How Communities and Organizations Conserve Undeveloped Land in Chester County, Pennsylvania

Montgomery Harris III
*University of Pennsylvania*, montgomh@wharton.upenn.edu

Follow this and additional works at: [https://repository.upenn.edu/od_theses_msod](https://repository.upenn.edu/od_theses_msod)

Harris, Montgomery III, "How Communities and Organizations Conserve Undeveloped Land in Chester County, Pennsylvania" (2015). *Master of Science in Organizational Dynamics Theses*. 77. [https://repository.upenn.edu/od_theses_msod/77](https://repository.upenn.edu/od_theses_msod/77)

Submitted to the Program of Organizational Dynamics, College of Liberal and Professional Studies, in the School of Arts and Sciences in Partial Fulfillment of the Requirements for the Degree of Master of Science in Organizational Dynamics at the University of Pennsylvania.

Advisor: Trudy Heller

This paper is posted at ScholarlyCommons. [https://repository.upenn.edu/od_theses_msod/77](https://repository.upenn.edu/od_theses_msod/77)

For more information, please contact repository@pobox.upenn.edu.
How Communities and Organizations Conserve Undeveloped Land in Chester County, Pennsylvania

Abstract
This paper focuses on the tension surrounding land conservation and development in Chester County, Pennsylvania. I argue that community involvement is critical to preserve natural resources and ecosystems. The more stakeholders work together to prepare for future strains on their natural resources, the better the quality of life will be for people and for the other inhabitants of our natural world. I present a systems approach to this topic.

Keywords
land conservation, systems approach to land conservation, community involvement in land conservation, Chester County, Pennsylvania

Comments
Submitted to the Program of Organizational Dynamics, College of Liberal and Professional Studies, in the School of Arts and Sciences in Partial Fulfillment of the Requirements for the Degree of Master of Science in Organizational Dynamics at the University of Pennsylvania.

Advisor: Trudy Heller
HOW COMMUNITIES AND ORGANIZATIONS CONSERVE UNDEVELOPED
LAND IN CHESTER COUNTY, PENNSYLVANIA

by

Montgomery Harris, III

Submitted to the Program of Organizational Dynamics,
College of Liberal and Professional Studies
in the School of Arts and Sciences
in Partial Fulfillment of the Requirements for the Degree of
Master of Science in Organizational Dynamics at the
University of Pennsylvania

Philadelphia, Pennsylvania

2015
HOW COMMUNITIES AND ORGANIZATIONS CONSERVE UNDEVELOPED LAND IN CHESTER COUNTY, PENNSYLVANIA

Approved by:

_________________________________________________
Trudy Heller, Ph.D., Advisor

__________________________________________________
Stephen M. Finn, Ph.D., Reader
Abstract

This paper focuses on the tension surrounding land conservation and development in Chester County, Pennsylvania. I argue that community involvement is critical to preserve natural resources and ecosystems. The more stakeholders work together to prepare for future strains on their natural resources, the better the quality of life will be for people and for the other inhabitants of our natural world. I present a systems approach to this topic.

Recommended Citation: Harris, Montgomery (2015) "How Communities and Organizations Conserve Undeveloped Land in Chester County, Pennsylvania," Capstone for Organizational Dynamics at the University of Pennsylvania.

Keywords: land conservation; systems approach to land conservation; community involvement in land conservation; Chester County, Pennsylvania
Acknowledgments

I would like to thank the following people for inspiring and guiding me during my Capstone process: Drs. Alan Barstow and Dana Kaminstein, my Organizational Dynamics professors for the Capstone course; Dr. Trudy Heller, my academic advisor; Becky Collins, my tireless and creative editor; Dr. Steven M. Finn, my internal reader; Ross Pilling, my external reader; Chester County Open Space Preservation Director William D. Gladden, II; and, Neil Kling, Esq., government liaison.
List of Tables

Table 1. Summary of conservation development techniques, p. 28-29.

Table 2. Logic model, p. 46.

Table 3. Chester County municipalities that raised funds during 2002-2010 to purchase open space, including farmland preservation, p. 92-93.
List of Figures

Figure 1. Farming variables, p. 45.

Figure 2. Lundale farm, fall, 2014, p. 77.

Figure 3. Transforming open space to sustainable farm enterprises, Appendix A, p. 125.
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>4</td>
</tr>
<tr>
<td>List of tables</td>
<td>5</td>
</tr>
<tr>
<td>List of figures</td>
<td>6</td>
</tr>
<tr>
<td>Introduction</td>
<td>10</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>11</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>12</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>12</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>13</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>14</td>
</tr>
<tr>
<td>Chapter 6</td>
<td>14</td>
</tr>
<tr>
<td>Chapter 1, Background and Context</td>
<td>16</td>
</tr>
<tr>
<td>Personal interest</td>
<td>19</td>
</tr>
<tr>
<td>Chapter 2, Literature review</td>
<td>22</td>
</tr>
<tr>
<td>Planning</td>
<td>23</td>
</tr>
<tr>
<td>A model conservation community</td>
<td>23</td>
</tr>
<tr>
<td>Greenway mastery</td>
<td>26</td>
</tr>
<tr>
<td>Conservation development</td>
<td>28</td>
</tr>
<tr>
<td>Economics</td>
<td>31</td>
</tr>
<tr>
<td>Land trusts</td>
<td>32</td>
</tr>
<tr>
<td>Land trusts for open space preservation</td>
<td>32</td>
</tr>
<tr>
<td>Community</td>
<td>35</td>
</tr>
<tr>
<td>Homeowner activism</td>
<td>35</td>
</tr>
<tr>
<td>Environmental ethics</td>
<td>36</td>
</tr>
<tr>
<td>NPOs evaluation</td>
<td>37</td>
</tr>
<tr>
<td>Metrics can yield increase in NPO funding</td>
<td>38</td>
</tr>
<tr>
<td>Summary and conclusion</td>
<td>39</td>
</tr>
<tr>
<td>Chapter 3, Methodology</td>
<td>41</td>
</tr>
<tr>
<td>Process</td>
<td>41</td>
</tr>
<tr>
<td>General approach</td>
<td>41</td>
</tr>
<tr>
<td>Interviewing</td>
<td>42</td>
</tr>
<tr>
<td>Economics</td>
<td>43</td>
</tr>
</tbody>
</table>
Selection
Personal observation

Chapter 4, Research and interview results
County-wide views
Government overview of county open space policy
Former County Commissioner emphasizes vigilance
Planning expert
Township activities
Township and county actions
Township public meeting showcases open space committee
An open space regional perspective
Agriculture
Farming as conservation
Farming for economic development
Ninth generation Chester County farm resident
Land trusts preserving open space in Chester County
Addressing threats to land trust protection in Pennsylvania
Conservation champions
Tax incentives
Business-nonprofit partnership
Green business restoring the watershed

Chapter 5, Discussion and conclusions
Summary of key findings
NPOs
Economic incentives
Government
Agriculture
Lessons learned
Conservation champions as unsung heroes
Trending
Economic incentives support the Central Park syndrome
Exemplary government
Citizen action
Land trusts require strategy and business operations
Recognition
Adopt the corridor concept for smart growth management
Agriculture
Challenges remain
Local biases impact execution of County objectives
Metrics
More research needed
Chapter 6, Closing reflections
  Rock stars to the rescue
  Severe drought as game-changer
  Foreign takeover wrecks havoc
  Rodale Institute leads the way

References

Appendix A

Appendix B

Appendix C
Undeveloped land can help to ensure the survival of future generations on this planet. Open space and farmland nurture our physical and our mental health. In order to continue to preserve natural resources such as undeveloped land, people must collaborate purposefully and systematically.

This is a paper about the players and the components at work in Chester County, Pennsylvania’s open space system. The paper is not intended to critique government or a political machine. On the contrary, elected officials are executing public policy that contributes to a quality or a sense of place that residents prefer. Two recent articles in a suburban newspaper demonstrate the progress of Chester County’s open space movement.

On September 13, 2015, Main Line Suburban Life reported that by early 2016 tax dollars will conserve 50,000 acres of open space in Chester County. The article quotes an Uwchlan Township farmer as saying, “Agriculture is alive and well in Chester County thanks to the open space program.” Reporter Michael Rellahan cites southeastern Pennsylvania open space statistics that indicate an enduring commitment by residents and their respective elected officials.

On September 15, 2015, the Daily Local News reported that U.S. Representative Ryan Costello (R), a former Chester County Commissioner, has joined three congressmen to form the bipartisan Land Conservation Caucus. The intent of the Caucus is to create dialogue about federal policies that would impact public access to open space. The article reports that Costello will participate in partnerships with local land conservation organizations.
This paper looks holistically at the community and organizational dynamics that conserve land in what I argue is an important Pennsylvania county for agriculture, recreation, and quality of life. Although specific individuals and organizations are leading the movement, sustainable development requires all stakeholders to collaborate through alliances and partnerships. Where possible, I try to provoke the reader to recognize the consequences for humanity and for nature should we live in a world stripped of trees and pastures – of green space. There are six chapters, which I will now summarize.

Chapter 1

Human life, wildlife, and ecosystems depend on open space or land protected from development. Although open space is an important topic to study (as is agriculture, biodiversity, and climate control), I did not identify a land conservation movement in Chester County from my search of literature such as academic journal studies. As a result of my field research, I confirm that there is such a movement today.

The purpose of my study is to examine the strategies that communities and organizations are applying to the conservation of Chester County land. My primary research question is: How are organizations that provide services in Chester County effective in conserving open space? From my study, I hypothesize that in order to conserve land, people must collaborate with one another.
Chapter 2

There is no shortage of literature that evaluates the effectiveness of organizations and communities that contribute to land conservation. Academic and scientific journal articles present models and instruments that can indicate whether environmental organizations or government departments are preserving land adequately for future generations. A Harvard thesis describes how the Town of Lincoln, Massachusetts created an open space system because of “... community solidarity and commitment.” The Town relied on master plans to design its future landscapes, designed by stakeholders in a democratic process.

A graduate of North Carolina State University leveraged his thesis to persuade the Raleigh, North Carolina city council to build a network of greenways. He argued that the greenways would connect city neighborhoods and reap both economic and environmental benefits. The thesis-turned-report led to the conservation of 21,000 acres in the municipality and ended devastation caused by severe flooding.

Another University of Pennsylvania thesis examines the effectiveness of land trusts in protecting open space. The study describes how the Brandywine Conservancy, alive and well today in Chester County, maintained “... strong ties with local planning commissions ...” The author also presents a case study on The French and Pickering Creeks Conservation Trust (FPCCT), which also flourishes today.

Chapter 3

After my literature research, I interviewed practitioners, citizen activists, and government officials. For historical perspective, I interviewed the former County
planning director. I estimate that my interviewees share collectively more than 220 years of direct and personal Chester County experience.

I chose not to distribute surveys. Instead, my primary research technique was to interview key participants in the County’s open space system in person, by phone, or, in one case, by email. In fact, the variety of perspectives that the stakeholders provide is the fundamental contribution that my paper offers to Chester County’s open space narrative.

Chapter 4

This chapter tells the stories of land conservation stakeholders who are leading and collaborating today in Chester County. Some of the narrators work on the front lines to prevent wanton development. Others apply their talents to strike a balance between land conservation and the needs of growth.

For example, the director of Pennsylvania’s only county open space department explains Chester County’s grant process for farmland preservation. The director believes that the democratic process of voting people into government positions is the key driver for open space progress. He finds that the effectiveness of environmental organizations, such as land trusts, depends on individual leadership.

Another voice is that of a resident who is a board member of FPCCT, board member of Lundale Farm in Pughtown, and serves on his township’s open space committee. This conservation champion believes that tax incentives induce and enable landowners to enter into conservation easements. His personal goal is to increase food production from County and regional farms.
Chapter 5

In this chapter, I present my findings and connect the principles from the literature research to the lessons from the interviewees. A consensus emerges that the future of the County’s landscapes is in the hands of its current citizens. The key lesson is that open space preservation requires residents to engage in their communities and to interact with their elected officials.

I met with government officials who favor attracting more businesses to locate their operations in Chester County. While that would help local economies, growth begets land development which by necessity destroys natural resources such as open space. One solution to mitigate negative environmental impact is for communities to follow a “corridor concept” in their planning. From my neophyte vantage point, that concept resembles the “smart growth” concept.

The key findings are: environmental organizations such as land trusts must adopt business-like practices and earn accreditation to survive; the culture of Chester County residents is to pay higher taxes to save open space; citizen activists lead open space initiatives in their communities; and, County officials are torn between attracting growth and honoring the County comprehensive plan.

Chapter 6

In the final chapter, I imagine four scenarios in which ecosystems are stressed exponentially relative to current conditions and in which Chester County is driven to solve “wicked problems.” The scenarios raise the specter of a life compromised by a scarcity of fresh foods and dairy products. Citizens cannot afford for these imagined
conditions to turn real. Thought leaders must continue to be pro-active by collaborating with key stakeholders in the County through contingency planning and game simulations.
Chapter 1

*Treat Nature aggressively with greed and violence and incomprehension: wounded Nature will turn and destroy you.* Aldous Huxley (1947)

*Necessity is the mother of conservation.* Anonymous

*Think globally, act locally.* René Dubois (1972)

Parks, fields, and woods attract both taxpayers and tourists to communities. Land that is protected from development, also called open space, can contribute to an enhanced quality of life for residents of environmentally-friendly townships and regions. Wildlife also benefit from habitat that is unspoiled or preserved. For these primary reasons, this is an important topic to study.

Open space facilitates outdoor recreation and is essential to support plants on a large scale to enhance air quality and water tables. Another health benefit as determined from an 18-year study of 12,000 people in the U.K. is that mental health can improve when population density is reduced by natural buffers (Alcock, White, Wheeler, Fleming, and Depledge, 2014). Conservation of open space is important to other fields such as agriculture, biodiversity, and climate control. Land conservation receives far more media attention these days then when the first Earth Day was celebrated in 1970. I was surprised, however, not to identify academic or journal studies of land conservation activity in Chester County, Pennsylvania. For these additional reasons, this is an important topic to study.

As in other regions, there are obstacles that delay or prevent successful preservation of open space in Chester County. Economic considerations may dissuade
people who inherit family-owned farms to continue the family tradition of farming and instead to “sell out” to developers. Further, citizen apathy or non-engagement in community government can cause elected officials to act with less oversight or accountability regarding the protection of natural resources.

I chose to study land conservation best practices in Chester County because several organizations are stewarding the land effectively. This stewardship can benefit people and the natural world for generations to come. An apathetic public combined with a particular political machine, however, could compromise and minimize their effectiveness.

The purpose of this thesis is to identify the strategies that organizations design and deploy to conserve Chester County, Pennsylvania land in natural states. My primary research question is: How are organizations in Chester County effective in conserving open space? To determine this, I will explore questions such as: Why have certain townships in the County maintained appreciably more open space in recent years than other townships? How are open space advocates in this section of southeastern Pennsylvania utilizing strategies that work effectively in other parts of the United States?

Other questions that this paper examines include: Which “unsung heroes” in Chester County are working to conserve open space for all? Who in the County sets open space public policy? Will mergers of similar organizations be more common out of necessity and to avoid the fate of the GreenSpace Alliance? (The Alliance ceased to function independently when it lost its primary funding source, but vestiges live on within the Delaware Valley Regional Planning Commission.)
My study explores the roles of open space committees, non-profit organizations (NPOs) such as conservation land trusts, and governments in protecting land. The paper investigates the economic, legal, and philanthropic aspects of land trusts and explores laws that provide for open space to remain intact in perpetuity. I examine the economic considerations that might influence landowners to conserve their land rather than sell to developers what is perhaps their most valuable asset. I demonstrate how public officials impact a “sense of place” when they create and act on policies that shape the physical characteristics of their communities.

NPOs can be complex ecosystems. Miriam May, a University of Pennsylvania alumna, who joined a regional United Way organization after working for the bank Citigroup, describes her transition into the non-profit world as:

It was a rude awakening. I should have served on a nonprofit board first. I quickly discovered that nonprofits have a complex set of stakeholders. Clients, collegial competitors, donors, the board, committees, volunteers, community members and national umbrellas can all complicate a nonprofit’s ability to execute its mission effectively. Additionally, there is much to accomplish with far fewer resources (www.whartonmagazine.com)... people think it is easier than corporate. In fact it is more complex... (Miriam May, personal communication, July 14, 2105).
My central argument is that Chester County citizens acting in concert with organizations, including private-public partnerships, shape the destiny of their surrounding landscapes through community action. My hypothesis is that environmental organizations, especially those that are grass roots-oriented, are effective based on the extent of their resources and their ability to measure their outcomes and mission achievements. I apply systems thinking to understand how communities and individual landowners preserve land that benefits the public and the ecosystem. As a result of my study, I hypothesize that conserving land in communities and regions requires people to collaborate with one another.

I believe that my contribution to open space research will be 1) to demonstrate how disparate organizations working to conserve natural resources in Chester County are linked, and 2) to answer whether a reproducible system exists in the County to facilitate meaningful collaboration amongst NPOs, governmental agencies, and businesses.

**Background and Context**

Because of population and economic growth, current land practices will continue to permit real estate developers to reshape land for short-term gains. The challenge, as I see it, is how to balance land use interests with public welfare interests. For example, agricultural preservation is important not only to Chester County but to the entire Delaware Valley region. One dire, regional scenario is the hunger consequences that could result from a cutoff from or failure of key food supply sources such as California’s
Central Valley. How committed are citizens to preserving Chester County’s food-bearing farms?

**Personal interest.**

I live in far eastern Chester County. Before becoming a resident, I enjoyed bicycling past miles of charming farms, large private properties, and parks in the County. I can recall vividly the beauty and expanse of the former King Ranch described as “a 12,500 acre chunk of some of America’s finest grasslands, just west of Unionville, Pa.” ([http://terryconway.net/](http://terryconway.net/)).

My personal interest in Chester County countryside stems from childhood visits to a former dairy farm known as Lundale Farm located in Pughtown, Pennsylvania between Chester Springs and Pottstown, not far from French Creek State Park. I campaigned for the former farm owner, Mr. Samuel Morris, during two of his state legislature bids. Mr. Morris championed land conservation and historic preservation locally and state-wide. Partly due to his pioneering efforts, today Pennsylvania is a leading state for farms with preserved acreage. In October, 2014, I re-visited the dairy farm, which is now held in trust, to interview the executive director. The interview appears in Chapter 4.

Part of Lundale Farm is leased to farmers who cannot afford to purchase their own farms. One hundred acres is leased to the owner of Honey Brook, Pennsylvania’s Wyebrook Farm for “grass insurance” – i.e., for his cattle to graze. Lundale’s executive director, Marilyn Anthony, is cultivating a network of farm friends through events such as a yoga-hike, which I joined on November, 2014.
Another Chester County farm that I visited is Oakdale Farm in Kennett Square. According to Carol Landefeld, a descendant of the original owner and current resident, “Our farm dates back to 1770. The farm at its largest was 301 acres but now my husband and I own 50 acres. Unfortunately we are surrounded by developments, so there is very little open space” (C. Landefeld, personal communication, November 12, 2014).

The stewardship of land is vital to the field of sustainable development, which is development that balances short-term interests with the protection of future generations’ interests. Communities must plan for their growth prudently, in a balanced fashion. In this paper I show how Chester County engages in “smart growth” and “conservation development.”

(NOTE: I use the terms conservation and preservation interchangeably or synonymously throughout this paper.)

Chapter 2 presents a review of pertinent literature regarding land conservation and land use issues.

Chapter 3 explains my research methods.

Chapter 4 contains the discussion of my research results.

Chapter 5 contributes to the open space debate, states my conclusions, and suggests further research.

Chapter 6 reflects on what could occur with and without citizen action for open space preservation.
Chapter 2

Literature Review

*They paved paradise
And put up a parking lot.* Joni Mitchell (1970)

I found no academic or scientific journal studies of Chester County land conservation. In fact, an elected official indicated that this paper could be the first known study on the topic. Patricia Pregmon, a real estate and conservation attorney, corroborated this lack of scholarly writing.

She advised me that practitioners are more apt to blog, i.e., to post commentaries on Web sites, than to publish in scholarly publications. There are, however, a number of articles which are relevant to my topic that support my thesis. Part of the intent of my review of this literature was to examine how organizations whose mission it is to conserve land in Chester County articulate their outcomes as opposed to their activities. In addition, I reviewed articles about successful and non-successful conservation efforts in regions outside the Delaware Valley.

I am also interested in identifying the metrics and methods used to judge the effectiveness of conservation NPOs. I searched journals using key words such as: performance evaluation, board, land conservation, and environmental governance. My searches yielded models and instruments that objectively evaluate the effectiveness of conservation NPOs vis-à-vis self-declared missions and community contributions.

What I present in this chapter is relevant knowledge of land conservation issues that are national in scope. The sources include books and reports. In addition, I review
two theses – one of which addresses key Chester County NPOs in 1995 that are still active today. I selected literature based on land issues that are relevant to Chester County regardless of publication dates. Literature from the 1980’s and 1990’s was not intentionally excluded and may yield additional perspective on this paper’s topic.

**Planning**

Planning is essential to the coordination of land use and conservation objectives. Later in this paper I consider the accomplishments of both the Chester County Open Space Preservation and the Delaware Valley Regional Planning Commission. In this section, I review community planning literature that is broad in scope and is applicable to Chester County communities. Whyte (1968) and Lemire (1979) offer two statements that summarize the challenges and possibilities inherent in regional planning:

> There is great faith that regional planning can resolve the various conflicts of interest…a regional planning body can be a unifying influence; it can stimulate communities to adopt better and more uniform zoning ordinances. . . .

> But even a well-conceived plan will not resolve the inequities of growth . . . A plan that is any good cannot homogenize the region and provide a little bit of everything to keep each of the parts happy – some open space, some industry, some residential development” (Whyte, 1968, pp. 28-29).

**A model conservation community based on systems thinking.**

inspired me to visit the Town of Lincoln Conservation Department in Lincoln, Massachusetts. Thesis author Hooper Brooks writes, “Lincoln’s open-space system would not have occurred at such a scale without strong community solidarity and commitment” (p. 4). In Chapter 4, I present the results of my interviews with Chester County stakeholders who endorse and practice this principle.

Robert A. Lemire’s *Creative Land Development* (1979) is about a systems approach to land use planning. As a result of his community activism and the reputation the Town of Lincoln (population 6,362 in 2010 [http://www.lincolntown.org/](http://www.lincolntown.org/)) as a model of community planning, towns throughout the U.S. have sought his expertise. Lemire presents a compelling case for communities to pursue collective, creative, and holistic approaches to balancing growth with conservation. Especially noteworthy are the Town’s democratic process to engage stakeholders in designing future landscapes and the investment in and reliance on master plans.

Regulatory powers can be safely applied to save resource land that is too fragile or not safe for developing into competing uses (p.8) . . . There is a tendency to think of our towns as independent city-states whose sovereignty must be protected from state and federal governments…we must learn to shed this view. Nature does not recognize political boundaries…conservation programs must be implemented that transcend our political boundaries (Lemire, 1979, p. 116).

During the 1970s, Lincoln’s residents were not opposed to state and federal government involvement on what to do with undeveloped land. With a progressive-
minded citizenry that thought holistically to include all stakeholders, and that valued the
natural world, Lincoln approached open space in a systems thinking mode. *Creative
Land Development* is, therefore, a textbook or road map for how communities can
acquire and use land sustainably.

Brooks wrote that “. . . open fields are the heart of Lincoln’s character . . . 10 –
20% open space should be the goal of all communities” (p. 20). Chester County’s goal to
preserve 30% of its open space by 2019, then, is ambitious to me by comparison.

Brooks also posits that affluence was a key component to fuel the town’s open
space movement.

Lincoln taken as a whole may be irrelevant as a model to other
communities with less money or less inclination to become
open-space intensive with all the corresponding management
problems . . . taxes clearly are a strong element in forcing the
sale of large pieces of land for conservation or open space (pp.
35, 42).

The Town’s 2008 comprehensive document, *Open Space and Recreation Plan*,
details the vision for Lincoln’s future. This is a vision that imagines Lincoln becoming a
“green sanctuary” for the greater Boston region (p. 4). The Plan acts as a framework to
enhance the community’s green infrastructure. When the report was published, the
Lincoln Open Space Committee consisted of 15 citizens and public agency
representatives and a town conservation staff of six.
Lincoln continues to celebrate its rich heritage rooted in over 250 years of New England farming traditions. . . . Since the first piece of conservation land was acquired in 1957, Town citizens, boards, organizations and staff continually strived to identify and implement creative land-use strategies that balance growth with environmental protection (p. iv).

Today, the community planning in Chester County is guided by a similar comprehensive policy plan called Landscapes2, which establishes growth management and preservation strategies (www.landscapes2.org). The report states, “Natural resources have shaped the land use and economy of Chester County for over three centuries. . . . Chester County contains productive Piedmont soils that do not require irrigation. . . . The county has an interconnected ecosystem supporting wildlife and a sustainable tourism economy” (p. 59).

Greenway mastery.

The transcendentalists of the late 19th century (Emerson, Thoreau) started the land preservation movement followed by leaders such as President Theodore Roosevelt, Gifford Pinchot, and John Muir (Personal communication, Ross Pilling, September 29, 2015). From an urban perspective, landscape architect and urban park designer Frederick Olmstead and Philadelphia land use visionary Edmund Bacon have gained global acclaim. A less-known individual named William L. Flournoy, Jr., also deserves wide recognition for his contributions to community planning. As a young
employee of the North Carolina Department of Environment and Natural Resources, Flournoy created an extensive report based on the concept of a greenway system.

In 1972, Flournoy presented his report *The Benefits, Potential, and Methodology for Establishing the Capital City Greenway* to the Raleigh city council. Flournoy envisioned a network of greenways connecting the city’s neighborhoods. The report builds a strong case to create greenways based on social, economic, and environmental benefits.

In his report, Flournoy writes “. . . there is so much evidence that open space pays off handsomely for the typical suburban community that the objectors should be saddled with the burden of proof rather than the proponents” (p. 28). He argues that though government is essential to establish projects such as greenways, the public plays important roles in expediting the approval and construction processes. The report led to the implementation of 730 miles of trails and the conservation of 21,000 acres in the municipality.

When to adopt conservation policies may depend upon a crisis, such was the case in Raleigh with severe flooding, but the improvements begin with agents of change. The synergy of a talented young person and a caring city council produced positive benefits for thousands of Raleigh citizens and visitors. Flournoy’s vision has enhanced the quality of life in Raleigh, N.C. for decades. Clearly, visionaries such as Olmstead, Bacon, and Flournoy can vastly improve the quality of life in their respective communities and regions.
Conservation development.

According to Jeffrey Milder, (2007), as recently as 2007, there was a dearth of development research published in peer-reviewed literature. He defines conservation development (CD) as “. . . projects that combine land development, land conservation, and revenue generation while providing functional protection for conservation resources” (p. 758). In his article, he proposes a CD framework that is not limited to clustered housing in residential tracts.

Milder analyzed project data and interviewed practitioners to learn their experiences with CD in the U.S. He writes that the outcomes, not the land use techniques, distinguish CD from conventional development. [See Table 1.] To Milder, one problem is that developers will “manipulate the (CD) label to attain advantages in project permitting and marketing in such a way that the concept functions as little more than a smoke screen for conventional sprawl” (pp. 765-66).

Table 1.
Summary of Conservation Development Techniques

<table>
<thead>
<tr>
<th>Distinguishing Characteristic</th>
<th>Conservation With</th>
<th>Development Approaches</th>
<th>Development With</th>
<th>Conservation Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1: Conservation buyer projects</td>
<td>Type 2: Conservation and limited development projects</td>
<td>Type 3: Conservation subdivisions</td>
<td>Type 4: Conservation oriented planned development projects</td>
<td></td>
</tr>
<tr>
<td>Typical development density (see note)</td>
<td>Minimal: limited to housing for the landowners and their family</td>
<td>Limited: typically 5%-25% of ordinarily permitted density</td>
<td>Full: 100%-200% of ordinarily permitted density</td>
<td>Varies: typically relatively dense</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Typical project proponents</td>
<td>Land trusts, landowners</td>
<td>Land trusts, landowners, developers</td>
<td>Developers</td>
<td>Developers</td>
</tr>
<tr>
<td>Typical economic model</td>
<td>Private owners agree to conservation restrictions while retaining the rights to build a small amount of new development</td>
<td>Participants use limited development to finance conservation or to create a multi-objective for-profit project</td>
<td>Goal is to maximize developer profit</td>
<td>Goal is to maximize developer profit</td>
</tr>
<tr>
<td>Typical development patterns</td>
<td>One or a few houses in a rural setting</td>
<td>Single-family housing in a rural, exurban, or suburban setting</td>
<td>Single-family housing in a suburban or compact village layout</td>
<td>Mix of housing type and other land uses suburban, urban, or village layout.</td>
</tr>
<tr>
<td>Most relevant public policies (local, state, and federal)</td>
<td>Tax incentives for donating conservation easements</td>
<td>Local zoning, tax incentives for donating conservation easements</td>
<td>Local zoning</td>
<td>Local zoning</td>
</tr>
</tbody>
</table>

Source: Milder (2007)

Compared to conventional (sprawl) development, “smart growth” requires developers to prepare environmental impact, endangered species, and historical preservation studies. Developers and environmentalists define smart growth differently. The following principles from Anthony Downs, though written 10 years ago while he...
was a senior fellow at the Brookings Institution, help to explain this important land use concept:

1. Limiting outward extension of new development in order to make settlements more compact and preserve open spaces.
2. Raising residential densities in both new-growth areas and existing neighborhoods.
3. Providing for more mixed land uses and pedestrian-friendly layouts to minimize the use of cars on short trips. (Downs, 2005, p. 368)

The compact growth pattern dictated by Smart Growth principles restricts the ability of farmers and other owners of outlying land to take advantage of the higher land prices they could obtain from further sprawl development. By confining a lot of open outlying land to farming or open space, Smart Growth diminishes the capital gains the owners of such land can expect to receive from future development (p. 372).

Smart growth policies, Downs argued, have a “. . . strong intellectual and emotional appeal, compared to more sprawl. But trying to implement those policies requires adopting a whole set of additional policies that are much less appealing to most Americans . . . smart growth is likely to remain a vision that is much more talked about than carried out in practice” (p. 377). *Growing Greener: Conservation By Design* is a Pennsylvania Land Trust Association guide to help municipalities and developers approach smart growth (http://conservationtools.org/guides/9).
Economics

Chester County is fortunate to have both a significant open space budget and a high-percentage of affluent landowners. Brooks (1972) and multiple authors argue that economic considerations are central to whether or not open space is conserved. According to GreenSpace Alliance and Delaware Valley Regional Planning Commission’s *Return on Environment: The Economic Value of Protected Open Space in Southeastern Pennsylvania* (2011), “While homes that are closer to open space enjoy a more significant property value increase, on average, all homes in our region are worth $10,000 more because of access to open space. When you add it all together, it’s a gain of more than $16.3 billion for our region’s homeowners and economy” (p. 3). The report asserts that:

- Southeastern Pennsylvania realizes nearly $61 billion in annual coast savings from protected open spaces’ ability to naturally filter out pollutants and replenish water supply.
- The total annual benefit generated by natural flood mitigation services is more than $37 million.
- Trees on protected open space are estimated to provide $17 million in annual air pollution removal and carbon sequestration services.
- The health-related cost savings resulting from physical activity on protected open space amount to $1.3 billion per year including avoided workers’ compensation costs and avoided productivity losses.
- Economic activity associated with protected open space in southeastern Pennsylvania results in more than 6,900 jobs and $299 million in annual earnings.
• Agricultural jobs associated with protected farmland make up 45% of employment related to protected open space in southeastern Pennsylvania, totaling 3,100 jobs.
• Economic activity associated with protected open space generates $30 million per year in state and local tax revenue.  (http://www.dvrpc.org/reports/11033B.pdf).

Land Trusts

The Pennsylvania Land Trust Association (PALTA) lists 14 land trusts that currently operate in Chester County (http://conservationtools.org/organizations/).

Wildlands Conservation defines a land trust as, “. . . a nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisition, or by its stewardship of such land or easements (http://www.wildlandsconservation.org/what-is-a-land-trust).

Land trusts for open space preservation.

Susan L. Monahan’s 1995 University of Pennsylvania thesis, A Critical Analysis of Land Trusts and Their use of Conservation Easements as an Effective Tool for Open Space Preservation, examines “the effectiveness of land trusts in protecting open space . . . through public private partnerships” (p. 4). The author asserts that local and regional land trusts are a solution to “stagnating government action” and create “effective public policy” (p. 57). Similar to Alexander’s and Hess’ (2011) advocacy of human capital, Monahan recommends that land trusts need to attract educated people to join their staffs. Monahan calls for a “movement to educate the general public as well as to train environmental professionals” (p. 66). Her paper is important on many levels to the field
of land conservation, and her chapter on case studies in particular is germane to my research.

In the first case study, she examines the contributions of the Brandywine Conservancy, first led by George A. “Frolic” Weymouth in 1967. Monahan writes that the Conservancy “maintains strong ties with local planning commissions and employs tax attorneys and real estate experts to forge the nexus necessary to create the best possible environmental solution for the [Brandywine] Valley” (p. 43). The Conservancy and a limited partnership saved more than 5,000 acres of farmland from unbridled development when they purchased the Buck and Doe Run Valley Farms located south out of Coatesville on Route 82.

The land acquisition “was an investment by several wealthy people interested in saving the countryside of Chester County…the maximum density of residential structures was limited to three houses per one hundred acres” (p. 46). A follow-up study is needed to determine how the Conservancy has subsequently collaborated with activist residents, local organizations, and businesses. For example, how has their mission evolved and how do Conservancy educational programs impact land and habitat preservation today?

The second case study examines the impact of “a small but diligent land trust” (p. 51) known as The French and Pickering Creeks Conservation Trust (FPCCT) (p. 51). During its (soon-to-be 50-year) history, the Trust spent a significant amount of its resources to defend easement terms for a 42-acre tract in East Vincent Township that it had bought in 1969 and later sold. In violation of the conservation easement, the new owners erected two buildings on the property. After years in multiple courts, in 1995 the
Pennsylvania Supreme Court upheld a lower court ruling that the buildings did in fact violate the no-building covenant (p.55).

Conservation easements allow landowners to own or sell property that is restricted from specific uses, such as commercial, forever. The easement is an agreement between landowner and an organization, such as a land trust, which monitors the property and enforces the terms of the agreement. These easements limit the quantity and location of dwellings on a property. Their benefits to landowners include: reduced income, estate and/or gift, and property taxes. (Source: “Conservation Easements,” Brandywine Conservancy, 2015 www.brandywine.org) Another type of easement is the façade easement, which is designed to maintain the historic character of a building's façade and does not include the interior or contents.

Author’s Note: A conservation easement is an interest in real property established by mutual agreement of a landowner and a private land trust or government. It limits certain uses of the land for the purpose of achieving particular conservation objectives while keeping the land in the landowner’s control. The easement continues in perpetuity, no matter the owner of the land (http://conserveland.org). A 501(c)(3) is a nonprofit organization exempt from federal income tax for activities that are charitable, educational, scientific, etc.

As an illustration of easements, this year the Brandywine Creek Greenway reported a conservation easement on a privately-owned farm in Honey Brook Township that permanently protects 100 acres. The easement was jointly purchased by the Brandywine Conservancy, Chester County, and the Township. The outcome has allowed the County to permanently preserve a future segment of the Northern Struble Trail (http://www.brandywinegreenway.org).

FPCCT would seem to represent trusts that are tenacious in nature. Undoubtedly, FPCCT has had the proper leadership and wherewithal to sustain its mission. But since
the passing of its founder and wife of former owner of Lundale Farm, Eleanor Morris, how has this trust acquired financial capital and infrastructure to be a force for good in the County? Almost 20 years have passed since Monahan published her work. There are opportunities to update her findings and to examine the relevance and impact of land trusts and other conservation organizations that work today to protect Chester County land.

**Community**

Individuals lead movements that change policy to protect habitat and open space. One such leaser was Clayton Hoff, a chemical engineer and founder of the Brandywine Valley Association, who helped solidify a sense of community in southern Chester County. In 1945, thirty residents of West Chester, Pennsylvania and Wilmington, Delaware gathered to listen to Hoff speak about the pollution and the abuse of the Brandywine Creek.

Alarmed by the prospects of irreversible damage, Hoff motivated meeting attendees to form a small, U.S. watershed association (www.brandywinewatershed.org). The resultant Brandywine Watershed Association collaborated with partner organizations to clean up 90 per cent of the Creek’s pollution. “. . . the entire valley (300 square miles) now thinks and acts as one community about common water problems, with individuals, industries, and local, state, and federal agencies all working together . . . ” (Hubbard, 1960, pp. 164-165).

**Homeowner activism.**

Citizens do influence the zoning and planning of their communities.
To coopt the opposition, developers sometimes agree to donate a portion of a contested tract of land to the township as open space in return for approval to build houses on the remaining land. Limited to building a smaller number of homes on spacious lots, developers respond by building larger homes that generate more profits per unit . . . visible signs of increasing pressure from developers . . . provoke a reaction among local residents and planners . . . change in land use controls feature either homeowners or planners as agents of change (Rudel, Thomas, O'Neill, Karen, Gottlieb, Paul, McDermott, Melanie, Hatfield, and Colleen (2011) p. 611).

**Environmental Ethics**

*A Sand County Almanac* written in 1949 by Professor Aldo Leopold of the University of Wisconsin, is a seminal treatise on conservation. *A Sand County Almanac and Other Writings on Ecology and Conservation* (2013) quotes Leopold as stating, “There is as yet no ethic dealing with man’s relation to land and to the animals and plants which grow upon it . . . the land-relation is still strictly economic, entailing privileges but not obligations.” He believes that a “land ethic” establishes man as a “member and citizen” of the environment (p. 172).

Leopold’s writing is important because he teaches that man cannot be independent of his environment. He writes that man and the natural world “are a community of interdependent parts, an organism” (p. 352). In the 65 years since Leopold wrote that classic book, however, the population gains that have spurred rampant
construction and the proliferation of the Internet have distanced man’s awareness of and relationship with the natural world. The United States Census Bureau reports that the population within urbanized areas grew by 14.3 percent from 2000 to 2010. My only criticism is that the author may have overlooked how dense population in U.S. communities can minimize a sense of obligation to steward the environment.

**NPOs Evaluation**

Multiple authors question whether NPOs measure their effectiveness and contributions to communities that they serve. Despite fewer resources than most commercial entities, NPOs can modify their operations to better report data and demonstrate outcomes. Although based on a Taiwanese study, the following explains metrics land conservation organizations can consider adopting.

In *A Study of Implementing Balanced Scorecard (BSC) in Non-profit Organization: A Case Study of a Private Hospital*, Yang, Yang, and Cheng (2005) examine Balanced Scorecard (BSC) for NPOs in Taiwan. “. . . the criteria for measurement (of) NPOs’ performance are more arbitrary (compared to businesses) as a result of their unique structure and goals” (p. 286). The authors identify two critical problems that NPOs face:

1. Ineffective organizations that do not accomplish their social missions.
2. Inefficient organizations that generate low ROI (return on investment) from the money they spend.

The authors argue that NPOs that promise services must follow effective management principles to be effective. They must “transform their mission into a performance index.”
The equation “Effective Index = the Outcome/Income” can measure an organization’s performance (pp. 287-88). The authors write that when applying BSC, governments or NPOs should value vision and mission more heavily than commercial ventures do. “NPOs should place contributors and clients at the top of their BSCs and use the client perspective to develop internal processes” (p. 289).

**Metrics: measurable outcomes can yield an increase in NGO funding.**

Louise Alexander’s and George Hess’ *Conservation Biology* (2011) paper, *Land Trust Evaluation of Progress toward Conservation Goals*, reports the results of a survey of 24 North Carolina land trusts. The survey inquired how the land trusts measured their progress to satisfy conservation goals. Alexander and Hess (2011) found that most of the trusts that responded to the survey could identify land they had protected as well as fundraising success (“bucks and acres”), but could not identify their progress toward measurable goals. The authors state that the North Carolina land trusts’ “arguments for additional funding and policy changes would be much stronger” if the trusts state clear goals and measure their progress (p.11). One way to achieve that objective is for land trusts to complete the accreditation process with the Land Trust Alliance.

Alexander and Hess (2011) applaud the contributions of local land trusts, which increased 63% in number in the U.S. between 2000 and 2005 (p. 8). Because of the variety of organizations that they surveyed, I concur that the survey’s sampling is “likely representative of local land trusts across the United States” (p. 8). They note that government and benefactors have started to hold land trusts accountable for their performance.

Their survey found that the land trusts did not convey clear goals or specific
conservation targets. This finding is consistent with the Conservation Measures Summit (circa 2010) conclusion that “local land trusts tend to focus more on actions than outcomes” (p. 11). Today, however, the trend is for stakeholders to hold land trusts to a higher standard of accountability. In Chapter 4, I address how the land trust movement has progressed since 2011 through my reporting of the Pennsylvania Land and Water Conservation Conference and interviews with members of Chester County land trusts.

The authors state the benefits of trusts that can demonstrate progress-to-goals as:

- Best practices in environmental management.
- Public engagement.
- Acquisition of new donors (p.11).

Alexander and Hess recommend that local land trusts work with scientists and conservation experts and that they adopt the Open Standards for the Practice of Conservation (OSPC). (To learn the history of OSPC visit http://cmp-openstandards.org/about-os/history/.)

**Summary and Conclusion**

My literature search revealed a pattern of the important roles that both homeowner-activists and the sense of community play in land conservation. Individuals have mobilized citizens to establish land conservation movements across the United States. The movements have forged public policy that protects open space from residential and commercial development.

The literature confirms that in order for open space to remain undeveloped, citizens must take an active role in the planning of their respective communities. My
literature review found gaps in addressing land conservation needs and issues specific to Chester County, Pennsylvania. The purpose of this paper is to contribute to the literature and ongoing dialogue germane to Chester County’s open space and to fill in those gaps.

Chapter 3 explains my research methods.

Chapter 4 contains the discussion of my research results.

Chapter 5 contributes to the open space debate, states my conclusions, and suggests further research.

Chapter 6 reflects on what could occur with and without citizen action and community involvement in open space preservation.
Chapter 3

Methodology

_Thou shalt inherit the Holy Earth as a faithful steward, conserving its resources and productivity from generation to generation._ Dr. Walter Lowdermilk (1888-1974), soil conservationist and Rhodes Scholar (1939)

The intent of my study was to identify the components that contribute to organizational success and “staying power.” I began my research by reviewing relevant literature on U.S. open space issues. This included reading more than a dozen books, which were the source for many of the beginning chapter quotations. I read academic journal papers and studied governmental and NPO Web sites. Then, I examined reports and data from the Chester County Planning Commission, Delaware Valley Regional Planning Commission, and Pennsylvania Land Trust Association.

Process

**General approach.**

At this stage, my objective was to identify the key organizations, communities, and thought leaders that contribute substantially to Chester County’s “sense of place” and quality of life through their preservation of land and water. Once identified, I created a “short list” of whom I preferred to interview for primary source material. This was a manual, as opposed to a software, process.

My approach was to identify trends and issues, rather than engage in a quantitative exercise of identifying and analyzing data. In fact, the research methodology for this paper was primarily qualitative. In addition to attending conferences and
meetings to gather knowledge, I conducted individual interviews with officials, activists, and conservation practitioners to gain richer information from those entities that protected and preserved Chester County land.

I refrained from designing and distributing surveys. The experience of these practitioners, NPO volunteers, landowners, and officials was significant in its breadth and scope. The interviews followed a semi-structured format.

**Interviewing.**

I often experienced a “snowballing” effect when selecting interviewees. People I knew or became acquainted with referred me to those people whom they considered to be experts or well-informed on County land matters. For instance, I met Dulcie F. Flaharty, V.P. of Community Partnerships for Natural Lands Trust, at the Pennsylvania Land Conservation Conference in May. She referred me to Patty Elkis of the Delaware Valley Regional Planning Commissions, whom I interviewed by phone. Next, I contacted the prospects by email to arrange a telephone or in-person interview. The questions that I posed to my interviewees were meant to determine either a consensus or, conversely, a unique perspective.

To ensure the accuracy of the data gathered from these interviews, I: 1) Recorded in-person interviews on an iPhone, then transcribed my notes into a journal. 2) Took notes during telephone interviews, then wrote them in the journal. For any questions that arose on interviewee statements, I would re-contact the respective person for clarification. Interviewees Anthony, Elkis, Flaharty, Gladden, Krummrich, and Landefeld each received a draft copy of my report on our respective interviews for review before I included them in the final draft of this paper.
Covaleski (or his staff) provided written responses to the questions that I had posed. After gathering data, I manually coded responses to discover emerging themes, consistencies, and inconsistencies. Software was not used in this process.

Because I felt the necessity to uncover a variety of viewpoints, I found that my interview sampling was as important as discerning significant patterns and the overall learning experience. I chose my interviewees based on factors that included their title, organization they represented, referral recommendation, and personal acquaintanceship. I was fortunate to be referred to knowledgeable people, who either agreed to a face-to-face or telephone interview.

Using an average of 20 years per person, collectively the interviewees account for more than 220 years of knowledge of and association with the welfare of Chester County. During the interviews, I was careful not to let my bias, favoring conservation over growth and development, interfere with my listening and observing. I believe that the interviews reported in Chapter 4 produce a material contribution to the knowledge of open space preservation.

My objective was to practice inquiry not advocacy. Having said that, this paper does not reflect analysis of land development, land use, or the views of economic growth advocates often associated with real estate developers and Republican elected officials. Those interest groups argue that economic growth in the County leads to investment in the initiatives that preserve open space.

Economics.

In July 2012, the Norristown, Pennsylvania landscape architecture firm Simone Collins, published *Transforming Open Space to Sustainable Farm Enterprises*. This
comprehensive report was commissioned by the GreenSpace Alliance and Delaware Valley Regional Planning Commission. The contributors make the case that open space creates economic benefit with the following data shown in Figure 3 found in Appendix A:

- Chester County has 20,744 acres of open space suitable for sustainable agriculture.
- If only 30% of these lands are utilized, the potential economic value is $74.7 million to $124.5 million (p.19).

Selection.

There are dozens of environmental NPOs such as land trusts that play important roles in preserving land and other natural resources in the County. For this paper, I elected to study NPOs that are exemplary for execution of their mission. To determine their effectiveness, I took into account factors such as outcomes, the level of their public or private support, reputation, and longevity. Figure 1 demonstrates the systems nature and interconnectedness of agriculture.

The Open Space Preservation (OSP) department is actively working with municipalities to fulfil the objectives of Landscapes2, the County comprehensive plan. Another example, Lundale Farm, located in South Coventry Township, is educating the public on the value of open space preservation through workshops. Their Web site states, “We want to encourage landowners—particularly those who have land under conservation easement—to lease some of their land to farmers like these” (http://lundalefarm.org/whats-growing/).
Another of my research methods consisted of observing communities and landscapes firsthand. For example, in December, 2014, I drove on secondary roads through southern Chester County near Longwood Gardens to visit Oakdale Farm. During that tour, I visited the Chester County Conference and Visitors Bureau in Kennett Square, where I gathered information about how the Brandywine Valley attracts tourists. In June, 2015, I rode my bicycle 55 miles during the French and Pickering Creeks Conservation Iron Tour with more than 1,500 land preservation enthusiasts and other recreationists through northern Chester County. (Along the route, I noticed several land trust signs on rural properties that read “Preserved Forever.”)

Source: Reganold, et al. (2011)
This chapter identified the sources for my research and rationale for selecting my interviews. The central research for this paper’s thesis are the interviews. That said, hard data provided by County government found on pages 93-94 illustrate the order of magnitude of open space acquisition in Chester County. Chapter 4 records data from my interviews. Chapter 5 links the interview data to the literature reviewed in Chapter 2.

Chapter 4 contains the discussion of my research results.

Chapter 5 contributes to the open space debate, states my conclusions, and suggests further research.

Chapter 6 reflects on what could occur with and without citizen action and community involvement in open space preservation.
Chapter 4

Research and Interview Results

*Mission, personal relationships, and trust come first.* Dulcie F. Flaharty (2015)

*Author’s Note: Unlike Chapter 2, page references found in parentheses at the end of sentences refer the reader to pages in this paper and not an outside body of work.*

Land trusts are proving to be successful in preserving landscapes in Chester County – most often in perpetuity. Their accreditation by the Land Trust Alliance is becoming increasingly vital to ensure a trusts’ credibility. The accreditation is a type of “good housekeeping seal of approval” that signifies meeting a high standard in land conservation. For instance, the Brandywine Conservancy received the Land Trust Accreditation Commission’s accreditation. Although an organization can be effective and do good work without a national certification, accreditation demonstrates accountability and can increase donor confidence in a trust.

Following is a discussion of Chester County land conservation research results. First, I will present the views of elected, appointed, and retired government officials. Then, I report on my interview with a director of the Delaware Valley Regional Planning Commission, a non-profit organization (NPO). Next, I interview agricultural experts. That is followed by an explanation of land trust issues by an environmental NPO veteran. Chapter 4 concludes with an individual conservationist and a green-minded business interview.
County-wide Views

Government overview of county open space policy.

Chester County consists of 73 “home” ruled municipalities, each with their own set of land use regulations. Early in my research, I realized it would require substantially more time and resources than I had available to analyze open space on a township-by-township basis. Hence, instead of undertaking a comprehensive, governmental study such as that, I chose to seek a county-wide overview from the director of the Open Space Preservation department, William D. Gladden, II.

The County is one of 67 counties in Pennsylvania. The County consists of 759 square miles or approximately 500,000 acres and is the seventh most populated county in the Commonwealth (http://www.chesco.org). Gladden told me that Chester County currently has the only open space department of any county in the Commonwealth (William D. Gladden, II, personal communication, February 13, 2015).

The County Commissioners aim to preserve 150,000 acres, or 30 percent of the County, permanently by 2019. To get background on this ambitious project, I contacted Stephanie Phillips, who does strategic planning for the County’s Managing for Results division (http://www.chesco.org/index.aspx?nid=504). “The 150,000 acres (30%) is as laid out in in the County’s Comprehensive Plan. Details can be found in Linking Landscapes. The recommendation was ‘rigorously protecting 5,000 acres of open space each year.’ We reached 100,000 acres (20%) in 2006” (Stephanie Phillips, personal communication, July 16, 2015).

The Commissioners want to achieve this through a combination of sources that include: “... national and state parks, land that is preserved as a byproduct of the
development process such as homeowner associations, land acquired by the State Game Commission, and land preserved by nonprofit organizations without County funds” (Gladden, personal communication, June 17, 2015).

The County department responsible for administering open space grant programs authorized by the County Commissioners is the Open Space Preservation. Their mission is to “. . . use funds allocated by the County Commissioners to help keep farmers on the land, provide safe and accessible places for children and families to play, and protect the woods and wildlife that make Chester County special” (www.chesco.org/openspace).

In February 2015, I met with OSP Director Gladden who told me that in 1989 over 70 percent of residents voted “Yes” on the open-space funding ballot. In the years since, the County Commissioners have budgeted $10 million annually to preserve open space. For 2015, that budget is applied: $2.5 million for community revitalization; $250,000 for improved land use planning; and $7.25 million to fund farmland preservation, municipal parks/trails/greenways, and nonprofit conservancy grants programs (Gladden, personal communication, February 13, 2015).

The County’s conservation outreach or education includes:

- water quantity and quality issues;
- farmland preservation; and
- “Envirothon” – an environmental knowledge competition among Chester County school students.

Gladden said that pending real estate transactions can be discussed in County Commissioners executive sessions, which are not open to the public. County grant
awards for land preservation projects administered by the department are described to the public at two meetings open to the public, which are recorded and uploaded to the County Web site. He believes that Internet postings contribute to the Commissioners’ transparency and promote awareness of land development and conservation.

Subsequent to our interview, Gladden described the transparency of the grant process to me via an e-mail. Readers may benefit from knowing this process. The following addresses the systematic approach to land conservation in Chester County. For these reasons and despite the length, I have included Gladden’s remarks verbatim.

a. The decision as to whether or not to invest in real estate on the part of the County Commissioners has the potential for consequences that are not in the public interest. These decisions can be as varied as to whether the County is seeking to purchase land for its purposes of governing (buying land on which to construct a building) or for preservation (funding the purchase of development rights on a farm or providing grant funds to a 501 c 3 private nonprofit conservation organization to purchase land for a nature preserve).

For example – unwanted public pressure may arrive at the doorstep or telephone of the landowner from people who think they should donate their land for such laudable purposes on one hand. On the other hand – the owner of the land may receive pressure not to sell to the government. Furthermore – should a
pending real estate transaction become public knowledge – other
potentially interested buyers may look at this as their last chance
to acquire the land and make a very large offer to the owner
thereby making it not feasible for the public interest goals to be
achieved. These are but a few of the infinite reasons why having
information go public before a transaction has passed a “tipping”
point – may not be in the public interest.

b. So . . . When is this “tipping point”? For the purposes of Chester
County – and our grant programs – it may be useful to think about
the various timelines. For the municipal and conservancy grants
for example – the deadline for applications is in February.
Any township, borough, the City or qualified conservation
organization can submit a grant application to my
department. Before submitting a grant application – we require
that the prospective applicant show us the site . . . . Once they are
complete – we go through the scoring criteria and assign a score to
each. The scoring and all other program guidelines etc. are
available online at www.chesco.org/openspace.

Once we have a firm handle on the applications and have checked
back with any applicants who may have still be nailing down some of
the last details – we prepare a summary. When the summary is
finalized – I present it to the County’s Chief Operating Office
(http://www.chesco.org/DocumentCenter/View/9917) . . .
Once that process is completed – these summaries are distributed to the County Commissioners and usually discussed in person in what is called an “executive session.” The result of that discussion and possible subsequent discussions – is County grant awards to some or all of the applicants for some or all of the funds requested. There are instances when projects are not funded at all (in case that was not clear).

c. The grant awards are part of a public process . . . . For projects where the applicant is ready to go forward, the actual project, grant dollar amount, and a brief summary are placed on a public meeting agenda for a meeting that is called the sunshine meeting. At the sunshine meeting the public is invited to comment on the items and questions are raised and discussed . . . .

d. The next step is a public meeting called the Commissioners Meeting. At that meeting the public also has the right to comment – however department heads do not present the items nor do they describe them etc. . . . that has already been done.

The Commissioners read off the items and vote on them. If at least 2 of the 3 commissioners votes in favor – then the matter is passed and the County has a legally binding contract with the applicant for the proposed project.

e. The “pending” part is everything leading up to the public sunshine meeting in the example above. For the farmland preservation
program – there are differences in a and b. . . . Before the end of January – I provide the County COO and, if desired, the County Commissioners with a briefing of the applications along with possible funding scenarios for their consideration.

The County Commissioners decide how much funding they want to invest in farmland preservation and a form is submitted to Harrisburg. That form and its contents are made public at a sunshine meeting and acted upon at the subsequent public meeting.

. . . No specific farms are identified and this is just for general funding commitments.

There is a two-year period for expenditure of the County’s funds as stipulated by state law.

Once we start working on individual farms, we present that information to the farmland preservation board (appointed by the County Commissioners) in executive session . . . . Once an individual project is a top priority and has been appraised, the project and appraisal are vetted by the farmland preservation board. They authorize staff to make offers to the landowner. These discussions are all in executive session and considered pending real estate transactions.

If the offer is rejected by the landowner – that is the end of it. If the offer is accepted, then we submit the final details to the County Commissioners. At the sunshine meeting I present the amount of
the offer that was accepted, where the funds will come from, the farm being preserved, etc. and answer any questions. At the next public meeting – the Commissioners Meeting – the contract is brought forward by the Commissioners.

If 2 of 3 vote in favor of a contract in the amount under consideration – then the County enters in to a contract. That is all done at a public County meeting. Those meetings are advertised. They are also video recorded with the video available online at www.chesco.org . . . (Gladden, personal communication, July 7, 2015).

One County land issue that could soon become contentious is that of pipeline construction and the related rights-of-way. Gladden told me:

There are a lot of different pipelines from a lot of different companies. Chester County is right in the crosshairs of lots of pipeline paths. Rights-of-way are being expanded. We’re seeing the impact on open space [from pipeline development]. The easy path for utilities is often through the farms. There’s less opposition not less concern, because there are fewer people [living in farming districts]” (William D. Gladden, II, personal communication, February 13, 2015).

Gladden believes that the key driver or catalyst for change regarding open space is the democratic process itself.
People vote in a variety of ways. They vote literally at the voting booth for sure, but they also vote with the choices that they make when it comes to the goods and services they consume, how they use and manage their land, charities that they support. . .
The degree to which their choices lead to an awareness of the environment, the consequences or our actions, what we can do to have a positive impact, and the ways we can take advantage of our opportunities to be good stewards of our natural resources – these factors and many more will all be important as we continue to write the history of Chester County” (Gladden, personal communication, June 17, 2015).

He concluded our interview by saying, “We have to preserve the farm land now. We have to eat.” As a follow up to our conversation, I posed the following question to Gladden via email:

**Do environmental Non-governmental Organizations influence county government? If so, how? Which ones are most active or effective with the Commissioners and environmental agencies such as OSP?**

Gladden responded:

It truly depends on your definition of influence as well as the context from within which the question emanates. I will try to explain the perspective to which my answer is geared and provide
answers from more than one perspective in hopes that an accurate representation can be gleaned.

**YES:** Chester County. If there were no nonprofit conservation organizations doing land preservation transactions that require payment – if there were not any of those operating in Chester County PA – there would not be a Preservation Partnership Program. The result of that program in easily quantified matrices is:

- 7,498 acres preserved.
- Land preservation activities have an appraised value of $150,750,061.64 (the value at the time of the transaction – NOT adjusted for any inflation over the course of 25 years of program history and counting).

The amount of County grant funds within that figure is $42,441,901.18. That means that roughly $42.5M in County funds has generated an additional investment of roughly $118,250,000 resulting in about 7,500 acres of permanent land preservation. Other measures that are mentioned rather frequently but which I have not seen analyzed mathematically are:

- Many of the acres preserved are open and accessible to the public at no charge. This amount to what some have called “Chester County’s Hidden Gems” or “A second system of County Parks with no financial burden of maintenance or upkeep on the taxpayers.”
I have heard that these positive characterizations of the work on nonprofits as well as their results can result in a self-supporting synergy. More opportunities = more users/participants in outdoor/open space related activities. That in turn creates more members and support for the nonprofit organization.

That support can have translations to elected officials at all levels when – for example – there is an event to celebrate a particular accomplishment. Members of the organization show up. Elected officials at the township, county and state may be in attendance. They see – and are seen by – the number of attendees which attendees usually enjoy (happy for the opportunity to show appreciation for the financial support of the government) and on the part of the elected officials who may find it fulfilling to have played a role in the projects’ success.

**YES and NO:** They have influence equal to any other nonprofit that helps the County achieve its’ goals and objectives. For example there are many nonprofit organizations working on issues like economic development, affordable housing, food for those in need, medical assistance (including dental), etc. The fact that they exist and may help the county government by increasing the efficiency of the delivery of services can result in programs being funded. . . .

**NO:** Non-governmental organizations do not – themselves – have the
ability to vote for or against any county government elected officials (only their members do – and of that – only the members who live in the voting jurisdiction have the potential to influence county government.

**Which ones are most active or effective with the Commissioners and the Department of Open Space Preservation?**

As is the case in many walks of life – with my department – organizations or individuals within those organizations are most successful working with me and/or my team: display respect for us as professionals, understand the limits within which public employees work, have a track record of successfully completing projects we fund without excessive complications, are honest with us (don’t overly dramatize situations and approach problem solving calmly and rationally), represent the County position to landowners and other public and/or private project partners accurately and with sensitivity, do their best to maximize the benefit to all project partners including the county, work with the county to try and stretch county funds as far as possible, are good responsible negotiators on terms of deals so that the public benefit is maximized, and in general approach situations or projects and working with the County as a true partnership.

I would not ascribe these characteristics to any one organization in a greater preponderance than others. More or less – all of the organizations we partner with share similar common values. Like
for profit companies – every nonprofit has its own corporate
culture.
Within that culture – my experience has been that the individuals
themselves make the most significant difference – not necessarily
the organization for which they work (Gladden, personal
communication, July 9, 2015).

**Former County Commissioner, current State Senator emphasizes vigilance.**

To further my research, L. Stockton Illoway, board member of French &
Pickering Creeks Conservation Trust, suggested that I interview former County
Commissioner and Pennsylvania State Senator Andrew “Andy” Dinniman. In a
sense, I managed a “twofer” (or two for one) by securing a 20-minute plus
interview with the former Commissioner and State Senator for the 19th district,
which encompasses Phoenixville and Collegeville southwest to West Nottingham
Township in Chester County. Despite wrestling with a deadline for the 2015-
2016 state education budget, Andy, as he prefers to be called, made time to
answer four of my open space questions.

He urged me to visit the Chester County Planning offices to secure copies
of the *Landscapes* series, the County’s comprehensive open space plan. He said
the plan was developed by three County Commissioners. (NOTE: He did not
reference the County Planning Commission.) The genesis of the documents was
“envisioning sessions” held in various townships circa 1990. (Instead, I printed
sections from the online version.)
What we heard in the envisioning sessions is that Chester County residents share a special sense of place - the land, the farms, the streams, and the small villages that make it unique and not homogenized suburbia. Mrs. (Eleanor) Morris would sum it up as: open space and historic places.

That was the key to Landscapes – not from the top down, but from the bottom up. The actual development of the plan involved local citizens to determine what people wanted. We asked: “What do you want it [the County] to look like in 2015” (Andrew E. Dinniman, personal communication, June 19, 2015).

I asked the Senator if and how the natural gas pipelines are disrupting open space in the County. “A gas line will disturb the land so that it is no longer pristine. There is an easement on top of an easement. When you build a gas line, you have to cut down trees, which can create water runoff issues for boroughs,” he said.

There are 20 other states in the Union that tax pipelines. One of my bills (in the Pennsylvania Senate) is for levying a local tax on the pipelines to fund safety personnel training and environmental impacts. The other bill is to require gas companies to replace land it has taken – acre for acre. We do this for wetlands.

We are one of the few counties in U.S. where citizens voted to raise taxes to buy open space. Chester County has a certain
environmental ethic, which is deeply valued. We also need to accommodate growth. The best way to do that is within existing boroughs that have water and sewer infrastructure (Dinniman, personal communication, June 19, 2015).

I asked Andy to imagine how Chester County’s open space might look in 2030. There will be development pressures as the price of land goes up. We’ll lose what we have achieved as the housing market heats up. To maintain and connect open space, we need more easements. . . . We must be vigilant. Will we be able to save agricultural areas? Yes, if townships and the County follow the guidelines of “Landscapes.” If we make exceptions or take shortcuts, it will be very hard to keep the vision all of us had in 1992 (Dinniman, personal communication, June 19, 2015).

**Planning expert.**

Dinniman referred me to George Fasic, 84, the County’s planning director from 1975 – 1996, whom I interviewed on past, current, and future planning issues. During our meeting on June 20, 2015, he told me that he was glad that I was getting “different viewpoints” because he was "biased.” He also said that he was “not political.”

Fasic studied Cartography at Penn State and Urban and Regional Planning at Columbia University. Before running the Chester County Planning Commission he held a similar position in Berks County, Pennsylvania. He taught Planning for 32 years “permanent part-time” at West Chester University.
We began by reminiscing about Sam and Eleanor Morris, the conservation power couple who advocated for open space and farmland preservation in the County during more than two decades beginning in the 1970s. He called Mrs. Morris a “ferocious advocate for open space” (George W. Fasic, personal communication, June 20, 2015). Fasic thinks of the County as four distinct districts: the Main Line, northern, Honey Brook, and southern. Each district maintains different “attitudes.” When he first became planning commissioner, he realized that he would have to approach each district differently. Part of his inventory-taking or data-gathering was to speak to representatives, such as supervisors, of the more than 70 municipalities.

The Planning Commission became more professional. We cleaned out political appointees . . . It was educational to get the municipalities to create their own comprehensive plans. We had matching funds to offer. [Today] there is a competition between the business community and the open space advocates – economic development vs. resource protection.

The current Commissioners endorsed VISTA 2025 (the economic development strategy for the County). The Commissioners are constricting budget for the Planning Commission.

Open space and farmland preservation are critical to the character of Chester County. Quality of life creates economic base. Why are you paving over prime soils? Why are you messing up the
aquifers, which we may need to depend on in 10 or 15 years
(Fasic, personal communication, June 20, 2015)?

Fasic’s comment about the Planning Commission’s past use of matching funds to compel open space planning in order for municipalities to qualify for County open space acquisition funding got my attention. To learn the current practice, I consulted perhaps my most reliable and informed source, Bill Gladden. Here’s what Gladden reported to me:

**Yes** – we have a program for Municipalities to apply for funding. All municipalities and townships are eligible for these grants. We have awarded many of these grants since the program began; there is a list of recent grant awards and projects completed at the bottom of this page on our website: [http://www.chesco.org/index.aspx?NID=1507](http://www.chesco.org/index.aspx?NID=1507)

For land preservation, these grants are called Acquisition Grants. Acquisition Grants reimburse a maximum of 50% up to $500,000 of the approved cost to buy land, conservation easements, or trail easements. A lower percentage of County funds requested will result in more favorable consideration.

At least 10% of the matching funds must come from the township, but they can use state grants or other funds to make up the rest.

Applicants fill out an application and projects are ranked according to the criteria as stated in the municipal application and grant manual
– you can look at the current Round 27 Grant Manual and
which explains what is eligible and all the criteria for selection
(Gladden, personal communication, July 16, 2015).

My conversation with the former Planning Commission director then turned to
agriculture. Fasic said that the Agriculture Development Council was created to get the
agriculture community to talk more to each other. He said that youth organizations such
as 4-H and Future Farmers of America are less visible in the County now than in the past.
With the exception of Great Valley and Octorara, few high schools offer agriculture
programs.

"Young people don’t want to farm," he said. "They want their money. The
Millenials are moving to urban areas. Someone has to put up the money to save the
farms" (George W. Fasic, personal communication, June 20, 2015).

Looking into the future, he predicts that more farmers will lease their land under
easement for farming. He foresees urban farming becoming more popular. Also, he
believes that fewer people will be able to afford large lot single family housing because
of the storm water and septic fees.

To address the challenges facing open space preservation, he offered these
solutions:

• Create more awareness of “Landscapes2” – the County’s comprehensive plan.
• Update “Landscapes2” with a “Landscapes3.”
• Forge a unified preservation voice. Bring the “pockets” of advocates
together to form a consortium that speaks out on open space issues
effectively (George W. Fasic, personal communication, June 20, 2015).

Township Activities

Township and county actions.

I thought that I needed more information on how the County interacts with
townships regarding open space matters. Through an Internet search, I discovered the
existence of Chester County Association of Township Officials (CCATO), whose
Web site states, “We are no longer a County populated by farms with cows and
horses. Now we are home to major corporations and people outnumber the livestock”
(http://ccato.org).

A week later I was sitting in the West Pikeland Township office with the CCATO
president, who also chairs the Township Board of Supervisors, Ernie Holling. He has
lived in Orange County, CA and south Florida, where he worked in computer science.
The Township Acting Manager, Sam Bryant, a graduate of the Fels Institute at the
University of Pennsylvania, joined us.

I began by asking: Who shapes conservation public policy in Chester County?

It’s [conservation] intrinsic . . . the thought process of most municipal
leaders . . . certainly people like Bill Gladden (OSP Director) help
drive that process, but it goes beyond that into the Planning
Commission itself. . . . Each municipality has done various things to
generate programs. . . .
as an example, here in West Pikeland we passed an earned income tax to fund open space – a quarter percent . . . ours passed with 61 percent of the vote . . . we typically operate on an easement basis contrasted with an acquisition basis . . . to either preserve vistas or to create trail pathways. . . .

Our last step was the acquisition of 67 acres of land which was earmarked to be 100 and some odd houses and thanks to the slowdown in the real estate market, the builder kind of faded away . . . and the owner said ‘I need to sell . . . so we bought the land and we’re going to convert it into a park and possibly a new site for the Township building.

All of the Commissioners are very sensitive to conservation and preservation . . . [In] VISTA 2025 [the County economic development plan] one of the things they [the consultants] found unique was that the first thing that came up about Chester County was the quality of place . . . the consultants said they had never seen that come out first . . . so you can see that the mind-set of Chester County is very focused on conservation and open space preservation.

. . . most people recognize . . . that the dollar value is represented by as an example the “Central Park syndrome” . . . being next to open space increased property values . . .

We [CCATO] got together with Natural Lands Trust [to establish] the “Growing Greener Award.” The way it works is we typically
have a three-person committee to review plans and projects submitted for it . . . it’s competitive . . . people are definitely interested in winning that award . . . both NLT and CCATO have a fairly visible presence in the County . . . CCATO does not have an open space committee (Ernie Holling, personal communication, July 14, 2015).

Then, Bryant offered a more regional perspective regarding township-to-township and county-to-county collaboration.

You want to have whole tracts of conserved land . . . things like bike trails . . . you want to make sure they connect properly between counties . . . it adds opportunity for intergovernmental cooperation on this issue [open space and conservation] . . .

We got $500,000 from the County to support open space projects in West Pikeland Township (Sam Bryant, personal communication, July 14, 2015).

Next, Holling contrasted his residential township with other communities in the County. “The southern part of Chester County tends to be more agricultural, because 47 percent of the agricultural workers in the SMSA [Standard Metropolitan Statistical Area of Greater Philadelphia] are in Chester County,” Holling said.

I asked Holling and Bryant how they envision open space conservation in the County in 2030 vis-à-vis the harmony and the balance between open space preservation and the inevitable growth from population increases.
That’s a concept within the VISTA 2025 plan . . . essentially they’re talking about corridor concepts . . . So the idea is to create these pipelines of commercial or business activity contrasted with just letting it sprawl . . . doing things along the Route 1 corridor, along the Rout 3 corridor . . . and focusing each of those corridors on different facets.

I read them this statement found on page 183 of Landscapes2: “Chester County serves as the economic engine of the state.” The response that I received was:

There are definitely several very high-profile companies here – groups like Vanguard . . . You’ll have groups like Natural Lands Trust contrasted with the business groups, but it doesn’t have to be an either or [situation] . . . or some sort of negative relationship . . . the VISTA 2025 plan seeks to prevent any of those sort of disturbances from happening (Bryant, personal communication, July 14, 2015).

I think there are some appropriate synergies . . . we need the economic growth, but we also need to keep the character because it’s driving the growth and the kind of we want . . . we’re looking at the intellectual pursuits, so software kinds of businesses . . . . . that use intellectual power . . . From a county-wide perspective, most officials are sensitive to the fact that we need to keep the balance going. . . . We need to have growth, but we also need to have
compromise so the quality of place still remains because it’s a driver for us (Holling, personal communication, July 14, 2015).

At the close of our discussion, I asked whether West Pikeland uses “viewshed,” as I had heard that term at least twice during an East Pikeland Township public meeting that I had attended. (The following section describes that meeting.) Holling said that viewshed was the focus word during the preservation process for a property located on Route 113. He said he could substitute scenery or vista for this word that had been foreign to me (Holling, personal communication, July 14, 2015). To the best of my understanding “viewshed” is jargon, not well defined and not a core criterion for preservation eligibility.

**Township public meeting showcases open space committee.**

On April 21, 2015, I attended a community hearing to discuss the merits of whether East Pikeland Township should purchase a parcel of 25 acres. The township’s Open Space Committee (OSC) recruited a large contingent of residents from the Coldstream Crossing retirement community to attend the meeting and voice their opinions about the property located across Route 113 from their residences. I was invited to the hearing by a friend, who has lived in the Kimberton, PA area for more than 20 years.

During the meeting, residents observed PowerPoint slides detailing the location of the parcel and learned about the status of a Superfund site nearby from an Environmental Protection Agency representative. (A former industrial operation had diverted waste solvents, which continue to contaminate the soil, to local lagoons.) The majority of the residents who testified at the hearing supported the purchase with either Township funds
or Open Space fund reserves. More than one resident used the term “viewshed” begging definition to describe their fondness for the landscapes in and around East Pikeland.

The OSC proposed that Township Supervisors authorize $1,000,000 to purchase the property for the purpose of preserving open space and to prevent development. Mr. L. Stockton Illoway, Committee spokesperson, said that OSC envisioned preserving the space as it now appears with the possibility of adding a walking trail that could connect to a County trail network. (In 2013, the Township published “Municipal Trail Plan for East Pikeland Township.) There was discussion of who would purchase an historic building on the site and what to do with that structure.

East Pikeland Township exhibited Leopold’s (1949) land ethic culturally by mere civic participation in the April 21st public meeting that I attended. Structurally, the existence of their open space committee indicates a conservation-minded community. This mind-set correlates with how Brooks (1972) describes the town of Lincoln Massachusetts’ open space system that is dependent on “. . . strong community solidarity and commitment” (p.20).

An Open Space Regional Perspective

Dulcie Flaharty, vice president of Natural Lands Trust, referred me to Patty Elkis, who is the director of the division of planning for the Delaware Valley Regional Planning Commission (DVRPC). I spoke with Elkis by telephone regarding her government-supported agency’s role in the Delaware Valley region. The purpose of the interview was to gain a regional perspective on open space.

Elkis has presented “Return on Environment” in PowerPoint to over 50 audiences since the study came out, to demonstrate the economic value of protected open space.
“Audiences included local and state elected officials, planners, landscape architects, those in the economic development sphere, students, and citizens,” she wrote me in an e-mail (Patty Elkis, personal communication, July 9, 2015). This year, she also presented “Transforming Open Space to Sustainable Farm Enterprises” at a landscape architecture conference at the University of Pennsylvania. She said that she has worked with William D. Gladden, director of the Chester County Open Space Preservation, when they both served on the board of the former GreenSpace Alliance.

DVRPC’s comprehensive plan for the region including Chester County, Connections 2040 Plan for Greater Philadelphia, covers managing growth and protecting the environment, creating livable communities, building the economy, and establishing a modern, multimodal transportation system. The plan also addresses sustaining open space and local food production. I learned that the agency is a resource for regional food system planning. “Our region cannot feed itself; food must be imported. We will probably always need to import food,” she said (Elkis, personal communication, May 29, 2015). The agency plans to study how Montgomery County can promote local food production.

We are embarking on a project to promote local food in Montgomery County, at the request of Montgomery County. This is in our Work Program under project 16-44-190 found at http://www.dvrpc.org/asp/workprogram16/Default.aspx.

We have not conducted such a study for Chester County, but I believe they have done their own local food promotion (Elkis, personal communication, July 9, 2015).
I mentioned that during my research I had heard from one source that the popularity of community-supported agriculture (CSAs) had plateaued in Chester County. Elkis does not share that view. To clarify this point, Elkis clarified her view in a subsequent email by writing:

That is my opinion not based on data but based on my experience with my own CSA, Lancaster Farm Fresh. When I subscribed 5 years ago there were 20-30 subscribers at my pick up station, now there seem to be at least 75. Note, however, I live in Montgomery County, not Chester County.

Also, in conversation and in the media, I believe there is a growing interest and demand for locally produced food that will be partially met through growth in CSAs,” (Elkis, personal communication, July 9, 2015).

This year, as it does every five years, DVRPC took aerial photographs of the region’s land use for Geographic Information Systems (GIS). GIS helps planners to analyze geographical data. Due to the time needed to interpret the images, the findings will not be released until late 2016.

Her agency has determined that still more conserved land is needed in the region. To support this, she referred me to page 31 of Connections 2040: Plan for Greater Philadelphia. Subsequent to the interview in an email Elkis wrote, “No [there is no formula for desired proportions of developed to conserved lands], we base our numbers on the mapping of natural resources, creating an interconnected
It’s getting harder and harder to conserve land. Most large tracts are already preserved. Since available parcels for preservation are getting smaller, land trusts (and municipalities) need to work with more landowners, which becomes more time-consuming. As a region, we are doing a great job conserving land. One of the challenges is that every municipality has local land use control. (Elkis, personal communication, July 9, 2015).

Regarding key benefactors for land preservation, she said that the William Penn Foundation (WPF) continues to fund open space projects. For environmental initiatives, however, WPF is primarily focused on water quality – specifically eight watershed clusters in the Delaware Basin. Those land conservation organizations dependent on WPF grants may need to demonstrate how their projects improve water quality in order to be competitive (Elkis, personal communication, July 9, 2015).

Author’s Note: Ross Pilling, real estate consultant who is expert in conservation easements, stressed the importance of the Pennsylvania Department of Conservation and Natural Resources Community Conservation Planning Program which provides grants for both planning and open space acquisition. He said that the program requires a 50% match from other sources and is highly effective in leveraging WPF funds (Pilling, personal communication, September 29, 2015).

To identify which organizations receive WPF funding she referred me to WPF’s annual report. She said that DVRPC receives funding from WPF, periodically. In a subsequent email she wrote, “As an example, we recently received a WPF grant of $385,000. Our overall budget is over $18 million” (Elkis, personal communication, July 9, 2015).
We concluded our interview talking about trail networks in Chester County and in the region. Elkis informed me that “The Circuit” will become a 750-mile network of multi-use trails in Greater Philadelphia for commuters, recreational users, etc… She said people want to get outdoors for recreation near their residences. DVRPC is a member of The Circuit Coalition, which reads like a Who’s Who of local to national non-profit organizations, foundations, and government agencies. In a subsequent email she wrote, “They coordinate on the prioritization of projects, advocate and help get them programmed with funding, and they market the Circuit for users” (Elkis, personal communication, July 9, 2015).

Author’s note: Patrick Starr, Executive Vice President Pennsylvania Environmental Council advised, “The Circuit will take us another 22 years to build at a pace of roughly 18 miles/year IF we can sustain that. Recent actions by the DVRPC make this more likely (inclusion in the Transportation Implementation Plan)” (Patrick Starr, personal communication, July 22, 2014).

In addition to regional reports, DVRPC collects open space data, including how open space conservation is/will be funded. Between 1988 and 2013, voters in the DVRPC region approved 219 referendums authorizing counties and municipalities to levy additional taxes or issue bonds dedicated to open space preservation. During that period, of all the open space referendums issued in Pennsylvania, 92% were approved (http://www.dvrpc.org/OpenSpace).

In an email to follow up on our interview, I asked Elkis how these items get to be on the ballot in the first place. Elkis wrote, “Through a lot of work of open space advocates working with elected officials” (Elkis, personal communication, July 9, 2015).
The following statistics demonstrate that Greater Philadelphia and/or Delaware Valley region residents favor taxation and bond issuance to fund open space funding.

- All eight of the suburban counties (4 in New Jersey and 4 in Pennsylvania) and 126 of the region's 352 municipalities (36%) have submitted open space funding referendums to voters.
- Referenda have passed in seven of the eight suburban counties and 121 of the 126 municipalities where they have been issued.
- Over the last 25 years, voters in the DVRPC Region (excluding statewide initiatives) have approved over $745 million in bonds and have approved tax measures which generate millions annually for open space preservation (http://www.dvrpc.org/OpenSpace/).

After speaking with Gladden and Elkis, I realized the vital agricultural role that the County plays in the region. Hypothetically, I was aware that Chester County could become more of a “breadbasket” for the Delaware Valley or Greater Philadelphia, but what did I know about farm preservation? To better understand farming, I visited two farms and called an appointed County official.

**Agriculture**

**Farming as conservation.**

A January, 2013 article in the Philadelphia Inquirer, “Leasing Land Aims to Attract a New Breed of Farmers,” inspired me to want to visit Lundale Farm, located in Pughtown, Pennsylvania and formerly owned by Sam and Eleanor Morris. As my parents were friends with the Morrises, I had visited the farm
a half dozen times starting in the 1960s for social events. The *Inquirer* article piqued my curiosity about the present use of a picturesque property with which I had an emotional and historical connection.

I thought the agricultural model of leasing sections of the farm to preserve open space was both progressive and fitting for the Morris legacy. The *Inquirer* article planted a seed in me to study land conservation. The seed grew and led to this paper.

*Author’s Note:* Ross Pilling, real estate consultant who is expert in conservation easements, advised that the reader should know that Sam and Eleanor first preserved the farm with conservation easements and, upon Mrs. Morris’ death, set up a foundation with an endowment that totally supports base cash flow (Pilling, personal communication, September 29, 2015).

In October, 2014, I interviewed Marilyn Anthony, executive director of Lundale Farm, shown in Figure 2, which is a 440-acre farm located in northern Chester County. The mission for the non-profit Lundale Farm, Inc. (LFI) is: “. . . to foster opportunity, innovation and inspiration for organic farmers, landowners and local food supporters . . . Currently six farms operate independently at LFI and include a grass-fed beef herd, a micro greens enterprise, a horse-powered vegetable CSA, an apiary, and two producers of organic feed and forage for livestock” ([http://lundalefarm.org/then-and-now/](http://lundalefarm.org/then-and-now/)).
Anthony told me that her relationship with the Farm began when a Morris family member asked the Pennsylvania Sustainable Agriculture Association (PASA) to do a feasibility study on the farm’s resources and future opportunities. At that time, Anthony was the eastern Pennsylvania director for PASA. Subsequently, she was invited to join the board of the 440-acre property, which boasts an 18th Century farmhouse and springhouse registered with the National Trust for Historic Preservation. She described the Farm as a “living laboratory” (Marilyn Anthony, personal interview, October 18, 2014).

“There have been no Roundup® or other chemical applications in three years,” she said. “All of the land will be organic (certified) in 2016. A husband and wife are the first resident farmers. They grow microgreens in the greenhouse for sale to restaurants in
Philadelphia.” (Marilyn Anthony, personal interview, October 18, 2014). (They are also the co-authors of *Microgreens: A Guide To Growing Nutrient Packed Greens*.)

If you want to encourage people to value and protect land, you need to get them on it. We invite all ages back to see where food comes from and to help with planting. We’re planning a yoga hike and a ‘farm-to-feet’ trail run. The Willistown Conservation Trust is also great with community engagement and educational programming (Anthony, personal interview, October 18, 2014).

We talked about community-supported agriculture (CSAs). Anthony said that they are a game-changing economic model for farmers in that they eliminate many cash flow problems. In a CSA, people buy shares in advance of a harvest for periodic amounts of produce. She believes that although the demand for local food is growing, CSAs as a market are close to a saturation point.

*Author’s note: Lundale Farm collaborates on workshops and other educational programs with organizations such as FPCCT. The first group to visit the re-purposed farm was the Herb Society of America. Illoway is a member of the board of directors.*

On a far smaller scale and budding basis, former PASA Director Marilyn Anthony and the Morris family have turned Lundale Farm into part-organic farming incubator (a/k/a “living laboratory”), part-agricultural training center. Lundale could spark a save-the-farms movement in Greater Pughtown that takes root in neighboring boroughs and has a multiplier effect through its alignment with other family-owned farms and the Willistown Conservation Trust. Such a movement could answer Monahan’s (1995) call for a “movement to educate the general public as well as to train environmental professionals” (p. 32).
Farming for economic development.

Until I spoke with Agricultural Development Council Director Hillary Krummrich, I did not know that the County had experienced a duplication of effort regarding heritage programs. I learned that the Chester County Agricultural Land Preservation Board had distributed student scholarships and Farmer of the Year awards in the past. The County Commissioners created Krummrich’s position circa 2007, while she worked for the Planning Commission.

(She has a Master’s in Public Administration and a Juris Doctor.) Ms. Krummrich advised that PA Farm Link (http://www.pafarmlink.org/) has provided land matching for farmers before PASA did.

Since 1981, the Ag Council has served as a neutral, county government organization. We partner with the Chester County Economic Development Council (CCEDC), who can apply for grants, sharing a very similar mission of economic development with the same theme of promoting, and developing the ag industry.

...[We also partner] with the Chester-Delaware County Farm Bureau, which focuses on advocacy and legislation...[It’s a] way for the ag producers/community to know about the Ag Council and help us implement our programs. In return, we help bring information from our other partner organizations (Hillary Krummrich, personal communication, July 16, 2015).
The Council’s primary niches are: 1.) Focus on community outreach in an educational role, such as publishing “Local Farm Products” [which I found copies of at the Tredyffrin Public Library] 2.) Support municipalities on regulatory issues, who ultimately determine land use [in their respective jurisdictions], and 3.) Facilitate collaboration amongst agricultural partners, including the Chester County Conservation District.

For instance, we co-sponsored forums such as the Ag Mixer in January and the Ag Census last September. We do not work directly with farmers. CCEDC contributes to work force development through AgConnect.

It is correct that more than one-third of the land in Chester County is still in agricultural production. Not all of that acreage is preserved. About 25 percent of all County land is preserved.

I asked Krummrich how she envisions the County’s agricultural picture to look like in 2030.

There are exciting opportunities and advancements in agriculture that don’t require the same amount of land to operate. Chester County only lost about one percent of agricultural land between the 2007 and the 2012 censuses and zero percent in terms of farms. The industry will change and diversify as it needs to.
Considering the plight of California, the non-irrigated soils and class of soils in Chester County are very desirable.

I think the [County] Commissioners are very committed to land preservation and understand the importance of agriculture to our local economy.

Ninth generation Chester County farm resident.

A graduate of the University of Pennsylvania referred me to Carol Landefeld, University of Pennsylvania School of Veterinary Medicine Class of 1980, who is the owner of the Oakdale Farm in East Marlborough Township, Pennsylvania. In December, 2014, I interviewed Landefeld in her kitchen. She said:

West Marlborough Township is horse country. Fences are set back 20 to 30 feet so horseback riders can ride between road and fence safely. East Marlborough Township is fully developed with individual plot homes.

I’m ninth generation to live on the Farm. There are few farms left. This used to be a large agricultural area.

Bob and I haven’t done anything to the land. We’ve rented it out for farming. Every single tract of land sold by farmers goes to development. A big draw for developers is the (award-winning) Unionville School District (Carol Landefeld, personal interview, December 30, 2014).

[Our neighbor] Mrs. Hicks, 90, had three sons and two daughters. Her husband (Jack Hicks) ran a dairy farm within
walking distance. The farm provided a living for her family but would not support her three sons and their families. The farm was sold to a developer who put up a large townhouse community for 55 and older owners (Landefeld, personal interview, July 21, 2015). How could each son make a living off the land? You become land poor, so you sell the land in order to retire. I looked into a conservancy (for the Farm) in the past. The price was about one-fifth what developers would offer . . . wealthy people can afford to donate their land (Landefeld, personal interview, December 30, 2014).

Landefeld told me that the Brandywine River Conservancy holds meetings at the environmental management center on the campus of the Brandywine River Museum of Art. The purpose of the meetings is to educate citizens on conservation with a principal focus on land preservation through private donation of conservation easements. She said she wants the Conservancy co-founder, George Alexis “Frolic” Weymouth, who is close to 80 years old and whom she called the “fun du Pont,” to live forever.

**Land Trusts Preserving Open Space in Chester County**

**Addressing the threats to land trust protection in Pennsylvania.**

In May, 2015, I attended the Pennsylvania Land Conservation Conference in Gettysburg, Pennsylvania as a student. I attended the annual conference to learn about land conservation issues and to make contact with land trust practitioners who might lead me to primary source material for this paper. The conference is hosted by the PA Land Trust Association (PALTA) and is held annually for the land trust community in Pennsylvania.
Land trust board and staff members, government department representatives, and vendors attend the Conference which is sponsored and organized by PALTA which is made up of full time staff, its board of directors and consisting of 75 dues-paying conservation organizations. PALTA’s vision, mission, goals, and strategies are found at http://conserveland.org/about_us.

Through their conferences, workshops, and resultant advocacy, PALTA impacts public policy. For instance, in 2012 PALTA, helped overturn the former governor’s proposed two-year phase-out of state farmland preservation funding.

PALTA had been building its field of influence since its inception through working with and supporting land trusts throughout the state, building and deepening relationships with legislators and State Agency leadership, developing and circulating of technical resource (Conservation Tools.org), and acting as a policy think tank and sounding board,” wrote Dulcie Flaharty of the National Lands Trust in an e-mail to me (Personal communication, Dulcie Flaharty, July 6, 2015).

I attended two panel-discussion sessions and spoke to vendors and attendees representing environmental and governmental organizations. The first session I attended was entitled “Emerging Trends – Merging Land Trusts and Blending Missions.” Jeffrey Marshall, president of PALTA and president of Heritage Conservancy based in Bucks County, moderated the discussion.

One of the panelists was Dulcie Flaharty, vice president of Natural Lands Trust (NLT), which is based in Media, PA and which holds easements throughout the region
and including Chester County. She said that Montgomery County Lands Trust (MCLT), the land trust where she served as executive director prior to NLT, started as a “tiny, grass roots organization” in 1993 (Dulcie F. Flaharty, personal communication, May 9, 2015). From 1993 to 2003 the Montgomery County Commissioners allocated $100 million for open space initiatives without ballot referenda in its early years.

MCLT worked in Montgomery County from 1993 through 2006 saving land privately and in conjunction with County and partner efforts. During that time we worked through the first Montgomery County Open Space Plan adopted in 1993.

When we realized in 2001-2002 that there was more work to be done, which meant more and dedicated funding, we developed the concept of a ballot question on open space, convinced the County Commissioners to undertake a referendum and then spearheaded that effort. In 2005 - 2006 we updated the MCLT Strategic Plan as noted below with a modified mission statement and the stated goals (Flaharty, personal communication, July 6, 2015).

Montgomery County Lands Trust works to preserve and connect the natural areas, farmland, and neighborhood green spaces, which contribute to our quality of life, to a clean and abundant water supply and to the health of our region’s economy (MCLT Strategic Plan).

Our [MCLT’s] goals between 2005 and 2010 were to:
• Ensure the preservation of 5,000 additional acres of land in Montgomery County through private land protection and through Montgomery County’s Green Fields/Green Towns program.

• Create education and outreach programs which inform and mobilize target audiences in order to promote policy, decisions, and practice which protect and enhance land, water, and quality of life.

• Advance successful and full implementation of the Montgomery County Green Fields/Green Towns program.

• Promote, develop, and support diverse partnerships which advance collaborative land preservation, promote smart growth efforts, and attract leveraged funding.

• Build organizational capacity in order to effectively and efficiently accomplish the mission of Montgomery County Lands Trust” (Flaherty, personal communication, July 6, 2015).

As you will learn of the growing pains of another land trust in the next section, conservation NPOs cannot survive on a pipe dream-like mentality of simply behaving as do-gooder tree-huggers. True, their mission is important to the territories that they serve, but how they operate organizationally determines their fate or longevity. On this subject, Flaherty said:
It is important to re-visit your [organization’s] business plan, not just your strategic plan. In 2006, I felt our business model was vulnerable, even though funding was decreasing but still available. The William Penn Foundation started talking about the importance of scale . . . our board had discussions on whether our business model was sustainable . . . We looked for a partner, NLT had been a contracted partner for almost 10 years, and the cultures were compatible and their resources in staff and endowment were larger.

I would say that there was informal conversation between the professional leadership NLT and MCLT on who to work in more alignment from 2002 on, but serious conversation on “merger/affiliation” did not begin until 2010-2011. That was confidential between E.D. & President. Board of MCLT began seriously thinking about the future joining of organizations in late 2010. We were not exclusively looking at NLT. Other options were investigated, Flaharty wrote me in an e-mail. In late 2011 the boards of MCLT and NLT decided to affiliate for two years beginning in July 2012. We blended functions, but kept existing easements and 501 (c) (3) identities separate. (Flaharty, personal communication, July 6, 2015).
MCLT had previously received Land Trust Alliance (LTA) accreditation, (to be explained later) which validated good business practices and confirmed the structure of our easements. “We tested our message [of a blended and affiliated organization] with key donors, [who received it well], and on July 1, 2012, we went public. The two organizations became blended, not legally merged. That would be considered after two years of affiliation” (Flaharty, personal communication, May 9, 2015).

[NLT does conservation work in 13 counties from the Poconos to the South Jersey Bayshore.] After a decade of cooperative efforts, MCLT and NLT developed a defined MOU [Memorandum of Understanding] for operations in Montgomery County in 2000. We defined roles and responsibilities, met regularly and NLT even made grant to MCLT to support certain activities through 2009. This was a strategic, collaborative partnership not a formal affiliation.

We build up trust and alignment that benefited our eventual decision to align and then merge (Flaharty, personal communication, July 6, 2015).

In 2008, our organization [MCLT] felt the pinch of the recession. Our funding sources started cutting back. MCLT had a higher presence or profile in Montgomery County, but NLT has a longer historic connection with some landowners and donors.

The two organizations were fully blended in December 2014. Now working through MCLT-cultivated connections, NLT also has the
potential to be more grass-roots-focused than in the past; we have to be careful when we get large that we are not corporate.

During the PALTA conference lunch, I spoke with Sean Brady, executive director of Hollow Oak Land Trust, which protects greenspace primarily in the Pittsburgh Airport Corridor. (He later approved my use of the “Logic Model” found in Table 2 on Page 42.) The subject of the next panel-discussion session that I attended was fundraising events. Amanda Hickle of the Lancaster Farmland Trust and Sara Painter of French & Pickering Creeks Conservation Trust (FPCCT) presented. Hearing Sara’s creative ideas on cultivating donors sparked me to want to learn more about how FPCCT has become a successful land trust in northern Chester County.

Conservation Champions

On May 22, 2015, I interviewed L. Stockton “Stock” Illoway about land conservation in East Pikeland and throughout Chester County. Illoway serves on the board of French & Pickering Creeks Conservation Trust (FPCCT), founded in 1967 and has been a force or key driver in managing the Trust. After the founder retired, Stock became president of FPCCT.

We hired an executive director and land planners. We aimed to turn it [the organization] around financially. I started our bicycle (fundraising) event 13 years ago. The first year we had 108 riders and last year (2014) we had 1,500 riders. We net about $60,000 to $65,000 on the event. I started another fundraising event – the Bacon Brothers concert. The brothers
basically grew up on the Pickering Creek. Their grandmother was one of the first [land] donors to the Trust.”

We did a study of our area, to determine which were the most important land pieces to preserve, rate them, and then went after them. FPCCT’s territory is northern Chester County and occasionally we go outside this territory. Most of this [what the Trust does] is pretty local – township by township. For instance, the people of West Vincent Township got together to form a land trust, possibly because they did not have faith in FPCCT [before the turnaround]. Later, they assigned all their easements to us (L. Stockton Illoway, personal communication, May 22, 2015).

He told me that people who work for land trusts find that there is more work to do than they expected. Maintaining conservation easements requires resources to conduct annual monitoring, something smaller organizations often lack. Another key consideration, he said, is whether or not a land trust gets accredited by the Land Trust Alliance. In the past, trusts were attacked for land deals that appeared to be tax scams source. To maintain the accreditation, trusts must be re-accredited every five years. Hence, the work of the land trust continues long after the initial deal has been made.

We all work collaboratively to try to make it work – to put as many acres under easement as possible. Our working partners include Natural Lands Trust (NLT). The goals are the same – to preserve
the land. It’s a question of who does it. They key is the ability to get funding.

[For example] FPCCT received a grant from the William Penn Foundation to study the water quality of French Creek, a tributary of the Schuylkill River (Illoway, personal communication, May 22, 2015).

We then discussed the current and future states of agriculture in Chester County. [As noted earlier, the Pennsylvania Association of Sustainable Agriculture (PASA) has abandoned its farmer placement program.]

. . . and we [the Lundale Farm board] are still in very much of a learning mode. We want to help new farmers to be successful. Lundale and FPCCT did a joint workshop to talk to easement owners on how to get organic, sustainable agriculture on their preserved land. Farming is a tough business. If you can’t get your family to take over [the property], you sell the land.

Townships can raise funds from a bond to buy land to preserve it by purchasing development rights from the farmers. Then farmers aren’t forced to sell the land. The land cannot be developed any more than the terms of the easement (Illoway, personal communication, May 22, 2015).
Illoway’s reference to easement terms got my attention. For instance, during my research I learned that easements are essentially bulletproof – with the exception of government bodies exercising their power to take private property for public use, known as eminent domain. To better understand how agricultural easement terms could change, I consulted Bill Gladden, who advised:

The only way the development terms can change from the allowable terms set forth in the deed of easement is through the Agricultural Lands Condemnation Approval Board (ALCAB). This board oversees the condemnation of farmlands enrolled in the Agricultural Security Area, or ASA, or other productive farmlands. The Bureau of Farmland Preservation facilitates the ALCAB. The board convenes on an as-needed basis whenever a petition to condemn is submitted to the Secretary of Agriculture.

The board is comprised of representatives from the Departments of Agriculture (chair), Environmental Protection and Transportation, in addition to a representative of the Governor’s Office and two farmer members.

Certain exemptions to board jurisdiction include work to existing highways and projects that have Federal Energy Regulatory Commission (FERC) or Pennsylvania Public Utility Commission (PUC) approval.
Specific farming uses can change (different crops, etc.) but it has to stay in what the state defines as agriculture. That definition was changed maybe five or so years ago to allow more equine types of uses to qualify as agriculture (Gladden, personal communication, July 16, 2015).

Then, I endeavored to learn how Chester County townships have applied tax funds to purchase open space. Gladden provided the data found below in Table 3 on the 2003 to 2010 history of Chester County municipalities that raised funds from bond placements to preserve open space.

Table 3.
*Chester County Municipalities that Raised Funds During 2002-2010 to Purchase Open Space, Including Farmland Preservation*

<table>
<thead>
<tr>
<th>Year</th>
<th>Township</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>(15) Warwick Twp.</td>
<td>0.25% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>Charlestown Twp. (8)</td>
<td>0.50% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(16) E. Nantmeal Twp.</td>
<td>0.25% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(17) Londonderry Twp.</td>
<td>0.25% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(18) Lower Oxford Twp.</td>
<td>0.50% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(19) Pennsbury Twp.</td>
<td>0.188% EIT and $.045 property tax dedicated to OS</td>
</tr>
<tr>
<td></td>
<td>(20) Upper Oxford Twp.</td>
<td>0.50% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(21) West Brandywine Twp.</td>
<td>0.125% earned income tax dedicated to open space</td>
</tr>
<tr>
<td>2004</td>
<td>(22) East Nottingham Twp.</td>
<td>0.5% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(23) Highland Twp.</td>
<td>0.5% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(24) West Sadsbury Twp.</td>
<td>0.2% earned income tax dedicated to open space</td>
</tr>
<tr>
<td>2005</td>
<td>(25) Honey Brook Twp.</td>
<td>0.5% earned income tax dedicated to open space</td>
</tr>
<tr>
<td></td>
<td>(26) Kennett Twp.</td>
<td>0.25% earned income tax dedicated to open space and $.02 per $200 assessed property value.</td>
</tr>
<tr>
<td></td>
<td>(27) New Garden Twp.</td>
<td>0.125% earned income tax dedicated to open space</td>
</tr>
</tbody>
</table>
2006 - Spring

East Vincent Twp. (11) .2% increase for total of .325% earned income tax dedicated to open space
(28) London Grove Twp. .25% earned income tax dedicated to open space
(29) Pocopson Twp. $0.10 per $100 assessed property value dedicated to open space and .25% earned income tax dedicated to open space
West Vincent Twp. (14) .25% earned income tax dedicated to open space

2006 - Fall

(30) East Pikeland Twp. .25% earned income tax dedicated to open space
(31) Elk Twp. .50% earned income tax dedicated to open space
(32) Schuylkill Twp. .25% earned income tax dedicated to open space
(33) London Britain Twp. .25% earned income tax dedicated to open space

2007

(34) West Pikeland Twp. .25% earned income tax dedicated to open space

2008 - Spring

Charlestown Twp. (8) Increase 2003 .5% to 1% EIT dedicated to open space

2009 - Fall

Pennsby Twp. (19) .34 mill property tax increase for OS & eliminate OS EIT
End result = .79 mill property tax for OS

2010

(35) East Coventry Twp. .25% earned income tax dedicated to open space

Source: Chester County Open Space Preservation, 2015

Tax incentives.

Continuing my conversation with the Conservation Champion, Illoway explained that a key incentive for a landowner to agree to a conservation easement is to lower his or her property tax rate. As easements typically restrict the number of houses that can be built and as a result the appraised property value decreases. He said that some school districts are upset by that loss of taxable income. He believes that today there is much more of a local, sustainable agriculture movement than in the past. He admires how the Hudson Valley in New York produces food for New York City.
Not all Community Supported Agriculture (CSAs) will survive, but people want good, local food – free of pesticides – that hasn’t traveled thousands of miles to get to you. My goal is to get more and more of our preserved land actively producing food for local (and regional) consumption,” (Illoway, personal communication, May 22, 2015).

**Business-nonprofit partnership.**

Chester County organizations protect water quality by preserving the land surrounding watersheds. The Brandywine Creek Greenway is a collaborative project between 24 Chester County and Delaware County municipalities and the Brandywine Conservancy. The Greenway consists of permanently protected open space. I pondered how the business community helps protect watersheds in the County. Historically, the 1968 Plan and Program for the Brandywine was developed to preserve water quality and quantity for DuPont industrial process water (Personal communication, Pilling, September 29, 2015). A current example is found at a brewery located in Downingtown, PA.

**Green business restoring the watershed.**

The Victory Brewing Company does more than create award-winning beers and ales. I first learned of the company’s environmental focus after registering for the 2013 PASA Bike Fresh Bike Local bicycling tour. At the finish line, cyclists chose from three Victory beverages to complement their tacos. Co-founder and brewmaster Bill Covaleski (or a member of his staff or an attorney) responded to five questions that I posed by email about the company’s environmental stewardship.
Which non-profit environmental and planning organizations does Victory partner with or collaborate with? How?

. . . we created the Victory Headwaters Grant . . . we chose Guardians of the Brandywine, a local watershed stewardship organization, to receive the Victory Headwaters Grant in 2011. Guardians of the Brandywine receives a penny-per-bottle sold of our Headwaters Ale throughout areas of PA, totaling in the upwards of $30,000 since the grant was originated . . .

We have since added the Brandywine Valley Association as a Headwaters Grant recipient under the same terms.

The funds given are used by the organizations at their discretion [within the guidelines of] the grant agreement between our entities [which] constrains the funds usage to implementing programs, the organization’s outreach efforts, and toward ongoing operating costs of these non-profit groups.

Additionally, we have a long history in support of the Pennsylvania Association for Sustainable Agriculture as we believe that agricultural practices can have a significant impact on the environment . . . Our proud partnership may have led to our selection as 2014 Sustainable Agriculture Business Award
Which non-profit organizations that help protect natural resources in Chester County are most effective in their mission in your view? Why?

We have worked with the Brandywine Valley Association for many years beginning with events that raise awareness of their environmental stewardship by connecting our audience with their outreach events. In this relationship we have come to respect their operation for the emphasis it puts on education . . . Guardians of the Brandywine emphasize education as well. Together and with the additional involvement of The Brandywine Conservancy we have engaged in four highly successful riparian buffer restoration events in the last three years, the last of which mobilized volunteers planted 2,200 native species saplings along the upper reaches of the West Branch of the Brandywine in West Nantmeal Twp.

The substantial, positive effects of fully functioning riparian buffers on water quality is well established, and both the Brandywine Valley Association and the Guardians of the Brandywine (http://brandywinewatershed.org/redstreamblue/index.asp) on focus ample resources on such valuable projects in a manner that engages the local community, encouraging long-term sustained progress.

How does Victory measure its environmental impact? Do you set annual environmental impact reduction goals or targets? Do you have a Triple Bottom
We measure our consumption of natural resources at each brewery by metrics for each barrel of beer brewed. From there we’re able to set both corporate goals and individual process goals to reduce consumption of specific resources.

While we do not have a formal triple bottom line, we do not make decisions in a vacuum of profits . . . To survive into coming generations, we must respect that we are a business as well as a platform for change – you cannot have one without the other.

**How has the Headwaters Grant improved water quality and the watershed near you?**

The Headwaters Grant, as cited above, has contributed to the execution of multiple watershed restoration projects . . . Again, we firmly believe that stimulating community support for environmental stewardship endeavors is the key role which our organization can play, with our broad public appeal.

In terms of scientific metrics that prove the success of the initiatives we support, that data lies with our program partners. We would suggest contact Robert Struble at the Brandywine Valley Association or Tish Malloy of the Guardians of the Brandywine for
more detailed information on the actual impact of these efforts on water quality.

**Patagonia, Ben and Jerry’s, and New Belgium are reportedly B Corporation-certified** [http://www.bcorporation.net/what-are-b-corps](http://www.bcorporation.net/what-are-b-corps). What would it take for Victory to be B-corporation-certified? *[NOTE: A B-corporation or benefit corporation provides general benefit to the public through environmental stewardship.]*

There are a number of factors and considerations when becoming a certified B-corporation and while Victory Brewing Company has not taken the impact assessment to formalize this, we do meet many of the social, environmental and corporate qualifications for a B Corp. However, some of the qualifying steps do not correlate with our corporate structure as a founder-run and privately-owned- and-operated business.

So while we likely won’t be looking for B Corp certification in the near future, we internally hold ourselves accountable to many of the same standards set by the certification.

It is interesting to note that one of the founders of B Corporation, Jay Cohen Gilbert, is personally connected with one of Victory’s founders, Bill Covaleski, as their children are classmates at the same school.
Frequent conversations between Covaleski and Gilbert have probed
the possibilities and hurdles ahead for Victory in pursuit of the
standards that B Corporation certification strives for.

This chapter captures the experience and views of Chester County thought
leaders on land conservation. The interviewees shared the challenges, processes, and
systems that organizations and communities face when addressing open space issues.
The next chapter interprets findings from this chapter’s interviews and connects present
Chester County to the literature reviewed in Chapter 2.

Future Chapters

Chapter 5 contributes to the open space debate, states my conclusions, and
suggests further research.

Chapter 6 reflects on what could occur with and without citizen action and
community involvement in open space preservation.
Chapter 5
Discussion and Conclusions

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. Aldo Leopold (1968)

The first five presidents of the United States were all farmers. There can be no culture without agriculture. Joel K. Bourne, Jr, (2015)

Author’s Note: As in Chapter 4, page references found in parentheses at the end of sentences in this chapter refer the reader to pages in this paper and not an outside body of work.

As stated in Chapter 1, my central argument is that Chester County citizens collaborating with both governmental and non-governmental organizations, including private-public partnerships, shape the destiny of their surrounding landscapes through community action. My research and interviews support my original hypothesis that environmental organizations are effective based on the extent of their resources and their ability to measure their outcomes and mission achievements. Further, I found evidence that conserving land in communities and regions requires people to collaborate with one another. This paper has identified strategies that organizations design and deploy to conserve Chester County, Pennsylvania land in natural states. My findings and conclusions follow.

Summary of Key Findings

NPOs.

Land trusts and other environmental NPOs are educating citizens on the financial and health benefits of open space.
1. NPOs need adequate resources and must adopt business-like practices to maintain their easements and to be relevant in a future of shrinking land to conserve.

2. To be effective, NPOs must partner with government officials, other NPOs, businesses, and communities.

**Economic incentives.**

1. Real estate appreciates when located in close proximity to open space (a/k/a the “Central Park syndrome”).

2. Farmers and other landowners can receive tax benefits by entering into agricultural or conservation easements.

**Government.**

1. County comprehensive plan, the Landscapes series, is based on a bottoms up or citizenry vision.

2. Local governments are better positioned than County government to decide on the prudent development: open space ration for their jurisdictions.

**Agriculture.**

1. Farm leasing is likely to increase in Chester County.

2. Organic farming protects residents and outside consumers alike.

**Lessons Learned**

From my research of pertinent literature and speaking with experts, there is plenty of good work being done in Chester County and in the Greater Philadelphia region to
conserve land. Organizations, such as township and county governments and land trusts, are facilitating transactions to preserve County open space in perpetuity. Individuals, who are often “unsung heroes,” are influencing and mobilizing their fellow residents to voice their support of green space. Despite these efforts, community identities are changing because of development and growth.

**Conservation champions as unsung heroes.**

Senator Andrew “Andy” Dinniman’s remarks on the importance of honoring the guidelines of the “Landscapes” documents (the County’s comprehensive policy plans), along with former Planning Commission Director Fasic’s concern about how politics changes preservation priorities, led me to believe that land conservation movements need champions such as Stock Illoway. These champions demonstrate that individual effort can lead to positive results in conserving open space. Illoway may be exceptional in that he volunteers for a land trust board, a family trust that leases land to organic farmers, and a township open space committee. But without residents with even a modicum of his zeal, developers could more easily convince township officials to pave over open space and promote sprawl.

**Trending.**

Conservation organizations, such as land trusts, face myriad decisions when establishing or re-calibrating goals and evaluation metrics. For instance, benefactors, such as foundations, increasingly are demanding proof of financial stability, staff structure, reporting accountability, and results before they grant funds to these organizations. In response to higher standards and expectations than in the past, NPOs
that conserve land in Chester County find that they must become more business-like or corporate in their operations.

**Economic incentives support the Central Park syndrome.**

The report *Return on Environment* (2011) and interview respondents (including West Pikeland Township Board of Supervisors Chairman Holling) recognize that property values increase when located near open space, which is known as the “Central Park syndrome.” Once they understand this significant real estate concept, property owners are more likely to become active in managing the environmental fate of their respective communities. Public officials should continue to educate citizenry on how protected land benefits communities by creating agricultural jobs and raising local tax revenue. An Open Space Preservation department that is properly funded and politically supported can lead this awareness-building effort.

**Exemplary government.**

Political party bias aside, there are many signs that County government is dedicated to open space, today. First, Open Space Preservation Director Gladden (2015) stated that the Commissioners budgeted $10 million in 2015 to preserve open space (page 49). That, coupled with the fact that the County is the only Pennsylvania county with an open space department, confirms to me that Chester County has the potential of being a land conservation model for U.S. local governments.

A goal to preserve 30 percent of county land permanently by 2019 is indeed a laudable goal, one that was confirmed by government at the behest of the citizenry. As Senator Dinniman explained (p. 60), Chester County’s comprehensive policy plan is
based on the vision of its citizens. Citizens are voting on whether taxes should be raised in order for their local governments to acquire the financial resources to preserve land in their respective townships. Further, the Open Space Preservation (OSP) department is actively working with municipalities to fulfill the objectives of *Landscapes2*.

**Citizen action.**

Once a community builds a consensus on land conservation, a structure to support real estate deals to protect the use of land can frequently follow. This can manifest informally with an individual taking an activist role with his or her neighbors – “rallying the troops,” as it were.

More formally, individuals can volunteer for a political party role; join municipal or township government; or, serve on a planning board, a zoning board, or an open space committee. Dinniman and Gladden made it clear to me that protecting natural resources requires citizens to become politically involved in their respective communities.

**Land trusts require strategy and business operations.**

In Chapter 2, we saw that Monahan’s 1995 thesis asserted that local and regional land trusts are a solution to “stagnating government action” and create “effective public policy” (p. 32). I concur with that view, having observed that in the time since her thesis was presented, the Brandywine Conservancy, FPCCT, and NLT have blossomed into mature, stable, and productive environmental organizations. I concur. Their output has and should continue to benefit Chester County residents for generations.

Land trusts, however, have proved not to be maintenance-free. They require an operation that is easily accountable to the public and to prospective funders. In Chapter 4, Dulcie Flaharty revealed the difficulties that land trusts face and explained how her
organizations, Natural Lands Trust (NLT) and Montgomery County Lands Trust (MCLT), recognized and overcame challenges. My conclusion is that land trusts need well-designed and managed operations and financial wherewithal to effectively monitor and enforce their conservation easements.

Recognition.

The County-sponsored grant process that Gladden describes is but one method to preserve open space. Environmental NGOs such as FPCCT and NLT are working directly with landowners to create conservation easements that preserve undeveloped and underdeveloped properties in perpetuity (subject to eminent domain). The CCATO-NLT alliance to manage the “Growing Greener Community Award,” which recognizes a township annually for its environmental stewardship practices, contributes to open space awareness and community pride. Through marketing, this award could become more visible, resulting in more residents becoming better informed on how the County is controlling sprawl and restricting land use.

Adopt the corridor concept for smart growth management.

I agree with CCATO’s West Pikeland Township’s Holling that a “corridor concept” accommodates growth in developed areas that have existing infrastructure without accelerating sprawl appreciably. That view should satisfy most residents who are conservation-minded, especially if their taxes are not adversely impacted. The notion of limiting development to designated areas, however, seems to me should be viewed as a local and not a county or regional issue. Townships’ planning committees and zoning boards are the key entities that decide what to permit in their “backyards.” This is a key takeaway or finding from my interviews.
To contain growth within a respective township, then, communities would want to consider Milder’s (2007) conservation development as an alternative to conventional development or sprawl. (See Table 1 pp. 28-29.) For Milder, the outcomes, not the land use techniques, distinguish conservation development from conventional development. Despite Down’s (2005) prediction (that smart growth would likely remain more of a vision than a model that is carried out in practice) smart growth can satisfy a township’s or municipality’s need to balance growth with the land protection. This has been proven in the Town of Lincoln, Massachusetts. Further, to maintain that balance, officials and “watchdogs” such as the Brandywine Conservancy would want to assess critically the plans and the credentials of prospective developers and builders who propose construction on their “turf.”

**Agriculture.**

Pennsylvania Association of Sustainable Agriculture (PASA) Executive Director Brian Snyder confirmed to me during the Philly Farm and Food Fest on April 12 that they had suspended its program to match aspiring farmers with farms. PASA had provided a vital service in eastern Pennsylvania, where Chester County is located, that helped sustain an agricultural economy and preserve farmland. PA Farm Link now helps fill the PASA void by matching landowners with people interested in leasing or buying their farms.

I find Fasic’s prediction that farm leasing will increase in the County to be a logical conclusion. If landowners do not have a seamless system to lease their land to others for farming, however, I fear that farmland could disappear at an alarming rate. Landowners will “take the (developers’) money and run” – possibly creating an
unsustainable condition for County agriculture.

Farm leasing could produce actionable solutions for families who are forced to sell their family farms because younger family members choose not to farm for a living. (An option such as leasing land to farmers might have been useful to the Hickses, who sold their land in West Marlborough Township to developers.) Although my investigation does not corroborate County Planning Commission Director Fasic’s vision for farm leasing, I believe that given the proper incentives farmers will increasingly lease their land under easement for farming. For that to happen, environmental NPOs such as land trusts and local governments need to continue to collaborate systematically.

With master’s and doctorate degrees, Agricultural Development Council Director Krummrich is an educated appointed official. She also served the County in her capacity with the Planning Commission more than seven years ago. Though not tasked with work force development, the Council plays an important role of community outreach and municipality counsel regarding regulatory matters.

Her statement that the “non-irrigated soils and class of soils in Chester County are very desirable” is profound, even prescient (page 81). As climate change destroys prime agriculture land in high-food-production places like California’s Central Valley, Chester County farmland values should appreciate. That could cause the purchase of private property to become cost-prohibitive for certain individuals, land trusts, and townships. What I question is whether the agriculture advancements that Krummrich referred to in our interview (such as mushroom growing and hydroponics that do not require the same amount of land as “traditional” operations may require) could cause
more of a net agricultural land loss than the “one percent . . . between 2007 and 2012 censuses . . .” (p. 80).

**Challenges remain.**

When interviewing a variety of people, as I did for this study, a spectrum of viewpoints can result. That was the case with my field research. As an example, despite Agricultural Development Council Director Krummrich’s rosy statistics on County farming from 2007 through 2012, former Planning Commission Director Fasic and landowner Landefeld suggest that farming in the County is in a state of decline.

I surmise that there is a disconnect between the agricultural image that County government broadcasts and the current reality. Of course, time will tell which version is accurate. Unless scenarios such as those that I present in Chapter 6 manifest and evolve, I propose that farmland in Chester County could disappear and be “repurposed” at a moderate rate, not at an extreme rate.

Elkis’ statement that the William Penn Foundation has shifted its environmental focus to water quality made me realize that there is an important relationship between land and watersheds conservation. The August/September, 2015 issue of *Nature Conservancy* corroborated that concept by reporting that improving farming practices results in better water quality and quantity. In “The Urban Water Crisis,” McDonald and Shemie argue that water utilities who work with farmers can be a more cost-effective strategy than buying and protecting land (http://www.nature.org/magazine).

I learned that more organic farming, as exists today at Lundale Farm, will impact the health of residents regionally in positive ways. Pesticides will not leach into surrounding waterways such as Pickering Creek. Produce and beef raised on the Farm
will not poison or add toxins to the diets of consumers.

**Local biases impact execution of County objectives.**

In identifying the strategies that organizations design and deploy to conserve land, I discovered an enduring human potential in Chester County communities. I found land stewardship efforts that are both exemplary and wanting. For instance, the cooperation amongst townships and counties regarding trails is indeed constructive. I learned, however, that townships can plan with an objective of differentiation - separating themselves from “the herd,” distinguishing themselves from their neighbors. This indicates to me a competitive not a collaborative spirit. After visiting with elected and appointed officials, I had doubts whether the current County Planning Commission has the political might to enforce the land conservation objectives of Landscapes2 (the key planning document for the County) in the future.

The town of Lincoln, Massachusetts (described in Chapter 2) and Chester County share similar, comprehensive documents to guide officials such as planners, elected officials, and practitioners. I concur with Lemire’s (1979) statement that “. . . conservation programs must be implemented that transcend our political boundaries” (p. 24). In listening to Holling, Bryant, and Fasic, however, I sense that political climates or mantras do, in fact, operate as either pro-growth or pro-conservation. The current County administration appears to favor economic growth over keeping the “character” (countryside, rural nature) of the County. Based on my research, Vista 2025, the County’s economic development strategy, conflicts with and could trump the smart growth-approach of Landscapes2 when two of the three County Commissioners form a party line or shared mind-set.
Clearly, organizations such as the Chester County Planning Commission are critical actors to determine the balance of conserving farmlands and other open space with the inevitable development that follows population growth. I agree, however, with Whyte (1968) and Lemire (1979) that good plans cannot be all things to all stakeholders. Some compromise will nearly always be necessary. In addition, as suggested by the County’s former planning director, George Fasic (p. 62), elected officials such as the County Commissioners can easily derail years of conservation progress if they have strong desire to attract or to fuel growth.

Metrics.

Yang, et al. (2005) state that criteria measuring an NPO’s performance is more arbitrary than measuring a for-profit concern in A Study of Implementing Balanced Scorecard (BSC) in Non-profit Organization: A Case Study of a Private Hospital. That NPOs are well-served when they create a “performance index” to judge their effectiveness. I agree with the authors in principle, but question whether under-resourced NPOs, such as relatively new or under-capitalized land trusts, can attract the management expertise found in businesses. That said, based on Open Space Preservation Director Gladden’s assessment, NLT is a well-run organization. Based on their evolution, and one-time near collapse as described by Illoway (2015), FPCCT is an example of a forward-thinking and successful conservation organization in Chester County.

More research needed on unfinished business and unanswered questions.

Though this paper contributes to the subject of open space preservation and issues vital to Chester County, Pennsylvania, the paper has revealed gaps that others can address. For instance, what percentage of family farms in Chester County are being sold
because young people no longer value agriculture as a career? How do communities create economic incentives that allow landowners to practice conservation ethics? There is an opportunity for a future study to assess the effectiveness and value of the organizations presented in this paper in more detail. Another study could analyze why some organizations doing land preservation work in Chester County are unsuccessful, or compare the successful to the less successful NPOs.

Given that a lack of funding, due to competing forces, eliminates programs (and entire organizations), I wholeheartedly concur with Alexander’s and Hess’ (2011) recommendations in *Land Trust Evaluation of Progress toward Conservation Goals*. Simply following a “bucks and acres” mantra is not enough for land conservation organizations these days. My study found that to be effective, land trusts need to partner with government officials, other environmental NPOs, businesses, and communities. I have not answered, however, how land trusts attract outside, professional assistance.

Further, I did not demonstrate why a framework developed by a consortium of international conservation organizations (the Open Standards for the Practice of Conservation) would be relevant to regional land trusts.

As evidenced by the abundance of referenda and selection of politicians, County residents are accepting higher local taxes in order to preserve the character of their surroundings and protect their property values. The recent history of municipalities issuing bonds to preserve open space from the statistics in Gladden’s Table 3 supports this observation (pp. 92-93). What isn’t clear and should be examined, however, is whether this “bottom up” style of participative government dissipates when political power shifts.
Clearly, the concept “we, the people” is of central importance to the issue of land use. People do vote in a variety of ways as Gladden said (p. 55). He’s completely correct when he says that their choices lead to an awareness of the environment. Organizations and citizen leaders can help communities become good stewards of our open space and, collectively, they will shape the history of Chester County. As the young man’s tee shirt at Costco read the other day:

NO NATURE
NO FUTURE
Chapter 6
Closing Reflections

*Study how society uses its land, and you can come to pretty reliable conclusions as to what its future will be.*  E.F. Schumacher (1973)

*Government alone cannot solve environmental and social problems. Nor is corporate cooperation sufficient. Cooperation from individuals is also essential.*  R. Ackoff (1974)

This paper is based on facts, scholarly arguments, and personal observations. During the course of my research, I realized that future events could “tip the scales” to increase organizational effectiveness and citizen engagement to save natural resources in Chester County. This chapter, then, is my creative contribution to the evaluation of the conservation vs. development dilemma. I was inspired to write this chapter by the author Joel Bourne, Jr.

In *The End of Plenty: The Race to Feed a Crowded World*, Joel K. Bourne, Jr. (2015) envisions two possible “paths” for the future of the planet. In the first, climate change reduces food production, which causes food price inflation and immigration pressure on developed nations like the United States. The second, though utopia-like, relies on innovation - what I think of as Yankee ingenuity. In that scenario, investments in renewable energy and organic-farming contribute to a near-carbon-free economy that could reduce food insecurity - agronomy becomes the “next big thing” (pp. 313-315).

This chapter explores four scenarios of forces that could dramatically change Chester County’s landscapes, including celebrity intervention, disaster, international economics, and organizational leadership. With the exception of the “Foreign Takeover,” the scenarios demonstrate individuals and organizations solving the problems
of disappearing open space and reduced agricultural output.

The following scenarios are based on modest to extreme climate change risks and survival threats. They range in probability of occurrence. A combination of the second and third scenarios could be catastrophic for County residents and the natural world and could lead to a “point of no return.” The first and last are less pessimistic, less critical.

**Rock Stars to the Rescue**

Successful rock and roll musicians Sting and Don Henley, co-founder of the 1970s rock band The Eagles, have funded the [Walden Woods Project](https://www.walden.org). The project, headquartered in Lincoln, Massachusetts (the town featured in Chapter 2), is a nature preserve with more than 120 conserved acres located where 19th Century philosopher Henry David Thoreau once lived. The preserve offers environmental programs for students and teachers ([https://www.walden.org](https://www.walden.org)). (Entertainers raising funds and awareness exclusively for Chester County open space are The Bacon Brothers, who have performed benefit concerts for French & Pickering Creeks Conservation Trust.)

I envision famous rock stars (or other celebrities) inspiring wealthy people with Greater Philadelphia roots to contribute to a regional effort to conserve open space and protect farmland. They could start by motivating native musicians such as Daryl Hall, John Oates, and Todd Rundgren to launch a foundation to ensure that Delaware Valley (which includes Chester County) watersheds and land resources flourish. A celebrity-built fund may attract wealthy County residents such as former NFL Eagles Coach Richard “Dick” Vermeil and Urban Outfitters CEO Richard Hayne to join the cause. The celebrities could donate funds, serve as spokespeople in schools, and/or galvanize volunteers and activists.
The foundation could leverage the influence of its donors to persuade deep-pocketed corporations domiciled in the County, such as Vanguard and Liberty Property Trust, to climb aboard the “bandwagon.” The public image of those corporations that contribute to the movement would be enhanced by these contributions to ensuring opportunities for future generations living and working in the same region. These businesses would adopt triple bottom line policies (which address people, the planet, and their company profit) to show “teeth” that could overcome any greenwashing claims that could be lodged against them.

### Severe Drought as Game-Changer

The scientists prove to be correct. In 2030, a megadrought scorches the California Central Valley, cutting off a key food supply to Chester County and the Delaware Valley. Realizing a market advantage, Latin American food exporters hike their produce prices dramatically. Low and middle-income people face exorbitant food expenses.

The megadrought causes a migration of western U.S. residents to relocate to water-rich communities in the eastern U.S. The shift in regional critical mass places untold strain on human services in the Delaware Valley. The federal government offers grants to Chester County residents who grow crops on their properties for themselves and for their neighbors. Community-supported agriculture (CSAs) and farm stands become
the go-to sources for fresh produce. Residents tear up their yards, and municipalities transform their public parks to create “victory” gardens. Communities establish canning operations to warehouse pickled produce and other foodstuffs for the non-growing seasons. A survivalist mentality pervades the County. Because of the lack of water, beef becomes scarce, and increasingly citizens adopt vegan diets.

**Foreign Takeover Wreaks Havoc**

“China, Inc.,” the Chinese government-Chinese corporate consortium, has been on a buying spree outside its borders. For decades, China has accumulated a “war chest” of U.S. treasury securities. In 2013, a Chinese company bought the Virginia-based pork producer and processor, Smithfield Foods. According to a report by the Center for Investigative Reporting aired on the public television station WHYY, Smithfield was the world’s largest pork producer in 2014, processing more than 10,000 pigs a day.

A member of the Senate Agriculture Committee said (2014) “Food security is national security . . . food is a strategic resource that should be as important to the U.S. government as oil” ([http://www.pbs.org/newshour](http://www.pbs.org/newshour)). China heeded this warning and waged an aggressive resource development strategy in Africa. In 2017, they acquired thousands of acres of prime soil in Chester County by deploying a Trojan Horse tactic to disguise their true identity. On the former American-owned soil, crops are raised for export to feed the 1.5 billion Chinese people. To protect their U.S. interests, Chinese drones equipped with high-tech sensors, cameras, and laser rockets, maintain a watchful eye on would-be trespassers.

Rural residents move in large numbers to neighboring cities such as Philadelphia, Chester, and Wilmington. Environmental organizations cease operations in Chester
County and retreat to regions unoccupied by foreign powers. The County ceases to be known for U.S. agriculture.

**Rodale Institute Leads the Way**

As the global climate change (or cycle) continues and resource skirmishes escalate, lifestyles are compromised and society regresses. The middle class is forced to travel less, causing them to become more involved in and committed to their respective communities. Non-irrigated farm regions, such as Chester-Lancaster counties, serve as vital “breadbaskets” for their residents and nearby urban populations in Philadelphia and Wilmington, Delaware. In this scenario, people are forced to practice conscious conservation – to survive.

The Rodale Institute, a leader in organic farming since 1947, establishes a satellite campus in the progressive-minded community of Kimberton, Chester County, near Phoenixville, Pennsylvania. The Institute serves as part-think tank and part-agricultural training center. They collaborate with the Pennsylvania Association for Sustainable Agriculture, Pennsylvania Farm Link, and the Chester County Agricultural Development Council. They receive funding from foundations that want to protect standards of living. The Institute is the catalyst that rallies County-wide citizen participation in protecting natural resources and the ecosystem.

Rodale provides the science and compelling data to motivate more wealthy residents to invest in “saving the land.” These individuals emerge from an escapist or reclusive mentality to apply their resources, including business acumen and contacts, to merge the fabric (dare I say patchwork?) of disparate environmental parties. As a result of their new-found “religion” and generosity, Republican commissioners work
consistently with County townships and NPOs to uphold, to honor the “Landscapes”
planning series.

Citizens of all ages practice conservation and Chester County expands its
farmland preservation image globally. Rodale and its partners, such as foundations,
sponsor innovation tournaments to solve land conservation and agricultural challenges in
the spirit of what Terwiesch and Ulrich present in *Innovation Tournaments: Creating and
Selecting Exceptional Opportunities* (2009).

This chapter imagined alternative approaches to conserving open space to benefit
the residents of Chester County and, for that matter, the people of the Delaware Valley.
The scenarios that I present are meant to be instructive, not pure fantasy or science
fiction. Citizen activists, governments, and non-environmental organizations can provide
a service to their communities by performing gaming exercises such as the ones
presented in this section.

Cybersecurity experts, businesses, and the military may be gaming right now to
solve “wicked” problems – i.e. complex problems that experience resistance to
resolution. I propose that we should consider growth vs. land conservation tensions to be
dilemmas, even wicked problems. Why not use these techniques for strategic thinking
and contingency planning to save the prime and sacred soils for which Delaware Valley
residents are increasingly dependent?
References


*The Brandywine Plan: A plan for the upper east branch of Brandywine Creek.* (1968). West Chester, PA: Chester County Water Resources Authority.


http://www.chesco.org/Search/Results?searchPhrase=Document+Center&page=1
&perPage=10

Downs, Anthony (2005). Smart growth: Why we discuss it more than we do it. Chicago:


Press of Kansas.


Grant awards. Chesco.org. Retrieved September 7, 2015, from Chesco.org Web site:


and Cultural Organization.


LandTrustAlliance.org Web site: http://www.landtrustalliance.org


Press.

Lundale Farm farming. LundaleFarm.org. Retrieved March 12, 2015, from

Lundale Farm operations. Lundalefarm.org. Retrieved May 15, 2015, from
Lundalefarm.org Web site: http://lundalefarm.org/then-and-now/

Nature.org Web site: http://www.nature.org/magazine


Meine, C. (Ed.) (2013). Aldo Leopold: A Sand County Almanac & Other Writings on
APA Manual for correct format.

Reprise.

easements as an effective tool for open space preservation. Philadelphia:
University of Pennsylvania Press.

Municipal grants. Chesco.org. Retrieved February 20.15, from Chesco.org Web site:


site: http://www.dvrpc.org/OpenSpace/local.htm
http://conservationtools.org/organizations/county?county_id=15


Appendix A

Figure 3. Transforming Open Space to Sustainable Farm Enterprises
Appendix B

List of Interviewees

Business

Covaleski, William; Co-founder, Victory Brewing Company

Government

Bryant, Sam; Acting Township Manager, West Pikeland Township Board of Supervisors
Dinniman, Andrew; Pennsylvania State Senator
Gladden II, William D.; Director, Chester County Open Space Preservation
Gumbart, Tom; Director, Town of Lincoln, Massachusetts
Holling, Ernie; Chairman, West Pikeland Township Board of Supervisors
Krummrich, Hillary; Director, Chester County Agricultural Development Council

Landowner

Landefeld, Carol; East Marlborough Township

Non-Profit Organizations

Anthony, Marilyn; Executive Director, Lundale Farm
Elkis, Patty; Associate Director, Delaware Valley Regional Planning Commission
Flaharty, Dulcie; Vice President, Natural Lands Trust
Illoway, L. Stockton; French & Pickering Creeks Conservation Trust
May, Miriam; Director, Harvard Hillel

Practitioners

Pregman, Patricia; Attorney, Real Estate and Conservation
Pilling, Ross; Principal, Conservation Development, Inc.
Retired Government

Fasic, George; former director, Chester County Planning Commission

Flournoy, William; former state employee, North Carolina Department of Environment and Natural Resources and conservation activist
Appendix C

List of Interview Questions

• Who shapes conservation public policy in Chester County?

• Which organizations are most effective in conserving land in Chester County and why?

• What metrics should organizations and communities apply to measure performance toward goals? What accountability standards do you follow?

• What roles do board members and trustees play?

• What are the leading documents that guide open space planning in the County?

• Is there a systems approach to conserving open space in Chester County? In the Greater Philadelphia region?

• How do you envision the County’s land conservation movement will look in 2030?

• Do the townships that value open space possess a pro-open space DNA that has been passed from generation to generation of residents? Or, do current zoning codes, tax advantages, and wealthy landowners have more impact in preventing developers from exploiting the land?

• What are the economic benefits of open space to landowners and their respective communities?

• Who monitors the progress of and executes Landscapes2, the County’s comprehensive plan?