern
- * Bruce Light, Penn Township Manager
- * Carrie Martin, Murrysville Parks & Recreation
- * Amy Myers, Allegheny County Conservation District
- * Rey Peduzzi, Trafford Borough
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * John Turack, PSU Cooperative Extension and Smart Growth Partnership
- * Mackin: Amy (Senopole) Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. Field View Summary

A summary of observations that were submitted to Mackin regarding the field view on June 24, 2009 was distributed for SC review and comment. Additional comments from the field view include:

- * Turtle Creek needs to be controlled -- surprised at how severe the erosion, stream bank stabilization, and stormwater problems are.
- * The gorge is a beautiful scenic, green area.
- * Surprised to see AMD / Aluminum precipitate by Abers Creek – thought AMD problems occurred further upstream by Export.
- * Important to recognize that we all have an important role to play depending on each person's expertise and interest. We all need to unite and get involved to create an implementable plan and then take action as individuals to the individual projects proposed to fruition.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, July 29, 2009 – Murrysville Community Center

Meeting Summary

3. Vision Statement

The following draft vision statement for the plan was submitted to the SC for review and comment.

"The Turtle Creek Gorge is recognized as a local treasure of remarkable natural beauty that offers educational and recreational opportunities. With renewed awareness and stewardship, the surrounding communities have united to share in the responsibilities to remediate, protect, and preserve the Turtle Creek Gorge as part of a larger, regional continuum of greenways and recreational resources for future generations to enjoy."

There were no comments on the Vision Statement.

Action: SC members are to email Amy (asenopole@mackinengineering.com) with any comments on the Vision Statement.

4. Project Goals

Draft goals for the plan were submitted to the SC for review and comment.

1. *Preserve the integrity of the natural, recreational, and cultural resources of the Turtle Creek Gorge that are being affected by nearby urban development.*
2. *Raise public awareness and encourage stewardship of the valuable natural resources present within the Turtle Creek Gorge.*
3. *Enhance the Turtle Creek Gorge by offering additional recreational opportunities.*
4. *Develop a prioritized acquisition plan to secure land within the gorge for trail development and the protection of green space and natural resources.*
5. *Utilize the Gorge as an educational resource for school children and the general public alike.*

The following comments were provided:

- * Break down #1 into two separate goals—make it more positive at the start, new statements: Preserve the natural beauty of the Turtle Creek Gorge; Address the influences of nearby urban development on the Gorge ecosystem.
- * Rewrite #4: change word acquisition, add information about conservation easements and land donations
- * Add another goal about the gorge as a destination point and place that people want to visit; describe environmental economics and ecotourism.

Action: SC members are to email Amy (asenopole@mackinengineering.com) with any additional comments on the goals.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm - Wednesday, July 29, 2009 - Murrysville Community Center

Meeting Summary

5. Stakeholder List

A preliminary stakeholder list was submitted to the SC for review and comment. The stakeholders will be interviewed for input in the project and may include anyone that the SC feels is worthwhile. Mackin will interview approximately 25 stakeholders (not including landowners). Some members also discussed involving the Chamber of Commerce and local business leaders as a good way to get the gorge funding and get support for the gorge as a tourist attraction. Perhaps someone from the Murrysville CDC should also be included.

Action: Amy will email the stakeholder list to all SC members.

Action: SC members are to review the list and email Amy (asenopole@mackinengineering.com) with additional stakeholders as well as contact information.

6. Project Boundary

Project Map: include Monroeville owned land and parks near project area. A few parcels were identified as ones that would likely be donated, based on previous conversations during the trail feasibility study. The benefits of donating land and/or conservation easements and possible incentives will need to be explored in order to encourage landowners to pursue these options. Conservation easements were discussed along with possible acceptable uses, such as mineral rights, sustainable logging permitted, etc.

Action: Project area maps will be mailed to each municipality to identify stormwater problem areas, parcels to be donated, and any other issues, constraints, opportunities, etc. on the mapping.

7. Miscellaneous

- * Allegheny and Westmoreland Counties are currently in the process of developing stormwater management plans. The local municipalities are encouraged to participate in developing these plans. Then, it is up to the municipalities to develop ordinances based on the stormwater management plan and to enforce the ordinances.
- * While conversations have occurred with the Railroad, it will not be donated but rather sold to Westmoreland County if the company deems it too expensive to continue operations.
- * John Turack mentioned before the meeting on the map that Murrysville has a streetscape / revitalization project occurring and that would be important to be aware of to possibly have a trail connection to that area if possible.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm - Wednesday, July 29, 2009 - Murrysville Community Center
Meeting Summary

8. Next Meeting

The next Steering Committee meeting will be held on Wednesday, September 30, 2009 at 1:30 PM in the Murrysville Community Building.

9. Adjourn

The meeting was adjourned at 3:10pm.



Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm - Wednesday, September 30, 2009 - Murrysville Community Center
Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and asked that the attendees introduce themselves and the organization(s) each is representing. The following people were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * John Albertson, Representative John Pallone
- * Mark Bowers, Environmental Consultant
- * Bruce Corna, Jr., Bruce Construction LLC
- * Chuck Duritsa, Westmoreland Land Trust
- * Noel Grimm, Westmoreland Heritage Trail Chapter
- * Greg Holesh, Watershed Manager – PADEP
- * Rob Hunter, Murrysville Recreation
- * Bruce Light, Penn Township Manager
- * Amy Myers, Allegheny County Conservation District
- * Les Race, Trafford Borough
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * John Turack, PSU Cooperative Extension and Smart Growth Partnership
- * Mackin: Amy (Senopole) Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. Review Revised Vision Statement & Project Goals

The revised vision statement and project goals were distributed for SC review. There were no comments.

3. Review Revised Stakeholder List & Surveys

The revised stakeholder list and survey was distributed for SC review. Mackin will send surveys to each stakeholder and then near the end of the project, send the action plan to each for review. Along with the surveys, Mackin will send a map of the project area along with a brief project overview and the goals and vision.

The following persons / organizations were added to the list:

- * Westmoreland Conservancy (contact@westmorelandconservancy.org)
- * Citizens for the Rural Preservation of Murrysville – Jerry Wolfe (jkwolfe@windstream.net)
- * Crowfoot Rod Gun Club House (724) 327-9315
- * Logans Ferry Sportsman's Club (logansferrysportsmensclub@yahoo.com)

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, September 30, 2009 – Murrysville Community Center
Meeting Summary

The following comments were offered on the survey:

- * Add “nearby or affecting” to Question #3
- * Add a question “Where is access to the greenway needed?”

4. Criteria for Ranking Parcels

Amy distributed a ranking criteria handout to the SC for review. She explained that first, each parcel will be ranked by ease of acquisition and then within the acquisition categories, ranked according to the criteria. The following comments were offered regarding the criteria:

- * Standard #10 – Erosion or washout areas: the ranking is backwards. The parcel should receive a “1” if it has low erosion problems and a “3” if it has a lot.
- * Add one underneath for “cost of implementation” as addressing erosion problems may be a high cost.
- * Add one for stormwater
- * Add one for environmental issues

Action: Chuck Duritsa offered to provide information on any archaeological sites / findings.

5. Project Boundary

SC reviewed the proposed project boundary maps and made changes.

Action: Amy will email the revised project boundary maps out to the SC for review.

6. Landowners Meeting

The SC decided to hold an open house meeting and invite all of the landowners within the proposed project boundary. The following was agreed upon:

- * The meeting will be held on Wednesday, November 18th at the Murrysville Community Building from 3pm to 7pm; open house format.
- * Diane will contact Linda Lyman about writing a newspaper article on the project before sending out the letters. The newspaper article should describe the project and its purpose, being clear that the committee is looking for property donations, easements, etc. to protect the gorge as a recreational, natural, and cultural resource.
- * Letter will be from the Turtle Creek Study Committee.
- * Typical questions of landowners are: What’s in it for me? How will this affect my ordinary life? Contact Roy Kraynyk, Allegheny Land Trust, to review the letter to the property owners.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, September 30, 2009 – Murrysville Community Center

Meeting Summary

- * Mackin will send a project area map, project information, and an RSVP card along with the letter.
- * The letter will provide contact information for Rey Peduzzi, Bruce Corna, Jr., and Noel Grimm as local SC representatives.

Action: Amy will email the documents to the SC for review.

Action: Malcolm & Amy will arrange for refreshments at the meeting.

7. Public Meeting

The SC decided to wait until 2010 to hold a public meeting. As part of the public outreach, public education and trail education should be implemented. For example, literature should be available to discount concerns of having a trail in their back yard, while focusing on the benefits of having a trail in your back yard. Likewise, discuss the benefits of donating, easements, etc.

8. Next Meeting

The next Steering Committee meeting will be held on Wednesday, November 18, 2009 at 7:00 PM in the Murrysville Community Building, after the Landowners Meeting.

NOTE: Malcolm has suggested meeting at 2pm PRIOR to the Landowners Meeting instead so that the SC can be briefed on the format of the meeting.

9. Adjourn

The meeting was adjourned at 3:30pm.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, January 27, 2010 – Murrysville Community Center

Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and asked that the attendees introduce themselves and the organization(s) each is representing. The following people were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * John Albertson, Representative John Pallone
- * Tom Dittman, Westmoreland Heritage Trail
- * Chris Goswick, Allegheny County Economic Development—Planning
- * Alex Graziani, Smart Growth Partnership
- * Noel Grimm, Westmoreland Heritage Trail Chapter
- * Greg Holesh, Ecological Restoration, Inc. (ERI)
- * Rob Hunter, Murrysville Recreation
- * Bruce Light, Penn Township Manager
- * Amy Myers, Allegheny County Conservation District
- * Rey Peduzzi, Trafford Borough
- * Jesse Jon Salenskey, Bruce Construction/VIP/WCD
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * John Turack, PSU Cooperative Extension and Smart Growth Partnership
- * Mackin: Amy Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. Review of Landowners Meeting

Mackin distributed a copy of the results from the landowners meeting and survey. The meeting was well-attended and good information was received as a result.

Betsy Aiken provided an update regarding the pending donation of the Theo Van de Venne property near Duff Park. The Westmoreland Land Trust is working on a DCNR grant application that may include five (5) additional properties to be acquired through the donated land value. Two (2) of the additional properties would provide a connection between Duff Park and Pleasant Valley Park.

Malcolm Sias provided an update regarding discussions with Greg Schaffer, Penn Township landowner, who has been coordinating with the Westmoreland County Conservation District and the Westmoreland Land Trust for potential projects regarding streambank stabilization and wetland construction on his property. Bruce Light indicated he has a meeting with him next week and will keep the committee updated.

Mackin also mentioned that one of the larger landowners in Murrysville indicated that their property is to be deeded to Murrysville when the owner is deceased. Mackin will follow up with this landowner.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, January 27, 2010 – Murrysville Community Center

Meeting Summary

Action: Mackin will work with the SC to follow-up with the landowners who we have not yet heard from.

3. Stakeholder Surveys

Mackin has sent surveys to all 41 stakeholders and so far, has received eight (8) completed surveys. As the completed surveys are returned, Mackin will compile the results. The stakeholders will be invited to the public meeting.

Action: Mackin will follow-up with the stakeholders who we have not yet heard from.

4. Criteria for Ranking Parcels

Mackin distributed an updated criteria ranking to the SC for review and discussion. The parcels will be ranked first by ease of acquisition and then within the acquisition categories, ranked according to the criteria. The following comments were offered regarding the criteria:

- * There was a discussion regarding whether or not erosion needed to be called out as three separate criteria; however, due to its impact within the greenway, it is vital to know whether or not the source of the erosion is present on the parcel and whether or not there is potential to control the erosion on the parcel.
- * Add a description to “Likelihood of Future Development” to address presence of utilities, road access, etc.
- * Add a criterion for whether or not the parcel is adjacent to preserved and/or public land.
- * The Committee agreed to assign “negative numbers” to the criteria that address issues. For example, if a parcel contains invasive plant species, it would receive a “-3” rather than a “+3” so as to distinguish high priority parcels for recreation/conservation opportunities from high priority parcels for enhancement opportunities.

Mackin also stated that they will provide the database to the Committee at the end of the project so that the Committee, or responsible organization, will be able to update and/or revise the criteria as needed in the future. The database will be in both Excel Spreadsheet format as well as tied to the parcel data in GIS (ArcView). The database will include a list of parcels that were examined for inclusion and the explanation why they were excluded, if applicable, from the final project boundary.

Jesse offered assistance if there are any hits on the PNDI search or if there are any Natural Heritage Inventory sites. In addition, Pia Van De Venne works with volunteers through the Murrysville Park Volunteers and Friends of Murrysville Parks to eradicate invasive plant species.

Action: Mackin will send the Committee the updated Criteria Ranking as well as a draft map depicting the ranking assigned to each parcel for review and comment.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, January 27, 2010 – Murrysville Community Center
Meeting Summary

5. Public Meeting

The public meeting will be held on Wednesday, February 24, 2010 at 7:00pm in the Murrysville Community Building. The meeting will consist of a presentation, questions and answers, as well as maps to allow the public to identify any issues or opportunities within the Project Area.

Action: Mackin will send publicity materials (press release, flyer) to the Committee for distribution to local organizations, municipalities, and media outlets to advertise the public meeting.

Action: All Committee members are encouraged to attend the public meeting.

6. Next Meeting

The next Steering Committee meeting will be held on Wednesday, March 31 at 1:30 PM in the Murrysville Community Building.

7. Adjourn

The meeting was adjourned at 3:30pm.



Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, March 31, 2010 – Murrysville Community Center

Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and since asked that the attendees introduce themselves and the organization(s) each is representing. The following people were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * Tom Dittman, Westmoreland Heritage Trail
- * Noel Grimm, Westmoreland Heritage Trail Chapter
- * Bruce Corna, Jr., Bruce Construction
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * John Turack, PSU Cooperative Extension and Smart Growth Partnership
- * Moni Wesner, Sustainable Monroeville
- * Marylyn Devlin, Sustainable Monroeville
- * Mackin: Amy Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. Update on Duff Park Expansion

Malcolm provided an update on the proposed Duff Park Expansion – the County is putting together a grant application to submit to DCNR for acquisition funding. The proposed expansion is approximately 100 acres over four (4) separate parcels. The County is hoping to use the value of the one (1) donated parcel to provide matching funds for the other three (3). If everything works out as planned, only \$20,000 cash will need to be spent to expand the park. A map was distributed that depicts the proposed expansion and the parcels to be acquired.

3. Stakeholder Surveys

Mackin has sent surveys to all 41 stakeholders and to date, has received 11 completed surveys. Copies of the survey were provided to the Committee members in attendance that have not yet completed one. The stakeholder survey results will help to provide background information as well as help to identify issues and opportunities within the project area.

Action: Mackin will email the Committee the stakeholders who have yet to return a completed survey.

Action: Committee members are to either provide Mackin with a better contact name/information, or if possible, encourage the stakeholder to complete the survey and return to Mackin ASAP.

Discussion ensued over Monroeville's missing representation on the study committee. Mackin had emailed information to Councilman Berhard Erb; however, he did not reply back. Ideally, Monroeville will appoint a person (representative from council, planning commission, staff, etc.) who is officially

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, March 31, 2010 – Murrysville Community Center

Meeting Summary

affiliated with Monroeville and can report and coordinate with local officials to accomplish recommended projects.

Action: Committee members are to email Mackin potential contacts that can represent Monroeville within in the study committee.

4. Public Meeting Summary

Mackin distributed a brief summary of the public meeting that was held in February. While 28 people signed in, an estimated 40 were in attendance. The issues of concern were mainly flooding and developing the greenway for recreation. A resident at the Public Meeting suggested having the next meeting in the project area as a field trip to get participants engaged and to see firsthand the issues and opportunities within the greenway. Discussion ensued regarding public involvement and how to get more local residents involved in the project.

An idea was presented to have a series of four (4) workshops within the project area each Friday in June. Each workshop will focus on a particular issue or opportunity and could be sponsored by local organizations. The workshops would then be videotaped and then could be broadcast through Murrysville's and Monroeville's televised local cable networks. The final public meeting could then be held in July to present the draft plan and recommendations; ideally a few demonstration projects would be ready to go to publicize at the meeting and ask for interested volunteers.

Action: Committee members are to email Amy with any ideas regarding workshop topics, locations, speakers, and organizations that are willing to sponsor and/or assist with planning and publicizing the workshops.

Action: John Turack will talk to Penn State Cooperative Extension and the Smart Growth Partnership to determine their level of interest in sponsoring the workshops.

Study committee members volunteered to research/contact possible videographers and audio video (AV) departments (i.e. municipalities, local schools, businesses, etc.). The videotaping could possibly count as community service credit for high school seniors. Having local reporters on site during the workshops to cover the project was recommended.

Action: Committee members are to research the feasibility of using local AV departments, etc. to videotape the workshops. Please send Amy any updates regarding this concept.

Another idea was also proposed to utilize social media, such as Facebook (FB), to notify the public about the overall project as well as publicize upcoming meetings. Bruce Corna, Jr. volunteered to set up a FB page for the project and to utilize his contact list, which consists of approximately 1,400 local residents, to spread the word. Also, study committee organizations or other local groups can also become friends through FB further expanding the reach of the Turtle Creek Greenway Facebook page.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, March 31, 2010 – Murrysville Community Center

Meeting Summary

The videos from the workshops can also be posted for residents to view on the FB page as well as YouTube.

Action: Bruce Corna, Jr. will develop a Facebook page for the Turtle Creek Greenway and coordinate with Amy regarding information to be posted, etc.

5. Criteria Ranking

The Revised Ranking Criteria was reviewed and now includes separate rankings based on Natural, Cultural, and Recreational Resources and Restoration Opportunities. General comments on the mapping and ranking included:

- * Adding more road names to the mapping to help folks orient themselves on the mapping
- * Review the Municipality of Monroeville trail map to obtain an overview of potential trail connections within the region
- * Make the railroad parcel all one parcel and the same ranking color
- * Manipulate the parcel layers for Westmoreland and Allegheny Counties to fill in parcel gaps

Action: Mackin to email committee members the ranking criteria mapping and a spreadsheet showing how each parcel ranks according to the criteria.

Action: Committee members are to review and provide comment on the parcel ranking criteria and overall ranking of the parcels. Please provide a reason for why a parcel should be ranked differently, if you have a comment.

6. Greenway Plan Outline

The plan sections and outline were reviewed. Mackin is continuing to pull together the sections of the report. Draft sections will be emailed to the Study Committee for review and comment as they are completed.

Action: Mackin will email the Committee draft sections prior to the next meeting.

7. Next Meeting

The next Steering Committee meeting will be held on Wednesday, April 28 at 1:30 PM in the Murrysville Community Building. *Note: We will be meeting MONTHLY rather than bi-monthly for the duration of the project.*

8. Adjourn

The meeting was adjourned at 3:00pm.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm - Wednesday, April 29, 2010 - Murrysville Community Center

Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and asked the attendees to introduce themselves and the organization(s) each is representing. The following people were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * John Albertson, Representative John Pallone
- * Kim Blauvelt, Murrysville Recreation
- * Bruce Corna, Jr., Bruce Construction
- * Chris Droste, Westmoreland Conservation District
- * Tom Dittman, Westmoreland Heritage Trail
- * Chris Goswick, Allegheny County Economic Development—Planning
- * Noel Grimm, Westmoreland Heritage Trail Chapter
- * Greg Holesh, ERI
- * Bruce Light, Penn Township Manager
- * Rey Peduzzi, Trafford Borough
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * Marylyn Devlin, Sustainable Monroeville
- * Mackin: Amy Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. Stakeholder Survey Update

Mackin distributed an updated stakeholder survey list, showing who has returned a completed survey and who yet had not. Out of 41 surveys sent, we have received 17 back so far, and expect at least 2 more. Mackin has placed personal phone calls and follow up emails to all of the stakeholders that we haven't heard back from. Mackin distributed copies of the survey and asked the Committee to pass them along to stakeholders whom they know.

Discussion ensued over Monroeville's missing representation on the study committee. Mackin sent additional information to Councilman Berhard Erb; however, they have not heard back from him yet. Ideally, Monroeville will appoint a person (representative from council, planning commission, staff, etc.) who is officially affiliated with Monroeville and can report and coordinate with local officials to accomplish recommended projects.

Action: Chris Goswick will contact Monroeville about identifying a representative.

Action: Malcolm Sias will contact Monroeville Parks and Recreation Department to have someone complete the stakeholder interview.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, April 29, 2010 – Murrysville Community Center

Meeting Summary

3. Public Outreach

Bruce Corna, Jr. developed a Facebook site for the project: www.facebook.com/TurtleCreekGorge. The website can be utilized to post photographs, project information, educational materials, publicity for upcoming meetings/events, etc.

A discussion was held on the concept of the Fridays in June workshop series. It was decided that rather than hold four, it would be better to hold one and have “stations” set up in the Greenway between B-Y Park and Saunders Station Road. The following was decided:

- * Workshop will be on Thursday, June 17, 2010 – rain or shine
- * Public can meet at B-Y Park between 5:30 pm and 6:30 pm
- * Workshop is expected to last about 2 hours
- * Vans will be available to shuttle people from B-Y to Saunders Station Road
- * Five “stations”
 - o Station 1: Value of conservation/ Water quality – Diane Selvaggio
 - Saunders Station Road Parking Lot
 - o Station 2: Streambank stabilization – Rob Cronauer
 - Greg Shaffer property
 - o Station 3: Stormwater management/erosion – Chris Droste/Jim Pillsbury
 - Site TBD
 - o Station 4: Invasive species – Betsy Aiken/ Friends of Murrysville Parks
 - Site TBD
 - o Station 5: Recreation opportunities – Malcolm Sias
 - B-Y Park
- * Malcolm to contact Norris’ for permission
- * Picnic after at B-Y Park
 - o Need volunteers for refreshments
- * Publicize via flyers, Facebook, Murrysville cable access channel, others?

Bruce also indicated that he has been inquiring about someone to film the public workshop and has an interested student. He will work out the details and get back to the Committee by the May meeting.

Action: John Turack will talk to Penn State Cooperative Extension and the Smart Growth Partnership to determine their level of interest in sponsoring the workshops.

Action: Mackin will develop a spreadsheet for the meeting and send around for volunteers.

Action: Note: no publicity of this event should occur until meeting details are confirmed at May meeting.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, April 29, 2010 – Murrysville Community Center

Meeting Summary

4. Criteria Ranking

The Revised Ranking Criteria was reviewed and includes separate rankings based on Natural, Cultural, and Recreational Resources, and Restoration Opportunities. These rankings will assist the organizations responsible for implementation. A third ranking based on ease of land acquisition, which will be presented at a later date, will also be included in the plan.

Action: Committee members are to review and provide comment on the parcel ranking criteria and overall ranking of the parcels. Please provide a reason for why a parcel should be ranked differently, if you have a comment.

5. Draft Recommendations

Mackin distributed a handout containing the draft recommendations for the Greenway Plan, organized by the project goals.

Action: Committee members are to review the recommendations and provide comments by Friday, May 15, 2010.

6. Fieldwork

Mackin explained that prior to the next meeting, they will be conducting fieldwork to finalize the criteria ranking, identify potential pilot project sites for priority recommendations, and take photographs of high priority areas.

Action: If Committee members have any photographs of local parks, events, service projects, etc. within the Greenway that they would like to include in the plan, please email them to Amy at (awiles@mackinengineering.com).

7. Next Meeting

The next Steering Committee meeting will be held on Wednesday, May 26 at 1:30 PM in the Murrysville Community Building. *Note: We will be meeting MONTHLY rather than bi-monthly for the duration of the project.*

8. Adjourn

The meeting was adjourned at 3:00pm.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting #7

1:30pm - Wednesday, May 26, 2010 - Murrysville Community Center

Steering Committee Meeting Summary

1. Welcome & Introductions

Malcolm Sias opened the meeting at 1:30 pm and asked the attendees to introduce themselves and the organization(s) each is representing. The following people were in attendance:

- * Amy Myers, Allegheny County Conservation District
- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * Tom Dittman, Westmoreland Heritage Trail
- * Chris Goswick, Allegheny County Economic Development—Planning
- * ??, Allegheny County Economic Development
- * Rey Peduzzi, Trafford Borough
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * Marylyn Devlin, Sustainable Monroeville
- * Jesse ?
- * Joe ?
- * John Turack, PennState Cooperative Extension
- * Mackin: Amy Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. Stakeholder Survey Update

Out of 41 surveys sent, we have received 19 completed surveys back so far. 3 organizations are not able to participate: PADEP, Murrysville Sportsman's Club, and the Sportsman's & Landowners Association of Murrysville (SLAM). Mackin has also talked to 3 stakeholders, which were specific conversations/questions in lieu of a survey—PA Turnpike Commission, Franklin Regional School District, and Monroeville Parks and Recreation. In total, we have heard back from 25 stakeholders.

Mackin still has to contact Western Pennsylvania Conservancy regarding the Simpson Run Biological Diversity Area (BDA).

Mackin has placed personal phone calls and follow up emails to all of the stakeholders that we haven't heard back from. Once the recommendations are finalized, Mackin will email them to all the stakeholders and request their comments. We will also ask them which projects their organization would be interested in partnering or participating in.

Action: Mackin to call Western Pennsylvania Conservancy about the Simpson Run BDA.

Action: Mackin will email the finalized recommendations to the stakeholders for comment and partnering opportunities.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting #7

1:30pm - Wednesday, May 26, 2010 - Murrysville Community Center

Steering Committee Meeting Summary

3. Public Workshop

The Public Workshop Flyer and agenda was reviewed. The workshop is scheduled for Thursday, June 17 at 5:30 PM. If you are volunteering or presenting during the walk, please arrive at 5 PM at B-Y Park. Also, if you are presenter, be mindful of your technical terminology and keep your explanations simple for the general public to understand.

- * Workshop will be on Thursday, June 17, 2010 – rain or shine
- * Public can meet at B-Y Park between 5:30 pm and 6:00 pm; picnic will be held at the beginning
- * Workshop is expected to last about 2 hours
- * Vans will be available to shuttle people from B-Y to Saunders Station Road
- * Six “stations”
 - o Station 1: Value of conservation/ Water quality – Diane Selvaggio
 - Saunders Station Road Parking Lot
 - o Station 2: Streambank stabilization – Rob Cronauer
 - Greg Shaffer property
 - o Station 3: Stormwater management/erosion – Chris Droste/Jim Pillsbury
 - Site TBD
 - o Station 4: Invasive species – Pia van de Venne/ Friends of Murrysville Parks
 - Site TBD
 - o Station 5: Ecological Resources / Recreation – Dick Byers
 - Site TBD
 - o Station 6: Recreation opportunities – Malcolm Sias
 - B-Y Park

Once the flyer is finalized, Mackin will distribute it to the various media outlets, study committee, stakeholders, municipalities, libraries, identified landowners, and public meeting participants. The same media outlets that were contacted for the Public Meeting will be used. Mackin will request that the municipalities post it on their website and cable access channel. It will also be posted on the Facebook site for the project: www.facebook.com/TurtleCreekGorge.

If you need hard copies of the flyer to post, please email Amy and she will mail them out to you.

Joe Medicino has graciously volunteered to film the workshop. The film will be posted on Facebook to allow the general public, who weren't able to participate in the workshop, to see the greenway and gorge. Other ideas for utilizing the film include: to obtain funding and public education presentations. An educational video series about the greenway highlighting the issues (i.e. invasive plant species, erosion and stormwater, etc.) would be beneficial for the public to see the problems and get people involved. Educational video of a project from start to finish, such as the Greg Shaffer bank stabilization project, would be a great way to show the public how to resolve stormwater and erosion issues within the greenway. The plan is to unveil the film of the workshop at the next public meeting in August.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting #7

1:30pm - Wednesday, May 26, 2010 - Murrysville Community Center

Steering Committee Meeting Summary

The Municipality of Murrysville has offered their council chambers to hold the next public meeting. The next public meeting can be filmed by the Murrysville video staff; however, they would have to be paid. Utilize the MS4 program as a spring board to promote this plan?? (John Turack's idea)

Conversation ensued over the overarching entity for the greenway. The idea was proposed to have an alliance of existing organizations—1 representative from each group and the alliance meets quarterly to discuss the greenway and what their individual groups are doing. Until this 501(c)3 group is formed, the Community Foundation of Westmoreland may be a good way to start collecting funds for high priority projects in the meantime.

Action: Betsy Aiken will confirm Dick Byers as a presenter. **Malcolm?** will confirm Chris Droste and Jim Pillsbury as presenters.

Action: Mackin to email / mail finalized Workshop Flyer to the various media outlets, study committee, stakeholders, municipalities, libraries, identified landowners, and public meeting participants.

Action: Mackin will mail hard copies of the flyer to Rey Peduzzi and Marylyn Devlin.

4. Recommendations

Mackin distributed a handout containing the updated draft recommendations for the Greenway Plan, organized by the project goals. Updates to the recommendations were based on Mackin's additional fieldview and research.

The study committee provided the following comments on the draft recommendations:

- Concern that the recommendations are targeted more towards municipalities, which don't have funding. Grants and funding opportunities will be included as part of the recommendations.
- Adopting an official map for municipalities can be very difficult and controversial.
- Ordinances should be written simply and straightforward, so that the general public can understand them. The plan will focus mostly on updating existing ordinances; however, for any recommended new ordinances, Best Management Practices (BMPs) and model ordinances will be provided as examples to make the process easier.
- Allegheny County is currently updating their Subdivision and Land Development Ordinances (SALDO), which can be a model for any ordinance updates.
- For any invasive plant species removal, a special permit is needed for a person to utilize/apply a pesticide. Betsy Aiken requested that this be added as a recommendation, since Murrysville currently doesn't have a certified person.
- Pitcairn/Monroeville Sportsman's Club currently holds an Annual Trash Clean-up Day.

Turtle Creek Gorge Greenway Plan

Steering Committee Meeting #7

1:30pm - Wednesday, May 26, 2010 - Murrysville Community Center
Steering Committee Meeting Summary

- Amy Baer, a Gateway Science teacher, recently received funding for on-site water quality studies, which could possibly be performed in the Turtle Creek Watershed.
- Water quality studies have been performed on Turtle Creek and within the watershed. Primary sources of pollution include AMD, sediment from excess stormwater runoff, fertilizer/pesticides, and fecal coliform.
- Turtle Creek was stocked with trout last year.
- Change Murrysville Botanical Gardens to Society.

Action: Committee members are to review the recommendations and provide comments by ???.

5. Fieldwork

Mackin conducted a field view on Thursday, May 20th. Mackin identified potential pilot project sites, took photographs of high priority areas, and identified issues and opportunities.

Action: If Committee members have any photographs of local parks, events, service projects, etc. within the Greenway that they would like to include in the plan, please email them to Amy at (awiles@mackinengineering.com).

6. Next Meeting

The next meeting will be the Public Educational Workshop on Thursday, June 17, 2010. *Note: We will be meeting MONTHLY rather than bi-monthly for the duration of the project.*

7. Adjourn

The meeting was adjourned at 3:15 pm.

Turtle Creek Greenway Plan

Steering Committee Meeting

1:30pm – Wednesday, August 4, 2010 – Murrysville Community Center
Meeting Summary

1. Welcome & Introductions

Amy Wiles opened the meeting at 1:30 pm. The following people were in attendance:

- * Amy Myers, Allegheny County Conservation District
- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * Noel Grimm, Westmoreland Heritage Trail
- * Bruce Corna, Jr., Bruce Construction, LLC
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Jim Kress, Turtle Creek Watershed Association
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * John Turack, Penn State Cooperative Extension
- * Mackin: Amy Wiles, AICP, Lead Senior Planner & Project Manager
- * Mackin: Jennifer Yeckel, Senior Environmental Scientist

2. June Public Workshop Summary

Mackin distributed a summary from the Public Educational Workshop that was held on Thursday, June 17. There was a good turnout; roughly 40 participants. The Committee was happy with the presenters and thought the workshop was a success and a better option than the traditional public meeting. The participants were engaged in the presentations and asked good questions of the presenters.

Jim Starr, Houston Starr Corporation, was in attendance. He had contacted Mackin after the meeting expressing concern that the maps were depicting that the project area is mostly public land. Mackin had explained during the workshop that the project area was mostly privately owned. To ensure this fact is clear, a note will be made in the video stating that this is the case. Before the video goes out for public view, the content and message of the video will be reviewed.

Action: Mackin to email Joe about scheduling a field visit with Diane, Malcolm, and/or Noel Grimm in order to get the video finished before the public meeting.

3. Review of Recommendations

Mackin distributed a map of the Greenway that depicts the identified projects in addition to a matrix containing all of the recommendations. Committee members were then asked to rank the priorities—high, medium, low and to identify potential responsible party and partners. Committee members were asked to identify high, medium, and low priorities for each goal statement.

Discussion ensued regarding the recommendations after the exercise. Concern was expressed over the limited resources available—time, money, and volunteers—to complete these proposed recommendations. The funding available is limited so it is difficult to try to rank the recommendations taking into consideration the current economic situation.

Turtle Creek Greenway Plan Steering Committee Meeting

1:30pm – Wednesday, August 4, 2010 – Murrysville Community Center
Meeting Summary

Action: Mackin will email the recommendations to the remainder of the SC for ranking.

4. Implementing Organization

Conversation ensued over what organization should be responsible for implementation of the greenways plan. One of the issues at hand is that the Greenway spans two counties, which makes coordination somewhat difficult. While the TCWA could be an umbrella organization, it doesn't have the capacity (staff, time or resources) to take on that responsibility. The Committee then discussed how public access to and within the Greenway is ultimately the key to implementation and that a trail needs to be the top priority. A trail organization, which could be formed as a subsidiary to the Regional Trail Corporation, could then take the lead for implementation and incorporate conservation efforts as part of their mission.

Action: A recommendation will be included that the counties (community and economic development representatives) take the lead on the trail concept from an economic development standpoint.

5. Final Public Meeting

A final public meeting will be held to present the draft plan to the public and kick off the 45-day public comment period. The Committee anticipates the end of September; however, Mackin will coordinate with Joe to ensure that the video will be complete by then. The meeting will be held in the Murrysville Council Chambers as an open house from 6-8pm; where the video will be run on a loop and maps and recommendations will be on display for people to view and provide comment.

To keep the momentum of the project going, a Turtle Creek clean-up will be scheduled for early October. Participants at the public meeting will have the opportunity to sign up for the event at the meeting.

Action: Betsy will contact Murrysville to see what dates the Chamber is free.

Action: Diane will contact the local sportsman's clubs and see if they are interested in holding a litter clean up day in early October.

6. Draft Plan Review

Mackin reviewed the sections of the Plan—Introduction, Natural Resources Inventory, Property Owners, and Recommendations. The Draft Plan will be sent to the Committee for review at the beginning of September. After those comments are addressed, the Draft Plan will be submitted to DCNR and then presented to the public at the Public Meeting at the end of September.

Turtle Creek Greenway Plan Steering Committee Meeting

1:30pm – Wednesday, August 4, 2010 – Murrysville Community Center
Meeting Summary

The study committee suggested addressing the economic issue in the plan. A statement should be made that public access to the Greenway, and therefore developing the trail, is key to implementing any of the recommendations proposed. Providing access will provide the impetus to rally interest in the Greenway from all stakeholders—the public, local municipalities, non-profits, etc. Public access is the key to recreation, conservation, and education efforts.

In the interim, the video can be used for educational purposes to show the public and public officials about the issues that exist in the Greenway, relay the economic potential of developing a trail, and develop community support.

Action: The plan will reflect the overarching need for public access to and within the Greenway as the key to implementation. Information will also be included in the plan that addresses the Greenway from an economic perspective and how it is beneficial to the communities.

Action: Mackin will add a management strategy about the potential for economic development in the area.

Action: Mackin will provide the draft report to Malcolm to review first to ensure the proper message is being conveyed.

Action: Malcolm will talk to representatives at Westmoreland County regarding a meeting with the railroad owners to talk about the benefits (economics, recreation, etc.) of developing a trail.

7. Adjourn

The meeting was adjourned at 3:45 pm.

Turtle Creek Greenway Plan

Final Steering Committee Meeting

1:30pm - Thursday, December 16, 2010 – Murrysville Community Center
Meeting Summary

1. Welcome & Introductions

Amy Wiles opened the meeting at 1:30 pm. The following people were in attendance:

- * Betsy Aiken, Westmoreland Land Trust and Murrysville Parks & Recreation
- * Bruce Corna, Jr., Bruce Construction, LLC and Westmoreland Land Trust
- * Rob Cronauer, Westmoreland Conservation District
- * Tom Dittman, Regional Trail Corporation
- * Alex Graziani, Smart Growth Partnership of Westmoreland County
- * Noel Grimm, Westmoreland Heritage Trail
- * Rey Peduzzi, Trafford Borough
- * Jesse Jon Salensky, Bruce Construction
- * Diane Selvaggio, Turtle Creek Watershed Assoc. & Duquesne University
- * Malcolm Sias, Westmoreland County Parks and Regional Trail Corporation (RTC)
- * Mackin: Amy Wiles, AICP, Lead Senior Planner & Project Manager

2. Draft Plan

The draft plan was made available for review by the Committee on Mackin's FTP site. In addition, the draft plan has been reviewed by DCNR and a letter was received from Monica Hoffman detailing comments that need to be addressed. The comments are minor in nature and all will be addressed by Mackin.

Action: Mackin will finalize the plan based on comments received.

3. Greenway Video

The draft video was sent from Joe Mendicino and showed to the Committee members. After viewing the video, the Committee had several comments regarding the final video. The video will serve as the executive summary for the final plan.

Action: Amy and Malcolm will contact Joe to see if he is willing to make the final edits.

Note: Several attempts to contact Joe were unsuccessful. Therefore, the final video will be completed by Video Graphics, Inc. of Greensburg.

Turtle Creek Greenway Plan
Final Steering Committee Meeting

1:30pm - Thursday, December 16, 2010 – Murrysville Community Center
Meeting Summary

4. Final Public Meeting

The final public meeting is scheduled for Thursday, January 27, 2011 at 7:00pm. The meeting will be held at the Murrysville Council Chambers and broadcast live on their local cable channel 19. After that meeting, the plan will be finalized.

Action: Mackin will send a press release to local newspapers and flyers to Committee members to distribute.

6. Adjourn

The meeting was adjourned at 3:45 pm.





Appendix D—Stakeholder Interviews

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Alexander J. Graziani, AICP

Mailing Address: 226 Donohoe Road, Ste. 105

City / State / Zip: Greensburg, PA 15601

Phone #: 724-552-0118

Affiliation: Smart Growth Partnership / Westmoreland
Land Trust

E-mail: alex@smartgrowthpa.org

- 1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.**

The Smart Growth Partnership is an advocate for the use of the ten smart growth principles through education and technical assistance. I am a Westmoreland Land Trust board member.

- 2. Has your organization identified any issues within the Greenway?**

Transfer all development rights to protect the land from development.

- 3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?**

The Land Trust may be interested in acquiring land for preservation in the corridor.

- 4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?**

NA

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

Rail line with trail, like 5 Star in Greensburg.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Work with the Land Trust. Transfer development rights.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Resources to preserve.

8. What would you like to see in terms of access provided to the Greenway?

As able to have a trail alongside the railroad.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes

12. Any additional comments?



Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Amy Myers

Mailing Address: 400 North Lexington St.

City / State / Zip: Pittsburgh, PA 15208 Phone #: 412-241-7645

Affiliation: Allegheny County Conservation District E-mail: abmyers@covad.net

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

The Allegheny County Conservation District is an agency of State government having as its mission the conservation of the County's soil and water resources.

2. Has your organization identified any issues within the Greenway?

Severe bank erosion, excess sedimentation, and stormwater runoff

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

Not at this time.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

I haven't lived here that long to really be able to answer that question.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

I would like to see the stream restored, and be usable (hiking, fishing, etc) to nearby residence within the Turtle Creek Watershed. I think it is one of the few natural assets that many people could take advantage of in an increasingly urban area.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Obtaining the cooperation and support of the surrounding community and landowners for the Greenway seems pretty key. Also recognition of this area by they state and local governments as a natural area which should be set aside would be very beneficial.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Uncooperative landowners and lack of financial support.

8. What would you like to see in terms of access provided to the Greenway?

I would like to see better access to the stream for recreation as well as more formal parking areas and access to the trail.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

No.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Maybe.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Sure.

12. Any additional comments?

No.

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Ben Sampson

Mailing Address: 2500 Eldo Rd. Monroeville, PA
15146

City / State / Zip: Monroeville, PA 15146

Phone #: 412-374-1060

Affiliation: Chairman of Parks Commission

E-mail: bsampson@sampsonmorrisgroup.com

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

The Murrysville Park Commission represents the municipality of Murrysville in advising the best use of its parks and open space for recreation and conservation. Turtle Creek is the main watershed in the community and affects many of its parks and much of its open space.

2. Has your organization identified any issues within the Greenway?

The Turtle Creek Greenway is adjacent to and contributes to the symbiotic relationship between our park system and its ecological balance.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

Yes, our trail system could ultimately tie into the greenway and our invasive plant study and control efforts could extend to the greenway and also be affected by its ecological status.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

We have experienced a significant gasoline spill recently from a ruptured transmission line.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

We would like to see public trails and access – both pedestrian and bicycle, also preservation of the riparian woodlands would protect the streams ecosystem.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Develop a constituency among the public to promote awareness and use.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Lack of leadership and follow through.

8. What would you like to see in terms of access provided to the Greenway?

Dedicated trails and access

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

No

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes

12. Any additional comments?

Project has value



Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Mailing Address: Betsy Aiken
City / State / Zip: Phone #: 4106 Hilty Road
Export, PA 15632
Affiliation: E-mail: 724 325-4026
baiken@infionline.net

Friends of Murrysville Parks (FOMP)

Murrysville Trail Alliance (MTA)

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

FOMP works to promote knowledge and appreciation of Murrysville's park resources, and also works to support the efforts of Murrysville park volunteers to control invasive plants in Murrysville parks.

MTA works to promote and support the development of interconnected trails and greenways throughout Murrysville.

2. Has your organization identified any issues within the Greenway?

FOMP: The Greenways holds significant numbers of Japanese knotweed, an especially pernicious invasive plant.

MTA: The possibility of a regional recreational trail running through the Greenway is thrilling, as to some extent such a trail could serve as the focal point and backbone of a community trail system.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

FOMP: Murrysville park volunteers work extensively to control invasive plants in Duff Park. FOMP has sponsored an ongoing study of the effectiveness of invasive plant control in the park, making use of GIS mapping of invasive plant populations. FOMP has hosted wildflower and forest hikes through Duff Park, and is currently developing a proposal for an education "tree walk" through Duff Park that will feature small signs at several trailside specimen trees and a printed guide with a map.

MTA is working to advance a "Trails Proposal" for Murrysville, which features a number of prospective trails throughout the community. One trail in the proposal runs along Turtle Creek just beyond (east of) the eastern boundary of the study area; it is envisioned that this trail will connect to a future TCG trail, or

to an existing trail running within Duff Park, just inside of its northern boundary.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

FOMP: Proliferation of Japanese knotweed and other invasive species.
Less industrial use of the Gorge.

MTA: Increased recognition of the value of the Gorge's conservation.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

The Turtle Creek Greenway would be a conserved area*, with public ownership of land or easements and public access to much of the Gorge. Good stewardship would mean prioritization of invasive plant control efforts, and application of resources to controlling those plants that are the most damaging (i.e., Japanese knotweed). The Greenway would hold an extension of the WHT bikeway, which will be a recreational focus for the TCG communities of Murrysville, Penn Township, Monroeville, and Trafford. The Greenway would also encompass enough uphill acreage to protect its viewshed and naturally control stormwater to mitigate potential for flooding

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

FOMP: Develop cooperative plan for control of Japanese knotweed.

Identify any historical resources, and evaluate their preservation and use.

Develop plan for conservation....

Address question of fee ownership vs conservation easements

Resolve question of entity to spearhead conservation and own land or easements

Prioritize acquisitions, giving heightened attention to parcels providing access to Gorge for recreational uses

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Insufficient funding

Inadequate resources (manpower, organizational backing) to drive project

Conflicts between stakeholders

8. What would you like to see in terms of access provided to the Greenway?

Ready public access from a number of points, serving all stakeholder communities.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

“Old-timers” that can provide history of Gorge (do not know names off-hand).

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

FOMP – yes.

MTA – yes.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes, either.

12. Any additional comments?

This is an exciting project, creating tremendous possibilities for the future!

Turtle Creek Greenway Plan (TCGP)
Stakeholder Interview Questionnaire

Name: Bruce J Corna Jr.
Mailing Address: 4263 Old William Penn Hwy.
City / Murrysville State / Pa Zip: 15668
Phone #: 724.396.0930
Affiliation: Westmoreland Land Trust / Murrysville Resident
E-mail: Bcorna@bruceconstructionllc.com

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

Land use plays a crucial role in determining the future of a region.

Citizens throughout the county have stated that their number one priority is to retain the predominant rural character of Westmoreland County.*

The primary land use objective in Westmoreland County, as identified in the comprehensive plan, is to provide a balance between development and preservation. The land trust is an important addition to the organizations that are already actively working to help achieve that balance because, on the conservation side, the trust has the potential to preserve a wide variety of types of land – such as land that offers scenic vistas, tracts that help to create larger greenway corridors through the county, and sensitive areas that are under pressure for development.

2. Has your organization identified any issues within the Greenway?

Not that I am aware were discussed

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

There is a project in the works but I don't know that I am at liberty to disclose the information surrounding it at this time.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

Positive change has been the amount of use it is getting by residents of local communities. The only negative I can see is the encroachment of invasive plant species.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

I do

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

There are a variety of things that need to be addressed but public buy in and participation are the most critical component of making all of this a reality. Water quality is a major concern. Perhaps a partnership with Trout Unlimited or some other water specific organization would be a good way to share the vision. I would like to see, as I think everybody would, the extension of the the current trail in Duff park.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Lack of public buy in, lack of funding, problems with adjacent land owners.

8. What would you like to see in terms of access provided to the Greenway?

Foot and bike traffic only from a variety of easily accessible areas.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

Not at this time

10. Would your group be willing to partner with other local organizations to protect and improve theGreenway?

I'm sure we would but would have to discuss it with our board.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes, either one would be fine

12. Any additional comments?

Not at this time

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Cheryl Kemerer _____

Mailing Address: PO Box 452

City / State / Zip: Harrison City, PA 15636 Phone #: 724-744-2171 ext. 205

Affiliation: Penn Trafford Area Recreation Commission

E-mail: ckemerer@penntwp.org

Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

The Penn Trafford Area Recreation Commission is a non-profit, intergovernmental agency serving the residents of the Penn Trafford School District which includes Penn Township and Trafford Borough. Our mission is to provide life-long learning, fitness and fun through the implementation of wholesome, affordable recreation activities and the development of safe, appealing facilities.

Has your organization identified any issues within the Greenway?

No

Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

Yes. We will be re-developing the playground facilities within the Trafford BY Park and we would like to develop a new skate park within the Trafford BY Park as well.

What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

New housing developments adjacent and nearby

Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

Preservation of natural habitat is imperative with access for residents to discover and enjoy its natural beauty, exercise in the outdoors, learn about the environment through interpretive signage.

What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Each community must designate the corridor for conservation preserving the natural habitat and limiting development.

What might prevent the Turtle Creek Greenway Plan from being successful?

Local residents and elected officials need to be educated about the benefits to them and their community. The municipalities need to work together to develop access to their residents and preserve the natural habitats, as well as develop a maintenance plan for the access facilities.

What would you like to see in terms of access provided to the Greenway?

Signage and parking in each park accessing the corridor would provide multiple use of access facilities and minimize development areas and costs. Motorized vehicles should be prohibited other than in parking areas.

Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Possibly. I would have to approach my Board. This is the kind of facility that we should support and participate in.

If we have any additional questions is it okay if we follow up with you? Email or Phone?

Of course.

Any additional comments?

Good luck. This is a great start to greenway corridors in our area. We need to expand these kinds of facilities within the Penn Trafford area.

From: chris droste [mailto:cedroste@yahoo.com]
Sent: Wednesday, April 21, 2010 11:00 AM
To: Amy Lynn Wiles
Cc: chris D
Subject: RE: Turtle Creek Greenway Update

I could not put this in Word format, so here is my response to the questionnaire.

Chris Droste
westmoreland Conservation District
218 Donohoe Road
Greensburg, PA 15601
724-837-5271 chris@wcdpa.com or cedroste@yahoo.com

1.

Mission

The Westmoreland Conservation District promotes, educates, and implements conservation principles through examples and programs. We encourage best management practices and voluntary compliance of laws. Our Board of Directors, professionals, and volunteers are committed to the leadership and service required in pursuing a better environment. We use our skills and talents, and the cooperation of our partners, to build a culture of responsible stewardship and sustainability.

2. There are many stormwater problems from uncontrolled land development done in the 60's, 70's and 80's, from Penn Twp, monroeville, murrysville area. There have been flooding and erosion problems to the greenway area along turtle creek. Erosion of the stream banks are a major concern. land is lost, sedimentation exists, we loose millions of tons of soil each year.

3. WCD is currently engaged into a project with a land owner Greg Shaffer at saunders station bridge several 1,000 feet of stream bank protection from grant moneys

4. The postive changes are that TCWA has cleaned up trash in saunders station area, murrysville is eradicating japanese knotweed in duff park area. The negative is the flooding, severe erosion to the banks of turtle creek.

5. A vision would be to preserve this corridor as is, allow people to use it wisely for recreation, fishing, hiking, passive recreation. Protect the slopes from erosion from stormwater runoff, Reduce and repair the erosion going on now to turtle creek. .

6. Establish a plan to reduce the stormwater runoff from municipities that drain in the corridor bluffs. Secure funding to do the work, Create a forest management plan and vegetation management plan to eradicate the japanese knotweed, allowing native vegetation to grow and thrive to protect the banks from erosion.

7. Funding from growing greener is going away. foundation support diminishes. landowner participation may not occur for easements to do stormwater pond installation.
8. The heritage trail is the proposed access. there is access at saunders station road that exists to access for fishing. We need parking off trafford road in murrysville,
9. The fish commision should be contacted.
10. We partner with all groups and cooperate with all municipalities. We engage in partnerships with municipal government and have good relationships with all involved in westmoreland county.
11. You can contact me both phone and email and letter.
12. The comments that I would have would include: securing funding to do a master plan of action to start out with managing stormwater in all areas, design the controls, secure the funding. Then start with vegetation management, plans to remove the knotweed invasives and install native planting. Forest management plans need installed. you may need to log out stuff and plan others. riparian corridor plans need shaped. school groups can help, college grad students, etc.

Thanks for engaging the WCD into the discussion groups

Chris Droste
WCD

Christopher E. Droste
Senior Erosion Control Specialist
Westmoreland Conservation District
PH: 724-837-5271
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cedroste@yahoo.com
www.wcdpa.com

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Diane Selvaggio **Mailing Address:** 5096 Hardt Road
Gibsonia, PA 15044

Phone #: 724/443-0375

Affiliation: Turtle Creek Watershed Association **E-mail:** good.fish@live.com

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

TCWA's mission is to promote the conservation of the natural resources of the Turtle Creek watershed by:

- Conducting watershed-related educational and scientific investigations &/or research;
- Educating individuals, schools, organizations, and communities to the value of sound conservation techniques to protect natural resources - the basis for safe drinking water, improved flood control, invigorated quality of life, and stable property values;
- Participating in existing beneficial government programs that enhance watershed protection and promoting additional multi-municipal cooperation; and
- Promoting local interest in the conservation of natural resources in the watershed and encouraging local support for programs that correct or improve water quality and quantity problems.

Overall, there are four major, and inter-related, problems in our watershed, and all impact the future Greenway:

Streambank Stabilization – failures throughout the watershed are increasing – exacerbated by zoning ordinances in most of our 33 municipalities that do not consider or protect natural stream features and the development resulting from those. Erosion and sedimentation problems affect water quality, fish stocking and survival, recreation potential and economic benefits, and flooding potential.

Stormwater Management – without the expected funding from the state and the counties for Act 167 Stormwater Planning Updates, our municipalities are at a disadvantage when creating a united front in addressing stormwater-related issues. TCWA has been working with the municipalities, the Center for Environmental Research and Education, and 3 Rivers Wet Weather Demonstration Program to do some comprehensive planning.

Abandoned Mine Drainage Remediation – of the three main sections of Turtle Creek and its eleven tributaries, only two are not impacted by AMD. Located at the top of the Irwin Syncline, the reduced amount of overburden and limited amounts of limestone within that overburden result in low pH water containing significant amounts of iron, aluminum, and sulfur. Development in areas where the largest discharges occur limits treatment options and provides other challenges to develop site-specific hybridized systems.

Education - over 193,000 people live in the watershed's 147 square miles. Many of them are keenly aware of the problems we all face, but not the origins of those problems. They have little understanding of how their actions or those of their elected officials impact our water-related issues. However, once they become informed about concepts such as "You dump it, you drink it," or "You are paying for flood damages even if erosion and flooding don't hit you directly," their changes in thinking bring changes in behaviors that help resolve the problems.

2. Has your organization identified any issues within the Greenway?

See Answer #1.

Excessive stormwater runoff, the resulting erosion and flooding are doing significant damage to the Greenway area.

Mine drainage from the abandoned Delmont Mine, Export Mine, and Lyons Run Mine contaminates Turtle Creek.

As the public slowly becomes more aware of the issues and the potential solutions, there is more political will to address these issues.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

We have been working to address AMD, streambank stabilization, and stormwater issues impacting Turtle Creek in the greenway area. Lacking of funding has slowed or stopped our progress.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

Stormwater runoff volumes have increased substantially, causing more frequent and serious flooding episodes, and bank stabilization problems have increased proportionally.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

Broad community support and engagement. Recognition of the Greenway as a valuable community asset. Better stormwater management education, planning, and technical alternatives in place within the community. All property within view when walking beside the stream would have been secured in some manner. Streambank stabilization projects underway. Invasive species under control, native vegetation preserved and enhanced. Incorporated environmental education opportunities. Biking/hiking trail under construction, with some sections completed. Expansion plans finalized for an extension from Trafford to Keystone Commons in Turtle Creek.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Community education. Community education. Community education on all levels to insure the Greenway's general perception as a community asset and to create the political will to insure the Greenway's future.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Lack of community perception of the Greenway as an asset.

Perception that land is being “taken.”

Perception that any land not “developed” to create a dollar gain for someone hurts the community.

A political movement against all things “environmental” driven by the belief that “environmental” protection and preservation efforts impede “real world” economic development. There are several key elected Republicans who have already challenged or killed a few good projects that would save their communities money, would enhance the local quality of life amenities, or would protect residents’ property that have been scuttled by Republicans reluctant to go on record as supporting anything “green.”

Lack of adequate funding.

Improper planning that creates problems.

8. What would you like to see in terms of access provided to the Greenway?

I discovered a while ago that the more access people have to a natural area (and the more they stay on marked trails while visiting), the more likely that area will be to have the kind of community protection it needs for the long term.

No specific suggestions for access points, but if we can use those now readily available, that would be good. If we can have a reasonably long section being handicapped accessible, with ready access points at each end of the section, that would be wonderful.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

Can’t think of anyone right now.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes. good.fish@live.com 412/396-1550

12. Any additional comments?

No.

Turtle Creek Greenway Plan Questionnaire

1. The mission of the Pennsylvania Fish & Boat Commission (PFBC) is to protect, conserve, and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities. The PFBC stocks brown trout and rainbow trout twice in the spring for recreational angling opportunities in a 3.9 mile section of Turtle Creek from Saunders Station Bridge to the mouth of Brush Creek.
2. There are a number of issues that impact the aquatic life in Turtle Creek including mine drainage, stormwater runoff, sewage, industrial effluents, lack of adequate riparian zone width, stream bank erosion and sedimentation. Some of these issues are located within the greenway.
3. The PFBC was involved with the Trafford Dam Removal Project.
4. I have not spent a lot of time on Turtle Creek nor able to keep up with the status of projects in the watershed.
5. A stream that can support a more diverse aquatic community.
6. Recommendations: clean up AMD, reduce stormwater runoff, increase riparian zone width, conduct more stream bank stabilization projects, obtain easements for conservation and public fishing.
7. Obtaining funding to conduct projects and obtain easement
8. I would like to see more access to public fishing on Turtle Creek.
9. No
10. The PFBC would be willing to partner on certain types of projects.
11. Yes

Turtle Creek Greenway Plan (TCGP)

Name: Greg Holesh
City / State / Zip: Apollo, PA 15613
Affiliation: Ecological Restoration, Inc.

Mailing Address: 194 Goodview Or
Phone #: (724) 727-5771
E-mail: gholesh@ecorestinc.com

Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

Ecological Restoration, Inc is a specialty construction company focusing on wetlands, streams & revegetation. We also have a full service nursery/greenhouse. We are located in Westmoreland City.

Has your organization identified any issues within the Greenway?

No.

Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

No.

What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

I don't live in/near greenway, but I have noticed increased erosion in along the stream.

Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

More stable stream, fewer invasive plants.

What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Maybe start w/ Pa FDC to begin designs for stream restoration.

What might prevent the Turtle Creek Greenway Plan from being successful?

\$\$. The rail is also an issue. W/o rail/trail to build the project it may not work.

What would you like to see in terms of access provided to the Greenway?

Minimal. Maybe a few select locations.

Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

No.

Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes

If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes

Any additional comments?

No.

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Jerome Wolfe Mailing Address: 2380 Flagstaff Dr.
City / State / Zip: Export, PA 15632 Phone #: 724 327-5159
Affiliation: Citizens for the Preservation E-mail: CPRMPAC@Yahoo.com
Of Rural Murrysville (CPRM)

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

CPRM is dedicated to the preservation of the rural characteristics of Murrysville, PA. The Organization was formed in 2008 and incorporated in 2009. Its mission is to be pro-active in community affairs and specifically in development projects in order to bring about the best type of sustainable growth in Murrysville.

2. Has your organization identified any issues within the Greenway?

CPRM has identified issues, such as the General Business District Overlay Ordinance as not being in the best interests or the wishes of the citizens of Murrysville. Business development such as the Marketplace on 22 has resulted in commercial development on residentially zoned property with potential problems for the town of Export, PA in increased flooding.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

CPRM does not initiate projects, but either supports or objects to other organizations on an individual basis.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

As a positive, we have seen Turtle Creek cleaned up and the acid content reduced.

The increase in development, both commercial and residential, as well as the reconstruction of US Route 22, has had a serious effect on the Borough of Export, PA. There have been two serious floods in the past two years resulting in substantial and costly damage to the residents. Development projects currently planned are likely to aggravate the problem.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

We would hope the Turtle Creek Greenway would become an area in which residents could visit and enjoy as an undisturbed area as close to its natural state as possible. Visiting and undisturbed may be contradictory terms unless considerable thought is given.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

CPRM has not given much thought to the Greenway up until now. We would encourage any efforts that would help retain its natural condition.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Encroachment on and run-off from residential and commercial development are most likely to have a negative impact.

8. What would you like to see in terms of access provided to the Greenway?

A walking and/or bicycle trail (unpaved) would be desirable. There would need to be a parking area(s) for access, and regular maintenance of the Greenway to remove trash is necessary. Volunteer organizations such as service clubs or Boy Scouts would be ideal to keep the Greenway from becoming a tax burden to the communities.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

We are not aware of other organizations, but the Borough of Export surely has a vested interest.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

CPRM would be willing to partner with others, however, our resources are limited and our mission is to be an advocate for the citizens of Murrysville. We do not know, at this time, what the community's feelings are about the Greenway.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

12. Any additional comments?

We are certainly receptive to any questions you may have. E-mail would be the preferred way to contact us.

Turtle Creek Greenway Plan (TCGP)
Stakeholder Interview Questionnaire

Name: Jessica Stewart

Mailing Address: 409 Broad Street, Suite 206A

City / State / Zip: Sewickley, PA, 15143

Phone #: 412.741.2750

Affiliation: Conservation Planner, Allegheny Land Trust

E-mail: jstewart@alleghenylantrust.org

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

Allegheny Land Trust's mission is to serve as the lead land trust conserving and stewarding lands that support the scenic, recreational, and environmental well-being of communities in Allegheny County and its environs. Implementation of this mission has led to the creation of the Allegheny Land Trust's Greenprint. The Greenprint acts as a guide to strategic conservation identifying where biodiversity, scenic character, and lands with stormwater management value exist and overlap. Many lands that possess these attributes are located within the Turtle Creek Watershed. The Allegheny Land Trust has an interest in supporting activities in the watershed that promote the protection of such lands.

2. Has your organization identified any issues within the Greenway?

Within this watershed, and many others in the area, stormwater management is an issue that deserves attention and action.

A recent survey conducted by the Allegheny Land Trust and given to watershed organizations, including the Turtle Creek Watershed Association, revealed that mine drainage is another issue that affects the proposed Greenway area. The Allegheny Land Trust has dealt with this issue at our Wingfield Pines Conservation Area. The creation of a passive abandoned mine drainage treatment system will remove 43 tons of iron oxide from the mine drainage that enters Chartiers Creek, which runs through the site. It has also provided an opportunity to educate those visiting the site about the issue of Abandoned Mine Drainage. It is possible that this model could be used elsewhere to deal with the issue of mine drainage.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

Not at this time. A desire and commitment from the communities to implement the Greenway Plan could leverage Allegheny Land Trust's involvement.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

N.A.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

In ten years the Greenway would be either complete or in the process of being established. It would be a Greenway that has many different functions and provides for the simultaneous occurrence of several complimentary activities. For instance, the Greenway has established habitat and migration corridors to increase biodiversity in the area. It also has corridors established for use by people to exercise, bird-watch, and take in the scenery. It has areas used by people for recreation, and other areas used for education. The Greenway is being supported by a robust community group who provide stewardship. Overall, the Greenway is an area that promotes the conservation of natural elements that provide us with benefits, such as stormwater management, while also promoting the health, wellness, and safety of the community.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Both the protection and improvement of these resources depends upon education and outreach to the community. People are unable to appreciate the value of something they know nothing about, therefore it is imperative that the resources and benefits provided by the Greenway are known and understood. Also, it is important to establish sustaining relationships with individuals and organizations that will support it in the long-term. Lastly, the value of these resources will be more fully supported when there is participation occurring across municipal borders and among elected officials. Local zoning ordinances need to be adopted that provide for the conservation of lands that offer substantial public benefits with a focus on protecting the most at risk lands.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Challenges to implementation of the Greenway Plan may arise from development and industry, as well as from municipalities with different priorities. Also, a lack of funding could prove a serious obstacle to overcome. Much of the success of the Greenway Plan will depend upon the support it receives from the communities involved and affected.

8. What would you like to see in terms of access provided to the Greenway?

Communities learn the true values and benefits provided by a resource, such as a Greenway, only by having the opportunity to build a connection and relationship with that resource. Therefore, access to the Greenway is a very important aspect of this project. It is necessary to generate community support and also to educate the public

about the benefits provided by natural infrastructure. Through education you are able to foster a culture of conservation that the community will perpetuate. It is important to balance access provided to the public with the needs of the biodiversity in the Greenway. The access that is granted to the public should not come at any cost to the health of those animals and plants found in the Greenway.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

N.A.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes. Especially to protect those lands in Allegheny County identified in the Allegheny Land Trust Greenprint.

11. If we have any additional questions is it okay if we follow up with you? Email or phone?

Yes. Either. Email: jstewart@alleghenylantrust.org Phone: 412.741.2750

12. Additional Comments

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Joseph Dietrick

City / State / Zip: Murrysville, PA 1568

Affiliation: Municipality of Murrysville

Mailing Address: 4100 Sardis Road

Phone #: 724-327-2100

E-mail: jdietrick@markosky.com

Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

The Municipality of Murrysville is involved with the approval and review of land development plans. As such, the Municipality has developed ordinances regulating the disturbance of land and natural resources. The Municipality continues to work on improving these regulations in order to reduce the impact of development as much as possible.

Has your organization identified any issues within the Greenway?

Duff Park is a municipal park and Murrysville provides funding and resources to maintain and improve the park. In the past this work has consisted of repair the existing trails, stabilizing the stream banks and replanting vegetation.

Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

I do not know of any current or new projects.

What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

I think the Turtle Creek Greenway has improved greatly over the last 10 years. Turtle Creek appears to be more natural. The AMD that has polluted Turtle Creek in the past is still prevalent but the attempts to mitigate this problem are having a positive effect.

Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

I would like to see a trail system that follows Turtle Creek and provides recreation for the local area. I would like to see Turtle Creek become a better stream for wildlife and fish. I hope that the efforts to reduce the impact of AMD continue.

What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

I think it would be best if the different communities along the Turtle Creek Greenway can agree on a basic type of development for the Greenway. This would involve standards for trail construction and signage.

What might prevent the Turtle Creek Greenway Plan from being successful?

The same two things that keep any project from being successful; lack of interest and lack of funds.

What would you like to see in terms of access provided to the Greenway?

Since the Greenway is a resource for all to enjoy the access should accommodate all. The development of the access points should be based on the specific areas. All access will not be the same.

Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

Rob Hunter at the Municipality of Murrysville.

Would your group be willing to partner with other local organizations to protect and improve the Greenway?

The Murrysville Council is always open to partnering with other organizations to improve the area.

If we have any additional questions is it okay if we follow up with you? Email or Phone?

Listed above

Any additional comments?

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: John Turack Mailing Address: 214 Donohoe Road, Suite E
City / State / Zip: Greensburg, PA 15601 Phone #: 724-837-1402 x199
Affiliation: Westmoreland Cooperative Extension/SGP E-mail: jdt15@psu.edu

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

MISSION STATEMENT: The Smart Growth Partnership enables communities to enhance their viability, quality of life, and long-term sustainability by providing education and technical assistance, and by promoting smart growth principles.

The Mission of Penn State Cooperative Extension's Economic and Community Development

2. Has your organization identified any issues within the Greenway?

Yes, preserving and managing the Greenway is a very valuable effort, and one that should be done comprehensively. The corridor has been historically valuable not only for its natural resources, but also as a regional transportation corridor. All efforts to enhance and maximize its continuing use for complete or appropriate multi-modal transportation would be advised.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

No, beyond assisting the municipalities and communities nearby with visioning and strategic planning processes when invited, and collaborating when appropriate with this effort.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

There is much discussion currently about its possible uses, with a significant amount of public engagement in the decision-making process occurring. This is a positive.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

Yes. A truly state-of-the-art, demonstration, multi-modal transportation and conservancy corridor, with its natural resources and historical assets conserved, preserved, protected, and or enhanced.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

Continue and expand current citizen and public engagement efforts.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Insufficient early and continued citizen engagement.

8. What would you like to see in terms of access provided to the Greenway?

Major trail heads and/or multi-modal transportation nodes in appropriate locations at the bookends of the Greenway. and in the existing core communities (Commercial Districts, Major Employment Centers, Neighborhood Mixed-Use Business Districts (like Trafford and Export), Park and Rides, Transit Stations, etc.) with smaller neighborhood minor connections where/when appropriate and deemed feasible. As the corridor is re-utilized for

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

Yes. I send on to the planning team as I discover them.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

I believe so.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes. However most appropriate for you.

12. Any additional comments?

Great work so far! Keep it up!

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

**Name: Mailing Address: Malcolm N. Sias, 194 Donohoe Road, Greensburg Pa, 15601
City / State / Zip: Phone #: 724-830-3968**

Affiliation: Westmoreland County Bureau of Parks and Recreation & Regional Trail Corporation E-mail: msias@co.westmoreland.pa.us

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

The mission of the Regional Trail Corporation is to acquire, develop, manage and maintain appropriate trail and water corridors within southwestern PA in partnership with local trail chapters and councils to promote opportunities for recreation, volunteerism, education, tourism, economic development, and historic and environmental conservation.

The RTC would like to plan, construct and manage the extension of the Westmoreland Heritage Trail, a biking and walking trail, through the Turtle Creek Gorge. Interpreting the natural and historical features of the land is part of the attraction for trail users.

The mission of the Westmoreland County Bureau of Parks and Recreation is to plan, develop, and manage park and recreation facilities and programs for the residents of Westmoreland County. Facilities include parks, trails, greenways and open space.

Same as above with this addition. Westmoreland County Parks would like to have a publicly accessible greenway in the Turtle Creek Gorge to preserve the green space, encourage conservation of the resource and to open it for public use.

2. Has your organization identified any issues within the Greenway?

The operating Railroad is utilizing the corridor we would like to develop into a trail. Over time we hope to partner with them to preserve the corridor and turn it into a public use trail for biking and walking. Issues that affect that are both economic and natural. The RR has a value to the businesses of the area and we want to be sure that their needs are met in another manner if this RR is not operating. The problems with flooding along Turtle Creek currently affect the RR and would do the same to the trail. It is in everyone's interest to try to solve some of these problems as soon as possible.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

We hope to develop the trail and as stated earlier this depends on how long the RR continues to operate.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years? The negative effects of storm water, flooding etc continue to grow and seem to be getting worse.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years? We would like to see it in operation as a publically owned and managed greenway with the Westmoreland Heritage Trail constructed through the center, along the RR corridor. A multi-municipal management plan would be in effect and all the stakeholders would be united in a clear vision for the management of the Greenway.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural

resources within the Greenway? A trail would bring the necessary people into the Gorge and they would encourage solutions to problems, interpreting and protecting the natural and historic resources, etc.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

The inability to obtain the RR corridor and turn it into a public trail. Without that public perception may not be altered enough to lead to necessary changes.

8. What would you like to see in terms of access provided to the Greenway?

Parking access along existing roads to serve trail users, fishermen and general visitors.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should

be interviewed as a stakeholder? No

10. Would your group be willing to partner with other local organizations to protect and improve the

Greenway? Of course – that's what this whole process is about.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone? Yes.

12. Any additional comments?

Sorry this is late.

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Mark Bowers

Mailing Address: 279 Orr Road

City / State / Zip: West Newton, PA 15089

Phone #: 724/872-5232

Affiliation: Westmoreland Land Trust

E-mail: 4beagles@verizon.net

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

^{Westmoreland Land Trust}
"To conserve and steward lands and waters of Westmoreland County that harbor ecological, scenic or recreational qualities to offer a healthier and more sustainable future for all."

The TC Greenway project is located in one of WLT's target areas within Westmoreland County.

2. Has your organization identified any issues within the Greenway?

None.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

The greenway is one of many potential project areas. WLT is considering ~~planning~~ evaluating the potential for acquisition of properties adjacent to Duff Park and the TC Greenway.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

Positive changes - I am unaware except for increased interest in establishing or preserving a greenway.

Negative: stormwater damage due to probable impacts of increasing amount of developed land in adjacent areas.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

A trail connecting Saltsburg, Indiana, PA to Pittsburgh, PA

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

and within the greenway. (1) Acquisition of steep, undevelopable land adjacent to
(2) Management for invasive species, (3) Acquisition of two railroad miles.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Continued use of the river ~~as~~ an active railroad, lack of funding for the project.

8. What would you like to see in terms of access provided to the Greenway?

Connection to the existing parks.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

Friends of Marysville Parks members, Westmoreland Conservancy members.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes. Either method would be okay.

12. Any additional comments?

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: ROY WEIL

Mailing Address: 5131 PENTON RD

City / State / Zip: PITTSBURGH, 15213

Phone #: 412-681-5131

Affiliation: SHAW-WEIL ASSOC

E-mail: TURTLECREEK@SHAW-WEIL.COM

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

ENCOURAGE OUTDOOR RECREATION

2. Has your organization identified any issues within the Greenway?

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

BIKE TRAILS
CANOE ACCESS

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

7. What might prevent the Turtle Creek Greenway Plan from being successful?

MONEY

8. What would you like to see in terms of access provided to the Greenway?

BIKE TRAILS CONNECTED TO MUD RIVER TRAIL
CANOE PUT IN AT EVERY CROSS ROAD

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

11. If we have any additional questions is it okay if we follow up with you? Email or ~~Phone~~?

YES

12. Any additional comments?

Turtle Creek Greenway Plan (TCGP)
Stakeholder Interview Questionnaire

Name: Jerome Wolfe

Mailing Address: 2380 Flagstaff Dr.

City / State / Zip: Export, PA 15632

Phone #: 724 327-5159

Affiliation: Citizens for the Preservation
Of Rural Murrysville (CPRM)

E-mail: CPRMPAC@Yahoo.com

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

CPRM is dedicated to the preservation of the rural characteristics of Murrysville, PA. The Organization was formed in 2008 and incorporated in 2009. Its mission is to be pro-active in community affairs and specifically in development projects in order to bring about the best type of sustainable growth in Murrysville.

2. Has your organization identified any issues within the Greenway?

CPRM has identified issues, such as the General Business District Overlay Ordinance as not being in the best interests or the wishes of the citizens of Murrysville. Business development such as the Marketplace on 22 has resulted in commercial development on residentially zoned property with potential problems for the town of Export, PA in increased flooding.

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

CPRM does not initiate projects, but either supports or objects to other organizations on an individual basis.

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

As a positive, we have seen Turtle Creek cleaned up and the acid content reduced.

The increase in development, both commercial and residential, as well as the reconstruction of US Route 22, has had a serious effect on the Borough of Export, PA. There have been two serious floods in the past two years resulting in substantial and costly damage to the residents. Development projects currently planned are likely to aggravate the problem.

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

We would hope the Turtle Creek Greenway would become an area in which residents could visit and enjoy as an undisturbed area as close to its natural state as possible. Visiting and undisturbed may be contradictory terms unless considerable thought is given.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

CPRM has not given much thought to the Greenway up until now. We would encourage any efforts that would help retain its natural condition.

7. What might prevent the Turtle Creek Greenway Plan from being successful?

Encroachment on and run-off from residential and commercial development are most likely to have a negative impact.

8. What would you like to see in terms of access provided to the Greenway?

A walking and/or bicycle trail (unpaved) would be desirable. There would need to be a parking area(s) for access, and regular maintenance of the Greenway to remove trash is necessary. Volunteer organizations such as service clubs or Boy Scouts would be ideal to keep the Greenway from becoming a tax burden to the communities.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

We are not aware of other organizations, but the Borough of Export surely has a vested interest.

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

CPRM would be willing to partner with others, however, our resources are limited and our mission is to be an advocate for the citizens of Murrysville. We do not know, at this time, what the community's feelings are about the Greenway.

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

12. Any additional comments?

We are certainly receptive to any questions you may have. E-mail would be the preferred way to contact us.



Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: Marylyn Devlin

City / State / Zip: Monroeville, PA 15146

Affiliation: Sustainable
Monroeville

Mailing Address: 321
Spring Run Dr.

Phone #: 412-372-6113

E-mail: marylyndevlin@msn.
com

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

Our mission is to help the city of Monroeville move forward in the green economy by offering sustainable solutions.

2. Has your organization identified any issues within the Greenway?

water mgt. - goal # 2

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

no

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

?

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

I like the idea of partnering with the local schools and govt websites. - goals # 6 + 7

7. What might prevent the Turtle Creek Greenway Plan from being successful?

The current lack of Monroeville's govt involvement - would like to invite specific people to the 6/17 workshop

8. What would you like to see in terms of access provided to the Greenway?

goal # 3

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

Yes,

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

Yes

12. Any additional comments?

Our mtgs. are the First Mon. of each month from 7-8:30 pm in the Monroeville Library's

I will ask for 6/17 volunteers Program Ctr. then (6/17).

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name: TRAFFORD ECONOMIC AND COMMUNITY DEVELOPMENT COOP, (TECD) LACEE Mailing Address: 271 H. HERBERT DRIVE
City / State / Zip: TRAFFORD, PA Phone #: 412 373-1175 412 897-4620 Cell
Affiliation: TECD E-mail: LACEE1@VERIZON.NET

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

PURPOSE

The purpose for which this corporation was formed was to create a climate to enhance economic development and to promote technical assistance, education and activities to aid business location and growth and to sustain the quality of life in the community of Trafford,

2. Has your organization identified any issues within the Greenway?

No

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

A PARK & RIDE

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

None

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

ALONG WITH THE TRAIL, IT WOULD BE NICE TO SEE THE DAM REMOVED FROM THE CREEK SO IT COULD BE USED FOR BOATING. THE CREEK IS IN BAD NEED OF CLEANING.

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

CLEAN UP THE TURTLE CREEK

7. What might prevent the Turtle Creek Greenway Plan from being successful?

PROPERTY OWNERS COOPERATION

8. What would you like to see in terms of access provided to the Greenway?

AT THIS TIME I DON'T KNOW. I GUESS PARKING AREAS FOR ACCESS & PICNIC AREAS. REST ROOM FACILITIES IS A CONCERN.

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

TRAFFORD BOROUGH COUNCIL, TCC, + ROY P. DUZZI

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

YES

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

YES

12. Any additional comments?

NOT AT THIS TIME.

Turtle Creek Greenway Plan (TCGP)

Stakeholder Interview Questionnaire

Name FRANKLIN TOWNSHIP MUNICIPAL SANITARY AUTHORITY Mailing Address: 3001 MEADOWBROOK ROAD
City / State / Zip: MURKYSVILLE, PA. 15668 Phone #: 724 327-1950
Affiliation: TCWA E-mail: JBRUCKER@FTMSA.ORG

1. Please briefly describe the mission of your organization, including how your organization utilizes and/or is involved with the natural (land, water, biological), recreational, and cultural (historic sites and archaeological sites) resources of the Turtle Creek Greenway.

SEWAGE TREATMENT PLANT

2. Has your organization identified any issues within the Greenway?

FLOODING

3. Does your organization have any current or future projects planned within, adjacent, or nearby the Greenway? If so, what is the status?

POSSIBLE IN FUTURE - AUTHORITY OWNS GREENWAY

4. What changes (positive and negative) have you seen within the Turtle Creek Greenway within the last 10 years?

FLOODING

5. Do you have a vision of what you would like the Turtle Creek Greenway to look like in 10 years?

6. What recommendations do you have to protect and/or improve the natural, recreational, and cultural resources within the Greenway?

7. What might prevent the Turtle Creek Greenway Plan from being successful?

FLOODING

8. What would you like to see in terms of access provided to the Greenway?

ACCESS TO GREENWAY BY MEADOWBROOK ROAD

9. Do you know of any other individuals who are knowledgeable of the Turtle Creek Greenway that should be interviewed as a stakeholder?

10. Would your group be willing to partner with other local organizations to protect and improve the Greenway?

POSSIBLE

11. If we have any additional questions is it okay if we follow up with you? Email or Phone?

YES E-MAIL OR PHONE

12. Any additional comments?



Appendix E—Public Meetings

Turtle Creek Greenway Plan

Public Meeting

WHEN: Wednesday, February 24, 2010

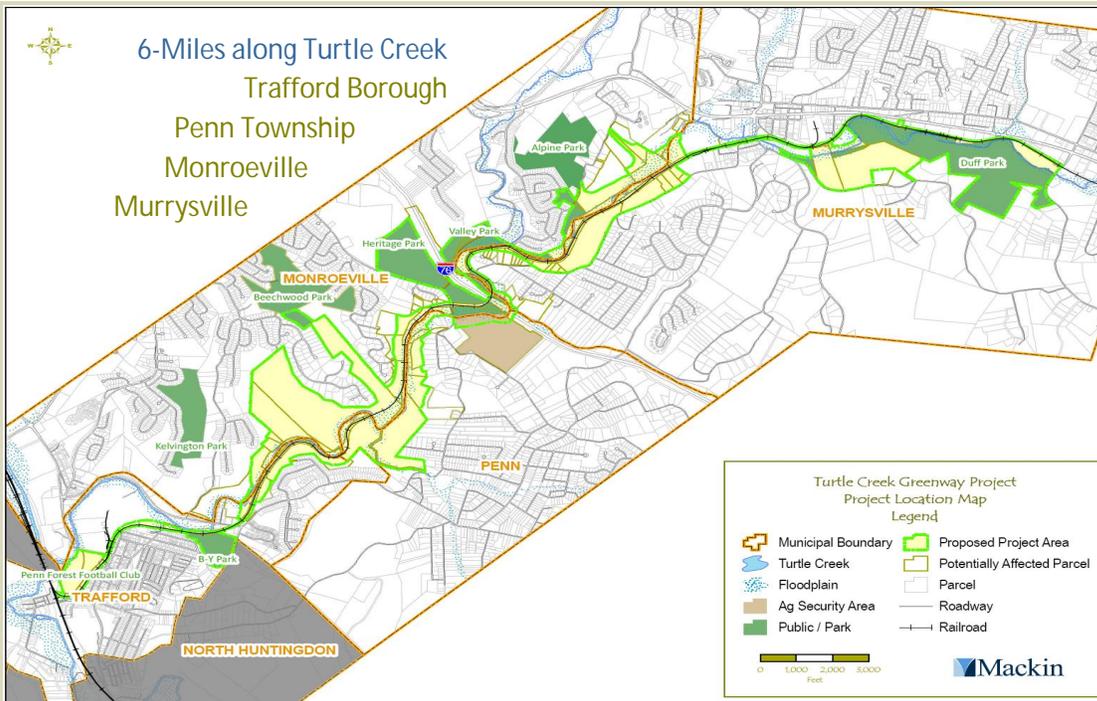
TIME: 7:00 PM–9:00 PM

WHERE: Murrysville Community Building, 3091 Carson Street

WHY: Provide input on opportunities related to recreation & conservation

ABOUT THE PROJECT...

Issues



- 2 Streambank & Hillside Erosion
- 2 Future Development
- 2 Invasive Plant Species
- 2 Litter & Illegal Dumping

Opportunities

- 2 Protection of Open Space
- 2 Expand Public Recreation Areas
- 2 Enhance Wildlife Habitat
- 2 Improve Stormwater Management
- 2 Utilize as Outdoor Classroom

Turtle Creek Greenway Project Goals:

- 2 Preserve the integrity of natural, recreational, and cultural resources
- 2 Manage adverse impacts to the Greenway & its ecosystem from stormwater damage
- 2 Raise public awareness and encourage stewardship of natural resources
- 2 Enhance the Greenway by offering additional recreational opportunities
- 2 Develop a plan to secure land for trail development and the protection of resources through fee simple, conservation easements, and/or donations, or other methods
- 2 Utilize the Greenway as an educational resource for school children and the public
- 2 Promote the Greenway as a destination and encourage ecotourism



Questions?? Please contact:

Amy Wiles, AICP, Mackin (consultant)
412.788.0472

or

Malcolm Sias,
Westmoreland County Parks & Recreation
724.830.3968

Turtle Creek Greenways Plan (TCGP)

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough



Public Meeting: February 24, 2010 Sign In Sheet

| | Name | Representing | Email | Phone # |
|----|------------------------|-----------------------------|------------|------------|
| 1 | Tom McGee | Gateway Newspapers | [REDACTED] | [REDACTED] |
| 2 | Noel Grimm | Westmoreland Heritage Tr | [REDACTED] | 29 |
| 3 | Marie Selvaggio | TOWA / CERE | [REDACTED] | |
| 4 | Donald Baker | | [REDACTED] | |
| 5 | Connie Radocay | West. Botanical Soc | [REDACTED] | |
| 6 | Linda Lyman | P.F. NEWS | [REDACTED] | 4 |
| 7 | Joe Galvin | | [REDACTED] | |
| 8 | Brien Palmer | MTA | [REDACTED] | 507 |
| 9 | Bonnie Belak | 4-H Conservation Club | [REDACTED] | |
| 10 | Pier van de Venne | Parks Volunteers | [REDACTED] | 33 2770 |
| 11 | Dorey-Virginia Oethers | Pittman Community Resources | [REDACTED] | 9374 |
| 12 | Jay & Tom Henniger | self | [REDACTED] | 962 |
| 13 | Dale Matuze | self | [REDACTED] | |
| 14 | CRAIG BARRAS | TCWA | [REDACTED] | |
| 15 | Mary Shaw | self | [REDACTED] | |

Turtle Creek Greenways Plan (TCGP)

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Public Meeting: February 24, 2010 Sign In Sheet

| | Name | Representing | Email | Phone # |
|----|--------------------|-------------------------|-------|---------|
| 16 | ROY WEIL | SELF | | |
| 17 | JOHN BALICKI | JOHN BALICKI ASSOC. LLC | | |
| 18 | MIKE KARDILL | RESIDENT | | |
| 19 | JESSICA STEWART | Alleghenyland Trust | | |
| 20 | BRUCE CORNA | | | |
| 21 | MARK BOWERS | WESTMORELAND L.T. | | |
| 22 | DOUGLAS GRANGER | SELF | | |
| 23 | ERNIE SCHINDEHETTE | STARTRAIL | | |
| 24 | JASON BABIK | SELF / TCWA | | |
| 25 | MARK FRYDECH | SELF | | |
| 26 | BOB McDONALD | CAD | | |
| 27 | MARC ALAIA | Self | | |
| 28 | JOE MURITCH | SELF | | |
| 29 | | | | |
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Turtle Creek Gorge Greenway Plan

Public Meeting #1 Summary

Wednesday, February 24, 2010 – Murrysville Community Center

1. Welcome & Introductions

28 people signed into the meeting, representing organizations including the Turtle Creek Watershed Association, Westmoreland Heritage Trail, Five Star Trail, Westmoreland Botanical Society, Murrysville Trail Association, Murrysville Parks Volunteers, Pitcairn Community Renaissance, Allegheny Land Trust, and interested residents.

2. Presentation

Malcolm Sias and Diane Selvaggio opened the meeting by providing a background on the Turtle Creek Greenway Project. Amy Wiles then gave a presentation on what a greenway is, a project overview, what the plan will address, and what we have found so far.

3. Questions & Answers

Amy opened the meeting up to questions.

- * Flooding issues in Trafford Borough
 - o There is public misconception over what the Army Corps is proposing to do to Turtle Creek
 - o Need to update municipal ordinances to address issues, particularly stormwater
 - o Need to make local officials aware
 - o Need to fix flooding issues first before beautification efforts
 - o Army Corps needs to conduct a study of Turtle Creek area to develop a watershed-wide plan to address issues
- * Landowners responsible for addressing stormwater on own property
 - o Educational programs need to be offered
 - o Strategies can be implemented such as permeable surfaces, rain barrels, rain gardens, etc.
- * Private landowner coordination
 - o Contacted all landowners via mail and invited to meeting in November 2009
 - o Mailed surveys to all landowners to identify level of interest
 - o Project is voluntary only – no property will be taken
 - o Options available include donations, easements, partnerships to implement projects, etc.
- * What is the plan for the Brickyard in Monroeville?
 - o Historical area that is owned by Monroeville
 - o Included in project area
 - o Plan is for passive open space with interpretive signing, educational opportunity, trails
- * What is the level of Monroeville's involvement?
 - o There are a few residents on the Committee
 - o Information was sent to a Council member to identify suitable person to involve
- * Will the project area be extended to include other areas of Monroeville or Pitcairn?
 - o No, the project area for this project is 6 miles along Turtle Creek however it is possible for the TCWA or local municipalities to conduct similar projects in other areas

Turtle Creek Gorge Greenway Plan

Public Meeting #1 Summary

Wednesday, February 24, 2010 – Murrysville Community Center

4. Mapping Exercise

The attendees were asked to identify any known locations related to recreational opportunities, access areas, natural areas, and/or areas with environmental concerns such as flooding, erosion, etc.

Please refer to the maps for identified locations.

7. Adjourn

The meeting was adjourned at 9pm.



Turtle Creek Greenway Plan Public Educational Workshop

WHEN: Thursday, June 17, 2010

RAIN OR SHINE!!

TIME: 5:30PM

WHERE: B-Y Park (PA 130 / 7th Street, Trafford PA)

WHAT: 2.3 Mile Educational Walk—Wear Hiking Boots or Sneakers!!

Schedule of Events...

- 5:30pm Meet at Pavilion #3
In B-Y Park (Trafford)
Cook-Out & Project Overview
- 6:00pm Leave for Saunders Station Road
(Monroeville)
- 6:20pm Educational Walk
- to *Topics to be Covered:*
- 8:00pm  *Conservation & Water Quality*
-  *Streambank Stabilization*
-  *Stormwater Management & Erosion Control*
-  *Invasive Plant Species Management*
-  *Recreation Ecological Resources*
-  *Recreation & Trail Opportunities*
- 8:10pm Project Wrap-Up @ B-Y Park



Visit us on Facebook!

www.facebook.com/TurtleCreekGorge



Please RSVP by June 14, 2010 to:

Amy Wiles, AICP, Mackin (consultant) awiles@mackinengineering.com / 412.788.0472

Malcolm Sias, Westmoreland County Parks & Recreation
MSIAS@co.westmoreland.pa.us / 724.830.3968



Turtle Creek Greenways Plan (TCGP)

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Public Workshop: June 17, 2010 Sign In Sheet

| | Name | Representing | Email | Phone # |
|----|------------------|-------------------------|------------|-----------|
| 1 | Marylyn Devlin | Sustainable Monroeville | | |
| 2 | Tom McGee | Murrysville Star | [REDACTED] | ext. 9627 |
| 3 | Chris Goswick | Allegheny Co. | [REDACTED] | 5 |
| 4 | Linda Lyman | Penn Franklin Nat | [REDACTED] | m |
| 5 | Jonathan Ritchie | GAI Consultants | [REDACTED] | |
| 6 | Adam Scheller | GAI Consultants. | [REDACTED] | |
| 7 | Sarah Pillsbury | WCD | | |
| 8 | JIM PILLSBURY | WEST. CONS. DIST. | [REDACTED] | |
| 9 | Rob Cronauer | ' | [REDACTED] | |
| 10 | Don Baker | | | |
| 11 | Bill Adams | RESIDENT | [REDACTED] | 10 |
| 12 | RICHARD P. RAUSO | RICHARD P. RAUSO ASIA | [REDACTED] | |
| 13 | Matt Rauso | same as ↓ above | ↓ | ↓ |
| 14 | Maryann Lassak | MYSELF | [REDACTED] | |
| 15 | Tom Ronkerly | MYSELF | [REDACTED] | 14 |

Turtle Creek Greenways Plan (TCGP)

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Public Workshop: June 17, 2010 Sign In Sheet

| | Name | Representing | Email | Phone # |
|----|-----------------------|--------------------------------------|------------|------------|
| 16 | M.A. Serrapere | — | [REDACTED] | [REDACTED] |
| 17 | Chris Droste | wcd, wht TCWA | [REDACTED] | [REDACTED] |
| 18 | John Stan | Houston Star | [REDACTED] | [REDACTED] |
| 19 | Amy + Mike Baer | Gateway Middle School | [REDACTED] | [REDACTED] |
| 20 | CLARENCE "BUCK" SKENA | F.O.M.P. WESTMORELAND CONSERVANCY | [REDACTED] | [REDACTED] |
| 21 | Les & Donna Race | TRAFFORD | [REDACTED] | [REDACTED] |
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Turtle Creek Gorge Greenway Plan

Public Educational Workshop Summary

Thursday, June 17, 2010 – B-Y Park

1. Welcome & Introductions

22 people signed in to the meeting, representing organizations including the Turtle Creek Watershed Association, Westmoreland County Conservation District, Westmoreland Heritage Trail, Gateway Middle School, Friends of Murrysville Parks, Westmoreland Conservancy, Murrysville Star, Sustainable Monroeville, Penn Franklin News, and interested residents. Even though only 22 people signed in, it was estimated that approximately 40 people attended the event.

2. Presentation

Malcolm Sias opened the meeting by providing a background on the Turtle Creek Greenway Project. Amy Wiles then gave a presentation on what a greenway is, a project overview, how we got to this point, and an overview of what to expect on the 2.3-mile educational walk through the proposed greenway.

3. Educational Walk

The walk started at the parking lot at Saunders Station Road and ended at B-Y Park. There were 5 presenters and stations along the walk, which included:

- * Value of Conservation & Water Quality – Diane Selvaggio, Turtle Creek Watershed Association
 - o As humans, we are connected to the natural environment—we share DNA with many things. Humans have 40% of the same DNA as with daisies, 76% with dogs, and 97% with chimpanzees.
 - o Natural systems and natural infrastructure perform many valuable functions that keep us alive, often at little or no cost, such as purification of the air; water for drinking; and healthy soils to grow food, produce lumber, and other products.
 - o To be part of the solution to conserve natural resources, you can do a number of things, such as compost your yard and food waste; reduce your fertilizer and pesticide use at home; and construct a rain garden or rain barrel on your property.
- * Streambank Stabilization – Rob Cronauer, Westmoreland County Conservation District
 - o Showed example of eroded bank within the project area
 - o Described project on a private landowners property as an example of how the local conservation districts and landowners can work together to improve the stream's water quality and improve streambanks
 - o The local conservation districts provide free technical advice to local landowners on streambank and riparian type projects on their properties
 - o Live stakes are an easy way to revegetate eroded streambanks. Live stakes are tree branches that can be cut then planted directly into the ground and will grow into a new tree. Examples include willow, cottonwood, sycamore, and dogwoods; however, willows are the most commonly used and successful at propagating.

Turtle Creek Gorge Greenway Plan

Public Educational Workshop Summary

Thursday, June 17, 2010 – B-Y Park

- * Stormwater Management & Erosion Control – Chris Droste / Jim Pillsbury, Westmoreland County Conservation District
 - o Maps were distributed showing the Turtle Creek Watershed, the number of streams within the watershed, and the amount of impervious surfaces within the watershed.
 - o Impervious surfaces such as roofs and pavement prevent rain and stormwater from infiltrating the ground where it falls. Thus, water becomes channelized/collected and creates erosive runoff from the force of all the water going one direction. It also prevents groundwater levels from becoming recharged or maintained.
 - o Simpson Run within the project area is an example of a flashy stream and of an area of excessive stormwater damage. The stream was filled with sediment, gravel, and large trees that were carried downslope by stormwater runoff. During the walk, the channel was dry, then when it rains stormwater is directed to the stream and an influx of water gushes down through the stream valley into Turtle Creek.
- * Invasive Plant Species Management – Pia Van de Venne, Friends of Murrysville Parks
 - o Japanese knotweed is a pervasive and severe problem throughout Southwestern Pennsylvania. It dominates stream valleys and disturbed areas.
 - o Once Japanese knotweed establishes, it takes approximately 10 years of intensive management through cuttings and herbicide treatments before you can completely eradicate it.
 - o Japanese is prevalent throughout the greenway.
 - o Other invasive species common to the area are garlic mustard, tree-of-heaven, autumn olive, and shrub honeysuckle.
- * Recreation Opportunities & Trails – Malcolm Sias, Westmoreland County Parks & Recreation
 - o Trails help areas to be better managed and provide recreational opportunities for the public. For example, the Youghiogheny River valley prior to the trail was a dump area for trash/appliances, hangout for teenagers, and a problem area. Since the trail has been constructed, the area has been cleaned up and is now managed as a recreational facility.
 - o The Turtle Creek Greenway has some issues such as invasive plant species, unregulated ATV use, graffiti, littering. The hope is by preserving it as a greenway, local organizations can get involved and start to manage and protect the beauty of the area for all to enjoy.

4. Exit Survey

The attendees were asked to complete an exit survey to identify issues and opportunities they noticed regarding natural, recreational, and cultural resources as result of the walk. 13 exit surveys were returned. Several participants took surveys home and said they would mail them in.

7. Adjourn

The meeting was adjourned at 9pm.



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: LINDA LYMAN Representing: P.F. NEWS

Mailing Address: _____ Phone Number: _____

City / State / Zip: MURYSVILLE PA Email address: [REDACTED]
-franklin.com

Was this your first time visiting the Turtle Creek Greenway area? _____ Yes _____ No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

DUFF PARK WALKS

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

X Yes _____ No _____ Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

USABILITY - NEED TO MAKE IT ACCESSIBLE SO
people will use it, and therefore keep it up
for the future.

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Please drop your survey in the Survey Box provided or mail it to us at:

**Amy Wiles
Mackin Engineering Company
117 Industry DrivePittsburgh, PA 15275**



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Elisa Beck Representing: Sustainable Monroeville

Mailing Address: 106 Trotwood Drive Phone Number: [REDACTED]

City / State / Zip: Monroeville, PA Email address: [REDACTED]@gmail.com
15146 sustainablemonroeville@gmail.com

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

— With our dog - hiking
— with Turtle Creek Greenway

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Lots of work + a magnificent project!
Gateway School District has a new
Superintendent - Joseph Petrella -
Consider contacting him, Perhaps plan a
meeting with Sustainable Monroeville to kick

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor? Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

I think a shared corridor for the
Railroad and public transportation and
recreation would be ideal.

*a part of
an education
project*

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the “educational workshop” format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Please drop your survey in the Survey Box provided or mail it to us at:

**Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275**



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: DONALD BAKER Representing: _____
 Mailing Address: 3435 Mac Intyre Dr Phone Number: _____
 City / State / Zip: Murrysville PA 15668 Email address: _____

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Yes

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Barbara Ferrer Representing: CAB

Mailing Address: 21 Lakeside Drive Phone Number: [Redacted]

City / State / Zip: Gbg, PA 157601 Email address: [Redacted]

onCast.net

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

I visited once before with a group that walked the trail

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

I think it could be a great opportunity to present a working example. It can be an educational center

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor? Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Not at this time

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? Yes No *Check with Malcom*

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): *Not sure*

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Very Much

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Betsy Hoeldtke Representing: _____
 Mailing Address: 318 Morrison Ave Phone Number: _____
 City / State / Zip: Greensburg PA 15601 Email address: _____ *distinct*

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Excellent service

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Public awareness, funding

education

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Please drop your survey in the Survey Box provided or mail it to us at:

**Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275**



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Chris Droste

Representing: Westmoreland Conservation District, Westmoreland Heritage Trail

Mailing Address: 248 Donohoe road

Phone Number: [redacted]

City / State / Zip: Greensburg, PA 15601

Email address: [redacted]@ya400.com

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

stormwater, erosion & trail opportunities

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

we need alot of the Bank erosion problems addressed
Stormwater problems in Murrsville, Export, RT22
Penn Turp / Monroeville
- Build the trail!

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

controlling the water must happen
before building a trail.

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): Streambank Stabilization
& trail Building

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): trails - (with WHT)
stormwater issues (wcp)

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

TRAIL - water control - Bank erosion
issues must be addressed for
the trail, Flood prevention for
trail.

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

YES, its a must to visualize the problems
or you cannot address the problems
at hand.

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Rob Cronauer Representing: Westmoreland Conserv. Dist.
Mailing Address: 218 Donohoe Rd. Phone Number: [REDACTED]
City / State / Zip: Greensburg Email address: [REDACTED]@gmail.com

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

It is great to see people are working on some of these environmental issues. Lots of projects to tackle!

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

land acquisition! If you build it they will come. I wouldn't put anymore time and \$\$ into project until the land is acquired.

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): Streambank stabilization

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): On the ground projects.

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

- #1 Get the land!
- #2 Stabilize trail washouts (use rail to transport materials, i.e. rock)
- #3 Remove rail & construct trail.
- #4 Install signage, benches, etc...

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Very nice

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: SARAH PILLSBURY Representing: _____

Mailing Address: 408 OAKLAND AVE Phone Number: _____

City / State / Zip: GREENSBURG, PA 15601 Email address: _____

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

A LOT OF WORK TO DO - TRAIL DEVELOPMENT,
STABILIZING STREAM BANKS, FLOOD CONTROLS NEEDED

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

KEEP LITTER & DEBRIS DOWN.
FLASH FLOOD WARNING.

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

TRAIL DEVELOPMENT FOR WALKERS AND BIKERS
AND ASSOCIATED ISSUES TO BE ADDRESSED

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

YES. HELPFUL TO ADDRESS ISSUES TO ^{BE} IDENTIFIED ^{BE ABLE} ~~THEM~~ ^Y

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: JIM PILLSBURY Representing: WCD
 Mailing Address: 218 DONDHOE ROAD Phone Number: [REDACTED]
 City / State / Zip: GBG Email address: [REDACTED]

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

A GREAT PLACE TO VISIT. COULD BE GOOD FOR
FAMILY OUTINGS & PICNICS. COULD BE AN
OPPORTUNITY TO UNITE MUNICIPALITIES TOGETHER.
A CHANCE TO WORK TOGETHER ON STORMWATER

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

ACCESS — PARKING
FLOODING & EROSION

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

EDUCATION & OUTREACH
BANK PROTECTION
STORMWATER WORK

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

VERY GOOD SNACKS! 😊

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Maryann Lassak Representing: _____

Mailing Address: _____ Phone Number: _____

City / State / Zip: Morrisville, PA Email address: _____

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

LOTS OF POTENTIAL - LOTS OF WORK

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

WON'T HAPPEN IN MY LIFETIME!

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ ✓ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ Not sure I HAVE THE TIME, POSSIBLY

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

EROSION

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Very much

Please drop your survey in the Survey Box provided or mail it to us at:

**Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275**



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: C. WILLIAM DAVIS Representing: MURKYSVILLE PARKS
 Mailing Address: 4778 N. HILLS RD Phone Number: [REDACTED]
 City / State / Zip: MURKYSVILLE PA 15768 Email address: [REDACTED] @mail.com

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

They were all very well presented

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

How well it be paid for

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): connecting the greenway with Duff Park

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): I don't know yet

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Get that railroad converted to a trail

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

I think this session was very informative & it's nice to be with people who share the same interests and concerns about this beautiful earth!

Please drop your survey in the Survey Box provided or mail it to us at:

**Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275**



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Jai Starr Representing: Houston-Starr Co

Mailing Address: 320 E. Rockton Ave Phone Number: [Redacted]

City / State / Zip: Richmond TX 77411 Email address: [Redacted]

Houston-Starr Co

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

hike / Dune

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Interesting

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Yes

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Yes

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Bill Adams Representing: RESIDENT

Mailing Address: 211 SAUNDERS ST. Phone Number: [REDACTED]

City / State / Zip: TRAFFORD PA 15085 Email address: [REDACTED]

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? _____ Yes _____ No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Please drop your survey in the Survey Box provided or mail it to us at:

**Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275**



Turtle Creek Greenways Plan
Public Educational Workshop
 June 17, 2010 Exit Survey

Arvey
 JUN 22 2010

Please provide the following information to be notified for upcoming meetings/events:

Name: Donna Les Race Representing: Tratford-Resident
 Mailing Address: 271 Hillcrest Dr Phone Number: [REDACTED]
 City / State / Zip: Tratford, Pa, 15085 Email address: [REDACTED]@m.net

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

We've walked that area many times and was surprised to see the amount of erosion. The Knotweed has taken over in a relatively short period of time. These areas will require a lot of work but I feel it would be worth our time and funding. It's a beautiful area

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

The fact that it's in a flood plane

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes No

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

Erosion, invasive vegetation

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Yes

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275



Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Amey W.
JUN 23 2010

Please provide the following information to be notified for upcoming meetings/events:

Name: CLARENCE "BOCK" SKENA
 Mailing Address: 3561 NORTH HILLS ROAD
 City / State / Zip: MURRYSVILLE, PA 15668

Representing: MEMBER * WESTERN PA CONSERVANCY
 * WESTMORELAND CONSERVANCY
 * VOLUNTEER * FRIENDS OF MURRYSVILLE PARKS
 Phone Number: [REDACTED]
 Email address: clarev [REDACTED] .com

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

I went to the Saunders Station area and walked
"upstream" and "downstream", and found a waterfall
a short distance downstream, and had a chance
meeting with descendants of the Saunders family who live in the

What were your impressions of the Greenway in terms of the topics discussed (Conservation & log (now board and batten) house on Saunders Station Road, Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species,

Ecological Resources, and Recreation & Trail Opportunities)?

"Right on", a well planned program featuring
knowledgeable people addressing important
topics and issues.

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

No problem with the greenway (a good project).
My main concern is with WATER QUALITY.

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? Yes No ?

If yes, please describe the project(s): The Friends of Marysville Parks (FOMP) is actively trying to control and/or eliminate invasive species in Duff Park.

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes No ?

If yes, please describe the project(s): _____

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

- Move to "acquire" the Greenway or "permission" to use it
- Study and determine water quality, from springs to creeks, to Turtle Creek from sources to Trofford.

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

The "educational workshop" (in the field, not a classroom) was outstanding. We were shown many of the challenges, some can be mitigated over time with adequate funding. However, water quality may be the most difficult problem. I enjoyed the workshop.
Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275

Turtle Creek Greenways Plan

Public Educational Workshop

June 17, 2010 Exit Survey

Please provide the following information to be notified for upcoming meetings/events:

Name: Tom Rankley Representing: self
Mailing Address: 4946 Simmons Circle Phone Number: [REDACTED]
City / State / Zip: Expont, PA 15632 Email address: [REDACTED].com

Was this your first time visiting the Turtle Creek Greenway area? Yes No

If not, why have you visited the Turtle Creek Greenway (please specify activities):

What were your impressions of the Greenway in terms of the topics discussed (Conservation & Water Quality, Streambank Stabilization, Stormwater Management, Invasive Plant Species, Ecological Resources, and Recreation & Trail Opportunities)?

Streambank seemed fairly stable, although there were some areas that
needed help. Simpson Run shows obvious need for stormwater mgmt.
Lots of invasive weeds. Perfect trail opportunity but obviously not
until rail line is given up by the owners.

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?
 Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Not really

If you are representing an organization, does your organization currently have any projects planned within the Turtle Creek Greenway? _____ Yes _____ No *N/A*

If yes, please describe the project(s): _____

Would you be interested, either personally or as part of your organization, to participate in implementation projects for the Turtle Creek Greenway? Yes _____ No

If yes, please describe the project(s): *Mostly any work efforts - clearing land, developing trail beds, etc.*

What do you think are the priority projects that should be implemented with regards to the Turtle Creek Greenway?

I don't have the experience to know what should be prioritized first.

Did you enjoy the "educational workshop" format of the meeting? Please use this space to provide any additional comments regarding the meeting or the Greenway Plan.

Yes, I thought it was very well done. You (Amy) did a nice job providing the background of the projects. I liked the hike and the different presentation 'stations'. It was all very well organized.

Please drop your survey in the Survey Box provided or mail it to us at:

Amy Wiles
Mackin Engineering Company
117 Industry Drive, Pittsburgh, PA 15275

Turtle Creek Greenway Plan Final Public Meeting

WHEN: Thursday, January 27, 2011

TIME: 7:00PM

WHERE: Murrysville Municipal Building's Council Chambers
4100 Sardis Road, Murrysville PA

Visit us on Facebook!

[www.facebook.com/](http://www.facebook.com/TurtleCreekGorge)

[TurtleCreekGorge](http://www.facebook.com/TurtleCreekGorge)

Come out and find out what the priority projects are!



Conservation



Enhancement



Recreation



Stormwater Management



Restoration

For more information, please contact:

Amy Wiles, AICP, Mackin (consultant) at awiles@mackinengineering.com / 412.788.0472

Malcolm Sias, Westmoreland County Parks & Recreation at MSIAS@co.westmoreland.pa.us / 724.830.3968

Turtle Creek Greenways Plan (TCGP)

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Public Meeting: January 27, 2011 Sign In Sheet

| | Name | Representing | Email | Phone # |
|----|-----------------------|---|-------|---------|
| 1 | Chris LFO | | | |
| 2 | John Turack | Penn State SG/P/ Cooperative Extension | | |
| 3 | LON SPAENER | RESIDENT - MURRYSVILLE | | |
| 4 | Noel Grimm | Westmoreland Heritage Trail | | |
| 5 | Betsy Aiken | Westmoreland Land Trust | | |
| 6 | Tom Dittman | Westmoreland Her. Trail | | |
| 7 | LINDA LYMAN | P.F. NEWS | | |
| 8 | Michele Clarke | Resident - Murrysville | | |
| 9 | Bruce CORNA JR | Resident/ WCD/WLT | | |
| 10 | Dale + Xina Matuzs | Residents | | |
| 11 | Joe Galvin | Resident | | |
| 12 | JIM & SARAH PILLSBURY | Westmoreland Conservation District | | |
| 13 | Chris Goswick | Allegheny Co. | | |
| 14 | | | | |
| 15 | | | | |



Appendix F—Official List of the Birds in Pennsylvania

Credit for the following information and the “Official List of Birds of Pennsylvania” goes to the Pennsylvania Society for Ornithology website:
http://www.pabirds.org/PORC/PORC_Official_List.htm#TheList

[Official List of the Birds of Pennsylvania](#)

The Official List of the Birds of Pennsylvania was first published in 1990 (PB V4:51). Subsequent editions were published in 1995 (PB V9:118-123) and 2000 (PB V14: 109). One of the responsibilities of the Pennsylvania Ornithological Records Committee (P.O.R.C.) is to review the status of all species on the state list and to publish an Official State List every five years. The committee has completed its assignment and the following list is the result of its work.

[Classification of Records](#)

[Status Definition](#)

[Provisional List](#)

[Documentation](#)

[Nomenclature](#)

[The Pennsylvania List](#)

CLASSIFICATION OF RECORDS

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Class I: An accepted species documented by identifiable specimen, diagnostic photograph, or diagnostic recording.

Class II: An accepted sight record documented independently by two or more observers.

Class III: An accepted sight record documented independently by one observer.

The records must meet Class I criteria to be included on the Official List. Species in Class II and Class III are accepted to the Provisional List until they can be elevated to Class I status through submission of physical evidence (specimen, photograph, sound recording)

STATUS DEFINITION

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Regular: Species recorded 8,9,or 10 of the last ten years.

Casual: Species recorded 4,5,6, or 7 of the last ten years.

Accidental: Species recorded 3 or fewer of the last ten years.

Extirpated: A previously regularly occurring species that has not been recorded in fifty years.

Extinct: Species which no longer exists.

Note: These definitions reflect the number of years in which the species has been recorded, not the number of occurrences within one year. Therefore, 100 occurrences in one year in the last ten years would still be classified as Accidental.

PROVISIONAL LIST

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Those species that have been accepted on the basis of sight records. If physical evidence becomes available, the species will be moved to the Official List.

DOCUMENTATION

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Bold-faced/Underlined species and any species not already on the list are classified as rarities, and sightings of these species therefore require a specimen, photograph, recording, or one or more written descriptions for consideration of acceptance by P.O.R.C. The distribution of certain rarities varies widely according to geographical location within Pennsylvania. Therefore, some species are exempt from the documentation requirement in certain areas and are noted in the list below. For example, Great Cormorant occurs annually along the Delaware River in Bucks, Delaware, and Philadelphia counties, but is extremely rare elsewhere in the state. For this reason, sightings of Great Cormorant in Bucks, Delaware and Philadelphia counties do not need documentation in order to be verified but require documentation for acceptance when found outside these areas.

NOMENCLATURE

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The taxonomic treatment and species sequence follows the changes made in the 42nd, 43rd, 44th, 45th and 46th Supplements to the 1998 AOU Checklist, as published in Auk 117:847-858 (2000); 119:897-906 (2002); 120:923-931 (2003); 121:985-995 (2004); and 122:1026-1031 (2005).

THE PENNSYLVANIA LIST

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- [Class I - 401 Species](#)
- [Extirpated - 4 Species](#)
- [Extinct - 2 Species](#)
- [Provisional List - 8 Species](#)
- [Recognizable Forms and Subspecies](#)

This fourth edition of the Official List contains 401 species in Class I, 4 species on the extirpated list and 2 on the extinct list. The Provisional list contains 8 species. There are 18 additions to the Official State List since the publication of the third edition in 2000. The additions are given below. The year in parenthesis indicates the original date of documentation if different from the date the species was added to the list.

Changes in the Pennsylvania List since the last edition that resulted from changes in the AOU checklist are given below.

Changes in English names:

Oldsquaw becomes Long-tailed Duck (*Clangula hyemalis*)
Rock Dove becomes Rock Pigeon (*Columba livia*)

Changes in scientific names:

Purple Gallinule (*Porphyryla martinica*) becomes (*Porphyrio martinica*)
Red Phalarope (*Phalaropus fulicaria*) becomes (*Phalaropus fulicarius*)
Eastern Screech-Owl (*Otus asio*) becomes (*Megascops asio*)
Snowy Owl (*Nyctea scandiaca*) becomes (*Bubo scandiacus*)
Boreal Chickadee (*Poecile hudsonicus*) becomes (*Poecile hudsonica*)

Ovenbird (*Seiurus aurocapillus*) becomes (*Seiurus aurocapilla*)
Blue Grosbeak (*Guiraca caerulea*) becomes (*Passerina caerulea*)

Change in the Pennsylvania List as a result of splits in the AOU checklist:

Common Snipe becomes Wilson's Snipe (*Gallinago delicata*) split from (*Gallinago gallinago*)

Addition to the Pennsylvania List as a result of splits in the AOU checklist:

Cackling Goose (*Branta hutchinsii*)

Additions to the Pennsylvania List:

Greater Shearwater - added in 1999 by photograph.
Band-rumped Storm-Petrel - added in 2006 by photograph (2003).
White-tailed Tropicbird – added in 2002 from specimen collected in 1954.
Anhinga - moved from Provisional List in 2006 by photograph.
Long-billed Curlew – added in 2005 by photograph.
Curlew Sandpiper – added in 2002 by photograph.
Long-tailed Jaeger – added in 2000 by photograph.
California Gull - added in 2002 by photograph.
Black Guillemot – added in 1999 by photograph.
Calliope Hummingbird – added in 2002 by photograph.
Hammond's Flycatcher – added in 2000 by photograph.
Ash-throated Flycatcher - added in 1997 by photograph.
Gray Kingbird - added in 2004 by photograph.
Fork-tailed Flycatcher – added in 2006 by photograph.
Cave Swallow – moved from Provisional List in 2006 by photograph.
Redwing – added in 2005 by photograph.
MacGillivray's Warbler – added in 2004 by photograph

CLASS I - 401 SPECIES

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Black-bellied Whistling-Duck (*Dendrocygna autumnalis*) Accidental.

Pink-footed Goose (*Anser brachyrhynchus*) Casual.

Greater White-fronted Goose (*Anser albifrons*) Regular.

Snow Goose (*Chen caerulescens*) Regular

Ross's Goose (*Chen rossii*) Regular.

Brant (*Branta bernicla*) Regular.

Cackling Goose (*Branta hutchinsii*) Regular

Canada Goose (*Branta canadensis*) Regular.

Mute Swan (*Cygnus olor*) Regular

Tundra Swan (*Cygnus columbianus*) Regular.

Wood Duck (*Aix sponsa*) Regular.

Gadwall (*Anas strepera*) Regular

Eurasian Wigeon (*Anas penelope*) Regular

American Wigeon (*Anas americana*) Regular

American Black Duck (*Anas rubripes*) Regular

Mallard (*Anas platyrhynchos*) Regular.

Blue-winged Teal (*Anas discors*) Regular

Cinnamon Teal (*Anas cyanoptera*) Accidental

Northern Shoveler (*Anas clypeata*) Regular

Northern Pintail (*Anas acuta*) Regular

Green-winged Teal (*Anas crecca*) Regular.

Canvasback (*Aythya valisineria*) Regular

Redhead (*Aythya americana*) Regular.

Ring-necked Duck (*Aythya collaris*) Regular

Tufted Duck (*Aythya fuligula*) Accidental.

Greater Scaup (*Aythya marila*) Regular.

Lesser Scaup (*Aythya affinis*) Regular.

King Eider (*Somateria spectabilis*) Accidental

Harlequin Duck (*Histrionicus histrionicus*) Accidental

White-winged Scoter (*Melanitta fusca*) Regular

Surf Scoter (*Melanitta perspicillata*) Regular

Black Scoter (*Melanitta nigra*) Regular.

Long-tailed Duck (*Clangula hyemalis*) Regular.

Bufflehead (*Bucephala albeola*) Regular.

Common Goldeneye (*Bucephala clangula*) Regular

Barrow's Goldeneye (*Bucephala islandica*) Accidental.

Hooded Merganser (*Lophodytes cucullatus*) Regular

Common Merganser (*Mergus merganser*) Regular

Red-breasted Merganser (*Mergus serrator*) Regular

Masked Duck (*Nomonyx dominicus*) Accidental

Ruddy Duck (*Oxyura jamaicensis*) Regular

Ring-necked Pheasant (*Phasianus colchicus*) Regular

Ruffed Grouse (*Bonasa umbellus*) Regular

Wild Turkey (*Meleagris gallopavo*) Regular.

Northern Bobwhite (*Colinus virginianus*) Regular.

Red-throated Loon (*Gavia stellata*) Regular.

Pacific Loon (*Gavia pacifica*) Accidental.

Common Loon (*Gavia immer*) Regular.

Pied-billed Grebe (*Podilymbus podiceps*) Regular.

Horned Grebe (*Podiceps auritus*) Regular.

Red-necked Grebe (*Podiceps grisegena*) Regular

Eared Grebe (*Podiceps nigricollis*) Regular.

Black-capped Petrel (*Pterodroma hasitata*) Accidental.

Cory's Shearwater (*Calonectris diomedea*) Accidental.

Greater Shearwater (*Puffinus gravis*) Accidental

Leach's Storm-Petrel (*Oceanodroma leucorhoa*) Accidental.

Band-rumped Storm-Petrel (*Oceanodroma castro*) Accidental

White-tailed Tropicbird (*Phaethon lepturus*) Accidental

Northern Gannet (*Morus bassanus*) Accidental.

American White Pelican (*Pelecanus erythrorhynchos*) Regular.

Brown Pelican (*Pelecanus occidentalis*) Accidental.

Double-crested Cormorant (*Phalacrocorax auritus*) Regular.

Great Cormorant (*Phalacrocorax carbo*) Regular.

Anhinga (*Anhinga anhinga*) Accidental.

Magnificent Frigatebird (*Fregata magnificens*) Accidental.

American Bittern (*Botaurus lentiginosus*) Regular.

Least Bittern (*Ixobrychus exilis*) Regular.

Great Blue Heron (*Ardea herodias*) Regular.

Great Egret (*Ardea alba*) Regular.

Snowy Egret (*Egretta thula*) Regular.

Little Blue Heron (*Egretta caerulea*) Regular.

Tricolored Heron (*Egretta tricolor*) Regular.

Cattle Egret (*Bubulcus ibis*) Regular.

Green Heron (*Butorides virescens*) Regular.

Black-crowned Night-Heron (*Nycticorax nycticorax*) Regular.

Yellow-crowned Night-Heron (*Nyctanassa violacea*) Regular.

White Ibis (*Eudocimus albus*) Casual

Glossy Ibis (*Plegadis falcinellus*) Regular.

Roseate Spoonbill (*Platalea ajaja*) Accidental

Wood Stork (*Mycteria americana*) Casual

Black Vulture (*Coragyps atratus*) Regular.

Turkey Vulture (*Cathartes aura*) Regular.

Osprey (*Pandion haliaetus*) Regular.

Swallow-tailed Kite (*Elanoides forficatus*) Casual

Mississippi Kite (*Ictinia mississippiensis*) Casual.

Bald Eagle (*Haliaeetus leucocephalus*) Regular.

Northern Harrier (*Circus cyaneus*) Regular.

Sharp-shinned Hawk (*Accipiter striatus*) Regular.

Cooper's Hawk (*Accipiter cooperii*) Regular.

Northern Goshawk (*Accipiter gentilis*) Regular.

Red-shouldered Hawk (*Buteo lineatus*) Regular.

Broad-winged Hawk (*Buteo platypterus*) Regular.

Swainson's Hawk (*Buteo swainsoni*) Accidental

Red-tailed Hawk (*Buteo jamaicensis*) Regular.

Rough-legged Hawk (*Buteo lagopus*) Regular.

Golden Eagle (*Aquila chrysaetos*) Regular

American Kestrel (*Falco sparverius*) Regular

Merlin (*Falco columbarius*) Regular

Gyr Falcon (*Falco rusticolus*) Accidental

Peregrine Falcon (*Falco peregrinus*) Regular.

Yellow Rail (*Coturnicops noveboracensis*) Accidental.

Black Rail (*Laterallus jamaicensis*) Accidental.

Clapper Rail (*Rallus longirostris*) Accidental.

King Rail (*Rallus elegans*) Casual

Virginia Rail (*Rallus limicola*) Regular.

Sora (*Porzana carolina*) Regular.

Spotted Rail (*Pardirallus maculatus*) Accidental.

Purple Gallinule (*Porphyrio martinica*) Accidental.

Common Moorhen (*Gallinula chloropus*) Regular.

American Coot (*Fulica americana*) Regular.

Sandhill Crane (*Grus canadensis*) Regular.

Black-bellied Plover (*Pluvialis squatarola*) Regular.

American Golden-Plover (*Pluvialis dominica*) Regular.

Snowy Plover (*Charadrius alexandrinus*) Accidental.

Wilson's Plover (*Charadrius wilsonia*) Accidental.

Semipalmated Plover (*Charadrius semipalmatus*) Regular.

Piping Plover (*Charadrius melodus*) Casual

Killdeer (*Charadrius vociferus*) Regular.

American Oystercatcher (*Haematopus palliatus*) Accidental.

Black-necked Stilt (*Himantopus mexicanus*) Casual.

American Avocet (*Recurvirostra americana*) Regular.

Greater Yellowlegs (*Tringa melanoleuca*) Regular.

Lesser Yellowlegs (*Tringa flavipes*) Regular.

Solitary Sandpiper (*Tringa solitaria*) Regular.

Willet (*Tringa semipalmata*) Regular.

Spotted Sandpiper (*Actitis macularius*) Regular.

Upland Sandpiper (*Bartramia longicauda*) Casual

Long-billed Curlew (*Numenius americanus*) Accidental

Whimbrel (*Numenius phaeopus*) Regular.

Hudsonian Godwit (*Limosa haemastica*) Casual

Marbled Godwit (*Limosa fedoa*) Casual.

Ruddy Turnstone (*Arenaria interpres*) Regular.

Red Knot (*Calidris canutus*) Regular.

Sanderling (*Calidris alba*) Regular.

Semipalmated Sandpiper (*Calidris pusilla*) Regular.

Western Sandpiper (*Calidris mauri*) Regular.

Least Sandpiper (*Calidris minutilla*) Regular.

White-rumped Sandpiper (*Calidris fuscicollis*) Regular.

Baird's Sandpiper (*Calidris bairdii*) Regular.

Pectoral Sandpiper (*Calidris melanotos*) Regular.

Purple Sandpiper (*Calidris maritima*) Casual

Dunlin (*Calidris alpina*) Regular.

Curlew Sandpiper (*Calidris ferruginea*) Accidental

Stilt Sandpiper (*Calidris himantopus*) Regular.

Buff-breasted Sandpiper (*Tryngites subruficollis*) Regular.

Ruff (*Philomachus pugnax*) Accidental.

Short-billed Dowitcher (*Limnodromus griseus*) Regular.

Long-billed Dowitcher (*Limnodromus scolopaceus*) Regular.

Wilson's Snipe (*Gallinago delicata*) Regular.

American Woodcock (*Scolopax minor*) Regular.

Wilson's Phalarope (*Phalaropus tricolor*) Regular.

Red-necked Phalarope (*Phalaropus lobatus*) Regular.

Red Phalarope (*Phalaropus fulicarius*) Casual

Pomarine Jaeger (*Stercorarius pomarinus*) Casual

Parasitic Jaeger (*Stercorarius parasiticus*) Casual.

Long-tailed Jaeger (*Stercorarius longicaudus*) Accidental

Laughing Gull (*Larus atricilla*) Regular.

Franklin's Gull (*Larus pipixcan*) Regular.

Little Gull (*Larus minutus*) Regular.

Black-headed Gull (*Larus ridibundus*) Regular.

Bonaparte's Gull (*Larus philadelphia*) Regular.

Mew Gull (*Larus canus*) Accidental.

Ring-billed Gull (*Larus delawarensis*) Regular.

California Gull (*Larus californicus*) Accidental

Herring Gull (*Larus argentatus*) Regular.

Thayer's Gull (*Larus thayeri*) Regular.

Iceland Gull (*Larus glaucoides*) Regular.

Lesser Black-backed Gull (*Larus fuscus*) Regular.

Glaucous Gull (*Larus hyperboreus*) Regular.

Great Black-backed Gull (*Larus marinus*) Regular.

Sabine's Gull (*Xema sabini*) Casual

Black-Legged Kittiwake (*Rissa tridactyla*) Casual.

Ross's Gull (*Rhodostethia rosea*) Accidental.

Gull-billed Tern (*Gelochelidon nilotica*) Casual

Caspian Tern (*Hydroprogne caspia*) Regular.

Royal Tern (*Thalasseus maximus*) Accidental.

Roseate Tern (*Sterna dougallii*) Accidental.

Common Tern (*Sterna hirundo*) Regular.

Arctic Tern (*Sterna paradisaea*) Casual

Forster's Tern (*Sterna forsteri*) Regular.

Least Tern (*Sternula antillarum*) Casual.

Sooty Tern (*Onychoprion fuscatus*) Accidental.

Black Tern (*Chlidonias niger*) Regular.

Black Skimmer (*Rynchops niger*) Casual.

Dovekie (*Alle alle*) Accidental.

Thick-billed Murre (*Uria lomvia*) Accidental.

Black Guillemot (*Cepphus grylle*) Accidental.

Ancient Murrelet (*Synthliboramphus antiquus*) Accidental.

Rock Pigeon (*Columba livia*) Regular.

Eurasian Collared-Dove (*Streptopelia decaocto*) Casual.

White-winged Dove (*Zenaida asiatica*) Accidental

Mourning Dove (*Zenaida macroura*) Regular.

Common Ground-Dove (*Columbina passerina*) Accidental.

Black-billed Cuckoo (*Coccyzus erythrophthalmus*) Regular.

Yellow-billed Cuckoo (*Coccyzus americanus*) Regular.

Barn Owl (*Tyto alba*) Regular.

Eastern Screech-Owl (*Megascops asio*) Regular.

Great Horned Owl (*Bubo virginianus*) Regular.

Snowy Owl (*Bubo scandiacus*) Regular.

Northern Hawk Owl (*Surnia ulula*) Accidental.

Barred Owl (*Strix varia*) Regular.

Great Gray Owl (*Strix nebulosa*) Accidental.

Long-eared Owl (*Asio otus*) Regular.

Short-eared Owl (*Asio flammeus*) Regular.

Boreal Owl (*Aegolius funereus*) Accidental.

Northern Saw-whet Owl (*Aegolius acadicus*) Regular.

Common Nighthawk (*Chordeiles minor*) Regular.

Chuck-will's-widow (*Caprimulgus carolinensis*) Casual.

Whip-poor-will (*Caprimulgus vociferus*) Regular

Chimney Swift (*Chaetura pelagica*) Regular.

Ruby-throated Hummingbird (*Archilochus colubris*) Regular.

Calliope Hummingbird (*Stellula calliope*) Accidental.

Rufous Hummingbird (*Selasphorus rufus*) Regular.

Belted Kingfisher (*Megaceryle alcyon*) Regular.

Red-headed Woodpecker (*Melanerpes erythrocephalus*) Regular.

Red-bellied Woodpecker (*Melanerpes carolinus*) Regular.

Yellow-bellied Sapsucker (*Sphyrapicus varius*) Regular.

Downy Woodpecker (*Picoides pubescens*) Regular.

Hairy Woodpecker (*Picoides villosus*) Regular

Black-backed Woodpecker (*Picoides arcticus*) Accidental.

Northern Flicker (*Colaptes auratus*) Regular.

Pileated Woodpecker (*Dryocopus pileatus*) Regular.

Olive-sided Flycatcher (*Contopus cooperi*) Regular.

Eastern Wood-Pewee (*Contopus virens*) Regular.

Yellow-bellied Flycatcher (*Empidonax flaviventris*) Regular.

Acadian Flycatcher (*Empidonax virescens*) Regular.

Alder Flycatcher (*Empidonax alnorum*) Regular.

Willow Flycatcher (*Empidonax traillii*) Regular.

Least Flycatcher (*Empidonax minimus*) Regular.

Hammond's Flycatcher (*Empidonax hammondii*) Accidental.

Pacific-slope Flycatcher (*Empidonax difficilis*) Accidental.

Eastern Phoebe (*Sayornis phoebe*) Regular.

Say's Phoebe (*Sayornis saya*) Accidental.

Vermilion Flycatcher (*Pyrocephalus rubinus*) Accidental.

Ash-throated Flycatcher (*Myiarchus cinerascens*) Accidental.

Great Crested Flycatcher (*Myiarchus crinitus*) Regular.

Western Kingbird (*Tyrannus verticalis*) Casual.

Eastern Kingbird (*Tyrannus tyrannus*) Regular.

Gray Kingbird (*Tyrannus dominicensis*) Accidental.

Scissor-tailed Flycatcher (*Tyrannus forficatus*) Accidental.

Fork-tailed Flycatcher (*Tyrannus savana*) Accidental.

Loggerhead Shrike (*Lanius ludovicianus*) Regular

Northern Shrike (*Lanius excubitor*) Casual.

White-eyed Vireo (*Vireo griseus*) Regular.

Yellow-throated Vireo (*Vireo flavifrons*) Regular.

Blue-headed Vireo (*Vireo solitarius*) Regular.

Warbling Vireo (*Vireo gilvus*) Regular.

Philadelphia Vireo (*Vireo philadelphicus*) Regular.

Red-eyed Vireo (*Vireo olivaceus*) Regular

Blue Jay (*Cyanocitta cristata*) Regular.

American Crow (*Corvus brachyrhynchos*) Regular.

Fish Crow (*Corvus ossifragus*) Regular.

Common Raven (*Corvus corax*) Regular

Horned Lark (*Eremophila alpestris*) Regular.

Purple Martin (*Progne subis*) Regular.

Tree Swallow (*Tachycineta bicolor*) Regular.

Northern Rough-winged Swallow (*Stelgidopteryx serripennis*) Regular.

Bank Swallow (*Riparia riparia*) Regular.

Cliff Swallow (*Petrochelidon pyrrhonota*) Regular.

Cave Swallow (*Petrochelidon fulva*) Accidental.

Barn Swallow (*Hirundo rustica*) Regular.

Carolina Chickadee (*Poecile carolinensis*) Regular

Black-capped Chickadee (*Poecile atricapillus*) Regular.

Boreal Chickadee (*Poecile hudsonica*) Accidental.

Tufted Titmouse (*Baeolophus bicolor*) Regular.

Red-breasted Nuthatch (*Sitta canadensis*) Regular.

White-breasted Nuthatch (*Sitta carolinensis*) Regular.

Brown Creeper (*Certhia americana*) Regular.

Carolina Wren (*Thryothorus ludovicianus*) Regular.

Bewick's Wren (*Thryomanes bewickii*) Accidental.

House Wren (*Troglodytes aedon*) Regular.

Winter Wren (*Troglodytes troglodytes*) Regular.

Sedge Wren (*Cistothorus platensis*) Casual.

Marsh Wren (*Cistothorus palustris*) Regular.

Golden-crowned Kinglet (*Regulus satrapa*) Regular.

Ruby-crowned Kinglet (*Regulus calendula*) Regular.

Blue-gray Gnatcatcher (*Poliophtila caerulea*) Regular.

Northern Wheatear (*Oenanthe oenanthe*) Accidental.

Eastern Bluebird (*Sialia sialis*) Regular.

Mountain Bluebird (*Sialia currucoides*) Accidental.

Townsend's Solitaire (*Myadestes townsendi*) Accidental.

Veery (*Catharus fuscescens*) Regular.

Gray-cheeked Thrush (*Catharus minimus*) Regular.

Bicknell's Thrush (*Catharus bicknelli*) Accidental

Swainson's Thrush (*Catharus ustulatus*) Regular.

Hermit Thrush (*Catharus guttatus*) Regular.

Wood Thrush (*Hylocichla mustelina*) Regular.

Redwing (*Turdus iliacus*) Accidental.

American Robin (*Turdus migratorius*) Regular.

Varied Thrush (*Ixoreus naevius*) Casual.

Gray Catbird (*Dumetella carolinensis*) Regular.

Northern Mockingbird (*Mimus polyglottos*) Regular.

Brown Thrasher (*Toxostoma rufum*) Regular.

European Starling (*Sturnus vulgaris*) Regular.

American Pipit (*Anthus rubescens*) Regular.

Bohemian Waxwing (*Bombycilla garrulus*) Casual.

Cedar Waxwing (*Bombycilla cedrorum*) Regular.

Blue-winged Warbler (*Vermivora pinus*) Regular.

Golden-winged Warbler (*Vermivora chrysoptera*) Regular.

Tennessee Warbler (*Vermivora peregrina*) Regular.

Orange-crowned Warbler (*Vermivora celata*) Regular.

Nashville Warbler (*Vermivora ruficapilla*) Regular.

Northern Parula (*Parula americana*) Regular.

Yellow Warbler (*Dendroica petechia*) Regular.

Chestnut-sided Warbler (*Dendroica pensylvanica*) Regular.

Magnolia Warbler (*Dendroica magnolia*) Regular.

Cape May Warbler (*Dendroica tigrina*) Regular.

Black-throated Blue Warbler (*Dendroica caerulescens*) Regular.

Yellow-rumped Warbler (*Dendroica coronata*) Regular.

Black-throated Gray Warbler (*Dendroica nigrescens*) Casual.

Black-throated Green Warbler (*Dendroica virens*) Regular.

Townsend's Warbler (*Dendroica townsendi*) Accidental.

Blackburnian Warbler (*Dendroica fusca*) Regular.

Yellow-throated Warbler (*Dendroica dominica*) Regular.

Pine Warbler (*Dendroica pinus*) Regular.

Kirtland's Warbler (*Dendroica kirtlandii*) Casual.

Prairie Warbler (*Dendroica discolor*) Regular.

Palm Warbler (*Dendroica palmarum*) Regular.

Bay-breasted Warbler (*Dendroica castanea*) Regular.

Blackpoll Warbler (*Dendroica striata*) Regular.

Cerulean Warbler (*Dendroica cerulea*) Regular.

Black-and-white Warbler (*Mniotilta varia*) Regular.

American Redstart (*Setophaga ruticilla*) Regular.

Prothonotary Warbler (*Protonotaria citrea*) Regular.

Worm-eating Warbler (*Helmitheros vermivorum*) Regular.

Swainson's Warbler (*Limnothlypis swainsonii*) Casual.

Ovenbird (*Seiurus aurocapilla*) Regular.

Northern Waterthrush (*Seiurus noveboracensis*) Regular.

Louisiana Waterthrush (*Seiurus motacilla*) Regular.

Kentucky Warbler (*Oporornis formosus*) Regular.

Connecticut Warbler (*Oporornis agilis*) Regular.

Mourning Warbler (*Oporornis philadelphia*) Regular.

MacGillivray's Warbler (*Oporornis tolmiei*) Accidental.

Common Yellowthroat (*Geothlypis trichas*) Regular.

Hooded Warbler (*Wilsonia citrina*) Regular.

Wilson's Warbler (*Wilsonia pusilla*) Regular.

Canada Warbler (*Wilsonia canadensis*) Regular.

Yellow-breasted Chat (*Icteria virens*) Regular.

Summer Tanager (*Piranga rubra*) Regular.

Scarlet Tanager (*Piranga olivacea*) Regular.

Western Tanager (*Piranga ludoviciana*) Accidental.

Green-tailed Towhee (*Pipilo chlorurus*) Accidental.

Spotted Towhee (*Pipilo maculatus*) Accidental

Eastern Towhee (*Pipilo erythrophthalmus*) Regular

American Tree Sparrow (*Spizella arborea*) Regular.

Chipping Sparrow (*Spizella passerina*) Regular.

Clay-colored Sparrow (*Spizella pallida*) Regular.

Field Sparrow (*Spizella pusilla*) Regular.

Vesper Sparrow (*Poocetes gramineus*) Regular.

Lark Sparrow (*Chondestes grammacus*) Casual.

Lark Bunting (*Calamospiza melanocorys*) Accidental.

Savannah Sparrow (*Passerculus sandwichensis*) Regular.

Grasshopper Sparrow (*Ammodramus savannarum*) Regular.

Henslow's Sparrow (*Ammodramus henslowii*) Regular.

Le Conte's Sparrow (*Ammodramus leconteii*) Casual.

Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni*) Regular.

Saltmarsh Sharp-tailed Sparrow (*Ammodramus caudacutus*) Accidental

Seaside Sparrow (*Ammodramus maritimus*) Accidental.

Fox Sparrow (*Passerella iliaca*) Regular.

Song Sparrow (*Melospiza melodia*) Regular.

Lincoln's Sparrow (*Melospiza lincolni*) Regular.

Swamp Sparrow (*Melospiza georgiana*) Regular.

White-throated Sparrow (*Zonotrichia albicollis*) Regular

Harris's Sparrow (*Zonotrichia querula*) Casual.

White-crowned Sparrow (*Zonotrichia leucophrys*) Regular.

Golden-crowned Sparrow (*Zonotrichia atricapilla*) Accidental.

Dark-eyed Junco (*Junco hyemalis*) Regular.

Lapland Longspur (*Calcarius lapponicus*) Regular.

Snow Bunting (*Plectrophenax nivalis*) Regular.

Northern Cardinal (*Cardinalis cardinalis*) Regular.

Rose-breasted Grosbeak (*Pheucticus ludovicianus*) Regular.

Black-headed Grosbeak (*Pheucticus melanocephalus*) Accidental.

Blue Grosbeak (*Passerina caerulea*) Regular.

Lazuli Bunting (*Passerina amoena*) Accidental.

Indigo Bunting (*Passerina cyanea*) Regular.

Painted Bunting (*Passerina ciris*) Casual.

Dickcissel (*Spiza americana*) Regular.

Bobolink (*Dolichonyx oryzivorus*) Regular.

Red-winged Blackbird (*Agelaius phoeniceus*) Regular.

Eastern Meadowlark (*Sturnella magna*) Regular.

Western Meadowlark (*Sturnella neglecta*) Casual.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) Regular.

Rusty Blackbird (*Euphagus carolinus*) Regular.

Brewer's Blackbird (*Euphagus cyanocephalus*) Regular.

Common Crackle (*Quiscalus quiscula*) Regular.

Brown-headed Cowbird (*Molothrus ater*) Regular.

Orchard Oriole (*Icterus spurius*) Regular.

Baltimore Oriole (*Icterus galbula*) Regular

Bullock's Oriole (*Icterus bullockii*) Accidental

Brambling (*Fringilla montifringilla*) Accidental.

Pine Grosbeak (*Pinicola enucleator*) Regular.

Purple Finch (*Carpodacus purpureus*) Regular.

House Finch (*Carpodacus mexicanus*) Regular.

Red Crossbill (*Loxia curvirostra*) Regular.

White-winged Crossbill (*Loxia leucoptera*) Regular.

Common Redpoll (*Carduelis flammea*) Regular.

Hoary Redpoll (*Carduelis hornemanni*) Accidental

Pine Siskin (*Carduelis pinus*) Regular.

American Goldfinch (*Carduelis tristis*) Regular.

Evening Grosbeak (*Coccothraustes vespertinus*) Regular.

House Sparrow (*Passer domesticus*) Regular.

EXTIRPATED - 4 SPECIES

[Back to top](#)

Greater Prairie-Chicken (*Tympanuchus cupido*)

Eskimo Curlew (*Numenius borealis*)

Brown-headed Nuthatch (*Sitta pusilla*)

Bachman's Sparrow (*Aimophila aestivalis*)

EXTINCT - 2 SPECIES

[Back to top](#)

Passenger Pigeon (*Ectopistes migratorius*)

Carolina Parakeet (*Conuropsis carolinensis*)

TOTAL - 407 SPECIES

PROVISIONAL LIST

[Back to top](#)

Although no species is accepted on the official Pennsylvania list without documentation by specimen, photograph or tape-recording, the Committee may accept sight records (i.e. for species not on the state list) which are supported by written details alone. Such species are added to this “Provisional List”. If documentation in the form of specimen, photograph, or tape recording finally becomes available, the species is then moved to the state list.

Common Eider (*Somateria mollissima*) Accidental
Northern Fulmar (*Fulmarus glacialis*) Accidental.
Black-tailed Godwit (*Limosa limosa*) Accidental
Surfbird (*Aphriza virgata*) Accidental.
Band-tailed Pigeon (*Patagioenas fasciata*) Accidental
apus sp. (*Apus*). Accidental
Lewis’s Woodpecker (*Melanerpes lewis*) Accidental
Violet-green Swallow (*Tachycineta thalassina*) Accidental

RECOGNIZABLE FORMS AND SUBSPECIES

[Back to top](#)

This is a list of recognizable forms and subspecies that have occurred in Pennsylvania and which documentation of future sightings is requested.

“Black” Brant (*Branta bernicla nigricans*).
Green-winged (Common) Teal (*Anas crecca crecca*).
“Eastern” Willet (*Catoptrophorus semipalmatus semipalmatus*).
Yellow-rumped (Audubon’s) Warbler (*Dendroica coronata auduboni*).
White-crowned (Gambell’s) Sparrow (*Zonotrichia leucophrys gambelii*).
Dark-eyed (Oregon) Junco (*Junco hyemalis thurberi*).

Acknowledgements:

Everyone who has birded in Pennsylvania and reported their record(s) for publication has contributed to this Official List. P.O.R.C. wishes to thank the many observers who took the time to submit photographs and written documentation of bird species in Pennsylvania.

REQUESTS FOR CORRECTIONS AND RECORDS

This Official List should not be considered as the final word on Pennsylvania birdlife. It is only our knowledge to the present, and will be outdated soon after it is published. Undoubtedly, there will be errors, typographical or technical, and perhaps omissions. When these are noted or when authentic records are obtained for species that are not listed, that information should be forwarded to the Pennsylvania Ornithological Records, Nick Pulcinella, Secretary. 613 Howard Road, West Chester, PA 19380 nickpulcinella@verizon.net.



Appendix G—PNDI Correspondence

2010-0414

Lat/Long

COPY

Mackin Engineering Company
 R.I.D.C. Park West
 117 Industry Drive
 Pittsburgh, PA 15276-1015
 Phone: (412) 788-0472
 Fax: (412) 787-3588



January 19, 2010

Fish and Wildlife Service
 David Densmore
 Supervisor
 United States Department of Interior
 Pennsylvania Field Office
 315 South Allen Street, Suite 322
 State College, PA 16801-4850



U.S. FISH AND WILDLIFE SERVICE

Pennsylvania Field Office
 315 South Allen Street, Suite 322
 State College, Pennsylvania 16801-4850



No federally listed species under our jurisdiction is known or likely to occur in the project area. This determination is valid for two years. Should project plans change, or if additional information on listed species become available, this determination may be reconsidered.

Leticia Cole

Acting Supervisor 3/25/10

RE: Turtle Creek Greenway Plan
 Allegheny and Westmoreland Counties, PA
 Threatened or Endangered Species
 Mackin Project No. 4715-001

Dear Mr. Densmore:

Mackin Engineering Company has been contracted by the Regional Trail Corporation (RTC) in partnership with the Turtle Creek Watershed Association (TCWA) to prepare the Turtle Creek Greenway Plan (TCGP). The project area encompasses 6 miles of the Turtle Creek stream valley, beginning at Duff Park in the Municipality of Murrysville, through Penn Township and the Municipality of Monroeville, ending in Trafford Borough. Thus, the project area encompasses portions of both Allegheny and Westmoreland Counties, Pennsylvania. The study area for the project is located on the Braddock and Murrysville quadrangles of the 7.5 USGS map series. Further details regarding the study area are provided on the enclosed map.

The purpose of the TCGP is to protect the natural resources and green space within the Turtle Creek Greenway and to identify potential areas for conservation, recreation, preservation, and restoration. The completed plan will result in specific management strategies to address the plan goals based on existing opportunities, constraints, and in consideration of public input. These strategies will be aimed at the preservation of the Greenway as a natural and recreational area for surrounding communities and will identify organizations and project partners integral to the project implementation.

As a Greenways Plan, this project will not have any impacts to any federally or state listed threatened or endangered species or species of special concern. We are requesting a list of identified species under your jurisdiction within the project area to include in the existing natural resources section of the plan.



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Natural Diversity Section
450 Robinson Lane
Bellefonte, PA 16823-9620
(814) 359-5237 Fax: (814) 359-5175

March 17, 2010

IN REPLY REFER TO:
SIR# 33288

Jennifer Yeckel
Mackin Engineering Company
R.I.D.C. Park West
117 Industry Drive
Pittsburgh, Pennsylvania 15275

RE: **Species Impact Review (SIR) - Rare, Candidate, Threatened and Endangered Species
Turtle Creek Greenway Plan
Allegheny and Westmoreland Counties, Pennsylvania**

Dear Ms. Yeckel:

I have examined the map accompanying your recent correspondence, which shows the location for the above-referenced project. Based on records maintained in the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files, the state candidate American brook lamprey (*Lampetra appendix*) is known from the vicinity of the project.

This fish species is especially vulnerable to physical (dredging, rip-rap, etc.) and chemical (pH, dissolved oxygen, temperature, heavy metals and organic contaminants) changes to the aquatic environment. Although the mobile adults of this protected fish species may be capable of moving away from an instream project area, their spawning grounds (including eggs, fry, and immature fish) are vulnerable to burial, crushing by equipment, and siltation from in-stream construction projects. We are concerned about potential impacts to the fish, eggs and hatching fry from any in-stream work associated with this project. Therefore, we request that **all in-stream activity be avoided from March 15 through June 15 in order to avoid adverse impacts during the spawning season for this species.** Likewise, all work should be done during low flow periods, and strict erosion and sedimentation control measures need to be employed. Provided that these recommendations are followed, best management practices are employed, and an approved strict erosion and sedimentation control plan is maintained, then I do not anticipate the proposed activity to have any significant adverse impacts to the species of special concern or any other rare or protected species under Pennsylvania Fish & Boat Commission jurisdiction.

If you have any questions regarding this response, please contact Nevin Welte of my staff at (412) 586-2334 and refer to the SIR number at the top of this letter. Thank you for your cooperation and attention to this matter of threatened and endangered species conservation.

Sincerely,


Christopher A. Urban, Chief
Natural Diversity Section

CAU/NTW
c: DEP-NW Region

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.



February 16, 2010

Jennifer Yeckel
Macklin Engineering Company
RIDC Park West
117 Industry Drive
Pittsburgh, PA 15275-1015

| | |
|--|---|
| MACKLIN ENGINEERING COMPANY | |
| Project No. _____ | |
| <input type="checkbox"/> IVM | <input type="checkbox"/> BDB |
| <input type="checkbox"/> DIM | <input type="checkbox"/> SJP |
| <input type="checkbox"/> TER | <input type="checkbox"/> LAL |
| <input type="checkbox"/> RPP | <input type="checkbox"/> VJC |
| <input type="checkbox"/> MHD | <input type="checkbox"/> _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Correspondence File | <input type="checkbox"/> Contract File |
| <input type="checkbox"/> Administration File | <input type="checkbox"/> Marketing File |
| <input type="checkbox"/> Enclosures: _____ | Dept. _____ |

PNDI Number: 20559

COPY

Re: Turtle Creek Greenway Plan
Cities of Murrysville and Monroeville, Trafford Borough, and Penn Township ; Allegheny and Westmoreland Counties

Dear Ms. Yeckel,

Thank you for submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number 20559 for review. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources of concern under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

This correspondence is only an informational letter to enable more appropriate project planning before a project is formally submitted to DCNR for review. If any earth disturbance is planned or more detailed project information becomes available, please submit this project to our office for further review of potential impacts to the attached species list. Our recommendation is that a qualified botanist should establish more detailed presence or absence and location data for the species listed below. DCNR would be willing to assist Macklin Engineering and carry out a botanical survey, if desired, for the sensitive area within the Turtle Creek Greenway Plan. **Again, this letter DOES NOT provide approval from DCNR for any earth disturbance associated with this project.**

PNDI records indicate that the following Pennsylvania plant species of special concern under DCNR's jurisdiction have previously been found **within the proposed project location**:

Trillium nivale (Snow trillium) PA Rare Status: Often found in moist woods; survey should be conducted from late March to early April. Within the proposed Greenway, this species was found along the lower slopes of a northeast facing stream bank (Simpson Run) in moist soils in a tulip poplar / sugar maple forest. The included map provides location information for this species and potential habitat areas.

PNDI records indicate that the following Biological Diversity Area (BDA) delineated by the Western Pennsylvania Conservancy during the Allegheny County Natural Inventory is located **within the proposed project location**:

Simpson Run BDA (High Value Site) - This site is a maturing, mesic central forest community along a northern tributary to Turtle Creek, Simpson Run. Simpson Run enters Turtle Creek just downstream of the Saunders Station Road crossing. This BDA has been recognized as a special species habitat, especially lower southwestern slopes of the valley which are occupied by tulip poplar and sugar maple woods.

This response represents the most up-to-date summary of the PNDI data files and is valid for one (1) year from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on-site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

This finding applies to impacts to DCNR only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure the U.S. Fish and Wildlife Service, PA Game Commission, and the Pennsylvania Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,

Mr. Kelly L. Sitch, Environmental Review Specialist FOR Chris Firestone, Wild Plant Program Mgr.
Ph: 717-425-5370 ~ Fax: 717-772-0271 ~ c-ksitch@state.pa.us

conserve

sustain

enjoy

P.O. Box 8552, Harrisburg, PA 17015-8552 717-787-3444 (fax) 717-772-0271

Snow trillium (*Trillium nivale*)

Pennsylvania Plant Species of Concern

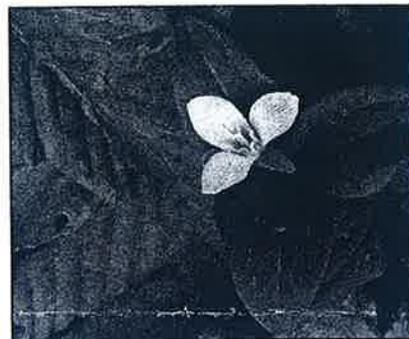
State Rank: S3 (vulnerable), Global Rank: G4 (apparently secure)

What it looks like:

Snow trillium is a small member of the lily family, growing only up to 15 centimeters (about 6 inches) tall. Its structure is very simple: a single stem rises from a short, thick rhizome (underground stem) to a single whorl of leaves, then a single flower. The seeds bear fatty elaiosomes, which attract ants to carry seeds away from the parent plant. Individual plants may live more than eight years.

The **flower** has three white, oval-shaped petals above three slenderer sepals; they are about 4 cm (2 in) across or smaller. Flowering occurs during late February and March.

Three **leaves** are arranged in a single whorl below the flower. They are oval to triangular with a few prominent parallel veins, and from 3 to 5 cm (1.5 to 2 in) long.



Thomas G. Barnes @ USDA-NRCS PLANTS Database - Barnes, T.G. & S.W. Francis. 2004. *Wildflowers and ferns of Kentucky*. University Press of Kentucky.

Where it is found:

Snow trillium grows in wet, fertile woodlands from Pennsylvania west to North Dakota and Nebraska and south to Virginia. It is a calciphile, preferring soil with high limestone content.

Why it is rare:

Threats to snow trillium include habitat destruction by logging and quarrying, grazing in the Midwest, and competition from in-

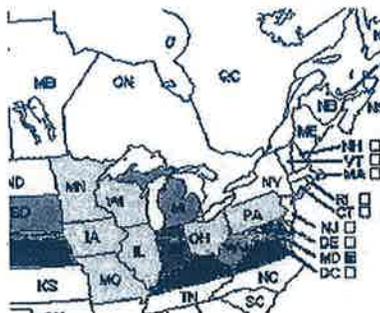
Pennsylvania Distribution by County



▲ current data ■ records > 30 years old (1975)
Pennsylvania Natural Heritage Program data 2005

North American State/Province Conservation Status

Map by NatureServe (August 2007)



State/Province Status Ranks

- SX – presumed extirpated
- SH – possibly extirpated
- S1 – critically imperiled
- S2 – imperiled
- S3 – vulnerable
- S4 – apparently secure
- S5 – secure
- Not ranked/under review

vasive species in some areas. Its populations are often small and widely scattered across its range.

Conservation considerations:

Snow trillium can most benefit from preservation of undisturbed habitat, with consideration given to save areas large enough for population expansion. Control or removal of invasive exotic competitors will also help.



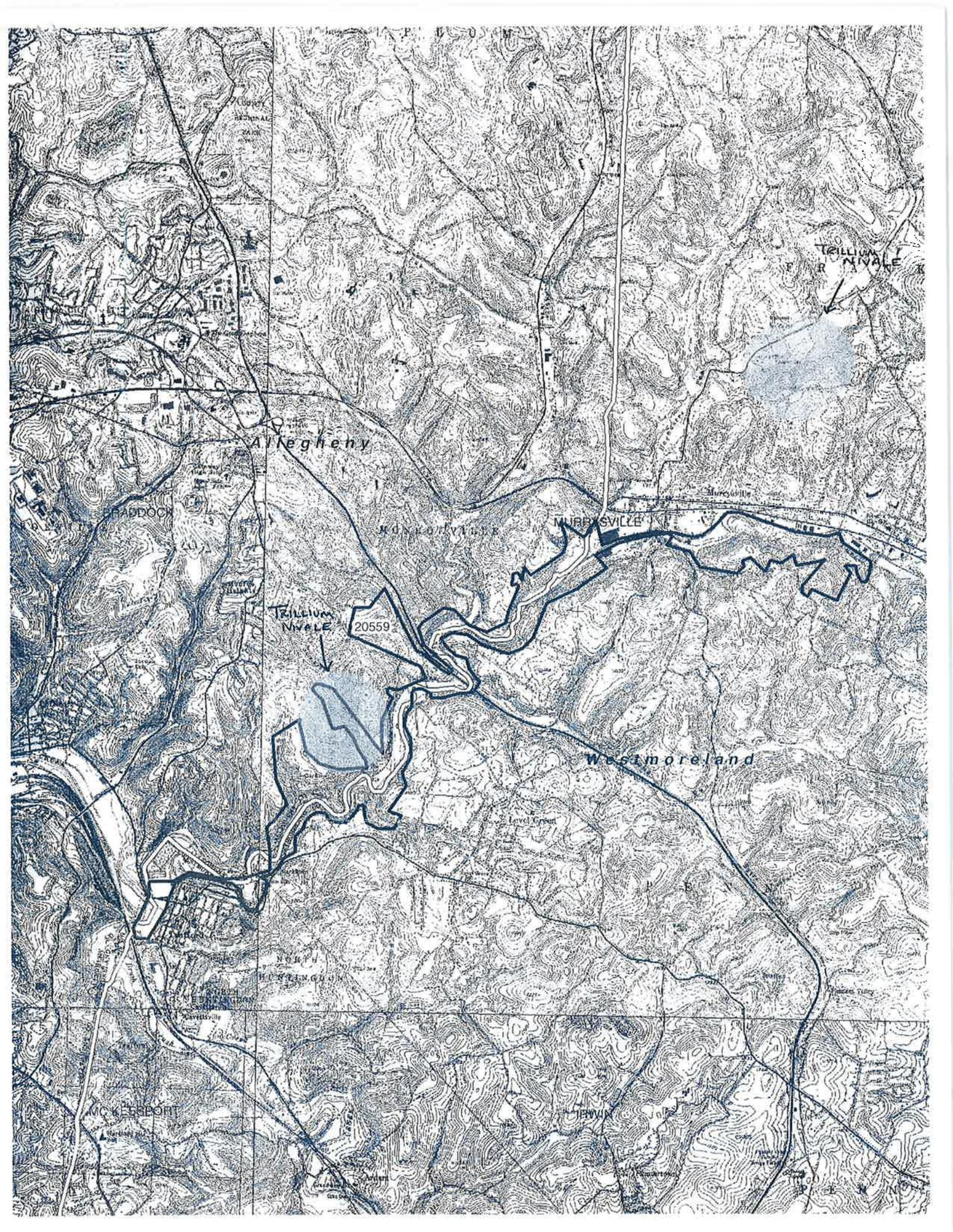
Pennsylvania Natural Heritage Program



Saving the places we care about

References

- Gleason, Henry A. and Arthur Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. Second ed. New York: The New York Botanical Garden. 834.
- Holmgren, Noel H. 1998. *The Illustrated Companion to Gleason and Cronquist's Manual*. New York: The New York Botanical Garden. 795.
- NatureServe. 2007. *NatureServe Explorer: An online encyclopedia of life* [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 31, 2007).
- Neson, G.L. and J.C. LaDuke. 1985. *Biology of Trillium nivale (Lilaceae)* [Abstract]. *Canadian Journal of Botany*. 63(1): 7-14.
- Smith, Brent H., Paul D. Forman, and Amy E. Boyd. 1989. *Spatial Patterns of Seed Dispersal and Predation of Two Myrmecochorous Forest Herbs*. *Ecology*, 70(6): 1649-56.
- United States Department of Agriculture - Natural Resources Conservation Service. 2005. *The PLANTS Database* [web application]. National Plant Data Center, Baton Rouge, Louisiana 70874-4490 USA. Available at <http://plants.usda.gov>. Accessed 13 January 2005.





COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA GAME COMMISSION
2001 ELMERTON AVENUE, HARRISBURG, PA
17110

*"TO MANAGE ALL WILD BIRDS, MAMMALS AND THEIR HABITATS
FOR CURRENT AND FUTURE GENERATIONS."*

PNDI Project Review

January 26, 2010

Ms. Jennifer Yeckel
Mackin Engineering Company
R.I.D.C. Park West
117 Industry Drive
Pittsburgh, PA 15275-1015

PNDI Project Review
Turtle Creek Greenway Plan
Allegheny and Westmoreland Counties, PA
M.P. # 4715-001

Dear Ms. Yeckel:

Thank you for submitting information about the above referenced project so that a Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review could be conducted for this project. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

No Impacts Are Anticipated

PNDI records indicate that there are no species or resources of concern located in the vicinity of the project areas. Based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no further coordination with the PGC will be necessary for this (these) project(s) at this time.

This response represents the most up-to-date summary of the PNDI data files and is valid for one (1) year from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Jennifer Yeckel
COPY
FEB 01 2010

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,



James R. Leigey
Wildlife Impact Review Coordinator
Division of Environmental Planning
And Habitat Protection
Bureau of Wildlife Habitat Management
Phone: 717-787-4250, Extension 3128
Fax: 717-787-6957
E-Mail: jleigey@state.pa.us

A PNHP Partner



Pennsylvania Natural Heritage Program

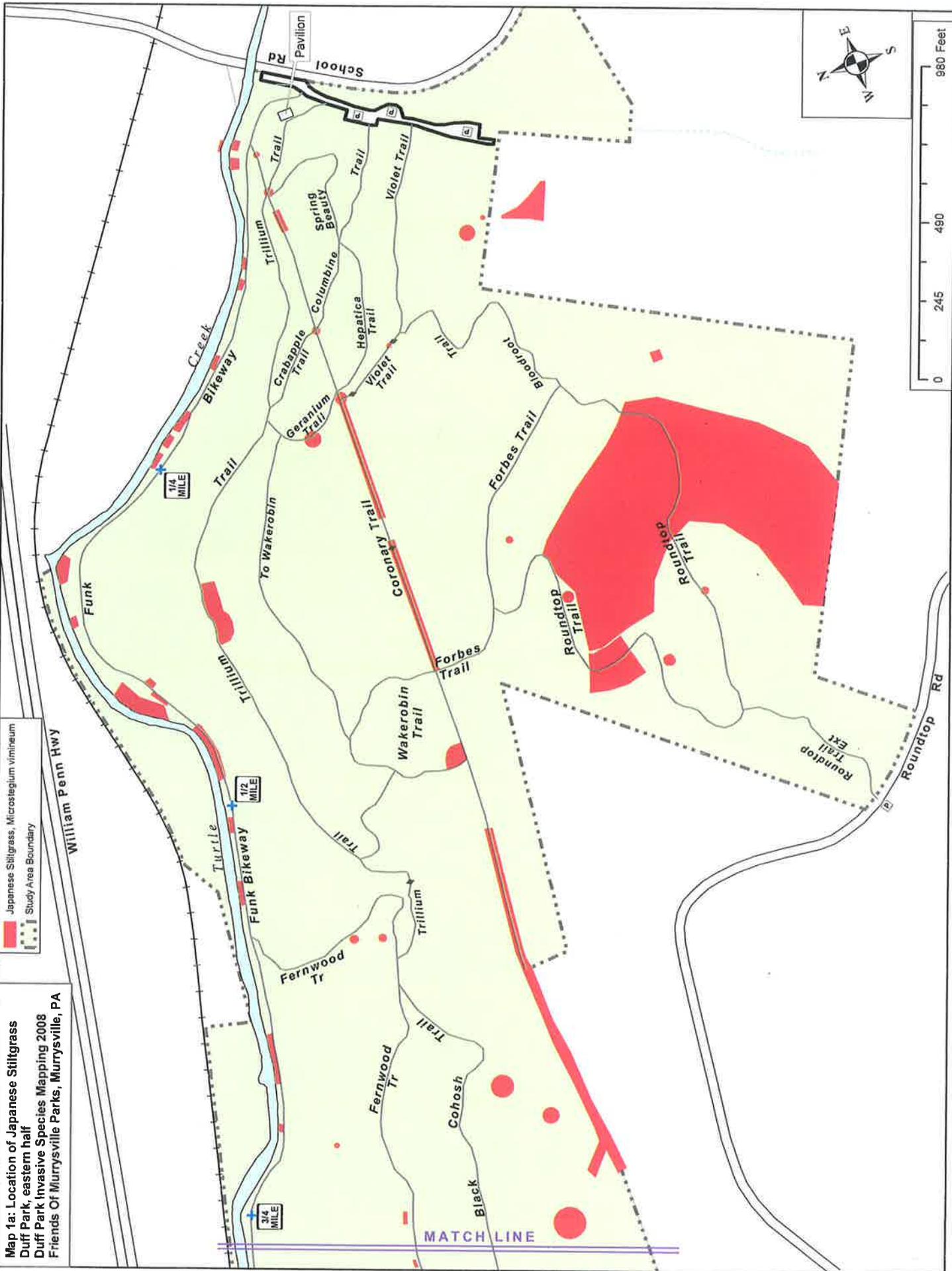
Cc: File

Appendix H—Invasive Species Mapping for Duff Park



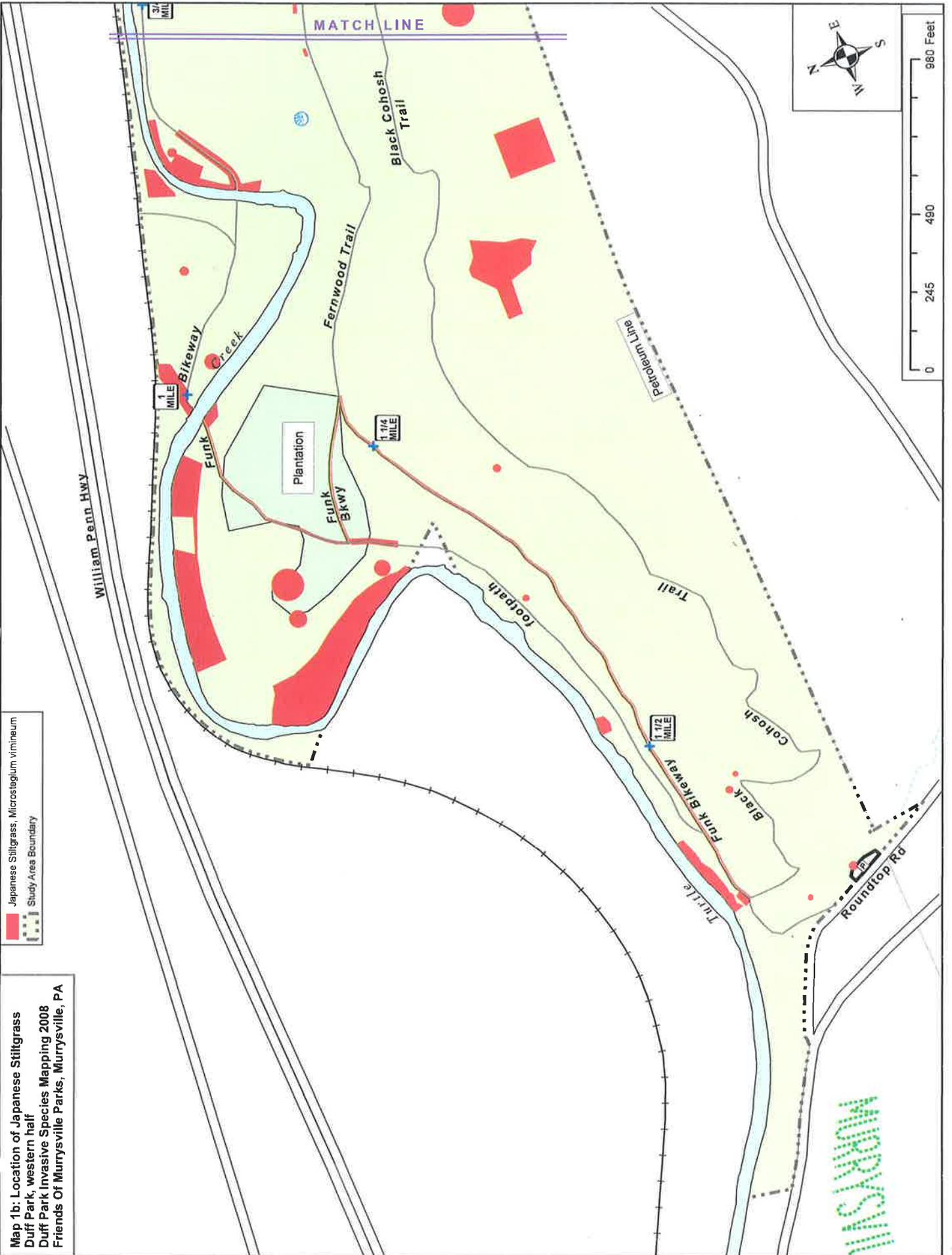
Map 1a: Location of Japanese Stiltgrass
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Japanese Stiltgrass, *Microstegium vimineum*
 Study Area Boundary



Map 1b: Location of Japanese Stiltgrass
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

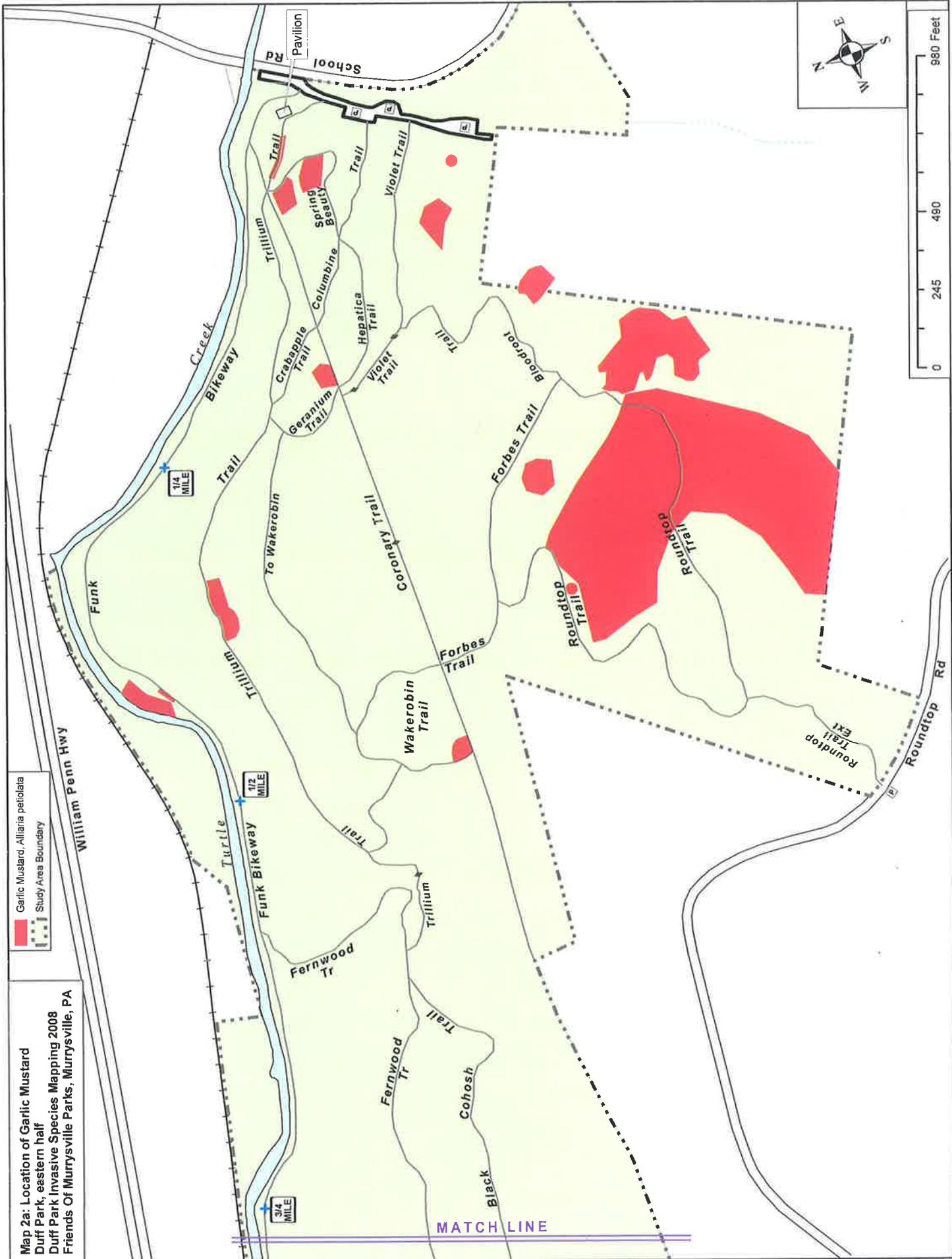
 Japanese Stiltgrass, *Microstegium vimineum*
 Study Area Boundary



MURRYSVILLE

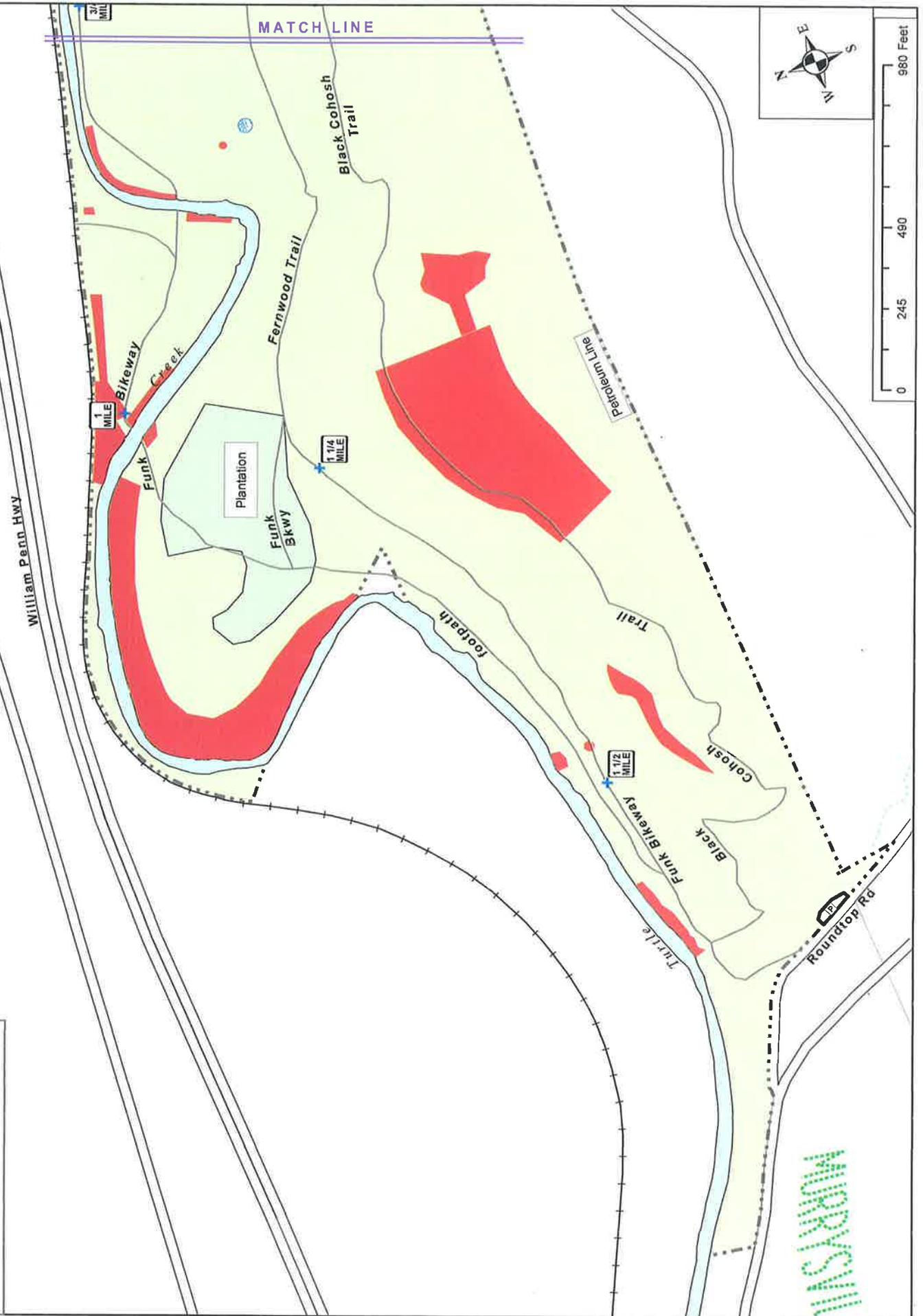
Map 2a: Location of Garlic Mustard
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

Garlic Mustard, *Alliaria petiolata*
 Study Area Boundary



Map 2b: Location of Garlic Mustard
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

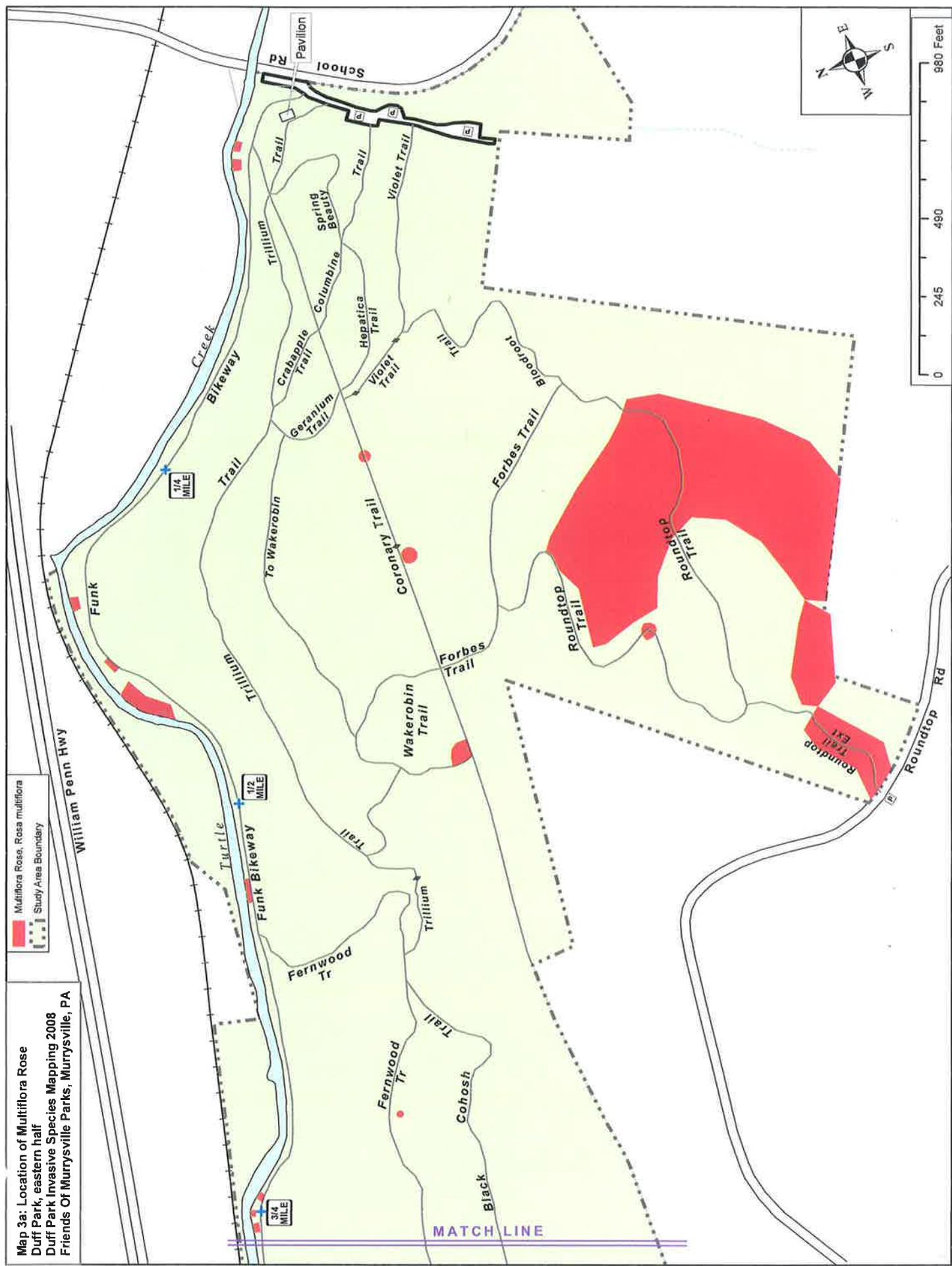
 Garlic Mustard, *Alliaria petiolata*
 Study Area Boundary



MURRYSVILLE

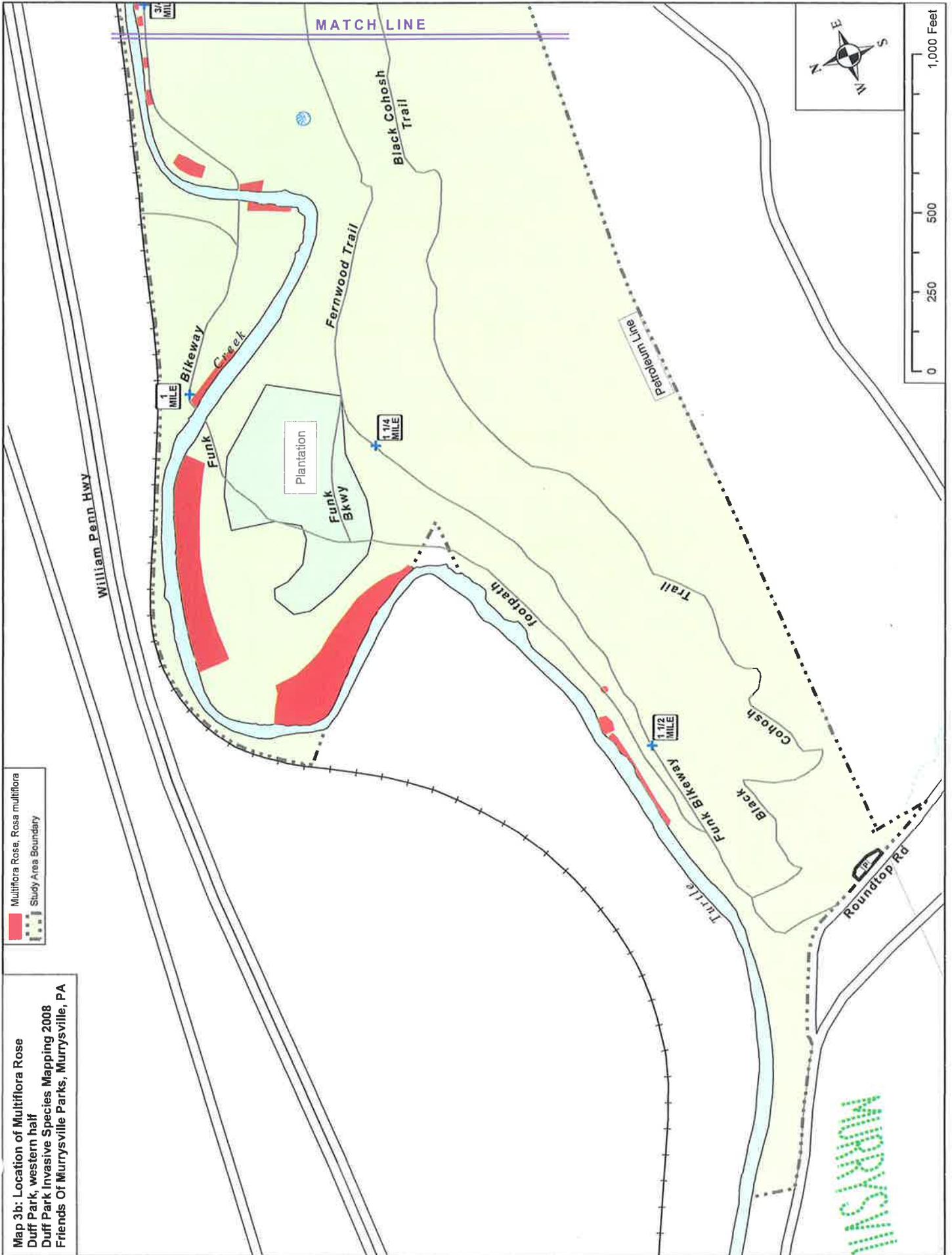
Map 3a: Location of Multiflora Rose
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Multiflora Rose, *Rosa multiflora*
 Study Area Boundary



Map 3b: Location of Multiflora Rose
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

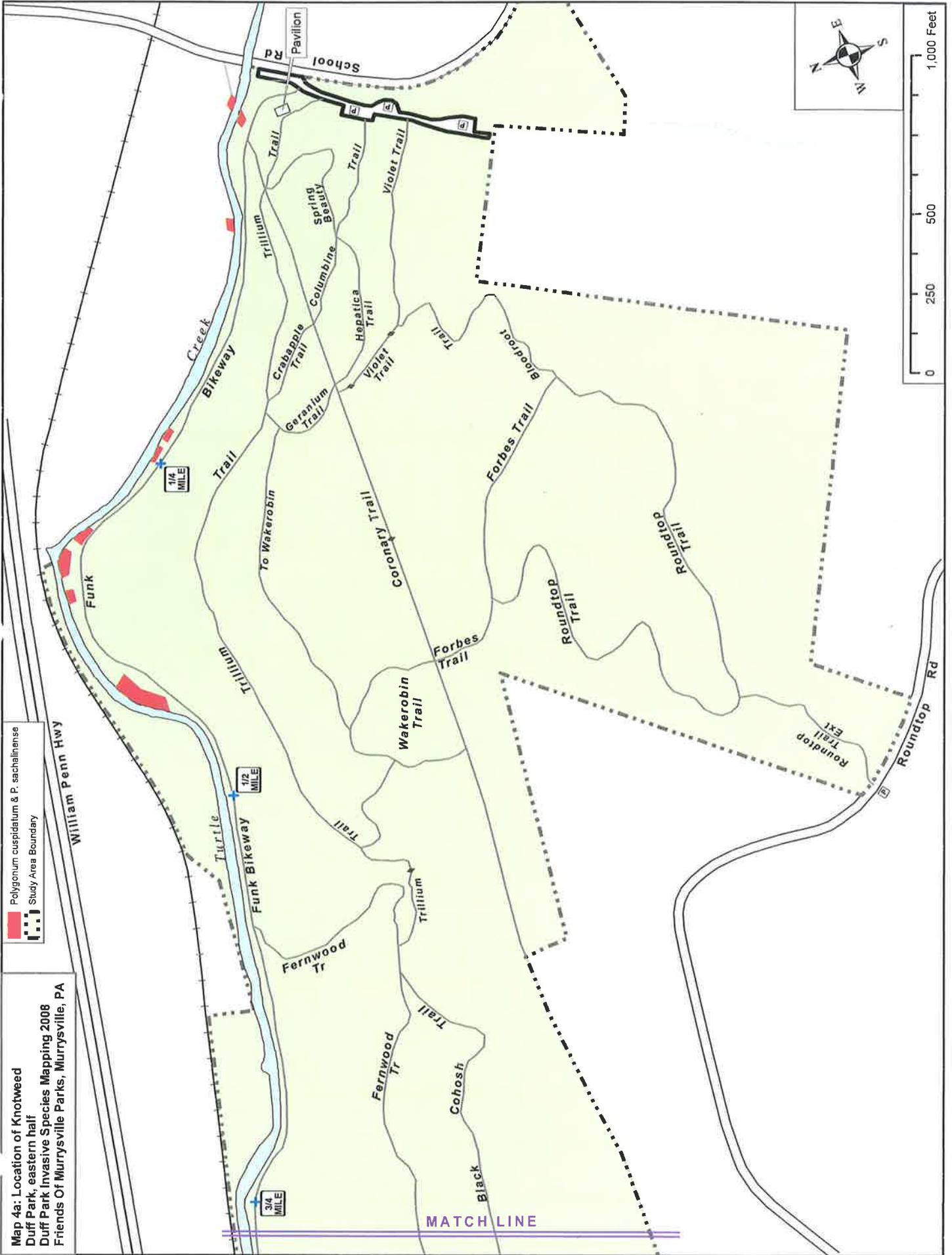
 Multiflora Rose, *Rosa multiflora*
 Study Area Boundary



MURRYSVILLE

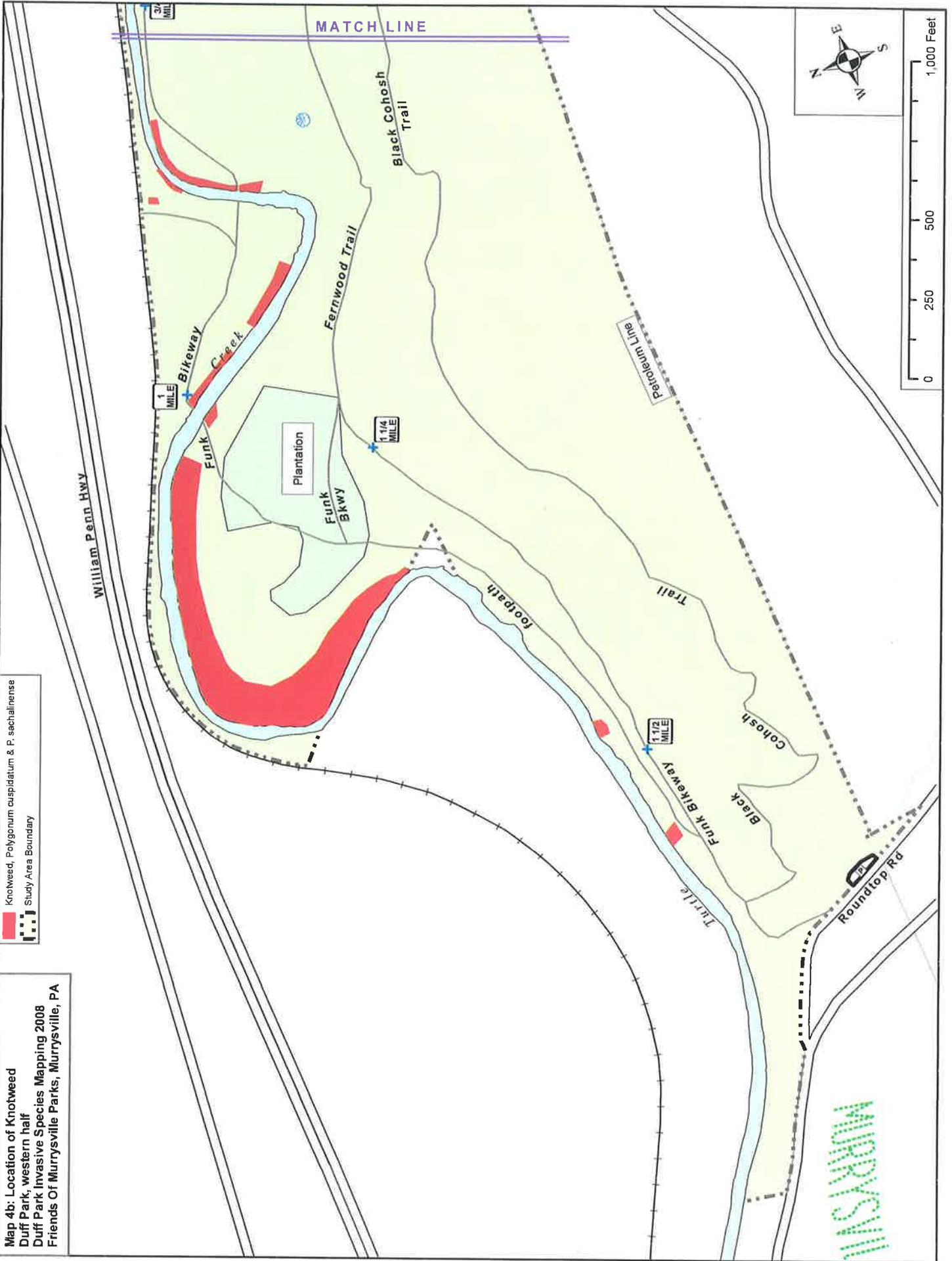
Map 4a: Location of Knotweed
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Polygonum cuspidatum & P. sachalinense
 Study Area Boundary



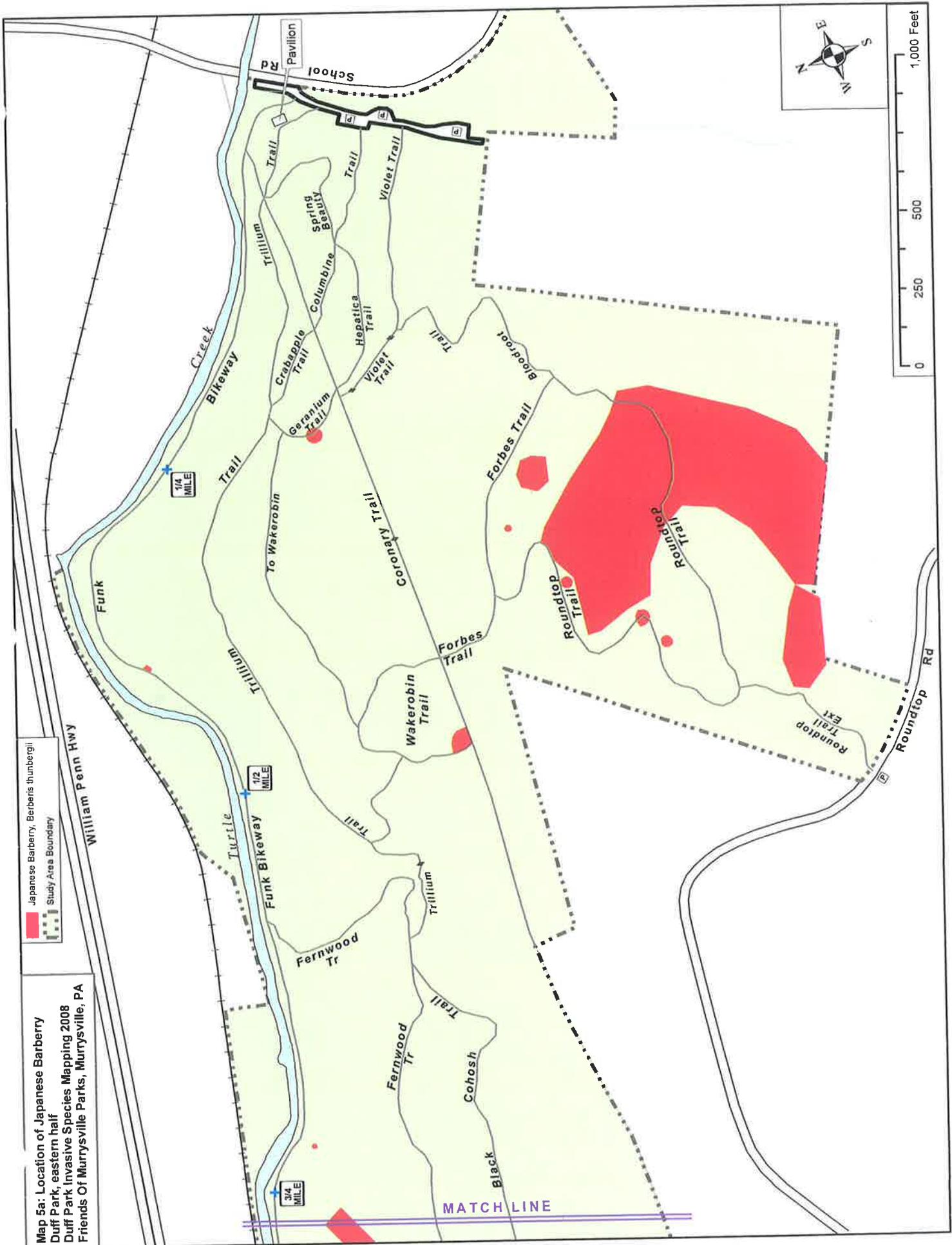
Map 4b: Location of Knotweed
Duff Park, western half
Duff Park Invasive Species Mapping 2008
Friends Of Murrysville Parks, Murrysville, PA

 Knotweed, *Polygonum cuspidatum* & *P. sachalinense*
 Study Area Boundary



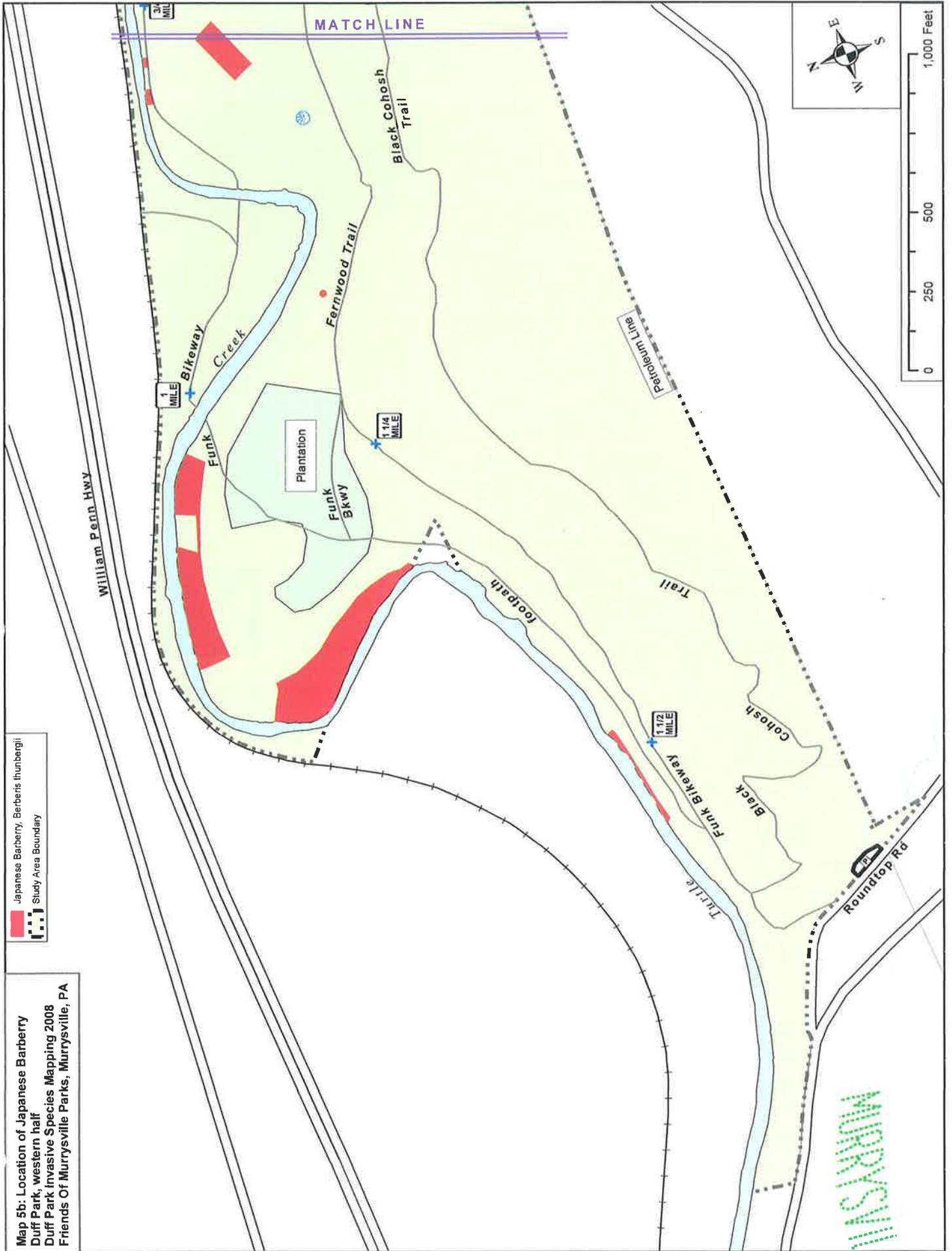
Map 5a: Location of Japanese Barberry
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

Japanese Barberry, *Berberis thunbergii*
 Study Area Boundary



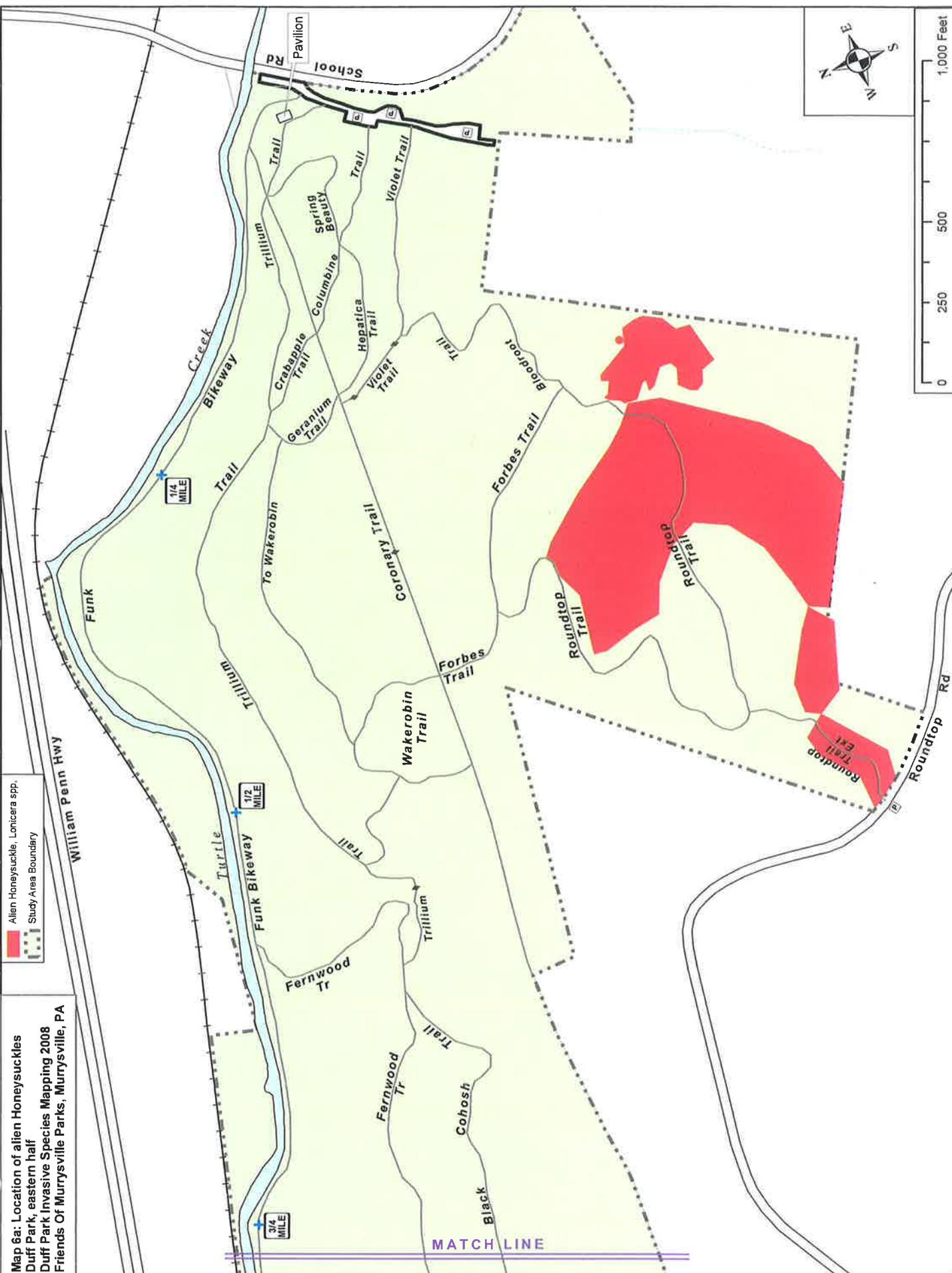
Map 5b: Location of Japanese Barberry
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

Japanese Barberry, *Berberis thunbergii*
 Study Area Boundary



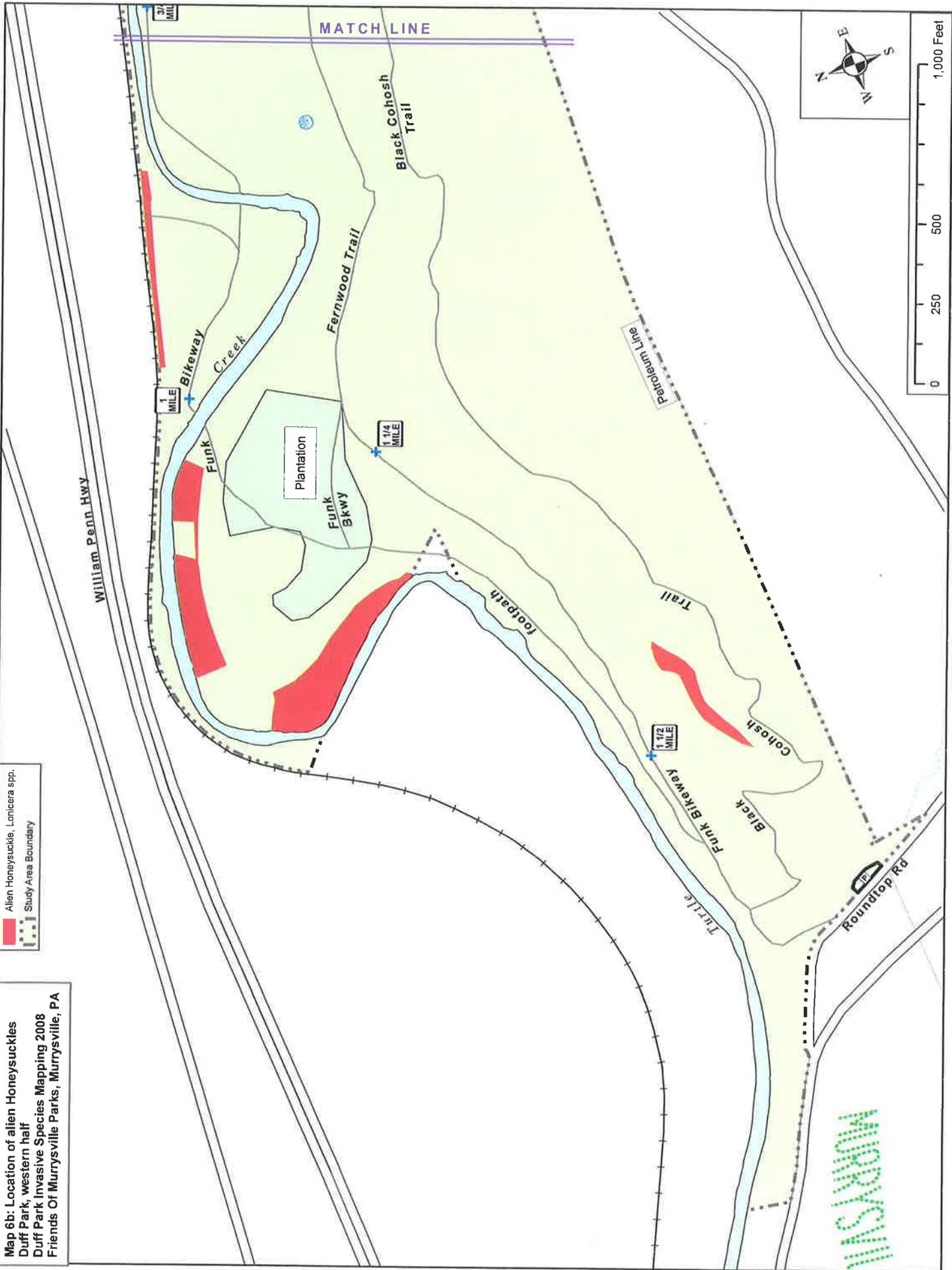
Map 6a: Location of alien Honeysuckles
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Alien Honeysuckle, *Lonicera* spp.
 Study Area Boundary



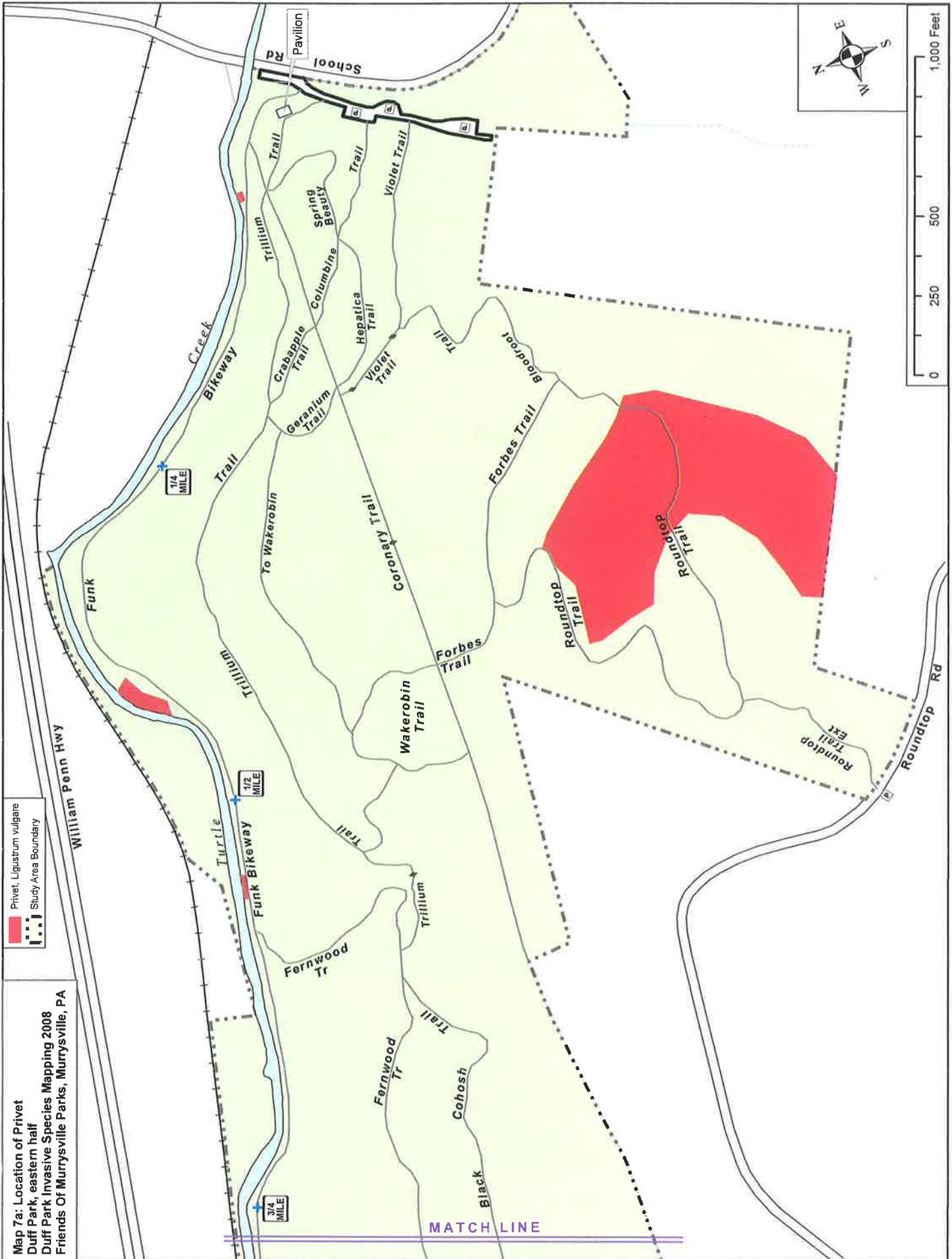
Map 6b: Location of alien Honeysuckles
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Alien Honeysuckle, *Lonicera* spp.
 Study Area Boundary



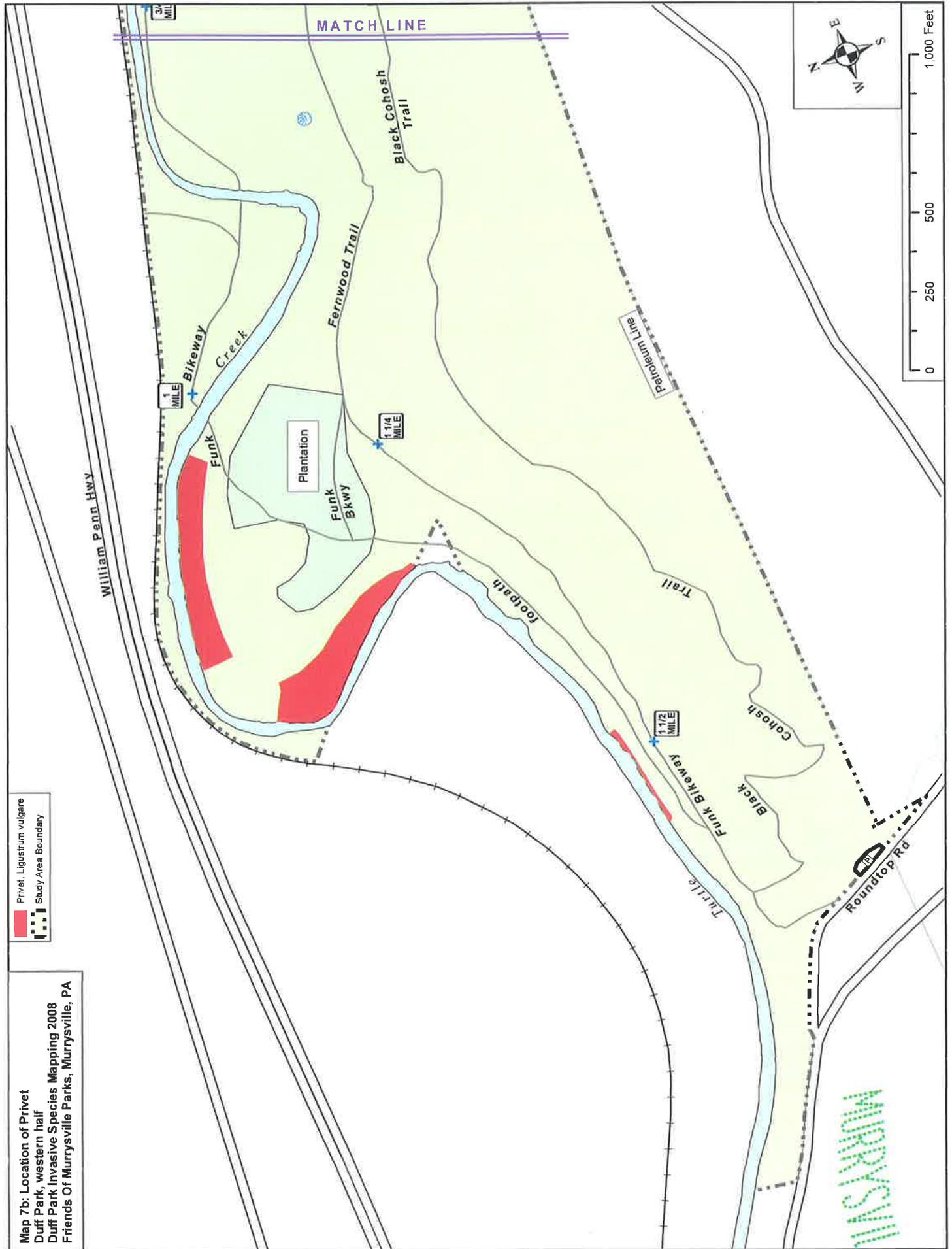
Map 7a: Location of Privet
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

Privet, *Ligustrum vulgare*
 Study Area Boundary



Map 7b: Location of Privet
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

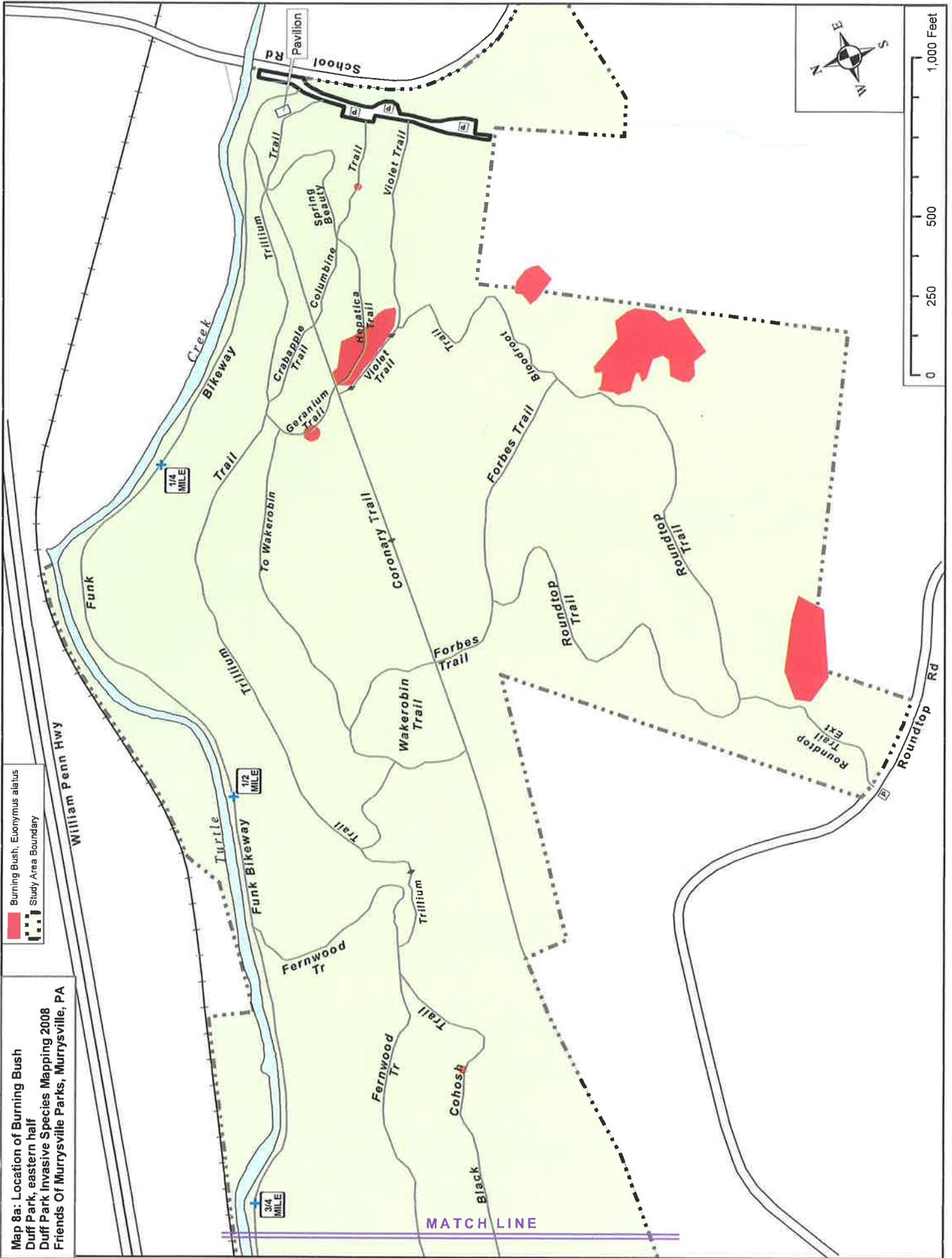
 Privet, *Ligustrum vulgare*
 Study Area Boundary



MURRYSVILLE

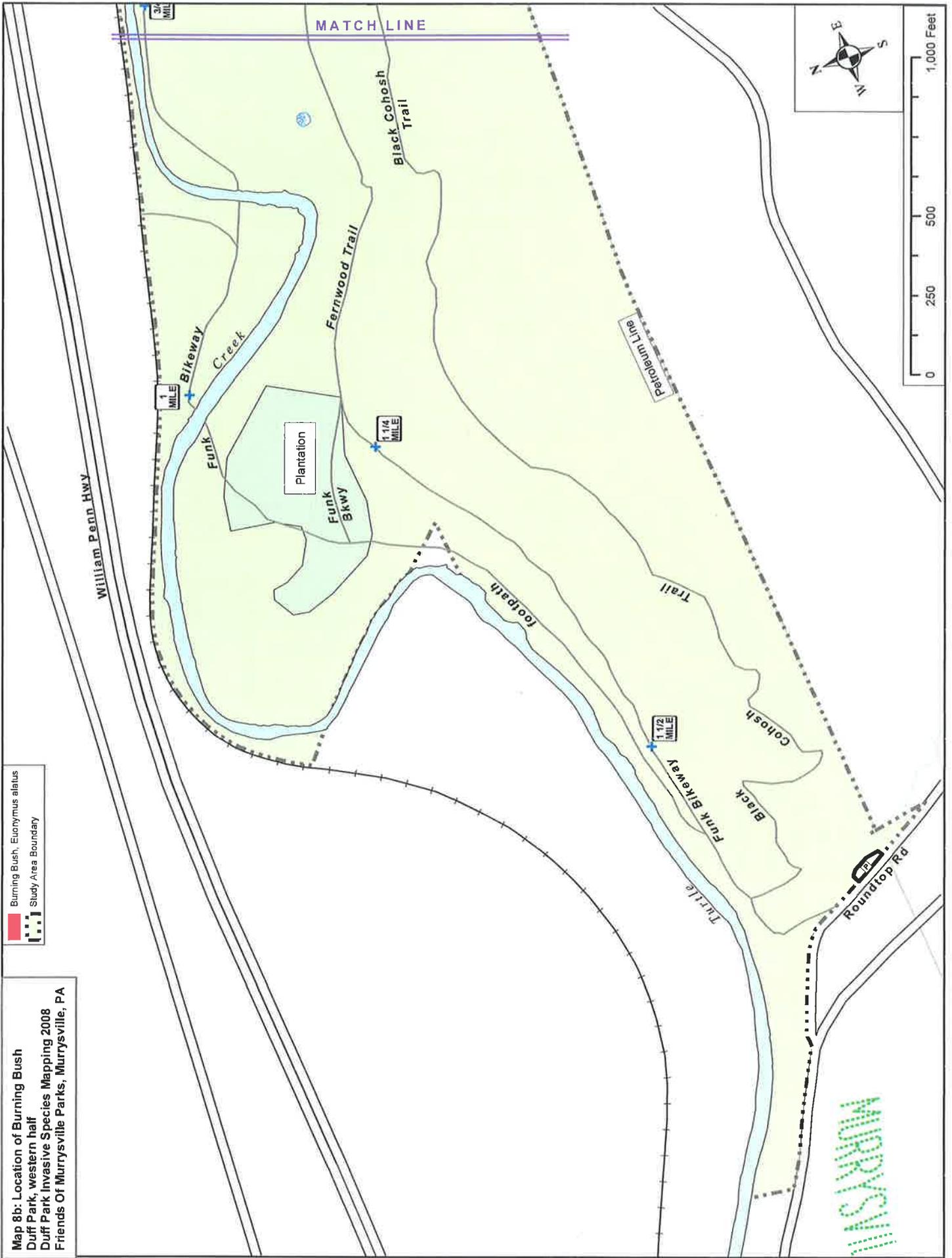
Map 8a: Location of Burning Bush
 Duff Park, eastern half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Burning Bush, *Euonymus alatus*
 Study Area Boundary



Map 8b: Location of Burning Bush
 Duff Park, western half
 Duff Park Invasive Species Mapping 2008
 Friends Of Murrysville Parks, Murrysville, PA

 Burning Bush, *Euonymus alatus*
 Study Area Boundary





Appendix I—Landowner Meeting Summary

Turtle Creek Greenways Plan
Landowners Meeting Summary

| Project_ID | MAPBLOCKLO | Owner | Land Use Description | Attend Meeting? | Survey Return? | Develop Plans? | Issues / Activities? | Acquisition Interest? | Willing to Partner? |
|--------------------------------------|------------------|---------------------------------|--------------------------|-----------------|----------------|------------------|--|--|---------------------|
| RAILROAD RIGHT-OF-WAY PARCELS | | | | | | | | | |
| RR | 36-02-09-00-0093 | DURA-BOND PROTECTIVE COATING C | RR ROW | No | Yes | Yes - industrial | flooding, steep, erosion, dumping, fishing | No - will remain active RR; concern with liability | No |
| RR | 749-D-12 | NORFOLK SOUTHERN - PGH DIVISION | PURTA Exempt - Active RR | No | No | | | | |

| | | | | | | | | | |
|---------------------------------|------------------|-----------------------------------|---------------|-----|----|--|--|--|--|
| TRAFFORD BOROUGH PARCELS | | | | | | | | | |
| TB_1 | 36-03-03-00-0001 | CBS | Soccer Fields | No | No | | | | |
| TB_2 | 36-01-16-00-0129 | TRAFFORD BORO | Public Park | N/A | | | | | |
| TB_3 | 36-01-16-00-0013 | J J A P INC c/o MR. JOHN KINGSTON | Vacant Land | No | No | | | | |
| TB_4 | 36-02-09-00-0102 | DRAKULIC JOHN JR JANET E | Commercial | No | No | | | | |
| TB_5 | 36-02-09-00-0086 | J J A P INC | Vacant Land | No | No | | | | |

| | | | | | | | | | |
|------------------------------|------------------|---------------------------|-------------|-----|-----|---------------------|--------------------------|-------------------------------|----------------------|
| PENN TOWNSHIP PARCELS | | | | | | | | | |
| Penn_1 | 55-02-00-00-0103 | HOUSTON STARR COMPANY | Vacant Land | Yes | No | Maybe - residential | Steep | No | Maybe - recreation |
| Penn_2 | 55-02-00-00-0009 | PENN TWP SEWAGE AUTHORITY | SEWAGE ROW | No | Yes | No | Flooding, steep, erosion | Owned by Houston Starr | Maybe |
| Penn_3 | 55-02-00-00-0010 | HOUSTON STARR COMPANY | Vacant Land | Yes | No | Maybe | Steep | No | Maybe - recreation |
| Penn_4 | 55-02-00-00-0158 | SHAFFER GREGORY L | Vacant Land | Yes | No | | Steep, Flooding | Maybe - conservation easement | Maybe - conservation |

Turtle Creek Greenways Plan
Landowners Meeting Summary

| Project_ID | MAPBLOCKLO | Owner | Land Use Description | Attend Meeting? | Survey Return? | Develop Plans? | Issues / Activities? | Acquisition Interest? | Willing to Partner? |
|------------|------------------|----------------------------|----------------------|-----------------|----------------|----------------|------------------------------------|-------------------------------|-----------------------|
| Penn_5 | 55-02-00-00-0174 | SHAFFER GREGORY L | Vacant Land | Yes | No | | Flooding, Streambank stabilization | Maybe - conservation easement | Maybe - stabilization |
| Penn_6 | 55-02-00-00-0167 | ALAIA MARC TRACY | Vacant Land | Yes | Yes | No | Steep | Yes - any | Maybe |
| Penn_7 | unknown parcel # | SHAFFER GREGORY L | Vacant Land | Yes | Yes | | Flooding, Streambank stabilization | Maybe - conservation easement | Maybe - stabilization |
| Penn_8 | 55-02-00-00-0171 | REGIONAL TRAIL CORPORATION | Parking Access | Yes | No | | | | Yes |
| Penn_9 | 55-02-00-00-0023 | DEUTSCH MELVIN & SUSAN | AG - ASA | No | No | | | | |
| n/a | | ROMITO DAVID & JENNA | SFR | Yes | No | No | Flooding, erosion | No | No |
| n/a | | YACAMELLI KERRY | SFR | Yes | No | No | Flooding, erosion | No | No |
| n/a | | HOFFMAN BEN | SFR | Yes | No | No | Flooding, erosion | No | No |

MONROEVILLE PARCELS

| | | | | | | | | | |
|-------|-----------|-----------------------|---------------------------|-----|----|-------------------|---------------------------------|----|--------------------|
| Mon_1 | 861-H-185 | HOUSTON STARR COMPANY | Residential / Vacant Land | Yes | No | Maybe - potential | Steep, possible Marcellus Shale | No | Maybe - recreation |
| Mon_2 | 981-N-78 | HOUSTON STARR COMPANY | Vacant Land | Yes | No | Maybe | Steep, Flooding | No | Maybe - recreation |
| Mon_3 | 981-P-40 | HOUSTON STARR COMPANY | Vacant Land | Yes | No | Maybe | Steep, Flooding | No | Maybe - recreation |
| Mon_4 | 981-K-159 | MONROEVILLE | Vacant Land | N/A | | | | | |
| Mon_5 | 981-G-34 | HOUSTON STARR COMPANY | Vacant Land | Yes | No | Maybe | Steep | No | Maybe - recreation |
| Mon_6 | 981-D-283 | JOVANOVIH MARY | SFR | No | No | | Steep, Trail Access to Creek | | |

Turtle Creek Greenways Plan
Landowners Meeting Summary

| Project_ID | MAPBLOCKLO | Owner | Land Use Description | Attend Meeting? | Survey Return? | Develop Plans? | Issues / Activities? | Acquisition Interest? | Willing to Partner? |
|------------|------------|----------------------------|----------------------------|-----------------|----------------|--------------------|--|----------------------------|-----------------------------------|
| Mon_7 | 980-S-282 | CHOUGH LAWRENCE & LINDA | SFR | Yes | No | No | Steep | Maybe | Maybe |
| Mon_8 | 980-M-281 | MARINO RICHARD & JUSTINA | SFR | No | No | | | | |
| Mon_9 | 1109-J-266 | URICK MICHAEL & DOROTHY | SFR | Yes | Yes | No | None | Conservation Easement | Maybe |
| Mon_10 | 1109-E-291 | SCHEUERMANN PAUL | Vacant Land | No | No | | | | |
| Mon_11 | 1109-E-36 | SCHEUERMANN PAUL & DOROTHY | Vacant Land - Builders Lot | No | No | | | | |
| Mon_12 | 1109-E-24 | LIEB MARTIN & ALICE | SFR | No | Yes | No | Steep, Erosion, Access via Saunders St | Conservation Easement | Yes - recreation and conservation |
| Mon_13 | 1109-E-22 | GRIFFITH WILLIAM & KAREN | SFR | Yes | No | | | | |
| Mon_14 | 980-D-223 | MONROEVILLE | Public | N/A | | | | | |
| | 1109-F-73 | MONROEVILLE | Public | N/A | | | | | |
| | 1109-K-355 | MONROEVILLE | Public | N/A | | | | | |
| | 1109-G-353 | MONROEVILLE | Public | N/A | | | | | |
| | 1109-G-329 | MONROEVILLE | Public | N/A | | | | | |
| | 1109-L-380 | MONROEVILLE | Public | N/A | | | | | |
| Mon_15 | 1109-G-347 | MONROEVILLE | Public | N/A | | | | | |
| Mon_16 | 856-H-396 | PA TURNPIKE COMMISSION | ROW | Yes | No | Maybe - expand ROW | None | Maybe - easement for trail | Yes - recreation |
| Mon_17 | 1109-F-385 | MONROEVILLE | Public | N/A | | | Natural dock for kayaks | | |
| Mon_18 | 1109-B-379 | MONROEVILLE | Public | N/A | | | | | |
| | 1108-P-47 | MONROEVILLE | Public | N/A | | | | | |
| Mon_19 | 1109-D-132 | MARSCHIK, HERMAN & MARY | Vacant Commercial Land | No | No | | | | |
| Mon_20 | 1245-J-317 | MONROEVILLE | Public | N/A | | | School District Property? | | |
| | 1108-H-334 | MONROEVILLE | Public Park | N/A | | | | | |

Turtle Creek Greenways Plan
Landowners Meeting Summary

| Project_ID | MAPBLOCKLO | Owner | Land Use Description | Attend Meeting? | Survey Return? | Develop Plans? | Issues / Activities? | Acquisition Interest? | Willing to Partner? |
|------------|------------|---|----------------------|-----------------|----------------|------------------------------|--|--------------------------------------|-----------------------------------|
| Mon_21 | 1245-J-248 | MARSCHIK, HERMAN & MARY Assessed in Westmoreland County - Rose/Farmer | AG/Vacant Land | Yes | No | No | Steep, wet, gas leases, access to creek from storage units | Yes - to go to Murrysville at death? | Yes - Recreation and conservation |
| Mon_22 | 1245-E-314 | KRUT WILLIAM E & CYNTHIA | SFR | Yes | Yes | Maybe - Residential for kids | Flooding, steep, dumping | No - but want to keep natural | Maybe |
| Mon_23 | 1245-B-1 | EARL JR & KATHLEEN HABERSTROH | SFR | No | No | | | | |
| Mon_24 | 1244-P-1 | EARL JR & KATHLEEN HABERSTROH | Vacant Land | No | No | | | | |
| Mon_25 | 1244-L-82 | RJD ENTERPRISES | Mini-Warehouse | No | No | | | | |
| Mon_26 | 980-K-144 | MONROEVILLE | Public | N/A | | | | | |

MURRYVILLE PARCELS

| | | | | | | | | | |
|---------|------------------|--------------------------------|---------|-----|-----|-------|---------------------------------|-----------------------------------|-----------------------------------|
| Murry_1 | 49-13-00-00-0006 | BOEHM GEORGE F CHERYL J | AG | Yes | Yes | Maybe | Flooding, Steep, ATV recreation | | Maybe |
| Murry_2 | 49-13-15-00-0048 | CHUNKO THOMAS F ROBERTA AM | SFR | No | No | | | | |
| Murry_3 | 49-13-00-00-0092 | FRANKLIN TWP MUN SANITARY AUTH | Utility | No | No | | | | |
| Murry_4 | 49-13-00-00-0009 | FRANKLIN TWP MUN SANITARY AUTH | Utility | No | No | | | | |
| Murry_5 | 49-13-00-00-0011 | FRANKLIN TWP MUN SANITARY AUTH | Utility | No | No | | | | |
| Murry_6 | 49-13-00-00-0060 | BYERS WILLIAM A & CAROL | SFR | Yes | Yes | No | Steep slopes | Donation or Conservation Easement | Yes - Recreation and conservation |
| Murry_7 | 49-13-00-00-0060 | DEAN DANIEL R MARCIA | SFR | No | No | | | | |
| Murry_8 | 49-13-00-00-0015 | BRANDT MICHAEL K+TYLER DOROTHY | SFR | Yes | No | | | | |

Turtle Creek Greenways Plan
Landowners Meeting Summary

| Project_ID | MAPBLOCKLO | Owner | Land Use Description | Attend Meeting? | Survey Return? | Develop Plans? | Issues / Activities? | Acquisition Interest? | Willing to Partner? |
|------------|------------------|-----------------------------------|----------------------|-----------------|----------------|-------------------|--------------------------|--|-----------------------------------|
| Murry_9 | 49-13-00-00-0073 | FISCUS PETER E RUTH E | SFR | Yes | Yes | No | Steep, dumping | Not sure | Maybe - conservation |
| Murry_10 | 49-13-00-00-0016 | ANGELO DAVID L & MICHELE C | SFR | No | No | | | | |
| Murry_11 | 49-13-00-00-0074 | HILL ERNEST F JR & BARBARA A | SFR | No | No | | | | |
| Murry_12 | 49-13-00-00-0017 | SCARCELLI ROSS | SFR | No | No | | | | |
| Murry_13 | 49-13-00-00-0018 | MCDONOUGH ELIZABETH R ETAL | SFR | No | No | | | | |
| Murry_14 | 49-13-00-00-0019 | MCINTYRE CLARENCE R JR & JEANN | SFR | No | No | | | | |
| Murry_15 | 49-13-00-00-0020 | GEBROSKY ROBERT J & MARGARET E | | No | No | | | | |
| Murry_16 | 49-13-00-00-0078 | HILL FRANK K & MAY M | | No | No | | | | |
| Murry_17 | 49-13-00-00-0041 | WEST MARY JANE ETAL | AG | No | No | | | | |
| Murry_18 | 49-13-00-00-0043 | FARMER EVELYN c/o BONNIE MILLER | AG/Vacant Land | Yes | No | No | Steep, wet, gas leases, | Yes - to go to Murrysville at death | Yes - Recreation and conservation |
| Murry_19 | 49-13-00-00-0044 | LUTZ ROBERT J | SFR | Yes | Yes | No | Steep, erosion, wetlands | Sale | Maybe |
| Murry_20 | 49-13-00-00-0045 | LUTZ ROBERT J | SFR | Yes | Yes | No | Steep, erosion, wetlands | Sale | Maybe |
| Murry_21 | 49-13-00-00-0046 | DUQUETTE MARY c/o BARBARA GEBAUER | SFR | No | No | | wetlands | | |
| Murry_22 | 49-13-00-00-0047 | VITEK JAMES A DANITA K | SFR | No | Yes | Yes - Residential | No | No | No |
| Murry_23 | 49-13-00-00-0049 | MINE SAFETY APPLIANCES CO | COMMERCIAL | No | No | | | | |
| Murry_24 | 49-14-00-00-0068 | DYMA-CRAFT INDUSTRIES INC | AG | No | No | | Steep, flooding | <i>May acquire via Van de Venne Property</i> | |
| Murry_25 | 49-14-00-00-0138 | WEST PENN POWER CO | Utility | No | No | | | | |

Turtle Creek Greenways Plan
Landowners Meeting Summary

| Project_ID | MAPBLOCKLO | Owner | Land Use Description | Attend Meeting? | Survey Return? | Develop Plans? | Issues / Activities? | Acquisition Interest? | Willing to Partner? |
|------------|--------------------|--------------------------------------|--------------------------|-----------------|----------------|----------------|----------------------|--|-----------------------------------|
| Murry_26 | 49-14-00-00-0069 | DELMAR LEASING CORPORATION | Commercial - part vacant | No | No | | Steep, flooding | | |
| | 49-14-00-00-0135 | MUNICIPALITY OF MURRYSVILLE | Public Park | N/A | | | | | |
| | 49-14-05-00-0101 | MUNICIPALITY OF MURRYSVILLE | Public | N/A | | | | | |
| | 49-14-00-00-0071 | MUNICIPALITY OF MURRYSVILLE | Public Park | N/A | | | | | |
| Murry_27 | 49-14-00-00-0072 | | | | | | | | |
| Murry_28 | 49-14-00-00-0067 | VAN DE VENNE THEO PIA | AG | Yes | No | No | Steep | Donation | Yes - Recreation and conservation |
| Murry_29 | 49-14-00-00-0070 | Yerick, Cynthia J c/o Cynthia Lorenz | Vacant Land | No | No | | | <i>May acquire via Van de Venne Property</i> | |
| Murry_30 | 49-14-00-00-0100 | Matcuk, Robert C & Suzanne | Vacant Land | No | No | | | | |
| Murry_31 | 49-14-00-0-00-0026 | Manno, John C Jr & Diana A | Vacant Land | No | No | | | <i>May acquire via Van de Venne Property</i> | |
| Murry_32 | 49-14-00-00-0133 | Whitehead, Daniel L & Lenore R | Vacant Land | No | No | | | <i>May acquire via Van de Venne Property</i> | |
| Murry_33 | 49-06-044-00000 | MURRYSVILLE | Public Park | N/A | | | | | |



Appendix J—Landowner Surveys



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: DURA-Bond Industries, Inc.

Parcel #(s): Turtle Creek Railroad

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

Flooding (please explain Flooding is getting worse.)

Steep terrain (undevelopable) (please describe OBVIOUS IN VARIOUS PARTS)

Erosion / washout area (please describe ALWAYS)

Garbage / hazardous waste (please describe _____)

Recreation opportunity (please specify They Fish)

_____ Site of cultural / historical significance (please specify _____)

_____ Access to Turtle Creek from a public road / right-of-way (where? _____)

_____ Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

No Donation (entire parcel or a portion thereof)

No Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

No Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

No Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

_____ Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

_____ Yes, for recreation activities only _____ Yes, for conservation activities only

_____ Yes, for recreation and conservation _____ Maybe, need more information

X No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

_____ Yes X No _____ Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Yes. We operate the railroad and safety is a concern for our operations. We have had one fatality and other incidents

What is the best way to contact you regarding project updates, etc.?

Email: Wmorris @ DURA-Bond. Com.

Phone #: 724-327-0280 EXT 102

Mailing Address: P.O. Box 518
Export, PA 15632

We have decided to repair the railroad and continue to operate it. We feel it is vital to our business.

Wayne Morris.



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: Art Byers

Parcel #(s): 49-13-00-00-0060

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

Flooding (please explain _____)

Steep terrain (undevelopable) (please describe _____)

Erosion / washout area (please describe _____)

Garbage / hazardous waste (please describe _____)

Recreation opportunity (please specify _____)

Site of cultural / historical significance (please specify _____)

Access to Turtle Creek from a public road / right-of-way (where? _____)

Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

Donation (entire parcel or a portion thereof)

Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

What is the best way to contact you regarding project updates, etc.?

Email: wabyers@comcast.net

Phone #: _____

Mailing Address: _____



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: Cary B. Byers

Parcel #(s): _____

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other (____)

Are you aware of any of the following on your property?

NO Flooding (please explain _____)

yes Steep terrain (undevelopable) (please describe _____)

NO Erosion / washout area (please describe _____)

NO Garbage / hazardous waste (please describe _____)

NO Recreation opportunity (please specify _____)

NO Site of cultural / historical significance (please specify _____)

NO Access to Turtle Creek from a public road / right-of-way (where? _____)

_____ Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

Donation (entire parcel or a portion thereof)

_____ Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

_____ Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

_____ Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

_____ Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

_____ Yes, for recreation activities only _____ Yes, for conservation activities only
_____ Yes, for recreation and conservation _____ Maybe, need more information
_____ No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

_____ Yes _____ No _____ Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

What is the best way to contact you regarding project updates, etc.?

Email: _____

Phone #: _____

Mailing Address: _____



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name:

George F. Behr

Parcel #(s):

49-13-00-00-0006

Do you have any plans to develop your property (or portion thereof) in question?

Yes

No

Maybe, not sure

If so, for what type of use?

Residential

Commercial

Industrial

Other

Are you aware of any of the following on your property?

Flooding (please explain _____)

Steep terrain (undevelopable) (please describe _____)

Erosion / washout area (please describe _____)

Garbage / hazardous waste (please describe _____)

Recreation opportunity (please specify ATV)

Site of cultural / historical significance (please specify _____)

Access to Turtle Creek from a public road / right-of-way (where? _____)

Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

Donation (entire parcel or a portion thereof)

Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

- Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

- Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

What is the best way to contact you regarding project updates, etc.?

Email:

Phone #:

Mailing Address:



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough



Owner Name: ROBERT J + MARGARET M. LUTZ

Parcel #(s): 49-13-00-00-0044 ; + 45

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

Flooding (please explain _____)

Steep terrain (undevelopable) (please describe STEAD ACCESS TO PROPERTY)

Erosion / washout area (please describe WETLANDS BESIDE RAILROAD)

Garbage / hazardous waste (please describe _____)

Recreation opportunity (please specify _____)

Site of cultural / historical significance (please specify _____)

Access to Turtle Creek from a public road / right-of-way (where? _____)

Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

Donation (entire parcel or a portion thereof)

Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option
AT SOMETIME IN THE FUTURE

Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

I NEED MORE INFORMATION AS TO WHAT
ACTIVITIES WOULD BE INCLUDED.

What is the best way to contact you regarding project updates, etc.?

Email: BONEIDLE@WINDSTREAM.NET
Phone #: 724-325-2448
Mailing Address: 3646 MEADOWBROOK ROAD
MURRYSVILLE, PA 15668



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: PETER & RUTH FISCHS

Parcel #(s): 44-13-00-00-0073

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

Flooding (please explain _____)

Steep terrain (undevelopable) (please describe CLIFF-LIKE)

Erosion / washout area (please describe _____)

Garbage / hazardous waste (please describe IT APPEARS AS IF PART OF OUR PROPERTY WAS ONCE A DUMP A LOT OF GLASS IS IN THE GROUND WHEN I DO ANY DIGGING)

Recreation opportunity (please specify _____)

Site of cultural / historical significance (please specify _____)

Access to Turtle Creek from a public road / right-of-way (where? _____)

Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

Donation (entire parcel or a portion thereof)

Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Other (please specify UNSURE)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

I WOULD BE IN FAVOR OF SOME RESPONSIBLE CONSERVATION/
PRESERVATION EFFORTS, BUT HAVE SOME CONCERNS ABOUT
EXCESSIVE ENVIRONMENTAL RESTRICTIONS

What is the best way to contact you regarding project updates, etc.?

Email: fickle88@juno.com

Phone #: (412) 651-8584

Mailing Address: 3224 MEADOWBROOK RA
MURRYSVILLE, PA 15668



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: MICHAEL C AND DOROTHY T URICK

Parcel #(s): 1109-J-266

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

No Flooding (please explain _____)

No Steep terrain (undevelopable) (please describe _____)

No Erosion / washout area (please describe _____)

No Garbage / hazardous waste (please describe _____)

No Recreation opportunity (please specify _____)

No Site of cultural / historical significance (please specify _____)

No Access to Turtle Creek from a public road / right-of-way (where? _____)

NONE Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

No Donation (entire parcel or a portion thereof)

Yes Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

No Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

No Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

Other (please specify) _____



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

_____ Yes, for recreation activities only _____ Yes, for conservation activities only

_____ Yes, for recreation and conservation X Maybe, need more information

_____ No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

 X Yes _____ No _____ Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

 NONE

What is the best way to contact you regarding project updates, etc.?

Email: ABERSCREEK @ VERIZON. NET

Phone #: 412 372 2238

Mailing Address: 407 URICK LANE

 MONROEVILLE PA 15146



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: Marc & Tracy Alaia

Parcel #(s): 55-02-00-00-0167

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other (____)

Are you aware of any of the following on your property?

- Flooding (please explain _____)
- Steep terrain (undevelopable) (please describe Majority of parcel is steep)
- Erosion / washout area (please describe _____)
- Garbage / hazardous waste (please describe _____)
- Recreation opportunity (please specify _____)
- Site of cultural / historical significance (please specify _____)
- Access to Turtle Creek from a public road / right-of-way (where? _____)
- Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

- Donation (entire parcel or a portion thereof)
- Conservation Easement (i.e. remain permanent open space, woodlands, etc.)
- Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option
- Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option
- Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

What is the best way to contact you regarding project updates, etc.?

Email: m2@alalaia.net

Phone #: 412-856-1211

Mailing Address: 272 Saunders Station Rd.

Trafford, PA 15085



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: William Krut

Parcel #(s): 1245-E-314

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

Flooding (please explain Along turtle creek)

Steep terrain (undevelopable) (please describe multiple areas)

Erosion / washout area (please describe _____)

Garbage / hazardous waste (please describe people throw garbage from CAVITT RD)

Recreation opportunity (please specify _____)

Site of cultural / historical significance (please specify _____)

Access to Turtle Creek from a public road / right-of-way (where? _____)

Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

no Donation (entire parcel or a portion thereof)

no Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

no Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

no Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

no Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

- Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

- Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Improved Public access to secluded areas of
 Private property

What is the best way to contact you regarding project updates, etc.?

Email: Krutwi@monroeville.pa.us

Phone #: _____

Mailing Address: _____



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name: PENN TOWNSHIP SEWAGE AUTHORITY

Parcel #(s): WE DON'T OWN THIS PROPERTY, WE JUST HAVE A SANITARY RIGHT of way
THROUGH IT.

Do you have any plans to develop your property (or portion thereof) in question?

Yes No Maybe, not sure

If so, for what type of use?

Residential Commercial Industrial Other ()

Are you aware of any of the following on your property?

- Flooding (please explain THE LOWER PORTION FLOODS IN HEAVY RAIN.)
- Steep terrain (undevelopable) (please describe OUR SEWER LINE IS IN THE WAY)
- Erosion / washout area (please describe THE STREAM RUNS THROUGH THE PROPERTY.)
- Garbage / hazardous waste (please describe _____)
- Recreation opportunity (please specify _____)
- Site of cultural / historical significance (please specify _____)
- Access to Turtle Creek from a public road / right-of-way (where? _____)
- Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

- Donation (entire parcel or a portion thereof)
- Conservation Easement (i.e. remain permanent open space, woodlands, etc.)
- Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option
- Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option
- Other (please specify) _____



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

- Yes, for recreation activities only Yes, for conservation activities only
 Yes, for recreation and conservation Maybe, need more information
 No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

- Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

WOULD NEED MORE INFORMATION

What is the best way to contact you regarding project updates, etc.?

Email: plsa@WINDSTREAM.net

Phone #: 724 744-4333

Mailing Address: 1032 Nite Site Rd.
IRWIN PA 15642

THIS PROPERTY IS OWNED BY: HOUSTON STARR CO.
300 BRUSTON AVE.
PITTSBURGH PA 15221

PARCEL ID 55-2-10



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

Yes, for recreation activities only Yes, for conservation activities only

Yes, for recreation and conservation Maybe, need more information

No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

Yes No Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

No due to lack of information

What is the best way to contact you regarding project updates, etc.?

Email: liebm38@yahoo.com

Phone #: 412 856-0548

Mailing Address: 123 Bel-Aire Drive
Monroeville, PA 15146



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

Owner Name:

James A. Vittek

Parcel #(s):

Do you have any plans to develop your property (or portion thereof) in question?

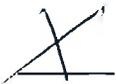


Yes

No

Maybe, not sure

If so, for what type of use?



Residential

Commercial

Industrial

Other (_____)

Are you aware of any of the following on your property?

_____ Flooding (please explain _____)

_____ Steep terrain (undevelopable) (please describe _____)

_____ Erosion / washout area (please describe _____)

_____ Garbage / hazardous waste (please describe _____)

_____ Recreation opportunity (please specify _____)

_____ Site of cultural / historical significance (please specify _____)

_____ Access to Turtle Creek from a public road / right-of-way (where? _____)

_____ Other (please specify _____)

Are you interested in pursuing any of the following regarding your property?

_____ Donation (entire parcel or a portion thereof)

_____ Conservation Easement (i.e. remain permanent open space, woodlands, etc.)

_____ Lease (entire parcel or a portion thereof) – NOTE: there is no funding for this option

_____ Sale (entire parcel or a portion thereof) – NOTE: there is no funding for this option

_____ Other (please specify _____)



Turtle Creek Greenways Plan

A conservation & recreation project for the Municipalities of Monroeville, Murrysville, Penn Township, and Trafford Borough

If you do not wish to pursue a legal agreement regarding your property, would you be willing to partner with an organization, such as the Regional Trail Corporation or the Turtle Creek Watershed Association regarding recreation and/or conservation efforts along the Turtle Creek Corridor?

_____ Yes, for recreation activities only _____ Yes, for conservation activities only

_____ Yes, for recreation and conservation _____ Maybe, need more information

~~_____~~ No

Do you support the concept of a public greenway being developed for the Turtle Creek Corridor?

_____ Yes ~~_____~~ No _____ Maybe, not sure

Do you have any concerns regarding the development of a public greenway being developed for the Turtle Creek Corridor?

Property Rights

What is the best way to contact you regarding project updates, etc.?

Email: Jim@TheViloks.net

Phone #: _____

Mailing Address: _____



Appendix K—Criteria Ranking Form

Turtle Creek Greenway Ranking Criteria

| Ranking Criteria for Natural, Cultural and/or Recreational Value | | | | |
|---|---|--|---|---|
| | STANDARD | 1 | 2 | 3 |
| 1 | Meets stated project goals | meets 1 or less goals | meets 2 goals | meets 3 or more goals |
| 2 | Provides recreational access to the greenway and/or stream -public access via roadway, trail, etc. | Low / None -No current access & little opportunity for access | Moderate -No current access, but has potential for access | High -Currently provides access or has good potential to provide access |
| 3 | Provides active recreational opportunities -active means ball fields, playgrounds, docks, piers, multi-use trails, picnic tables, etc.; activities that require facilities | Low / None -No current facilities & no opportunity for facilities | Moderate -No current facilities , but has potential for facilities | High -Currently has facilities or has good potential to provide facilities |
| 4 | Provides passive recreational opportunities -passive means hiking, birdwatching, exploring nature, fishing, etc.; no facilities required | Low / None -Area has no potential (i.e. steep) for passive recreation | Moderate -Area has some potential for passive recreation | High -Currently used or has good potential to provide opportunities |
| 5 | Provides natural beauty / greenway -area is in its natural state, forested, etc. regardless of invasive species presence | Low / None -Parcel has been disturbed or is developed | Moderate -Parcel may have some development, but has natural areas | High -No development or disturbance |
| 6 | Contains site of cultural, historic, or natural significance -cultural: locally significant site -natural: BDA, T&E species, geological feature, NHI site, quality wildlife habitat area -historical: listed / eligible for NR | No known resource | Possible resource | Resource present |
| 7 | Habitat enhancement opportunities -bird boxes, vegetative / native plantings, etc. | Low / None -No opportunities present | Moderate -Some opportunities present | High -Good opportunities present |



Turtle Creek Greenway Ranking Criteria

| Ranking Criteria for Natural, Cultural and/or Recreational Value (cont) | | | | |
|--|---|--|---|---|
| | STANDARD | 1 | 2 | 3 |
| 8 | <p>Provides natural flood control / protection</p> <p>-contains existing wetlands, floodplain, forested area, etc.</p> | <p>Low / None</p> <p>-Area is disturbed, eroded, developed; no vegetation present</p> | <p>Moderate</p> <p>-Area provides some flood control / protection</p> | <p>High</p> <p>-Area contains a wetland, vegetated floodplain, or is forested</p> |
| 9 | <p>Proximity to Preserved Land or Publicly Owned Land</p> <p>-adjacent to or provides a connection to public park, land under conservation easement, or owned by conservation organization</p> | <p>Low / None</p> <p>-No connection present</p> | <p>Moderate</p> <p>-Possible opportunity for a connection</p> | <p>High</p> <p>-Provides a direct connection</p> |
| 10 | <p>Opportunity as educational area or for interpretive signage</p> <p>-educational areas may include: wetlands, floodplains, invasive species identification, outdoor picnic areas to hold classes, littering/dumping sites, etc.</p> | <p>Low / None</p> <p>-No opportunity present</p> | <p>Moderate</p> <p>-Some opportunities present</p> | <p>High</p> <p>-Good site for educational opportunities</p> |
| 11 | <p>Likelihood of future development</p> <p>-land could be developed as residential, commercial, and / or industrial; availability of utilities, access to roadways, etc.</p> | <p>Low / None</p> <p>-Can't be developed i.e. too steep, floodplain, etc.</p> | <p>Moderate</p> <p>-Possible to develop and / or known interest long-term</p> | <p>High</p> <p>-High potential for development and / or known interest in immediate future</p> |
| 12 | <p>Cost to implement projects</p> <p>-projects may include: recreational facilities, habitat enhancement, etc.</p> | <p>High Cost</p> <p>-Major projects identified</p> <p>-Projects would require significant amount of funding and professional assistance and volunteer work</p> | <p>Moderate Cost</p> <p>-Several projects identified</p> <p>-Projects would require some amount of funding and volunteer work</p> | <p>Low / No Cost</p> <p>-No/few projects identified</p> <p>-Projects could be completed with little to no funding and / or volunteer work</p> |

Turtle Creek Greenway Ranking Criteria

| Ranking Criteria for Restoration Activities | | | | |
|--|--|--|--|---|
| | STANDARD | -1 | -2 | -3 |
| 13 | Litter / Illegal Dumping -used as illegal dumpsite, presence of trash, residual waste from previous use | Low / None -No litter or illegal dumpsites present | Moderate -Some issues with littering and illegal dumping | High -Litter or illegal dumpsite identified |
| 14 | Contains area of erosion and / or wash out problems | Low / None -No erosion or wash out identified | Moderate -Some/minor erosion or washout identified | High -Major/problem area of erosion or washout identified |
| 15 | Source of erosion and wash out present | Low / None -Source of erosion and wash out is NOT located on parcel | Moderate -Source of erosion and wash out is not located on parcel, but a lot of issues present | High -Source of erosion and wash out is located on the parcel |
| 16 | Contains potential to install erosion and sedimentation control / flood control measure -E&S / flood control measures include: wetland creation, riparian plantings, culvert replacement / unblock, bank stabilization, rip rap, etc. | Low / No potential -No space and/or need for E&S | Moderate -Limited space and /or limited need for E&S | High potential -Significant space and significant need for E&S |
| 17 | Presence of invasive plant species -Japanese knotweed, etc. | Low / None -No invasive species present | Moderate -Invasive species present, but not many nor not high priority to eradicate | High -Invasive species is present and is a high priority to eradicate (high potential to spread) |
| 18 | Cost to implement projects -projects may include: E&S measures, invasive species removal, flood control, etc. | Low / No Cost -No/few projects identified -Projects could be completed with little to no funding and / or volunteer work | Moderate Cost -Several projects identified -Projects would require some amount of funding and volunteer work | High Cost -Major projects identified -Projects would require significant amount of funding and professional assistance and volunteer work |



Appendix L—Organizations

County / Municipal

Allegheny County
Local legislators/government officials
Municipality of Monroeville
Municipality of Murrysville
Parks & Recreation Dept. – each municipality & county in project area
Penn Township
Public Works Dept. – each municipality
Trafford Borough
Westmoreland County

Resource Agencies

Allegheny County Conservation District (ACCD)
Department of Natural Resources and Conservation (DCNR)
Environmental Protection Agency (EPA)
Natural Resources Conservation Service (NRCS)
PA Department of Environmental Protection (PADEP)
PA Fish and Boat Commission (PFBC)
PA Game Commission (PGC)
PA Historic Museum Commission (PHMC)
Pennsylvania Department of Agriculture (PDA)
Southwestern Planning Commission (SPC)
U.S. Army Corps of Engineers (USACE)
U.S. Fish & Wildlife Service (USFWS)
Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR)
Westmoreland County Conservation District (WCCD)

Non-Profits / Local Organizations

Allegheny Cleanways
Allegheny County Economic Development
Allegheny Land Trust (ALT)
Audubon Society of Western PA (ASWP)
Chamber of Commerce
Environmental Advisory Committees
Friends of Murrysville Parks (FOMP)
PennState Cooperative Extension
Pennsylvania Environmental Council
Pennsylvania Resource Council (PRC)
Regional Trail Corporation
Smart Growth Partnership
Southwestern PA Household Hazardous Waste Coalition (SWPAHHW)
Sustainable Monroeville
Turtle Creek Valley Council of Government (TCVCOG)
Turtle Creek Watershed Association (TCWA)
US Department of Agriculture (USDA)
Western Pennsylvania Conservancy (WPC)
Westmoreland County Botanical Gardens

Westmoreland Heritage Trail
Westmoreland Land Trust (WLT)
Trout Unlimited (TU)
Rachel Carson Homestead Association (RCHA)

Other

Boy/Girl Scouts
Green developers
Local citizens
Local colleges/universities
Local historical societies
Local school districts/students



Appendix M—Funding Sources

| Grant / Program Name | Description | Website Address |
|--|--|---|
| American Water Environmental Grant Programs | American Water's Environmental Grant Program offers funds for innovative, community-based environmental projects that improve, restore or protect the watersheds, surface water and/or groundwater supplies in the communities it serves. | http://pr.amwater.com/ |
| Constellation Energy EcoStar Grants | The EcoStar Grant program was launched in January 2010 with a request for applications from nonprofit organizations seeking funds for environmental projects in their communities. Grants of up to \$5,000 each will be used by nonprofit community organizations to engage in environmental stewardship projects. Grant requests should be submitted by May 1 for the June meeting and September 1 for the October meeting. | http://www.constellation.com/portal/site/constellation/menuitem.531e0af410e791875fb60610025166a0/+%20gaJsHost%20+ |
| Council on Foundations | The Council on Foundations is a national nonprofit association of approximately 2,000 grantmaking foundations and corporations. | http://www.cof.org/ |
| CVS Caremark Community Grants | Program awards grants up to \$5,000 to nonprofit organizations for programs targeting children with disabilities; programs focusing on health and rehabilitation services; and public schools promoting a greater level of inclusion in student activities and extracurricular programs, and initiatives that give greater access to physical movement and play. | http://info.cvscaremark.com/community/our-impact/community-grants |
| Foundation Center | A database of foundations and other funding sources. | http://foundationcenter.org/ |
| Foundation for Pennsylvania Watersheds | Awards grants to 501(c)3 nonprofit organizations for local efforts to protect healthy, natural streams, to clean up pollution and to restore degraded wildlife habitat.. | http://www.pennsylvaniawatersheds.org/?page_id=3 |
| Grants.gov | Provides information on hundreds of federal grants that can be used to support a variety of programs. | http://www.grants.gov/ |
| International Society of Arboriculture – TREE Fund | This program supports the development of arboriculture educational programs and materials for K-12 students. | http://www.treefund.org/ed_grants.htm |
| KaBOOM! | KaBOOM! offers communities occasional grant opportunities to begin or complete playspace projects. | http://kaboom.org/build_playspace/get_funding/grants |

| Grant / Program Name | Description | Website Address |
|--|--|---|
| Mantis Awards for Community and Youth Gardens | Each year, Mantis presents the Mantis Awards for charitable and educational garden projects that enhance the quality of life in their host communities. Any nonprofit garden program may apply, including schools, churches, correctional facilities, parks departments, youth camps, community gardens, and many others. | http://www.kidsgardening.com/grants.asp |
| National Fish and Wildlife Foundation | The National Fish and Wildlife Foundation provides funding on a competitive basis to projects that sustain, restore and enhance the Nation's fish, wildlife, plants and their habitats through our Keystone Initiative Grants and other Special Grant Programs. | http://www.nfwf.org/AM/Template.cfm?Section=Grants |
| National Gardening Association (NGA) – Youth Garden Grants | NGA awards Youth Garden Grants to schools and community organizations with child-centered garden programs. Applicants must plan to garden in 2010 with at least 15 children between the ages of 3 and 18 years. | http://assoc.garden.org/grants/ |
| National Recreation and Park Association (NRPA) | NRPA provides education for professionals and the public on the essential nature of parks and recreation and advocates for increased national funding for parks and recreation through federal grants and initiatives. | www.nrpa.org |
| National Tree Trust | The mission of the National Tree Trust is to promote healthy communities by providing resources that educate and empower people to grow and care for urban and community forests. | http://www.nationaltreetrust.org/ |
| PA CleanWays – Allegheny & Westmoreland Affiliates | A non-profit organization that helps communities take action against illegal dumping and littering. | http://www.pacleanways.org/ |
| Pennsylvania Council on the Arts (PCA) – Local Government | Provides grants to local governments to assist in funding arts programs, arts projects, regrant programs, and pass through projects. | http://pacouncilonthearts.org/pca.cfm?id=46&level=Third |
| Pennsylvania Department of Community and Economic Development (DCED) – Keystone Recreation, Park and Conservation Fund | State grants to construct new library buildings, renovate or rehabilitate existing facilities and make library buildings accessible for persons with disabilities. Joint applications are required from a sponsoring municipality (or Councils of Government and authorities approved by the participating local governing body of the COG or authority) and a state-aided public library. | http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/funding-detail/index.aspx?progId=118 |

| Grant / Program Name | Description | Website Address |
|--|--|---|
| Pennsylvania Department of Community and Economic Development (DCED) – Local Municipal Resources and Development Program (LMRDP) | Grants to municipalities for the construction or rehabilitation of infrastructure, building rehabilitation, acquisition and demolition of structures/land, revitalization or construction of community facilities, purchase or upgrade of machinery and equipment, planning of community assets, public safety, crime prevention, recreation, and training. | http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/funding-detail/index.aspx?progId=78 |
| Pennsylvania Department of Community and Economic Development (DCED) – Urban Development Program | Provides grants for <u>urban</u> development and improvement projects, including the construction or rehab of infrastructure, building rehabilitation, acquisition and demolition of structures/land, revitalization or construction of community facilities, purchase or upgrade of machinery and equipment, planning of community assets, public safety, crime prevention, recreation, and training. | http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/funding-detail/index.aspx?progId=81 |
| Pennsylvania Department of Conversation and Natural Resources (DCNR) – Community Conservation Partnerships Program (C2P2) | C2P2 grants are open to local / county governments and non-profit organizations to assist with recreation projects; three basic types: planning, acquisition and development. Includes grants for community recreation, land trusts, rails-to-trails, rivers conservation, snowmobile/ATV, heritage areas, land and water conservation fund, and recreational trails. | http://www.dcnr.state.pa.us/brc/grants/ |
| Pennsylvania Department of Conversation and Natural Resources (DCNR) – Peer to Peer Technical Assistance | Grants of up to 90 percent of eligible costs (\$10,000 maximum) to study problem-specific issues dealing with the administration of park and recreation facilities and/or services. These are short-term projects conducted primarily by experienced park and recreation professionals who work closely with community leaders. | http://www.dcnr.state.pa.us/brc/grants/itagrant.aspx |
| Pennsylvania Department of Conservation and Natural Resources (DCNR) – Wild Resource Conservation Program (WRCP) | The Wild Resource Conservation Program is accepting grant applications for projects in the following areas: Effects of Climate Change on Biodiversity; Education; Wildlife Action Plan Priorities; Wild Plant Management; and General Biodiversity Projects | http://www.dcnr.state.pa.us/wrcp/grants/index.aspx |

| Grant / Program Name | Description | Website Address |
|---|---|---|
| Pennsylvania Department of Environmental Protection (DEP) – Community Cleanup Program | The DEP Community Cleanup Program assists local partners with cleaning up illegal dumpsite. The community cleanup program is a partnership among community organizations, environmental groups, local business and industry, and local, county and state governments. The program brings together these partners to identify illegal dumps, prioritize cleanups, coordinate cleanups and provide surveillance and enforcement. | http://www.depweb.state.pa.us/landrecwaste/cwp/view.asp?a=1418&Q=505004&landrecwasteNav= |
| Pennsylvania Department of Environmental Protection (DEP) – Enactment of Ordinances and Implementation of Stormwater Management Plans | Reimburse municipalities for costs incurred in the adoption or revision of ordinances or regulations and other actual administrative, enforcement, and implementation costs incurred in complying with the Pennsylvania Stormwater Management Act (1978 Act 167) and the companion regulation governing stormwater management grants and reimbursements (25 Pa. Code 111). Eligible applicant: municipality. Average grant: \$1,400.00. | http://www.depweb.state.pa.us/portal/server.pt/community/watershed_management/10593 |
| Pennsylvania Department of Environmental Protection (DEP) – Environmental Education Grants Program | School districts, private schools, nonprofit groups and county conservation districts may apply for funding to develop new or expand current environmental education programming. This program is a reimbursement program with a 20 percent matching funds component, with certain exceptions. | http://www.depweb.state.pa.us/enved/cwp/view.asp?a=3&q=473224 |
| Pennsylvania Department of Environmental Protection (DEP) – Flood Protection Grant Program | Provides funds to government entities responsible for the operation and maintenance of flood protection projects for non-routine maintenance, project improvements and specialized equipment. Eligible applicant: county, municipality, authority. Average grant: \$25,000,000. | http://www.depweb.state.pa.us/portal/server.pt/community/waterways_engineering/10499 |
| Pennsylvania Department of Environmental Protection (DEP) – Growing Greener Watershed Grants | Restore watersheds and streams, reclaim mined lands, remediate AMD | http://www.depweb.state.pa.us/growinggreener/site/default.asp |
| Pennsylvania Department of Environmental Protection (DEP) – Illegal Dump Cleanup Program | Provide financial assistance for a maximum of \$25,000 with a match of 50% match to assist in the cleanup of illegal dumps on public lands, state-owned lands, and third-party sites. Eligible applicant: County, Municipality, Authority, NonProfit, Conservation District. | http://www.ahs2.dep.state.pa.us/GrantsCenter/ProgramSummary.asp?ID=139 |

| Grant / Program Name | Description | Website Address |
|--|--|---|
| Pennsylvania Department of Environmental Protection (DEP) – Nonpoint Source Implementation Program (Section 319) | Provide funding to assist in implementing PA's Nonpoint Source Management Program. This includes funding for abandoned mine drainage, agricultural and urban run-off, and natural channel design/streambank stabilization projects, and for development of watershed-based restoration plans. Eligible applicant: County, Municipality, Authority, School District, NonProfit, Conservation District, Watershed Groups. Average grant: \$110,000.00. | http://www.portal.state.pa.us/portal/server.pt/community/nonpoint_source_management/10615 |
| Pennsylvania Department of Environmental Protection (DEP) – PA Conservation Works! | One-time grants for motivated local governments and non-profit entities with shovel-ready projects that will save or conserve a minimum of 25 percent of all energy used. | https://www.grants.dcnr.state.pa.us/documents/conservation_works_7000_bk_d_ep4250.pdf |
| Pennsylvania Department of Environmental Protection (DEP) – Stormwater Management Planning and Implementation | DEP provides financial and technical assistance to counties for development, and to municipalities for implementation, of watershed-based storm water management plans under the Storm Water Management Act (1978 Act 167). The financial assistance consists of grants and reimbursements that cover 75% of the allowable costs for storm water management plans covered under the Act. Eligible applicant: County, Municipality. Average grant: \$200,000.00 | http://www.depweb.state.pa.us/portal/server.pt/community/watershed_management/10593 |
| Pennsylvania Department of Labor and Industry – PA Conservation Corps Program | Offers grants to municipalities for conservation, recreation, historic preservation, graffiti removal and repair of vandalism. Funds may be used to purchase materials and services. | http://www.portal.state.pa.us/portal/server.pt/community/pennsylvania_conservation_corps/10573/project_grants/599288 |
| Pennsylvania Fish and Boat Commission (PFBC) | The Commission has a number of grant programs that provide funding in support of fishing, boating and aquatic resource conservation; including the Boating Facility Grant Program, the Boating Infrastructure Grant Program, and the Coldwater Heritage Partnership. | http://www.fish.state.pa.us/grants.htm |
| Pennsylvania Humanities Council | Humanities Grants foster collaborative learning through public programs. Examples of humanities projects include discussion groups exploring books or films, workshops, walking tours, panel discussions, exhibitions with interpretive programs, and craft demonstrations integrating conversations about the craft. | http://www.pahumanities.org/resources/grants.php |

| Grant / Program Name | Description | Website Address |
|--|---|---|
| Pennsylvania Infrastructure Investment Authority (PENNVEST); Green Infrastructure Projects | PENNVEST actively funds Green Initiatives that promote and encourage environmental responsibility in our communities that are creative and innovative with green solutions for water quality management. | http://www.portal.state.pa.us/portal/server.pt/community/programs/9322/green_initiatives/541807 |
| Pennsylvania Infrastructure Investment Authority (PENNVEST); Drinking Water, Wastewater and Storm Water Loans and Non-point Source Financing | Primarily low interest loans to pay for costs associated with design, engineering, and construction of public or private owned drinking water or wastewater systems, non-point source pollution mitigation and municipal storm water projects. Loans up to \$20 million for more than one municipality. | http://www.portal.state.pa.us/portal/server.pt/community/available_funding/11211/drinking%2C_waste_and_storm_water_loans/560726 |
| Pennsylvania Recreation and Park Society (PRPS) RecTAP Program | Provides technical assistance grants of up to \$1,500 to help recreation and park boards and departments with specific issues. No matching funds are required. | http://www.prps.org/grantsrectap.htm |
| Pennsylvania Rural Water Association (PRWA) Sourcewater Protection Program | Helps communities to develop sourcewater protection plans to guide water utilities through the process of identifying potential threats to public drinking water and water utility facilities and outline plans of action in advance of problems. PRWA will work with any system interested in protecting their groundwater supply. There is no charge for the PRWA services provided. | http://www.prwa.com/content/sourcewater-protection |
| Pew Charitable Trust | Provides grants related to environment, culture, and health and human services. | www.pewtrusts.com/grants |
| SPARK (Sports Play and Active Recreation for Kids) | Provides staff training and one of the few areas that funds can be obtained to purchase equipment. | www.paspark.com |
| TreeVitalize | TreeVitalize Metros Sub Grant is available to Municipalities and or Municipal agencies. Up to \$25,000 available for tree planting per Municipality per year. Up to \$200 per tree. Dollar for dollar match is required. (At least half the match MUST be cash. Non-cash contributions such as services, labor, or materials contributed by the municipality or by volunteers. Application deadlines: February 1st and July 1st of each year. | http://www.treevitalize.net/SubGrant.aspx |
| Water Resources Education Network (WREN) | Watershed education projects sponsored by community based partnerships that educate, build awareness, and promote water-sustaining public policies and/or behavior change. Projects should be designed to encourage individual or collective action that will protect and improve local water resources. | http://wren.palwv.org/grants/grants_wren.html |



Appendix N—Recommended Updates to
Municipal Land Use Ordinances

OVERALL ASSESSMENT

Major items lacking in **ALL** of the municipal land use ordinances:

- ✓ **Landscaping standards**: In most of the ordinances, landscaping standards are minimal at best, and Trafford only has provisions for shade trees planted between sidewalks and curbs and NOTHING ELSE. While in all of the ordinances, landscaping is addressed in Zoning, it needs to be better handled in the SALDOs and needs to go beyond the bare minimums. A recommended planting list which included specific prohibitions against invasive species – especially those identified in the Duff Park report – would relieve some of the reviewing burden off of Planning Commission members and keep residents better informed
- ✓ **Riparian buffers**: The Stormwater Management standards are adequate in all of the ordinances, and particularly exemplary in Monroeville’s case, but there is a sad lack of attention to riparian corridors – a few simple regulations mandating buffers, naturalized areas / plantings, and prohibiting fencing, invasive species of plants, excessive grass-cutting and clearing, etc. would go a long way
- ✓ **Steep slopes**: Better steep slope protections are needed – all of the ordinances should follow Monroeville’s example of restricting hillside subdivisions
- ✓ **Low Impact Development**: The “Low Impact Development” standards (based upon DEP’s model ordinance) included as an Appendix in both Monroeville and Trafford’s Stormwater Management standards should be included in ALL of the communities’ codes, especially the Cluster Development suggestions, though these should be expanded and incorporated as part of both Zoning and SALDO

SUGGESTED UPDATES

1. The current Penn Township and Monroeville ordinances follow the DEP model regulations to the current extent practicable; the Trafford ordinance and the Murrysville ordinance both contain some DEP model regulations but do not include the full extent that Monroeville does.
2. There are some innovative environmental techniques that could be added as supplements to **ALL** of the ordinances to discourage the use of standard pipes and drains and pervious pavement, all of which can degrade overall water quality in the watershed.
3. **ALL** of the municipalities in the watershed should consider adding incentives or stronger language / more detail regarding progressive solutions that will mimic natural hydrologic functions and decrease the amount of impervious area and stormwater runoff from individual sites. Some of these techniques include:
 - ✓ Green Roofs
 - ✓ Rain harvesting
 - ✓ Downspout disconnections
 - ✓ Planter boxes
 - ✓ Rain gardens
 - ✓ Permeable pavements

- ✓ Vegetated swales
- ✓ “Green” parking – i.e., porous paving, increased landscaping, canopy trees required, etc.
- ✓ “Green Streets”
- ✓ Pocket wetlands
- ✓ Riparian buffers

CASE STUDIES / EXAMPLES OF “BEST PRACTICES,” AS DOCUMENTED BY THE ENVIRONMENTAL PROTECTION AGENCY:

[City of Chicago - Disconnect Your Downspout](#) - Promotes downspout disconnection as one technique to help alleviate flooding and provides basic principles and illustrations for homeowners on how to disconnect their downspouts.

[New York State Stormwater Management Design Manual \(PDF\)](#) - This excerpt from the redevelopment chapter provides information on three versions of stormwater planters: contained planters, infiltration planters, and flow-through planters. It includes sizing and design guidance.

[Stormwater Guidelines for Green Dense Redevelopment, Emeryville](#) - EPA recently supported the City of Emeryville, California in the development of “Stormwater Guidelines for Green, Dense Redevelopment.” Emeryville, which is a suburb of San Francisco, has worked for over a decade on reclaiming, remediating and redeveloping the many brownfields within its borders. The guidelines, and an accompanying spreadsheet model, were developed to make as much use of redevelopment sites as possible for handling stormwater.

[USDA - USFS Report: Conservation Buffers - Design Guidelines for Buffers, Corridors, and Greenways.](#) - This report provides over 80 illustrated design guidelines for conservation buffers synthesized from a review of over 1,400 research publications. Each guideline describes a specific way that a vegetative buffer can be applied to protect soil, improve air and water quality, enhance fish and wildlife habitat, produce economic products, provide recreation opportunities, or beautify the landscape. These science-based guidelines are presented as easy-to-understand rules-of-thumb for facilitating the planning and designing of conservation buffers in rural and urban landscapes. The online version of the guide includes the reference publication list as well as other buffer design resources.

[Parking Spaces / Community Places: Finding the Balance through Smart Growth Solutions \(PDF\)](#) - Describes approaches that can help communities explore new, flexible parking policies that can encourage growth and balance parking needs with their other goals. The report also demonstrates the significance of parking decisions in development patterns and presents case studies of places that are successfully using these strategies.

SMARTCODE / LIGHT IMPRINT

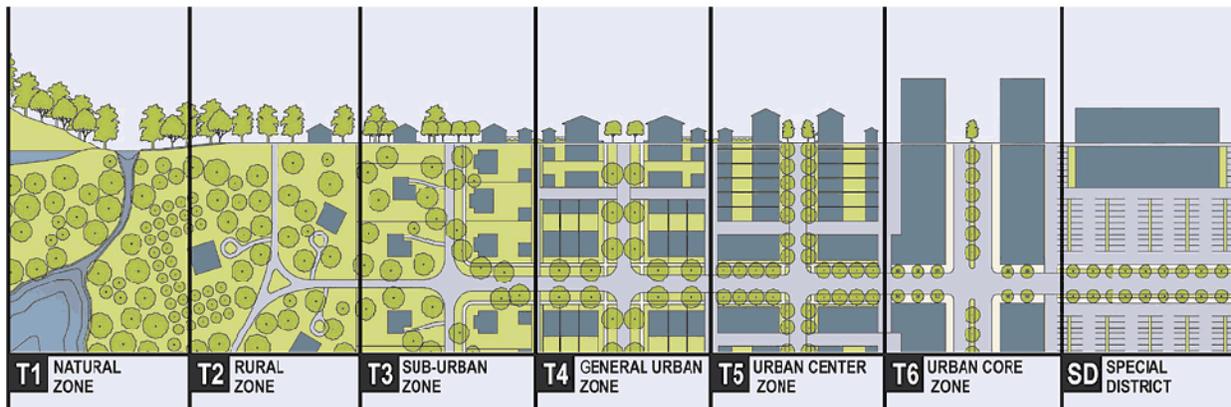
In 1999, the EPA issued regulations for stormwater management for all municipally owned sewer systems in the U.S. While the conventional approach to stormwater management emphasized water collection, piping, storage, and discharge, the EPA regulations advocated a more holistic and proactive set of techniques, known as best management practices (BMP's). These combine some or all of the following:

- ✓ Local and regional planning to manage growth and protect ecologically sensitive areas
- ✓ Site design to minimize land disturbance and paved surfaces, and to buffer water bodies with strips of vegetated land
- ✓ Retention of stormwater with facilities such as detention ponds and dry basins
- ✓ Allowing stormwater to percolate into the soil with infiltration facilities such as trenches and permeable or porous pavement
- ✓ Vegetation that absorbs pollutants and assists percolation, used in facilities such as swales, constructed wetlands, and rain gardens

A subset of BMP's is low-impact design (LID) or environmentally sensitive design (ESD). The goal of LID is to emulate the hydrology of a site / watershed in its natural state. LID techniques can include green roofs, cisterns, rain gardens, permeable pavement, and swales. LID techniques are usually less costly than conventional practices and often perform better. Regulators are moving to require these techniques in all land development regulations.

However, the best way to reduce stormwater impacts is well-designed urban density in conjunction with regional planning that preserves natural land. Compact, walkable urbanism is by far the best way to mitigate stormwater runoff, particularly when considering the region or watershed as a whole. Many progressive communities and regions are embracing a transect-based approach to density and, by proxy, stormwater.

The transect is a system of classifying urban environments from rural to urban, according to intensity and character. This diagram by Duany Plater-Zyberk is the classic representation of the concept:



Transect zones on a spectrum from rural to urban. The diagram is generic and does not represent an actual place or specific recommendation. Image credit: Duany Plater-Zyberk & Company and Center for Applied Transect Studies

The goal of transect-based planning is to serve a variety of preferences for urban environments, delivered in neighborhoods that are compact and complete. Each environment has an identifiable character that results from the coordination of urban design elements in an internally consistent manner. These environments are called transect zones, and they range in size from a few acres to tens of acres. Good neighborhoods are composed of three or more transect zones.

The goal of new regulations such as those propagated in Light Imprint is to propose water management solutions that will work over the long-term. While LID techniques such as green roofs and rain gardens are included in regulations, they are not overemphasized; other tools such as requiring small park areas, street trees, pools, drains, masonry troughs, and paving treatments are also important considerations. Light Imprint techniques promote “trains of treatment” – i.e., linking BMP’s in a functional series that applies water treatments sequentially instead of across the board. Each solution is based upon the appropriate transect zone in which it is located, and draws upon more natural, durable, and less costly solutions as opposed to intrusive and over-engineered solutions. The Light Imprint Toolbox Matrix presents a wide range of stormwater solutions, and allocates each one to the transect zones for which it is best suited. The key is that lower-intensity zones can easily retain and absorb stormwater, while in higher-intensity zones the difficulty and cost of retaining stormwater is much greater. Lower-intensity zones can retain extra stormwater, thereby balancing the runoff generated by higher-intensity zones.

Other Case Studies and Examples:

The West Virginia statewide stormwater permit reduces requirements for projects that are redevelopment, high-density development, or transit-oriented development.

http://www2.wvdep.org/dwwm/stormwater/MS4_docs.htm

Reference Used for This Section: <http://www.lightimprint.org/>,
<http://transect.org/docs/RegionalWatersheds.pdf> and <http://www.smartcodecentral.com/>



Appendix O—Rain Garden Frequently Asked Questions

Rain Garden Frequently Asked Questions

Why are you giving away free rain gardens?

Because rain gardens help to reduce flooding...and flooding has been a problem in and around Ramsay Terrace.

Rain gardens also have other good qualities. They reduce pollution in our streams. And they make our homes and neighborhoods more attractive.

Where does the money for the free rain garden program come from?

Mount Pleasant Borough has received a grant* to design, install, and landscape up to 40 rain gardens in and around Ramsay Terrace with other locations possible at a later time.

What exactly is a rain garden?

A rain garden is a special kind of landscaping with perennial flowers, shrubs, and/or small trees.

It is attractive – and it has a purpose: to help reduce flooding.

How does it work?

Some of the rain water from outside your home that's now going into the storm drain system will go instead to the rain garden.

One easy way to do this is to redirect one of the downspouts from your roof so that the water goes to the rain garden.

In the rain garden, water slowly sinks into the ground and collects in a shallow, unseen trough underneath the plants.

The plants use this water to grow, and any water left over slowly filters into the ground nearby.

Is it like a pond?

No. Even though it is called a rain garden, the ground in the garden does not stay wet.

During some storms, a little standing water – maybe a few inches – can collect in a rain garden. However, this water begins to sink into the ground very quickly.

If there is standing water in the garden, it normally will sink into the ground over the course of a few hours. In a very heavy storm, this will take longer, but typically no more than a couple of days.

Will it create a wet spot in my yard?

No. Water will not spill out of the rain garden and into your yard.

If you have wet spots in your yard now, a rain garden may help reduce them.

What about mosquitoes?

A rain garden does not breed mosquitoes.

Mosquitoes need 7-12 days to lay and hatch eggs. After most rain storms, any standing water in your rain garden will be gone in just a few hours.

Will a rain garden make my basement damp?

No. We will carefully locate your rain garden to be sure that it doesn't allow the infiltrating water to seep into your foundation.

Will it make it difficult to mow my yard?

No. You will be able to cut the grass right up to the edge of the rain garden.

How big will the rain garden be?

The average size will be about 10 feet by 20 feet, and most likely it will be an oval shape.

The specifics of your particular property – existing trees, slope of the yard, location of utility lines, soil type, etc. – will determine the exact size and shape of your rain garden.

What plants will be in the rain garden?

The Westmoreland Conservation District is coordinating the design, installation, and landscaping of the rain gardens.

The Conservation District has several different garden designs, and the plants in each have been chosen so that they complement each other and create a visually pleasing garden.

Most gardens will have a combination of perennial flowers, small shrubs, and/or small trees – all of which are hardy in our area.

How do I care for the rain garden?

Basically, not much care is required – some weeding, maybe a little pruning and, if there is no rain, occasional watering.

What if I don't know a weed from a flower or how to tend the plants in the rain garden?

If you have a rain garden, you also will receive information on how to care for it. But, as stated in the previous answer, not much care is required.

A person will be available during construction of the rain garden to answer any questions you might have. Afterward, the Westmoreland Conservation District has a landscape architect on staff who can help you.

What if the plants in my rain garden die?

Plants in the rain garden should do well, and will be guaranteed for a period of time against natural problems.

However, if they should fall victim to some natural cause during this guarantee period, and need to be replaced, they will be replaced at no cost to you.

When will the rain gardens be installed?

Installation of the rain gardens is scheduled to start in early summer, 2010.

How long will it take?

An average rain garden will take about a week to install.

What do I have to do to get a rain garden?

Fill out the enclosed "Interest Form" and return it to the Westmoreland Conservation District no later than Monday, March 15.

Once the Conservation District receives your form, a representative will contact you and make arrangements to come to your home to look at your yard.

During this visit, he will discuss the program with you and evaluate whether or not your property is suitable for a rain garden.

Funds for this free rain garden program are limited, so the locations of the gardens will be determined on a first-come, first-served basis to those residents of Ramsay Terrace and nearby streets who meet the conditions of the program.

**Funding for the rain gardens is being provided by the Pennsylvania Department of Environmental Protection through Section 319 of the Federal Clean Water Act administered by the U.S. Environmental Protection Agency. The Richard King Mellon Foundation is providing funding for the public information meetings and outreach.*