I. Introduction

A. Project Scope

This study investigates the feasibility of providing a central link to connect existing segments of the Schuylkill River Trail (SRT) in Berks County, and also, the feasibility of extending branches of this trail system to Lake Ontelaunee on the east and to Blue Marsh Lake on the west. This east-west trail component of the trail system is known as the Freedom Trail (FT). The Freedom Trail will use the same right-of-way as the Schuylkill River trail in its central portion.

The Schuylkill River has been designated as a Heritage Area of state and national significance. A recreational trail system is being developed that will connect the mountainous upper reaches of the river in Schuylkill County to its mouth at Philadelphia. Under the direction of the Schuylkill River Greenway Association (SRGA) and county planning agencies, many segments of this trail have already been built. This feasibility study investigates the possible viability of connecting the existing northern segment terminating at the Borough of Hamburg to the existing central segment at the City of Reading. Design is already underway and construction funding has been allocated for a trail section between Pottstown and Phoenixville. Completion of these two segments will create a continuous recreational trail from Pottsville in Schuylkill County to the Delaware River at Philadelphia.

This trail corridor reaching from the Appalachians to the coast is complemented by the Freedom Trail providing connections to Lake Ontelaunee and Blue Marsh Lake. These lakes are important scenic, environmental and recreational resources for the citizens of Berks County. The Freedom Trail will provide enhanced recreational access to these lakes for the citizens of Berks County and beyond. Planned for horses and wagons, the Freedom Trail will be a unique recreational resource for Berks County’s equestrian community.

This feasibility study investigates opportunities and constraints affecting the proposed trail alignment, and makes recommendations for proceeding with the next phases of implementation. In addition to identifying trail alignment and acquisition alternatives, the study recommends appropriate management entities to control, operate, and maintain the trail. Potential funding sources and development strategies...
are formulated and sequenced into a phased Implementation Plan. These explorations include opinions of cost for acquisition, development, and operation of the trail. The strategies laid out in this report will guide subsequent project development and implementation actions by local governments, non-profit organizations, and the private sector.

Public participation has been a key component to the success of this project. Input from community groups, local governments, and the public in general has been solicited through public meetings, maps, graphic presentation and displays, and publicly distributed project brochures.

This study’s recommendations are the result of public participation garnered through a structured stakeholder interview process. The proposed trail alignment and configuration was developed through a series of meetings with the project steering committee and in public forums.

B. Project Partners

The progress that has been achieved would not have been possible without the talent and vision of the project’s many partners. These partners generously contributed their time and ideas through participation on the Trail Advisory Committee. Funding for this study has been generously provided by a grant from The Pennsylvania Department of Conservation & Natural Resources (DCNR) with matching funds from the Schuylkill River Heritage Area (SRHA), Freedom Trail, Inc., and other generous contributors.

Project partners include among others:
- Berks Equine Council Committee
- Reading Riverplace
- Penn State University-Berks Campus
- Muhlenberg Township Parks and Recreation Department
- Berks Conservancy
- North Berks Recreation Corporation
- Berks County Parks and Recreation
- Berks County Planning Commission
- Berks County Industrial Development Authority

C. Regional Context

The entire Schuylkill River Trail (Reading to Hamburg Section) and Freedom Heritage Trail system can best be described as a cruciform pattern reaching from the urban core of downtown Reading north to the picturesque rural setting of Hamburg. Much of the region consists of the headwaters of tributaries of the Schuylkill River forming gently rolling agricultural landscapes that adjoin the Blue Mountain ridge of the Appalachian uplands. The alignment stretches from Blue Marsh Lake on the west and traverses a variety of agrarian to suburban landscapes in an eastern connection with Lake Ontelaunee, sharing a portion of overlap in Muhlenberg Township. Both of these large water bodies have extensive loop hiking trail systems that are currently in use, or planned for future expansion. These water resource areas include numerous significant natural and environmental habitats. Not only does Lake Ontelaunee serve as a regional reservoir, but also as an invaluable stormwater and flood control aquifer. Similarly, Blue Marsh Lake is a water resource of exceptional value on many counts including waterfowl nesting areas, habitat diversity, and flood control and is remarkably picturesque.
The corridor from Hamburg south comprises an array of landscapes as diverse as the people who call the region their home. It spans from the rural villages, towns and valleys in the north to the suburbs and urban character of Reading, the major city and southern anchor of the study area. Hamburg, Shoemakersville and Leesport serve as destination nodes along the route with historic charm and character certain to accommodate a healthy future well-grounded in cultural and heritage tourism.

This study encompasses a region that was once traversed by canal boats, horses, wagons, and carriages. Extension of the Schuylkill River Trail is a rediscovering of those routes, taking advantage of the same geographic and natural features that originally located the canal and roadway systems. Much of the old transportation corridors have been preserved over the years in the form of publicly owned lands, transition to current rail or highway transportation corridor or as private stakeholdings. Even in areas where the ownership patterns are clearly private, much of the character and physical features are still quite recognizable such as railroad embankments, linear depressions of the former canal prism and structures such as locks, tenders houses, mills and streetscape patterns.

The two proposed trail corridors will become regionally significant extensions of the largely successful open sections of the Schuylkill River Trail stretching from Philadelphia to Pottsville. The juncture of this particular section of the Schuylkill River and the Freedom Trail includes a section of the already completed Union Canal Trail, which has served as the area’s prototype greenway, paving the way for heightened interest in expanding the regional trails and greenway system. Large scale commercial and residential development throughout the Route 222 corridor has no doubt made planning for diminishing contiguous open space an imperative task for generations to come. The proposed trail spine will connect with the Bartram Trail section of the SRT at Hamburg, the Appalachian Trail at Port Clinton and the Union Canal Trail that already connects West Reading with Blue Marsh Lake. Much like Philadelphia’s Fairmount Park, planning and preservation of these greenway and trail corridors will preserve opportunities for recreational and alternative transportation through a diverse landscape rich with cultural, architectural, natural and historic significance. Certainly this network is a prime impetus for rethinking and re-investment in Pennsylvania’s heritage tourism opportunities that will become tied together through these trails.
D. Benefits of the Trail

The central and northern Berks County regions of the Schuylkill River National Heritage Area are exceptionally rich with natural, historical, and cultural assets. Opportunities exist to incorporate these regions into a premier nationally significant recreational trail system that will benefit heritage area residents and draw visitors to the area. The Trail will enhance the quality of life for existing residents not only by providing for recreation and appreciation of the beauty of the Schuylkill River and Berks County's scenery, but also by stimulating economic revitalization of the traditional main streets in the corridor’s historic towns.

Completion of the Schuylkill River Trail, a 130 mile land trail along the Schuylkill River corridor from the confluence with the Delaware River in Philadelphia to the headwaters in Schuylkill County is a critical component of the Schuylkill River National Heritage Area. The trail is either completed, under construction, or under study by SRHA, municipal planning agencies, and non-profit organizations.

Extension of the Schuylkill River Trail from Reading to Hamburg, and development of the Freedom Trail linking Blue Marsh Lake and Lake Ontelaunee will provide Berks County with recreational trails of national importance. The Schuylkill River Trail lies within a state and federally designated Heritage Area. The proposed Freedom Trail would share a portion of its alignment with the Schuylkill River Trail. The linking of these two trails will provide additional access to the trail system for Berks County residents. A unique feature of the proposed Freedom Trail would be its capacity to attract and host horse back riders as well as horse drawn carriages.

The 2003 Schuylkill River Heritage Area Management Plan recognizes five categories of benefits from the trail: resource conservation and enhancement, education and interpretation, recreation, community revitalization, and heritage tourism.

The trail system builds on Berks County’s scenic and historic resources. The trail system will promote public visitation and awareness of these resources and encourage their preservation. The trails complement the work of the Reading Company Technical and Historical Society in preserving the corridor’s history of industry, agriculture, mining, railroading and canals.
In addition to providing extraordinary recreational benefits for residents of Berks County, these trails will attract tourists and recreational users. The Schuylkill River Greenway and Freedom Trail are an integral part of the City of Reading’s efforts to revitalize its downtown through the Riverplace project and "The Greater Reading as a Greenway and Recreation Hub Initiative."

The SRGA examined potential recreational business activities that could be generated by the trail. Possible recreation related business activities identified include: bed and breakfasts, bicycle rental, canoe/kayak rental, recreation activities, sightseeing excursions, boat maintenance and cleaning services, kiosks or cart retailing, miniature golf courses, bicycle related shops and numerous equestrian support centers.

The proposed trail system will enhance mobility and connectedness within Berks County. The proposed trail system includes additional bridges across the Schuylkill River to serve non-motorized travel. These additional bridges will link neighborhoods and improve utilization of existing recreational facilities. The Freedom Trail can also link neighborhoods that are separated by barriers or disconnects due to removal of old bridges. As northern Berks County has grown, rural highways have become significant barriers to the movement of pedestrians. The Freedom Trail proposal includes the development of grade-separated pedestrian and carriage links across two of these dangerous barriers, Route 183 and Route 61. The trails will also provide safe walking and bicycle commuting opportunities to businesses, research parks, schools and the like. This concept is aligned as a positive step toward the County’s goals for enhanced heritage tourism and economic development.

The enhanced recreational opportunities that this trail system will provide are an attraction to workers in the so-called knowledge industries, making the county more competitive in the new economy.

The Trail will encourage economic revitalization by making use of the urban facilities offered by several town centers along the Heritage Area corridor including Leesport, Shoemakersville, and Hamburg. Bringing the trail through these historic industrial and agricultural centers provides mutually for the benefit of the town and the trail users. Town centers and their related businesses will provide amenities to trail users in the form of restaurants, hotels, shops and site-seeing. Thus, the trail users will bring a new source of income to help grow current businesses and create opportunity for the development of new ones. The Schuylkill River Heritage Area has now begun the Schuylkill River Trail Town Initiative to address this development.

Hamburg, Pennsylvania, offers unique shopping in an old fashioned town. One can explore the many shops sprinkled along its quaint business district, while enjoying a friendly downtown atmosphere. One discovers treasured antiques, rare coins and collectibles, one of a kind craft items, beautiful pottery, exquisite jewelry and fine leather goods. Quality fashions for the whole family can be found in the numerous boutiques and shops. Historic architecture is visible from every downtown street corner. Many of Hamburg’s most remarkable structures can be admired while taking a stroll through the business district.

Downtown Hamburg
district. George Meiser, local historian, has put it best by saying "Hamburg Borough, organized in 1837, is without a doubt one of the finest towns - architecturally - to be found anywhere in the state." The charms of Hamburg which will attract Trail users include the old fashioned 5 & 10 store, the 50’s style diner, the vintage movie house, and the nostalgic bakery.

E. Study Goals and Objectives

This study assesses the feasibility of a recreational trail following the Schuylkill River from the southern end of the Bartram Trail in the Borough of Hamburg to Baer Park in the City of Reading with connecting trails to Lake Ontelaune and Blue Marsh Lake. The objectives of this study are to evaluate the feasibility of proposed trails, and if appropriate, make recommendations to guide the creation of the two trail systems.

A map of physical and cultural resources and constraints was prepared as the basis for determining an optimal trail alignment. Among the features inventoried were transportation rights-of-way, land ownership, historic resources, steep slopes and wetlands. An environmental site reconnaissance was performed to assess the likelihood of environmental contamination. A historic resources inventory was also conducted. Opportunities for linkage to other elements of the regional transportation system, trail, destination points, and open space networks were identified.

During the inventory and analysis phase, major landowners along the trail corridor were identified. Potential Trail ‘bottleneck’ areas were identified where acquisition of additional rights-of-way would enhance the users’ experience. Many major landowners from whom a right-of-way would need to be acquired were contacted.

As the study progressed, meetings were held with the Steering Committee. Workshops were held to engage the public in sharing information and ideas. Members of the Steering Committee are key advocates for the implementation of this project. Issues of trail implementation and maintenance were presented, critiqued and agreed upon by consensus of the Steering Committee.

A phased implementation plan for the trail is included in this report. This phased implementation plan is supported by opinions of probable construction costs for the trail’s various segments.

F. Trail Characteristics

Several different trail width and sections are recommended for the SRT and Freedom Trail. Please see the attached “Trail Types” map in Appendix A.

TYPICAL SECTION A: Multi-use Gravel Bicycle/ Hiking Trail (10-12’ wide, compact, finely crushed stone)

TYPICAL SECTION B: Multi-use Widened Equestrian/ Carriage Trail (14-16’ wide, compact, finely crushed stone) widened to accommodate horse drawn carriages. The surface most conducive in accommodating a majority of users would be a compacted surface that is comfortable for walking, jogging, bicycling and is easily repairable and compliments the natural landscape. By expanding the Section A trail type to 14-16 feet at key locations and for short distances (50-60 feet), carriages can be accommodated with areas to pass, pause for rig or team management, turn and maneuver easily.
TYPICAL SECTION C: Asphalt Multi-use Bicycle/ Hiking Trail (10-12’ wide). In areas of bridge and roadway approach and descending terrain, an asphalt approach apron is recommended to provide all-season traction, a visible and textural transition to new trail conditions and for permanent application of trail signage, striping or arrows to be applied to the asphalt surface. This section is beneficial in interfacing with PennDOT and local roadways in order to maintain a (snow) plowable shoulder and to maintain the painted striping, rumble strips and road markings required by the respective agency. This approach apron can include an integrated sign and access barrier system to notify users of approaching crossings and traffic patterns.

In a few locations where physical space is limited, it will be necessary to compress the trail width and allow equestrians to utilize the shoulders of the trail. For short sections, carriages would share the same surface as other trail users. Examples of this scenario include locations where the alignment passes between historic structures, through narrow village streets and most commonly along the sections of historic canal cut into hill and mountainside. The key to successful changes in trail configuration will be to post visible and perhaps textural changes with adequate shoulder transition.

G. Projected Use

The Schuylkill River and Freedom Trails will appeal to a broad spectrum of users. This appeal is evidenced by the many people who make informal use of the area in its unimproved condition. The completed section of the Union Canal certainly sees significant use, which is destined to increase when the trail is extended and connected to more communities and destinations. Portions of the Schuylkill River trail between Valley Forge and Philadelphia attract so much use that the paved 12 foot wide surface can no longer handle the masses of joggers, walkers, bicyclists, dog walkers, baby strollers and wheelchairs that enjoy the corridor daily. In these more urbanized areas, which are similar to the development at Riverplace (City of Reading), user traffic volumes are measured in millions of users per year. Understandably, urban areas draw regional users on weekends who visit the area to make day long excursions or perhaps overnight sojourns on the trail. More rural areas convey less dense crowds, but are appreciated by steady streams of more regular and local users.

It is intended that the highest benefit of this trail corridor will be the reestablishment of connections between county, state and local parks, residential and business communities, cultural, natural and historic resources. Regional planners envision this trail system as a strategic element of future growth and development of the region’s potential for increased markets in heritage tourism and economic development.

Fortunately the region has a few trails in existence including the Bartram Trail to the north, the Thun Trail at Reading (completed sections of the Schuylkill River Trail) and the Union Canal Trail.
connection to Blue Marsh Lake. These trails have sparked the interest and momentum that has led to this study. The citizens that use these trails have realized and appreciated the many benefits of trails and greenways and have initiated various studies and plans such as this. Some current uses that would be immediately enhanced include: local joggers, picnickers, hikers, and anglers; recreational and commuting bicyclists; and employees of local businesses.

The proposed Freedom Trail would be an attraction to horse drawn carriage enthusiasts that would be unique on the East Coast. The carriageways which are proposed to connect Lake Ontelaunee and Blue Marsh Lake with Riverplace in the City of Reading will eventually provide a continuous route of over 75 miles of wagon- and carriage-ready designated trail. This specialty trail will be the first and only formally designated trail of its kind on the eastern seaboard. It is anticipated that this trail will draw equestrian and horseback enthusiasts from all reaches of the nation. Through discussions with local equestrian teams and the Berks Equine Council Committee, the study team learned that most wagon and carriage team enthusiasts are seeking a corridor such as this that will provide enough contiguous miles of trail to host a three day event. The critical design element then becomes planning the location and resources to support these events. Future planning for this corridor will expand on the details and specifications for parking, staging, corral, stable and comfort facilities that will support this Heritage Trail.

**H. Examples of Other Long-Distance Multi-Use Trails**

Unlike a short local trail project where the entire trail is constructed all at once, the Schuylkill River Trail and Freedom Trail in northern Berks County will be constructed in numerous phases over a long period of time. This has been the experience on other portions of the 110-mile long Schuylkill River Trail, as well as with other long-distance, multi-use off-road trails.

The lesson to be learned by the SRT/FT is that many of these other trails have made themselves “open to the public” long before they have been completed. By publishing guidebooks, posting signage, using temporary routings, and building a trail community of users, businesses and communities, these trail organizations have engendered tremendous benefits for the communities they serve. This work leads to tremendous support for completing the trails as continuous off-road facilities.

The 150 mile-long Great Allegheny Passage links Pittsburgh with Cumberland, Maryland, at which point the trail connects with the C&O Canal National Historical Park, whose towpath goes all the way from Cumberland to Washington DC. As with the Schuylkill River Trail, much of the route is a rail-trail. An excellent
on-line guide is available with maps, lists of services and contacts. The evidence of trail-related economic revitalization of the small towns through which it passes is quite evident. Over time, the trail is being located completely off-road; however, it has made good use of on-road detours to provide a continuously signed route. One section of the on-line map is attached – note how the routes use existing streets to link off-road sections.
Although bicycling and hiking are the two most popular activities, certain sections of the Trail with grassy areas are open to equestrians, and other users include fishermen and cross-country skiers. Most of the trail is a packed, crushed limestone surface.

**Chesapeake & Ohio Canal National Historical Park:** As noted by the National Park Service, “Preserving America’s colorful canal era and transportation history, the Chesapeake & Ohio Canal National Historical Park is 184.5 miles of adventure. Originally, the C&O Canal was a lifeline for communities and businesses along the Potomac River as coal, lumber, grain and other agricultural products floated down the canal to market. Today millions of visitors hike or bike the C&O Canal each year to enjoy the natural, cultural and recreational opportunities available.”

The story of the C&O Canal is not unlike that of the Schuylkill Navigation – beginning at the fall line at tidewater in Georgetown, and heading off into the wilderness through steep mountains. Just as the Schuylkill River Trail links with the Appalachian Trail at Port Clinton, so does the C&O at Harpers Ferry. Many of the rural towns along the C&O depend heavily on trail users for their business, and vice-versa.

As may be the base with the Schuylkill River Trail, the width and surfacing of the C&O towpath varies depending upon its location in small and large towns, and rural areas. The majority of the towpath is surfaced with crushed stone.
The Erie Canalway Trail: Named for the famous canal opened in 1825 between Albany on the Hudson River, and Buffalo at Lake Erie, this Trail will eventually span 524 miles across New York State following existing and previous routes of the canal. Already over 200 miles are open and in use. Here again, the trail is an economic lifeline for many older rural towns bypassed by modern transportation routes. In urban centers, the trail enhances the quality of life through its recreational and non-motorized transportation assets, while giving access to the canal and adjacent rivers.

However, the guidebook published by Parks and Trails New York reflects the use of temporary on-road segments linking the completed off-road sections. The sample map section (Map 19 Syracuse east) illustrated here shows the trail as it comes out of the eastern end of Syracuse.

The Erie Canalway Trail leaves streets in Syracuse and then follows the historic canal into the countryside.

Here again, as with other long-distance trails, the type and width of paving varies depending upon location and volume of usage. Also, while some of the trail is on the former towpath, much is also on old railbeds, as much of the old towpath was lost when the canal was significantly upgraded to its current 200'-width and use as a barge canal in the early 20th century.

The Trail passes the Stockade Historic District

Canalway Trail at Lift Lock
The East Coast Greenway: The Schuylkill River Trail and Freedom Trail are hardly isolated trails. Already there are numerous links to a virtually endless system of eastern trails, including the Appalachian Trail at Port Clinton, and in Philadelphia, the East Coast Greenway. The Greenway extends from Maine to Florida, and is planned to be an “urban Appalachian Trail” linking cities. Of course, there is a good bit of countryside between the great eastern cities, and as a result, the trail’s character varies tremendously from one region to another. Trail conditions and standards vary tremendously, from rural towpaths to sophisticated urban waterfront trails in Manhattan. Given the length of the trail, and the costs of development, it will be some time before the goal of an off-road trail is reached. However, as with the Erie Canalway Trail, signage of temporary on-road routes is already in place, and guidebooks are available for some sections. As an example, the entire route through Pennsylvania has been designated and signed as “Bicycle Route E” as part of the state’s system of state-wide bicycle touring routes.

A 40 page guidebook is available both on-line and on paper. As with the Schuylkill River Trail, different sections of the trail are being developed by different agencies and groups. The East Coast Greenway Alliance acts as the principal advocate for a connected system of trails, and for the development of the Greenway. A continuous routing from Maine to Florida should be in place in 2007.

1. Summary of Key Recommendations

A brief summary of recommendations include the following. These recommendations are discussed in greater depth in Section II.H “Recommendations for Future Action.”

- The trail should be phased. A detailed discussion of recommendation for three key stages of construction is given in Section II.F.
- It is recommended that the permanent alignment for the trail make use of a pedestrian and carriage bridge to be built at Confluence Point, connecting to Reading Riverplace and central Reading.
- Connections to major employment centers, such as Berks County’s Nutrition and Wellness Corridor project is highly recommended, and a pedestrian bridge is proposed at the location of the former Leisch’s Bridge. Such bridges should also support emergency vehicle use.
- Responsibility for acquisition should lie with the County for the Schuylkill River Trail, and with Freedom Trail, Inc. for its unique sections.
• Responsibility for trail construction should lie with the SRGA for the Schuylkill River Trail, and with Freedom Trail, Inc. for its unique sections.

• Responsibility for maintenance: When the SRT is complete, the Trail should be maintained and managed as part of the County park system. The unique sections of the Freedom Trail should be managed by Freedom Trail, Inc. The SRHA will remain involved through its Trailkeeper Program.

• Several individuals at public meetings expressed concern that conflicts might arise between trail usage and hunting. A program to encourage awareness by both hunters and trail users of the need for responsible usage is critical.

J. Determination of Feasibility

Many sections of the Schuylkill River Trail system are already built or programmed for construction. This system represents millions of dollars of public investment as well as countless volunteer hours and private donations. The extension of this trail system from Reading to Hamburg confronts unique challenges because of steep slopes and the fact that the Reading and Northern Railroad continues to operate in this corridor on both the former Reading and PRR lines.

Construction of new pedestrian bridges across the Schuylkill provides an appropriate design solution to these challenges. The Leisch’s and Stoudt’s Ferry Bridges were abandoned and demolished in the mid twentieth century. Replacement of these bridges will link communities that have long been separated. The design of these and other bridges could provide Berks County with the opportunity for a signature architectural statement at its river frontage. The abandoned right-of-way of the Schuylkill River Canal provides a favorable route for much of the trail from the Stoudt’s Ferry Bridge north to Hamburg. Several portions of the former canal are already in public ownership, making this a logical and practical location for continuation of the Schuylkill River trail system.

The proposed Freedom Trail crosses more rural sections of Bern, Ontelaunee and Perry Townships. This area is characterized by relatively large land holdings. The willingness of few large land owners to dedicate trail easements would provide most of the right-of-way that is needed between the two lakes. Challenges that this trail must overcome include the lack of continuous utility corridors, and the width and grade requirements associated with its intended use for horse drawn carriages. The crossing of heavily trafficked Routes 61 and Route 183 presents a few challenges. Grade separated crossings are proposed for these two busy highways. The trail would provide safe crossings for neighborhoods that have been separated by heavy traffic for decades.

Another challenge for the Freedom Trail is opposition expressed during the course of this study by the Bern Township Supervisors. Although supportive of the Schuylkill River Trail, the Supervisors expressed a reluctance to support the Freedom Trail, and site condemnation of rights-of-way and easements. The current Supervisors also oppose use of the Fairgrounds as a staging area for trail-related equestrian events. The eastern segment of the Freedom Trail in Ontelaunee Township does not appear to face these same political obstacles.

This report includes preliminary estimates of probable development costs for the two trails and, in Appendix E, a list of property owners from whom easements must be negotiated.