

## WORK SESSION

March 17, 2015

A work session of the Whitpain Township Board of Supervisors was held on Tuesday, March 17, 2015 at the Whitpain Township Building, 960 Wentz Road, Blue Bell, PA at 7:30 p.m. for the purpose of reviewing the agenda of the March 17, 2015 Supervisors' meeting. Chairman Frederick R. Conner was present with Supervisors Adam D. Zucker, Anthony F. Greco, Melissa M. Weber, and Kenneth F. Wollman. Also present were Township Solicitor James J. Garrity, Esq., Township Manager Roman M. Pronczak, Township Engineer James E. Blanch, P.E., Assistant Township Manager David J. Mrochko, Director of Public Works Ronald J. Cione, Police Chief Mark A. Smith, Parks and Recreation Director Kurt W. Baker, Director of Code Enforcement Michael McAndrew, Fire Marshal David M. Camarda and Director of Finance John Nagel. Three members of the public were also present.

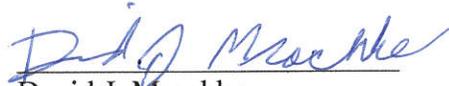
The Supervisors reviewed the agenda discussing approval of the March 10, 2015 meeting minutes, Resolutions #1071, 1073, 1074, 1075 and 1076, waiver requests, release of escrow for Gable Estates, the March Zoning Hearing Board cases and the public hearing on Ordinance No. 336.

After reviewing the agenda, Mr. Pronczak mentioned that Centre Square Fire Company has proposed moving their annual carnival to the Reed's Centre Square Hotel property. Over the last few years inclement weather has negatively impacted the carnival because it is typically held on the fire company's property at 1298 West Skippack Pike in Blue Bell. This venue is mostly grass and becomes muddy during rain events. The proposed new location would be mostly paved and would also have more on-site parking. Mr. Pronczak has discussed the proposal with some neighbors in close proximity to Reed's Centre Square Hotel and has not heard of any objections to the proposal.

At approximately 7:59 p.m., the work session adjourned and the Supervisors left for the public meeting. When the public meeting ended, the Supervisors reconvened the work session at approximately 9:00 p.m. Mr. Pronczak discussed three proposals presented to the Land Development Committee, which is a sub-committee of the Board of Supervisors consisting of Melissa Murphy Weber and one additional Board member who is selected based on the particular proposal. The three topics discussed included a proposed cluster development on Cathcart Road; a proposal for the Florig property on Skippack Pike, and Centre Square Montessori.

Mr. Pronczak concluded the meeting by updating the Supervisors on proposed architecture for Centre Square Commons, which will be located across from Kohl's and Superfresh at the corner of Skippack and DeKalb Pikes. The architect hired by Madison Development has modified the architectural design so it is more in keeping with traditional architecture in the area. The architecture will continue to be refined and Mr. Pronczak will keep the Supervisors informed of any other developments.

At 9:40 p.m., the Supervisors adjourned the work session and met in executive session to discuss legal and personnel matters.

A handwritten signature in blue ink, appearing to read "David J. Mrochko". The signature is written in a cursive style with a horizontal line underneath the name.

David J. Mrochko  
Whitpain Township Assistant Manager

#06-2015  
March 17, 2015

The regular meeting of the Whitpain Township Board of Supervisors was held at 8 p.m. Tuesday, March 17, 2015 at the Township Administration Building, 960 Wentz Road, Blue Bell, PA. Chairman Frederick R. Conner, Jr., along with Supervisors Adam D. Zucker, Anthony F. Greco, Melissa Murphy Weber and Kenneth F. Wollman were present. Township Manager Roman M. Pronczak, P.E., Assistant Township Manager, David J. Mrochko, Solicitor James J. Garrity, Esq., Police Chief Mark A. Smith, Township Engineer James E. Blanch, P.E., Finance Director John B. Nagel, Code Enforcement Officer Michael E. McAndrew, Public Works Director Ronald J. Cione, Parks and Recreation Director Kurt W. Baker, Fire Marshal David M. Camarda and Recording Secretary Virginia Papale were also present. There were approximately 20 members of the public at the meeting.

Following the Pledge of Allegiance, Chairman Conner welcomed everyone to the sixth meeting of the year.

Mission Moments this evening will continue the conversation that began the previous week at the Manor House regarding preservation of the Meadowlands Tract comprising 125 acres. In summary, last October the Township began discussions with Meadowlands Country Club with the objective of preserving 125 acres in perpetuity. The property is zoned Park and Recreation, and we expect that it will continue to be. At some point in the future, a different Board could change that designation. This Board is resolute in seeing that it is preserved in perpetuity for many reasons as presented at the first meeting. The reason it is being discussed under Mission, Vision, Values is that in the collective view of this Board, the Park and Open Space Board and the Planning Commission, the Vision and Values adopted are truly served by the preservation of this tract. The debt that was incurred to purchase Prophecy Creek Park expires in 2018 will be rolled over, and a new debt of \$6 million will be assumed to acquire the conservation easement with an additional \$1 million to advance open space initiatives. Should this proposal move forward, we will assume new debt in the amount of \$7 million with no anticipated tax increase. The interest rate on the municipal bond we are seeking is considerably less than what was used for the purchase of the Prophecy Creek and St. Helena's tracts. Chairman Conner called for any public comment.

Mr. Rick Collier, Chairman of the Wissahickon Valley Watershed Association, offered a few comments. He reaffirmed support of the initiative, and the commitment of the WVWA, offering expertise and in-kind services to continue on the right track of preservation and enhancement of environmental projects. As a planner, Mr. Collier stressed the importance and value of open space. A study of the value of open space in the four-county area highlights the substantial economic and environmental impacts, measuring the effect on residential property values, environmental services provided by protected open space, recreational activity on protected open space and the jobs and revenue created by protected open space. A copy of the study summary is made a part of these minutes.

Mr. Zucker mentioned the unfunded mandates passed down by the state to the municipalities regarding stormwater runoff and creek maintenance. He asked if the WVWA preservation plans for this property will help reduce the cost of the mandates. Mr. Collier confirmed that it will and said that the proposed enhancements of Willow Run will preserve the buffers and habitats.

Mr. Greco asked if there will be restrictions put on the golf course regarding fertilization and insecticides. Mr. Collier said golf courses are under more strict regulations than homeowners with adopted best management practices and training to maintain properties, and at this time it is too early for specifics to be defined.

Chairman Conner said our financial exposure to meet the EPA requirements overseen by DEP runs into the millions of dollars to contain stormwater. The expectation is that the proposed enhancements will significantly reduce our financial exposure to the requirements. Mr. Collier confirmed this and added that the natural system that is proposed will reduce the erosion and sedimentation. The WVWA constantly monitors water quality, looking at changes in chemistry and whatever is going on in creek water. The creek water is already being treated from above, although further reducing the amount of pollutants is something to support. Chairman Conner thanked Mr. Collier for his comments and the partnership of the Wissahickon Valley Watershed Association on this initiative.

The Board will continue to take public comment on this initiative, while working with the club and the WVWA on the agreement. Once satisfied with an agreement, it is expected that the membership of the club will vote on it, followed by a vote by the Board of Supervisors on the agreement. There will be more public discussion. The Board will then vote to assume the debt and complete the agreement. All will be done at public sessions. Chairman Conner commended the leadership of Meadowlands Country Club, the Wissahickon Valley Watershed, and the Natural Lands Trust in working with us in a collaborative manner to bring about this creative arrangement to protect the tract and offer significant value to the Township and its residents.

A motion was made by Mrs. Weber, duly seconded by Mr. Zucker to approve the minutes of the Board of Supervisors' meeting of March 10, 2015. Chairman Conner called for any discussion. There was none and the motion carried.

A motion was made by Mr. Zucker, duly seconded by Mr. Greco to pass Resolution No. 1071, proclaiming April 23, 2015 as Earth Day in Whitpain Township. Chairman Conner shared that the Earth Day celebration held annually at the Manor House at Prophecy Creek Park is always a great event. This year marks the 20<sup>th</sup> Anniversary of the celebration. The Parks and Recreation Department, the Park and Open Space Board and the Shade Tree Commission all do a wonderful job to promote and execute the festivities. There were no additional comments and the motion carried unanimously.

Chairman Conner reordered the agenda to hold the public hearing scheduled for Ordinance No. 336 earlier in the evening.

As advertised, a public hearing on Ordinance No. 336 was opened by Chairman Conner. This is an Ordinance amending the Code of the Township of Whitpain, Part II (General Legislation), Chapter 142 (Vehicles and Traffic), Section 142-32 (Parking Prohibited at all times in certain locations) to add a new parking prohibition on the east side of Narcissa Road between a point 125 feet north of the centerline of Copper Beech Drive and a point 150 feet south of the centerline of Copper Beech Drive; and to further add a new parking prohibition on the west side of Norristown Road between a point 200 feet north of the centerline of Copper Beech Drive and a point 170 feet south of the centerline of Copper Beech Drive. Chairman Conner asked the Township Engineer to give a brief summary of the Ordinance.

Mr. Blanch said the Engineering Department was asked to look at the parking situation within the acceleration and deceleration lanes on Norristown Road and Narcissa Road at Copper Beech Drive. The request was related to safe sight distances in both areas. In accordance with Title 67 of the Transportation Safety Manual and the speed limits on Norristown Road and Narcissa Road, it was determined that parking restrictions could be implemented. Even with the restrictions, up to three vehicles can park outside of the proposed restricted area along Narcissa Road and one vehicle along Norristown Road. Solicitor Garrity added that in order for the parking restrictions to be enforced, the Township must have an ordinance, signage and striping in place.

Chairman Conner asked if any Board or staff member had comments. There were none. He then asked if any member of the public had comments.

Residents Thomas Sweeney and Maryann Cartis of 270 and 247 Cooper Beech Drive offered support of the Ordinance, citing sight distance problems. Bob King asked if there have been accidents, incidents or safety issues to require this. Mr. Blanch said although his department is not aware of accidents, while the study was being done a trailer parked in the offset did block safe sight distance and it is becoming more of a problem. By limiting parking, no vehicle will be within the sight triangle, which will provide safe conditions. Mr. King requested that the area be again reviewed based on traffic and accidents, to which Mr. Blanch responded that based on Title 67 and the study that was done, the restrictions are those recommended. Mr. Zucker added that a couple of years ago, there was one truck. Currently, more and more people are parking vehicles there and it is creating a safety issue. Chairman Conner said the Board has tried to be accommodating, even discussing less internal parking restrictions with the Homeowners' Association. The parking along the acceleration and deceleration lanes is now out of hand and absolutely poses a safety risk that cannot be allowed. There were no additional comments from the public.

Chairman Conner asked if any member of the Board wished to comment. Mr. Wollman said this has been a safety issue for decades, and is confirmed with the engineering study. The Mission Statement defines the purpose of our municipality, the reason for its existence, its core purpose. This municipality has "never wavered in its collective commitment to ensure public safety." He will recuse himself from the vote.

Mrs. Weber echoed Mr. Wollman's comments. When this was discussed in work session, the Board agreed that they tried to accommodate the property owners who had no success in appealing to their Homeowners' Association. The HOA and residents need to continue their dialogue regarding this matter; it is encouraged. These are work vehicles, not recreational vehicles, and it's possible that a fair solution can be reached. The engineering staff was there and witnessed the conditions. Safety is paramount. Mr. Greco agreed that safety is most important. That the HOA disallows pickup trucks is an internal matter. As a Board, we are responsible for the health, welfare and safety of all residents.

Mr. Pronczak thanked Col. King publicly for his cooperation with the Police Department and for parking his vehicle in such a way that it did not block the required sight distance. Unfortunately, others park without regard for sight distance and the problem has grown and must be addressed. Chairman Conner closed the hearing.

A motion was made by Mr. Greco, duly seconded by Mr. Zucker and carried to adopt Ordinance No. 336 as discussed. Mr. Wollman recused himself from the vote.

A motion was made by Mr. Greco, duly seconded by Mr. Wollman to pass Resolution No. 1073 amending the previously granted preliminary/final land development approval for the Deer Hollow at Blue Bell development to approve plan sheets 4A, 4B, 30A and 30B of 30, prepared by Richard C. Mast Associates, PC, which depict revisions to the stormwater management BMPs for the development as required by the PA Department of Environmental Protection. This approval is contingent upon the review and approval of the revised plans by the Township Engineer, review of revised homeowners' association documents by the Township Solicitor, and the execution and recording of an amendment to the Declaration of Covenants, Easements and Restrictions Concerning Stormwater Facilities for the development. Chairman Conner called for any discussion. There was none and the motion carried.

A motion was made by Mr. Zucker, duly seconded by Mr. Greco to pass Resolution No. 1074 authorizing the Chairman of the Board of Supervisors to sign an Application for Traffic Signal Approval to be submitted to the PA Department of Transportation. The application is required in order to modify the traffic signal located at the intersection of Skippack Pike and North Wales Road. Chairman Conner called for any discussion. There was none and the motion carried.

A motion was made by Mr. Wollman, duly seconded by Mr. Greco to pass Resolution No. 1075 authorizing the Chairman of the Board of Supervisors to sign an Application for Traffic Signal Approval to be submitted to the PA Department of Transportation. The application is required in order to install a new traffic signal at the intersection of DeKalb Pike and the Shops at Blue Bell Shopping Center driveway. Chairman Conner gave some background into this action, noting the entrance to the Giant Shopping Center includes a very dangerous turning lane. The owners of the property requested a review and staff concurred that the new traffic signal will make the area safer. There were no additional comments and the motion carried.

A motion was made by Mrs. Weber, duly seconded by Mr. Wollman to pass Resolution No. 1076 authorizing the Township Finance Director to rebalance the General Fund balances under the new standards for financial reporting established by the Government Accounting Standards Board (GASB) and transfer \$500,000 from the General Fund to the Capital Reserve Fund for future capital improvements. Chairman Conner said this will transfer funds from the General Fund to the Capital Reserve Fund. This was budgeted last year during the budget approval process, and we are now executing this move after year-end and initial unaudited reports. This is the right time to move the funds. There were no additional comments and the motion carried.

A motion was made by Mr. Greco, duly seconded by Mr. Wollman to grant a waiver to Regency Blue Bell LP for parking lot modifications at the Shops of Blue Bell Shopping Center located at 1750 DeKalb Pike. The waiver is conditioned upon the review and approval of the site plan by the Township Engineer. Chairman Conner explained that this is the parking area behind the Giant store and the modifications involve moving parking spaces around. There were no additional comments and the motion carried.

The request for a waiver from Korman Communities for a driveway extension requires further review and was not addressed this evening.

A confirming motion was made by Mr. Greco, duly seconded by Mrs. Weber to release \$12,853.60 (Release #1) from the escrow fund for Gable Estates Subdivision located at 960 Morris Road. Chairman Conner called for any discussion. There was none and the motion carried.

The Board of Supervisors took no action on the following cases scheduled to be heard by the Zoning Hearing Board on March 19, 2015 at 7 p.m.:

#2034-15	Robert & Pattie Haasz
#2035-15	Joseph & Donna Ferrier
#2036-15	1155 DeKalb Associates, LLC

On the following Zoning Hearing Board application, upon motion by Mr. Zucker, duly seconded by Mrs. Weber and unanimously approved, the Board authorized the Solicitor to appear in opposition to the case on March 19:

#2032-15	Pet Supplies Plus & Forman Sign Co. (Dan Flaville)
----------	--

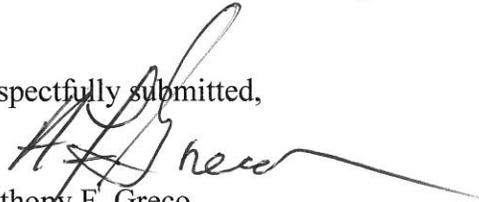
Chairman Conner turned the meeting over to Vice-Chairman Zucker who asked if any member of the audience wished to make public comment. Mr. John Maines of 237 Crystal Court asked if the Meadowlands loan is \$6 million. Chairman Conner explained that it is not a loan, but the purchase of an interest in the real estate, with the provision of a conservation easement in perpetuity to prevent development of the 125 acres. There will be an option for the Club to reassume ownership of the property and repay the \$6 million, as the terms of the

20-year life of the agreement is fulfilled. However it ends up, the conservation easement survives, lasting in perpetuity. Mr. Maines asked if the Club will continue to operate as a private club. Chairman Conner detailed that it will, and there will be environmental requirements written into the agreement. The Township will make sure they live up to the agreement. Vice-Chairman Zucker asked if there were any other questions. There were none.

Chairman Conner announced the Rotarians will host their Annual Wellness Expo on Saturday morning, March 28<sup>th</sup> at Montgomery County Community College. He also noted the Board held an executive session prior to the meeting, and will return to executive session to discuss legal and personnel matters.

There being no further business, Vice-Chairman Zucker moved to adjourn the meeting at 8:54 p.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'A. Greco', with a long horizontal flourish extending to the right.

Anthony F. Greco  
Secretary

/v



**The Economic Value of Protected Open Space  
in Southeastern Pennsylvania**

PREPARED FOR  
GreenSpace Alliance  
Delaware Valley Regional Planning Commission

FINAL EDITION  
January 2011

# **The Economic Value of Protected Open Space**

*in Southeastern Pennsylvania*

**January 2011**

**FINAL EDITION**

Produced for

**GreenSpace Alliance**

**Delaware Valley Regional Planning Commission**

By

**Economy League of Greater Philadelphia**

**Econsult Corporation**

**Keystone Conservation Trust**



February 2011

Greetings,

Southeastern Pennsylvania has an enviable collection of protected open spaces, including parks, working farms, trails, nature preserves, and historic and cultural landscapes. When we think of the beauty of Greater Philadelphia, these areas often come to mind. They give us our “sense of place”. Some might think that their value stops there, but this study, **Return on Environment – The Economic Value of Protected Open Space in Southeastern Pennsylvania**, quantifies the many ways in which these open spaces actually save us money and support our economy.

Commissioned by the GreenSpace Alliance and the Delaware Valley Regional Planning Commission, funded by The Lenfest Foundation and Pennsylvania Department of Conservation and Natural Resources, this report, conducted by Economy League of Greater Philadelphia, Econsult Corporation, and Keystone Conservation Trust, shows how we:

- Increase our property values by being close to protected open space;
- Avoid spending money to artificially replicate the vital environmental functions provided by protected open space;
- Save money from free or low-cost recreational activities on protected open space;
- Create jobs related to the open space.

Just glance through the executive summary - we think you will find the magnitude of the savings and value added impressive.

The Greater Philadelphia area has done a great job in preserving open space in the past. We have protected unique habitats, inspiring viewsheds, wonderful trails and prime farmland for future generations. But there are still many more places in need of preservation. The report shows us why it makes sense to protect additional open space, not just for sentimental reasons, but also because it's a wise public investment that pays us back, now and in the future.

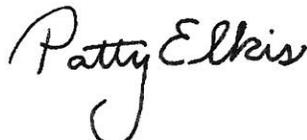
This study will be used to educate the public and decision makers about the economic value of protected open space in order to reframe the dialogue about open space as a benefit, not just an expense. We hope to promote policy changes that will favor open space protection and to raise political and financial support for further open space preservation. The project includes a strategy to communicate these ideas widely, and we thank everyone in advance for helping to spread these messages.

The communications strategy was conducted by Paragraph Inc. and Wordplay, LLC and funded by the Claneil Foundation and J. P. Mascaro & Sons, to whom we express deep gratitude. We also thank the William Penn Foundation for its continued support. Finally, we would like to thank all the organizations who have championed this project, and the people who have volunteered their time and expertise for **Return on Environment – The Economic Value of Protected Open Space in Southeastern Pennsylvania.**

Sincerely,



Donna W. Pitz  
Executive Director  
GreenSpace Alliance



Patty Elkins  
Associate Director of Planning  
Delaware Valley Regional Planning Commission

# Acknowledgements

The GreenSpace Alliance and the Delaware Valley Regional Planning Commission acknowledge the generous contributions of time, expertise, and support given by the study's Advisory Committee and Green Ribbon Panel.

The following members of the Study Advisory Committee contributed valuable advice in developing the study concept, working with the study consultants, and assisting with the development of the communications plan: Glen Abrams, Laurie Actman, Jen Adkins, Maggie Allio, Steve Beckley, Blaine Bonham, Lauren Bornfriend, Cliff David, Sherri Evans Stanton, Dulcie Flaharty, William Gladden, Andrew Goodman, Ann Hutchinson, Judy Thomas, Philip Hopkins, Graciela Cavicchia, Chris Linn, Mary Ann Hunter, Deenah Loeb, David Kraybill, David Masur, Jake Michael, Molly Morrison, Beth Pilling, Michelle Schmitt, Spencer Finch, Mindy Lemoine, Jeff Knowles, Kris Kern, John Sorrentino, Jessica Sanchez, and Carolyn Wallis.

The study's Green Ribbon Panel generously shared their insights into how to communicate the results of the study. Members of the panel include: Carolyn Adams, Charles Branas, Andrea Bretting, Carol Collier, Michael DiBerardinis, Joseph Duckworth, Jeffrey Featherstone, Michael Frank, Robert Hankin, Deborah Howe, Mark Alan Hughes, Andy Johnson, Calvin Johnson, Henry Jordan, Kirsty Halliday, Paul Lyons, Carol McCabe, Bruce Melgarey, Joseph Minott, Thomas Morr, Anne Papageorge, James Plumb, James Seif, Barry Seymour, Chris Terlizzi, Walter Tsou, and Susan Wachter.

The GreenSpace Alliance and the Delaware Valley Regional Planning Commission are especially grateful to The Lenfest Foundation for their early and generous support of the study. The study was also financed in part by a grant from the Community Conservation Partnerships Program, the Environmental Stewardship Fund under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

**Photo Credits:** Cover photos courtesy of GreenSpace Alliance, Delaware Valley Regional Planning Commission, and Natural Lands Trust. Photos throughout the study are courtesy of Montgomery County Planning Commission, Delaware County Planning Department, Natural Lands Trust, Economy League of Greater Philadelphia, The Food Trust, and Bucks County Department of Parks and Recreation.

# The Economic Value of Protected Open Space

*In Southeastern Pennsylvania*

## Table of Contents

Executive Summary	1
Chapter One: Introduction	7
Protected Open Space in Southeastern Pennsylvania	7
Study Approach	9
Chapter Two: Property Values	15
Methodology	15
Effect of Proximity to Open Space	18
Case Study: The Radnor Trail	21
Chapter Three: Environmental Services	25
Methodology	25
Summary of Environmental Impacts	25
Case Study: Hopewell Big Woods	35
Case Study: Peace Valley Park	39
Chapter Four: Recreation and Health	43
Methodology	43
Recreational Use	44
Healthcare Savings	46
Case Study: The Perkiomen Trail	49
Case Study: Glenolden Park	53
Chapter Five: Economic Activity	57
Methodology	57
Summary of Economic Activity Impacts	58
Case Study: Clark Park	63
Case Study: Honey Brook Township	67
Conclusion	71
Endnotes	73
References	75

## Tables and Figures

Table 1: Total Acreage of Open Space by Type and County	7
Table 2: Protected Open Space Compared to Land Area	8
Table 3: Total Economic and Fiscal Impacts of Open Space on Housing, by county	16
Table 4: Total Economic Impact of Open Space on Housing Values, by county	17
Table 5: Total Environmental Benefits, but type and county	26
Table 6: Water Supply Service Benefit, by type and county	26
Table 7: Water Quality Service Benefit, by type of Open Space and county	27
Table 8: Flood Mitigation Service Benefit, by type of Open Space and county	27
Table 9: Wildlife Habitat Service Benefit, by type of Open Space and county	28
Table 10: Acreage of Tree Canopy Cover, by type of Open Space and county	29
Table 11: Air Pollution Removal Benefits	29
Table 12: Estimated Carbon Sequestration and Storage Amounts	30
Table 13: Carbon Sequestration and Storage Benefits	30
Table 14: Summary of Statistics for Analyzed Sub-watersheds	31
Table 15: Decrease in Annual Runoff Attributed to Protected Open Space	32
Table 16: Runoff Generated by a Two-Year Storm	33
Table 17: Estimated Cost for New Stormwater Infrastructure to Manage Additional Runoff	33
Table 18: Total Economic Value of Recreational Activity on Protected Open Space	44
Table 19: Estimated Household Outdoor Recreation Activities	45
Table 20: Total Health-Related Cost Savings by Open Space	46
Table 21: Total Annual Economic and Fiscal Impacts Associated with Protected Open Space	58
Table 22: Total Annual Expenditures Associated with all Protected Open Space	59
Table 23: Annual Expenditures Associated with Publicly Protected Open Space	59
Table 24: Annual Agricultural Sales Associated with Protected Farmland	60
Table 25: Annual Tourism Expenditures Associated with Protected Open Space	60
Table 26: Total Employment Associated with Protected Open Space	60
Table 27: Total Annual Salaries Associated with Protected Open Space	61
Table 28: Total State Tax Revenues Associated with Protected Open Space	62
Table 29: Total Local Tax Revenues Associated with Protected Open Space	62
<hr/>	
Figure 1: Total Protected Open Space by Type	8
Figure 2: Total Protected Open Space by County	8
Figure 3: Case Studies	10
Figure 4: DVPRC Planning Areas and Protected Open Space	17
Figure 5: Average Increase in Home Values Due to Proximity of Open Space	18
Figure 6: Change in Value of Homes within a quarter-mile of Open Space	20
Figure 7: Location of Analyzed Sub-Watershed	31
Figure 8: Location of Outdoor Recreation Time	45

# Executive Summary

Protected open spaces – public parks, preserved farmland, and private conserved lands – provide substantial economic, environmental, and public health benefits to surrounding communities. These benefits, however, are generally not well understood and are often undervalued in policy debates and investment decisions. In the interest of fostering a better understanding of these benefits, this study estimates the economic value generated by protected open space in southeastern Pennsylvania.

Approximately 14 percent of the land area in Bucks, Chester, Delaware, Montgomery, and Philadelphia counties is protected open space. This area includes parks and trails such as Ridley Creek State Park and the Schuylkill River Trail, working farms across southeastern Pennsylvania, and private land trust owned or eased lands.

Building off of previous valuation studies and using standard economic analysis techniques, this study estimates the value of protected open space in southeastern Pennsylvania by measuring impacts across four areas: (1) the effects of protected open space on residential property values, (2) the value associated with environmental services provided by southeastern Pennsylvania’s protected open spaces, (3) the value of recreational activity on protected open space and associated avoided health-care costs, and (4) jobs and revenue created as a result of activity on and connected to protected open space.

This analysis indicates that protected open space adds significant value to the regional economy (see right), with benefits accruing to businesses, governments, and households. The economic benefits generated by protected open space accrue in different ways – some are direct revenue streams to individuals or governments, some represent asset appreciation value, some accrue in the form of avoided costs. Because these values differ in nature, the estimates in this study should not be added together to produce a single aggregate value of protected open space in southeastern Pennsylvania.

The estimates presented in this study should provide elected leaders, policy makers, and the public with a new perspective on the value of protected open space and contribute to informed decisions concerning future development in southeastern Pennsylvania. It is important to note, however, that this study does not analyze the costs associated with acquiring, preserving, or maintaining land as protected open space, and does not represent a cost-benefit approach.

**This study estimates** the economic value of protected open space in southeastern Pennsylvania by measuring impacts across four areas: property values, environmental services, recreation and health, and economic activity. Top findings include:

**\$16.3 billion**

added to the value of southeastern Pennsylvania’s housing stock

**\$240 million**

in annual property and transfer tax revenue for local governments

**\$133 million**

in costs avoided as a result of the natural provision of environmental services

**\$577 million**

in annual benefit for residents who recreate on protected open space

**\$795 million**

in annually avoided medical costs as a result of recreation that takes place on protected open space

**6,900 jobs**

created on or as a result of protected open space in the five-county region

## Property Values

Homeowners are willing to pay a premium to live in close proximity to protected open space. As a result, southeastern Pennsylvania's existing open space adds to the overall value of its housing stock. This increased wealth is captured by citizens through higher sales values of homes near protected open space, and generates increased government revenues via larger property tax collections and transfer taxes at time of sale. This study analyzes approximately 230,000 home sales in the five counties of southeastern Pennsylvania from 2005-2009 to estimate the effect of protected open space on residential property values and the attendant fiscal impacts. Results indicate that proximity to open space contributed a significant positive impact to residential property values both before and during the economic downturn that began in 2008. Key findings include:

**\$16.3 billion** added to the value of southeastern Pennsylvania's housing stock

Homes in southeastern Pennsylvania as far as one mile away from protected open space capture a measurable increase in their value because of this proximity. When added together, the increments of value that homes in southeastern Pennsylvania capture because of their proximity to open space total \$16.3 billion dollars.

**\$240 million** in annual property and transfer tax revenues

By increasing the value of homes within a one-mile radius, protected open space also increases the amount of property taxes and transfer taxes that local governments and school districts receive in southeastern Pennsylvania. These increased property and transfer tax revenues equal \$240 million in total per year.

### Who Benefits?

#### Households



Nearby protected open space increases home values, resulting in increased home equity and wealth captured when the home is sold.

#### Governments



Property value increases attributed to nearby open space result in higher property and transfer tax revenues for local governments.

## Environmental Services

Protected open space also provides value in the form of naturally occurring environmental processes. If these lands were developed, southeastern Pennsylvania would be forced to replicate vital and costly services such as flood control and air pollution mitigation through alternative methods. In relying on the natural landscapes on protected open spaces to provide these valuable services, southeastern Pennsylvania avoids significant expenses. This study estimates the avoided costs associated with several environmental services that naturally occur on southeastern Pennsylvania's protected open spaces, including water supply, flood mitigation, provision of wildlife habitat, air pollution removal, and carbon sequestration and storage. Key findings include:

**\$133 million** in annual benefits through the provision of six environmental services.

Protected open space in the five-county region contributes an estimated \$133 million in annual cost savings and economic benefits through the provision of six ecosystem services: water supply, water quality, flood mitigation, wildlife habitat, air pollution removal, and the sequestration of carbon in yearly growth of trees on protected open space. This sum represents costs avoided by not having to artificially replace vital ecosystem services currently provided by protected open space within the five-county region.

**\$61 million** in carbon currently stored in trees on protected open space.

It is estimated that trees on southeastern Pennsylvania's protected open space store approximately \$61 million in carbon within existing biomass. If the carbon currently stored in trees – both above and below ground – on protected open space were released into the air, it would cause damages due to increased carbon emissions that would cost approximately \$61 million to mitigate.

### Who Benefits?

#### Governments



Local governments avoid having to spend money to artificially replicate the vital environmental functions provided by protected open space.

#### Businesses



Businesses avoid having to pay additional taxes to replicate the environmental functions provided by protected open space.

#### Households



Homeowners avoid having to pay additional taxes to replicate the environmental functions provided by protected open space and to repair damage caused by flooding and air pollution.

## Recreation and Health

Park usage generates value via the consumer benefit that residents enjoy by engaging in recreation and exercise free or at below-market rates instead of turning to private markets for the same activities. There also are considerable health cost avoidance and productivity savings related to rigorous exercise on protected open space. This study estimates these direct use and health cost savings benefits. Key findings include:

### **\$577 million** in annual benefits for residents who recreate on protected open space

Nearly \$577 million in benefits accrue annually to residents who participate in recreational activities on protected open space within southeastern Pennsylvania. This value represents the additional amount of money that residents in the five-county region would be willing to spend in the private market to participate in the recreational activities that they currently enjoy on protected open space.

### **\$795 million** in medical costs avoided annually

Physically active people typically enjoy a variety of health benefits, including lower incidence of cardiovascular diseases, diabetes, depression, certain cancers, and obesity. It is estimated that the moderate and strenuous activity that takes place on protected open space in southeastern Pennsylvania accounts for \$795 million in avoided medical costs annually.

### **\$485 million** in lost productivity costs avoided annually

It is estimated that businesses in southeastern Pennsylvania avoid \$485 million in lost productivity costs per year because of the physical activities their employees engage in on protected open space in the region. This total represents the combined value of costs not incurred because of avoided productivity losses, due to physical activity on the protected open space within the five-county region.

## Who Benefits?

### Households



Protected open space provides free and low-cost recreational activities that residents would otherwise have to pay for in the private market.

Moderate and strenuous recreational activity on protected open space also results in avoided medical costs.

### Businesses



The recreational opportunities available on protected open space contribute to the health of the region's workforce, translating into avoided medical, workers' compensation, and lost productivity costs.

## Economic Activity

Protected open space generates a variety of economic activities, ranging from agricultural activity on preserved farmland to tourist visitation to public park maintenance. This analysis estimates the spending, employment, earnings, and tax revenues associated with these activities. Key economic benefits associated with these activities on protected open space are:

### **\$566 million** in annual expenditures

It is estimated that \$566 million in annual spending occurs on and because of protected open space in the five counties of southeastern Pennsylvania. Examples of these expenditures include government spending for the management and maintenance of public open space, spending for the purchase of goods made on preserved farmland, and spending related to tourism associated with protected open space. This spending – a sum of outlays by businesses and governments – represents an overall economic benefit to the five-county region.

### **6,900 jobs**

Protected open space in southeastern Pennsylvania contributes an estimated 6,900 jobs to the regional economy. Examples of these jobs include public maintenance workers, park administrators, and rangers; farmers, distributors, and suppliers working on protected farmland; and guides and hospitality professionals catering to tourists who visit protected open space.

### **\$299 million** in annual salaries

Salaries paid to individuals working jobs on or related to protected open space in southeastern Pennsylvania total nearly \$300 million per year.

### **\$30 million** in state and local taxes per year

The economic activity that takes place on and because of protected open space in southeastern Pennsylvania generates tax revenues via income and property taxes. This activity generates an estimated \$30.2 million annually in state and local taxes.

#### Who Benefits?

##### Businesses



Protected open space, including farmland and public parks, is a source of commerce for businesses in the five-county region.

##### Governments



The economic activity spurred by protected open space generates tax revenue for local governments in the form of income and property taxes.

##### Households



Protected open space provides economic opportunity for residents of southeastern Pennsylvania in the form of employment and wages.