

# AN ANALYSIS OF THE CONSERVATION POTENTIAL IN THE SAND HILLS CONSERVATION REGION OF THE PENNSYLVANIA HIGHLANDS

July 2012

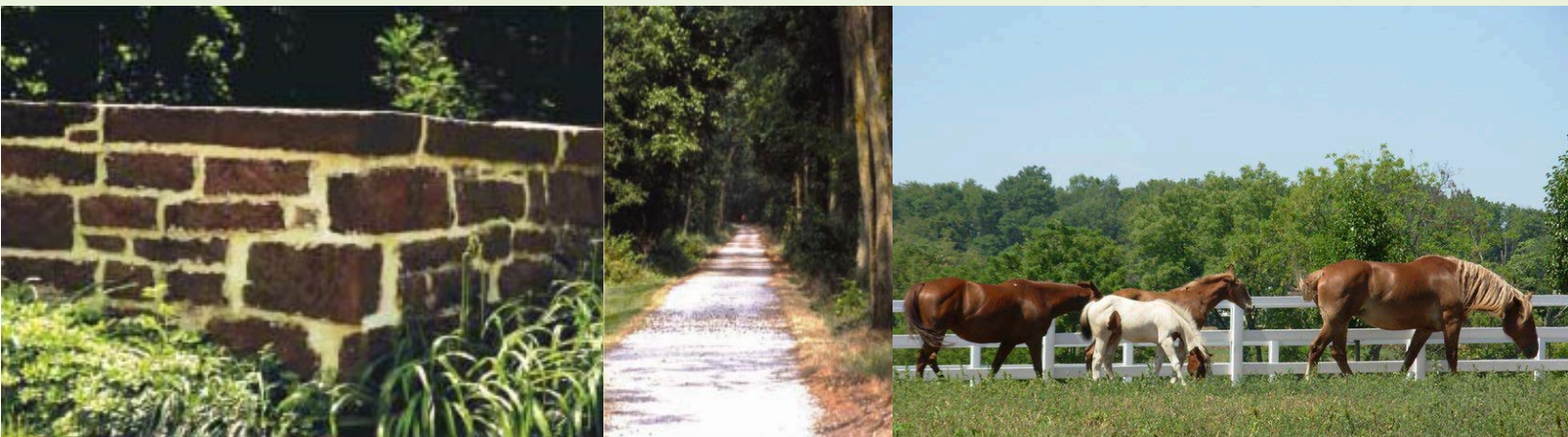
Conducted by:  
Appalachian Mountain Club  
The Trust for Public Land



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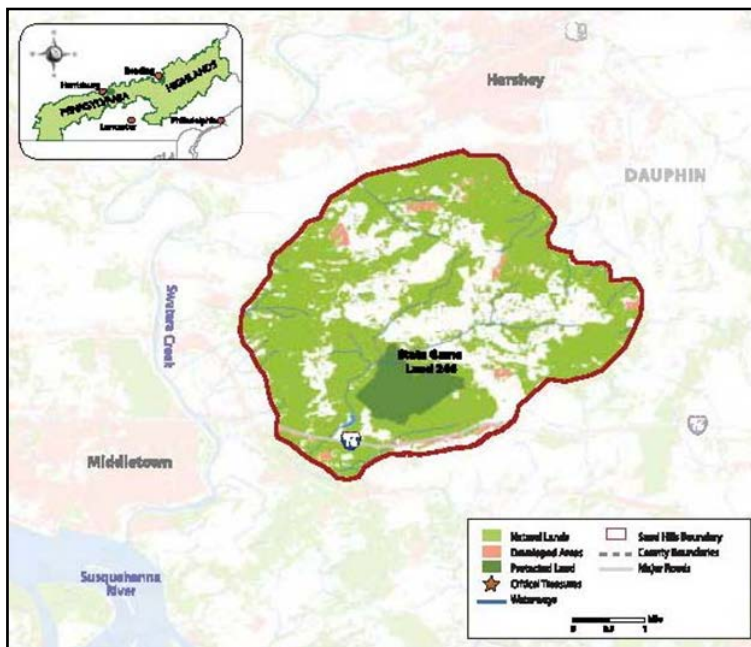


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# Executive Summary

## Sand Hills Conservation Area, Pennsylvania Highlands



The Sand Hills form a central forested hub ([Appendix A](#)) of the Pennsylvania Highlands. This region of lower Dauphin County is a unique area of natural and recreational resources along the eastern shore of the Susquehanna River. This area's expansive woodlands and unique geologic features have helped shape the heritage and character of its people and communities. The Sand Hills landscape encompasses approximately 8,052 acres of land, including state game lands.

The Sand Hills Conservation Area was highlighted in the

Pennsylvania Highlands Conservation Atlas<sup>1</sup> and is a priority landscape for protection within the Pennsylvania Highlands. The Pennsylvania Highlands has been designated as a Mega-Greenway by the Commonwealth of Pennsylvania and stretches over 1.9 million acres in southeastern PA, through 13 counties from Northampton to Adams County. The Pennsylvania Highlands is part of the nationally significant 3.5 million acre Highlands region in Pennsylvania, New Jersey, New York and Connecticut.

In the fall of 2011 the Appalachian Mountain Club and The Trust for Public Land undertook an analysis of the conservation potential in the Sand Hills. The goals of the analysis were two-fold. The first goal was to identify core conservation areas and to develop a conservation assessment of priority lands in the area. The second goal was to identify potential funding resources that could be utilized to protect priority lands in the Sand Hills.

## Key Findings

- The Sand Hills region contains over 13,100 parcels totaling approximately 41,000 acres. There are 122 parcels of existing conservation land, including state-owned lands (7 parcels), county-owned lands (7 parcels), municipally-owned lands (70 parcels), privately-owned lands (6 parcels), parcels with conservation easements (7 parcels), and parcels with agricultural easements (25 parcels). These parcels range from less than a quarter acre to over 217 acres in size and total 2,800 acres or 7% of the Sand Hills area.

<sup>1</sup> [http://www.outdoors.org/pdf/upload/cons\\_PAHighlandsAtlas1.pdf](http://www.outdoors.org/pdf/upload/cons_PAHighlandsAtlas1.pdf)

- Out of 13,100 parcels, there are a total of 12,980 unconserved parcels that are potentially available for conservation protection; these total approximately 38,200 acres or 93% of the area. Of the unconserved parcels, there are a few large parcels (100 to 1,300 acres) and many small parcels (<3.3 acres). Of the unconserved parcels, 466 are adjacent to existing protected areas, and there are no in-holdings with 100% of their borders contiguous to conserved lands.
- There are approximately 58 miles of recreation trails and 997 unconserved parcels that are adjacent to or contain a trail.
- Most funding for land conservation in America comes from local governments. Therefore, a dedicated source of local revenue often serves as the key to long-range open space preservation efforts as the stable funding source to leverage grant money offered by the state and federal programs.
- Since 1996, more than 100 local ballot measures were passed in Pennsylvania that support the acquisition of land for open space, farmland and recreational purposes, generating nearly \$1 billion. The overall passage rate for local ballot measures in Pennsylvania is 80 percent. Pennsylvania voters have approved 91 percent of all 47 bond measures, 71 percent of all 77 earned income tax measures, and 85 percent of all 13 property tax measures.
- In May 2005, Derry Township voters rejected a 0.1 percent earned income tax increase for open space with 44 percent support. The 10-year measure could have generated approximately \$5 million for open space and conservation easements. Neither Dauphin County nor any of its other municipalities have ever voted on a conservation finance ballot measure.
- In Pennsylvania, general obligation bonds are the financing mechanism utilized most often by counties for land conservation. A bond issue provides up front funds that will allow for the immediate purchase of land while it is still available and distributes the cost of acquisition over time so that future beneficiaries also share in the burden. In addition, bond issues are a familiar form of public financing for local capital improvements including park development, in Pennsylvania.
- At the municipal level, pay as you go taxes such as the property tax, earned income tax, and real estate transfer tax have been used, in addition to bonds, to finance land conservation, mainly in the southeastern portion of the state. <sup>2</sup>
- There are several local finance options—from taxes to bonds—that could be considered as tools for financing parks and land conservation in the Sand Hills Conservation Area. Specifically, this report analyzes the revenue raising capacity of bonds, property taxes and the earned income tax as conservation finance mechanisms and their associated cost to taxpayers. In addition, several relevant state and federal conservation funding programs could be leveraged to provide funding for specific land acquisitions. The communities in this area could consider separate public funding programs or a coordinated effort to finance land conservation in the Sand Hills area.

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<sup>2</sup> <http://www.heritageconservancy.org/news/publications/pdf/pub-fin.pdf>

- This feasibility report is meant to inform these jurisdictions of new funding options for land conservation by identifying potential funding mechanisms and revenue raising capacity. Next steps should include matching a funding source to the needs identified by the municipality and testing voter attitudes toward a specific set of funding proposals. TPL recommends a public opinion survey that tests funding options, ballot language, tax tolerance, and program priorities of voters.
- This study does not address county or municipal fiscal status for implementing a funding mechanism in depth. Rather, it anticipates that an examination of fiscal status will be an integral part of any decision-making process concerning conservation funding for the individual jurisdictions in the study area.

## Conclusion

Based on the scientific and fiscal analysis, there is great potential for significant land conservation in the Sand Hills. If this effort is successful, people residing in and around the Sand Hills will enjoy many benefits, including plentiful clean water and air; access to close-to-home recreational and cultural resources; the conservation of important ecological resources such as forests, waterways and wildlife habitat and increased economic opportunity.

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# I. Land Conservation Assessment

## Introduction

The Sand Hills region of lower Dauphin County is a unique area of natural resources along the eastern shore of the Susquehanna River. The Dauphin County Natural Areas Inventory identifies important habitats for a variety of animals in the Sand Hills region. Those habitats include the Round Top Thicket in northeast Londonderry Township, boulder belts of local significance, and the Iron Run Dam site. Among several federal- and state-listed rare plant and animal species in the Sand Hills area are the long eared owl, upland sandpiper, Allegheny woodrat, and timber rattlesnake.

There are significant outdoor recreation areas in the Sand Hills. The 22-mile Jonathan Eshenour Memorial Trail passes through the Sand Hills and will ultimately link Palmyra and Hummelstown and tie into to the planned Swatara Creek Greenway and trail. Although some of the Sand Hills are in State Game Land 246, the rest of the Sand Hills remains vulnerable to development pressures. This mix of historic, cultural, and natural resources makes the Sand Hills one of the unique landscapes in the Pennsylvania Highlands.

The goal of the land conservation assessment is to spatially identify high conservation value lands within the Sand Hills that: i) have the greatest potential for larger scale protection based on ownership parcel size; and ii) offer greater public value and ease of stewardship based on a parcel's adjacency to other protected lands.

## A. Methodology

### Study Area

This project focuses on the portion of Dauphin County that is included in the Pennsylvania Highlands region ([Appendix B, Map 1](#)), including Conewago, Derry and Londonderry Townships and Royalton Borough. The Sand Hills conservation focus area<sup>3</sup> ([Appendix B, Map 2](#)) overlaps with sections of each township ([Appendix B, Map 3](#)). However, because the focus area is relatively small (8,052 acres), the entirety of each township and borough were evaluated since they all lie completely within the PA Highlands.

### Approach

The potential for land conservation within this area is based on a parcel assessment including ownership fragmentation (parcel size and adjacency to existing protected land) and conservation value<sup>4</sup>.

The ownership fragmentation component ranks parcels based on their size and adjacency to existing protected areas. The conservation value is a quantitative measure of the ecological

<sup>3</sup> Highlands Coalition. 2006. The Pennsylvania Highlands Conservation Atlas. <http://www.highlandscollection.org/documents/PAHighlandsAtlas.pdf>.

<sup>4</sup> AMC realizes that each advisory organization may evaluate landowner information differently. This approach was developed by the AMC and reviewed by a Sand Hills advisory group.

and recreational/cultural resource values of each parcel based on the assessment conducted by the USDA Forest Service (USFS) as part of the Pennsylvania Highlands Study<sup>5</sup>. In addition, other information was identified and mapped for each parcel.

Ownership fragmentation and conservation value were computed for all unconserved landowner parcels, though we recognize that many parcels may be poor candidates for conservation due to their small size or existing development. The 2011 parcel data from Dauphin County was used for this analysis.

### Analysis Components

The ownership fragmentation component ranks unconserved parcels based on size and adjacency to existing protected areas.

**Size:** The parcel size score was determined by ranking parcels by size and assigning a subjective score to groups, with the largest parcels receiving the highest score:

Score	Grouping
0	Smallest 75% of parcels
1	75 <sup>th</sup> to 80 <sup>th</sup> percentile of parcels
2	80 <sup>th</sup> to 85 <sup>th</sup> percentile of parcels
3	85 <sup>th</sup> to 90 <sup>th</sup> percentile of parcels
4	90 <sup>th</sup> to 95 <sup>th</sup> percentile of parcels
5	Largest 5% of parcels.

**Adjacency:** The parcel adjacency score was determined by the percentage of the property boundary bordering existing conservation land. The percentage was prorated to a maximum score of 5 (which would be given to parcels that are inholdings and entirely bordered by conservation land).

**Conservation:** The parcel conservation value score was computed as the parcel's mean value based on the composite value analysis developed by the USFS as part of the *Highlands Regional Study: Connecticut and Pennsylvania 2010 Update*<sup>6</sup> ([Appendix C, Map 1](#)). High conservation value areas include a combination of recreational/cultural, water, biological, agricultural and forest resources. For a list of resource components refer to [Appendix C, Table 1](#). This study is a continuation of the USFS New York/New Jersey Highlands studies conducted in 1992 and 2002. The purpose of the conservation value assessment was to integrate various sources of information to provide a coherent picture of relative resource conservation value across the region, highlighting areas that are a priority for conservation.

The mean parcel scores range from 1 to 10, with higher scores indicating higher composite resource value.

### Combined Parcel Value Score

A combined parcel value score was developed by adding the conservation value, parcel size and adjacency scores. The combined score identifies the parcels with the highest value for conservation based on the resource values and landscape context. This information is a

<sup>5</sup> Pennsylvania Highlands Study Part 1, USDA Forest Service 2006, <http://cleara.uconn.edu/highlands2006/PAMain.html> (data and maps are available on line).

<sup>6</sup> U.S. Department of Agriculture, Forest Service. 2010. Highlands Regional Study: Connecticut and Pennsylvania 2010 Update. [http://na.fs.fed.us/pubs/stewardship/highlands\\_regional\\_study\\_ct\\_pa\\_10\\_screen.pdf](http://na.fs.fed.us/pubs/stewardship/highlands_regional_study_ct_pa_10_screen.pdf).

helpful tool in both prioritizing conservation opportunities and obtaining funding for their protection.

### Additional Information

Additional information was identified for each unconserved parcel included in the analysis.

The parcel's mean score for each of the individual resource categories in the *Highlands Regional Study: Connecticut and Pennsylvania 2010 Update* was identified. These resource values include: recreational/cultural, water, biological, agricultural and forest resources ([Appendix C, Map 2 - 6](#)). The mean parcel scores in each category range from 0 to 10, with higher scores indicating higher resource value.

A parcel was noted if it contained or is adjacent to regional recreation trails or is used for recreational purposes. The regional recreation trails include Horse-Shoe Trail, Jonathan Eshenour Memorial Trail, Conewago Creek Water Trail, Lower Susquehanna River Water Trail, and Swatara Creek Water Trail ([Appendix C, Map 7](#)). Parcels that are used for recreation include amusement parks and private campgrounds.

A parcel was identified, and acreage and percentage determined, for the following features:

- AMC designated Greenway Corridor. The Greenway corridors<sup>7</sup> are the best potential lands to connect areas that have a high natural resource value ([Appendix C, Map 8](#)).
- AMC designated recreation corridor. The recreation corridors connect regional recreation trails to other trails and protected lands ([Appendix C, Map 9](#)). The recreation corridors were subjectively delineated.
- Pennsylvania Natural Heritage Program (PNHP) Core Habitat. Core habitat<sup>8</sup> is an area containing plant or animal species of concern at the state or federal levels, or exceptional native diversity ([Appendix C, Map 10](#)).
- PNHP Supporting Landscape. Supporting landscapes are areas surrounding or contiguous to core habitats that maintain vital ecological processes or secondary habitat for sensitive natural features that may be able to accommodate some types of low-impact activities ([Appendix C, Map 11](#)).
- Riparian areas. Riparian areas are based on a 100-foot buffer along streams<sup>9</sup> ([Appendix C, Map 12](#)).

Also, parcels were identified if the parcel contained an impaired or non-impaired stream ([Appendix C, Map 13](#)). Non-impaired and impaired streams are designated in the 2012 PA DEP Streams Integrated List<sup>10</sup>. The stream name, stream order<sup>11</sup>, and stream length within that parcel were also identified.

<sup>7</sup> Appalachian Mountain Club and Pennsylvania Committee of the Highlands Coalition. 2007. *The Pennsylvania Highlands Greenway Planning Project A Tool for Land Protection in the Pennsylvania Highland*. <http://www.outdoors.org/conservation/wherewework/highlands/highlands-resource-conservation.cfm>.

<sup>8</sup> Pennsylvania Natural Heritage Program. Statewide CNHI Fact Sheet. <http://www.naturalheritage.state.pa.us/cnhi/cnhi.htm>

<sup>9</sup> 100 feet is the average minimum riparian forest buffer width that PA DEP recommends for regulatory, voluntary, and grant activities. This width applies to perennial or intermittent streams, rivers (minimum 100 feet on both sides of the stream or river), lakes, ponds and reservoirs (DEP. 2009. Riparian Forest Buffer Guidance. Document Number 394-5600-001).

<sup>10</sup> The 2012 DEP Streams Integrated List represents stream assessments in an integrated format for the Clean Water Act Section 305(b) reporting and Section 303(d) listing. PA DEP protects 4 stream water uses: aquatic life, fish consumption, potable water supply, and recreation. The 305(b) layers represent stream segments that have been evaluated for attainment of those uses. If a stream segment is not attaining any one of its 4 uses, it is considered impaired.



## B. Results

### Parcel Value Assessment

The study area contains over 13,100 parcels totaling approximately 41,000 acres. There are 122 parcels of existing conservation lands including state-owned lands (7 parcels), county-owned lands (7 parcels), municipally-owned lands (70 parcels), privately-owned lands (6 parcels), parcels with conservation easements (7 parcels), and parcels with agriculture easements (25 parcels). These parcels range from less than a quarter of an acre to over 217 acres in size and total approximately 2,800 acres or 7% of this portion of Dauphin County ([Appendix D, Map 1](#)).

There are over 12,980 unconserved parcels encompassing about 38,200 acres that are potentially available for conservation protection. The unconserved parcels range from less than a quarter of an acre to over 1,300 acres in size. The distribution of the parcel size values (Figure 1 and Table 2) shows 2 large parcels (one over 1,300 acres and the other over 800 acres), with 12 other parcels over 200 acres. However, approximately 10,000 parcels are less than one acre. Because of the large number of small parcels, the top five percent (i.e. those over 9.8 acres) encompass 75% of the study area. Of the 61 parcels over 100 acres in size, 6 showed up in the top 1% of scores.

Table 2: Distribution of Parcel Size Scores

Score	# of Parcels	Size Range
0	9,737	>0.25 to 0.86 acres
1	649	0.86 to 1.1 acres
2	649	1.2 to 1.7 acres
3	649	1.7 to 3.3 acres
4	649	3.3 to 9.7 acres
5	648	9.8 to 1,344 acres

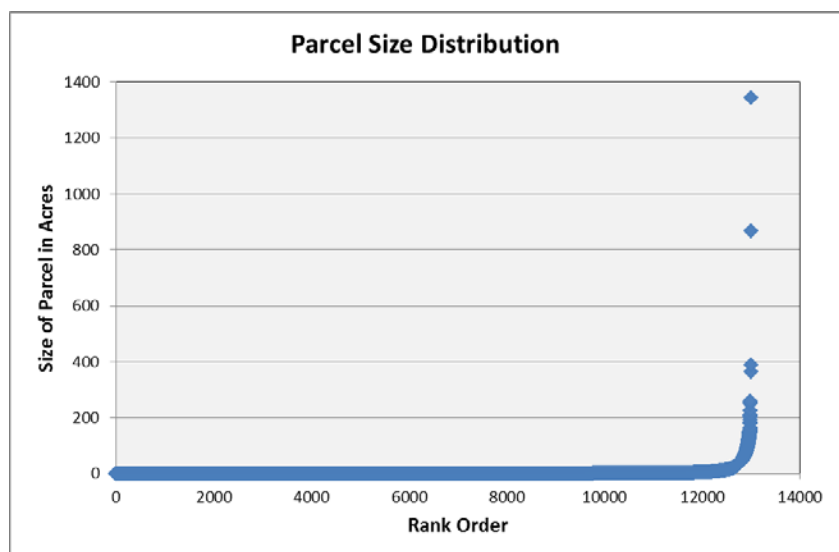


Figure 1: Parcel Size Distribution

<sup>11</sup> Stream order is determined by the Strahler method. This method of stream order increases when streams of the same order intersect. The intersection of two links of different orders will not increase in order.  
<http://webhelp.esri.com/arcgisdesktop/9.1/body.cfm?tocVisible=1&ID=3005&TopicName=Identifying%20stream%20networks>.

Of the unconserved parcels, 466 are adjacent to existing protected areas, ranging from less than 1% to 96% adjacency. The distribution of values (Figure 2) are relatively even until the upper end, representing parcels with a high degree of adjacency. There are no inholdings. There is one parcel that is 96% adjacent, 4 parcels with over 80% adjacency and 8 parcels with between 60% to 70% adjacency.

The mean parcel conservation value scores span the full range from 1 to 10. The distribution does not contain any outliers or discrepancies (Figure 3). However, there are 2,961 parcels with the value of zero. The value of zero represents 1) a limitation of the GIS analysis due to the parcels' small size and/or shape, which were below the resolution of the conservation value data used to compute this value, 2) areas in the conservation value data layer that are masked out (refer to [Appendix C, Table 1](#), for an explanation of masked areas that are set to zero), or 3) parcels are outside the boundary of this data layer.

The results of the combined parcel value analysis scores range from 0 to 15.8 out of a maximum of 20. The distribution of the combined parcel value displays no discrepancies or outliers within the distribution (Figure 4). Approximately 97% of the parcels have a value of 10 or below.

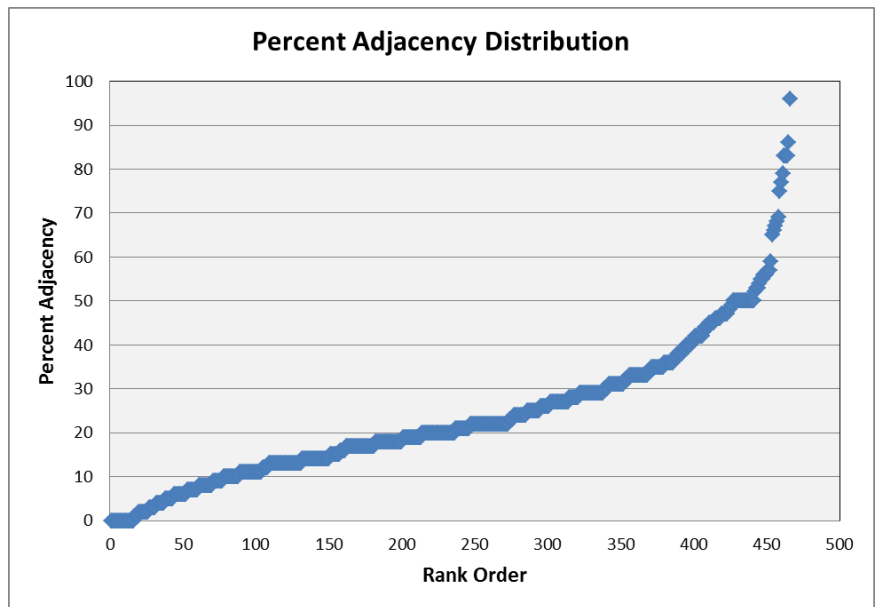


Figure 2: Percent Adjacency Distribution (only parcels adjacent to protected lands are included)

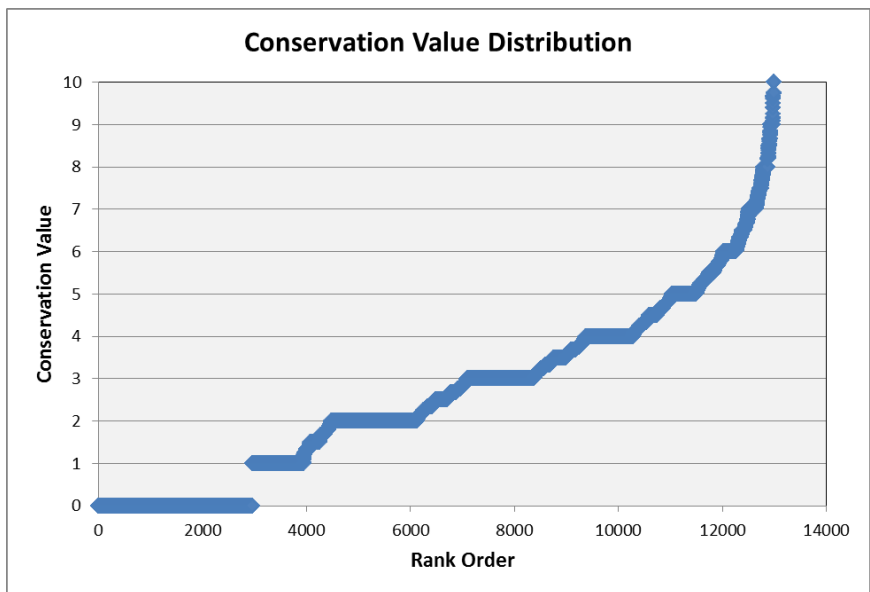


Figure 3: Conservation Value Distribution

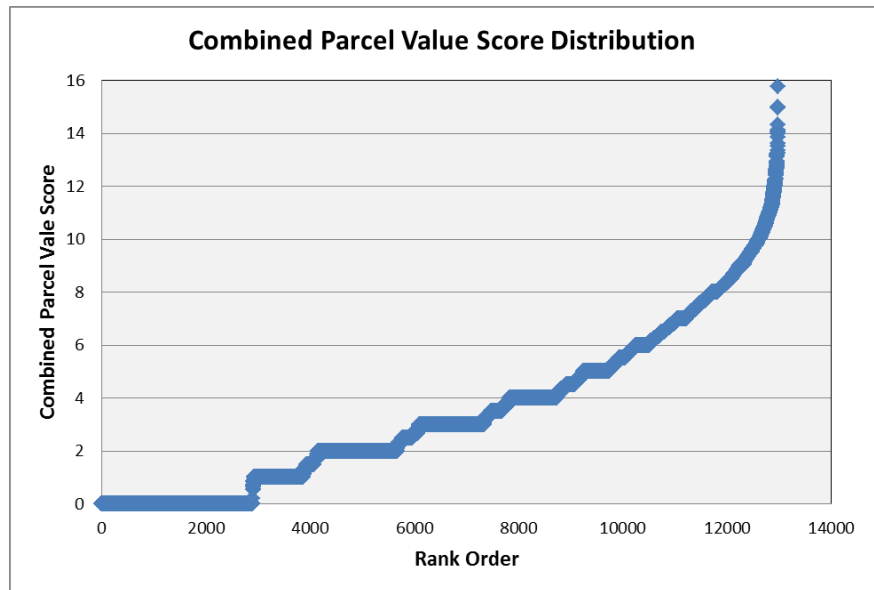


Figure 4: Combined Parcel Value Score Distribution

#### Identification of Priority Parcels

The top 25 ranked parcels were identified. The parcels range in size from 1 acre to 200 acres. Percentage of adjacency ranges from 0% to 83% and the conservation value score from 6 to 10. For the top 25 ranked parcels, the combined parcel value score ranges from the highest of 15.8 to 12.8 with a difference of 3.0. The difference between the top 10 parcels is 2.2, while the difference between the 11th and 25th parcel is 0.7.

#### Additional Information

Additional information was identified for each unconserved parcel included in the analysis:

- The parcels' mean score for each of the individual resource categories in the Highlands Regional Study: Connecticut and Pennsylvania 2010 Update (recreational/cultural, water, biological, agricultural and forest resources) ranged from 0 to 10, with higher scores indicating higher resource value.
- The regional recreation trails located within the Sand Hills project area include the Horse-Shoe Trail, Jonathan Eshenour Memorial Trail, Conewago Creek Water Trail, Lower Susquehanna River Water Trail, and Swatara Creek Water Trail. There are approximately 58 miles of recreation trails and 997 unconserved parcels that are adjacent to or contain a trail within the project area. The Horse-Shoe Trail is contained within, or adjacent to, 123 parcels; the Jonathan Eshenour Memorial Trail is contained within, or adjacent to, 516 parcels; the Conewago Creek Water Trail is contained within, or adjacent to, 52 parcels; the Lower Susquehanna River Water Trail is adjacent to 229 parcels; and the Swatara Creek Water Trail is adjacent to 104 parcels. Twenty-three parcels contain or are adjacent to the Horse-Shoe Trail and Jonathan Eshenour Memorial Trail; and four parcels contain or are adjacent to, the Horse-Shoe Trail and Swatara Creek Water Trail.

- Unconserved parcels used for recreational purposes include amusement parks and private campgrounds. These parcels were identified by reviewing the parcel's ownership information included with the parcel data. There are 3 parcels used for recreational purposes. There is one parcel identified as an amusement park and 2 parcels identified as private campgrounds.
- Of the unconserved parcels, 4,994 (38%) overlap with an AMC designated Greenway Corridor to some degree, ranging from less than 1% to 100%. There are 4,279 parcels classified as 100% or are completed within a corridor.
- Of the unconserved parcels, 2,744 (21%) overlap with an AMC designated recreation corridor to some degree, ranging from less than 1% to 100%. There are 2,446 parcels classified as 100% or are completed within a corridor.
- Of the unconserved parcels, 840 (6%) contain PNHP Core Habitat to some degree, ranging from less than 1% to 100%. There are 557 parcels classified as containing 100% core habitat.
- Of the unconserved parcels, 1,581 (12%) contain PNHP Supporting Landscape to some degree, ranging from less than 1% to 100%. There are 1,264 parcels that are classified as containing 100% supporting landscape.
- Of the unconserved parcels, 1,634 (13%) contain riparian areas to some degree, ranging from less than 1% to 100%. There are 111 parcels that are classified as 100% riparian.
- For unconserved parcels, it was noted if the parcel contains an impaired or non-impaired stream. Stream name, stream order and stream length were also recorded. Of the unconserved parcels, 791(6%) contain a stream, including 268 parcels that contain only non-impaired streams, 493 parcels that contain impaired streams, and 30 parcels that contain both. The highest stream order within an unconserved parcel is 4.

## II. Conservation Finance Assessment

### Introduction

The Trust for Public Land (TPL) is a national nonprofit organization dedicated to conserving land for people to enjoy as parks, gardens, and natural areas. Since 1972, TPL has conserved almost 3 million acres of land nationwide. In Pennsylvania, TPL has helped protect almost 3,000 acres.

To help state agencies and local governments acquire land, TPL assists communities in identifying and securing public financing. TPL's Conservation Finance program offers technical assistance to elected officials, public agencies and community groups to design, pass and implement public funding measures that reflect popular priorities.

Since 1996, TPL has been involved in more than 400 successful ballot measures and twenty successful legislative campaigns that have created more than \$34 billion in new funding for land conservation. Voters have approved 82 percent of the ballot measures that have been supported by TPL. In Pennsylvania, TPL is involved in the Renew Growing Greener coalition to increase state funding for land conservation. In May 2005 voters approved a \$625 million bond, which included \$300 million for open space and farmland preservation, as well as brownfield redevelopment. The measure passed statewide with 61 percent support and passed in Dauphin County with 56 percent support.

Locally in Pennsylvania, TPL most recently assisted in the passage of a \$10 million bond in Adams County. The funds will be used for open space, farmland and other natural area preservation. The measure passed with 75 percent support in November 2008. TPL also assisted Buckingham Township (Bucks County) in the passage of a \$20 million bond for open space in April 2008. The measure passed with 82 percent support. TPL has recently completed conservation finance feasibility studies for Monroe and Lackawanna Counties, and Upper Saucon Township (Lehigh County). Since 1996, TPL has assisted 8 conservation measures in Pennsylvania and all 8 have passed generating almost \$520 million for new land acquisitions.

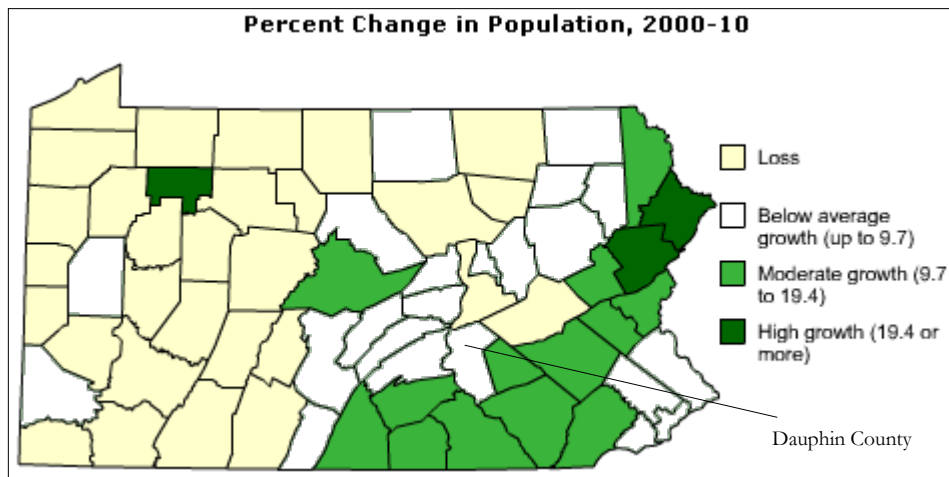
The objective for this study is to research the most viable local funding options for long-term conservation of open space, farmland, forests, watersheds and wildlife habitat for the Sand Hills Conservation Area including Dauphin County and the townships of Conewago, Derry and Londonderry. This research is part of a larger study of the region by the Appalachian Mountain Club.

### Overview

#### Demographics

Though Dauphin County has seen below average growth from 2000-2010, the county is surrounded, especially from the south, by moderate to fast growing counties which include Cumberland, York, Lancaster, and Lebanon. These areas could provide significant development pressures the Sand Hills area.





Conewago Township has the lowest municipal tax rate in Dauphin County (and in the mid-state region), partly because they have no real estate taxes. Conewago also has among the highest median household incomes in the area, at \$84,844. It is a mainly rural and agricultural area, with some newer developments largely occupied by people who work in neighboring Derry Twp. at Hershey Foods, Penn State Milton S. Hershey Medical Center, and Hershey Entertainment & Resorts Co.

Most of Conewago's \$500,000 budget comes from earned income taxes. It is also a community with few services — no police or fire department, and two members of the road crew. There is little industrial or commercial base. Conewago and Derry have the first and second highest median home values in the mid-state region. Conewago has the second highest median household income.<sup>12</sup>

#### Recent Preservation Funding Efforts

Conservation Finance election results can be helpful in gauging voter tolerance for public spending on land conservation. In May 2005, voters in Dauphin County supported the passage of the statewide Growing Greener II Bond question, authorizing \$625 million of which almost \$300 million was to preserve open space, farmland and watersheds. The amendment passed with 56 percent in Dauphin County and passed statewide with 61 percent support.

As mentioned previously, in May 2005, voters in Derry Township rejected the following earned income tax increase which would have generated revenue for open space acquisitions:

*The Open Space Lands Acquisition and Preservation Act as amended by ACT 153 of 1996 (32 P.S. § 5001, et seq.)*

*Do you favor the imposition by the Township of Derry of an additional earned income tax at the rate of .1% (1/10 of 1%) to be used for financing the acquisition by the Township of Derry of open space, agriculture and conservation easements and such other purposes as set forth in said Act?*

<sup>12</sup> Analysis by the Patriot News December 2011. [http://www.pennlive.com/midstate/index.ssf/2011/12/taxes\\_what\\_we\\_pay.html](http://www.pennlive.com/midstate/index.ssf/2011/12/taxes_what_we_pay.html)

The measure received 44 percent support and came about due to increasing development pressures on the Township. Between 1992 and 2002 more than 1,400 new homes had been built.<sup>13</sup> The failure of the measure was pinned on recent tax hikes by Dauphin County and the school district. The school district raised taxes 24 percent in 2004 and Dauphin County had increased taxes by 19 percent for two consecutive years.<sup>14</sup> Township residents already paid a 1 percent earned income tax, as well. The Hershey Trust Company owns most of the developable land in the Township, which at the time was estimated to cost between \$8,000 and \$10,000 per acre.<sup>15</sup>

It should also be noted that the Growing Greener II bond was voted on the same day voters in Derry Township were voting on their open space question. The amendment passed with 56 percent support in Dauphin County. In Conewago, Derry, and Londonderry Townships the voting was mixed, shown below. It passed statewide with 61 percent support.

Growing Greener II Bond Results			
Municipality	County	%Yes	%No
Conewago Towhsnip	Dauphin	55%	45%
Derry Township	Dauphin	54%	46%
Londonderry Township	Dauphin	45%	55%

## A. Past Preservation Efforts and Future Needs

The primary preservation program in Dauphin County is the Dauphin County Agricultural Land Preservation Program (ALP). This program is funded through the state farmland preservation program and Clean and Green rollback tax interest. The county also has contributed between \$50,000 and \$100,000 annually since 1998. The county used approximately \$1.4 million in federal funds between 1998 and 2005, however, with federal matching requirements, they have not pursued federal funds since 2005. Dauphin County has had difficulty finding landowners willing to agree to participate in the federal funding. As of 2011, the program has helped preserve over 13,000 acres through 131 easements.

Clean and Green is a state program, administered at the county level, which taxes enrolled land at use value as opposed to market value. When such land is converted to developed land, rollback taxes and interest are assessed. This can vary from as low as \$5,000 to as high as \$68,000.

Though most of the ALP easements have occurred in the northern part of the county, there are a few in the southeastern portion including 11 easements comprising almost 1300 acres in Londonderry and Conewago Townships. See map of easements in green below

<sup>13</sup> "Tax hike to buy land may come up for vote", [www.pennlive.com](http://www.pennlive.com) by Megan Walde August 30, 2004 The Patriot News

<sup>14</sup> "Derry to decide on ballot question", [www.pennlive.com](http://www.pennlive.com) by Megan Walde February 7, 2005 The Patriot News

<sup>15</sup> "Ballot question seeks views on raising taxes to save land", [www.pennlive.com](http://www.pennlive.com) by Megan Walde May 13, 2005 The Patriot News

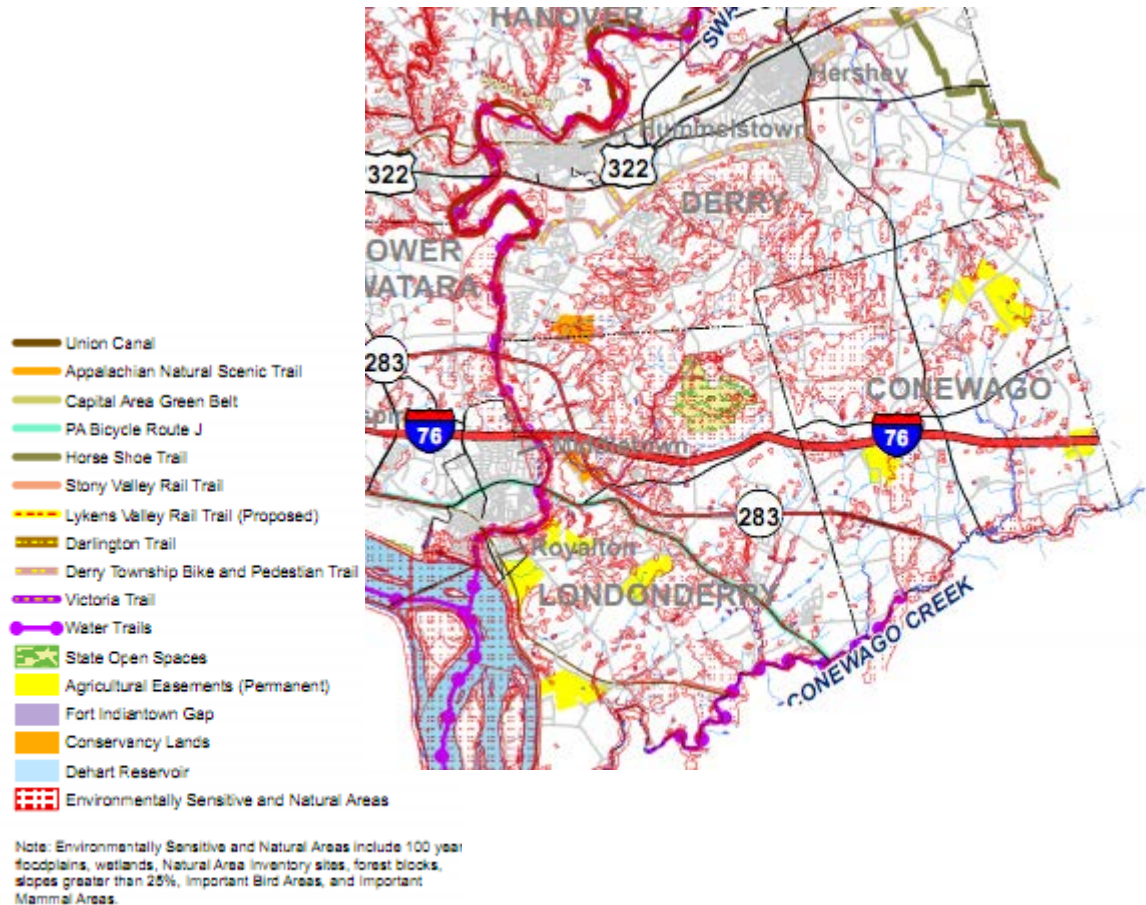


The Manada Conservancy and the Central Pennsylvania Conservancy are the two main local land trusts.

In April 2009 the County released the Dauphin County Parks, Recreation, Open Space and Greenways Study. The report was financed in part by a grant from the Community Conservation Partnership Program, Keystone Recreation, Park and Conservation Fund, under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

Under its “Action Program” the study suggests that “Dauphin County can be an important partner in preserving open space in the county. Many counties and municipalities in Pennsylvania have floated bonds to support parks, recreation, open space, and greenway functions. Dauphin County could provide funding support for open space, parks, greenways, and other land acquisition projects through a voter-approved bond. If desired, the money from the bond can be leveraged with state matching grants to increase the impact of the land preservation effort.” Table 4.6 in the report provides a list of potential state and federal funding sources for conservation.

In the “Proposed Open Space Concept”, the study recognizes the importance of environmentally sensitive areas in the map below:



## B. Local Conservation Financing Options: General Obligation Bonds, Property Taxes, Earned Income Taxes

Generally, there are five primary types of revenue sources available to counties and municipalities in Pennsylvania to pay for land conservation. Counties can use discretionary annual spending; and electoral and non-electoral debt financing, while municipalities may additionally use a voter-approved property tax <sup>16</sup> or earned income tax. This report will look at general obligation bonds at the county and municipal levels, and at the property tax for municipalities. The financing options utilized by a community will depend on a variety of factors, such as taxing capacity, budgetary resources, voter preferences and political will. The ability of local governments to establish dedicated funding sources depends upon state enabling authority. The specific finance options available to jurisdictions in the Sand Hills Conservation Area are described in this section.

It should be noted that municipal open space taxes can be used to either “pay as you go” or finance debt for land conservation purposes. Under Act 153 of 1996, voters decide only a tax type/rate. Borrowing is then a separate and as-needed decision made by the municipality’s elected officials, subsequent to a voter-approved tax increase. There are pros and cons to each approach. There is a much larger capacity created for land conservation in the near-term when the voter-approved tax is used to finance a bond or other type of loan, while the

<sup>16</sup> Voter approved, only if municipality would like to go above their legally limited property tax rate.

“pay as you go” approach typically provides less funding in the near-term, but generates a more stable source of annual revenues for land preservation.<sup>17</sup>

### Non-Electoral Debt

Non-electoral debt refers to bonds the municipality or county issues directly, without voter approval. Non-electoral debt is limited by law. The Local Government Unit Debt Act establishes the limits for non-electoral debt by type of local unit. The amount of non-voted debt that can be issued by a county or municipality is limited to 300 and 250 percent, respectively, of their borrowing base.<sup>18</sup> The Act defines the borrowing base as the average annual revenue taken over the last three years.<sup>19</sup> As of February 2012, Dauphin County and Conewago, Derry, and Londonderry Townships are not near their non-electoral debt limit. Though this is an option for land conservation, it is not ideal, as it must adhere to strict debt limits, and the alternative, voter-approved general obligation bonds, have enjoyed wide support in the Commonwealth.

### Requirements for Borrowing<sup>20</sup>

Once a decision has been made to incur debt for a capital project, the municipality must comply with a number of requirements imposed upon it by the Local Government Unit Debt Act for non-electoral debt.

Before a county or municipality can borrow funds, the governing body must enact an ordinance or a resolution in the case of small borrowings. The ordinance is both an information tool for the municipality’s citizens and a means to officially begin the process of incurring debt. Notice of the ordinance must be published both before and after its enactment. The law requires that the ordinance contain certain items, which include the following:

- an indication of the type of debt to be incurred (electoral, non-electoral, or lease rental debt);
- an indication of the form of debt (general obligation, revenue or guaranteed revenue);
- a repayment schedule and interest rates;
- a covenant;
- a notice whether the bonds will be sold at public or private sale;
- authorization for an officer of the municipality<sup>21</sup> to prepare a debt statement (which must be submitted to the Department of Community and Economic Development), to execute and deliver the bonds or notes, and to take other official action as may be needed;
- an identification of the project/purpose for which the debt is being issued and its useful life.

<sup>17</sup> <https://www.heritageconservancy.org/images/news/publications/pdf/opportunity2.pdf>

<sup>18</sup> Local Government Unit Debt Act Section 8022 (a)(2) <http://www.newpa.com/get-local-gov-support/technical-assistance/request-assistance/local-government-unit-debt-act/index.aspx>

<sup>19</sup> There are some provisions for the issuance of additional debt for certain purposes.

<sup>20</sup> Section 8102 and 8103

<sup>21</sup> Counties are also considered municipalities in Pennsylvania.



As shown in the chart on the right, a number of counties have opted to raise open space funds without a referendum.<sup>22</sup> The funding represents, primarily, budget appropriations and non-voted debt.

Recent Non-Electoral Debt and Appropriations for Open Space		
County	Total Amount Raised	Year Approved
Adams County	\$2 million	2003
Berks County	\$30 million	1999
Berks County	\$36 million	2005
Chester County	\$50 million	1997
Chester County	\$75 million	1999
Chester County	\$60 million	2004-2007
Cumberland County	\$3 million	2004
Lancaster County	\$9 million	1992-2006
Monroe County	\$7 million	2009
Montgomery County	\$100 million	1993
Schuylkill County	\$.65 million	2000

<sup>22</sup> Opportunity Knocks, Open Space is a Community Investment; The Heritage Conservancy 2008

### Voter-Approved General Obligation Bond

Voter-approved general obligation bonds have enjoyed widespread support in communities throughout Pennsylvania and much of the country. The passage rate for land conservation ballot measures in the Commonwealth is 80 percent, which is above the national passage rate of 76 percent for such ballot measures. Bonds have an even higher success rate at 91 percent. As shown in the chart to the right, over the past two decades, 33 counties and municipalities passed land conservation funding bond measures, most with overwhelming support, generating over \$775 million for land conservation. There are no statutory debt limits on the amount of voter-approved (electoral) debt, or self-sustaining debt.

### Issuing Debt for Land Conservation

A general obligation bond in Dauphin County or the municipalities in the Sand Hills Area would provide the means to raise a significant amount of money upfront to protect land that might not be available years down the road. A bond could provide the most readily accessible means to meet the conservation goals in the county and/or township. Bond funds may only be used for capital expenditures, including acquisition of lands or easements, and development or improvement of park and recreational facilities.

Local Land Conservation Bonds 1990-2010				
Jurisdiction Name	Date	Total Funds at Stake	Status	% Yes
Adams County	11/4/2008	\$10,000,000	Pass	75%
Bedminster Township	11/4/1997	\$2,500,000	Pass	82%
Bedminster Township	11/5/2002	\$2,500,000	Pass	77%
Bedminster Township	5/17/2005	\$2,500,000	Pass	69%
Buckingham Township	11/7/1995	\$4,000,000	Pass	82%
Buckingham Township	11/2/1999	\$9,500,000	Pass	85%
Buckingham Township	4/22/2008	\$20,000,000	Pass	82%
Bucks County	11/8/1994	\$3,500,000	Pass	67%
Bucks County	11/6/2007	\$87,000,000	Pass	74%
Delaware County	4/23/1996	\$100,000,000	Fail	
East Goshen Township	11/5/1996	\$3,000,000	Pass	72%
Hilltown Township	11/5/1996	\$3,800,000	Fail	50%
Lehigh County	5/21/2002	\$30,000,000	Pass	71%
Lower Makefield Township	11/3/1998	\$7,500,000	Pass	71%
Lower Makefield Township	11/4/2008	\$15,000,000	Pass	69%
Middletown Township	5/17/2005	\$8,500,000	Pass	79%
Milford Township	5/15/2007	\$5,000,000	Pass	62%
Monroe County	5/19/1998	\$25,000,000	Pass	52%
Montgomery County	11/4/2003	\$150,000,000	Pass	78%
Mount Joy Township	11/8/2005	\$2,000,000	Pass	61%
Northampton County	11/5/2002	\$37,000,000	Pass	65%
Northampton Township	5/19/1998	\$5,000,000	Pass	66%
Patton Township	11/6/2001	\$2,500,000	Pass	63%
Pike County	11/8/2005	\$10,000,000	Pass	67%
Plumstead Township	4/16/1996	\$4,000,000	Pass	84%
Plumstead Township	11/6/2001	\$6,000,000	Pass	76%
Plumstead Township	11/8/2005	\$8,000,000	Pass	77%
Plumstead Township	11/3/2009	\$4,500,000	Pass	51%
Radnor Township	11/8/1994	\$10,500,000	Fail	
Radnor Township	11/8/1994	\$10,000,000	Pass	
Radnor Township	11/7/2006	\$20,000,000	Pass	79%
Richland Township	11/5/2002	\$4,000,000	Pass	58%
Schuylkill Township	11/8/2005	\$20,000,000	Fail	42%
Solebury Township	4/23/1996	\$4,000,000	Pass	93%
Solebury Township	11/2/1999	\$10,000,000	Pass	90%
Solebury Township	11/5/2002	\$12,000,000	Pass	87%
Solebury Township	11/8/2005	\$18,000,000	Pass	88%
South Abington Township	11/4/2003	\$1,250,000	Pass	55%
Springfield Township	11/7/2000	\$3,000,000	Fail	
Springfield Township	11/7/2006	\$5,000,000	Pass	74%
Upper Dublin Township	11/4/2008	\$30,000,000	Pass	67%
Upper Makefield Township	11/5/1996	\$6,000,000	Pass	77%
Upper Makefield Township	11/7/2000	\$15,000,000	Pass	68%
Upper Makefield Township	11/8/2005	\$10,000,000	Pass	80%
Upper Merion Township	5/16/2006	\$5,000,000	Pass	85%
Upper Providence Township	5/20/2003	\$6,000,000	Pass	65%
Upper Southampton Township	5/21/2002	\$2,000,000	Pass	69%
Warrington Township	11/7/1995	\$2,100,000	Pass	66%
Warwick Township	11/7/1995	\$1,500,000	Pass	72%
Warwick Township	11/7/2006	\$7,000,000	Pass	72%
Wrightstown Township	11/7/1995	\$1,500,000	Pass	65%
Wrightstown Township	5/21/2002	\$1,500,000	Pass	70%
Wrightstown Township	11/7/2006	\$1,500,000	Pass	78%

The chart below includes the general obligation bond projections from a range of potential debt issuances displaying the annual household cost. For example, the County could issue \$25 million in general obligation bonds at a cost of about \$16 per household.<sup>23</sup>

#### Projected Bond Costs for Sand Hills Conservation Area Municipalities

20Year Bonds at 5% Interest Rate

		\$1m	\$2m	\$3m	\$4m	\$5m
Dauphin	Conewago Township	\$ 72.8	\$ 145.7	\$ 218.5	\$ 291.3	\$ 364.1
Dauphin	Derry Township	\$ 6.8	\$ 13.6	\$ 20.4	\$ 27.1	\$ 33.9
Dauphin	Londonderry Township	\$ 29.7	\$ 59.3	\$ 89.0	\$ 118.6	\$ 148.3

#### Projected Bond Costs for Dauphin County

20Year Bonds at 5% Interest Rate

	\$1m	\$15m	\$25m	\$40m	\$50m
Dauphin County	\$ 0.6	\$ 9.7	\$ 16.1	\$ 25.8	\$ 32.3

2012 Assessed value data dervied from County Assessor's office.

Costs are based median assessed home values for each township derived from the Patriot News

Common Level Ratio= 73.5 percent

Dauphin County Assessed Taxable Assessed Value = \$14.67B

Conewago Twp. Taxable Assessed Value = \$185.2M

Derry Twp. Taxable Assessed Value = \$2B

Londonderry Twp. Taxable Assessed Value = \$262.2M

TPL's bond cost calculations provide a basic estimate of debt service, tax increase, and cost to the average homeowner in the community for potential bond issuances for land conservation. Assumptions include the following: the entire debt amount is issued in the first year and payments are equal until maturity; 20-year maturity; and 5 percent interest rate. The property tax estimates assume that the jurisdiction would raise property taxes to pay the debt service on bonds, however other revenue streams may be used. The cost per household represents the average annual impact of increased property taxes levied to pay the debt service. The estimates do not take into account growth in the tax base due to new construction over the life of the bonds. The jurisdiction's officials, financial advisors, bond counsel and underwriters would establish the actual terms of any bond.

TPL recommends that the public opinion survey test voter support for bonds of varying amounts and to determine the annual amount that a majority is willing to pay to support a bond.

#### Authority<sup>24</sup>

For all local government units, except Philadelphia, the Local Government Unit Debt Act provides the authority and procedure for issuing local government debt. There are no statutory debt limits on the amount of voter-approved (electoral) debt, or self-sustaining debt.

#### Procedure<sup>25</sup>

To obtain voter approval, the governing body of the county or municipality must first adopt a resolution signifying its intent to issue electoral debt. A copy of the resolution and the

<sup>23</sup> [http://www.pennlive.com/midstate/index.ssf/2011/12/taxes\\_what\\_we\\_pay.html](http://www.pennlive.com/midstate/index.ssf/2011/12/taxes_what_we_pay.html)

<sup>24</sup> PA Local Government Unit Debt Act Section 8022

<sup>25</sup> Local Government Unit Debt Act, sections 8041 through 8049 and Center for Local Government Services "Referendum Handbook"

form of the question must be certified to the county board of elections at least 45 days before the election.<sup>26</sup>

The question must be phrased substantially as follows:

*Shall debt in the sum of [amount] dollars for the purpose of financing [insert brief description of project] be authorized to be incurred as debt approved by the electors?*

While the description of purposes should be brief, it should also be clear to the voters and it should authorize all of the intended activities.

Notice of the referendum must be published in one or two newspapers of general circulation beginning no earlier than 21 days before the election and no later than 14 days before the election. The county board of elections shall prepare a statement in plain English, which indicates the purpose, limitations and effects of the ballot question to be included in the notice along with the date of the election and the question to be submitted to the voters.

### Voter-approved Property Tax

The property tax is a familiar revenue source for local governments. Property taxes are usually measured in “mills,” where 1 mill equals \$1 of tax for every \$1,000 of assessed property value. Property taxes provide a steady annual source of revenue regardless of changes in the economy. They are relatively easy to administer at the local level, and the burden is broadly distributed. Local property tax rates have limits, requiring voter approval if these limits are exceeded. Nevertheless, voters in many communities have been willing to use a property tax increase when revenues are specifically earmarked for parks and open space protection.<sup>27</sup> Under Act 153 of 1996, funds may only be used for the purposes of acquiring land, including development rights. Funds from a voter-approved property-tax increase can also be used to finance revenue bonds for these purposes.

Projected Property Tax Costs for Sand Hills Conservation Area Municipalities							
Municipality	County	Taxable Valuation (2012)	Median Assessed Home Value	.25 mill Raises	.25 mill Average Annual Impact / HH**	.5 mill Raises	.5 mill Average Annual Impact / HH**
Conewago Township	Dauphin	\$185,207,600	\$168,095	\$46,302	\$42.02	\$92,604	\$84.05
Derry Township	Dauphin	\$1,969,182,600	\$166,478	\$492,296	\$41.62	\$984,591	\$83.24
Londonderry Township	Dauphin	\$262,153,800	\$96,873	\$65,538	\$24.22	\$131,077	\$48.44

\* To convert to today's assessed value, multiply by the Dauphin County common level ratio of 73.5% Ex: \$150,000 home value x 73.5%=\$110,250(assessment rounded to the nearest 100).

\*\*Household Impacts are based median assessed home values in each township

The chart above includes the property-tax projections from various mill increases for all of the jurisdictions within the Sand Hills Conservation Area displaying the average household cost for each. For example, Londonderry Township could increase their property tax by .5 mills, which would generate over \$131,000 for land conservation annually, while costing just under \$49 per the median assessed home value.

<sup>26</sup> Section 8043 Personal Conversation with Bernadette Barattini, Deputy Chief Counsel, PA Dept of Economic and Community Development 6/16/2008

<sup>27</sup> Excerpted from the Heritage Conservancy's <http://www.heritageconservancy.org/news/publications/pdf/pub-fin.pdf>

### Earned Income Tax

The earned income tax (EIT) is an important source of revenue for local governments. The EIT may be more acceptable than the property tax in communities with a large population of retired seniors, since the tax is only applied to earned income, not to real estate assets or pensions. Pennsylvania law caps the EIT at 1.0 percent, and in most jurisdictions the local school district lays claim to half of this amount. Act 153 of 1996 authorizes voters to approve the levy of an increased earned income tax beyond the 1.0 percent limit, exclusively for the purpose of financing purchases of land or development rights. Funds can also be used to finance revenue bonds for these purposes. The amount of the additional tax is set by the voters in a referendum. <sup>28</sup>

As of February 2012, Conewago, Derry, and Londonderry Township each currently collect a 1% earned income tax that is split evenly with their respective school districts. <sup>29</sup>

As mentioned, in May 2005 voters in Derry Township rejected the following EIT question.

*Do you favor the imposition by the Township of Derry of an additional earned income tax at the rate of .1% (1/10 of 1%) to be used for financing the acquisition by the Township of Derry of open space, agriculture and conservation easements and such other purposes as set forth in said Act?*

Derry Township Open Space EIT Results 5/2005			
Precinct	Yes Votes	No Votes	%Yes
1	163	142	53%
2	105	124	46%
3	73	110	40%
4	61	80	43%
5	56	82	41%
6	51	74	41%
7	132	177	43%
8	57	98	37%
9	35	43	45%
10	84	115	42%
11	133	141	49%
12	73	98	43%
13	107	124	46%
14	54	74	42%
15	81	111	42%

If the Derry measure had passed it would have generated approximately \$5 million over the course of the ten year proposal. If Derry Township went back to the ballot in 2012 with a .1 percent increase in the EIT for open space it would generate almost \$850,000 annually for land conservation and cost the average home \$61 annually or

Estimated Revenue and Cost of Additional EIT			
Township	EIT Increase	Annual Revenue *	Cost /Year/ Average HH Income**
Conewago	0.05%	\$39,000	\$42.42
	0.10%	\$78,000	\$84.84
Derry	0.05%	\$423,834	\$30.32
	0.10%	\$847,668	\$60.64
Londonderry	0.05%	\$45,000	\$33.37
	0.10%	\$90,000	\$66.74
Med. HH Income Conewago- \$84,844 Derry- \$60,635 Londonderry \$66,742			
*Based on 2011 EIT Revenue			

<sup>28</sup> Excerpted from the Heritage Conservancy's <https://www.heritageconservancy.org/images/news/publications/pdf/pub-fin.pdf>

<sup>29</sup>

[http://munstatspa.dced.state.pa.us/ReportViewer.aspx?R=MunicipalTaxInformation&county\\_id=220001&reporting\\_year=2012&rendering=H](http://munstatspa.dced.state.pa.us/ReportViewer.aspx?R=MunicipalTaxInformation&county_id=220001&reporting_year=2012&rendering=H)



just over \$1 a week.

Although the amount that a majority of voters are willing to pay on an annual basis can vary significantly by community and region, TPL has found from polling around the nation that the range is typically \$30-50 annually. It can be significantly higher in more affluent communities. In this context, the cost of the failed 2008 EIT measure may have been too high for a majority of voters.

TPL recommends that the public opinion survey gauge voter support for varying levels of property and EIT tax increases, with information on the annual cost to the average household, to determine how much voters are willing to pay, and their preferences for different funding mechanisms.

### Referring Tax Measures to the Ballot

The method for placing an earned income or property-tax referendum question on a ballot is set forth in the Pennsylvania Election Code (P.L. 1333, No. 320). First, the governing body must pass an ordinance to have the question placed on the ballot. For tax measures, the ordinance is then filed with the county board of elections at least 13 Tuesdays before the next primary or general election. The question for approval of a dedicated tax must be phrased in the following words:

*“Do you favor the imposition of a [describe the tax in mileage or rate] by [local government unit] to be used to [purpose]?”*<sup>30</sup>

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<sup>30</sup> <https://www.heritageconservancy.org/images/news/publications/pdf/pub-fin.pdf>

## C. State Conservation Funding Program

According to TPL's Conservation Almanac,<sup>31</sup> which tracks conservation acquisition activity nationwide, in Pennsylvania, 538,798 acres were acquired for conservation purposes between 1998 and 2008 at a total cost of \$1.1 billion. State spending by county shows that only \$465,500 was spent through Keystone Recreation, Park and Conservation grants, in Dauphin County for new land acquisition, whereas \$116 million was spent in Chester County, the highest spending among all counties. Other counties receiving high levels of state funding for new land acquisition include Lancaster, Berks, Northampton, Lehigh and Bucks, all of which have passed land conservation finance measures. However, between 1999 and 2010 Dauphin County received over \$64 million for park development and other projects using Growing Greener funding. Only a small percentage of this was used on land conservation. The main source of federal funding to counties came from the Grassland Reserve Program, Farm and Ranch Lands Protection Program, the Land and Water Conservation Fund, the National Park Service and the Wetland Reserve Program. Counties receiving the majority of these funds were Adams, Montgomery, Pike and Chester.

Between 1998 and 2008, the state spent \$62 per capita on conservation, which is relatively low compared to Virginia and North Carolina, for which similar data are available. However, when viewed more broadly during the time period of 1998-2005, Pennsylvania ranked 6th nationally in terms of total state level spending for conservation, and 17th in terms of per capita spending as illustrated below.

Land Conservation Spending & Acres Conserved using State Funds, 1998-2008			
State	State \$ Spent	Acres Conserved	\$ per Capita
North Carolina	\$1,075,500,086	838,262	\$119
Virginia*	\$843,999,004	558,165	\$109
Pennsylvania	\$767,156,998	386,455	\$62
New York	\$1,042,649,436	449,601	\$54
Kentucky**	\$46,856,559	52,839	\$11
Source: TPL Conservation Almanac			
*Data through October 2009			
**PACE Data not included for year 2008			

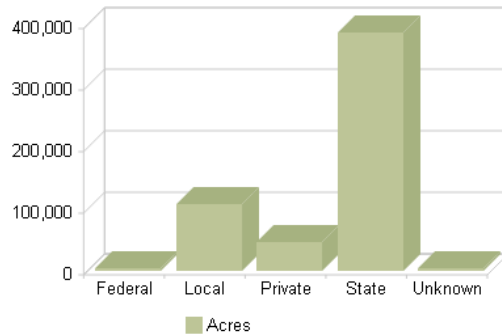
The charts below depict the total acres acquired and total dollars spent in Pennsylvania by level of government. Data on private investment is not comprehensive. Farmland preservation programs at the county level are primarily responsible for the high level of local activity in the state (\$382 million), which have helped to leverage state funds. The state Farmland Preservation Program, Growing Greener and Keystone Recreation, Park and Conservation grants have provided dedicated revenue at the state level of government.

<sup>31</sup> <http://www.conservationalmnac.org/secure/almanac/index.shtml>

Land Conservation Activity: Conservation Almanac, 1998-2005

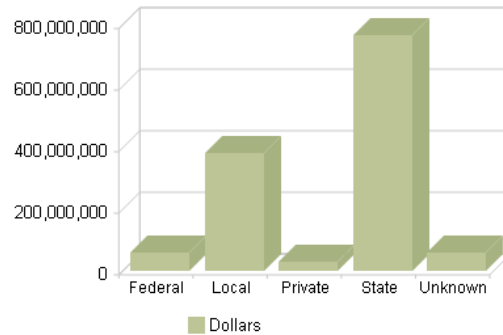
Rank	State	Snapshot \$ State	Snapshot Acres State	\$ spent per Capita
1	Delaware	\$204,374,534	80,406	\$236
2	Florida	\$3,567,559,516	1,671,784	\$195
5	North Carolina	\$851,733,148	467,492	\$94
6	Colorado	\$409,099,361	658,512	\$84
15	New York	\$742,645,658	432,253	\$38
16	Virginia	\$285,041,067	259,472	\$37
17	Pennsylvania	\$454,806,480	372,082	\$37
28	Nebraska	\$22,203,269	62,512	\$13
29	South Carolina	\$51,792,018	40,305	\$12
37	Kentucky	\$33,382,046	38,928	\$8
38	Idaho	\$11,662,402	13,330	\$8
39	Nevada	\$19,247,614	14,194	\$8
40	Oregon	\$25,469,490	41,452	\$7
50	North Dakota	\$12,000	80	\$0

Acres of Lands Protected 1998 - 2008



Level of Government	Acres
Federal	3,397
Local	107,869
Private	46,779
State	386,455
Unknown	4,676

Total Dollars Spent 1998 - 2008



Level of Government	Dollars
Federal	\$61,205,851
Local	\$382,295,581
Private	\$30,653,015
State	\$767,156,998
Unknown	\$58,139,804

## D. State Funding Sources

Pennsylvania uses direct appropriations from the General Fund, a portion of the real estate transfer tax, a state tipping fee, a portion of cigarette tax revenue, and several bonds to fund land conservation.

### Keystone Recreation, Park and Conservation Fund

In 1993 voters passed the “Key 93” initiative, which was originally funded by a 5-year, \$50 million bond in addition to 15 percent of the state’s share of the realty transfer tax. Key 93 focuses on land acquisition and preservation of nature preserves, habitats and parks. Grants are made through the Keystone, Recreation, Parks and Conservation Fund to The Department of Conservation and Natural Resources (65%), Pennsylvania Historic & Museum Commission (13%), Pennsylvania Department of Education (4%), and the State System of Higher Education (18%). Revenue allocated to DCNR is used for rehabilitation and upgrades to state park and forestry infrastructure, rails to trails projects, river protection and conservation projects. Grants are also distributed from DCNR to local recreation projects and to Land Trusts for natural areas and open space planning and acquisition. Between 1998 and 2008 just over \$95 million was spent on land acquisition through the Keystone Recreation, Park and Conservation Fund.

### Growing Greener Initiative (I and II)

The Growing Green I initiative, also called the Environmental Stewardship Fund, was signed into law in 1999 and dedicated nearly \$650 million in bond funds over five years to preserve farmland and conserve open space. In June 2002 the Governor reauthorized the Growing Greener program, doubling the funding and extending it through 2012. This extension is funded by a permanent dedication of a \$4.25/ton municipal waste disposal fee. The program’s mission is to conserve farmland through the Farmland Preservation Program and open space; maintain state parks; clean up abandoned mines and restore watersheds; provide funds for recreational trails and local parks; help communities address land use; and provide new and upgraded water and sewer systems. Thus, much of the initiative is aimed at funding for projects not related to land acquisition. In May 2005 voters approved the Growing Greener II statewide bond of \$625 million, nearly half of which is dedicated to the Farmland Preservation Program and open space conservation.<sup>32</sup>

The Farmland Preservation Program was established in 1988 to curb the loss of prime farmland to non-agricultural uses. The Bureau of Farmland Preservation oversees the program, allowing for the purchase of conservation easements (i.e. development rights) from owners of valuable farmland by state, county and local governments. Funding is provided through an annual allotment of cigarette tax revenue of \$20.485 million, as well as Growing Greener bond funds. The American Farmland Trust has recognized Pennsylvania’s farmland program as the leader in protecting farmland across the country, with more than 4,100 farms approved for easement purchases, totaling more than 450,000 acres.

In order to qualify for the program, the land must be a part of an Agricultural Security Area (ASA), meet size specifications, have at least half of the tract be harvested cropland, pasture or grazing land, and contain 50 percent land capability classes I-IV. The farmland is scored and ranked for possible uses other than agriculture based upon a variety of factors (e.g. proximity of farm to water and sewer lines, extent and type of non-farm development

<sup>32</sup> <http://www.waterresearch.net/grants/growinggreener.htm>

nearby). Counties that decide to have an Easement Purchase Program must create an agricultural land preservation board. To date, 57 counties of 67 (85%) have established boards.

In order for local governments to receive grant funding they must respond to an open application period upon notification by the state agency. Applications are ranked by regional/state staff and awarded according to internal budget priorities regarding land acquisition, restoration, recreation etc. All grants for land acquisition require a 50 percent match from local governments.<sup>33</sup>

Growing Greener II bond funds were spread out over six years to support projects within the Department of Environmental Protection (\$230 million), Department of Conservation and Natural Resources (\$217.5 million), the Pennsylvania Department of Agriculture (\$80 million), the Department of Community and Economic Development (\$50 million), the Pennsylvania Fish and Boat Commission (\$27.5 million) and the Pennsylvania Game Commission (\$20 million).<sup>34</sup> Without re-authorization, Growing Greener II bond funds ran out in 2011.<sup>35</sup>

In addition, the debt service on the Growing Greener II bonds has been and continues to be drawn from the Growing Greener I Environmental Stewardship Fund. The combination of the Growing Greener II bond funds being depleted and the debt service impact on Growing Greener I has resulted in a decline in funding for Growing Greener programs from an average of \$150 million annually over the past six years to \$27.3 million in the current budget.

### Environmental Block Grant Program

A provision of the Growing Greener II law established an Environmental Block Grant Program. This program allows counties to designate up to \$90 million over the course of the bond program to target local priorities for open space and farmland preservation, among other purposes. State agencies were also included as a recipient of funding. Each county was guaranteed a minimum level of support and received funding according to their class.<sup>36</sup>

<sup>33</sup> Conversation with Greg Gove, , Chief, Recreation, Parks & Conservation Grants Division, Bureau of Recreation and Conservation, PA DCNR

<sup>34</sup> Funding to the Department of Environmental Protection and the Department of Community and Economic Development do not support projects to acquire new land and little funding to the Fish and Boat Commission and Game Commission support new land acquisition.

<sup>35</sup> The Renew Growing Greener Coalition, a statewide coalition of 23 conservation, recreation and environmental organizations formed in 2008 to plan and execute a successor Growing Greener program initiative. The coalition supports the renewal of GG initiatives with a state investment of \$200 million annually, a dedicated & sustainable source or sources of revenue to support the renewal, the end of the diversion of money from the state's Environmental Stewardship Fund to pay debt on GGII bonds, and a renewed focus on conservation priorities.

<sup>36</sup> [http://www.portal.state.pa.us/portal/server.pt/community/growing\\_greener/13958/what\\_is\\_growing\\_greener\\_ii\\_/588900](http://www.portal.state.pa.us/portal/server.pt/community/growing_greener/13958/what_is_growing_greener_ii_/588900)

## E. Federal Conservation Programs

Through a variety of conservation programs, the federal government has long been an important partner for state and local governments, parks and conservation organizations, and community advocates. However, because of increased public and congressional scrutiny over federal spending, these programs face significant challenges each year as their budgets are proposed and finalized. For example from FY 2010 to FY 2011, the enacted level of the Land and Water Conservation Fund (LWCF) was reduced by one-third. In FY 2012, while the Obama Administration proposed full-funding of LWCF at \$900 million, the House of Representatives considered a funding bill that proposed reducing LWCF to only \$62 million. Other programs like the North American Wetlands Conservation Act and State Wildlife Grant programs would have seen cuts as well. Yet, when Congress completed the appropriations process for FY 2012, LWCF received \$322 million, an increase from the previous year's level of \$301 million, demonstrating continued bipartisan support for the program, even in difficult budget times. The precarious nature of federal spending and congressional activity has made for a very challenging political climate, yet one in which notable successes are still possible in Washington and at the special places around the country that Americans seek to conserve.

Despite these potential cuts to federal conservation funding, this section of the report highlights the conservation programs that have been or are more likely to provide funding for open space acquisition.

### Highlands Conservation Act – Federal

The Highlands Conservation Act (HCA) was passed in November 2004 and, “recognizes the importance of the water, forest, agricultural, wildlife, recreational, and cultural resources of the Highlands region, and the national significance of the Highlands (PA, NJ, NY, CT) region to the United States.” The Act authorizes Congress to appropriate \$110 million, \$10 million a year over ten years for land conservation in the 4 Highlands states as well as \$10 million, \$1 million a year over ten years for technical assistance and study by the USFS. The HCA is currently funded through the Land and Water Conservation Fund – federal side, through the U.S. Fish and Wildlife Service. A 50 percent match is required from “non-federal” sources, which can include state and local funds.

### America's Great Outdoors Initiative

<http://americasgreatoutdoors.gov/>

The Obama Administration launched the America's Great Outdoors (AGO) Initiative in April 2010. The initiative aims to reconnect Americans, and children in particular, to the outdoors by adopting a modernized approach to conservation. The initiative will reorganize and strengthen existing federal government programs and policies in coordination with state, local, tribal and private partners. Rather than dictating policies, the initiative relies on a grassroots model incorporating community ideas for conservation initiatives.

Conservation targets range across the entire spectrum of land conservation--from access and transportation trails to urban parks to national parks. The Department of the Interior, Department of Agriculture, Department of the Army, Department of Commerce, and the White House Council on Environmental Quality recently signed a Memorandum of Understanding to establish the Federal Interagency Council on Outdoor Recreation (FICOR). FICOR aims to coordinate agency policy and action pertaining to the initiative; to align policies and procedures among federal, state, local, tribal and other outdoor recreation



providers; and to identify partners outside the federal government who can promote outdoor recreation and provide additional resources and access.<sup>37</sup>

One of the goals of the AGO initiative will be to “create and enhance a new generation of safe, clean, accessible great urban parks and community green spaces.”<sup>38</sup> This goal is to be accomplished by increased funding for the Land and Water Conservation Fund; supporting federal programs aimed to promote urban parks and community green spaces including those of the Department of Housing and Urban Development, the Department of Transportation, and the Environmental Protection Agency; targeting technical assistance to support community efforts through programs such as the Forest Service’s Urban and Community Forestry Program; and connecting people with urban parks and community green spaces through programs such as the Department of Transportation’s Safe Pathways to Schools.<sup>39</sup>

One major strategy that was introduced in the initiative was the establishment of great urban parks through a portion of the LWCF for urban parks and broadening guidelines for state comprehensive outdoor recreation plans to support urban parks and green spaces. Accordingly, the President’s FY 2012 budget included \$122 million from LWCF state conservation grants to develop a competitive component targeted at community parks and green spaces, landscape-style conservation, and recreational waterways. The goal of these grants would be to fund “signature projects” that create more outdoor recreation opportunities and conserve open space in cities where access to natural areas has been unavailable. The Department of Interior is finalizing the details of this effort with the guidance of state and local park and recreation directors, state outdoor recreation liaisons, and conservation nonprofit organizations.

#### Land and Water Conservation Fund Department of the Interior (varies by agency) <http://www.nps.gov/ncrc/programs/lwcf/>

Created in 1964, the Land and Water Conservation Fund (LWCF) is the largest source of federal money for park, wildlife, and open space land acquisition. Specifically, LWCF provides funding to assist in acquiring, preserving, developing and assuring accessibility to outdoor recreation resources, including but not limited to open space, parks, trails, wildlife lands and other lands and facilities desirable for individual active participation.<sup>40</sup> The program’s funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year, while federal recreation fees, sales of federal surplus real property, and federal motorboat fuel taxes fund also contribute to the LWCF. Under this program, a portion of the money is intended to go to federal land purchases and a portion to the states as matching grants for land protection projects. Acquisitions at federal units must be within the boundaries of the national park or national wildlife refuge.

The distribution of federal funds can be determined by Congress or by the federal agencies depending upon the manner provided by Congress. Most often Congress will specify the

<sup>37</sup> <http://www.doi.gov/news/pressreleases/AMERICAS-GREAT-OUTDOORS-Administration-Announces-Federal-Council-Dedicated-to-Promoting-Outdoor-Recreation.cfm>

<sup>38</sup> “America’s Great Outdoors: A Promise to Future Generations,” February 2011, available at <http://americasgreatoutdoors.gov/>, at 37.

<sup>39</sup> “America’s Great Outdoors: A Promise to Future Generations,” February 2011, available at <http://americasgreatoutdoors.gov/>, at 37-41.

<sup>40</sup> <http://www.iac.wa.gov/iac/grants/lwcf.htm>.

units and amounts identified for LWCF funding. In years when Congress passes a continuing resolution, as in FY 2007 and FY 2011, allocations are determined by the federal agency. In both cases, and depending on the overall amount of funding provided, the competition for LWCF money is very high.

The proposed House Appropriations bill for FY 2012 sought to cut funding to the Land and Water Conservation Fund by more than 80 percent to \$62 million. However, the President's America's Great Outdoors recommended full \$900 million funding of LWCF programs in the Departments of the Interior and Agriculture.

<b>LWCF Appropriations (\$ millions) 2001 – 2011</b>											
Fiscal year	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11
Appropriation	536	573	413	272	259	144	138	155	180	306	301*

\*As enacted under the continuing resolution.

Source: LWCF Coalition, [http://lwcfcollection.org/files/LWCF\\_General\\_Factsheet.pdf](http://lwcfcollection.org/files/LWCF_General_Factsheet.pdf).

### LWCF—State Assistance Grants

#### National Park Service

The LWCF state assistance grants program provides a 50 percent match to states for planning, developing and acquiring land and water areas for natural resource protection and recreation enhancement. Funds are distributed through the National Park Service by a formula based on population and other factors. Once the funds are distributed to the states, it is up to each

<b>LWCF Stateside Grants to Pennsylvania</b>	
FY 2011	\$1,203,105
FY 2010	\$1,232,328
FY 2009	\$625,316
FY 2008	\$763,175
FY 2007	\$925,319

state to choose the projects, though the National Park Service has final approval. Eligible grant recipients include municipal subdivisions, state agencies and tribal governments, each of whom must provide at least 50 percent matching funds in either cash or in-kind contributions and a detailed plan for the proposed project. Grant applications are evaluated based on the technical merits of the project, the public/private partnerships, and how the project addresses the identified needs and priorities of a statewide comprehensive plan.

### Transportation Programs

#### U.S. Department of Transportation

Multiple transportation programs exist within the federal government that are applicable to conservation. Most are provided with funds through the five-year highway authorization packages. The last was SAFETEA-LU of 2005 and previous versions include TEA-21 of 1998 and ISTEA of 1991. For many years it was possible to receive additional funds through the annual appropriations process. However, Congress has eliminated earmarks in these bills, effectively ending the designation of funds for projects in the transportation appropriations bill.

### Transportation Enhancements

In 1991, Congress authorized ISTEA ("Ice Tea"), the Intramodal Surface Transportation Efficiency Act. This multibillion-dollar law included for the first time a federal commitment to use transportation dollars to offset negative effects of highway construction projects, such as fragmented communities and the loss of open space. This commitment is carried out through the Transportation Enhancements (TE) program, which sets aside funding for

community-based activities, such as bicycle facilities, historic preservation, abandoned rail corridors, and scenic protection.

Since Congress introduced Transportation Enhancements in 1991, over \$12 billion has been invested around the country in activities such as facilities for walking and bicycling, historic preservation, scenic beautification, land acquisition, and environmental mitigation. The program is funded through state transportation agencies, most of which have identified TE coordinators. Each state set aside ten percent of its Surface Transportation Program funds for use on TE activities. The state prioritizes the twelve eligible activities, accepts applications from local governments, and distributes the funds.

The basic Federal eligibility requirements for TE projects are that they be one of the 12 defined activities and are related to surface transportation. States can have additional eligibility requirements. It is important to understand each state's TE program requirements before embarking on a project application. TE funds can be distributed to state or local governments or a non-governmental organization.

Congress is currently debating proposals for a replacement of SAFETEA-LU. A House proposal has made state level enhancements funding optional. The Senate had proposed to keep the requirement for a set aside in order to pass an extension of the overall authorization agreed to consider an optional plan similar to the House. While national funding may not be eliminated, some states may decide to concentrate spending in other activities and not undertake enhancements projects.

#### 12 Eligible Transportation Enhancement Activities:

1. **Pedestrian and bicycle facilities**—Sidewalks, walkways or curb ramps; bike lane striping, wide paved shoulders, bike parking and bus racks; off-road trails; bike and pedestrian bridges and underpasses.
2. **Pedestrian and bicycle safety and educational activities**—Campaigns promoting safety awareness; safety training activities and classes; training materials.
3. **Acquisition of scenic or historic easements and sites**—Acquisition of scenic lands or easements; purchase of historic properties or buildings in historic districts, including historic battlefields.
4. **Scenic or historic highway programs including tourist and welcome centers**—Construction of turnouts and overlooks; visitor centers and viewing areas; designation signs and markers.
5. **Landscaping and scenic beautification**—Improvements such as street furniture, lighting, public art and landscaping along travel corridors.
6. **Historic preservation**—Preservation of buildings and facades in historic districts; restoration of historic buildings for transportation-related purposes; access improvements to historic sites.
7. **Rehabilitation and operation of historic transportation buildings, structures or facilities**—Restoration of railroad depots, bus stations and lighthouses; rehabilitation of rail trestles, tunnels, bridges and canals.
8. **Conversion of abandoned railway corridors to trails**—Acquisition of railroad rights-of-way; planning, design and construction of multi-use trails and rail-with-trail projects.
9. **Inventory, control, and removal of outdoor advertising**—Billboard inventories and removal of illegal and nonconforming billboards. Inventory control may include, but not be limited to, data collection, acquisition and maintenance of digital aerial photography, video

logging, scanning and imaging of data, developing and maintaining an inventory and control database, and hiring of outside legal counsel.

**10. Archaeological planning & research**— Research, preservation planning and interpretation; developing interpretive signs, exhibits and guides; inventories and surveys.

**11. Environmental mitigation of runoff pollution and provision of wildlife connectivity**— Runoff pollution studies; soil erosion controls; detention and sediment basins; river clean-ups; wildlife underpasses.

**12. Establishment of transportation museums**— Conversion of railroad stations or historic properties into museums with transportation themes; construction of new museums; purchase of exhibit materials.

General information is available at [www.enhancements.org](http://www.enhancements.org) and project information is available at <http://www.enhancements.org/projectlist.asp>.

### Safe Routes to School Program

The Safe Routes to Schools Program is a Federal-Aid program of the U.S. Department of Transportation's Federal Highway Administration (FHWA). The Program was created by of SAFETEA-LU. The SRTS Program is funded at \$612 million over five Federal fiscal years (FY 2005-2009) and is to be administered by State Departments of Transportation (DOTs).

The Program provides funds to the States to substantially improve the ability of primary and middle school students to walk and bicycle to school safely. The purposes of the program are:

- to enable and encourage children, including those with disabilities, to walk and bicycle to school
- to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
- to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity (approximately 2 miles) of primary and middle schools (Grades K-8).

Each State administers its own program and develops its own procedures to solicit and select projects for funding. The program establishes two distinct types of funding opportunities: infrastructure projects (engineering improvements) and non-infrastructure related activities (such as education, enforcement and encouragement programs).

<http://www.saferoutesinfo.org/>

State	Actual 2005	Actual 2006*	Actual 2007	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Total
Pennsylvania	\$1,000,000	\$3,345,128	\$4,430,549	\$5,436,148	\$6,720,350	\$6,720,350	\$7,326,704	\$34,979,229

### Recreational Trails Program

The Recreational Trails Program (RTP) provides funds to the States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds

benefit recreation including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.

The RTP funds come from the Federal Highway Trust Fund, and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use: fuel used for off-highway recreation by snowmobiles, all-terrain vehicles, off-highway motorcycles, and off-highway light trucks. The RTP funds are distributed to the States by legislative formula: half of the funds are distributed equally among all States, and half are distributed in proportion to the estimated amount of non-highway recreational fuel use in each State.

Each State administers its own program. In Pennsylvania the Community Conservation Partnership Program within the Department of Conservation and Natural Resources runs the program and sets policies and project eligibility requirements.

In FY 2011 Pennsylvania's formula apportion was \$2.411 million. In FY 2010 Pennsylvania's apportionment was \$2.211 million. Grants are not often above \$100,000. In Pennsylvania, much of the funding has gone towards trail projects on state lands and for winter trail activities.

#### Brownfields Program

#### U.S. Environmental Protection Agency

<http://www.epa.gov/brownfields/applicat.htm>

If a property identified for acquisition or redevelopment is or might be a "brownfields" site, many programs and other benefits at the local, state and federal levels encourage its redevelopment. The Environmental Protection Agency's Brownfields Program provides direct funding to eligible entities for brownfields assessment, cleanup, revolving loans, and environmental job training. In addition, legislation signed into law in 2001 limits the liability of certain contiguous property owners and prospective purchasers of brownfields properties, and innocent landowners are also afforded liability benefits to encourage revitalization and reuse of brownfield sites. EPA's brownfields program provides several types of grants:

- Assessment grants provide funding for a grant recipient to inventory, characterize, assess, and conduct cleanup and redevelopment planning and community involvement related to brownfield sites. Eligible entities are states, local governments, regional planning and redevelopment agencies, and Indian tribes. An eligible entity may apply for up to \$200,000 to assess a site contaminated by hazardous substances, pollutants, petroleum or contaminants co-mingled with petroleum, with a waiver up to \$350,000 for site specific proposals. Such waivers must be based on the anticipated level of hazardous substances, pollutants, petroleum or contaminants (including hazardous substances co-mingled with petroleum) at a single site. Total grant fund requests must not exceed a total of \$400,000 per applicant unless the applicant requests a waiver. Due to budget limitations, no entity may apply for more than \$700,000 in assessment funding.
- Remediation grants are available for remediation of brownfield sites. These grants are limited to \$200,000 per site, with no more than three applications per entity. There is a 20 percent cost-share. Eligible entities are the same as listed above for assessment grants, with the addition of nonprofit organizations, who are eligible to apply, but must



have site control of the property. One site may qualify for two grants if pollutants include petroleum and non-petroleum contaminants.

- Revolving Loan Fund grants provide funding for a grant recipient to capitalize a revolving loan fund to provide sub grants to carry out cleanup activities at brownfields sites. Grants may be awarded up to \$1 million per eligible entity, or a group of eligible entities, with a 20 percent cost share and a five-year time frame for completion. Eligible entities are the same as those listed under assessment grants.

Annual grants are announced around October each calendar year.

As noted above, the proposed fiscal year 2012 federal budget produced by the House Appropriations Committee calls for a cut to EPA funding by 18 percent, a \$2.1 billion cut, to a budget of \$7.15 billion (\$3.8 billion below the amount requested by President Obama). However, for the most part, the core Brownfields programs' funding remains intact, though the Brownfield Economic Development Initiative will be eliminated, as follows:

- EPA Brownfields Site Assessment and Cleanup - \$10 million, same as FY 10
- EPA Brownfields Assistance to the States - \$49.5 million, same as FY 10
- HUD Brownfields Economic Development Initiative - eliminated, a cut of \$17 million from FY 10 enacted.

### HUD Brownfields Programs: Brownfields Economic Development Initiative (BEDI) and Section 108 Loan Program

U.S. Department of Housing and Urban Development

<http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm>

<http://www.hud.gov/offices/cpd/communitydevelopment/programs/108/index.cfm>

The Brownfields Economic Development Initiative (BEDI) is a competitive grant program that HUD administers to assist cities with the redevelopment of abandoned or underused industrial and commercial facilities where expansion and redevelopment is burdened by *real or potential* environmental contamination. The goal of BEDI is to help cities spur the return of brownfields to economic use through financial assistance to public entities to redevelop brownfields. Another goal of BEDI is to enhance the security or improve the viability of a project financed with Section 108-guaranteed loan authority. Therefore BEDI grants must be used in conjunction with Section 108-guaranteed loans.

Section 108 is the loan guarantee provision of the Community Development Block Grant (CDBG) program. The BEDI funds minimize the potential loss of future CDBG allocations. Both Section 108 loans and BEDI grant funds are initially made available by HUD to public entities approved for assistance. Such public entities may re-loan the Section 108 loan proceeds and provide BEDI funds to a business or other entity to carry out an approved economic development project, or the public entity may carry out the eligible project itself.

BEDI projects must increase economic opportunity for persons of low-and moderate-income or stimulate and retain businesses and jobs that lead to economic revitalization. BEDI funds have been made available on a competitive basis. BEDI and Section 108 loan eligible recipients include CDBG entitlement communities and non-entitlement communities. BEDI and Section 108 funds must be used in conjunction with the same economic development project.

Non-entitlement communities are also eligible to apply for and receive grants under the BEDI program. If a non-entitlement community receives a BEDI grant and applies for



Section 108 loan guarantee assistance, the applicable state entity is required to pledge Community Development Block Grant (CDBG) funds as partial security for the loan.

### Community Food Projects Competitive Grants (CFPCGP) Program

*U.S. Department of Agriculture*

<http://www.csrees.usda.gov/fo/communityfoodprojects.cfm>

Private nonprofits are eligible to apply for Community Food Projects Competitive grants. Grants are intended to help eligible private nonprofit entities in need of a one-time infusion of federal assistance to establish and carryout multipurpose community food projects. Projects are funded from \$10,000 to \$300,000 and from 1 to 3 years. These one-time grants require a dollar-for-dollar match in resources.

The CFPCGP is designed to:

- Meet the needs of low-income people by increasing access to fresher, more nutritious food supplies;
- Increase the self-reliance of communities in providing for their own food needs;
- Promote comprehensive responses to local food, farm, and nutrition issues;
- Meets specific state, local, or neighborhood food and agricultural needs for infrastructure improvement and development;
- Plans for long-term solutions; and
- Create innovative marketing activities that benefit both agricultural producers and low-income consumers.

### Clean Water and Drinking Water State Revolving Funds

*U.S. Environmental Protection Agency*

<http://www.epa.gov/OWM/cwfinance/cwsrf/index.htm>

<http://www.epa.gov/safewater/dwsrf/index.html>

The U.S. Environmental Protection Agency is charged with implementing both the Clean Water Act and the Safe Drinking Water Act, two landmark pieces of legislation whose respective goals are to clean up America's waterways and to ensure safe drinking water. Conservation is an eligible activity under both laws. Both programs utilize "State Revolving Funds" (SRFs) to fund projects that improve water quality and enhance drinking water supplies. Every year, Congress appropriates funds that are apportioned out to the states on a formula basis to fund the SRFs. The Florida Department of Environmental Protection administers both the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund.

The proposed federal budget includes \$1.988 billion for the Clean Water and Drinking Water State Revolving Funds, and a \$797 million cut compared to FY 2011 request (which had already been proposed for a cut by President Obama because of an infusion of stimulus funds in FY 10).

CWSRF and DWSRF Appropriations (millions) 2001 – 2011											
Fiscal year	'01	'02	'03	'04	'05	'06	'07	'08	'09*	'10	'11**
CWSRF	1,347	1,350	1,341	1,342	1,091	831	1,084	837	4,689	2,100	2,100
DWSRF	823	850	844	845	843	837	837	950	2,829	1,387	1,387

\* 2009 totals include appropriations under ARRA: \$4 billion for CWSRF and \$2 billion for DWSRF.

\*\* As enacted under the continuing resolution.

Source: EPA budgets FY'03-FY'12, accessed at <http://www.epa.gov/planandbudget/archive.html>.

### Clean Water State Revolving Fund

Through the Clean Water State Revolving Fund (CWSRF) program, each state maintains a revolving loan fund to provide a source of low-cost financing for a wide range of water quality infrastructure projects. The CWSRF program is available to fund a wide variety of water quality projects including all types of nonpoint source, watershed protection or restoration, and estuary management projects, as well as more traditional municipal wastewater treatment projects. Nationwide, 95 percent of these funds go toward infrastructure projects, but watershed protection projects are increasing. Federal funds must be matched by 20 percent non-federal funds.

CWSRF programs operate much like environmental infrastructure banks that are capitalized with federal and state contributions. CWSRF monies are loaned to communities and loan repayments are recycled back into the program to fund additional water quality protection projects. The revolving nature of these programs provides for an ongoing funding source that will last far into the future.

States have the flexibility to target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, brownfields remediation, estuary management, and wastewater treatment. Land or easement acquisition is permitted with CWSRF funds as a method to reduce nonpoint source pollution.

### Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF) program was established by the 1996 Safe Drinking Water Act Amendments, under which EPA provides grants to states to establish revolving loan funds from which they provide loans and other types of financial assistance to public water systems for eligible infrastructure improvements. Conservation easements and fee acquisition may be funded. Since its inception, \$2.7 million has been used for the acquisition of approximately 2,000 acres of land under the DWSRF. EPA has begun a concerted effort to focus more attention on protecting “source water,” which is roughly defined as “untreated water from streams, rivers, lakes, or underground aquifers, which is used to supply private wells and public drinking water.” There is growing recognition that protecting the source from contaminants is often more efficient and cost-effective than treating drinking water later.

Loans under the DWSRF are typically low-interest loans which may be repaid over 20 years. There is some flexibility given to the states to allow them to waive the principal repayment, offer negative interest rates or extend the loans to 30 years in specific hardship cases. Up to 31 percent of these capitalization grants can be set-aside to administer the SRF and state source protection programs and to fund source water protection activities, including land acquisition. Up to 15 percent of the set-aside can be used for land conservation and voluntary, incentive-based protection measures, with no more than 10 percent used for a single type of activity, such as land protection.

### Community Development Block Grants (CDBG)

*U.S. Department of Housing and Urban Development*

<http://www.hud.gov/offices/cpd/communitydevelopment/programs/entitlement/>

The Department of Housing and Urban Development provides Entitlement Communities Grants for the principal cities of Metropolitan Statistical Areas (MSAs), other metropolitan cities with populations of at least 50,000; and qualified urban counties with populations of

at least 200,000 (excluding the population of entitled cities). CDBG funds may be used for activities that include, but are not limited to acquisition of real property; relocation and demolition; and construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers, and the conversion of school buildings for eligible purposes.

HUD awards grants to entitlement community grantees to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services. Entitlement communities develop their own programs and funding priorities. However, grantees must give maximum feasible priority to activities which benefit low- and moderate-income persons. A grantee may also carry out activities which aid in the prevention or elimination of slums or blight. Additionally, grantees may fund activities when the grantee certifies that the activities meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available to meet such needs. CDBG funds may not be used for activities which do not meet these broad national objectives.

Eligible grantees are as follows:

Principal cities of Metropolitan Statistical Areas (MSAs); other metropolitan cities with populations of at least 50,000; and qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities) are entitled to receive annual grants.

HUD determines the amount of each entitlement grant by a statutory dual formula which uses several objective measures of community needs, including the extent of poverty, population, housing overcrowding, age of housing and population growth lag in relationship to other metropolitan areas.

CDBG funds are allocated to states, counties and cities on a formula basis. HUD does not provide assistance directly to citizens, businesses or non-profit organizations. If you are an interested citizen, contact your local municipal or county officials for more information. It is possible that you live in a jurisdiction or area that is a direct or indirect grantee. Please check the [CDBG Grantee Contacts](#) or the [CDBG Participation Directory](#) for contact information. If your local government officials cannot answer your questions, or if you are a local official, contact the [HUD Field Office](#) that serves your area. Note that the local government administers the program and determines which local projects receive funding.

## III. Appendices

### Appendix A: PA Highlands Greenway Analysis

#### Definition and GIS Methodology for Hubs and Corridors

Hubs are core natural areas in the Pennsylvania Highlands and the potential connectors between them are called Corridors.

Hubs are areas that have a high natural resource value such as large intact forests or abundant wildlife and, little fragmentation such as forests or farmland broken up by large developments. Hubs are both undisturbed natural lands and adjacent protected lands such as state parks, forests or game lands.

Corridors are the best potential lands to connect the Hubs. While Corridors are not necessarily natural or protected lands they are important as they connect Hubs and often provide the most practical routes for animals to travel between core habitat areas.

#### Development of Pennsylvania Highlands Greenway “Hubs” and “Corridors”:

Phase one of the analysis process encompassed the development of a base layer to synthesize the natural and recreational resources targeted for conservation through the Greenway Plan. The data used in this process was obtained from the National Land Cover Dataset (NLCD). The first step involved identifying all green infrastructure grid cells. Green infrastructure consists of all thirty-meter NLCD pixels relating to forests, wetlands and open water. These three pixel values were then reclassified to equal the same value and converted to an ArcView shapefile. From this shapefile all contiguous areas totaling less than fifty hectares on the ground were removed followed by the removal of highly traveled roads. This was done to eliminate areas that are considered too small for analysis or are highly traveled and therefore do not qualify for analysis as a potential conservation area. A buffer was built around roads removing a 200 meters wide path from primary roads and a 100 meters wide path around secondary roads. These buffers act to filter the area between the roads and the natural areas to be studied. Multipart shapes were converted onto a single part and all shapes were then dissolved into one shape based on the Gridcode field in the attributes table. This shape was then converted back to raster format.

The second step of the analysis was to further narrow the targeted natural resources through what is known as a stronghold analysis. A stronghold analysis consolidates the natural resource areas in the base composite resource data layer by identifying those areas least affected by surrounding and fragmenting disturbances such as roads.

The stronghold analysis was performed in two steps. The first step was to shrink the hub lands grid and perform an aggregate analysis with the properties 1/aggreg/10/min/yes/yes performed stronghold type A. The second step was performed by shrinking the hub lands grid and performing an aggregate analysis with the properties 1/aggreg/3/min/yes/yes. Both analyses were converted to shapefiles and sliver polygons under 10 hectares were eliminated.

Type A strongholds greater than 20 hectares were combined with type B strongholds occurring within 300 meters of type A strongholds, resulting in the creation of aggregated stronghold hub lands that highlight distinct regions. The resulting areas have high natural resource values and are minimally fragmented by built disturbances.

The third step was to do a nearest neighbor analysis that would further smooth and unite intact natural resource areas such as interior forests, and give higher priority to those areas closest to existing public lands and private protected lands. This was intended to prioritize and highlight those areas where new land conservation can augment already protected lands.

The nearest neighbor analysis was performed on the stronghold hubs based on the mean and 300m group and a shrink was performed on the resulting grids to match the boundary of the initial analysis and then reclassified. Protected lands were buffered by 10 grid cells and given a value of 10. This assured that those existing protected areas would receive highest priority in our development of conservation core areas and nodes.

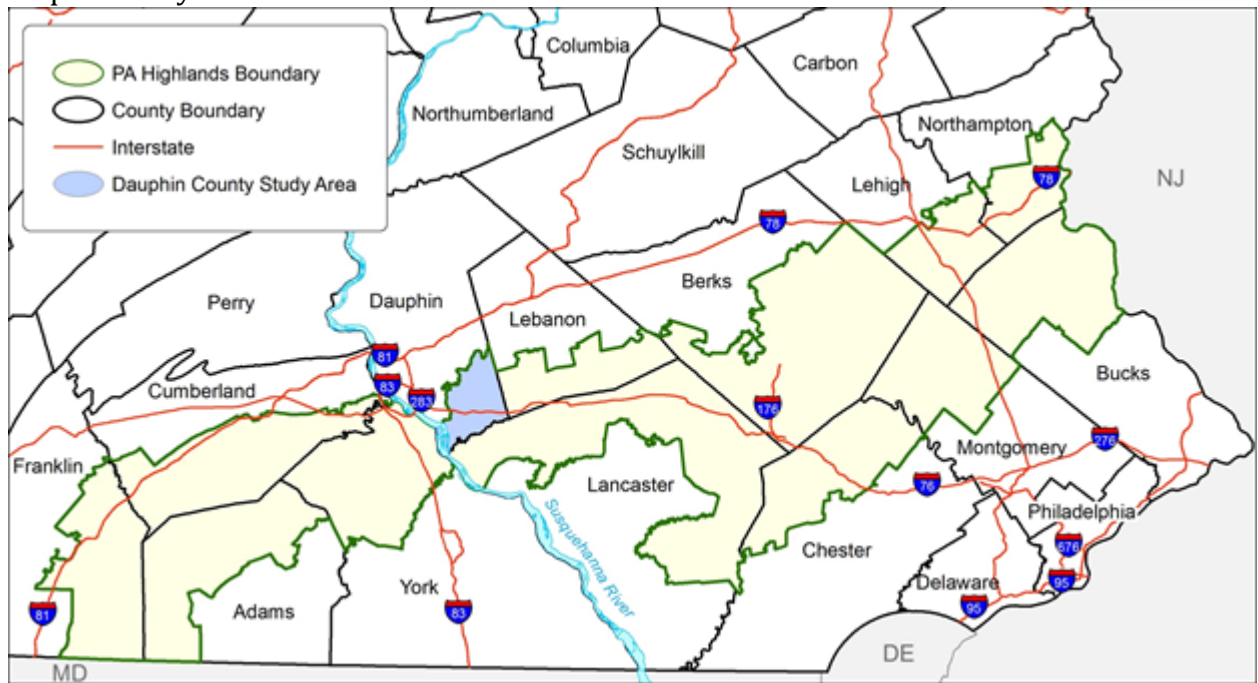
The fourth and final step was to integrate Natural Lands Trust's *Smart Conservation* to capture the highest priority ecological lands. *Smart Conservation* combines numerous data layers, pertaining to ecological richness, into a composite portrait of which lands are most essential for maintaining biological diversity. This was achieved by overlaying the stronghold analysis data with *Smart Conservation* ecological data, consisting of a potential vertebrates habitat subgroup, an aquatic habitat subgroup and a terrestrial habitat subgroup. A nearest neighbor analysis of 1000m was performed on the resulting overlay. An expand by ten on the top twenty-five percent quantile was performed to identify the hubs while a shrink by ten on the top fifty percent quantile was performed to identify the corridors. These hubs and corridors were then overlaid and converted to a shapefile.

The final result of the completed analysis is a composite hub and spoke greenway scheme that can guide future conservation of the region. Given the many data layers and techniques employed to create this greenway plan, the final product represents a blueprint for conserving a wide range of natural and recreational resource values that include biodiversity, water supplies, and outdoor recreation. If the Pennsylvania Highlands Greenway Map vision is successfully implemented, it will have a lasting impact on the quality of life for the entire region.

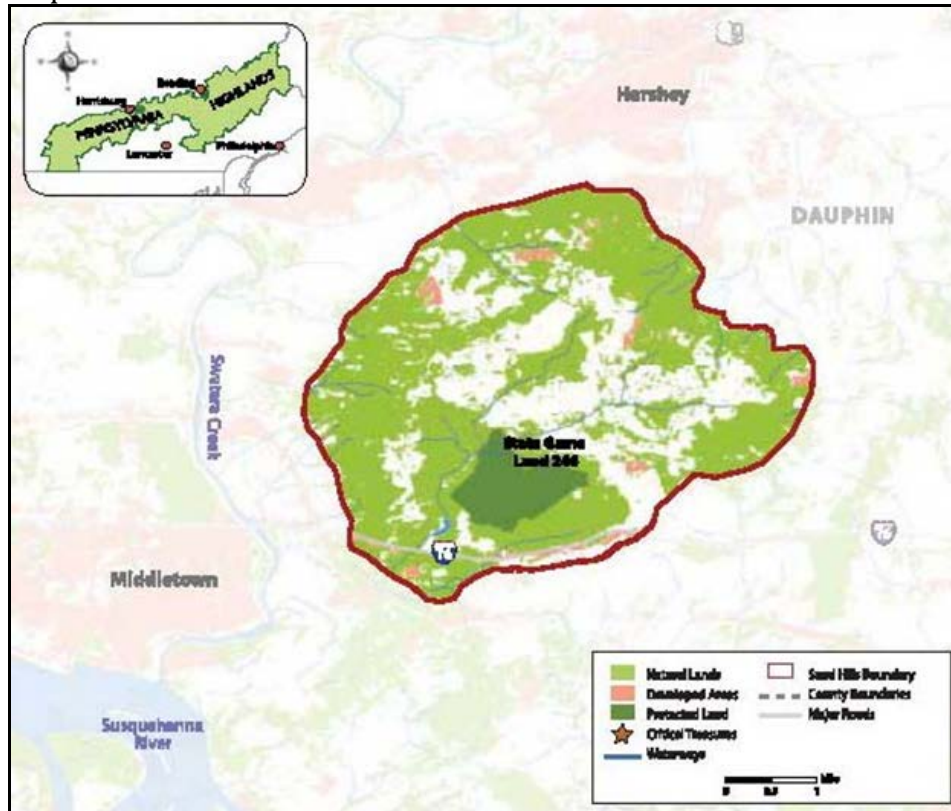


## Appendix B: Location Maps

Map 1: Study Area

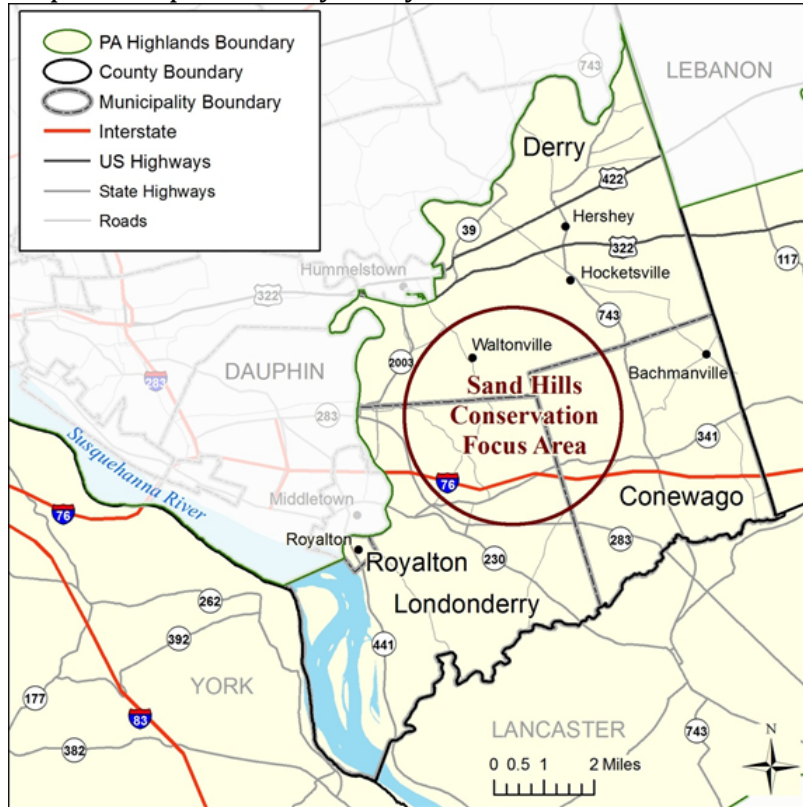


Map 2: Sand Hills Conservation Focus Area



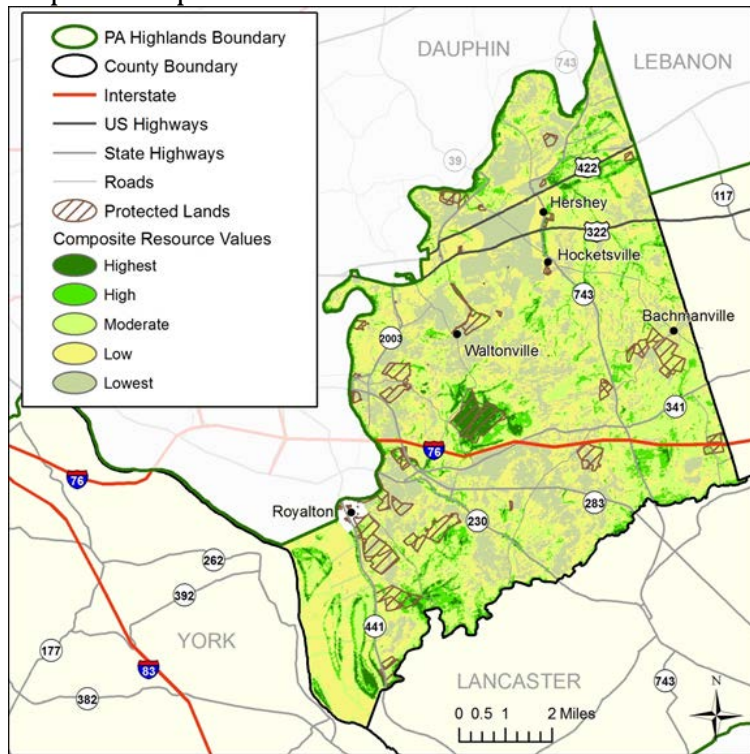


Map 3: Dauphin County Study Area

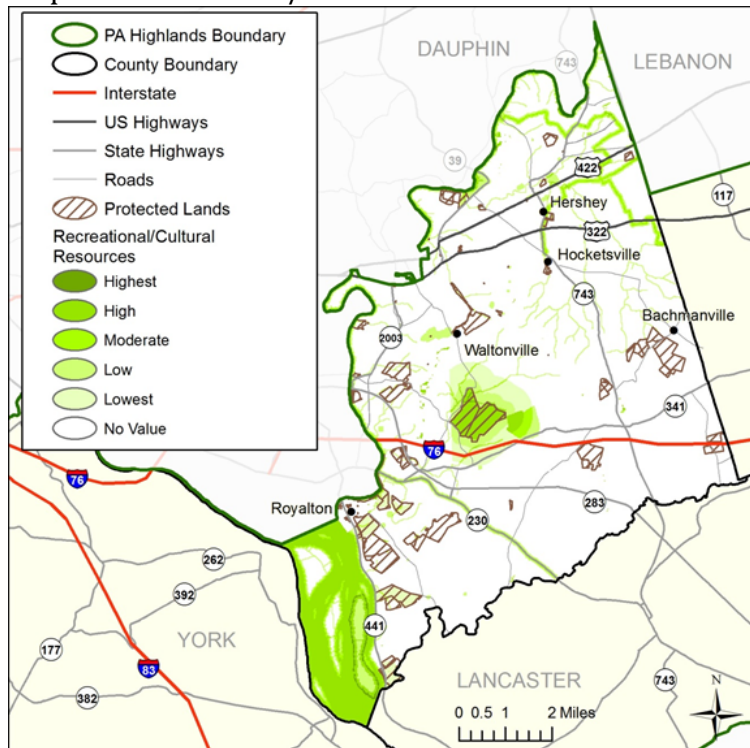


## Appendix C: Components

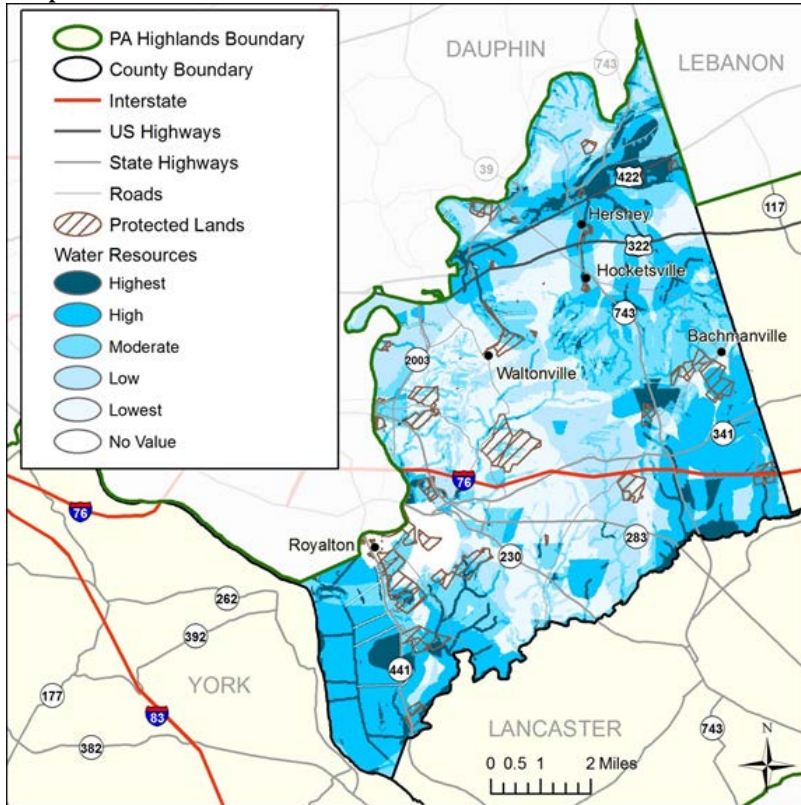
Map 1: Composite Resource Values



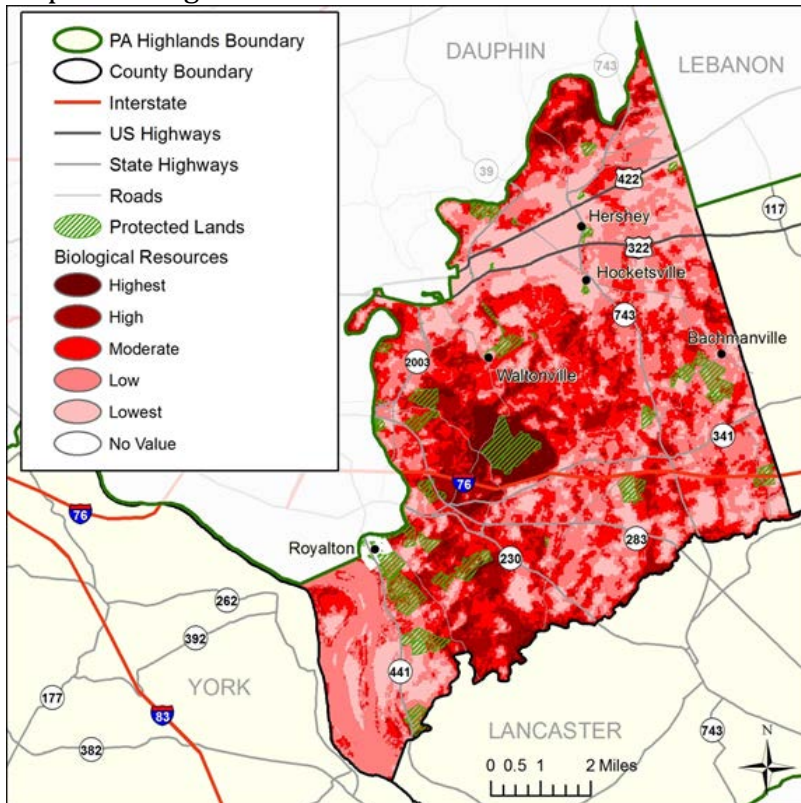
Map 2: Recreational/Cultural Resource Values



Map 3: Water Resource Values

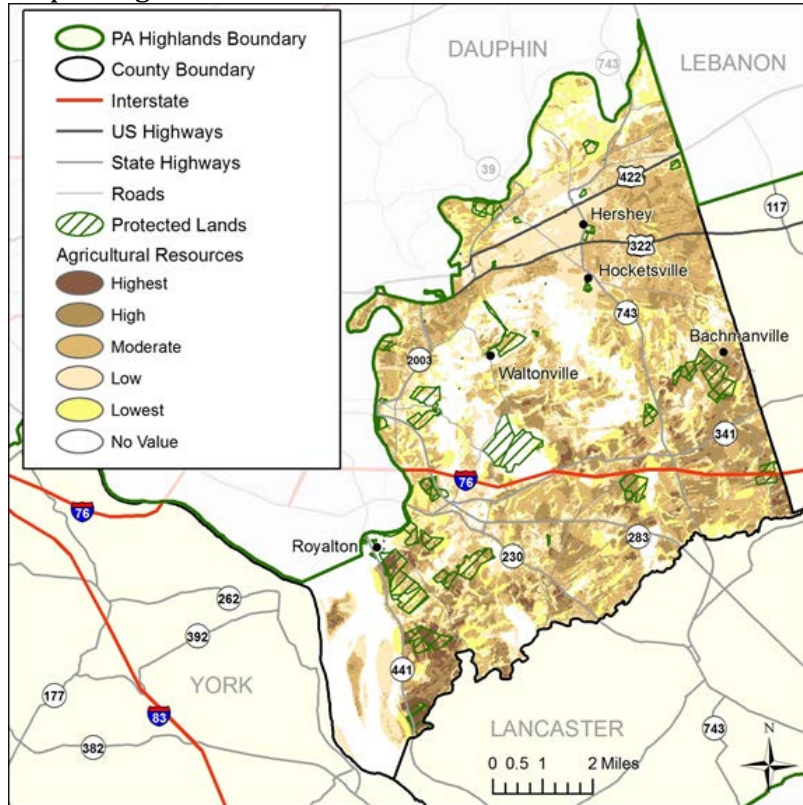


Map 4: Biological Resource Values





Map 5: Agricultural Resource Values



Map 6: Forest Resource Values

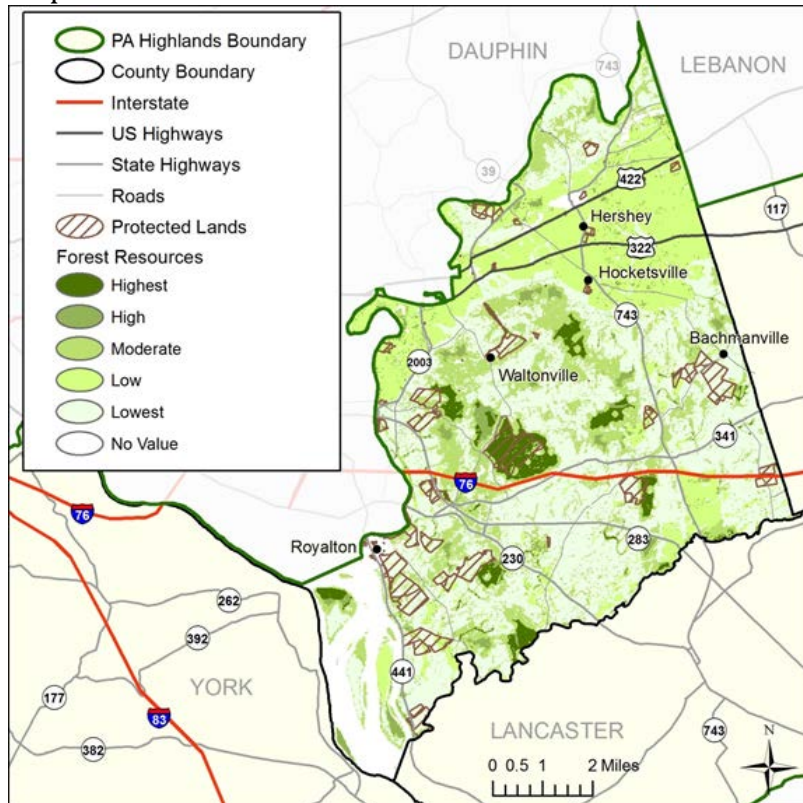


Table 1 PA Highlands Resource Components<sup>41</sup>

*Table PA-1. Data sources and weights. Data sources and weights applied to individual layers of the Pennsylvania Highlands conservation values assessment.*

Data Layer	Weight	Remarks
Aquifer Recharge Areas (bedrock), ranked units ranked by yield	10 to 2	Reese 2005, Schreffler 2005
Aquifer Recharge Areas ranked according to pollution susceptibility	10 to 0	DRASTIC analysis (Aller and others 1987)
Aquifer (wellhead) Protection Zone	10	Kelly 2005, Zone II only
Surface Water Supply Protection Zone	10	Kelly 2005, Zone A only
Riparian Zone (with 150-foot buffer), ranked	10 to 0	Rosencrance 2005, riparian analysis, rank by buffer vegetation quality
Steep Slopes > 25 percent 15 – 25 percent	10 4	Rosencrance 2005
Floodplain (100 year, not urbanized)	5	Rosencrance 2005
Wetlands, ranked	10 to 0	Rosencrance 2005
Hydric soils	2	Rosencrance 2005
Watersheds ranked by percent of area forested	10 to 0	Rosencrance 2005
Exceptional Value Streams (with 150-foot buffer)	2	Kelly 2005
Impervious surface (> 25 percent impervious surfaces)	Mask: sets cell to 0	Rosencrance 2005
Stream quality below state threshold for listed uses ("non-attaining reaches" of streams)	Mask: sets cell to 0	Kelly 2005, based on Clean Water Act: Sec. 305(b) Sec. 303(d).
Stream quality impaired by acid mine drainage (affected reaches of streams)	Mask: sets cell to 0	Kelly 2005
<b>Maximum theoretical score</b>	<b>89</b>	
Soils ranked by silvicultural potential	10 to 0	Rosencrance 2005, analysis by species and soil type
Forested Landcover	10	Rosencrance 2005, analysis of 2000 MRLC data (Multi-Resolution Land Characteristics) Consortium. MRLC developed the National Land Cover Dataset (NLCD) for 1992 and 2001, which is used throughout this report).
Interior Forest Blocks >5,000 acres >1,000 to 5,000 acres >500 to 1,000 acres >100 to 500 acres 25 to 100 acres	10 8 6 4 2	Rosencrance 2005, analysis of 2000 MRLC data
<b>Maximum theoretical score</b>	<b>30</b>	
Mammals Habitat Conservation Value, ranked	10 to 0	Rosencrance 2005, analysis by species with cumulative taxa results
Fish Habitat Conservation Value, ranked	10 to 0	Rosencrance 2005, analysis by species with cumulative taxa results

Continued

<sup>41</sup> U.S. Department of Agriculture, Forest Service. 2010. Highlands Regional Study: Connecticut and Pennsylvania 2010 Update. Table PA-1, page 131 – 133. [http://na.fs.fed.us/pubs/stewardship/highlands\\_regional\\_study\\_ct\\_pa\\_10\\_screen.pdf](http://na.fs.fed.us/pubs/stewardship/highlands_regional_study_ct_pa_10_screen.pdf).

Table PA-1. Data sources and weights. (Continued)

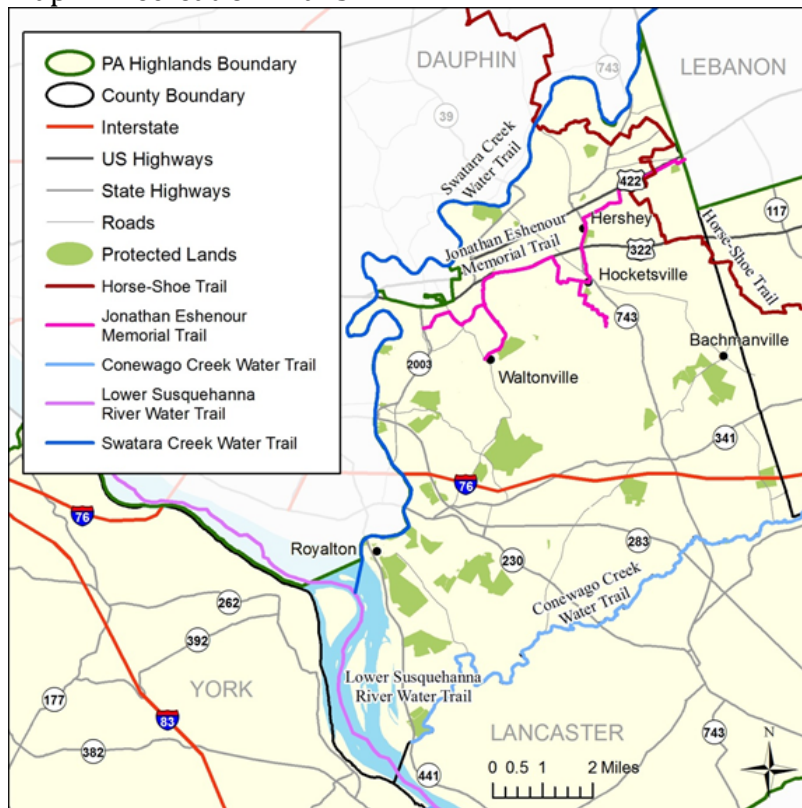
Data Layer	Weight	Remarks
Birds Habitat Conservation Value, ranked	10 to 0	Rosencrance 2005, analysis by species with cumulative taxa results
Aquatic Herps Habitat Conservation Value, ranked	7 to 0	Rosencrance 2005, analysis by species with cumulative taxa results
Terrestrial Herps Habitat Conservation Value, ranked	7 to 0	Rosencrance 2005, analysis by species with cumulative taxa results
Important Bird Areas, Core Buffer	5 3	Audubon Pennsylvania 2005
Important Mammal Areas	4	Audubon Pennsylvania 2005.
Plant and Animal Rarity, ranked	10 to 2	Rosencrance 2005, PA Natural Heritage Program 2005, eco-regionally ranked by Natural Lands Trust.
Green Infrastructure Hubs, ranked	2 to 0	Rosencrance 2005.
Interior Forest Landscape Blocks, ranked	10 to 0	Rosencrance 2005, analysis and ranking of 1992-1994 MRLC data.
Unfragmented Natural Landscape Blocks, ranked	10 to 0	Rosencrance 2005, analysis and ranking of 1992-1994 MRLC data.
Parks and Preserves with Buffers, ranked by land cover type	10 to 0	Magdasy 2005, includes lands with conservation easements.
The Nature Conservancy's Matrix Habitat sites	2	Walsh, Mary. 2005. The Nature Conservancy and Pennsylvania Natural Heritage Program. Unpublished data provided specifically for Conservation Values Assessment. Harrisburg, PA: The Nature Conservancy.
Conservation Reserve Enhancement Protection Areas (CREP, leased conservation areas)	3	USDA Natural Resources Conservation Service 2005.
<b>Maximum theoretical score</b>	<b>100</b>	
Prime Agricultural Soils	10	USDA Natural Resources Conservation Service 2005.
Agricultural crops in both 1994 and 2000	10	Rosencrance 2005, analysis of 1994-2000 MRLC data.
Agricultural crops in either 1994 or 2000	5	
Hay or pasture in both 1994 and 2000	3	
Hay or pasture in either 1994 or 2000	0	
Preserved farms (agricultural easement)	5	PA Department of Agriculture 2005.
Buffer to 500 feet	4	
Buffer 500 to 1,000 feet	3	
Agricultural Security Area	5	PA Department of Agriculture 2005.
<b>Maximum theoretical score</b>	<b>30</b>	
Recreational Trails	10	Magdasy 2005.
Buffer to 150 feet	8	
Buffer from 150 to 300 feet	6	
Visible undeveloped Ridgetops and Hilltops	10	Magdasy 2005.
With natural vegetation	5	
With other vegetation		

Continued

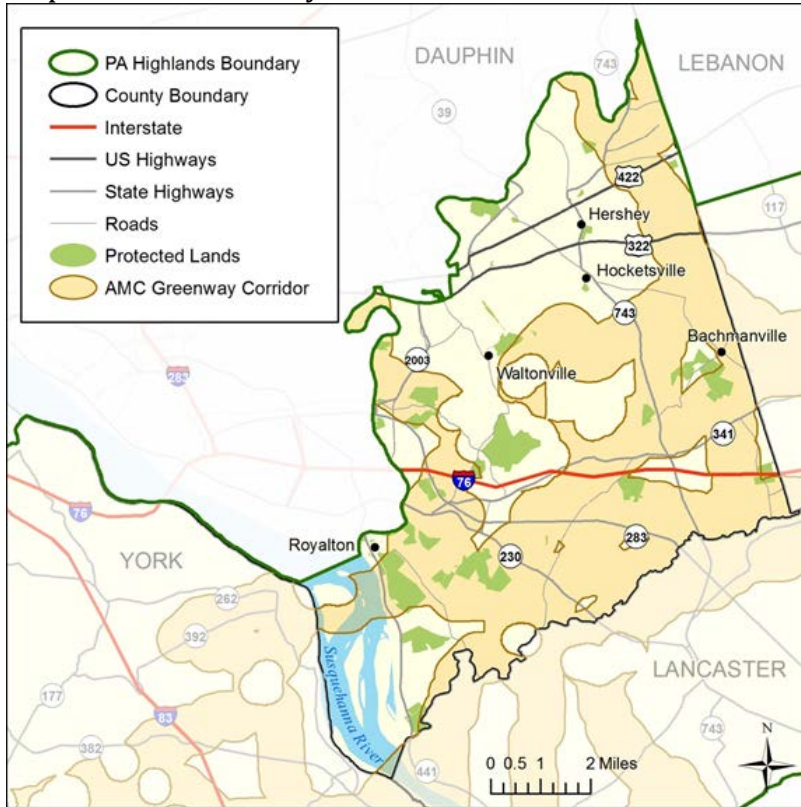


Data Layer	Weight	Remarks
Parkland dedicated to public access and use	10	Kripas 2005, plus information from Highlands counties.
Land protected by conservation easement	8	
Buffer to 1,000 feet	6	
Buffer from 1,000 to 2,000 feet	4	
Buffer from 2,000 to 3,000	2	
Historical or Cultural site with 150-foot buffer	6	Kripas 2005, most features are points
Lake, reservoir with public access	10	Magdasy 2005.
Buffer to 300 feet	8	
Canoe-able river or stream	10	
Buffer to 150 feet	8	
Buffer from 150 to 300 feet	6	
Trout production stream	8	
Buffer to 150 feet	6	
Trout maintenance stream	6	
Buffer to 150 feet	4	
Other lakes	6	
Buffer to 300 feet	4	
Cold water fishery	5	
Warm water fishery	5	
<b>Maximum theoretical score</b>	<b>46</b>	

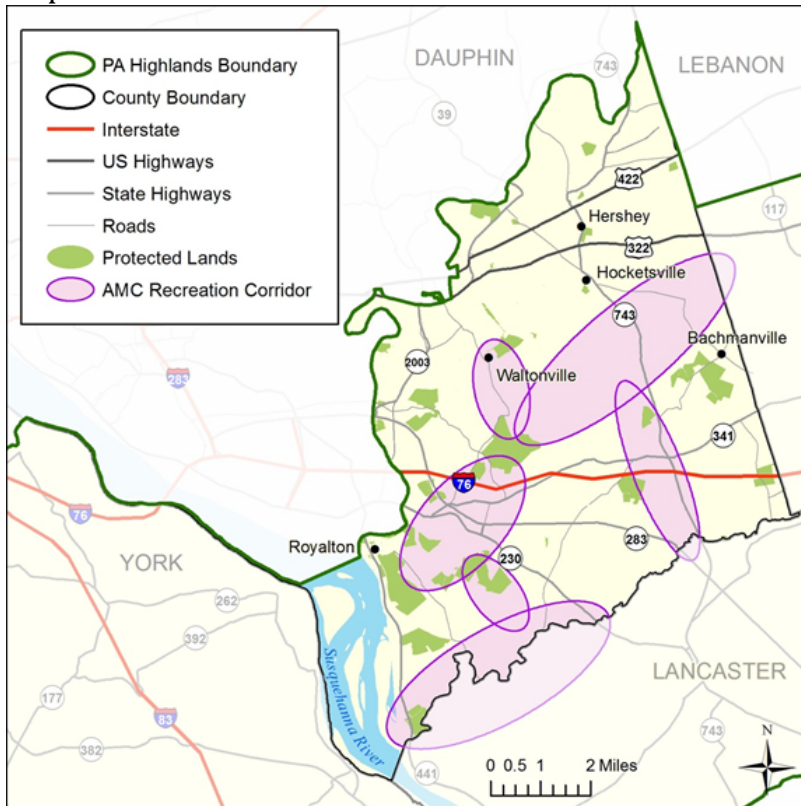
Map 7: Recreation Trails



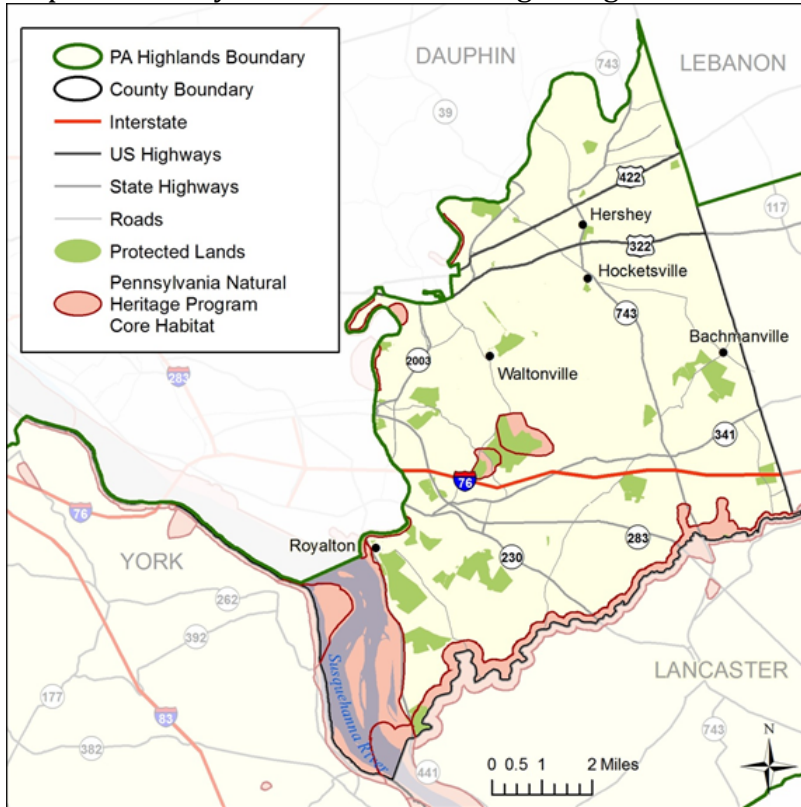
Map 8: AMC Greenway Corridors



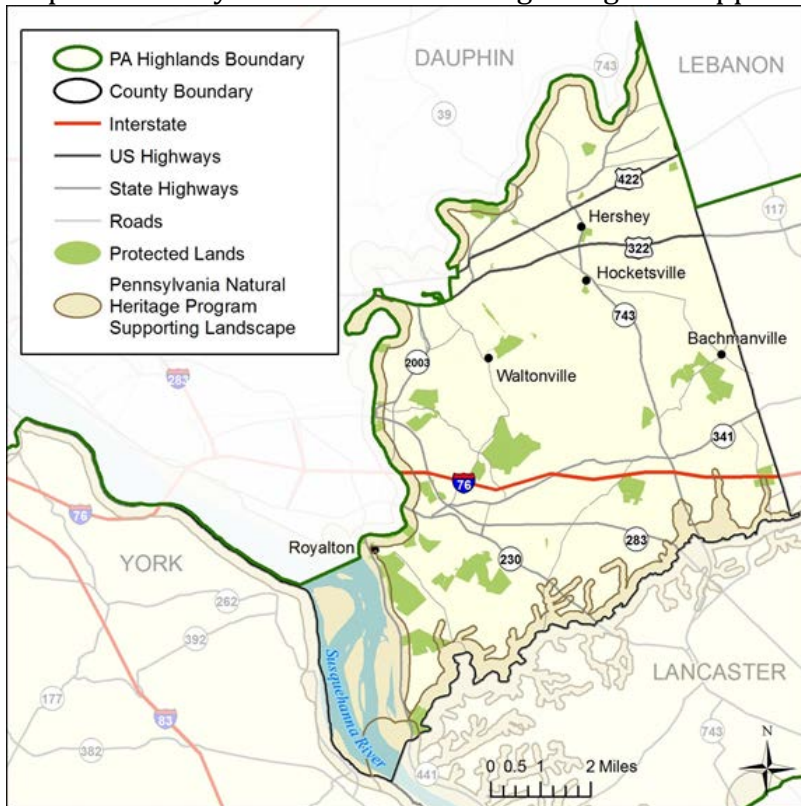
Map 9: AMC Recreation Corridor



Map 10: Pennsylvania Natural Heritage Program Core Habitat

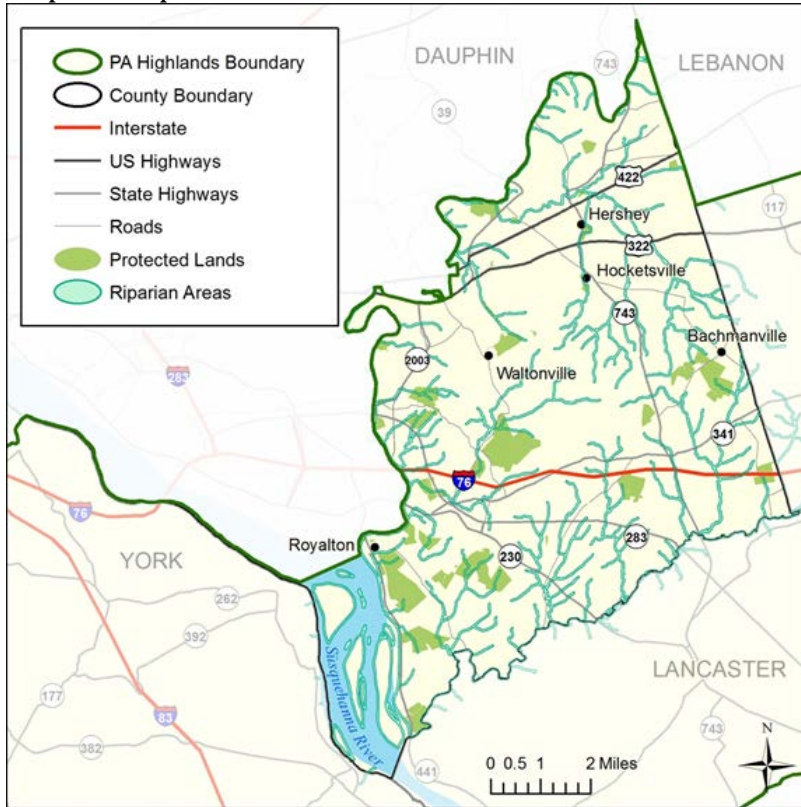


Map 11: Pennsylvania Natural Heritage Program Supporting Landscape

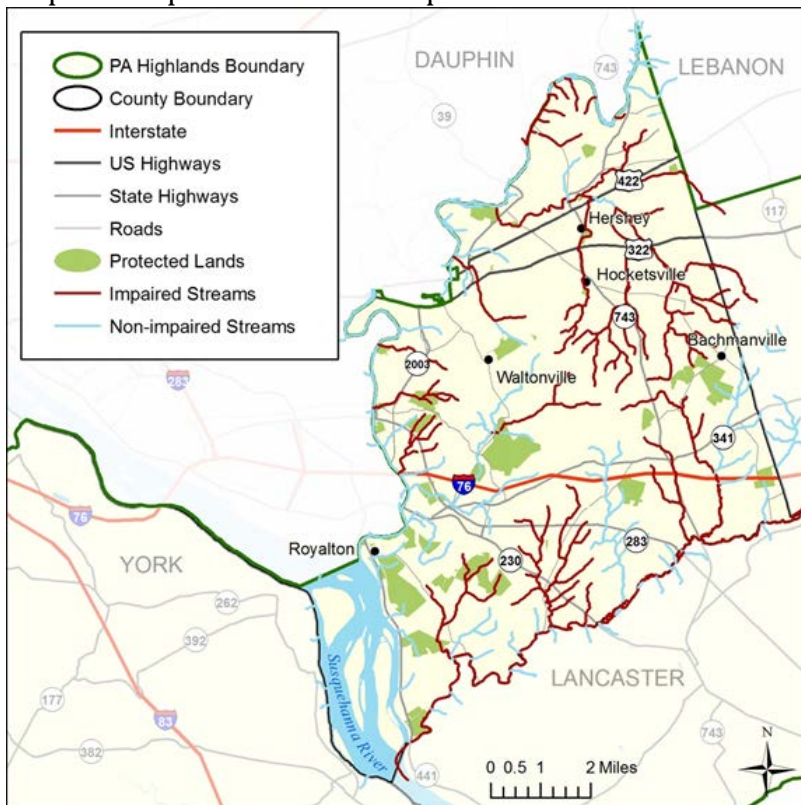




Map 12: Riparian Areas

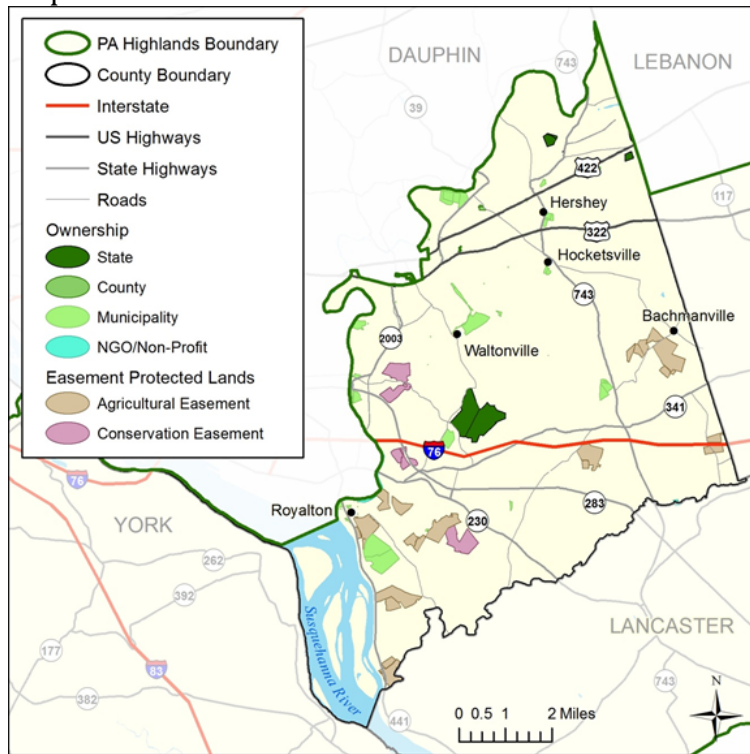


Map 13: Impaired and Non-Impaired Streams



## Appendix D: Results

Map 1: Protected Lands



## Appendix E: Recent Successful Ballot Language

### East Coventry Township, Chester County, November 2, 2010

"Do you favor the imposition of an additional Earned Income Tax at the rate of one quarter of one percent (0.25%) by East Coventry Township to be used for the purpose of; financing the acquisition of open space; acquiring agricultural conservation easements; and/or, acquiring recreation or historic lands"?

EIT passed 53% to 47%

### Pennsbury Township, Chester County, November 3, 2009

"Do you favor the imposition of a tax on real estate of 0.79 mills to be used to acquire real property for the purpose of preserving open space and securing open space benefits under the Open Space Lands Acquisition and Preservation Act?"

Property tax passed 62% to 38%

### Plumstead Township, Bucks County, November 3, 2009

"Shall debt be authorized to be incurred as debt approved by the electors in one (1) or more increments over a ten (10) year period, and not to exceed the sum of four million five hundred thousand dollars (\$4,500,000.00) in the aggregate, for the purpose of acquiring and developing parklands for active and/or passive recreational use?"

Bond passed 51% to 49%

### Adams County, November 4, 2008

#### Adams County Water and Land Protection Bond Referendum

Shall debt in a sum not to exceed 10 million dollars be authorized for the purposes of financing land conservation and preservation efforts, including protection of drinking water sources, stream water quality, wildlife habitat, farmland, open space and recreation lands, all for future generations, to be incurred as debt approved by the electors of Adams County, with lands preserved solely in cooperation with willing sellers, and ensuring that an annual independent audit evaluates program success?

Bond passed 75% to 25%