The Pennsylvania State University
The Graduate School
School of Forest Resources

UNDERSTANDING PRIVATE FOREST LANDOWNERS’ EXPERIENCES
AS THEY PLAN FOR THEIR FORESTS’ FUTURE

A Dissertation in
Forest Resources
and Human Dimensions of Natural Resources and the Environment

by
Joshua Brion Gruver

© 2010 Joshua Brion Gruver

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

August 2010
The dissertation of Joshua Brion Gruver was reviewed and approved* by the following:

James Finley  
Professor of Forest Resources and the Human Dimensions of Natural Resources and the Environment  
Dissertation Advisor  
Chair of Committee

A. E. Luloff  
Professor of Rural Sociology and the Human Dimensions of Natural Resources and the Environment

Allyson Brownlee Muth  
Program Associate Forest Resources and the Human Dimensions of Natural Resources and the Environment

William Elmendorf  
Associate Professor of Urban and Community Forestry and the Human Dimensions of Natural Resources and the Environment

Richard C. Stedman  
Associate Professor of Natural Resource Policy and Management  
Cornell University  
Special Member

Michael G. Messina  
Professor of Forest Resources  
Director, School of Forest Resources

*Signatures are on file in the Graduate School
ABSTRACT

Forests dominate Pennsylvania covering nearly 60 percent of its landscape. An estimated 750,000 private forest landowners (PFLs) hold 70 percent (more than 12 million acres) of this forest. The number of PFLs increases each year as landowners divide and sell or gift away their forestland. As forestland ownerships increase and change, the potential for urban development increases. The decision making processes PFLs engage when planning for their forestland’s future are not well understood. Recent statewide survey results indicate over 52 percent of PFLs plan to leave forestland to more than one heir. Further, approximately 9 percent are planning to subdivide, 27 percent are planning to sell, and 11 percent expressed interest in conservation easements. Using key informant, phenomenological, and semi-structured interviews, this dissertation explores PFLs’ motivations and decision-making processes as they plan for the future of their forestland. To provide context and a deeper understanding of how PFLs make decisions about their forestland, I approached those who had recently subdivided and sold forestland, gifted forestland, sold conservation easements, or had not yet committed to any plan in three counties and asked them to tell me about their experiences.

I provide analysis on their planning processes and discuss themes derived from their experiences as they decide to subdivide and sell forestland, leave forestland to heirs, sell or donate conservation easements, or commit to none of these options. Study counties were categorized as being highly developed, moderately developed, or rural. Findings suggest PFLs’ relationship and level of attachment to their land influenced their decision. Those who had not committed to any action and sold or donated easements expressed a strong attachment to their land. Conversely, PFLs who subdivided and sold forestland perceived the land as enabling and were less connected to it. In addition, family communication and relationships emerged as important factors in the planning process. PFLs expressed interest in giving land to heirs,
particularly in the no action group. Lack of communication with heirs, strong connection to the land, and wariness of their economic future resulted in planning indecision among PFLs in the no action group. Lack of knowledge of planning alternatives among PFLs who subdivided and sold suggested that planning education and information would aid decision-makers. Easement holders perceived having greater control over their land through the easement, which was counter-intuitive.
# TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................ ix

LIST OF TABLES .......................................................................................................... x

ACKNOWLEDGEMENTS .............................................................................................. xi

Chapter 1 Introduction ................................................................................................. 1

Problem Statement ...................................................................................................... 3

Chapter 2 Literature Review ...................................................................................... 5

Private Forest Landowners ......................................................................................... 5
Pennsylvania’s Private Forest Landowners ................................................................. 7
Expansion of the Urban-Rural Fringe ........................................................................ 10
Forest Parcelization .................................................................................................... 13
  Ecosystem Effects of Parcelization ........................................................................ 15
Alternatives to Subdividing and Selling .................................................................... 17
  Conservation Easements ....................................................................................... 17
  Forest Legacy .......................................................................................................... 20
  Family Limited Partnerships .................................................................................. 21
Making Decisions about Land .................................................................................... 22
Planning and Decision-making .................................................................................. 27
Summary ..................................................................................................................... 28

Chapter 3 Theoretical Framework ............................................................................ 29

Investigative Process ................................................................................................. 30
  Key Informant Interview ...................................................................................... 30
  Phenomenological Interview .............................................................................. 31
  Semi-structured Interview .................................................................................. 31
Framework for Analysis ............................................................................................ 32
  Sociodemographic Characteristics ..................................................................... 32
  Forest Parcels: Land Acquisition and Property Characteristics ....................... 32
  Forestland Succession Planning .......................................................................... 33
  Decisions to Subdivide and Sell Forestland ........................................................ 34
    An Empirical Exploration of Parcelization ....................................................... 35
  Decisions to Conserve Forestland ....................................................................... 36
Summary ..................................................................................................................... 38

Chapter 4 Methods .................................................................................................. 39

Qualitative, Quantitative, and Mixed Method Paradigms ..................................... 39
  Beyond Survey Research ..................................................................................... 41
  Mixed Methods ..................................................................................................... 42
**Chapter 5 County Descriptions and Issues** ........................................ 57

- **Study County Characteristics** .................................................. 57
  - Perry County ............................................................................. 58
  - Centre County ........................................................................... 58
  - York County ............................................................................. 59
- **Key Informant Interviews** .......................................................... 60
  - Perry County Key Informant Interviews .................................. 61
  - Centre County Key Informant Interviews ............................... 69
  - York County Key Informant Interviews .................................. 79
  - Overall Key Informant Summary ............................................. 94

**Chapter 6 Phenomenological and Semi-structured Interview Results** .................. 96

- **Sociodemographic Data** ............................................................. 96
  - Summary of Sociodemographics .................................................. 100
- **Phenomenological Analysis** ....................................................... 100
  - Theme Development ................................................................... 101
  - Interview Analysis ..................................................................... 102
  - Subdivision Group ..................................................................... 102
    - Relationship with the Land ...................................................... 102
    - Decision to Subdivide and Sell .............................................. 103
    - Participant Introductions ....................................................... 104
    - Thematic Analysis .................................................................. 107
    - Summary: Subdivide and Sell Group ....................................... 113
  - No Action Group ....................................................................... 115
    - Relationship with the Land ...................................................... 115
    - Decision to Not Act ................................................................. 116
    - Participant Introductions ....................................................... 116
    - Thematic Analysis .................................................................. 119
    - Summary: No Action Group .................................................... 126
  - Conservation Easement Group .................................................... 127
Chapter 8 Concluding Thoughts

Chapter 7 Discussion

Forest Planning was a Multidimensional Process

Importance of Relationships with Land in the Planning Process
Formation of the PFL-Land Relationship in the Easement Group
No Action and Subdivide and Sell Groups’ Connection to Land

Decisions about Land Planning were Multidimensional
Decision about Land Planning Often Involved Others
Lack of Alternatives in the Subdivide/Sell and No Action Groups
Decisions to Sell or Donate Easements
Land’s Economic Value was Important for Uncommitted PFLs
Lack of Direct Communication Concerning Land Planning Decisions
Emotion and Mutual Benefit among Decision-Makers

Summary: Re-addressing Study Questions
PFL Thought Processes
Factors
Facilitated Group Discussions
Survey Recommendations
Summary

Chapter 8 Concluding Thoughts

Shifting Relationships with Land
No Action: The Struggle with Uncertainty
Subdivide and Sell: No Alternatives versus No Perceived Alternatives
Selling and Donating Easements: Marketing Conservation
Family Communication
Personal Experiences with Future Forest Planning
Other Contributing Factors to Forest Planning and Decision-Making
Reflections on the Research Process
Study Limitations

Literature Cited

Appendix A Key Informant Interview Instrument
Appendix B Semi-structured Interview Instrument
Appendix C  Sociodemographic Questionnaire................................................................. 211
Appendix D  Subdivide and Sell Contact Letter............................................................... 213
Appendix E  No Action Contact Letter............................................................................. 214
Appendix F  Conservation Easement Contact Letter......................................................... 215
Appendix G  Phone Script................................................................................................. 216
Appendix H  Consent Form............................................................................................... 217
LIST OF FIGURES

Figure 3.1. Landowner and parcel characteristics and planning processes associated with succession and decision-making. ................................................................. 38

Figure 4.1. Faces and vases .................................................................................................. 45

Figure 5.1. Study Counties. ................................................................................................. 57

Figure 6.1. PFL age categories across groups (n=37). .......................................................... 97

Figure 6.2. Employment status of PFLs across groups (n=39). .............................................. 97

Figure 6.3. Highest grade of school reported across groups (n=37). ................................... 98

Figure 6.4. Household income of combined PFL groups (n=27) ......................................... 99

Figure 6.5. Political description by PFL group (n=33). ......................................................... 99

Figure 7.1. Factors and processes associated with future forest planning. ......................... 176
LIST OF TABLES

Table 5.1. Perry County: Population and housing unit change between 2000 and 2009........58
Table 5.2. Centre County: Population and housing unit change between 2000 and 2009..........59
Table 5.3. York County: Population and housing unit change between 2000 and 2009..........60
Table 5.4. Key informant occupation by county.................................................................61
Table 6.1. Subdivide and sell group: Land owned and subdivided by county.......................103
Table 6.2. No action group land characteristics by county......................................................116
Table 6.3. Conservation easement group land characteristics by county.............................127
ACKNOWLEDGEMENTS

Many have helped with the creation of this work. Without the many hands, minds, voices, and financial support of others, this work would never have seen the light of day. First I would like to acknowledge The Bureau of Forestry for their vision and financial support for the project. Their willingness to support this work financially demonstrates why they are one of the more progressive and forward thinking environmental institutions in the country.

I would like to thank my doctoral committee for their unwavering support and unlimited patience as I stumbled my way through the dissertation process. I feel infinitely fortunate to have been part of this family.

To Jim Finley, your commitment to others, your family, and your work are truly inspirational. I feel honored to have been a part of your life and your work. Your capacity for learning and teaching is boundless and I am forever grateful for the time we spent together talking about trees, people, and life. Your passion for science and dedication to helping others is humbling and something I hope to live up to.

To Al Luloff, thank you for helping me find my voice and for teaching me how to help others find theirs. The fundamental elements of being human – love, trust, and loyalty (among others) – are embedded in your research and teaching ethic. You inspire me to speak my mind and fiercely defend others.

To Allyson Muth who introduced me to phenomenology and planted the seed for this project, without your phenomenological prowess, your encouragement, your gift for listening, and your unwavering belief in my abilities I would not have been able to do this. Thank you Allyson. You have many gifts and I feel lucky to have been the recipient of some of them.
To Rich Stedman, your critical eye and dedication to strong academic research made this a better dissertation. Thanks for being on my committee and inspiring me to think beyond the boundaries of this research. I look forward to further collaboration.

Bill Elmendorf, your knowledge about planning, growth and development, and participant driven research were invaluable contributions to this project. I owe much to your good nature and humor. Thanks for setting the example of how to be a professor, a mentor, a parent and a relaxed human being. I’ll catch up with you at the next Red Mo race.

Sandy Smith, thanks for your steadfast belief in me as a student and a teacher. Your friendship over the years has meant a lot to me. I have learned much from you about many things and look forward to more.

Alex Metcalf, thanks for your friendship and contributions to this research. It was your understanding of people and forests and the issues surrounding them that inspired me to look into the parcelization phenomena.

To Carol Leitzel, thanks for your friendship and your knack for keeping me sane, in-line, and laughing. Your willingness to help in times of great need enabled me to make it through many-a-long day! I owe you lots of candy, coffee, and hugs.

To Adrienne, Finn, and now Tobias, my sweet ones, what an adventure this has been. None of this could have happened had it not been for you. I have such a deep love and respect for you. I cannot wait to begin the next adventure!
Chapter 1

Introduction

Ecology becomes a more complex but far more interesting science when human aspirations are regarded as an integral part of the landscape.

Rene Dubos. 1980. The Wooing of Earth

While exploring the untamed forested coastline of the Eastern United States in 1624, John Smith said, “[the New World is] a Countrey rather to affright than delight one” (Dobbs and Ober 1996, p.xvi). The Puritans contrasting the Eastern forests to the bright and airy fields they knew at home said of the forested New World, “[it is] a hideous and desolate wilderness” (Dobbs and Ober 1996, p.xvi). The next 300 years of history brought cycles of forestland clearing to make room for crops, build shelters and ships, produce potash, paper, and charcoal. Uses and markets were discovered for every tree and wood fiber. Hillsides were eventually transformed into bare humps. The hideous and desolate forests had been tamed at last.

The resulting erosion and forest fires from heavy logging prompted the conservation movement. Between 1880 and 1910, the preservationists lobbied state and federal agencies to create public forest reserves (Aldrich 2006). Soon, the utilitarian minded were advocating for scientific forestry, tree planting, fire control, and inspiring landowners to practice sustained yield (Dobbs and Ober 1996). The forests grew back. People wanted to live in the forests. Selling tracts of forestland brought a better price than selling timber. In the Northeast, during the mid-1980s, corporations began buying up large tracts of land, subdividing and marketing them as vacation homes on “wilderness lots” in the real estate sections of The New York Times and The Boston Globe (Dobbs and Ober 1996).
The puritanical desire to tame the “hideous and desolate wilderness” had evolved into a modern citizens desire to live and recreate in the wilderness. This transformation, combined with a growing population, need for living space, and burgeoning economy puts people in an odd position. Despite ourselves, we are co-conspirators in a paradox of our own making: We like open space and living in or near forests so much that we build our homes there and fragment forests at unprecedented rates.

This is a study about people, forestland parcelization, and conservation. Specifically, this study is about how people who own forestland make decisions concerning the future of the land itself. How do private forest landowners (PFLs) plan for the future of their forests?

The building boom of the last several decades combined with historic shifts in ownership patterns may be threatening the long-term viability of private forests all over the country. According to the Natural Resources Inventory, 10 million acres of private forestland were lost to development between 1982 and 1997 (USDA Natural Resources Inventory 1999). This expansion from urban areas into rural lands has resulted in the parcelization of our forest, agricultural, and open space lands. Parcelization is the process of breaking individual ownerships into smaller parcels and increasing the number of owners. Forest fragmentation is a result of parcelization and refers to the disruption of forestland continuity.

Much of the land in the Eastern portion of the United States is privately owned. Conversely, in the West, the majority of land is held publicly (i.e., owned by federal and state governments). Private land is held by families, individuals, hunting clubs, organizations such as churches and Boy and Girl Scouts of America, and industrial interests. Collectively, PFLs determine how our forests are managed, enjoyed, and ultimately, whether or not they stay forests.
Problem Statement

According to a recent Brookings Report (2003), 385 acres of forest and agricultural land are lost to development each day in Pennsylvania. Wyoming is the only state that exceeds this daily loss of land to development. This rapid conversion of forestland to other uses, driven by an expanding urban fringe, is compromising the state’s forests and the benefits they offer at an unprecedented rate. An estimated 550,000 PFLs own nearly 70 percent of Penn’s Woods (Butler 2008). The overwhelming number and diversity of PFLs making their mark on the landscape makes it difficult to sustain a healthy forest.

Forests cover 60 percent of the state’s land area and provide many ecological, economic, and social benefits including clean air, water protection, plant and animal habitat, wood products, and recreation opportunities. These private forests are besieged by legions of people seeking an improved quality of life associated with rural areas proximate and/or easily accessible to urban centers. Their migration into rural areas is a leading cause of forestland parcelization. In addition, the lack of estate planning or the desire to pass land to more than one heir contributes to increased parcelization. To work toward maintaining healthy and productive forests, this study seeks to better understand the decision-making processes PFLs engage as they plan for the future of their forestland.

The research objective is to identify and better understand those factors leading to parcelization of forestland in urban fringe areas of the Commonwealth. Results from this study will address the following questions: 1) What thought processes do PFLs engage when considering the future of their forestland?; 2) What factors do PFLs consider when planning for succession?; and 3) What role, if any, can natural resource professionals play in encouraging PFLs to consider alternatives? This initial exploratory research will serve as the foundation for a
larger project with the Pennsylvania Bureau of Forestry and The Human Dimensions Unit at Penn State.

The dissertation is organized as follows: a review of the literature on private forestland ownership patterns as it relates to decision making concerning forest succession is presented in Chapter 2. Chapter 3 provides a theoretical framework guiding the study. Chapter 4 provides a description of the methodology. Chapter 5 is a presentation of key informant results. Chapter 6 presents sociodemographic, phenomenological, and semi-structured interview results. Chapter 7 provides a discussion of the results. Chapter 8 presents conclusive thoughts and research implications.
Chapter 2

Literature Review

Private Forest Landowners

Forests cover approximately 751 million acres of land, or about a third of the United States (USDA USFS 2010). Private citizens and organizations own approximately 430 million acres, or about 58 percent of this area (Best and Wayburn 2001). Privately owned forests provide essential services to all citizens: clean water, clean air, recreational opportunities, wood for fuel and building supplies, plant and animal habitat, food, medicines, stores of genetic wealth, climate stabilization properties, carbon sequestration, and aesthetic enjoyment. The decisions PFLs make concerning the health, viability, and sustainability of their forests has a direct impact on our lives and well-being. Knowing more about PFLs and how they make decisions concerning their land (e.g., whether and how to harvest; whether to subdivide and sell) affects anyone benefiting from the services their land provides.

Unfortunately, we know very little about PFLs on the national, regional, or state levels. Our knowledge of who owns forestland and why they own it is rudimentary at best (Best and Wayburn 2001). Despite the large amount of attention given to better describing PFLs over the past several decades, we continue to know too little about their attitudes, interests, needs, or how best to reach them. At the same time, the nation’s private forests have been increasingly threatened by population growth, urban sprawl, and the resultant issues of forest parcelization and fragmentation. As people move into the rural-urban fringe and forestland is further parcelized and fragmented, the services forests can provide can be dramatically lessened.
Many efforts to capture an essential understanding of PFLs and translate this information into improved programs and policies designed to inform and educate PFLs, planners, government agencies, and conservancies have been undertaken. For the most part, these efforts have been largely descriptive. The importance of PFLs to the nation’s timber supply, their management objectives, and their potential role in conserving forests underpin the myriad studies undertaken to better understand their ownership objectives, perceived benefits of holding forests, past actions, and future intentions (Kingsley and Finley 1975; Bliss and Martin 1989; Jones and Finley 1993; Bourke and Luloff 1994; Argow 1996; Brunson et al. 1996; Campbell and Kittredge 1996; Egan 1997; Stevens et al. 1999; Best and Wayburn 2001; Davis 2003; Butler and Leatherberry 2004). The National Woodlands Owner Survey (NWOS) published by the USDA Forest Service every 5-10 years (for each state) and the Pennsylvania Private Forest Landowner Study by Penn State’s Human Dimensions Unit are two examples of longitudinal studies attempting to understand PFL attitudes, characteristics, profiles, and socio-demographic data (NWOS 2007; Metcalf et al. pending; Longmire et al. pending). Together, these studies have significantly contributed to a better understanding of PFLs’ knowledge of their forests, motivations toward stewardship, and what they intend to do with their forests in the future.

Over the past twenty years, PFLs have typically owned smaller parcels of land and have become less likely to engage in forest management practices (Bliss and Martin 1989; Campbell and Kittredge 1996; Cordell et al 1998; DeCoster 1998; Best and Wayburn 2001; Mehmood and Zhang 2001; Davis 2003; Butler and Leatherberry 2004; Metcalf et al. pending). There is a direct positive relationship between parcel size and willingness to harvest. PFLs with larger parcels are more willing to harvest and practice timber management than those with smaller parcels (DeCoster 1998; Butler and Leatherberry 2004). In terms of maintaining a flow of forest products from private lands, this does not bode well for the forest products industry.
At the national level PFLs tend to be older than the general population. The average age of Americans 25 or older is 49 years, compared to 60 years for PFLs (Butler and Leatherberry 2004). Scientists who study PFLs and the human dimensions of forests point toward the “aging” population of PFLs as evidence that the next 20 years will bring a swell of land transfers leading to forest parcelization as these aged landowners sell their land or pass it to their heirs. However, since there is constant turnover of land to new and younger owners, it follows that average age will remain relatively constant through time (Finley personal communication 2008). According to the National Woodland Owner Survey, PFLs own land because it allows them to enjoy beauty, scenery, and privacy (Butler and Leatherberry 2004). Work by Ticknor (1993) in Illinois, Hodge and Southard (1992) in Virginia and Metcalf et al. (2010) in Pennsylvania confirms this finding and further dispels the myth that PFLs are motivated by economic returns through timbering (Jones, Luloff, and Finley 1995). Other priority reasons for owning forestland include conserving nature and biodiversity; the forest acreage is part of a farm or home site, and the desire to pass it on to heirs. In general, PFLs tend not to own land for economic returns (either development value and/or timber value). Yet, as the rural landscape proximate to urban areas change and grow, as larger tracts of forestland are divided and developed, PFLs’ reasons for owning forestland seem to be at odds with the reality playing out on the landscape.

**Pennsylvania’s Private Forest Landowners**

This section of the study provides a portrait of the Commonwealth’s forests and forest owners. Most of the information presented here is drawn from the first round of surveys from the multi-year Private Forest Landowner Study conducted by the Human Dimensions Unit at Penn State in 2006.
Forests cover 60 percent of Pennsylvania (PA DCNR 2004). An estimated 533,000 private forestland owner’s control 70 percent of this forestland (Butler 2008). Estimating PFL numbers is challenging because sampling techniques used in the US Forest Service Inventory and Assessment protocol (USDA FS 2007) tend to select large parcels, potentially and inadvertently ignoring smaller parcels (Metcalf 2010). Despite this, over time the number of PFLs is increasing as forests are parcelized. PFL numbers from the NWOS for Pennsylvania, using a consistent sampling methodology from 1980, 1994, and 2007, were 490,000, 513,900, and 533,000 respectively (Birch and Dennis 1980; Birch 1996; Butler 2007). At the same time, parcel sizes have decreased over the same number of years. In 1980, the average parcel size was 25 acres and declined to 22 acres by 2007 (Birch and Dennis 1980; McWilliams 2007).

PFL sociodemographic characteristics in the state are similar to those at the national level. The average age of a PFL in Pennsylvania is 57. PFLs in Pennsylvania tend to be well educated with 27 percent having had at least some college education, 20 percent earn a 4-year degree, and 18 percent have an advanced degree. The median annual household income in Pennsylvania in 2008 was $50,000 according to the U.S. Census. Income among PFLs tended to be higher than average with 40 percent earning $75,000 or more annually. Politically, fifty-four percent identify themselves as either conservative or moderately conservative. Only eleven percent identify as liberal or moderately liberal (Metcalf et al. pending).

The majority of Pennsylvania PFLs (92%) own 50 acres of forestland or less, controlling 45 percent of the private forestland in the state. The percentage owning ten acres or less is 63. The remaining 8 percent of the owners control 55 percent of the forestland.

Similar to national findings, Pennsylvania PFLs own forestland for a variety of reasons. Wildlife is most often cited (62%) followed by solitude (59%) and enjoyment of owning (58%). Incidental ownership (i.e., it came with the property) is cited by 49 percent of PFLs. Reasons for owning forestland vary among PFLs depending on the number of forestland acres owned. PFLs
owning smaller properties (< 20 acres) cite privacy, enjoyment of owning, and incidental ownership as top reasons for owning forestland. For PFLs who own medium sized properties (i.e., 20 to 200 acres), privacy and enjoyment of owning remain important. Hunting increases in importance for these owners. Among those PFLs with the largest properties (> 200 acres), hunting, timber, and recreation are the most often cited objectives. Wildlife is important across all categories (Metcalf 2008).

When asked to just choose the most important reason for owning forestland PFLs reasons vary slightly. For example, PFLs with less than 20 acres, solitude and enjoyment are most important. For PFLs owning between 20 and 200 acres, enjoyment and hunting are the most frequent reasons. Timber is the number one reason for landowners owning 200 to 500 acres. Timber is most important for owners who own between 500 and 1000 acres, and hunting again for those owning over 1000 acres. (Metcalf 2008).

Pennsylvania’s PFLs have a variety of future plans for their forestland. Again, referring to the PFL survey conducted in 2006 by the Bureau of Forestry and Penn State, respondents were asked how likely they were to engage in several different activities (i.e., subdividing and selling, selling as is, conservation easement, establishing a trust or family corporation, leave to one or multiple children, and/or clear forest for a road or building). Nine percent of PFLs plan to subdivide and sell, while 27 percent plan to sell their land as is without subdividing. Approximately 11 percent have an interest in conservation easements. Eight and 17 percent plan to establish a family corporation or trust respectively. Leaving forestland to children is the most common future plan among PFLs. The majority (52%) plan to leave forestland to multiple children. Thirty percent plan to leave land to only one child. Only eight percent and 11 percent plan to clear forest for a road or building respectively (Metcalf 2008).

PFLs live in a complex and continually changing landscape. According to Mehmood and Zhang (2001), death, regulatory uncertainty, urbanization, income, and financial assistance are
factors contributing to PFLs’ decisions to parcelize their land. Understanding PFLs’ characteristics, their reasons for owning, and the decisions they make concerning their land within the broader context of an urbanizing landscape is essential. The next section addresses the process of urban-rural landscape expansion.

**Expansion of the Urban-Rural Fringe**

When you cannot tell where the country ends and a community begins, that is sprawl. Small towns sprawl, suburbs sprawl, big cities sprawl, and metropolitan areas stretch into giant megalopolises — formless webs of urban development, like Swiss cheeses with more holes than cheese.

U.S. House, 1980

Population growth and household formation are the ultimate drivers of urban growth. Combine those two factors with growth in income and wealth and the outcome is new housing developments and land consumption for housing (USDC 1999). Often, outlying area population growth is the result of the redistribution of the metropolitan population (Heimlich and Anderson 2001). Metropolitan areas grow organically, like mold, with predictable growth stages. After new housing developments are built and occupied, new residents realize the need for new schools and roads, sewers, and water supply improvements. As an area’s infrastructure is newly constructed or updated, the expanded and/or improved infrastructure then attracts new housing. Shopping centers and businesses appear following and servicing the new population (Heimlich and Anderson 2001).

The U.S. continues to experience high rates of population growth, adding 1 percent annually (Riche 2000). The population grew from 150 to 250 million people between 1950 and 1990 and is expected to add another 150 million by 2050 (U.S. Census Bureau 2000). Increasing immigration and higher life expectancy have added to growth levels. Immigration levels today are
similar to those experienced in 1900. Then, as now, nearly a third of the nation’s new population is due to immigration from abroad (Heimlich and Anderson 2001). In addition, U.S. women are bearing 2.1 children on average, which is the rate necessary for a population to replace itself (Heimlich and Anderson 2001).

People prefer to live in or near open spaces. Fannie Mae conducted a survey (1996) confirming the prevailing U.S. consumer preference for detached single-family homes with yard on all sides. Fuguit and Brown (1990) showed that 70 percent of Americans prefer a rural or small town setting within 30 miles or more of a city with a 50,000 or larger in population. Thirty-five percent of those living in a small town or rural setting more than 30 miles distant state their preference for the same type of setting within 30 miles of a city. The rural/urban fringe receives pressure from both sides. While most people prefer their current living situation, those who would rather live elsewhere are more likely (by a 2 to 1 margin) to prefer a less densely populated setting (Brown et al. 1997).

There are attractive benefits to low-density housing on the expanding urban fringe. First and foremost it is cheaper. Land costs on the urban fringe are lower than in the urban core (Heimlich and Anderson 2001). Other benefits include access to open space amenities, lower crime rates, better air quality, more flexible transportation by auto, and distinct areas for housing, commercial, and industry uses (Gordon and Richardson 1997; Peiser 1989).

The Internet and other technological advances enable telecommuting and e-commerce, facilitating urban expansion (Kittredge 2004). New technology lowers the cost of communication and transportation, but tends to increases the size of the urbanizing area (Heimlich and Anderson 2001). Internet, cable, satellite capabilities, and optical cable are already available in many areas and will likely become more prevalent. Progressive workplaces recognize the health, social, and production benefits associated with employees working from home a few days weekly (lower stress, increased time with family and friends) (Heimlich and Anderson 2001; Horan et al. 1996).
Roads, sewers, and water provide the essential framework for development. New and better roads allow for out-migration from cities and also allow easier commutes into cities (Heavner 2000). Provided there is no control on growth, interstate highways with numerous interchanges and widening networks of feeder and tributary road construction make development inevitable (Heavner 2000). There is a dynamic here – first, the narrow two-lane roads in the remote corners of a metropolitan area are the first channels for new, low-density development. After achieving a level of development, homeowners demand upgraded road systems. This leads to additional development pressures (Heimlich and Anderson 2001).

Eventually, public water supplies replace private wells. Sewers are generally the last infrastructure investments to occur. These facilitate full-blown developments, often at density levels comparable to inner suburbs (Heimlich and Anderson 2001).

Despite its chaotic appearance, urban expansion occurs in regular and predictable spatial and temporal patterns. Beginning at the historical origin of any city (e.g., New York’s Battery, Baltimore’s Point, or Denver’s original Pueblo) growth expands outward at the urban fringe. This plays out on every radius leading from downtown (Sinclaire 1967; Alonso 1968; Brooks 1987), parcelizing the landscape in ways appearing inevitable. Although, Pollan (1998) and Gobster and Rickenbach (2004) have documented the growth of permanent homes in rural areas occurring ahead of the predictable spatial and temporal growth curve. Typically, these enclaves are in or near attractive natural areas and are far enough from urban centers where residents can maintain ties to towns and cities, but probably do not commute there daily. These areas offer a blend of natural and cultural amenities not found in the forest or the city, but in areas in the middle. Gobster and Richenbach (2004) suggest further exploration of these growing development hotspots to further our own understanding of how nature and culture can contribute to “sense of place” (Jorgensen and Stedman 2001).
Forest Parcelization

In the 1990s as metropolitan areas grew rapidly and development sprawled into rural areas many PFLs profited by subdividing and selling their land (Best 2002). The USDA Forest Service projects the U.S. will lose 23.2 million acres of forestland to development over the next 50 years (Haynes 2001). Conversion of privately held land to residential subdivisions is expected to be the primary cause of that loss. Nationally, more than 32 million acres of private forestland are in parcels smaller than 20 acres (Birch 1996; Butler 2008).

Many PFLs undoubtedly find themselves conflicted as changes and pressures from the outside and/or from personal life situations drive them to liquidate their forestlands. Decisions to harvest timber or sell forestland are complex and influenced by an array of factors. Landowner values, beliefs, and attitudes ultimately interface with personal financial situations, health/state of their forest resource, and lucrative alternatives for land (Mehmood and Zhang 2001; Best 2002; Kittredge 2004).

As life situations change (e.g., aging, health, encroaching sprawl, as income from harvesting timber no longer justifies high property taxes, and as land transfers become more prevalent), PFLs are making management decisions that increasingly parcelize their ownerships. The decision processes leading PFLs to parcelize their lands are not well understood. Their decisions certainly reflect a host of reasons including need and choice.

Anecdotal evidence suggests PFLs make decisions when life-changing events occur, for example when children go to college, during times of illness and/or death, or to pay estate taxes (Mehmood and Zhang 2001). Thus, even if their reasons for owning land are not economic, the choices PFLs make are made for monetary need. However, Mehmood and Zhang (2001) also indicate parcelization increases with income. Higher incomes increase purchasing power, enabling people to afford lifestyle changes (e.g., the ability to purchase a second home or to move...
to a more rural environment). The migration of urban residents to rural areas has increased greatly over the past twenty years (Egan and Luloff 2000). Kittredge (2004) suggested the rural-urban interface expansion is facilitated by the Internet enabling telecommuting and e-commerce. Additionally, second homes in rural areas are increasingly the primary residences for many (Levitt 2002). Real estate values continue to escalate as demand for residential development increases. The parcelization issue is complex and understudied, and has the potential to significantly alter the environment and negatively affect social, ecological, and economic well-being.

Mehmood and Zhang’s (2001) study of factors contributing to parcelization identified several components and attempted to provide empirical evidence to support their observations. Death, urbanization, regulatory uncertainty, income, and financial assistance for landowners were all found to affect the change in average parcel size. Interestingly, they found estate and inheritance taxes did not have a significant impact on parcelization. Gobster and Rickenbach’s (2003) research in Wisconsin’s Northwoods calls attention to the reality that drivers and/or effects of parcelization interact; some drivers are constants, others are value driven and change slowly over time, others only emerge when conditions are ripe or when they interact with other drivers.

Regardless of the reasons behind forest parcelization, people tend to not like its consequences. Rickenbach and Gobster (2003) engaged Wisconsin forest stakeholders (i.e., forest industry, public land manager, environmentalists, and PFLs) in several discussion forums concerning their perceptions of forest parcelization. They framed their analysis using the social, economic, and biophysical dimensions of sustainability. Half of the comments from participants revolved around the social dimensions. The strongest social theme was the changed landscape due to the influx of new people and resultant parcelization. Participants viewed the effects of
parcelization negatively, particularly in terms of their impact on recreation opportunities, forest health, local communities, and timber-based economies.

Even if PFLs are resigned to keeping their land intact and in the family, passing land to heirs can present challenges, even becoming a path for parcelization and fragmentation. Any property transfer can lead to parcelization (Best and Wayburn 2001). There are several land succession issues affecting estate settlement: too many heirs; not enough heirs; heirs with competing forestland values; heirs with no interest in property; and/or insufficient non-forest funding for estate taxes (Best and Wayburn 2001). Understanding PFLs, their relationships to their land, and their decision making processes concerning their land, will help address this crisis in an informed way.

Mater’s PFL offspring study (2001) focused on the attitudes and motivations of potential heirs. Her study highlighted several issues and challenges associated with transferring land to heirs. Asked about the key reason for owning forestland, offspring ranked forest stewardship third and ranked it last as a key benefit to owning land. Conversely, their parents ranked stewardship as first. Not surprisingly, offspring hoped to be paid for the ecosystem services their land could potentially provide. Approximately 87 percent thought they would inherit their parent’s forestland and 60 percent thought they would inherit the land jointly with their siblings. In all, Mater suggested the transition of forestland from parents to offspring will be tough, as siblings tended to disagree about several things concerning the land including: identifying conditions forcing them to sell land and the tools most important for helping to retain family lands.

**Ecosystem Effects of Parcelization**

Forestland parcelization and subsequent fragmentation have deleterious effects on the ecosystem. Smaller forestland patches and patch isolation are significant threats to biodiversity
worldwide (Rosenberg and Raphael 1986). Forest parcelization, fragmentation, and increased population density tend to diminish forest functionality for wildlife, water quality, and timber (Wear et al. 1998, 1999). Such effects are not immediate or dramatic, yet their subtle nature invites complacency (LaPierre and Germain 2005). As forests change, habitat suitability for different species changes as well (Best 2002). Fragmentation favors species that prefer forest edges over interior and which are more opportunistic (e.g., deer, raccoon, cowbirds, wild turkey). Interior species including warblers, tanagers, some woodpeckers, hawks, and owls and species requiring large home-ranges (e.g., bear and elk) are threatened by fragmentation (Finley 2004). Recent increases in bear/human conflicts are illustrative of the effects of exurbanization and subsequent forest fragmentation (Patterson et al. 2003).

Coincidental with threats to wildlife and biodiversity, parcelization and subsequent development effects water quality. For example, development increases nutrient loadings in streams. Runoff from septic systems, lawn fertilizers, animal wastes, and road salts are accelerated by increased impermeable surfaces (Heisig 2000; EPA 2001; Endreny et al. 2002; Hassett et al. 2003). The Chesapeake Bay Watershed, the nation’s largest estuary and one of the most productive ecosystems in the world, loses approximately 100 acres of private forestland daily to suburban development. The effects of this high rate of parcelization on the working forested landscape pose serious challenges to watershed managers (Cooksey 2000; LaPierre and Germain 2005).

Subdivision and parcelization increase the potential for development and pose serious implications for soil, water, biodiversity, and wildlife conservation (Dennis 1992; Drzyaga and Brown 1998). More owners and smaller parcels undermine efforts to protect and manage privately owned forest resources for their public benefits – including timber supplies, high-quality drinking water, and wildlife habitats (Best 2004). The accelerating national trend of forest loss and parcelization demands quick attention. Coordinating management across ownership
boundaries and maintaining forest ownerships in larger tracts can improve efficiency and effectiveness of conservation and stewardship efforts (Best 2004). How can this best be done?

Alternatives to Subdividing and Selling

Conservation Easements

PFLs are increasingly turning to land trusts and conservancies to meet their conservation objectives (Best and Weyburn 2001). Currently, there are more than 1,225 land trusts (or conservancies) in the US representing a 63 percent increase since 1988 (Land Trust Alliance 1998; Best and Wayburn 2001). By 1998, they had collectively protected 4.7 million acres of land (Best and Wayburn 2001). According to the Pennsylvania Land Trust Alliance (PALTA), currently, about 5.4 million acres of Pennsylvania have been conserved for agricultural production, sustainable forestry, public recreation, and other purposes (PALTA 2010). Organizations such as The Nature Conservancy, the Trust for Public Land, and the Conservation Fund are large and publicly popular, but smaller regional and local trusts have become much more common in recent years (Best and Wayburn 2001). These smaller entities are more focused and knowledgeable of area PFLs and can offer specialized attention (Best and Wayburn 2001); funding, however, is typically an issue for such entities. Smaller trusts tend to be more willing to accept donated land and less willing to pay market value outright.

A conservation easement (CE) is a legal tool for maintaining land in an undeveloped state (Bick and Haney 2000). With an easement, landowners (grantors) can enter into a CE with an easement recipient (grantee) by selectively selling or donating their land development rights in perpetuity. The landowner receives compensation through taxes saved (i.e., as a tax deduction) or revenue received from the grantee.
The easement can be applied to all or part of the ownership. Agreement terms can be flexible and may vary depending upon landowner goals, the recipient, and/or specific property characteristics (Rosenblatt 2002). The conservancy or trust holds the separated rights in trust ensuring the terms of the CE established by the landowner are enforced. Conservancies typically monitor properties yearly to ensure terms are met and may use legal enforcement if necessary (Best and Wayburn 2001).

First introduced in the 1930s, CEs were used primarily to protect agricultural lands, scenic views, and threatened habitats. In the 1970s the U.S. Internal Revenue Service allowed landowners to take tax deductions for land donated under CEs. Concomitantly, interest in agricultural preservation among the general public increased in the late 1970s as the public’s concern with food security and agricultural viability increased (Kline et al. 2004). These concerns led to the implementation of local, state, and federal farmland preservation programs (Kline et al. 2004).

Agriculture conservation in Pennsylvania began in earnest in Lancaster County in 1980 with the initial direct action to obtain farmland by a county designated board charged with administering a voluntary deed restriction program (Maynard et al. 1998). Previous efforts to acquire farmland for conservation had been thwarted by a lack of specific programming, despite the fact that in 1968, the state legislature authorized the Commonwealth to allow counties to acquire, hold, or preserve open-space near urban areas with Act 442 (Maynard et al. 1998). Lancaster County’s program merged with statewide efforts in 1989 (Daniels 1991). In the 1988 general election, 70 percent of Pennsylvania voters supported a referendum question asking if they favored incurring a $100 million debt to purchase farm conservation easements.

Concerns over rapid loss of farmland to development, food security, and agriculture viability in the 1970s provided the public and government impetus to preserve farmland. More recent recognition of the social values and environmental amenities of farmland have continued
to motivate public support for preserving farmland (Kline et al. 2004). Forests would benefit from similar public attention and concern. A combination of market factors (e.g., cost of timber and timber availability), and nonmarket factors (e.g., ecosystem services, biodiversity protection, carbon sequestration), inform the value society holds for forestland (Haynes 2003). Natural Resource Professionals (NRPs) and policymakers will increasingly need to pursue these goals to conserve the shrinking forestland base (Kline et al. 2004). Increased public awareness and concern over forest preservation will provide the impetus for publically and privately funded forest conservation efforts.

Easements on forestland have become more widespread and employed by PFLs who want to protect their property and keep it as a working forest (Best and Wayburn 2001). Despite this growing popularity in recent decades, little is known about the specific benefits of CEs for conserving working forests. Merenlender et al. (2004) conducted a review of the CE literature and found very little information on: 1) The resulting pattern of protected lands and resources conserved; 2) The emerging institutions holding CEs and the landowners they work with; and 3) The distribution of costs and benefits to communities and the general public. Kline et al. (2004) contends that some rural communities feel that restrictions on land development and logging curb economic activity. Conservation easements can reduce local property tax revenue by diminishing the fair market value of land (Weibe et al. 1996). Further, use-value assessment programs shift tax burdens onto landowners unable to participate in easement programs through the reduction of property taxes on large tracts of forestland (Newman et al. 2000). Since a greater proportion of land is enrolled in conservation programs in rural areas, rural communities feel tax burdens more severely than rural fringe or urban communities (Kline et al. 2004). There is an obvious need for more research into the social, economic, and ecological benefits CEs promise to provide.

Though CEs are increasing in popularity, they are not widespread. Despite somewhat obvious benefits to PFLs and communities, there are issues or barriers impeding landowners from
capitalizing on them. For donated easements, tax incentives may not provide enough compensation for many landowners. Unfortunately, there is little local government control over which areas are protected (Hubbard and Hoge 2005). For purchased development rights, the cost can be prohibitive for the grantee (e.g., a local unit of government or a regional conservancy (Parker 2004). Further complicating the process, grantors normally have to retain an attorney to negotiate the contract. They must also provide funds to offset annual compliance monitoring. In many cases, monitoring is for perpetuity. The initial grantor funding requirements can stifle PFLs who want to legally conserve their land (Hubbard and Hoge 2005).

**Forest Legacy**

The USDA Forest Service administers the Forest Legacy Program (FLP), which offers PFLs another option for conserving forestland. FLP, authorized in the 1990 Farm Bill, is administered through state forestry departments and the Forest Service provides funding for easement purchases. The state Forest Legacy committee assists identifying and protecting environmentally important, privately owned forestlands threatened with conversion to non-forest uses. Most FLP conservation easements retain the forest in private ownership but restrict development and require sustainable forestry practices (USDA FS 2010).

Participation in FLP is limited to PFLs. Similar to regular CEs, qualified landowners are eligible to collect income from the sale or the donation of property development rights, and many landowners can also benefit from reduced taxes associated with limits placed on land-use. After sale of the conservation easement, the landowner may make economic use of the property under easement. FLP protects the ability of the land to “provide opportunities for the continuation of traditional forest uses, such as forest management, timber harvesting, other commodity use, and
outdoor recreation” (USFS Guidelines 2010). The Forest Service Guidelines stipulate that although an easement can be written to allow public access to the land, this is not required.

**Family Limited Partnerships**

Starting in 2005, the Family Limited Partnership (FL Partnership) has become a useful vehicle for asset protection and estate planning. Forming a family partnership helps reduce estate tax and settlement costs, protects family assets, and provides for ownership succession and property control (Ambrecht 1993). An FL Partnership is not a land planning action like subdividing and selling land or selling development rights. The FL Partnership is a legal entity allowing families to hold property and to pass it from one generation to the next by discounting their estate value. By splitting income among family “partners” forming a partnership makes income taxable to individual partners according to their distributable shares under the partnership agreement. The income, once entirely taxable to the individual family breadwinner in a family, is now divided among their family members who may be in a lower tax bracket (Lifton 1951). The estate tax reduction can be accomplished by allowing a PFL the ability to shift the value of the estate, without loss of control, by gifting limited partnership interests to children or other family members (Mintz 2010). The option to form an FL Partnership allows PFLs to hold their forestland rather than subdividing it and/or selling it for profit. Further, according to Ambrecht (1993), because interests can be restricted to the family, a family partnership can protect against third parties acquiring a partnership interest.
Making Decisions about Land

The consequences of forest parcelization are broad and sweeping, affecting people, wildlife, and ecosystems across the landscape. There are myriad reasons why PFLs parcelize their forestland. These decisions are made individually (or within the family) and are prompted by social, cultural, biophysical, and economic conditions and pressures. Studies of PFL decisions concerning the future of their forestland are rare. Stavins and Jaffe (1990) highlighted impacts large public investments had on PFLs decisions concerning the future of their forestland. In their example, the U.S. Army Corps of Engineers and the U.S. Soil Conservation Service’s flood control and drainage projects in the Lower Mississippi Alluvial Plain made agriculture more attractive to forest landowners and encouraged wetland depletion in the bottomland hardwood forest. The authors suggested: landowners responded to economic incentives in their land-use decisions; the federal flood control and drainage projects led to higher rates of forest-to-agricultural land conversion; and federal projects had this impact because they made agriculture feasible on newly cleared land. This study highlighted the interaction between government incentives and landowner decisions. Due to the paucity of literature concerning private forestlands and decision-making, there is a need to find it among other disciplines. Following, is a discussion of decision-making found in other literatures, including neurology, psychology, and business.

According to March (1994), understanding how people make decisions requires knowledge of context, that is, details about the historical, social, political, and economic worlds surrounding the decision and the individuals involved. Rational choice is the most common interpretation of decision-making (March 1994). Rational in this sense means the decision is calculated or as March says “coldly materialistic.” A rational procedure for making decisions explores these questions: 1) What determines which alternatives are considered? 2) What
determines the expectations about consequences? 3) How are decision maker preferences created and evoked? and 4) How is a choice made among the alternatives in terms of the values of their consequences (March 1994).

Theories of rational choice assume all alternatives and consequences are known to the decision-maker. This rational framework is endemic to theories of human behavior. Unfortunately, pure versions of rational choice are hard to accept as credible portraits of individual actors. It is almost common knowledge that not all alternatives are known, not all consequences are considered, and not all preferences are evoked at the same time. Rationality is limited. Decision makers desire to be rational, but are constrained by limited cognitive capabilities and incomplete information. Outcomes or consequences of possible actions will never be known precisely ahead of time (Bellman and Zadeh 1970).

Decision makers are hampered by limited attention, memory, comprehension, and communication (March 1994). Simply put, not everything can be attended to at once. Busy lives demand attention on many fronts. Too many signals are received, too many things are relevant to the decision, and little attention can be or is allocated to all things. Further, memories are faulty, records are not kept, and histories are not recorded. Finally, communication among various entities involved in decision-making is not easy. Communicating across disciplines, across generations, across cultures is exceedingly difficult. Struggling with these limitations, decision makers maintain the basic framework of rational choice but modify it to accommodate difficulties. March (1994) calls this adapted framework limited rationality.

The modified framework used to make decisions tends to stabilize interpretations of the world. Stereotypes are used to infer unobservable from observable elements. Typologies are used to categorize people. For example, attitudes (e.g., liberal, conservative) and traits (e.g., extroverted, friendly, independent) are typically used typologies often used. The world is understood via socially developed theories, schemas, and scripts that suppress discrepancies and
fill in missing information (March 1994). In short, decision makers look for information, but see what they expect to see and overlook unexpected things. Memories are less recollections of history than constructions based on what people thought might happen.

Recent work with forest owners in Finland focused on trying to help them overcome such decision-making limitations. Hujala et al. (2007) holds that their extension service (which essentially sells management plans to farm-forest owners) is no longer sufficient to satisfy the needs and demands of new forest owners with diversifying ownership objectives and management strategies. New efforts there reflect a customer-oriented forest planning structure as a way of engaging and satisfying the growing number of new forest owners. Emphasis is placed on decision-making and decision-support needs.

Ultimately, decisions PFLs make concerning the future of their forestland affect others. Do PFLs have a responsibility to others in terms of maintaining a forested landscape, providing a consistent timber supply, and/or addressing ecosystem services? Anecdotal evidence suggests most land subdivided and sold, and taken out of production, is done for monetary gain. Understanding the consequences of their actions may have a significant impact on the actual decisions PFLs make concerning the future of their forestland. In many ways, the public relies on PFLs to maintain healthy forests for a variety of reason already explored; therefore, issues of self-interest and trust relating to decision making and forest planning merits attention.

Sanfey (2007) reports: “… people’s choices do not conform to a model in which decisions are driven by financial self-interest” (pg. 598). Recent social decision-making research combines insights from game theory and neuroscience and suggests many of our most important decisions are made in the context of social interactions, which depend on the decisions of others. Sanfey used game theory to help him understand and explain situations in which decision-makers needed to interact with one another. In the ultimate game (UG), two players must divide a sum of money, with one of them specifically proposing the division (the proposer). “The responder has
the option of accepting or rejecting the offer. If the offer is accepted, the sum is divided as
proposed. If the offer is rejected, neither player receives anything (pg. 599).” Classical game
theoretical analyses predicts that rational, self-interested players will make decisions in the game
based on denying increased pay-off for all game players. Thus, the responder will accept any
offer and knowing this, the proposer will always offer the smallest non-zero amount. However,
players rarely play according to this strategy. More often than not, observed behavior
demonstrates that players will go for a 50/50 split.

The standard prisoners dilemma game (PDG) is about trust between players and offers
additional insights into decision-making. In PDG, two players simultaneously choose whether or
not to “trust” one another without knowledge of their partner’s choice. The best outcome, or
payoff, for a player happens when the opponent trusts and they themselves do not, and the worst
outcome occurs under the opposite situation (the player trusts while the opponent does not).
Mutual trust yields a modest payoff to both players. Mutual defection (or non-trust) yields the
lowest payoff, which is what classic game theory predicts would be the most common outcome.
Sanfey’s experiments demonstrate that 50 percent of the time, players exhibited mutual trust.

Eventually, every PFL will have to make a planning decision about his or her forestland
(including no decision). The decisions PFLs make affect others and could be mutually benefiting
or not. Sanfey’s experiments demonstrate that half of the time decisions people make are
mutually beneficial and involve significant emotional processes (rather than excluding emotion
from the process which was the previous scientific position).

There exists a significant amount of literature concerning emotion, decision-making, and
the biological substrate of the human brain. Classical economic theory, which posits that decision
are made on the basis of human self-interest, consistently removed emotion from the decision-
making process. The physical properties of the brain, along with Sanfey’s experiments previously
discussed, question the accuracy of classical economic theory and rational choice and how they relegate emotion to the background (Sanfey et al. 2003).

Neuroeconomics seeks to ground economic decisionmaking in the biological substrate of the brain (Sanfey et al. 2003). Again Sanfey uses the UG to investigate neural substrates of cognitive and emotional processes involved in economic decision-making. Scans of players’ brains as they responded to the game and the fair or unfair proposals of others showed activity in brain areas related to emotion and cognition. Heightened activity in the anterior insula for rejected unfair offers suggests an important role for emotions in decision-making (Sanfey et al. 2003).

Bechara et al. (2000) demonstrates the influence emotion have on decision-making by picking-up on signals in the brain that arise in bioregulatory processes. Most theories of choice use a cognitive perspective, assuming that decisions derive from an assessment of future outcomes of various options and alternatives through cost-benefit analysis. As well, emotion was a consequence of decision-making (e.g., regret after a decision) rather than as the reactions arising from the decision itself during deliberation. Bechara et al. propose “…individuals make judgments not only by assessing the severity of outcomes and their probability of occurrence, but also and primarily in terms of their emotional quality” (pg. 305). Bioregulatory signals such as those constituting feeling and emotion provide the principle guide for decisions (Bechara et al. 2000). Others, such as LeDoux (1997) and Coricelli et al. (2007) corroborate the theory that decision-making is strongly influenced by emotion.

In this study, we are interested in the decision process PFLs engage as they plan for the future of their forestland. These decisions are made individually (or within the family) and there is evidence to support that decision-making is influenced by an individual’s feelings and emotions. Research by Coricelli et al. (2007) suggests individuals learn to make better decisions based on their anticipation of regret. When the brain is actively engaging potential choices (i.e.,
planning), it is anticipating possible future consequences of decisions. These patterns reflect learning based on cumulative emotional experience. For PFLs, contemplating divestment options or engaging potential choices for the future of their land can be likened to a method of planning.

**Planning and Decision-making**

How is planning tied to decision-making? Planning refers to any detailed method, formulated beforehand, for doing or making something. In the context of this investigation, planning precedes decision-making. Planning informs the decision maker. For PFLs, planning for the future of their forestland would include among other things, creating a last will and testament, meeting with a tax advisor or lawyer, and learning about various divestiture options (e.g., easements, selling land, subdividing, land trusts, limited liability corporations). Other, less formal ways to plan might include talking to heirs about caring for the land, including them in management decisions, and preparing them for ownership. Unfortunately, we understand very little about how PFLs plan. We see the results of their planning, or lack thereof, in the decisions they have made with their land.

Whether planning at the individual level leads to better decision-making depends on myriad things including the level of planning, family situations, and above all else, what defines a better decision. Stakeholders, or entities who would benefit or not, from land planning include the: land itself; flora and fauna; neighbors; residents in the community, region, county, state; and finally the individual PFL and their family. A good decision for one may not necessarily be a good decision for the rest.

Results from Kline and Alig’s (1999) land use study in Oregon showed planning did not lead to better decision-making. In this case, land use planning was implemented to control development on forests and farmland on a regional level. Oregon’s land use planning program
concentrated development within urban growth boundaries, but did not necessarily reduce growth and development outside the boundary.

**Summary**

Though there has been recent and significant research exposing the characteristics, attitudes, values, and behaviors of PFLs, very little is known about how they make decisions concerning the future of their forestland. We understand they own land for reasons other than simple economics, yet the forested landscape is more parcelized and fragmented than ever. As urban populations expand outward and as the price for forested land continues to increase, PFLs are making decisions that further parcelize the landscape.

Conservation easements, the Forest Legacy program, and family limited partnerships are other options available to PFLs, but they are underutilized for a variety of reasons including PFLs lack of knowledge about these programs. Making decisions in general is not an exact science and is fraught with lapses in memory, miscommunication, assumptions, and busy lives. Still, we are learning from game theory that humans tend toward decisions that are mutually beneficial. Further they are not inclined to exclude emotion from their decision-making processes.

The implications for forest planning are cryptic at best. However, understanding that emotions and the desire for cooperation and trust play major roles in decision making may improve efforts to educate and inform PFLs as to their planning choices and consequences of those choices.
Chapter 3

Theoretical Framework

The qualitative portion of this study uses inductive rather than deductive reasoning. Hypotheses are not formally made or tested. Instead, through field observations, empirical generalizations are derived from patterns and regularities drawn from the interview data. General conclusions about decision-making processes emerge from participant’s experiences of planning, or not, for the future of their forestland. These conclusions will inform township and county planners, policy makers, and natural resource professionals about how PFLs think about and plan for the succession of their forestland.

The study was guided by several factors found in the extant literature concerning causes of parcelization. However, the lack of research and literature germane to PFL decision-making and forest planning resulted in the decision to use an exploratory, qualitative framework in this research. Also relevant to the investigation are my own biases and assumptions concerning forest planning, succession, decision-making, and land tenure. These assumptions were made explicit at the outset of the study and every effort was made to ‘set them aside’ or ‘bracket’ them during field observations, theme generation, and interpretation (Pollio, Henley, and Thompson 1997; Thomas and Pollio 2002). These assumptions are relevant to the overall structure and guiding elements of the study because they bring to light factors contributing to forest planning not necessarily found in the literature. A more detailed discussion of the bracketing procedure can be found in the methods chapter (Chapter 4) and bracketing results are presented in the conclusions chapter (Chapter 8). This chapter presents: 1) the investigative process used to collect data in this study; and 2) a theoretical conceptual model detailing factors and processes associated with future forest planning.
Investigative Process

Fundamental to this study was the need to engage PFLs concerning their forest planning and decision making processes, both during the planning process, and post planning and decision process. In all, there are three groups of landowners interviewed for this study. The subdivide and sell and conservation easement groups represent landowners who have committed to a land planning decision (i.e., they have either subdivided and sold/gifted or conserved land). The no action group represents landowners who have not committed to a decision and are in the midst of their planning and decision-making process. The primary means of eliciting information from landowners was through an open and in-depth phenomenological interview. Key informant (KI) and semi-structured interviews, as well as a sociodemographic questionnaire allowed me to contextualize the information I was gaining from PFLs and broadened my understanding of their experiences. The following section describes each of these methodological approaches and ascribes reasons for using them.

Key Informant Interview

To better understand the broader social, economic, and biophysical context within which PFLs were making successional decisions key informant interviews were conducted in three study counties. These interviews were conducted as a first step in the investigation. I felt it was important to initially understand issues in the community surrounding historical and current trends in growth and development; perceptions of forest health and the quality of the environment in general; and concerns or anxiety within the community over development and forest change.
Phenomenological Interview

Phenomenological interviews were conducted with PFLs in each of the three groups (i.e., sold or subdivided, no action, and conservation easement) to better understand their planning and decision-making experience. A detailed description of phenomenology, including its historical and philosophical roots, is provided in the following chapter (Chapter 4: Methods). This particular interview method provided an extraordinary opportunity to simply sit and listen to PFLs’ “stories” about their planning and decision-making experiences without interfering or interrupting their telling with ideas or questions I thought important. In this way, the data I collected was exclusive to their experience.

Semi-structured Interview

The semi-structured interview (Appendix B) allowed me to ask PFLs specific questions concerning their planning and decision-making experiences in light of what I learned via the KI and phenomenological interviews. The semi-structured interview also allowed me to collect consistent information from all PFLs concerning ownership characteristics (e.g., how much land they own, how much is forested, how many parcels, and where parcel(s) are located and related information they may not have discussed during the phenomenological interviews. A short sociodemographic questionnaire (Appendix C) followed the semi-structured interview. The questionnaire allowed me to collect basic information about the PFL, such as age, education, employment, income, and how they describe themselves politically.
Framework for Analysis

By inheriting and/or purchasing forestland, a PFL enters a planning process, which eventually leads to a succession planning decision regardless of the level of commitment to planning or the decision made. A PFL enters this planning and decision-making process having acquired a parcel(s) of land through purchase, inheritance, or both. This parcel(s) is imbued with specific characteristics (e.g., size and amount forested), and will eventually be either subdivided and sold or gifted, put in some form of easement, or neither of these options. Regardless of their attachment to the land, ownership values, or planning awareness, the acquisition of land initiates a planning and decision-making process that does not conclude until the land is completely divested.

Sociodemographic Characteristics

Sociodemographic characteristics of PFLs may play a role in their efforts to plan for the succession of their forest and decisions they make. The lack of research in this area presented some challenges in drawing parallels between this and other studies. However, the related literature indicates that age, gender, education, employment status, family status and number of children, years living in their community, annual household income, and political leanings each influence the kinds of planning one is willing to engage and ultimately the decision they make concerning the future of their forestland.

Forest Parcels: Land Acquisition and Property Characteristics

The acquisition of forestland, either through inheritance, purchase, or a combination of the two, marks the beginning of a planning and decision-making process PFLs are obliged to
engage. The size of the parcel(s) and how much of it is forested may potentially play a role.

Previous survey research in Pennsylvania (Metcalf 2008) shows that PFLs’ reasons for owning forestland vary depending on the acres of forestland owned. For example, PFLs’ who own small to medium sized properties, between one and 200 acres, cite privacy and enjoyment of owning as their top reasons for owning forestland. PFLs’ who own parcels larger than 200 acres cite timber and hunting more often. The degree to which they manage their forestland (e.g., harvest trees) also depends on parcel size (Butler and Leatherberry 2004). For example, those owning larger parcels tend to manage their forestland more than PFLs’ owning smaller acreages.

**Forestland Succession Planning**

The literature is limited in terms of research on PFL succession planning. In specific states, several ownership succession educational materials are available to PFLs through extension services. Oregon States’ *Ties to the Land* (Citation) is one example. *Ownership Succession: Plan Now for the Future of Your Land* (Demers 2009) via the University of Florida Extension is another example offering awareness education to PFLs concerning succession planning.

Combined, these efforts offer planning steps for PFLs as they consider divestment options for their forestland. These steps include: 1) discussing visions and goals for the land with a spouse; 2) having a similar discussion with the family; 3) create a family business structure to own the land; 4) choose and train a successor; 5) hold regular family meetings to discuss concerns, decisions, and business; and 6) create non-financial reasons for keeping the property (Demers 2009).

*Ties to the Land* is a DVD-based workshop resource, which promotes the transfer of land, but also the transfer of a commitment to good management and a passion for the land as well (*Ties*
to the Land 2010). The educational materials have been designed for use in communities around the country. Despite tax laws and other rules and regulations being state or region specific, Ties to the Land focuses on family dynamics, which it claims are universal. For a fee the workshop DVD and workbooks can be sent to any group or person willing to facilitate the workshops and learning sessions. There is no information on how many people have used the curriculum or have found it helpful. However, two states, Minnesota and Florida, have adopted its educational framework and approach, which speaks toward the programs success and reach.

**Decisions to Subdivide and Sell Forestland**

There is an inverse relationship between the number of private forest landowners (PFLs) and parcel size (Birch 1996; USFS NWOS 2007; Metcalf et al. pending). A review of the extant literature suggests myriad reasons for this trend. Estate and/or transfer taxes, urbanization, death, and medical and college costs are often suggested as reasons why PFLs subdivide and sell forestland.

Mehmood and Zhang (2001) reviewed the causes of parcelization gleaned from the literature and offer some empirical evidence on their validity. They suggest the causes of parcelization divide into two categories: supply and demand. This implies the causes of parcelization reduce neatly into an economic framework. On the supply side, the literature points to several key items: death, taxes, and uncertainty (DeCoster 1998; Mehmood and Zhang 2001). Often, when a PFL dies, the land is either: 1) divided among heirs; and/or 2) subdivided and sold to pay estate, inheritance, and property taxes. Out of financial necessity, PFLs and their families divest themselves of their forestland. In addition, current and anticipated land-use regulations may affect how PFLs perceive forest investments. This uncertainty could lead to increased forest
fragmentation (Louisiana SAF Policy and Legislative Committee 1996; Rose and Coate 2000; Mehmood and Zhang 2001).

From the demand side, lifestyles and the effects of urbanization fuel parcelization (DeCoster 1998; Mehmood and Zhang 2001). Living in or near the woods is a growing lifestyle trend. Both the USFS NWOS surveys and the PA PFL study (Metcalf et al. pending) acknowledge people tend to own forestland for privacy, recreational use, wildlife values, aesthetics, and other amenity-related reasons (USFS NWOS 2007; Metcalf et al. pending). It is common for people to live in or near the woods and to commute to urban centers (DeCoster 1998). As urban centers expand outward, land for development becomes more valuable (Lewis 1995). Studies by Barlow et al. (1998) and Befort et al. (1988) documented the effects urbanization had on land-use patterns. Urbanization impacts how land is used and significantly alters forested landscapes (DeForest 1991; Shands 1991; Harris and DeForest 1993).

**An Empirical Exploration of Parcelization**

Mehmood and Zhang (2001) attempted to measure parcelization and empirically investigate the significance and magnitude of the independent variables gleaned from the literature. They assumed a linear relationship between the change in average parcel size in each state (their dependent variable) and a host of independent variables representing causes of parcelization: death, taxes, income, uncertainty, and urbanization. In addition, they factored in two potential state-level drivers not typically acknowledged in the literature: available timber market (i.e., an active timber market) and state support of PFLs (i.e., the presence of cost-share programs). The lack of an active timber market may provide an incentive for PFLs to sell land instead of practicing forest management. Similarly, the absence of cost-share programs may lead PFLs to subdivide and sell their land.
In an OLS regression, this model was able to account for 58 percent of the variation in parcel size. Urbanization, income, land-use regulation uncertainty, and cost-share measures were positively related and significant at the 0.5 level. The death rate variable was positive and significant at the 0.01 level. Taxes and forest industry variables were not significant.

Conversely, PFLs can avoid subdividing and selling their land by selling or donating a conservation easement. While the literature is replete with information on conservation easements including the recent emergence of land trusts, easement case studies, and tax laws dealing with easements, there is a dearth in the literature concerning how people decide to conserve land.

**Decisions to Conserve Forestland**

Between 1982 and 1992, 8 million acres of farmland and 5.2 million acres of forestland in the United States were converted to urban or suburban uses (Vesterby et al. 1997). In response, voters in many states supported efforts to maintain open space amenities and reduce congestion by passing bond issues totaling $21.4 billion dedicated to land conservation and restoration (Land Trust Alliance 2003b). Despite the public’s ability to fund open space preservation on privately held lands, the decision to sell or donate development rights on these lands remains personal. Given this dedication of public funds, a critical question to be answered is “What factors contribute to a PFLs’ decision to sell or donate development rights on their forestland?”

Anderson and King (2004) conducted a laboratory experiment using a strategy game that modeled conservation decisions. The game tested whether the decision to conserve land was driven by private incentives or the desire to make socially equitable conservation decisions for the public’s benefit. Findings suggested conservation decisions were based on the land’s private value, not its public value. Anderson and King (2004) concluded it was private tax benefits, rather than the desire to provide a public good, which drove the conservation decision.
The use of tax incentives to encourage landowners to donate conservation easements has become increasingly popular as policy makers seek ways to mitigate urban sprawl (McLaughlin 2004). Tax incentives have worked moderately well to encourage private landholders with the financial means to bear a significant portion of the economic cost of protecting their land through the donation of their property rights (McLaughlin 2004).

Anella et al. (2004) addressed ranch families in the west and the decision they may face of either saving or selling the ranch. This decision is often influenced by whether the next generation wants to continue ranching. The increasing value of land for development and declining cattle prices are forces beyond the family’s control, often conspiring to decide the future of the property. The farming literature is replete with examples of inheritance and succession issues among farm families. Issues emerged from, among other things, capitalist production relations and sociocultural shifts:

… relationships and decision-making within the farm family have become increasingly depersonalized and objectified because of commoditization … but the family has also changed, and that new links between farm and family reflect general tendencies of individualization and emancipation” (de Haan 1994).

De Haan suggested that along with economic and structural changes promoted by a globalizing economy, there is evidence that families are changing too. He warns that we cannot deny the intermediary role of the farmer who thinks and behaves according to rules not necessarily imposed by capital.

Salamon et al. (1986) speaks to the role of family relationships, suggesting family farm continuity was influenced by particular father-son working arrangements and other subtle practices in two farming communities in the mid-west. These practices promoted intergenerational harmony and encouraged smoother successional processes.

Tax incentives, market values for land, and familial relationships all potentially factor into people’s decision to conserve land. Conservation easements have been employed to conserve
land since the late 1880s, albeit sparingly. Since then, and especially in the latter part of the 1970s, the use of conservation easements has grown as states have adopted, clarified, and revised the easement law to suit their needs.

Summary

Thought processes and factors contributing to how PFLs plan for the future of their forests are examined in this study. A thorough and better understanding of this process requires eliciting information from PFLs who have already made their planning decision or are in the midst of doing so. Data collection will begin with KI interviews to contextualize the information collected from PFLs. Phenomenological interviews followed by semi-structured interviews with PFLs will be conducted to elicit their detailed planning and decision-making experiences. Finally, sociodemographic information will be collected from each PFL to compare my sample with the larger PFL population. By understanding how land is acquired, particular parcel characteristics, the planning process, and the decision I hope to better understand the factors PFLs’ consider as they plan for the future of their forest (see Figure 3.1).

Figure 3.1. Landowner and parcel characteristics and planning processes associated with succession and decision-making.
Chapter 4

Methods

This exploratory mixed-methods study is the initial phase of a study concerned with forest parcelization in Pennsylvania. It focused on the decision-making processes PFLs engage as they plan for the future of their forests. Key informant (KI), phenomenological, and semi-structured interviews were used to help better understand factors influencing how PFLs make decisions about land succession. Findings from this initial phase will inform a statewide mail survey of PFLs concerning parcelization and estate planning.

Following is a discussion of the mixed-methods approach used in this initial phase of the parcelization study. It provides reasons why we did not resort immediately to conducting a quantitative survey, instead choosing to do in-depth (phenomenological) interviews. Next, there is a summary of the phenomenological traditions of inquiry and a discussion of its philosophical roots and methodological foundations. Finally, site and participant selection are covered, as are details concerning data collection and analysis.

Qualitative, Quantitative, and Mixed Method Paradigms

The field of mixed methodology, or the third methodological movement, evolved in response to controversies between advocates of qualitative and quantitative approaches and is a pragmatic way of capitalizing on the strengths of both (Tashakkori and Teddlie 2003). Each approach has distinct philosophical groundings, goals, and histories. Lincoln and Denzin (2000) provide an informative description of both qualitative and quantitative protocols:

Qualitative implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured (if measured at all) in terms of quantity, amount, intensity, or frequency.
Quantitative studies emphasize the measurement and analysis of causal relationships among variables, not processes.

Qualitative research primarily concerns those processes by which social experiences are given meaning, and focus on how individuals make meaning of their lives and experiences (Creswell 1994; Guba and Lincoln 1994). Qualitative researchers see rich description of the social world and phenomena as an integral part of their reporting. Qualitative research follows an inductive research design based on observations leading to theory making or verification. There are multiple realities or multiple truths derived from one’s construction of reality. Reality is socially constructed and so is constantly changing (Berger and Luckman 1966). Variables and categories germane to the study emerge during the process as opposed to being pre-identified in the beginning. Understanding context (e.g., cultural and historical influences) is an important aspect of qualitative research.

Conversely, quantitative methods use hypothesis testing, variable measurement, and statistical procedures to determine whether predictive generalizations of a theory hold true (Creswell 1994). The quantitative paradigm is based on positivism. Science is characterized by empirical research and all phenomena can be reduced to empirical indicators, which represent the truth. There is only one truth, which is an objective reality independent of human perception. Epistemologically the investigator and investigated are independent entities. Quantitative researchers try to remain independent from what they research. This distance aids them in remaining objective and not colored by bias or prejudices. Objectivity is the cornerstone of quantitative research.
Beyond Survey Research

In the end, both qualitative and quantitative researchers, and those that mix the two, think they know something about society worth telling to others, and they use a variety of forms, media, and means to communicate their ideas and findings (Becker 1998). Much past PFL research (e.g., USDA FS 1989, 1994, and 2007) has been quantitative and constrained by the inherent limitations of survey research (Bliss and Martin 1989). In studying PFLs, surveys are effective ways of characterizing landowners, collecting attitudinal data, ascertaining management objectives and future management intentions, and sociodemographic data from large populations of people (Davis 2003). The survey approach has several additional strengths: 1) A high degree of acceptance in the scientific community; 2) Potential to generate statistically valid generalizations about the population sampled; 3) Effective way to assess sociodemographic variables of PFLs; and 4) It is easily replicated and its conclusions validated. Bliss and Martin (1989) identified approximately 200 PFL surveys conducted between the late 1960s and the late 1980s. Since Bliss and Martin published their study, many other surveys were completed including several iterations of the National Woodland Owners Survey (USDA FS 1994, 2007), Kleunder and Walkingstick (2000), Kendra and Hull (2005), and Pennsylvania’s Private Forest Landowner Study (Metcalf et al. pending; Longmire et al. pending).

Bliss and Martin (1989) suggested there is a lack of new insights regarding PFLs and this lack may be the result of stagnating research methods. There are several limitations inherent in collecting data using only a survey (Bliss and Martin 1989). First, predetermined questions and answer categories necessitate researchers know what questions to ask and which answers are appropriate, especially in “closed” end-type questions. Second, the unit of analysis is the trait not the individual. If the study goal is to understand individuals’ behavior and motivations, it is essential to study the individual as a whole. Third, surveys describe selected characteristics of
only one moment in respondents’ lives (longitudinal surveys can be an exception). Fourth, survey research has little means by which to evaluate data quality. Qualitative methods can address some of these limitations. A combination of quantitative and qualitative data collection can be most valuable, as the methods complement rather than conflict with each other.

**Mixed Methods**

Some argue qualitative and quantitative methods are best used in concert. There is increased understanding and explanatory power in drawing from the strengths and minimizing the weaknesses of quantitative and qualitative methods in research studies (Johnson and Onwuegbuzie 2004). Its logic of inquiry is pragmatic, including the use of induction (discovery of patterns) and deduction (testing of theories and hypotheses) (Johnson and Onwuegbuzie 2004).

According to Johnson and Onwuegbuzie (2004), in constructing mixed method designs a researcher must decide: 1) “Whether or not one wants to operate largely within one dominant paradigm; and 2) Whether one wants to conduct the phases concurrently or sequentially.” It is necessary to integrate the findings from both at some point (e.g., a qualitative phase might be used to inform a quantitative phase, sequentially, or if the phases are conducted concurrently the findings should be integrated during the interpretation of findings” Johnson and Onwuegbuzie 2004:20).

Specifically, using qualitative methods initially (e.g., focus groups, facilitated group dialogue), complemented by a deductive inquiry (mail or telephone survey) is a powerful way to address a social phenomena. Qualitative research is more exploratory in nature and is particularly useful when the variables and categories of a problem are unclear. Using a qualitative approach initially can provide clear relationships or patterns of meaning among actors and/or phenomena. Such clarity would help researchers better understand how and/or what types of questions to ask
when engaging a broader audience in a survey. The present study used such an approach. Beginning with key informant, phenomenological, and semi-structured interviews we hope to bring parcelization as a social movement into better focus before beginning to engage broader audiences.

**Phenomenological History and Philosophy**

“Without thereby disclosing the foundations of a phenomenon, no progress whatsoever can be made concerning it, not even a first faltering step towards it, by science or any other kinds of cognition” (Colaizzi, in Valle, King, and Halling 1989:171). The efforts of this exploratory study are to disclose the foundations of how PFLs make decisions regarding the future of their forestland. Phenomenology involves the collection of participants’ experiences of a particular phenomenon. The phenomena in this case are PFLs’ forest planning decisions (i.e., subdividing and selling or gifting, selling/donating a conservation easement, and/or no action). Ideally, patterns and relationships of meaning within and across their experiences will emerge (Polkinghorne 1989; Valle, King, and Halling 1989; Creswell 1994; Pollio, Henley, and Thompson 1997; Thomas and Pollio 2002). Phenomenology is a way to determine the meanings of an experience, for the people who have had it, and to reduce those experiences to a fundamental meaning or “essence” (Polkinghorne 1989; Valle, King, and Halling 1989; Creswell 1994; Thomas and Pollio 2002). These essences will provide the foundation behind the parcelization phenomenon.

Literally translated, phenomenology is the study of experience. The development of specific methods for studying human experience is considered one of the primary contributions of the method (Valle, King, and Halling 1989). The historical and methodological roots of phenomenology tap into the philosophical ideas of Edmund Husserl, Soren Kierkegaard, Martin
Heidegger, Jean-Paul Sartre, and Maurice Merlou-Ponty among others. Each brought a new perspective or idea to the budding philosophy. Edmund Husserl, a German mathematician and philosopher, is credited with the initial idea of phenomenology and for coining the term. His expressed aim in developing phenomenology was to allow us to contact phenomena as we actually live them out and experience them (Husserl 1970). Husserl meant for phenomenology to be a rigorous and unbiased study of things as they appear so that one might come to an essential understanding of human consciousness and experience.

Building on the idea of understanding phenomena as it is experienced by an individual, Soren Kierkegaard and later Martin Heidegger and Merleau Ponty (Merleau Ponty 1945, 1962), brought an existentialist perspective to phenomenology. For each, it was essential that philosophy be helpful to people and to help elucidate the fundamental themes with which all human beings invariably struggle (Valle, King, and Halling 1989). By focusing on people’s lived experience, phenomenology became the ideal method to study the fundamental structures of our existence.

**Core Phenomenological Principles: Co-constitutionality and Intentionality**

A fundamental principle of existential phenomenology is co-constitutionality. An individual and the world he/she inhabits cannot exist alone or apart: Each is dependent on the other. With human experience, everything is experienced only in relation to some less clear part of the total situation, which helps define the focal object. Consider the faces and vases image (Figure 4.1).

This figure can be interpreted as either a white vase or two black faces facing each other. Whichever image appears first appears more compelling and thing-like than the remaining figure, which is experienced as less defined and further from the viewer. When the vase appears it is experienced as more compelling and thing-like than the faces, which disappear. The reverse of
this is also true. It is clear that one cannot exist without the other. It is also clear that when one is experienced, the other ceases to be. Only one is figural, or clearly standing-out, at any one time (Pollio, Henley, and Thompson 1989).

**Figure 4.1.** Faces and vases

“There are no figures by themselves: All figural aspects of experience always emerge against some ground that serves to delineate its specific form” (Pollio, Henley, and Thompson 1989:13). Phenomenologically speaking, there is no isolated figure of experience; rather, human experience is composed of a figure and background structure. Human experience is defined by focal and background aspects. This concept of figure and ground implies that the personal perspective is itself always a significant aspect to what is perceived. When we consider perceptual experience from the point of view of the actor, it is clear that all experiences are always situated or contextualized in some ground. The act of being is never isolated from the world but is always experienced as in-the-world.

In this sense, experience is never separate from the culture or the language in which we live, talk, and act. For one person, going on a camping trip may be experienced as an adventure (e.g., hiking, building a campfire, exploring an unknown area, fishing). For another, it may be
experienced as a daunting foray into the unknown (e.g., snakes, insects, lack of familiar surroundings). Going on a camping trip and its alternative meanings (i.e., adventure or daunting foray) are but two of many culturally defined possibilities. Understanding the meaning of this experience requires a description of the event from the point of view of the experiencing person (Pollio, Henley, and Thompson 1997).

The concept of intentionality is a second fundamental principle of phenomenology. It emphasizes that the human experience is continuously directed toward a world it never possesses in its entirety but toward which it is always aimed (Pollio, Henley, and Thompson 1997). It is different than “intention,” or having a plan or set agenda to carry out, which is often used in everyday speech. Intentionality, on the other hand, is a term used to explain that consciousness always has an object. This object may be something concrete like a tree, a chair, or another person. In this view, intentionality, then, best describes a directional relationship between a person and an object (Valle, King, and Halling 1989).

The implication of this dynamic is that what individuals are aware of in a situation discloses something important about whom they are. Pollio, Henley, and Thompson (1997:7) explain it like this, “…if for example, we come into a room and notice only the furniture, we are very likely a different person from someone who notices only the people, the food, or the artwork.” The objects individuals are aware of exposes what is notable for them. Further, accepting that we learn and relearn who we are on the basis of our encounters with objects, ideas, and people, what gets noticed in an encounter reveals what the self is like in terms of what is significant for and to us. It is through the world that the very meaning of a person’s existence emerges, both for themselves and for others (Valle, King, and Halling 1989).

In this sense, phenomenology is a tool capable of helping us reveal the structure of a PFLs’ “experience” (i.e., planning for the future of their forests) through their detailed description. Valle, King, and Halling (1989:13) described it this way:
A phenomenon is seen as having the same essential meaning when it is perceived over time in many different situations. The perceived phenomenon is analogous to a mineral crystal that appears to have many different sizes and shapes depending on the intensity, angle, and color of the light that strikes its surface. Only after seeing these different reflections and varied appearances on repeated occasions does the constant, unchanging crystalline structure become known to us.

Existential phenomenology seeks to clarify the structure of a phenomenon as revealed through descriptive techniques. Dialogue between researcher and participant is a good way to begin to understand the latter’s particular point of view in relation to a phenomenon. How questions are asked can shape the answers obtained. Phenomenologists are interested in a detailed recounting of the lived experience of an individual. Questions that elicit “yes” or “no” responses do not evoke detailed accounts. Since phenomenologists are not looking for an explanation related to the experience, questions beginning with “why?” are generally avoided. If, for example, we asked a PFL why she/he subdivided their land, she/he could potentially justify their decision instead of relating an account of how they experienced the phenomenon. A question beginning with “what” or “how” is more appropriate. In this way, there exists a chance of getting closer to their “story” of subdividing their land or donating a conservation easement.

Bracketing Interview

Prior to a phenomenological investigation it is important the investigator expose, as fully as possible, personal preconceived notions concerning what might be heard during interviews, the phenomenon itself, and any other personal feelings about the study. In general, qualitative research requires sensitivity toward ideas and notions the researcher “brings” to the research concerning the phenomenon. Since the researcher is the research instrument, in qualitative studies, it is crucial to make explicit preconceived notions and ideas about the phenomenon and separate them from information study participants share. This is known as “ bracketing,” or
acknowledging explicit biases and assumptions, and is a formal part of phenomenological investigations. A bracketing interview is typically conducted with the help of a colleague who interviews the investigator concerning their perspective on the phenomenon being studied. Reflective exercises involving journaling to document new understanding and to help identify new processes emerging from the data are conducted throughout the study by the investigator will continue to aid in bracketing. Colaizzi (in Valle, King, and Halling 1989) refers to this as individual phenomenological reflection.

Why Phenomenology?

Phenomenology offered several benefits to the study of PFLs. Given its focus on collecting meaningful descriptions of someone else’s experience, it was well suited for any situation in which a “professional consultant seeks to discover the wishes and needs of a client” (Pollio, Henley, and Thompson 1997:5). Similar to other qualitative methodologies, it allowed us to study aspects of a forestland owner’s experience, such as the meaning of their forestland to them, in a richer and more detailed way than by using surveys (Davis 2003). By understanding what the experience meant to an individual, we could better recognize how they are motivated to engage in particular behaviors. Phenomenology also provided a very human and relational format for sharing experiences (Pollio, Henley, and Thompson 1997; Thomas and Pollio 2002). This is useful when initiating dialogue with participants who traditionally have not shared personal experiences. Using phenomenology has been particularly useful in this study, as building trust between participant and interviewer is a key component of the method (Thomas and Pollio 2002). Developing this trust early in the interview was relevant because of the personal nature of the experiences. Decisions about land transfers, passing land to heirs, and subdividing land are generally viewed as personal and private, and are decisions potentially associated with personal
and/or familial stress and angst. In some cases, these life experiences may not be easy for participants to share with strangers. Eliciting a story from a participant about their land and planning decision has the potential to be less threatening than approaching them with a list of specific questions.

**Research Methods**

**Site Selection**

Centre, Perry, and York Counties in Pennsylvania were selected for study. County selection was based on three criteria: 1) rate of population growth; 2) amount of forest cover; and 3) urban, suburban, and rural characteristics. The three criteria represent a range of development pressures providing a structure for selecting PFLs with a range of experiences planning their forests future. Population growth was relatively high for each of the counties. Centre County’s population increased by 3.8 percent from 2000-2006, representing the highest population increase in the state for that period. Population increased in Perry and York Counties by 3.1 percent for the same time period. Forest cover in each of the counties varied. Centre County has the most forest cover at 64 percent, followed by Perry County at 50 percent, and York County, being the least forested, at 19 percent. The counties spanned the rural-urban continuum with York being urban, Perry rural, and Centre representing a quasi-rural county (i.e., there is development in Centre, but it is only happening in a few specific areas.)
Data Collection

Key Informant Interviews

Key informant (KIs) interviews were conducted as a first step in understanding development pressures in each study county (see Appendix A for the KI instrument). Key informants in this study were people living and working in each of the counties who possessed a familiarity with the communities and had a depth of knowledge about development, forest characteristics, and community issues (i.e., city and county planners, township supervisors and managers, surveyors, developers, foresters, local newspaper editors, and longtime residents). KIs were instrumental in providing an historical perspective on development and population changes in each study county. Further, they provided a contextual understanding of pressures PFLs may experience as they plan and make decisions about their forestland (Elmendorf and Luloff 2001; Brennan, Luloff, and Finley 2005; Flint, Luloff, and Finley 2008). Modified snowball sampling was used to identify additional KI participants (i.e., participants were asked, at the end of each interview, about others I should speak with who could provide further details). KI interviews continued until saturation was reached in each of the three counties (i.e., information was being continually repeated). This was an indication the information collected was accurate and complete.

All key informants were asked the same questions. Question topics were concerned with: Development patterns and pressures in the county and changes over time; Where migration is occurring from; Perceptions of local forest quality and quantity and changes over time; and Perceptions concerning how the general public might respond to these issues. All KIs were conducted face to face, electronically recorded, and transcribed verbatim. Interviews took place at
venues convenient to informants. Interviews were most often conducted at the participants’ workplaces.

**Phenomenological and Semi-structured Interviews**

Phenomenological and semi-structured interviews (Appendix B) were used to learn how PFLs experienced their decision making process. Phenomenological interview questions have a descriptive and facilitative purpose rather than one of assessing a pre-existing opinion, attitude, or level of knowledge (Pollio, Henley, and Thompson 1997). The interview was unstructured and conversational with an initial question to prompt description of the experience.

A semi-structured interview followed the phenomenological interview. The semi-structured interview was an effort to gather similar information from all participants. We were largely concerned with: How they acquired the land; How they use(d) the land; What has become of the land since they have sold or gifted it; How much acreage they currently owned, sold, or placed in an easement; and finally; If they considered other options for their forestland (i.e., selling or donating an easement, holding on to it, gifting it).

The first phase of the Parcelization study asked PFLs about decisions they had *already* made or were thinking about making. By providing information on the decision making process we can better understand *how* PFLs plan for and think about their forests’ future. To do this, we engaged three different groups of PFLs to understand their decision making process; those who: 1) Had subdivided and sold or gifted forestland; 2) Had sold development rights from all or a portion of their forestland; and 3) Had not yet committed to any action.

There were two general criteria used to select participants for the phenomenological and semi-structured portion of the study. First, they had to have experienced the phenomenon in question (i.e., subdivided and sold or gifted forestland; taken no action; sold or donated land into
easement). Second, they had to be willing to talk about their experience. Participants were selected from several different sources. PFLs who had subdivided and sold, gifted a portion of their forestland, or who had not committed to any planning action were randomly selected from county tax records, KI recommendations, and word of mouth. PFLs who sold or donated their land into easement were selected from conservancies and land trusts that administered the easement. These conservancies were: 1) Centre County – ClearWater Conservancy; 2) Perry County – The Central Pennsylvania Conservancy; and 3) York County – The Farm and Natural Lands Trust.

The focus of the phenomenological study was on PFLs’ experiences of planning for the future of their forestland. Since no statistical generalizations are made using the interview data, strict random samples of the population were not necessary (Polkinghorne 1989). Once lists of names were obtained from sources described above, continued sampling was purposeful. That is, participants were selected to generate as wide a variety as possible of specific experiences relative to the phenomenon. For example, had I selected only PFLs who owned less than 20 acres of land or only PFLs who divided their land into two parcels, the sample would have been skewed. Such a narrow range of PFL characteristics would have limited the kinds of experiences possible.

Once identified, potential participants were sent a letter (Appendices D, E, and F) explaining the purpose of the study and were told they would be contacted by phone in a few days to determine their willingness to participate (see Appendix H for phone script). All interviews were conducted face to face, electronically recorded (with two exceptions), and transcribed verbatim. Interviews took place at venues convenient to informants. Most often interviews were conducted at the participant’s home. Several interviews took place in public areas (e.g., coffee shops and restaurants).

Based on past work using phenomenological methods, we anticipated roughly 10-15 interviews would provide enough information for us to capture a complete perspective within
each of the landowner categories. In compliance with the Penn State University Institutional Review Board, study participants were informed of the audio taping, of the voluntary nature of the interview, and were asked to sign a consent form prior to beginning the interview (Appendix H).

*Sociodemographic Survey*

Following both the phenomenological and the semi-structured interviews, participants were given a short questionnaire asking sociodemographic questions (e.g., age, gender, education, employment, annual income; see Appendix C for the instrument). Participants were encouraged to complete the questionnaire immediately after the interview. Participants typically needed less than five minutes to complete the form.

*PFL Survey*

The second round of the Pennsylvania Private Forest Landowner study (Longmire et al. 2010) provided an opportunity to engage a large number of PFLs (n=3,000 concerning their forest succession planning activities. In previous PFL surveys (e.g., NWOS and PSU PFL 2006), we collected data on what PFLs intended to do with their forestland in the future (see Metcalf 2010). However, we lacked knowledge concerning the decisions they had already made. A focus in the second survey panel in 2008 was to ask again about their intentions, but to also to inquire about the decisions they had already committed to and/or completed. Toward this end, we asked questions about if and how much land they have subdivided, sold, gifted and/or put in easement. Further, since 55 percent of PFLs plan to leave land to multiple heirs (Metcalf et al. pending), we wanted to use questions in the 2008 survey to better understand if and how PFLs will leave land
to heirs (i.e., will they give land to one or multiple heirs; if multiple, will they divide and give or
give and let the heirs decide how to divide the gift). In addition, we wanted to know if PFLs,
would consider selling or donating an easement on their forestland, and if not, why? Finally, we
were interested in whether they have engaged in any forest/land planning activities (i.e., met with
a lawyer; tax advisor; created an estate plan; created a last will and testament). Data from the
survey are not presented in this dissertation, but will appear in subsequent literature concerning
PFLs in Pennsylvania, land-planning, and decision-making.

Data Analysis

Key Informant Interviews

Key informant interview transcripts were content analyzed for themes pertaining to
development patterns within the county, immigration issues, forest quality and quantity, and
public perceptions of these items and associated changes over time. Content analysis was done by
coding participant’s responses to the questions. Themes were developed based on patterns and
consistency within the data.

Phenomenological Interviews

Analysis took place within a phenomenological research group (recently established at
Penn State University in the School of Forest Resources) whose role was to help identify and
evaluate themes based on consistency of meaning. The PSU group contained between four and
seven readers who completed a phenomenological analysis course in 2008 (FOR 597b at Penn
State entitled The Future of Forests Study: A Phenomenological Analysis). Approximately one-
third of the 39 phenomenological interviews were read aloud line-by-line by the research group. Interviews representing each of the three PFL categories were read in this way. During and after the reading process, group members discussed the meanings of words, statements, and emotions expressed by participants regarding their decision-making and forest planning thoughts, ideas, and behaviors. These expressions were discussed in the context of the individual interview from which they emerged and were also considered in the context of other interviews already discussed. Commonalities were identified across transcripts resulting in themes representative of PFLs forest planning experiences as a whole. Effort was made to explore all possible meanings and divergent perspectives represented in the transcripts concerning the phenomenon. Patterns and later, themes, emerged from these group sessions which informed the analysis of the remaining two-thirds of the interviews. Text supporting these themes was presented to the research group to verify findings.

Following my analysis of the remaining two-thirds of the interviews, the group was reconvened and presented with themes and supporting quotations from these interviews. Beginning with the thematic structure we initially created, subsequent interview themes were analyzed to see how they fit within that overall structure. Conclusions were drawn and agreed upon concerning the final underlying structure that unified the invariant elements of the experience into a whole (Muth pending).

Semi-structured Interviews

Answers to semi-structured interview questions were collated and used to provide context related to PFLs and how they engaged the forest planning process: how much land participants owned; how they have used/use the land; how much they sold, gifted, or put into easement; and whether they considered other options for their forestland.
Summary

This exploratory mixed-methods study is the initial phase of a larger project concerned with forest parcelization in Pennsylvania. This study focused on the decision-making processes PFLs engaged as they planned for the future of their forests. Phenomenological interviews were used as a primary means of collecting data from PFLs because of the methods’ relational format. By encouraging participants to relate a story about their forest planning process rather than answer a list of questions, I hoped to elicit more detail concerning their decision-making experience rather than specific facts about their land or their ownership motivations.

Centre, Perry, and York Counties were studied because they had experienced steady population growth over the past decade and have been identified as being quasi-rural, rural, and developed respectively. Further, the three counties varied in the amount of forest cover with Centre County being the most forested, followed by Perry, and then York. By, purposefully choosing counties with differences and similarities, it was our hope to benefit from increased variation concerning PFL experiences and land planning scenarios.

Interviews with KIs in the three study counties allowed us to better understand the context within which PFLs were actualizing their land planning decisions. Where growth was occurring, the health of the forests, the public’s perceptions of growth and development, and forest loss within each of the study counties helped contextualize PFLs’ experiences. Phenomenological and semi-structured interviews were conducted with PFLs who had subdivided and sold forestland, taken no action, and/or conserved forestland in each of the three study counties. Effort was made to sample PFLs who owned a variety of parcel sizes (small, medium, and large), and who parcelized or conserved forestland of various sizes and amounts. The next chapter presents an analysis of the KI interviews in each of the study counties.
Chapter 5

County Descriptions and Issues

This chapter is drawn from the initial portion of the Future of Forests study. It includes:
1) county characteristics and 2) key informant results for the three counties.

Study County Characteristics

This study was conducted in three Pennsylvania counties (see Figure 5.1). These counties spanned the rural-urban spectrum, with Perry being the most rural, York being urban, and Centre County more or less representing a mid-point. Descriptive statistics for each of the three study counties are provided. These statistics focus on land use, and changes in population and housing units since the 2000 census.

Figure 5.1. Study Counties.
Perry County

Perry County covers a total area of 556 square miles and is one of three counties comprising the Harrisburg-Carlisle Metropolitan Statistical Area (Dauphin and Cumberland are the other two). The county is 57 percent forested and 26 percent agriculture, with the remainder 17 percent in surface water and urban areas (Penn State Extension 2010). The Tuscarora State Forest occupies the western edge of the county. In 2000 the population was 43,602 and in 2009 was estimated at 45,502 representing a 4.4 percent increase over nine years, making it one of the state’s fastest growing counties (U.S. Census Bureau, Population Division 2010). There were 18,981 housing units in 2000. Housing estimates in July 2008 reflect a 4.3 percent increase (U.S. Census Bureau, Population Division 2009).

Table 5.1. Perry County: Population and housing unit change between 2000 and 2009.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>43,602</td>
<td>45,502</td>
</tr>
<tr>
<td>Housing Units</td>
<td>18,981</td>
<td>19,794*</td>
</tr>
</tbody>
</table>

(* 2008)

Centre County

The county covers an estimated 1,112 square miles. It is part of the Ridge and Valley Province. State College is the largest community in the county and home to The Pennsylvania State University. The county was defined in this study as being quasi-rural. Development was happening in the county, but was not considered ubiquitous. However, increased population over the past decade and information that emerged from the KI interviews point to the contrary. Though the county does retain a rural feel (i.e., forested ridges and significant amount of farmland), growth pressures are significant and will be explored later in this analysis.
Both Rothrock and Bald Eagle State Forests cover a significant portion of the eastern and southern parts of the county. Agricultural lands account for nearly 12 percent of the land area in the county, while 75 percent is forested. The central portion of the county is typically agriculture on the valley floors and forests on the ridges. Bald Eagle Ridge, running southwest by northeast gives way to the Allegheny Plateau, which occupies the northwestern portion of the county.

Table 5.2. Centre County: Population and housing unit change between 2000 and 2009.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>135,930</td>
<td>146,212</td>
</tr>
<tr>
<td>Housing Units</td>
<td>53,308</td>
<td>58,558*</td>
</tr>
</tbody>
</table>

(* 2008)

According to the U.S. Census in 2000, the county population was 135,930 and had increased to 146,212 by 2009 representing a 7.5 percent increase (U.S. Census Bureau, Population Division 2010). In July 2000 there were an estimated 53,308 housing units in the county and this grew to 58,558 units by 2008, an increase of 9.8 percent (U.S. Census Bureau, Population Division 2009).

York County

York County is the most urban of the three study counties. Located in the Susquehanna Valley, it is characterized by a large fertile agriculture region, bordered to the east by the Susquehanna River and to the south by the Mason Dixon Line, which separates Maryland from the Commonwealth. The county covers an estimated 910 square miles, with 28 percent in forest and 40 percent in agriculture. Forests cover the higher elevated northern portions of the county.
and areas along the Susquehanna River. Moving south, the elevation gives way to scenic rolling
hills and farmland.

**Table 5.3.** York County: Population and housing unit change between 2000 and 2009.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>382,749</td>
<td>428,937</td>
</tr>
<tr>
<td>Housing Units</td>
<td>157,163</td>
<td>175,637*</td>
</tr>
</tbody>
</table>

(*2008)

The county is home to a significant amount of industry, including, among others, Snyder’s of Hanover, Utz Quality Foods, Martin’s Potato Chips, Wolfgang Candy, Caterpillar, P.H. Glatfelter Company, The Bon-Ton, Harley-Davidson Motor Company, and Pfaltzcraft Pottery. According to the U.S. Census Bureau, the York-Hanover Metropolitan Statistical Area is the fastest growing metro area in the Northeast. The US Census listed York-Hanover as the 95th fastest growing metro area in the nation, increasing 12 percent between 2000 and 2009 (U.S. Census Bureau, Population Division 2010). In 2000 there were an estimated 157,163 housing units in the county and this grew to 175,637 units by 2008 representing an 11.8 percent increase (U.S. Census Bureau, Population Division 2009).

**Key Informant Interviews**

Thirty-four key informant interviews designed to better understand the social, economic, biophysical, and cultural milieu in Perry, Centre, and York Counties were conducted in the spring and summer of 2008. KIs were people living and working in one of the three study counties who possessed a familiarity with the communities and depth of knowledge about development patterns, forest characteristics, and community issues. Participants in each county included individuals such as: county/municipal planners, township managers, local newspaper editors,
developers, surveyors, service foresters, and local citizens (Table 5.4). KI interviews were instrumental in providing an historical perspective on development and population change in each study county. Further, they provided a contextual understanding of pressures PFLs experience as they plan and make decisions about their forestland. Every effort was made to speak with similar key informants in each of the counties to aid in developing an informed perspective in and across counties based on patterns of growth and development, community concerns, quality of life concerns, and forest health.

**Table 5.4.** Key informant occupation by county.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Centre</th>
<th>Perry</th>
<th>York</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Planner</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Township Planner</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Township Manager</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Township Zoning Officer</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Forester/Service Forester</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Extension Forester/Director</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Newspaper Editor</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Long-time Resident</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Developer</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Surveyor</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation District</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Conservancy</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Perry County Key Informant Interviews**

Ten KIs were conducted in Perry County during the summer of 2008. These interviews included county and township planners, two foresters, an extension educator, newspaper editor, long-time resident, conservation district employee, and conservancy director. Four themes emerged from the interviews.
Theme 1: Perry County is a Good Place to Live

Interviewees considered their rural county a relaxing place to live. Several participants pointed out people liked to live in Perry County. The slower pace of life is attractive for residents. The western portion of the county still retains a very rural character, with farmland stretching through the narrow valleys edged by forested ridges. The eastern portion of the county was developing quickly, particularly in municipalities proximate to roads serving as conduits in and out of the county. One participant spoke of the rural nature of the county:

The county is predominantly rural, with a long broad valley that runs down along the center from New Germantown to New Bloomfield. You can drive down along and see nothing but farms on either side for miles and miles.

Another participant described how rural Perry County is:

From New Bloomfield west, it gets pretty rural. The bank in Blaine actually has a hitching post. It’s pretty cool. It’s rural and small town. Takes you a step back in time.

When asked about what draws people to Perry County, a participant and resident put it this way:

People love it here. They love it. That’s what’s happened here, I think, over the years, it’s not only the easy commute, that's one reason why they’re building here, I think they like the area so much better and the people better than living in the big city. So I think it gets away from the hustle and bustle. The people are nice and there are no red lights.

That there is not a single stoplight in the county is a source of pride for residents. Another participant said it like this:

Perry County kind of likes the distinction, I think, of being one of only two counties in the state that don’t have a traffic light.

Theme 2: We’re a Bedroom Community

Perry County was consistently referred to as a bedroom community for Harrisburg. Asked about where growth and development is happening, participants were very specific and
consistent with their comments. Growth is happening along the southeastern edge of the county adjacent to both the Juniata and Susquehanna Rivers and along PA Routes 322 and 11/15 in the Marysville and Duncannon areas. Growth is also spreading northward from Carlisle up PA Routes 34 and 74 into the central portion of Perry County. Carroll Township was consistently referred to as the fastest growing township in the county. It is located in the southeastern part of the county along PA Route 34. Route 34 runs north from Carlisle into the county and PA Route 850 tracks west from Marysville and the Harrisburg area. One participant spoke of the sprawl this way:

Well, we have the largest tract of undeveloped land that’s this close to Harrisburg, and that’s definitely going to change.

Another resident and member of the planning commission spoke of the growth Perry County is experiencing in an historical perspective:

Right after 1970 the building permits began to spike in Rye Township and southeastern Perry County. And that was a direct result of the construction of Interstate 81 and the Wade River Bridge on Interstate 81 and that made that corner of Perry County that much more accessible. Commuters will head out Route 34 and over the mountain at Wagoner’s Gap into Shermansdale in central Perry County and that's where we've been seeing the growth. The improvements to 322 have allowed growth to bypass the southeastern end and it’s moving up into northeastern Perry County, Liverpool area and those areas across 322, Howe Township up the 11/15 corridor.

A resident and employee at the local newspaper, the Perry County Times, remembered growth as being more prevalent in the 80s and 90s. Since then, growth has slowed because of the lack of infrastructure.

… there’s only so many on-lot septic systems you can fit on parcels of land in the county and still have the growth to be perpetual at the rate. (Since the 80s) growth has slowed considerably, precisely because the infrastructure is not here to support it getting much larger. By infrastructure, I would also include the road system, sewer, water, are probably the things that people are dealing the most with in terms of growing the county.

The rural nature of the county, its lack of businesses and industry, and proximity to urban areas such as Harrisburg, Mechanicsburg, Carlisle, Lemoyne, and Camp Hill sets the stage for a
significant portion of the county’s population to commute outside of the county to work. Several informants spoke about the easy commute and high percentages of people doing it:

I think with 322 now being four lanes the whole way and then 15 is an alternative, it makes for pretty easy travel when things are a mess. It’s still a pretty easy commute. Twenty minutes, half an hour probably even from the center of the county, or even Bloomsfield. You would probably be in Harrisburg in 40 minutes or so.

Carroll Township, which isn’t along any highways but it’s just over the mountain from everything and it’s a bedroom community. From Carlisle, in 20 minutes, you’re in the sticks.

A participant put the number of out-of-county commuters at 50 percent of the working population. Another resident estimated the out-of-county commuting number at 60 percent.

According to the American Community Survey (three year estimates 2006-2008) 67.6 percent of employed individuals over the age of 16 commute outside the county.

The lack of a stoplight was a regular topic of conversation during the KI interviews. The lack of a stoplight in the county is a focal point for Perry County residents. It has become a point of pride for the county, as well as a symbol of change. As the county’s population increases, changes in roads and traffic patterns to make room for commuters are inevitable. Currently there are plans for a stoplight near Marysville.

There are a lot of people who are proud that we don’t have a red light in the county. But, you know, there’s a half a dozen intersections that are very dangerous, and need a red light. And no one wants to be the first, because you know…after that happens it will be a tidal wave. The roads are severely overcrowded, and nobody wants to improve them because they feel if they improve, then there will be more development.

Another regular topic was the large developments planned for the southeastern edge of the county. Participants often spoke of the Cove Mountain development that may happen on or near Cove Mountain, which is near Marysville. Historically, development in Perry County occurred on subdivided land parcels with road frontage. House subdivisions, apartment buildings,
and townhome subdivisions historically have been small. Plans for subdivisions near Marysville are the largest Perry County has experienced, and nearly everyone is talking about them:

That is a big time outfit from New Jersey who has come in here and is sort of muscling the County around you know. They're basically claiming that they have 900 acres down there on the side of a mountain. If the township lets them do what they want to do, then they’ll build 1,000 units in high density. And if the township won’t let them do what they want, they’ll spread out these 1,000 units all over the mountainside.

The Cove Mountain and other subdivisions have divided public opinion between pro and anti-development. The newspaper employee put it this way:

… there is an ongoing perpetual war between those who want the county to grow and those who would like the county to stay the same. And that’s manifest now on the considerable public outcry that has arisen over the planned development. I think it’s almost 1,000 acres of mountain land that used to belong to the Jessup Company. There’s a lot of resentment over that and a lot of concern over that development in particular. Uh, another significant development that is causing some concern is the proposal by Penn Township to put in, I believe, it’s around 300 units on the ridge above Marysville, within Marysville road and that development is the one that’s been in the news recently because it is likely to result in the first traffic light that’s been approved, anyway, for Perry county. I bet there was a collision between people who would use this as a bedroom for Harrisburg and a collision with those who want to maintain it as it is. They came up here in the first place to get away from all you flatlanders. Stay where you belong.

Older Perry County residents and those who have lived in the county for a long time are generally resistant to growth and development. They also express resistance toward zoning ordinances and other land-use controls, which could stem the tide of development. According to a participant working in the planning office, about 50 percent of Perry County municipalities have adopted measures to control land development. These municipalities are typically located in areas that have experienced growth in the past. A resident who lives and works in the county described the irony of what he calls the Perry County persona:

I think that there is a Perry County persona. It is a persona that will track politically, very hard to the right, and that really thinks that the government should be out of our lives. And there is at least one aspect of the Perry County persona, not to have some flatlander telling them what they can and what they can’t do with their land … they want things to remain as they remember them
and to have the county they are used to having. But by the same token, they are resistant, or at least there is an element of resistance against the kind of governmental controls that would ensure that kind of… so, I guess it’s kind of an irony of the Perry persona, at least as I see it.

**Theme 3: There are Two Tides of Folks Coming In**

When asked where people are coming from, many participants echoed the belief that newcomers are moving from the greater Harrisburg metropolitan area. One participant put it this way:

There are two tides of folks coming in. The first ones are the suburbanites, and they are basically the braver people just over the mountain … Dauphin, Cumberland, and the Harrisburg area. Harrisburg is, I think statewide, is a very attractive place to live. The unemployment is super low; you can get state jobs, federal jobs, supporting industry jobs. It’s a really good place to live and the cost of living is fairly cheap. So you have these brave people maybe come in to Harrisburg, the ones who are there already, and they say: I hear about this Perry County up there. Not everyone wants to move up here because it’s so far to the shopping malls and um people hear stories about people with shotguns and things like that. We don’t dispel those rumors. So, I think the majority of the folks moving in are just coming from over the mountain. They aren’t coming from that far away. People don’t come here from Philadelphia and move right to Perry County. They are going to move into the city for a while and maybe…

Another set of immigrants are the Amish and Mennonites from southeastern Pennsylvania who are buying farmland in the western part of the county. The following three sets of comments are from a county employee, a county agriculture extension agent, and a conservation district employee, respectively. Their comments reflect this noticeable and growing trend:

We’ve had within the last five years a huge influx of the Amish, in western Perry County. They’re buying up anything that comes out and they are paying outrageous prices, because they can which is really driving the market up.

The Amish are just nuts on hunting. They will seemingly pay any price you know, and what it usually is, is some older guy who has a machine shop or a shed building business or something like that down in Lancaster County and has made a bunch of money at it and now is coming up here and forking money on the table to buy up most of the land. Glatfelter just sold a bunch of tracts of timber along route 17 up here from Millerstown all the way out through. The majority of those tracts were bought by Amish, paying incredible prices for this timbered off,
worthless ground. Some of it straight up and down, you know. In 1980 there was only 6 Amish farms in Perry County. And they were all dairy farms. Last year there was 112 Amish households in Perry County and only 8 of them dairy farms.

Ninety percent of the farms being sold (here) are being bought by Mennonites, which used to be bought by Amish. They are coming up from Lancaster, Chester, and Berks Counties. You would think they would keep a large farm intact. But they don’t need that much farm if they have a horse. So they’re taking a 150-200 acre farm and they’re splitting up into some 10 acre pieces for the kids. And, maybe even keeping a couple 50 acre pieces to farm. So, some of our larger woodlot, farmlands also get split up by those kinds of things. What used to be a 300 acre farm is now all these little chunky things.

The remodeling of hunting camps into year round homes is another trend in the western part of the county near the Tuscarora State Forest. An individual on the Perry County planning commission remarked:

I can remember going out there as a kid and the only thing back there were cabins. There were no permanent residences. Now you go out to the same areas and those cabins are being used for permanent residences, so now all of a sudden you’ve got the municipality has to provide for trash, school bussing, all the services associated with permanent residency. Retirement homes, whatever, you are going to have that and that’s exactly what I’ve seen happen in that area over the years.

**Theme 4: Everyone Has their Own Piece of Woods**

When asked if people were concerned about the loss of productive forests, the answer was always no. People were more concerned about farmland loss. Much of the forestland is on the ridges and has historically been used by farmers and landowners in the valley for hunting and collecting firewood:

I have not heard much of a buzz about forestland loss. I hear a lot more about farmlands. Preserving the farmlands.

Participants who work in the forest industry or have a working knowledge of forestry are especially concerned about the health of Perry County forests. Diameter-limit cutting continues to be popular among loggers and forestry professionals. Forestland subdivided and sold is usually
cut before the sale. According to a county service forester, the sale price tends to not reflect the loss of timber. Informants were acutely aware of forested land parcelization and the loss of larger, working forests in the county.

The majority of the forestland has been cut over pretty hard, in the last 30 years. And, because at the same time we had the really large deer herds, we did not have good regeneration. It’s really depressing to walk in to some of these woodlots because all you’ve got is red maple, striped maple, and birch … just junk.

Basically there’s not much of anything left. Everyone has their own little piece of woods. Instead of having a 40 acre wooded, working forest, you have all these little tiny things that are probably never going to get harvested because nobody wants trees cut in their little 3-5 acres around their house.

A county service forester blames tradition and lack of knowledge on the part of PFLs as they prepare to cut land that has been in their family for generations. He also points out another trend in Perry County forests – cutting timber before selling land:

That’s the old line, every 20 years, that’s their philosophy. Something that’s been handed down from farmers, my grandfather cut at 20 years and my dad cut it 20 years ago, now I am going to cut. Now (they’re) on, at least the third diameter level cut. The philosophy has got it down to where it’s only low grade, low value junk.

**Perry County Summary**

Perry County is a small, rural county perched on the outer edge of the expanding Harrisburg metropolitan area. People like to live in Perry County. The ridge and valley topography of the area feels removed from the hustle and bustle of Harrisburg, the nearby city. Residents enjoy rural view-sheds, but are proximate to urban amenities and work. Despite there being plans to install a stoplight, none exist in the county yet. This is a source of pride among many Perry County residents, although increasing population and higher traffic volumes have made certain intersections in the county dangerous. Two-thirds of residents already commute out
of the county to work. Road improvements from Harrisburg and the Carlisle areas have resulted in increased in-migration from urban area surrounding the county.

The rural nature of the western part of the county is still intact, although area demographics are changing dramatically as Amish and Mennonite immigrants buy large tracts of farm and forestland. These lands are being subdivided for family members. Some residents believe this is a good thing, as current land-use will not likely change dramatically. Others are threatened by the immigration because the land is subdivided, though mostly kept within families, but is taken out of farm and/or dairy production.

Many changes have already occurred and are still occurring in the eastern and southern portions of the county. For the first time in the history, large developers are interested in building apartments, condos, and homes on forested ridges overlooking the Susquehanna River. Residents living in these new developments would enjoy a 15-20 minute commute to Pennsylvania’s capital and have a rural and forested backdrop at home.

Forested land in the county is largely thought of as unhealthy and cut over. Many of the larger tracts of forested land are being subdivided and sold. The Glatfelter Paper Company is currently selling large portions of its holdings. Forestland that has been in families for generations is being cut too often and forest regeneration is not occurring. According to the local service forester, most forested land is logged before being sold; yet, this is not reflected in the selling price.

**Centre County Key Informant Interviews**

Four themes emerged from the 12 KI interviews conducted in Centre County during the spring of 2008. Interviews were conducted with regional and county planners, a forester and
extension educator, several developers and long-term residents, a land surveyor, and a conservancy director.

**Theme 1: This Is God’s Country**

When asked about the quality of the environment in Centre County, participants did not hesitate to heap praise on the area. Words and phrases such as, exceptional, phenomenal, and God’s country were often invoked. Informants thought the general population believed this about the area. Happy Valley, the valley where State College is located, is a good representation of the public’s sentiments. Anecdotally, the valley was given this name during the Great Depression. While the state, and indeed the country was facing difficult financial and social upheaval, people living and working in the State College area did not seem as affected by the economic crash and people seemed relatively happy, hence the name. A surveyor who has lived in the valley and has for many years had this to say about the natural environment and how others think of Centre County:

I’ve heard it referred to as God’s county for several years. And people in other parts of the state like York and Lancaster, have a very high opinion of the State College area especially. They think it’s God’s Country.

A developer who has lived and worked in the Centre County for years said this about its amenities:

Where in this country can you go and see a population of 100,000 people in as big a geographic area as we have in the county and sit there and have a minor league baseball team. Have a 108,000 seat football stadium, have the (Bryce Jordan Center), have a downtown state theatre, 2 theatres, have recreational facilities, be it all these state parks and everything within a half hour drive? You’d be hard pressed, I mean really, anyone would be hard pressed to find another area in the U.S. that has what we have right here.

When asked specifically about natural amenities, the environment, and natural resources, participants shared similar sentiments. A planner for the Centre region shared this:
The quality of the natural resources here are exceptional. We have two high quality trout streams that presidents come here to fish. Carter was in town two weeks ago. Dick Cheney fished here, too. The forested ridges provide unique bird and other habitat. So the main jewel, the crown jewel of the community would be our natural resources. I think seven out of ten people would say that’s why they’re here. They like to look at the forested ridges. They like to look at the open space, the clean water. They like the recreation opportunities that come with that. I think you find overall most people are here because at some measure they think that those are important qualities of life.

**Theme 2: Growth and Development**

Centre County was experiencing a significant amount of growth. Much of this growth was only occurring in particular areas and was associated with seasonal camps, large subdivisions outside the State College area, and new retirement communities. A Centre County planner said about growth and population increases in the county:

> The population has increased probably more so in this area than any other area in the state save the Northeast. And the area around Philadelphia, York, Lancaster area, those places are growing similarly in nature as Centre County as opposed to the counties around Centre County, which are actually holding their own or losing population. (People) are moving in at both permanent residents as well as recreational. This is becoming a retirement community as well.

Much of the permanent, non-recreational growth and development in the county was occurring in Walker, Miles, Spring, and Marion townships northeast of State College. Growth was projected to significantly increase there over the next 10 years. A surveyor living and working in the county said about current and projected growth:

> For the most part, growth is happening outside the Centre Region, I would say that the townships to the east are seeing the biggest increase in subdivisions, such as Miles or Walker or Spring, like east of Pleasant Gap. There are fairly major developments going in out there and that’s where a lot of growth is projected from what I understand.

A forestry extension agent and educator also indicated there is a significant amount of growth happening in the northeastern portions of the county:
The amount of land out there (Walker Township) that has been sold for development is just outrageous. That’s one of the townships you need to look into because that’s just going to be an entire bedroom community and it’s not going to be agriculture anymore. I mean there are 100-200 acre farms that have been sold for development. I think they approved 600 new homes out there. Just in Walker Township.

Seasonal camps are ever-present in the Snowshoe area. Natural gas, oil, and coal companies (e.g., C&K Coal, Gulf U.S.A.) had previously owned much of the land in and around Snowshoe Township. These lands have, in the last 10 years, been sold to developers, who have subdivided (and are still subdividing) thousands of acres into lots of various sizes for camps. This has created some resentment among local residents and hunters, as that land is now privately owned and no longer available for public use. A land developer spoke about the Gulf U.S.A. lands:

They had 14,000 acres of forestland out there. They retained the gas and oil rights and sold the surface off. Most of the lots are forested. People like forests, they like the woods. People don’t like the postage-stamp lots.

Another land developer who was extensively involved with selling and subdividing Gulf U.S.A. lands expressed guilt about the process. According to this informant, he made several attempts to sell land to the Bureau of Forestry and the Game Commission without luck. Eventually, he found other buyers who split the land into lots and sold to buyers wanting to build camps:

We tried to sell this tract to the state forest or state game lands, you’ve got state game lands here, you’ve got state forest here, no interest, no interest whatsoever. And what’s going to happen here is when I sell that… I asked them if they knew what was going to happen? Whoever buys this is going to subdivide this and put camps all over, and that’s exactly what happened.

When asked about how camps were selling and who was buying them, the developer said:

We’re not seeing the numbers that I would have thought that would buy camps just to come up for football weekends, that surprises me a little bit. They can stay up here and go to the Penn State game in 25 minutes instead of a long drive, but mainly it’s been for the recreational part. And the surprising part to me is a lot of
them are not hunters. A good high percentage of them aren’t hunters and the 
other thing is, probably 50% of the ones that are hunters that have bought these 
tracts, they still hunt on public ground. Yeah, and you get all kinds, and you get a 
lot of them and they think that’s what they want. They have some money, but 
four years later they’re selling it. People think this is where they want to be every 
weekend, but then they say, “well I want to go golfing on the weekend.” Or the 
kids get involved in some activity and they’re away. Then all of a sudden they 
see the dollars saying, “Why am I spending this much money to maintain this 
cabin when we’re only going up there during hunting season and maybe twice in 
the summer?” Not a lot of those, but the percentage is over ten.

There are several dynamics, which together control the amount of growth occurring in the 
county. First, the six municipalities comprising the Centre Region, including the State College 
Borough, adopted a growth boundary referred to as the Regional Growth Boundary, where 
growth is ideally limited to designated areas. Extending the boundary for development requires a 
unanimous vote from each of the six municipalities, and must contain 40-50 percent set-asides for 
open space retention. In the past several years, there have been 26 requests to extend the 
boundary, but only five were approved. The Centre Region planning model has received 
nationwide recognition for controlling growth, and won a statewide award for inter-municipal 
zoning agreements. However, because of the limited availability for growth within and around the 
boundary, land prices tend to increase, pushing development to areas outside. A Centre Region 
planner reflected:

We’ve got about 5,000 naked acres of land within the boundary, but some of the 
major developers are starting to tie that up and I think a lot of people are looking 
outside the boundary at this point. These outlying communities don’t have the 
string of growth management philosophies (we do). The I-99 corridor being 
constructed makes it easier to get (around) from outside the community. They’re 
going to start seeing more of the growth, despite the fact it costs $4.00 for a 
gallon gas.

Second, expenses associated with developing land in other townships are prohibitive. A 
developer has to consider on-site sewage costs (e.g., community on-lot sewage system), road 
construction, and cable and telephone services. Finally, will people move there? Is it close 
-enough to their jobs? Jobs are essentially within the State College area. A prominent developer in
Centre County who offered property for development near Black Moshannon reflected on whether it is a good investment to develop there:

Whoever owns that ground today has the right to put a plan in place to protect it going forward. But if that guy wants to sell it and he wants the maximum value, then he’s going to seek out the developers. Now, I’m not going up to Black Moshannon looking for land to develop, I can tell you that, but if someone came to me and said, hey would you look at this? Well certainly I would. And I would have to evaluate it.

It laid pretty good (the land near Moshannon), but here again you’ve got the challenges; you’ve got no water or sewer. You’ve got to find, you know, if you did break it up into lots, could people draw wells because there’s no public water. Would the sewage pass? You got to pave the roads, you got to do all these things. Well you know what? It cost me just as much to build a road up there as it does down here (in the Centre Region). There’s no savings there. And then if people need to put an on-lot sewage system and a well in, well, budget 20-30,000 bucks because that’s what it’s going to cost. So if I create some nice lots up there, say 1 acre 1.5 acre lots, and I put the public road in, it’s got to have underground cable, TV, er, cable, phone, and electric, got to put that all underground. That’s fine. That’s the way it should be. It all costs money though. At the end of the day I need whatever $40,000 for that lot to make any money and to pay for buying the land, carrying the infrastructure costs, borrow the money to carry the infrastructure. So who’s going to pay? Who’s going to buy it? The answer is nobody, very few.

A third and final control on growth in the county relates to job accessibility and the ridge and valley topography. State College and the Penn State University employ a large percentage of county residents. Having access to State College and the University was essential for these residents. Much of the forestland in Centre County was on mountain ridges or in otherwise inaccessible areas. Therefore, development in Centre County was occurring on relatively flat, agricultural ground. Interview participants acknowledged several examples of agricultural land subdivision and development, but very few examples involving forested ground. A surveyor living and working in the county said this about topography:

It’s mostly the topography. York County is mostly rolling hills and here we have the ridge and valley, and on the ridge it’s just rock and steep. It’s just either too rocky or too steep. And with the design criteria with roads and homes sites, at this point it’s not economically feasible, but at some point we might start seeing more development. All of these big subdivisions that are taking place, it’s all farmland that’s being subdivided. It’s relatively flat, there are roads for access.
It’s either got to be close enough to public sewer system or it’s got to be capable of supporting on lot sewage systems, so you can’t put that in solid rock.

Though rare, there were instances where participants referred to forest loss as being linked to development. According to several planners, the Municipal Planning Code supported silviculture or timber management “as a sound economic use.” A Centre Region planner read from the planning code, “forestry activities, including but not limited to timber harvesting shall be permitted use by right in all zoning districts in every municipality.” In the review process for developments, planners can set aside areas for protection within the plan and have influence over subdivision design. Prior to a planner’s involvement (i.e., before the owner submits the plan), an owner can do anything they want. KIs knew of several examples in the county where forested lots had been clearcut before subdivision plans were submitted (Lowes on North Atherton, a 25 house subdivision in College Township, and Hawbaker Industrial Park). A Centre Region planner said this:

Zoning ordinances may not unreasonably restrict forestry activities. Once they submit their plan, we can have influence. If they clear it before plan submission, all I can do is be frustrated. But if it comes in with forests on it, we have some ways that we can get some things addressed.

The larger issue in Centre County is the loss of farmland to development. There were multiple references to farmland subdivision in Walker and Marion townships. Developers and residents interviewed suggested there were a couple of major players buying and developing land. S&A Homes, a relatively large developer in central Pennsylvania, was often implicated in controlling the development market, especially within the Centre Region Growth Boundary. A long-time Centre County resident and farmer living in Walker Township put it like this:

S&A is buying up farmland. They’re developing some of it, but some of it they’re sitting on and not being taxed.

A developer in the area said this about the availability of land and S&A’s role in the development dynamic:
Within (the growth boundary) there is very little land really available for development. And the land that is available for development, the Gray’s Woods, the Tofrees, and Fox Point, it’s all for the most part controlled by S&A Homes. A large part of the developable land in the Centre Region is under the control of one builder. Ok? There aren’t that many lots available for others to build on because of what I said. S&A has most of the land tied up and they exclusively build on all their land.

**Theme 3: Poor Forest Health**

Asked about forest health in the county, participants knowledgeable about trees and forests often talked about the paucity of healthy forests. Participants usually suggested private forest landowners generally lack knowledge concerning forest management and silviculture and the overwhelming, at times, deer herd were to blame for regeneration problems. A long-time Centre County resident and logger by profession acknowledged the timber industry’s lack of stewardship from the turn of the century (1900) to current times. He talked about the nascent magazine industry’s need for specialized paper in the early 20th century, which required peeled wood. To do this, loggers used chemicals to kill trees, causing the bark to fall off. These trees obviously did not sprout, and as a result this practice adversely affected tree regeneration, which is still evident in our forests today:

You know one big change that people don’t seem to realize is that, the paper mill in Lock Haven, your wood had to be peeled. Well to do that, you girdled the tree and painted it with sodium arsenate and the next year you cut it, then the bark all fell out, and you see you’ve got no stump sprouts. A lot of people don’t realize that we lost a lot of our under stocking in that manner.

A forest extension educator had this to say about Centre County forests:

Our forests haven’t been managed properly at all. And that starts right from the history of the white-tailed deer number one, and I think we wouldn’t be nearly as bad off as we are with our forests if we didn’t have the deer issues. But the timber potential has been wiped out and the regeneration is entirely lacking and it’s usually striped maple or black birch. We’re not practicing any silviculture. From a timber standpoint it’s not sustainable, it’s just like mining. When you look at these mountains they look beautiful and healthy, but I can take you
virtually to every one of these ridges and show you exactly the same thing. From that standpoint I’d say our forest resources are pretty bad.

A long-time Centre County resident and logger added:

Also, the oak leaf roller devastated Centre County, killing 90%, USFS was told to downplay this problem, but there were a lot of areas that were 90% kill. Curtin Township was really bad and Snowshoe, you know several townships in that northern tier were really wiped out.

**Theme 4: No Anxiety about Land Development**

Aside from discussing forest health, development patterns, and unmitigated growth, participants expressed concern over a broad range of other topics. Those most often mentioned were gypsy moths and drilling for natural gas. These topics reflected not only participants’ anxieties, but also those of others in their communities. At the time these interviews were conducted, gypsy moth defoliation was in full swing. Walking in the woods anywhere in Centre County, one could hear ‘frass’ dropping from the canopy. The last major infestation anyone could remember was in the eighties, making this a rather remarkable experience for everyone. Asked if there was sense of anxiety or concern from the community over land development issues in the county a participant answered:

I don’t feel, or hear anxiety about that, the only anxiety we hear about is the gypsy moths. The frass, it’s like it’s raining out there, raining poop. I’ve been in those wooded conditions when they were at their peak. Oh yea, literally. So, go take a shower when you go home.

News about the Marcellus Shale and new drilling techniques developed to access natural gas was just surfacing during the interviews in Centre County. Interview participants employed in resource related fields and developers had heard about natural gas drilling, but it was not widespread knowledge. As the study continued through the next year and a half, everyone seemed to talk about Marcellus Shale drilling and gas leases. The following quotes confirm the newness of the topic:
Another one that just hit the pipe lately is there’s been a big push to get gas lease holds for drilling in this new what’s it, shale? I forget the term. It’s been in the papers recently. There’s been a whole bunch of speculators coming in and knocking on private homeowner’s doors and trying to acquire gas drilling leases and we’ve had, we’ve been involved with programs, we haven’t sponsored them but we’ve been involved in programs where you know, here are the do’s and don’ts, what to look out for as speculator coming in and knocking on your door. It begins with an M or an S…

Yeah it’s becoming more economically feasible to take it out, with the price of oil and natural gas going up. And then these Penn State guys said they’ve just found this huge natural gas reserve that runs through Centre County. I saw it in the news a few months ago. It’s supposed to be this huge natural gas reserve. It sparked a lot of interest. I think that’s probably something we’re going to see in the next five to ten years.

They’re playing $3,000 an acre to lease that land up in the northern part of Pennsylvania, like around Williamsport area for drilling. There’s a lot of money floating around right now.

Centre County Summary

Centre County was considered a quasi-rural county. The county was experiencing significant growth in very specific pockets. Bellefonte, the county seat, and State College represent the county’s urban core. The rest of the county was rural with forested mountain ridges and fertile farmed valleys. Participants referred to Centre County as a great place to live. They believed this reflected the feelings of the larger Centre County community. The scenic farmland and forested ridges were often referred to as idyllic. The county’s natural amenities were referred to as the area’s “crown jewel.” Often mentioned were the diversity and quantity of things to do in State College including, theaters, sporting events, restaurants, and music.

The six townships comprising the Centre Region, which included State College Borough, has enacted strict zoning ordinances, to keep development from spreading beyond the areas boundaries. Most of the growth happening near State College was occurring within the boundary. Growth outside the boundary was occurring on agricultural lands, with aggressive subdivision
developments in Walker, Marion, Spring, and Miles Townships. In addition, most of the growth on forested lands was occurring in the northwestern corner of the county for hunting camps. Tracts of industrial land have been subdivided and sold for seasonal recreation camps.

In general, forested areas are less preferred for development because of slope and access. Most of the development was occurring on farmland in just a few municipalities or inside the growth boundary where purportedly S&A Homes largely controls much of the developable land, thereby limiting what other builders and developers can use. Growth outside the boundary lacks access to public sewer and water, making medium to large subdivisions too expensive to develop.

Forestland in the county was generally referred to as unhealthy. Participants cited deer overpopulation, lack of knowledge and understanding about forest sustainability among PFLs and industry, and current gypsy moth infestations and oak leaf roller impacts in the past as reasons for the county’s unhealthy forests. The right to practice forestry was addressed in the Municipal Planning Code. Although, practicing forest management was generally a good thing, there are examples of clearcutting occurring before subdivision plans were submitted. Any action or advice planners may have about forest protection was negated by this practice.

Participants were less concerned about forest loss and/or development and more concerned about the current gypsy moth problem. Also, natural gas, historically inaccessible in the Marcellus Shale formation, became accessible during the time I was conducting interviews. There was considerable discussion about this topic.

**York County Key Informant Interviews**

The following themes emerged from the twelve KI interviews conducted in York County during the summer of 2008. Interviewees included county and township planners and managers, a
forester, extension educator, two zoning officers, a building and subdivision engineer, and a former director of a land conservation organization.

**Theme 1: Rings of Development**

York County has experienced a tremendous amount of growth and development in the past several decades. Much of the growth was a result of immigration from Maryland to its south, as well as from the West Bank and Harrisburg to the north. Lower property taxes, cheaper housing, and a building moratorium in certain Maryland counties attracted people from the south. These immigrants were still able to commute to jobs in the Baltimore and Washington D.C. areas. Interstate Route 83, connects Baltimore to Harrisburg, and has been a conduit along which development was occurring. PA Route 30, America’s first transcontinental highway running from Los Angeles to Atlantic City, intersects with Interstate 83 in York. Manchester Township, where the two highways meet was almost completely developed. Two farms, belonging to wealthy York County families have been preserved and provide the only undeveloped property in the township.

Growth and development were major topics of conversation in York County. Though many parts of the county still convey a rural feel and have maintained a strong agricultural presence, growth is difficult to control. As one participant in York County stated, “planners are tree huggers, but you can’t stop growth. You have to allow it.” A township manager spoke about the rings of development and historic growth patterns from the 1960s to the 2000s:

The city of York, West Jordan, and North York Boroughs are the core of the county if you will. Spring Garden Township, which I actually live in and was manager for 15 years, surrounds the city on three sides. So that’s the urban core of York County. Then surrounding it, York Township, Springettsbury Township, West Manchester and Manchester Townships were basically the first ring of suburban development – through the 60s, 70s, and 80s. The Hanover area down in the far southwestern corner, they’ve had influx from the Maryland side coming up from Owings Mills. The surrounding township to Hanover Borough is called Penn Township and that’s sort of the first ring of growth outside the Hanover
growth area. Interstate 83 is the main North-South route from Baltimore to Harrisburg. A lot of initial Baltimore influence hit the southern part of York County in the Shrewsbury area in the 80s and 90s, I’d say. And, of course, you have the Harrisburg influence in the North. Fairview Township being the first township south of the Harrisburg area and the northern most township in York County also on Interstate 83. Fairview in the north, Shrewsbury in the south, Penn Township in the southwest, and the four municipalities around the city – were the first growth spurt if you will. And now into the 90s and the 2000 era – it’s the second ring. It’s Hellam, East Manchester, Dover, Jackson, West Mannheim (near Hanover) – they’re now the focus of growth.

A township supervisor in one of York County’s more urbanized areas spoke about Interstate 83 as the major artery spurring growth and development. This participant also recognized growth in the county was expanding outward from the urban core:

York county growth is occurring primarily along the Interstate 83 corridor. The obvious reason for that is the land values were considerably less than Maryland and Baltimore and also even to the North Harrisburg and West Shore. So that in itself attracted the growth along 83. The commutes were reasonable. But as municipalities in the immediate urbanized area become built out or the amount of land that is properly zoned for development is consumed, then development expanded out to the next sphere of municipalities.

A zoning officer working in this already developed urban core spoke about running out of developable land and the ensuing pressure on less developed areas:

Manchester Township is the only municipality with 30 and 83 – two major roads intersect. So, you’ve got traffic pressures. People are coming from all direction to Manchester Township. They are basically out of land. They have a few farms left that might have a couple hundred acres. Most of the large developments have already eaten up the farms. And that’s primarily within the last decade. Money was cheap. People thought they could afford houses. It was cheap for them to take land and divide it and put in public improvements and build a house than it was to buy a used house and fix it up. So, everybody wanted to move to the “country” that has now become urbanized.

York County has been experiencing growth for several decades. Much of the immigrating population originated in Maryland and has moved north along the Interstate 83 corridor. York City proper and the townships surrounding it were developed to capacity. Participants were asked to reflect on current pressures in the county:

East Manchester is a Township experiencing a lot of growth. Connewago [township] has a lot of growth pressures on them. West Manchester is basically
in the same boat. There is very little area left for them to expand … although they have a few farms. But that is where it goes.

**Theme 2: Migration and Land Availability**

Several factors will drive further growth and development in southern York County: gas prices, planned growth on the Aberdeen Maryland Army base, and divestment of large portions industrial forestland (e.g., York Water Company and Glatfelter Paper Company). Fluctuating gas prices affect where people move. People tend to live closer to work when gas prices are high. These interviews were conducted in 2008 during peak gas prices ($4.00/gallon on average). Several planners spoke about how this will tend to push growth in the southern parts of the county as Marylanders will strive to stay closer to jobs in Baltimore and Washington D.C.

With current gas prices and travel pressures, you’re going to see a lot of pressure to the southern part of York. More so than what you’re going to see up here (York city) in the next several years for people trying to minimize the distance they have to travel.

Another participant shared their view of how gas prices will spur more development in the southern portions of the county:

Several years ago the price of gas, while still higher than what historically we had experienced, was still low enough that that was not a factor on the decision for these residents to move here primarily from Maryland, although some move south from the Harrisburg area. Because they could hop on 83 go into Maryland, go to the West Shore or even to Lancaster. The cost was reasonable. But now, if they are still seeking less expensive land in Pennsylvania, then the southern portion of York County – the Shrewsbury, Stewartstown, Fawn Grove areas become more attractive, because it is still less expensive land, but the commute is reduced.

Base Realignment and Closure (BRAC), a Federal effort to reduce military infrastructure, may in the next several years affect growth in the southern portion of York County, specifically Peach Bottom Township. BRAC conceivably will achieve maximum armed forces efficiency by realigning asset inventory to save money on operations and maintenance. More than 350
installations have been closed in four BRAC rounds from 1989 to 1995 and there are new closure authorizations. BRAC 2005 impacts 13 installations nationwide and makes Aberdeen Proving Grounds (APG) one of 20 BRAC growth communities in the U.S. By law all BRAC 2005 impacted missions must be moved and fully operational by September 15, 2011 (Harford County Economic Development 2010).

Fort Monmouth, an Army base in Monmouth County New Jersey, will relocate its operations to APG. That post houses several units of the U.S. Army Material Command and offices of the Army Acquisition Executive (AAE) that research and manage Command and Control, Communications, Computing, and Intelligence, Surveillance and Reconnaissance capabilities and related technology. The Federal Bureau of Investigations, National Security Agency, and the Federal Emergency Management Agency also have presence on the post.

According to the Harford County (Maryland) Economic Development website, the consolidation of bases will create 8,200 new positions on post comprised of civilian Department of Defense and embedded contractors. In addition, estimates suggest upwards of 10,000 indirect jobs will emerge from the move. Much of the expected growth is occurring in Harford County, Maryland and coterritorial counties in Maryland and Pennsylvania. Peach Bottom Township, which is about 20 miles from APG and adjacent to Harford County, will likely begin to experience an increase in population over the next several years. One participant spoke of APG, and Fort Meade in Maryland, which is also experiencing BRAC related growth and his expectations on growth in southern York County:

But in any case, those two places are going to put pressure on us, and so we’ve created a group of people who are working with a contractor, funded by the federal government to take a look at what kind of pressure we’re going to get from those two places. Fort Meade, which would come up I-83, and Aberdeen, which would be more in the southeastern part of York County. They’re already seeing some development there. So what happens, they come from Monmouth, NJ and the people who are close to retirement, they say, “Why should I retire in Maryland and pay taxes while I’m retiring, when I can just move up to Pennsylvania that does tax free retirement and yeah I’ve got to drive a little way
for 2, 3, 4 years while I retired, but they stay.” So that kind of thing is going to bring people in. One other thing we’re trying to do is bring in some of the businesses. There’s going to be a lot of businesses that need a place to go. Maryland is already omitted. They don’t have enough land for people or for the businesses. We’re expecting to see some of them move up our way.

Another participant reflected on the less expensive land and building costs in York County versus Maryland:

Ft. Monmouth N.J. is closing down. They’re shifting all their operations to Aberdeen Proving Grounds. There is a major expansion going on down there right now to accommodate testing facilities. So those people are going to be looking for homes. And the expectations are that they’re going to look in York County because the land is less expensive at this point. The cost of building is less expensive. The likely immediate impact will be on the southeastern part of the county – Stewartstown, Fawn Grove area.

As growth pressure rises in southern York County, several industrial landowners in the county are beginning to divest large tracts of forestland and some of that is being subdivided and sold. P.H. Glatfelter Company, with a home base in Jackson Township and the city of York, and York County Water are two businesses subdividing and selling forested properties. In a related way, a participant spoke about several power companies with large landholdings:

There is 3,500 acres of largely wooded area along the river corridor that was sold from a private power company to the DCNR, who in turn was supposed to have sold it to, I think it was the Nature Conservancy or else it was the Lancaster County Conservancy or maybe both. That may be the precursor of a lot more selling of things to come. One of two things is going to happen or three things. One they’ll (industry) keep it because it’s to their financial advantage to do so because they will want to build something. Two, they’ll sell it on some deal similar to this DCNR deal, or three they’ll just sell it and have houses go up.

Glatfelter Paper Company, here in Jackson Township in Spring Grove Borough, owns woodland all over the state. Two years ago they started selling off their land here in Jackson Township, for building lots. Because, if you’re looking at a one acre building lot for 60K without water and sewer even, they take a 10-acre piece of ground – they come up with a million bucks pretty quick.

York Water Company sold off a portion of their watershed to develop and build houses. That one was a wooded parcel that the company had that was probably, I’m going to say 100% wooded and it was right next to a borough that had water and sewer. So, ¼ acre and ½ acre lots with houses on it just like any other subdivision. That’s probably the worst example I can think of.
Theme 3: Growth Concerns

Despite York County’s long association with growth and development, residents still express considerable anxiety over change. Additional people mean more traffic, higher property and school taxes, and worse, loss of the bucolic, agricultural landscape:

There are those tree huggers who are concerned about the loss of trees and prime Ag lands, but then you hear the concerns expressed by those who have to pay their municipal and school taxes. That growth brings an increased demand for municipal sources, but more importantly puts an extreme burden on the school systems. To educate the school children within the standards established by the Commonwealth, means they have to expand or renovate schools or build new schools, which means more capital costs, which means debt service costs, which means ultimately higher school taxes. And so people are objecting in that respect.

One participant linked high school taxes with reasons for residents subdividing land. A township planner and long-term resident in a southern York County township had this to say about the strain school taxes put on residents:

Most people who are trying to keep it from growing too fast, the taxes are going up to high, but it’s the school taxes is the biggest thing. Older people can’t pay the school taxes. Our township taxes are very low, in fact the lowest in the county. Yeah, if you have $100,000 home, you pay $17.00. That’s no big deal. But school on the other hand is much greater. I know people who are paying $8,000-$9,000 a year. It really hits large landowners, really tough. So they either sell out to the rich people or they try to develop. What they try to do is sell off an acre here and an acre there. They can get $100,000-$125,000 for each one of those acres, and in the past it’s been forestland. And then live off of that as long as they can, then sell off another acre.

Traffic concerns county residents as well. A planner in an urban area of the county said of the traffic issue:

Another significant impact is traffic. Growth generates traffic. Especially when you think about how York County grows and the reason it’s growing - because of the less expensive land and the less expensive housing costs.

The bucolic agricultural scenery in York County was one reason why people live there – open space draws people. One participant called it the “open barn door theory.” Once people
move to York County, they want to shut the barn door and not let anyone else in. Talking about the anxiety communities feel, one participant put it:

I think it’s a major, major issue. Within the Ag community it’s a huge issue. I mean they are extremely alarmed by it. But people who are a more senior age, who like what they grew up with – and I qualify it that way because I think that’s typical wherever you go – they don’t want to see a community change. But, I’d say one of the greatest attractive features to this county is its open space, because of its farm ground. And so they all want it (growth/development) to stop the second they move in. And that would be true where I grew up as well.

Another participant said this about growth:

Growth. Growth is the single biggest issue and how to handle it. We’re on the Maryland border. Maryland counties are a little more stretched than Pennsylvania counties, and they tend to limit the amount of growth in their counties and that forces folks outward, and we’re one of the outward directions they go in. We have only hope that we’ll remain a rural community, but the more houses that get built here, the more trees as well as farmland disappear.

One thing never mentioned was concern or anxiety over loss of forestland. If asked, participants would say they never hear others talk about forest loss. If there was a concern over loss of open space, it was consistently over agricultural lands. Often, participants spoke of development pushing into forests to avoid building on agricultural lands. Strong agricultural land preservation programs in the county make it difficult to develop such lands. It was easier for developers to obtain building permits for homes and subdivisions on wooded or “natural lands.”

A township official said this of the trend toward building on wooded lands:

We would allow people to build homes in the Ag zone as long as they were not on prime agricultural land. One of the things that was defined as not prime agriculture land were stands of woods, no matter what quality or size, that’s where we were insisting people build. So we were cutting down a lot of trees. I fought and fought and fought and now I’ve got that down to where we’re only allowing people to build, if the woodlot is near the road.

Another informant spoke about encouraging building in the woods:

We’re trying as much as we can to preserve the prime Ag land – the tillable soil if you will. So the idea is to direct building on the sloped areas or whatever, or we say heavily wooded is a term we use. To the extent that people have a choice of woodland or not – we force them to the not. If it’s steeply sloped – we’ll do
the ‘or not.’ But anything in between to the extent that they can save farmland – that’s what we want to do.

Asked to reflect on quality of life issues in York County, a participant spoke candidly about the York County resident ‘persona,’ as well as the area’s character. This individual grew up in Maryland and still lives there, but has worked in York County for a long time. His job is oriented toward agriculture and adult education:

People are moving into this county and seem attracted to it. People - lifers - it is definitely a community, although I don’t think it’s unusual for anyplace … if you’re not a lifer, you’re never quite one of them. But every place I’ve known in my life, you’ve got some dynamic of that within there. It is a community that is, in my experience, has been strongly opinionated – sort of people who see the world black and white. More so than other places I’ve ever been. Even people who live here would tell you that that dynamic exists. And I’ve never had that refuted by anybody if I’ve pointed it out. So, it can be, from an educational standpoint, a rougher and tougher crowd.

Continuing, he shifts to talking specifically about wealth in the county and the divide between the wealthy and poor.

My biggest surprise in coming to this community was the extreme variation of wealth. This is a community of people who, have nothing and are very uneducated, to extraordinarily wealthy and highly educated. And coming from my home community in Carol County Maryland, I never … now when I go back home … it all looks from a wealth standpoint so much more homogenous because of my experience here. But you have Pfaltzgraff, you have Caterpillar, you still have Harley Davidson, you’ve got some huge manufacturing pieces that have brought an extreme amount of wealth into this community and for the higher echelon. The downtown York Rotary which has a membership of about 350, the largest one on PA, is a group of very philanthropic people, and that’s the other thing that comes along with the extreme wealth is the philanthropic piece. But then you contrast that to, particularly in pockets of rougher areas of the community and typical to any place I’ve lived in my life, or have been in my life, rough poorer soils have people that are less educated and poorer living on top of them. So you get some very poor, very uneducated people in addition to this extraordinary wealth. And for me that was, it’s been a fascinating piece for me because I had never seen anything quite like it before.

**Theme 4: We Don’t Want You Building Out Here.**

Many of my conversations with planners, township managers, long-term residents, and
educators in York County revolved around planning tools either developed in the county or used in there to control or regulate growth and development. They spoke about how these tools work, how they originated, and how they have evolved over the recent decades. Transferrable Development Rights (TDR) were recognized as helping control growth in certain townships. A manager in one of the faster growing townships helped develop the TDR sliding scale concept while working as a planner in York in the early to mid-70s.

TDR is a method for controlling development by only allowing specific regions of the township to have growth, leaving other areas; particularly open space untouched. Originally, private landholders were allocated limits on dwelling units based on parcel acreage. They could exchange or sell all or portions of their allocation to the township. Through this process, the township accumulated units and then reassigned them to areas they wanted to develop (e.g., typically within the sewer and water service zone). Pennsylvania law requires each township to allow for each major land use (i.e., agriculture, industrial, residential, and commercial) and TDRs were a novel idea, because instead of allowing landholders to build what and how they wanted, the township could control those rights and develop where they thought appropriate. The sliding scale takes parcel size into account when assigning dwelling units. Therefore, a 300 acre farm would be assigned more units than a 100 acre farm.

But we’re making it hard for them to sell off those acres. What we say is, “Look we don’t want you building out here.” Whether they’re doing it in a farm field or a stand of woods, we don’t want you house out there. We’ll pay you the money you would get for selling it and building a house for it. But we want the house built in there where it’s zoned. We’re trying to get them to transfer.

In some cases, townships retire dwelling unit allocations and in the process, essentially, ensure no building is done:

These transferrable development right provisions, which allow you to take what you could have done over in the Ag or conservation zone and sell those 3 or 4 rights to the developer who owns land inside the borough or not inside the borough, but around the borough, but some place where there are utilities that are zoned for commercial or residential development, so that you can suck the
development out of the outlying and inject them into an areas that has the
developing infrastructure. That has worked very well. Shrewsbury Township has
actually been buying the TDR (transfer development rights) and just retiring
them.

Following is an explanation of the sliding scale by the individual who helped develop the
tool:

In a nutshell, it’s taking the Ag areas in a municipality and saying to the farm
owners … if you want to really and truly protect your farmland one of the tools
you might be able to use is zoning. Two of the ways we can do that is use a set
scale or a sliding scale of limiting development rights within that Ag area. In
many case we limited the development to the poorest Ag soils. No development
on steep slope or heavily wooded areas. Limited the development along those
lines, but with a set number of households per parcel no matter how large the
parcel was. In other townships we said well, that is not quite fair because a guy
has 300 acres ought to be entitled to more than a guy has 100 acres. So, we’ll do
what we call a sliding scale and that is the guy that might have 50 acres gets 3
dwelling units, the guy has 100 gets 6, the guy that has 200 gets 9, 400 gets 15 or
whatever it is. Out of 35 townships in York County, probably at least a third or
more have those techniques included in their zoning regulations.

TDR is a tool used to control growth and development, but township supervisors may not
always want to control growth and development, or control it in the same manner. Since township
supervisors and commissioners are elected officials, zoning ordinances, regulations, and special
incentives developed during a previous administration can be changed. An informant spoke about
these changes in his township, which highlight how people, working toward a common good, can
take drastically different approaches:

A wooded lot was going for $175,000 an acre. That is high, just unbelievably
high. But how do we give that farmer $175,000 to get him to … well that’s pretty
difficult to do, and the only way to do it is to give the person who buys that
development right from him for $175,000 a triple benefit. In other words you
cannot just put one house that you would have put over here, but you can put 3
houses over here. He (the farmer) gets his $175,000 back plus we get our house
in there where we’ve got infrastructure, water, sewer, and roads, and everybody
is happy. But some of the supervisors don’t want to. They don’t want to, they just
don’t want to grow period, and they see well “if it goes here, it’s one house, if it
goes in there it’s three.” That’s all they see.

Both KIs and PFLs who had experience in city, regional, or township planning in York
County, promoted the idea of using TDRs as way to preserve forestland. This would work
similarly to TDRs for agricultural lands, where landowners sell their allotted building units to the township, who in turn, assembles and develops on these building units allocations near urban centers and on land not suited for agriculture. Study participants stressed the approach would work for forest landowners. Here is a participant who once sat on the township planning commission promoting the idea:

Well, part of your recommendations I hope, at the end will be that the Bureau of Forestry begin to look into transfer development rights, because that will do it. You need to try to begin to change the mindset of the Bureau of Forestry. The forestland is just as valuable as farm land. They need to get the same kind of policy they have for farmland transferrable development rights, they should have for forest land. It would save huge amount of tracts, because people would do it.

An Official Map was another development control tool often referred to during York County interviews with township and city planners and managers. An Official Map provided a municipality the ability to delay property development for up to a year, thus allowing the municipality an opportunity to acquire it for public use.

An Official Map is like a zoning ordinance, but it has some teeth. With an official map you could say, “Here’s where we want recreation in the future, here’s where we want roads in the future, here’s what we want to preserve.”

And there one of the things they’re doing, it’s looking at these stands of trees and trying to determine which ones we’re allowed (to) put on our official map, because that’s not just something you can do. And what the official map does, is it allowed the township to have right of first refusal. If you’ve got a stand of woods and it’s on our official map, if you want to sell or develop that, you have to come to us first. Now we have the option of buying it to protect it, or make a deal with you to limit the damage. There are a lot of things municipalities can do to protect their woodlands.

Township and county planners often referred to the Municipalities Planning Code’s allowance for timbering on private lands as a final comment on planning tools. Similar comments were made in Centre County. Several participants questioned this allowance, figuring if we wanted to protect trees and forests, why would we allow the Code to be written in such a way? One interviewee even suggested lobbyists had gotten one by the Pennsylvania Bureau of Forestry:
One of the strange things that we found out when we’re doing the zoning ordinance, county planning is telling us there is some state law now that says forestry has to be a permitted use in every zone in the township, not as a special exception or variance, but a use by right. The management of forests and timberlands for commercial purposes has to be allowed, has to be allowed as a use by right in every zone, in every municipality. Now, how did that get through the Bureau of Forestry and Forest Resources environmentally conscious people? Basically, you’re saying that we’re going to let people to cut trees anywhere anytime just about. That’s what it tells me.

**Theme 5: Hellam Township**

Hellam Township located on the eastern side of York County, proximate to the Susquehanna River, was beginning to experience tremendous growth as it was within the next available development ring. Understanding this, township officials were actively and aggressively addressing growth. Every township/city planner or manager interviewee invoked Hellam Township and their activities. Three items make Hellam’s story compelling: 1) PA Route 30 bisects it and as a result, the township is experiencing growth; 2) A large part of the township is forest; and 3) The township is bounded by the river to the east and hills to the north and south. Forested hills and proximity to the river are drawing people to the area:

Hellam Township would be a good example because the topography of Hellam is such that on the Northern part of the Township you have what is known as the River Hills, which still contains a lot of wooded area. And then, then there’s the York Valley, which 30 runs through and then it rises back up to the South to San Louis State Park there is some forested area there, too. Hellam is a township with sizeable expanses of wooded area where property owners may have subdivided because people want to live in Hellam Township … some people want to live in Hellam Township because they want to live in a wooded area. And some locations in Hellam Township have fantastic views of the Susquehanna River so it requires the development of wooded areas to gain that view.

Hellam Township officials have developed an active Environmental Advisory Committee (EAC) to address this influx. According to one participant, only a third of County’s townships have an EAC. Hellam’s EAC successfully used their Official Map to maintain and protect a continuous canopy over a large forested tract along the Susquehanna River. Several city and
township officials acknowledged this success during their interviews. An engineering consultant, who often works with County township officials, said this about Hellam:

Hellam Township put in their Official Map that this overlay was a continuous canopy overlay, so any development that occurred in this area, I forget the specifics of it, but it rated what you could do on your property no matter what you were zoned or no matter what you were building. You had to take into account the fact that you couldn’t remove more than X % of the canopy so that it stayed continuous on your property, so it could serve as a conduit for wildlife. They recognized as a township that that’s continuous forestland, that’s value over and above its aesthetic values, and they did something to preserve it.

Another participant said this about Hellam’s aggressive measures:

Hellam Township up in here has done this. They’ve got a huge area of continuous canopy cover and they’ve just simply said, “That’s protected now. You’re not going to go in there and cut that down.”

**York County Summary**

York County has experienced considerable growth from the 1960s to the present, with occasional peaks and valleys. The 1990s saw a peak, which occurred again in the 2000s just before the national economic slowdown. Much of this growth has come from Maryland as counties there placed moratoriums on development and as property taxes increased. Major highways, such as Interstate 83 allowed easy commuting to Washington D.C. and Baltimore. Townships immediately surrounding the city of York were the first to reach capacity, spurring a ring of growth, which has since expanded outward from the central core. Hellam and Jackson Townships on the eastern and western edges of the county, respectively, are currently experiencing high growth.

APG is currently expanding as the Army is moving much of its New Jersey operations from Ft. Monmouth under the BRAC strategy. The injection of Army personnel, civilians, and businesses and organizations was expected to affect growth and development in southeastern townships (e.g., Peach Bottom). The commuting distance from Peach Bottom Township to APG
was less than 25 miles. Large landholders, for example P.H. Glatfelter and the York County Water Company were divesting forestland. Some of this land has been sold to conservancies, but much of it was undergoing subdivision for building lots. Several large, new subdivisions as a result of these divestitures have occurred in Jackson Township. Development has led to the need to build several new schools, increasing school taxes across the county. Interview participants reported an increase in small subdivisions as residents periodically sell lots in an attempt to make ends meet.

County residents felt a sense of anxiety and concern over the amount of growth. The loss of agricultural lands was particularly disconcerting for residents. Long-time residents as opposed to newcomers mostly expressed this concern. There was no unprompted mention of resident concerns over forest loss.

The long history of growth and development in York County has resulted in several growth control mechanisms, which aid municipalities in preserving open space. Transferrable Development Rights (TDR) using a sliding scale was introduced in the mid-seventies. It allowed municipalities to purchase building rights from individual landowners and to use those acquired rights to concentrate development in areas with sewer and water infrastructure. TDR is a tool for addressing scattered development and has been somewhat effective at clustering houses near township centers and boroughs.

The Official Map is a relatively new tool municipalities were using to plan and preserve natural amenities and open space. Hellam Township used their Official Map to maintain forest cover along a stretch of the Susquehanna River. Building or development occurring in this forest must maintain a stipulated percentage of forest cover. Current growth patterns, natural amenities, a strong EAC, and their use of the Official Map to preserve forest cover have focused attention on Hellam Township as many KIs recognized it as a place that understood its current challenges and was actively working to mitigate growth and unnecessary natural amenity loss.
**Overall Key Informant Summary**

The 34 KI interviews provided insights into current social, economic, biophysical, and cultural attitudes and trends across the three study counties. These interviewees were people living and working in the county and possessed a familiarity with the communities and who had a depth of knowledge about development patterns, forest characteristics, and community issues. The results presented reflect their thoughts, ideas, and experiences from working and interacting with county residents. The analysis began with Perry County, the most rural county of the three, and ended with York County, the most urban.

Several similarities among the three study counties emerged from the interviews. First, the KIs believed residents liked where they lived. There is high value placed on living among the rolling hills of southern York County with the convenience of an easy commute south on Interstate 83. Similarly, working in Harrisburg, but living on farm ground in a pristine Perry County, far removed from the hustle of urban living was well worth a 40 minute commute. Centre County, a quasi-rural place, had cultural and natural amenities easily reached by residents.

In addition, there was little to no concern about the loss of forestland to development. Participants and residents were more concerned with loss of agricultural land. Finally, aside from the pro- and anti-development “cultural war” among Perry County residents, most participants spoke of people not wanting the place where they live to change. They wanted to preserve the bucolic farmland and the forested ridge views that brought them there originally.

Aside from current growth occurring, based on the interviews there were a couple of notable differences that emerged. York County, as opposed to Perry and Centre, was actively using several planning tools to control growth. Transferrable Development Rights, significant use of the EAC, and the Official Map have helped York mitigate development issues in recent years. Though Centre County has established a Growth Boundary around the Centre Region, there was
no discussion of other tools municipal planning tools used on a regular basis. Perry County has been growing, but not at the same rate as either York or Centre. The major developments planned for Marysville and Duncannon areas are firsts for Perry County. These developments are the talk of the town and foreshadow significant changes.

The presence of prime agricultural land and soils in York County has pushed land development into wooded areas. This was specific to York. Land development in Centre and Perry Counties was mostly on flatter agricultural ground. There were exceptions to this. The large Perry County developments planned near Marysville will be on forested land, which was an exception to typical flat-land development. However, this was the first proposed development of this kind in the county. In addition, Centre County has considerable seasonal developments in its forested northwestern corner.

The focus of the next section is on individual landowners within each of the study counties. The KI interview data here will provide background for the phenomenological interviews and help contextualize the experiences of PFLs as they plan for the future of their forestland.
Chapter 6

Phenomenological and Semi-structured Interview Results

This chapter presents interview data from PFLs in each of the three study counties. It includes: 1) Sociodemographic survey results; 2) Phenomenological interview results; and 3) Semi-structured interview results.

Sociodemographic Data

Following is social and demographic data collected from each interview participant. This data was collected at the conclusion of the both the phenomenological and semi-structured interview sessions and is presented here to help develop a broader understanding of participants involved in the study. Information was collected via a nine-question survey completed by participants(Appendix C). Data from thirty-nine questionnaires are presented here, of these, 10 involved couples. Socio-demographic data was collected from the individual initially contacted and who agreed to the interview. Consequently, spouses were not included in the socio-demographic data. However, spouses’ stories, perceptions, and points-of-view shared during both the phenomenological and semi-structured interviews were included in the analysis. Often, couples agreed on the information they shared during the interview. On the occasion there were differences in their perceptions or stories, these were not ignored, but were integrated into themes developed in the interview results and analysis.

Thirty of the 39 PFLs interviewed were male. The average age was approximately 65 years (Figure 6.1). This is slightly higher than the average age reported in the Pennsylvania PFL
study (Metcalf et al. pending). About half of the participants were retired (n=19), and 14 worked full time. Just four were part-time and only two considered themselves homemakers (Figure 6.2).

**Figure 6.1.** PFL age categories across groups (n=37).

![Bar graph showing age categories of PFLs across groups.]

**Figure 6.2.** Employment status of PFLs across groups (n=39).

![Bar graph showing employment status of PFLs across groups.]

As asked about their level of education, the majority at least completed college (n=24), with 12 having continued to graduate or professional school. Six reported having finished high school.
with seven at least having some college (Figure 6.3). This distribution is consistent with results from the Pennsylvania PFL study (Metcalf 2008).

**Figure 6.3.** Highest grade of school reported across groups (n=37).

Correlated strongly with education, income is high among PFLs. Two-thirds of PFLs, of those who reported, make over $50,000 annually (Figure 6.4). Six reported making between $35,000 and $49,999, while only one made less than $15,000 annually. Twelve participants preferred not to answer this question. For reference the median household income in Pennsylvania in 2008 was just over $50,000 according to the (U.S. Census 2009).

As asked to describe themselves politically, five PFLs did not answer the question. Those who subdivided and sold land tended to identify themselves as moderately conservative or conservative (n=10), while PFLs who donated or sold easements tended to identify themselves as moderately liberal or liberal (n=7). PFLs who had not committed to any action tended to describe themselves as moderate or moderately conservative (n=7) (Figure 6.5).
Figure 6.4. Household income of combined PFL groups (n=27)

Figure 6.5. Political description by PFL group (n=33).

Nine PFLs reported having no children. The other 28 had between one and eight children with the average number of children per family being 2.2. Approximately half of PFLs in the sample had either two or three children.
PFLs on average have lived in their present community for 41 years. Only two individuals reported living in their present community for less than 10 years, while nine individuals reported living in their same community for over 60 years. Three PFLs did not answer the question.

**Summary of Sociodemographics**

The participants in this study follow similar social-demographic trends as PFLs in the broader Pennsylvania PFL Survey study (Metcalf 2008). They were mostly male (77%), with an average age of 65 years, which is slightly higher than average age in the PFL study (57 years). Approximately 50 percent of our sample was retired with 36 percent working full time. They are well-educated, with two-thirds of the sample having completed college and gone on to graduate or professional school. Participants reported relatively high incomes, despite a large portion of the sample being retired. Two-thirds of the sample population reported making over $50,000 annually. Politically, PFLs who have subdivided and sold land described themselves as moderate conservatives or conservative (83%). Only one individual in the subdivision group described themself as liberal. Conversely, 64 percent of PFLs who sold or donated easements described themselves as liberal or moderately liberal. Seven out of 10 participants in the no action group described themselves as either moderate or moderate conservative.

**Phenomenological Analysis**

Findings for the phenomenological portion of the study are presented in three sections representing the three PFL groups interviewed: 1) Subdivision; 2) No action, and 3) Easement. Each interview began with the same question: *I am here to learn more about how private forest*
landowners plan for the future of their forestland. Can you tell me about your experience of planning for the future of your forestland? What stood out to you about your experience? Overall, the stories I collected reflect the diversity of PFLs’ experiences in succession planning, while pointing toward several tangible similarities among the three groups. Every effort was made to interview participants who owned land of varying sizes (i.e., small, medium, and large parcels), in different parts of each county. This would help ensure a higher degree of variance within the sample.

**Theme Development**

Thirty-nine phenomenological interviews were collected across the three study counties between November 2008 and January 2010 (details concerning where the interviews were conducted and with who are presented below). Interviews were transcribed word-for-word and presented to a phenomenological research group. Approximately one-third of the interviews, representing each of the three PFL categories, were read aloud line-by-line by the research group. Group members discussed the meanings of words, statements, and emotions expressed by participants regarding their decision-making and forest planning thoughts, ideas, and behaviors. These expressions were discussed in the context of the individual interview from which they emerged and were also considered in the context of other interviews already discussed. Commonalities were identified across transcripts resulting in themes representative of PFLs forest planning experiences as a whole. Effort was made to explore all possible meanings and divergent perspectives represented in the transcripts concerning the phenomenon. Patterns and later, themes, emerged from these group sessions which informed the analysis of the remaining two-thirds of the interviews. Text supporting these themes was later presented to the research group to verify findings.
Interview Analysis

In describing their planning experiences, PFLs across the three groups discussed their decision making process, as well as their relationship to the land itself. Because of this bifurcation, I found it is necessary to first understand the experience of owning or holding land and then the process of deciding its future. The decision experience naturally varies across the three groups. Themes that emerged from each group speak toward the group as a whole, across counties, and their experience of the phenomena. This section on the phenomenological interviews presents findings from the three groups, beginning with the subdivide and sell group, and addresses both land and decision themes specific to each. Important variation among counties is presented in Chapter 7.

Subdivision Group

I conducted 14 interviews in the three counties (i.e., nine individuals and five couples) about their experience of subdividing and selling forestland. Five interviews were conducted in Centre County, three in Perry, and six in York County. Details about how much land participants owned and how much they subdivided and sold are covered in Table 6.1

Relationship with the Land

For participants who have made the decision to subdivide and sell land, the relationship with the land itself was enabling. Land was functional, beneficial, and useful to them, family members, and sometimes for others outside the family. Land enabled members of this group to live, work, and provide for themselves and their families according to their values and goals. Their relationship to the land was based on this enabling quality that grounded these participant’s
experiences. Often their stories began with how the land enabled them to live a particular lifestyle – to build a house from the wood on the land; to grow crops; and to enjoy privacy.

**Table 6.1.** Subdivide and sell group: Land owned and subdivided by county.

<table>
<thead>
<tr>
<th>Centre</th>
<th>Perry</th>
<th>York</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own: 12 acres</td>
<td>Own: 18 acres</td>
<td>Roddy</td>
</tr>
<tr>
<td>Divide: 12 acres/25 lots</td>
<td>Divide: 5 acres/1 lot</td>
<td>Own: 45 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divide: 8 acres/3 lots</td>
</tr>
<tr>
<td>Lucy</td>
<td></td>
<td>Steve</td>
</tr>
<tr>
<td>Own: 15 acres</td>
<td>Own: 40 acres</td>
<td></td>
</tr>
<tr>
<td>Divide: 4.5 acres/3 lots</td>
<td>Divide: 5 acres/2 lots</td>
<td>Own: 45 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divide: 8 acres/3 lots</td>
</tr>
<tr>
<td>Charlie and Mary</td>
<td></td>
<td>Nancy</td>
</tr>
<tr>
<td>Own: 18 acres</td>
<td>Own: 273 acres</td>
<td></td>
</tr>
<tr>
<td>Divide: 6 acres/1 lot</td>
<td>Divide: 25 acres/4 lots</td>
<td>Own: 64 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divide: 50 acres/13 lots</td>
</tr>
<tr>
<td>William and Kathy</td>
<td>Own: 170 acres/&gt;500 acres</td>
<td>Frank and Helen</td>
</tr>
<tr>
<td>Own: 170 acres/&gt;500 acres</td>
<td>Divide: 50 acres/1 lot</td>
<td>Own: 78 acres</td>
</tr>
<tr>
<td>Divide: 50 acres/1 lot</td>
<td>Divide: 4 acres/3 lots</td>
<td>Divide: 4 acres/3 lots</td>
</tr>
<tr>
<td>Jack and Jill</td>
<td></td>
<td>Reginald and Roberta</td>
</tr>
<tr>
<td>Own: 189 acres</td>
<td></td>
<td>Own: 90 acres</td>
</tr>
<tr>
<td>Divide: 60 acres/11 lots</td>
<td>Divide: 3 acres/2 lots</td>
<td>Divide: 3 acres/2 lots</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ross</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Own: 900 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Divide: 60 acres/22 lots</td>
</tr>
</tbody>
</table>

1. In all cases, to protect participant identity, all interviewees are identified by pseudonyms.

**Decision to Subdivide and Sell**

There are two themes specific to this group’s decision to subdivide and sell. These include: 1) Perceived no alternative; and 2) Outside impetus. When describing their planning process and their decision to divest land, participants spoke of perceiving no alternative. For some, this meant they inherited the land and the tax burden along with it, and subdividing and selling was a necessity. For others, subdividing and selling land was the only perceived alternative to achieving their goal of farming more land, or providing land for a son or daughter.

The other element of the decision process that emerged from the interviews was the decision to subdivide and sell involved others (e.g., parents, township, spouse). Often the decision was experienced as a way to stabilize or regulate a relationship or a life event.
Following is a short introduction of study participants who have subdivided and sold land. Without going into too much detail, I tried to capture essential information about each participant.

**Participant Introductions**

John is a developer and has lived and worked in Centre County for over thirty years. He purchases land for development when he see what he calls “a good buy.” He has three children. Because of recent poor economic conditions, his work has slowed considerably. He recently lost money on one of his land investments due to red tape and local politics. He understands this is simply part of the business and the risk he takes.

Lucy and her husband have four young children and board horses on their property as a side business. They recently subdivided and sold three small wooded lots from the front of their property to afford 10 more acres of pasture for their horses.

Charlie, a retired professor and Mary a retired teacher have five adult children; one has recently moved back home after being away for 15 years. They are splitting six acres from their 18 acre parcel for the daughter who moved back home. They own a small amount of forest (about 6 acres), which lines a stream running through the back of their land. They take meticulous care of their yard and acreage, and allow anglers and their families to fish and picnic near the stream during trout season.

William is a retired coal miner and lives next door to the house where he was raised. He mined coal for his father all his life. Along with his brother and sister, he inherited 170 acres from their mother’s estate. They owe $2 million in back taxes on the estate as well as the land that was part of his father’s coal company. William was recovering from prostate cancer when I interviewed him. He likes to hunt on his land, but is ready to sell it all.
Jack is a trust lawyer travelling back and forth between London, New York, Hawai’i and Centre County. Jill, his wife, is a homemaker. They returned to Centre County after living in Hawai’i for many years. They live rurally. They both enjoy the mountains here and being able to get away from town. Jill wants to live closer to people. Jack is content to live away from people in the middle of the forest because of several bad experiences with neighbors.

Stan recently retired from the Pennsylvania Department of Environmental Protection. He and his wife built their own home using trees from their property. He is a hands-on, do it yourself kind of person. He and his wife recently moved from Perry to Dauphin County to live with and help care for his parents. As a result, his wife is 30 minutes closer to her job. Moving away from their land and house was a difficult decision.

David lives in rural Perry County. He helped build his own house. Several years ago, for financial reasons after a divorce, he sold a lot from his property. He gifted some land to his daughter and her husband. David works in Harrisburg and really enjoys hunting on his property and also helping oak regeneration.

Henry is one of eight siblings who inherited from their parents nearly 300 acres in rural Perry County. Henry and his older sister are co-executors. They tried initially to find a buyer for the entire property, but have been unsuccessful. Trying to subdivide and sell land for the past 10 years has been very frustrating and time consuming. To complicate matters, the siblings are infighting about money and who should benefit from land sales. Henry’s family sued to remove him from his executor responsibilities; however, they could not prove negligence.

Roddy and his younger brother Steve co-own 45 acres of wooded land in the Pigeon Hills in York County. Years ago their grandfather and father both built cabins on the land. Roddy still calls one of the cabins home. Steve lives close to the land and sometimes cuts wood on the property. Originally, their father wanted to sell 8 acres. Steve convinced him to subdivide the land
before selling it. Three years ago, during the process, their father passed away leaving Steve to finish the sale.

Nancy and her husband enjoy the privacy their property allows. They have always wanted to provide land for their children. Because of local zoning ordinances, and to fulfill their desire of gifting land to their children, they have built a small road through their property to provide enough road frontage to subdivide. They have had to subdivide and sell the maximum number of lots to make the project economically feasible. They are going to build a new house for themselves on the property and one of their daughters and her family will move into the original farmhouse.

Frank and Helen are turning their recently acquired ground into a working farm. They bought the land and subdivided three small lots to help cover costs. They now raise miniature cattle and are remodeling their older farmhouse. Frank enjoys hunting the property and is quite involved in wildlife and forest conservation activities. They both have full time jobs and run the farm on the side.

Over 30 years ago, Reginald and Roberta moved from Baltimore to southern York County to farm vegetables and fruits on a 90 acre farm. They have three children and are gifting land to them as they become interested. In 1990, Reginald began working for a nascent chemical company. Over time, he became a partner in the company. It is now a multi-national corporation and he and his partners recently sold it. Reginald and Roberta always wanted their children to live on the land and two currently do.

Ross, along with his son, is a farmer in southern York County. He was born and raised on the property he farms. One of Ross’s life goals was to farm enough land to provide a decent income for himself and his son’s family. He loves his job and is disheartened by what he perceives to be meaningless restrictions placed on farmers.
Thematic Analysis

Land Theme: Land Enables

“I don’t believe in ground that doesn’t do anything.”
- Reginald

The central theme for the land experience for those who sell or subdivide was that Land Enables. Members of this group enjoy a particular lifestyle that links at some point to their tenure with the land. What land offers ranges from privacy and personal satisfaction to monetary gain.

The ends of this continuum are heard in remarks by Stan and John. Stan said, “…I wanted some place that was a little private, had woods…I’m a wood worker. I can cut trees and make things.” While John acknowledged, “…I bought this land because I thought it was suitable for high-end development.” In both cases, land is enabling them to fulfill a particular need. Stan benefits from the privacy the woods gives him, and the ability to continue his woodworking hobby, and John benefits monetarily.

Reginald and his wife Roberta are “out of the truck” fruit and vegetable farmers (i.e., farmers who sell food from the back of their truck). Their land provides food and would enable them to provide for themselves and others if something “happened in the world.” For Reginald, land should do something – be used:

If something happened in the world, we have ground that’s good for feeding us and others. I don’t believe in ground that doesn’t do anything.

Ross, a farmer in southern York County, decided selling unproductive forestland enabled him to buy productive land to provide for his son’s and his own family:

Well basically it [subdividing and selling 60 forested acres] gave me about uh, $600,000 that I was able to buy 2 farms with. A 119 acre farm for, I think it was $327,000 and another um, 70 acre place, it was $170,000 and another place, it was a 40 acre parcel for $250,000.
There are other ways by which participants benefitted from their forestland that are paramount to them. For Jack, the large parcel of wooded land he owns enables him to live separate from others.

I would rather not ever sell off any of the property or have it subdivided… I have a history in my life of having bad neighbors and I’ve learned through experience that the only way to protect yourself… the best way to protect yourself against bad neighbors is to buy so much land that you don’t care what your neighbors do. Having a lot of land is a good way to insulate yourself from unruly neighbors.

For Nancy the land enables her valued privacy. She loves her land because:

Being from Baltimore you know, I never had been on a farm really and just once you’ve experienced having some space around you, you want more. And um, when we moved into that house, before this one, it was very nice, but we saw neighbors, you know? And we’re not anti-social by any means… I do value my privacy and I just…I just fell in love with this place I mean…I just loved it.

Frank loves being able to hunt on his own property. He and his wife Helen are telling me about their joy of spotting, photographing, and hunting deer:

**Helen:** But we’re enjoying the property. I mean we do enjoy it. It’s a lot of work but there are days when it’s not so fun and days when it is.

**Frank:** I love taking my bow in the evening, go out on our property and not have to worry about seeing anybody and you know being able to pick and choose what deer I shoot. I mean opening day, I had 5 shooter bucks, and I passed them all. Because…just because. Because I can you know…I have field cameras and stuff that I put out. I really try to do a decent job of managing.

The land enables Charlie and Mary the ability to share the stream with anglers and their families. Charlie and Mary explain it like this:

**Mary:** And over here across the street there is a man that is disabled but he has one of those alligator things he can drive down there too and he can fish or just, enjoy nature like he does.

**Charlie:** First day of fishing season, we have lots of guests.

**Mary:** They go down there and bring their families and take picnics and…sometimes we have to pick up trash afterward.

**Charlie:** But not very much. Most of them are pretty nice.
It also enables them to provide land for their daughter who has recently moved home after being away for 15 years:

Our daughter lives with us. She’s not married, never has been. And uh, we wanted to provide for her when we’re gone. So we decided to give her, her inheritance early.

Decision Theme 1: Perceived No Alternative

“This is the way I had to do it”
- Stan

For many interviewees, the decision to subdivide and sell land was necessary and something they had to do. “This is the way I had to do it” and similar phrases were heard in several interviews. Participants believed they had to subdivide and sell land, as there was no other alternative. More often, however, participants spoke of the need to divest land to provide for themselves or someone else (e.g., wanting to create a small, working farm for themselves, wanting to give land to heirs).

Here, William speaks of being forced into divesting because of the taxes his family owes on the land he inherited:

**William:** There’s 2 million in taxes on it.

**Josh:** Who pays them?

**William:** Nobody. They just keep growing.

**Josh:** So, What are your plans for that land?

**William:** I’d like to sell it... in 3 minutes we’d sell it. Do you have your money with you?

Henry is one of two executors of his parents’ estate in Perry County. He has seven siblings, all of whom are eager to benefit from the sale of the land. Because of sibling discord and tension, Henry did not want me to record our interview, so his quote is paraphrased from my notes:
No choice but to sell. I want to keep the land, but siblings want to sell. The beneficiaries want to get the land – the money. No choice. I want to keep it – land is priceless. I grew up here and lived here all my life. We put values on everything. But the decision has been made.

From Nancy’s perspective, she also had no alternative but to subdivide and sell the maximum amount of land she could in order to provide land for her children:

The subdivision…was developed because the lay of our land and for dividing it up for the kids…we have to, we have to subdivide in order to afford to give our kids some land. Because [the township] wants us to put in a road – an 1800 foot road – so you got to do it. They didn’t make it easy for us to just give our kids some land… we have to put in a road now. So, [the township is] making it necessary to divide the land.

Stan and his wife decided to move from their house and an 18 acre wooded tract in Perry County because of health issues with Stan’s parents’ health. Their decision was to divide their acreage into two parcels (five acres with the house and an adjacent 13 wooded acres). They retained the wooded area and sold the house and five acres. To Stan, subdividing and selling was the only alternative:

[My parents] posed the question of… are you interested in this house in Dauphin… it turned things into a different perspective because … my wife really, really didn’t want to move…My parents are both 80… I took an early retirement …because Dad is… not able to drive and Mom is driving more because she had to, but I still end up taking them to doctors appointments and that kind of stuff. So it was a decision I really didn’t want to make at the time, but uh I didn’t have enough vacation to do what I wanted to do and unfortunately as an only child um, there wasn’t anybody else there to do it. So, I bit the bullet and retired early.

The following two quotes are from Lucy who subdivided and sold land to purchase more pasture for her horse boarding business and Jack who subdivided and sold land as a compromise with his wife. Their respective decisions were perceived as the only alternative. For Lucy, it is helping her business. For Jack it is helping his relationship with his wife.

First, the decision to subdivide was simple because being a horse boarding facility, we were leasing 10 acres next to us here and the owner said she was going to sell those 10 acres. And of course without those 10 acres I would lose a large portion of my boarding business and we had approximately 3 plus acres down front where the woodlands are, that, uh, really had little value to us.
Well it was very simple (Jill, his wife, laughs). If it were up to me, I would not subdivide the property or sell any of it. If it were up to my wife, she wanted neighbors. And so the compromise was to subdivide the entire property leaving… the largest of the lot for the area where our house sits and have another 11 lots on the other side of Homan Pike available for sale to people who would become our “neighbors.” So they’re far enough away so that presumably they won’t bother me, but they’re close enough so that my wife can say we’ve got neighbors.

Finally, Frank and Helen wanted to have a small working farm. Their decision to subdivide and sell land was a way for them to pay for their dream. Frank and Helen perceived no other alternative:

When we looked at the land, the whole farm which, in all it was 155 acres total, it was already under contract…we went to that guy… and asked him if he’d be willing to subdivide the whole farm…he decided that … he really wanted the fields… And um, so he was willing to part with the house, and uh the barns, the woods, and some pasture. Basically, so we got 78 acres, came to an agreement on price and uh, at that point … it was our job to figure out … first of all what we were going to do with the property, number one; and number two, how to pay for it. So um, so I got together a business plan, well we did, and … what we had figured was if we could find a uh, I don’t want to call him a developer, but um, a builder who would purchase all 3 lots…

Decision Theme 2: Outside Impetus

“…then she died and left everything to the kids.”

- Kathy

Participant’s stories about deciding to subdivide and sell often evoked an outside force or impetus that factored into the process. It was sometimes linked to the desire for additional income as in John’s case, but in many cases was linked to family values and relationships with others. For Kathy and William for example, the outside impetus originated from inheriting land from William’s mother:

**Kathy:** that was inheritance is what it was… then she died and she left the ground and everything to the kids.

**William:** She told me, I’ll let you guys fight it out. That’s the way it was left.
Henry also inherited land from his parents. He wants to keep part of the land and has purchased a parcel from the estate. Nonetheless, pressure from his family to divest has been overwhelming and frustrating. His search for a single buyer has proven fruitless, so he has been selling smaller parcels a few at a time. Henry puts it simply:

I want to keep it – land is priceless, but siblings want to sell. The beneficiaries want to get the money.

Stan talks about the pressure he felt to help his parents. For him, this meant retiring early, and moving from the house he built into his parents’ home:

…as an only child um, there wasn’t anybody else there to do it. So, I bit the bullet and retired early um…

For Ross, keeping his son and both their families making a decent living was the impetus to subdivide and sell 60 wooded acres.

…my son and I are farming. I just wanted to get big enough that I could farm, say 1000 acres and have enough money generated that it would keep two of us in a decent living. And uh, I mean at the rate it’s going, 1000 acres isn’t going to be enough for long.

The impetus to subdivide and sell land for Reginald and Roberta was their desire to give land to their kids. This meant subdividing small parcels from their farm in York County to accommodate their children when they were ready to settle.

This land has always been about our children. One of my goals in life was to have all my children on one piece of property. So far, we’ve managed to get two of the three. I will subdivide another piece for my son if he wants it. I have a list of goals for my life: 1) to have all three children living with us on the farm; 2) to be a successful entrepreneur; 3) I don’t want my children to be a burden to society. I’m almost there; need one more child on the land. (Reginald and Roberta)

David’s impetus was twofold, to provide land for his daughter to build a house, but originally, he subdivided because of a divorce. In order to keep the house he had helped build and the land he enjoyed hunting on, he subdivided two lots and sold one:

And I ended up giving uh, my daughter then the other lot. Three acres or whatever, 3.5 acres or whatever. She built over here, she got married.
I had the whole 40 some acres or something whatever but, I got remarried and got divorced and wanted to stay here. So I actually put a couple of lots up out along the road for sale because of the divorce.

Charlie and Mary gave land to their daughter. For Charlie part of the reason for doing this was to provide for her. For Mary, part of her reason involved their missionary work in Germany. Having “loose-ends” taken care of (i.e., a written will) in case they did not, for one reason or another return, was required by the missionary agency. Their missionary work provided the impetus:

The reason that we gave Donna her inheritance early was...2 different times we’ve gone over to Germany as missionaries to a school for missionary kids. And before we go they want you...all sorts of (loose-ends) taken care of. A new will and all sorts of...plans in case you don’t come back. And so we thought well in doing that, maybe we’ll just go ahead and deed this land over to Donna and that will be taken care of.

Summary: Subdivide and Sell Group

Stories from participants in this group were always grounded in relationship to their land. With the exception of John, who identified himself as a developer, the story was never just about subdividing and selling. Although John did not have a deep connection with the land, it still enabled him to make money. For the other 13 participants the connection was deeper and more nuanced. The land enabled them to live a particular lifestyle (e.g., Franks ability to bow hunt on his property in the evenings) and to live with specific freedoms (e.g., insulation from neighbors as in Nancy and Jack’s cases). Their experience of planning for the future of their forestland was grounded in two discrete phenomena: 1) The relationship with the land itself; and 2) Their decision to subdivide and sell. For each participant, at a certain point in their ownership tenure, what the land enabled formed the ground for their experience, while factors involved in decision-making and land succession became figural or highlighted. Both ground and figure formed the full experience of their planning and decision-making process. The enabling relationship PFLs had with their land informed their planning decisions.
The relationship this group had with their land was best described as enabling. The land enabled them to have: privacy, space, recreational opportunities, business opportunities, history, family, tradition, and money. These values were for personal benefit or shared among others. In a few cases, participants’ relationships with the land seemed to go beyond the privacy and space, which are distinctively more personal than business opportunities and money, for example. These more personal relationships were not strong enough across all participants to warrant a theme. Further, these relationships came into being through the blood and sweat of building a house in two cases and hunting deer on the land in another. No participant ever said the land was a part of them, or that they were a part of the land, to contrast this group with the others below. In many ways, their attachment to the land was associated more with a working relationship between themselves and the land, for example, building a house, tilling the soil, and pasturing horses. In this way, Land Enables seemed to be the most appropriate description of participant’s relationship with the land.

For participants the decision to subdivide and sell land was often perceived as something done out of necessity. Phrases like, “I had to do it,” were often invoked during interviews. There were several examples where participants had inherited land and saw no other way to handle the situation but to subdivide and sell pieces. The example of William and his wife Kathy faced with two million dollars in property taxes speaks to the “no other way, I had to do it,” scenario.

There were several other examples of PFLs who perceived subdividing and selling as the only alternative. Stan’s parents lived close-by and their declining health and the shorter commute for his wife helped him decide subdividing and selling a piece of their property was the only way to make a little profit and fulfill his obligations. Jack and Jill created a neighborhood as a compromise and a way to strengthen their relationship with each other. They perceived this as the only way to settle their differences.
Participants often spoke of other people, family members, organizations, and their own desire to give land to kids as the impetus for their decision. Aside from John the developer and Lucy who owned a horse-boarding business, subdividing and selling land was never a solo decision, but always involved outside influence. For Nancy, the desire to give land to kids and township zoning regulations made it necessary to subdivide. For Ross, helping him and his son provide for their families was the impetus.

A relationship with land based on utility, seeing no other alternatives but to subdivide, and the influence of others provided enough reason for these individuals to subdivide and sell forestland.

**No Action Group**

Members of the no action group are PFLs who have not yet committed to either subdividing and selling forestland or putting land under easement. A total of 12 participants were interviewed in this group; four in Centre, three in Perry, and five in York counties (see Table 6.2).

**Relationship with the Land**

Similar to the subdivide and sell group, asked the phenomenological question, participants spoke of their experience planning for the future of their forestland, but they grounded this in their relationship to the land itself. What emerged were two thematic clusters: 1) The land and their past and current relationship to it; and 2) Their decision and planning process.
Table 6.2. No action group land characteristics by county

<table>
<thead>
<tr>
<th>Centre</th>
<th>Perry</th>
<th>York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathan</td>
<td>Chaz</td>
<td>Joseph</td>
</tr>
<tr>
<td>Own: 60</td>
<td>Own: 8 acres</td>
<td>Own: 61 acres</td>
</tr>
<tr>
<td>Willy</td>
<td>Bruno</td>
<td>Geoff</td>
</tr>
<tr>
<td>Own: 80</td>
<td>Own: 20 acres</td>
<td>Own: 109 acres</td>
</tr>
<tr>
<td>Fran</td>
<td>Garth</td>
<td>Walt</td>
</tr>
<tr>
<td>Own: 135</td>
<td>Own: 75 acres</td>
<td>Own: 133 acres</td>
</tr>
<tr>
<td>Crazney</td>
<td></td>
<td>Ben</td>
</tr>
<tr>
<td>Own: 735</td>
<td></td>
<td>Own: 150 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bob</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Own: 296 acres</td>
</tr>
</tbody>
</table>

**Decision to Not Act**

Because this group is currently experiencing the phenomenon in question, their thoughts, ideas, and expressions about the decision making process tended to be half-formed and changing (at times, their ideas would change during the interview). Many expressed several different planning ideas in the short one to two-hour interview. This group tended to be the most reflective during the interviews, often expressing things they had not thought of previously. At times, they acknowledged their lack of planning and found value in the interview as it prompted them to reflect more. For lack of a better term, this group was “messy.” Participants tended to express such a wide variety of thoughts and views that capturing the essence of their decision-making processes was challenging. Following are short descriptions of the participants in each county:

**Participant Introductions**

Nathan, a retired professor, acquired his land from the Meyer Lumber Company in 1953. He continued to purchase adjacent parcels through the next several years, eventually owning 60 acres. He built a cabin on the property and enjoys visiting and walking the parcel every chance he
gets. He is an avid plant and animal enthusiast and has done a comprehensive plant inventory on his property. He has one daughter who lives in the area.

Willy is an avid hunter. He has four children, two live in the area. Willy loves having access to his land. He greatly appreciates the area’s history, and has restored an old farmhouse he currently lives in. His hope is that one of his children will eventually occupy the homestead.

Fran is a retired schoolteacher who appreciated the history and the biological integrity of her land. When she was younger, she spent time on her property making sure it was protected from the maligning influence of her neighbors (e.g., maintaining her property boundaries and the springs running off the mountain). She has several grandchildren who live in the area. She is interested in helping them develop and maintain an environmental ethic.

Crazney, a retired professor, has actively maintained his land and used it to hunt, fish, and simply retreat from his busy work life. He has four children and is planning to give his entire parcel to one child. Above all, he wants to preserve his land. He believes his son, who has been actively engaged with the land, will continue his efforts.

Chaz co-owns with his brother eight acres of forested land. The land was part of a farm his grandfather, then father owned. Chaz has two sons, as does his brother. He enjoys hunting deer on the land and considers the land as still being a part of his grandfather.

Bruno bought his land from his aunt in the 80s. The land was once part of his family’s farm. Even though he lives separate from the parcel, he is actively engaged with it. He really enjoys his grandson’s appreciation of nature, especially trees. They often travel to the property together. They collect maple sap and hunt with friends and family in the fall. He is considering building a camp with his grandson.

Garth is a farmer with a long family history on the land he currently farms. His children all live within the state, most in or very near Perry County. He is unsure how to pass the land to his heirs. He has not communicated with them about the land.
Joseph and his brother Geoff inherited land from their father. They subdivided the land and both built houses to live there. Joseph is an avid hunter and outdoorsmen. He maintains a very spiritual connection with the ground. He is particularly fond of wooded land. He has three daughters and hopes they take an interest in the land as well. Geoff loves the privacy his property afforded him. He is not sure what he wants to do with the land as he ages. He currently uses it for harvesting firewood and to walk and jog. He allows others (e.g., horseback riders) access.

Walt is very focused on biodiversity and old-growth forests. He has one daughter who he hopes develops similar sensitivities. Walt describes himself as always having been interested in the environment. He started a chapter of the American Audubon Society in Baltimore in the 70s. Since then, he has continued his commitment to the environment with interests in blight resistant chestnut trees and conservation easements. He is interested in selling or donating an easement on his property; however, he remains skeptical of a local conservancy’s commitment to forest protection.

Ben grew up on the family farm and now owns it along with a horse boarding and breeding center located on the property. He is a woodworker and started his own cabinet-making business, before starting the horse business. He has been very active on the township planning board. He has two young sons.

Bob and his father bought the land in 1957. He grew up on the property and has raised his own family there. Both he and his father until retirement age worked for Bethlehem Steel. Most of his ground is forested with the exception of several strips of right-of-way land leased to the power company. He rents that ground out to a farmer. Bob has a story for every acre of his ground.
Thematic Analysis

Land Theme 1: Connection to the Land

“It is a part of me”

- Joseph

Participants in the no action groups expressed a relatively high degree of attachment to their land. Much of this attachment was rooted in family and history. In many cases, the land had been in the family through several generations. Participants spoke about childhood memories associated with the land. Several participants expressed an almost spiritual connection to their land, the woods, and the streams running through their property. Joseph described his deep connection to the woods in a sentiment that emerged very early in the interview and was a reoccurring theme throughout his story:

I’ll be honest…me…my connection with the woods, the forest…and nature is… (pause) is almost a spiritual connection… deeper than financial, it’s a quality of life…it’s bigger than me. More important than me, as an individual, but it’s like a spiritual kind of connection of which I’m just a part of.

Joseph later linked this spiritual connection to his quest for his personal truth as a human being -- he can connect with himself by being in the woods:

I really get a feeling that I can really stay connected in nature much more. I can just stay more connected to my truth in the woods.

Chaz co-owns eight wooded acres with his brother in Perry County. His connection to the land was grounded in experiences he had there as a child with his father and grandfather. Though his grandfather is dead, Chaz still thinks of the land as being part him. Here he expressed his desire to hang on to the land where so many formative experiences took place:

I think it’s a natural transition to want to hang on to something that was part of your childhood. You know, that area right there was where I first hunted or where I first had a gun in my hand and got a squirrel or something…it’s still part of my Grandfather; it’s still part of his ground.
Occasionally, participants expressed their connection to the land via how they feel when others (neighbors and family members) mistreat it. Ben grew up on the farm he now owns and runs as a horse breeding business:

Now…the neighbor, the neighbor who just bought the property (adjacent) 114 acres for 1 million dollars moves in, well he’s going under. First thing he does he starts stripping the forest… I mean it’s just all messed up. You know not just a selective cut, but let’s get everything we can dollar wise out of this piece of ground. He’s been there 2 years and don’t have…I mean, this is ground I’ve scampered over the last 40 years and you just watch it go like that.

Bruno, a retiree who retains ownership of part of his family’s farm in Perry County speaks toward his memories of hunting on the land and then owning his own part of America:

Well I, I bought mine I guess in the early 80s and I just, I wanted a part of America. And it was land that was formerly farmed by my father, the part of it that wasn’t forestry, and uh, the forest part, we hunted on. Guaranteed a deer every year. Guaranteed. And I had my part of America.

Part of this group’s connection to the land was through their appreciation of nature and the solitude and peace of mind the land offered them. I have included both nature appreciation and land as retreat as sub-themes to ‘Connection to the Land’ because they emerged as strong factors across participants in this group and contributed to their overall connection to the land.

Land Sub-Theme 1a: Nature Enjoyment

“I’ve always been interested in nature”
- Nathan

Participants spoke often of their appreciation for nature and enjoying their land as often as possible. Nature enjoyment was often connected to watching wildlife or simply walking their property and watching changes through the seasons. Nathan speaks of walking his property every chance he gets:

I’ve always been interested in nature. I like to walk around to see what I can see. I still go out every week or so. It’s fun to go out in the wintertime. See what’s going on. Look at all the tracks.
Walt is interested in wildlife, biodiversity, and old-growth forests. On his own land, he enjoyed watching the forest grow big and old:

I guess my main interest pretty much my whole life has been interested in biodiversity and natural type of things so… one of my primary interests is forestland. I have in interest in old growth. I don’t have that, but it’s getting up there. It’s probably somewhere, about 100 years old now. So, that’s basically it.

Several participants spoke of being attracted to their property because of its beautiful, high quality streams. Crazney now owns 735 acres of wooded land in Centre County. He first started buying land in that part of the county because of two streams that ran through the property. The streams and the pond he built featured prominently in his interview. He was an avid fisherman, and the pond attracted all types of wildlife which he really enjoyed watching:

But I bought it not to exploit it or to make money on it or anything. I bought it to preserve it to tell you the truth. The thing that attracted me the most there is the beautiful running water. There’s no pollution at all in that watershed. To me it was great personal satisfaction.

Simple pleasures, such as waking up to the cows in the neighbor’s field and watching deer run around in the woods were very satisfying to Willy. Several times during his interview he juxtaposed greedy developers and his appreciation for nature. Below is one of these occasions:

I just enjoy jumping in my jeep driving up there to see the deer running around. I like nature and I don’t like, you know, that it gets ravaged by greedy developers. I really, I really dislike that.

Fran talked about the springs that run through her property and their importance to people and wildlife. She was initially attracted to the streams and the trees on her land. There was a house on the parcel as well, but she was more interested in the woods:

I wanted the woods more than the house. And water. And it just happened to be available… sources of water and mountain springs and so on… when you live around the spokes of mountains, they come down protected and become considerably purer and the water… provides growth for the trees, plants. So it’s the future.
Land Sub-Theme 1b: Land as Retreat

“It is therapeutic for me”
- Crazney

For participants in this group, land was often a place to get away and to re-energize. Retreating to their property was an important part of their connection with the land. At times, retreating alone was preferable; other times, sharing the experience with family and friends was important. For Crazney, simply going to the property after long workdays and weeks and watching the water and the wildlife was therapeutic:

I worked here at the university and I worked 14-hour days, 7 days a week for the most part … if I could get out there on a Sunday and spend 6 hours, it was therapeutic for me just to watch the water in the creek and you know and uh, watch the wildlife. Rattlesnakes or copperheads or turkeys or whatever.

I met with Fran twice to capture the full interview. Our second meeting was on her property. Fran had not been on the property for three years, but was excited to give me a tour. She and I walked through the woods and talked about her land. Fran is close to 80 years old, so the walk was tiring for her, but something she really enjoyed:

(Walking in her woods, she stops, turns to me and says…) Funny how your energy kind of can rises when you begin to experience something you enjoy. The past several years have gone and I haven’t even been on it. In fact this is the first time in 3 years.

Joseph, Walt, and Geoff use their land to get away from others. Joseph hunts on his property and enjoys not seeing neighbors from his parcel. Walt bought his property to escape the city. Geoff likes the isolation that his land provides him:

I sort of like not living right next to a lot of people. Yeah. So umm, that just sort of fits me. That’s all. I like the view, the isolation. Uh, maybe there’s a little bit of anti-social behavior…uh, that’s a part of it. I’m not crazy about neighbors (laughs). Even though mine are a half a mile away. It can be a problem.

Sharing time on the land with family and friends and ritualizing this togetherness was how Bruno described his connection to the land:
Right now we…I have…I have a lot of family and friends that go up and they camp out. It’s about couple hundred yards off the road. It’s accessible. They camp out up there. We still do deer hunting up there. We hang our deer up and cut them up over a campfire. Throw the tenderloins on the fire so…

Finally, the essence of Nathan’s connection to his land was being able to go out, as often as possible, and just check up on things, taking note of the changes he saw in plants and animals, “I like to go out every couple of days to see what’s changed and stuff like that.”

Decision Theme 1: Decision as Indecision

“I don’t know how”
- Garth

“I’m holding out”
- Walt

Participants in this group found it easy to talk about their connection to the land. Their appreciation for nature and their desire to disappear into the woods to replenish emotionally and spiritually was clearly evident. However, this clarity was not so apparent when making decisions concerning the future of their forestland. Most of them had at least considered some potential options. Several had taken steps along a path of deciding the future of their forest. Walt, for example, was almost sure he wanted to conserve his land through an easement; however, a bit of doubt about easements has prompted him to join the board of a local conservancy to get a better feel for what they do and if it would be the right move. Half the participants had seriously considered selling or donating an easement on their land, but had not followed through for reasons explored in this section.

For the most part, participants often expressed indecision about what to do with their property. Nearly all had multiple heirs, and several had grandchildren who considered into their decisions. Geoff is the only PFL in this group who does not have children, and he had been the
least involved, of the twelve, in planning. Expressions akin to ‘I don’t know,’ and ‘I’m waiting or holding out,’ were often part of their dialogue.

For participants with multiple heirs, their indecision revolved around how to divide the land among them. Garth for example, had five children who all lived within an hour drive of the land. Not knowing how to divide the land among his heirs, Garth will likely put all their names on the deed and let them sort it out. He has not spoken to his children about the land or his plans:

Well I got 4 sons and 1 daughter…so I don’t know…and I don’t know really know how to divide it up to them, among them so they…I’ll just put all their names on the deed and let them decide how they want to divide it.

Whether heirs had an interest in owning and/or taking care of the property was another cause of indecision among interviewees. Often, they expressed not knowing if their heirs held an interest in the land. Several landowners had children who were too young to consider such possibilities. Some expressed how they surreptitiously observed potential heirs to see who among them were likely recipients. The next quote is from Walt who expressed being unsure if his only daughter would want the land:

I guess the only thing that makes me a little, a little hesitant at the moment is my daughter is my only child and she’s only 23 years old. So far she, she likes suburbia Baltimore is what she likes… and so we’ll have to see what’s going to happen with that.

Fran was considering giving land to one of her grandchildren:

Well, I would probably judge which of the four grandchildren is most likely to build a yurt or something like that. And there is no predicting right now.

Both Chaz and Geoff are weighing economic issues. Neither wants to commit to land planning decision because they might need income from divesting land to cover living costs and/or retirement.

…if the economic picture deems that it that it’s the right move due to the right amount of money that’s being offered or the need to keep a roof over your head, you got to make that decision at that time. No one can predict the future.
We looked at this conservation thing…I didn’t jump on it because I then I couldn’t sell it. Make money on it at some point if I needed to retire. It’s not, I’m not settled on doing that, but you never know what’s going to happen to your income either in the future so…a large part in my head is future retirement income is an option… another one is that I would um, find someone who wants to buy it and keep it and live here. With the right that I could live in a shack or something down in the other house until I die. Some place to be. I don’t need a whole lot. That would at least get it in somebody’s hands who might want to keep it the way it is.

Decision Theme 2: Economic Value Matters

“…you could sell a place like this and make millions”
- Geoff

Despite this group’s professed intimate connection to their land, the amount of income they could receive from subdividing and selling or selling/donating a conservation easement was important to them. Not being able to predict the future, not knowing if their children will be interested in maintaining the land, and knowing the money their land was potentially worth, all factored into their decision process. Some had a price they would be willing to sell their land for, if the time was right. Conversely, others had an amount in mind for which they would conserve their land. The following quotes speak toward this value factor:

The restrictions (conservation easements) were a little bit bothersome at the time, to limit my ability to sell and make a killing. There was a time when you could sell a place like this and make millions. (Geoff)

What did she say it was worth, like $8600 per acre or something astronomical like that…way up in that part of Perry County. I said well just you know; just send me a note and your business card. Of course she did. I still think I have it laying back here somewhere… I don’t know. (Bruno)

Well, you can’t take it with you (laughs). You can plant my ass in the ashes right over there and that's it you know. I don’t know, if the boys don’t have an interest in it…hell…Sprawl-mart. (Ben)

On the other hand, I probably want to wait and see if I can get an easement where I can get a decent… monetary return for that. So… that’s why I’m holding out. (Walt)

If it would be enough money …I’m not willing to give up options for my own property just for… a sum of money that will… buy me a new car… It’s got to be
a life-altering sum. …it’s gotta be something that’s going to perpetuate, for me, perpetuate an increase in my ability to spend time in the woods doing…or being a part of that. (Joseph)

Summary: No Action Group

This group of PFLs had not committed to any land planning decision. Several had invested considerable thought into various planning scenarios, but they had not committed. Phenomenologically, they were currently experiencing the phenomenon. As a result, their stories and their experiences shared an element of immediacy and fluidity.

As a whole, this group maintained close connection with their land. This connection was rooted in family history and childhood experiences. Many participants in this group retained ownership of land their family had owned for generations. For some the connection bordered on the spiritual, for others the connection was about being on the land as often as possible, walking the land, and checking up on things. This group expressed a high level of appreciation for nature. Several spoke about watching wildlife on their land or maintaining the property in such a way as to attract wildlife.

That the land was therapeutic emerged as an important element to their overall connection. Visiting the property and watching the stream or wildlife sated the stress of busy lives and jobs. Walking the property was enjoyable and raised energy levels. Simply getting away from others was important.

Decision making and planning was a troublesome topic for this group. Not being able to predict the future, not knowing if their children or grandchildren would take an interest in the land, and the lack of communication with their families about the land emerged as key concerns with this group. This group was waiting to see how things unfolded.

Despite being in limbo, participants spoke about the market value of their land and the option of selling it if timing were right. They also spoke about conserving their land and receiving an appropriate return on their investment to justify an easement.
Conservation Easement Group

I interviewed eight individuals and five couples concerning their experience of selling or donating a conservation easement on all or a portion of their forestland. I conducted a total of 13 interviews among the three study counties. Five interviews were conducted in Centre County, five in Perry, and three in York County (see Table 6.3). Following the table is a short introductory paragraph of each of the participants in the group.

Table 6.3. Conservation easement group land characteristics by county

<table>
<thead>
<tr>
<th>Centre</th>
<th>Perry</th>
<th>York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ella</td>
<td>Meg and Jim</td>
<td>Silas</td>
</tr>
<tr>
<td>Own: 113</td>
<td>Own: 63 acres</td>
<td>Own: 37 acres</td>
</tr>
<tr>
<td>In-easement: 113</td>
<td>In-easement: 63 acres</td>
<td>In-easement: 32</td>
</tr>
<tr>
<td>Ceylon</td>
<td>Beth</td>
<td>Violet and Tobias</td>
</tr>
<tr>
<td>Own: 141</td>
<td>Own: 77 acres</td>
<td>Own: 70 acres</td>
</tr>
<tr>
<td>In-easement: 141</td>
<td>In-easement: 77 acres</td>
<td>In-easement: 70 acres</td>
</tr>
<tr>
<td>Samuel</td>
<td>Bridgette</td>
<td>Crosby</td>
</tr>
<tr>
<td>Own: 200</td>
<td>Own: 106 acres</td>
<td>Own: 640 acres</td>
</tr>
<tr>
<td>In-easement: 126</td>
<td>In-easement: 106 acres</td>
<td>In-easement: 440 acres</td>
</tr>
<tr>
<td>Jay</td>
<td>Jane and Jim</td>
<td></td>
</tr>
<tr>
<td>Own: 235 acres</td>
<td>Own: 106 acres</td>
<td></td>
</tr>
<tr>
<td>In-easement: 235 acres</td>
<td>In-easement: 100 acres</td>
<td></td>
</tr>
<tr>
<td>Lefty and Lucy</td>
<td>Griff and Martha</td>
<td></td>
</tr>
<tr>
<td>Own: 400</td>
<td>Own: 200 acres</td>
<td></td>
</tr>
<tr>
<td>In-easement: 100</td>
<td>In-easement: 190 acres</td>
<td></td>
</tr>
</tbody>
</table>

Relationship with the Land

Individuals who decided to sell or donate an easement on their land described an emotional bond with their ground. This connection was forged through significant experiences with family on or near the land and important life experiences that changed the way they thought about property. These experiences and emotions described by PFLs in this group translated into their desire to be good stewards of the land.
Decision to Donate or Sell an Easement

The decision to sell or donate an easement was environmentally motivated, although for some, economic incentives played a small role. More compelling for easement participants was controlling their land in perpetuity. Following are short descriptions of the participants in each county.

Participant Introductions

Ella lived on the property previously owned by her father. She and her husband started a private land conservancy. Her husband has passed away, but she continues to remain active with the conservancy and the land. She has eight children.

Ceylon was a part-time teacher at a pre-school. She and her family took pride in their sustainable lifestyle. She and her husband made a conscious effort to raise their family in a rural area. They had two young daughters and were considering retiring on their property.

Samuel had a long family history in Centre County. His goal, after taking ownership of the farm was to maintain it as a working farm. He was a retired architect with a degree from Penn State and has lived in California and abroad for a large part of his life. He and his wife have retired in Centre County on the farm. He has four adult children who referred to the farm as their homestead.

Jay was retired from the Air Force and used his property for birding, falconry, and as a glider airport. The property sits along a ridge-top in Centre County and was perfect for birding and gliding. Jay really enjoyed long distance gliding. He once glided from Central Pennsylvania to Selma Alabama. His longest glide was from Loch Haven to Oak Ridge Tennessee and back. Jay loved the privacy and the elbowroom his property afforded him.

Lefty and Lucy were retired farmers. They inherited the farm from Lefty’s parents. They rent out most of the farm ground. Lefty enjoyed hunting on his property. Lucy operated a Bed and
Breakfast out of the home. Both enjoyed living rurally and especially enjoyed the view of the Juniata River and Spruce Creek valleys from their living room window. They had two adult children who lived in the area.

Meg and Jim raised organic beef. They were very committed to the land and to healthy living and eating. Jim was active with a local land preservation board. They have four children.

Beth and her husband moved to rural Perry County just as they were constructing I-81 near their previous home. Her husband was a journalist and frequently traveled to Harrisburg and Philadelphia. Being proximate to the train in Duncannon was convenient and important. With her husband gone a lot, Beth learned how to drive a tractor, ride a horse, and shoot a gun. “Perry County was a rough and tumble place back then.” She had fond memories from that time. She was a painter and still occasionally traveled to art and craft shows to sell her work. Her husband was an avid conservationist and they sold an easement at his urging. He has since passed away.

Bridgette and her sister were gifted the family farm. They eventually decided to sell an easement on the land. Bridgette lived there alone. Her sister resided in California. Bridgette was having a difficult time maintaining the property by herself and was considering selling it.

Jane and Jim met in high school and eventually purchased land adjacent to her father’s hunting club. They were young compared to most others participating in the study. They considered themselves environmentally conscious and they actively managed their land. While they lived away from their property, both of them worked near Harrisburg.

Griff and Martha have retired to his father’s old hunting camp. They turned the camp into a home and are very happy living there. They have one son who has been very supportive of the easement decision. Griff and Martha are Pennsylvania Forest Steward volunteers and enjoyed managing their forestland.

Silas has recently retired from the Pennsylvania Department of Environmental Protection. He has harbored the wish to live in a sturdy house and own forestland for a long time. Upon
retirement, he achieved his dream. He enjoyed wildlife, particularly birds on his property. He has
two sons; one lives on an adjacent lot Silas subdivided from his original parcel.

Violet was a retired anthropology professor and Tobias a retired medical research
scientist. They lived on ground previously owned by Violet’s family. Both were very active on
the township planning board. They were extremely interested in maintaining forested ground and
have actively tried to interest neighbors in donating or selling easements.

Crosby and his father co-own two farms. Crosby grew up on one and the other belonged
to his grandparents. He was a young lawyer in York and worked on the farm with his father part
time.

_Thematic Analysis_

**Land Theme 1: Emotional Bond**

_“I have an attachment to the woods that is very deep”_

- Violet

PFLs in this group maintained significant emotional attachment to their land. This
emotional bond grew from years, in some cases, generations of association with the same ground.
The bond between the owner and the land often formed through significant experiences on the
land with others in their family. Violet talked about learning the names of trees with her father
who loved the woods:

I have an attachment to the woods that, that is very deep because my father loved
theses woods and he used to take us for walks in them. He taught me the names
of all the trees.

Samuel was the fourth generation on his Centre County farm. His attachment to the farm
was rooted in his family’s historical connection to it. Also, he bought the farm from his aunt and
wants to honor her vision to keep it in the family. Putting the land in easement and his careful
attention to the land originated with her:
Yeah, 4 generations… it’s a 218 year old farm in uh, possession of the same family. 217 years. I wanted to preserve the farm… to keep it functioning as a farm…The plan is that it will continue to stay in the family for a while. I knew that was my, my aunt’s desire. So my concern has been pretty much to honor her desire.

Bridgette and her mother were both born on the farm, and she and her sister are the last in their family line, neither had heirs. They have placed the property under easement and Bridgette was going through the motions of selling the land. Nonetheless the idea of selling the land caused her great anxiety:

I was born in this house. My mother was born in this house. There’s a lot of history here. I just feel really, really sad right now that I have to sell it and every day I think I’m making a mistake and I should take it off the market and when I get close to getting a buyer, I get really nervous. I don’t know if I’m doing the right thing here.

Jane describes buying and conserving land she and her boyfriend discovered together when dating in high school. The land was adjacent to her father’s hunting cabin, where she spent considerable time as a child. Her memories included being at the camp with her father and friends and experiencing the land with her boyfriend. These ties strengthened her connection to the land and stood out as significant reasons for wanting to protect it:

I mean, yeah. It’s kind of funny; we’ve been dating… since we were like, young, like 14 and 15 young. So at one point when we were in high school we drove up to the cabin and we took this like walk and we ended up in this field and it was like really pretty you know and then like 10 years later we ended up buying the field …. I don’t see ever getting rid of it.

Lefty and Lucy spoke about their emotional connection to the view from their house. Lucy’s bed and breakfast guests are also enamored with their house and land. Seeing land developed was emotionally difficult for them:

… [neighbors] were afraid that we would develop and it would ruin the view. Well we love the view too. And um our guests that come here for the bed and breakfast from all over the world, they love it here. It’s so beautiful. And um, we’re very blessed because (she begins to cry), you don’t find that everywhere. I mean everywhere you look anymore you’re seeing buildings and housing and development and… it’s sickening.
Land Theme 2: Stewardship Ethic

“This land is a gift to me, I am a steward here.”
- Jim

Not owning the land, but rather being a steward was an often-repeated sentiment among PFLs in this group. This group was emphatic about caring for the land, water, and wildlife on their properties. Often this was linked to legacy and leaving the land in better shape than when they received ownership. Several participants made a point of saying they did not own the land; rather, they were stewards. They were more comfortable being stewards than owners. The following participants speak toward being a steward of the land:

Well Josh, what we have here is a philosophy of land use. I don’t believe I own this. It is a gift to me. I am a steward here. What matters to me is how it was…what shape it was when I got it and what shape it will be when I pass it on. And that’s the important part in land ownership if you please. That’s in a nutshell how I think. (Jim)

…but you don’t really own it (laughs). Like really you’re, you’re only passing through and you know, you got to think the long term and this land belongs to everybody. (Ceylon)

The stewardship ethic emerged in other ways as well. Bridgette simply did not want her farm to be developed. Her interest, as well as her sisters, was to continue cropping the land and to preserve it for the plants and animals:

We wanted to keep it as a farm… that was the main reason we didn’t want it to be developed. We can grow crops here um, there are plants and animals uh, there’s a natural habitat here for plants and animals and we wanted to preserve that. And once it’s developed, all of that disappears.

Violet and her husband thought of their land in the greater context of a watershed. Their interest was in protecting the watershed and the forested canopy that helped to protect water quality in the larger drainage:

The other reasons I think why a little bit beyond our own personal feelings about this land, it is part of a river watershed. And um, uh, I think the only way we’re going to protect that… corridor… is to convince people that they need to put easements on their land, otherwise we’re going to get it chopped up by development.
Decision Theme 1: Control

“We set the guidelines for what we sold them”
- Lefty

Having control over how the land was used emerged as an important dimension of the decision to sell or donate an easement. For Lefty and Lucy, it was very important they that they could stipulate future uses. For many, protecting their land from future abuses was key. For example, Meg and Jim stipulated they never wanted a Contained Animal Feeding Operation (CAFO) on the land. Tobias spoke of forever banning sludge dumping on his land. The next several quotes speak toward the control participants wanted to utilize through the easement:

We set the guidelines for what we sold them…no houses, no trailers…I’m allowed to hunt on it…I have the freedom of the land just like I always have. (Lefty)

…putting it into conservancy allows him to still have the freedom of the land, just the way we always did. (Lucy)

I’ve built things here. I have routine. I control my own environment. I like the mountains around me. No barking dogs. I invite others to hunt here. Invite others to ski here. I keep it environmentally sound. I like the environment and the ambience. (Jay)

Decision Theme 2: Economic and Environmental Motivators

“The value to me is less monetary and more about the environment”
- Jay

“We were able to get more money for the land because they were willing to pay more money to keep it out of development”
- Crosby

Most participants were motivated to sell or donate an easement because of their strong environmental values. Only a few discussed being motivated by the tax incentives. Only Jane spoke of these motivators together as influencing their decision to donate an easement on their property. For Silas, selling or donating an easement at a particular time was simply good economic sense. For several, protecting the historic integrity of their farm was much more
motivating. In this sample of PFLs, those who generated income from their land (e.g., farmers) were more apt to sell rather than donate an easement. They recognized the need to have resources to cover their retirement. Jane and her husband, not farmers, spoke of wanting to preserve the land and the cost of doing so:

I would say when we bought it we knew it was a piece of property we just loved. … We pretty much knew we wanted to put an easement on. I mean, definitely from a mix of knowing we wouldn’t want to see anything happen to the land and knowing, financially how to afford it.

The next several quotes are representative of participants who spoke almost completely about their decision as environmentally motivated and not motivated by tax incentives and/or making money.

I live a less consumptive lifestyle…the value to me is less monetary and more about the environment and elbowroom I have here. (Jay)

Whatever I have, I’m keeping the farm going until it’s all gone. It’s a very valuable piece of property for development, but we’re not doing that. (Samuel)

… it’s not because were wealthy, because we’re not, but money…the monetary aspect of putting an easement on our land was not the primary reason…. yes, we probably can take a tax deduction; yes, we probably right now can take advantage of bargain sale money in York County if we still stay on the list um, but that was not the primary reason… (Violet)

The next two quotes are representative of participants who spoke about their decision being primarily motivated by economics benefits (i.e., tax incentives and direct payment for the easement).

So, I guess another factor would be that…we both work separately from being famers so we have income…one of the reasons is as you probably know in you studies, of putting property under easements, you get a good tax benefit from doing that and we’re in the position that we could put it under the private program and get the tax deductions. (Crosby)

When I retire from the state I’m going to get a payout of money that is going to be taxable so…that would be a good time to bring this altogether and so…that was a driver in getting me to actually move on what I wanted to do. And I got 3 years worth of tax benefits because of carry over credits and the maximum amount I could take I did it on a time schedule that benefitted me financially (Silas)
Summary: Conservation Easement Group

Landowners, in this sample, who sold or donated easements on their property, were emotionally connected to their ground. These emotional ties were forged through significant events in their life, usually connected to other members in the family. Both Bridgette and her mother were born in the farmhouse she lives in now. Violet’s family owned the land where she and her husband have retired. She remembered her father teaching her the names of all the trees on the property when she was a little girl. Jay’s connection was not with family or history on his property, but with birds, particularly eagles, falcons, and hawks. He was an avid glider pilot and bought his land because of the access to a runway. He discovered his property from the air, which was an important piece of his story.

Controlling what happened on their land in perpetuity was a major motivator to sell or donate an easement for this group. Being able to set the terms of the easement mattered. Lefty, wanted to be able to hunt on the land after he sold an easement. He and his wife also wanted to protect in perpetuity the view they have from their living room window. They were able to craft the easement to fit their needs and wishes. Jay wanted other avid birders and glider pilots to use his property for birding and gliding beyond his tenure. He made sure these elements were part of the easement.

This group considered themselves stewards of their land. For them, land was better if taken care of properly for future generations. For most in the group, their desire to be stewards was motivated by an environmental ethic, no matter the economic costs of doing so. They consider themselves living a less consumptive lifestyle. Jim and Meg run an organic beef farm. The farm was an economic loss for them, but they were committed to providing good quality beef for people. They also had additional income, which helped them make ends meet. A few others in
this group were motivated by the economic incentives offered for selling or donating easements.

For Silas, the tax benefits he received from donating the easement coincided with his retirement payout. The decision made economic sense for him and his family. Crosby and his father donated an easement on two family farms. Both had jobs and good income and the decision made economic sense to them.

**Phenomenological Analysis Summary**

Thirty-nine interviews with PFLs, concerning how they planned for the future of their forestland, were conducted over the span of 14 months (November 2008-January 2010). PFLs had either subdivided and sold forestland within the past six years, sold or donated an easement on their forestland in the past six years, or had committed to neither of these actions. PFLs were asked to share their story about their planning process and to focus on instances that stood out to them. In discussing their planning decisions and processes, they invariably spoke of their connection to the land and its meaning to them. Themes that emerged from the interviews tended to cluster around the decision making process and PFLs relationship to the land.

For PFLs who subdivided and sold forestland, the statement “I don’t believe in ground that doesn’t do anything” summarized their relationship with the land. For this group, land provided a range of products and services, for example: coal, wood for woodworking and building, privacy, and space for heirs to live. Their decision to subdivide and sell forestland was often perceived as the only option. In some cases, the land was inherited and either tax was owed or heirs needed money. The land was divested to cover these costs. In other cases, land was subdivided to pass on to heirs. Landowners’ decisions to subdivide and sell were seldom made alone. They often spoke of others being involved in the decision or making the decision
necessary. These ‘others’ were identified as: parents, parents in poor health, township planners, and children.

Unlike PFLs who chose to divest land, PFLs in the no action group tended to be very attached and connected to their land. Often this connection was spiritual and tended to be active (e.g., hunting, observing, walking). This group also tended to appreciate and enjoy nature more than any other group. They often spoke of going out to check on the plants and animals on their land. They were interested in the different plants and animals found on their property. They also used their holding as a retreat, a place to get away from others and be alone. Overall, they had been engaging in the planning process. A few had essentially reached a decision for the most part, but had not acted because they had latent reservations about it being the right decision. However, most of the owners in this group were undecided about what to do and how to do it. They were waiting to see if their children or, in some cases, grandchildren would be interested in owning the land and would treat the land with the same respect they themselves did. A few PFLs spoke of not knowing how to divide land among multiple heirs and would simply bequeath it to all of them. While others perceived their land as money in the bank and with an uncertain economic future, they may need to retain the divestment option. Several spoke of being disappointed by how little money conservancies offered for their development rights. The economic value of their land seemed to matter to all of them. There was a price at which they would sell; and, there was also a price for which they would conserve.

Like those in the no action group, PFLs in the easement group were also attached and well connected to their land, often in an emotional way. They described this attachment in relation to others, such as a parent or other family member, or in relation to formative experiences they had with those people or on the land, such as being born there, or special places on the land they have an emotional attachment to (a particular view or habitat). This group often referred to themselves as stewards of the land, eschewing the term “ownership,” and taking responsibility for
the health and sustainability of the ground to serve others. This attitude manifested itself
countless times in statements like, “What matters to me is how it was…what shape it was when I
got it and what shape it will be when I pass it on.” This group valued the environment in a way
that encouraged their investment in its stewardship. For the majority, their decision to sell or
donate an easement was less about the economic incentives and more about their environmental
values. For several, selling or donating the easement simply made good economic sense at the
time.

This group perceived selling or donating an easement on their land gave them greater
control. Controlling what they and others were able to do on the land, in perpetuity, was
important. They often spoke with great satisfaction about the freedoms they were able to continue
to enjoy, such as still being able to hunt on the easement ground and making sure there were no
close neighbors or barking dogs.

The next section provides an overview of themes that emerged from the semi-structured
interviews with participants. These interviews were conducted following the phenomenological
session, during the same visit with participants. The same questions were asked of each
participant during the semi-structured interviews, unless the participant answered the question
during their phenomenological interview. The purpose of these questions was to establish a
consistent base of information from which to conduct the final analysis of findings. Together, the
phenomenological and semi-structured interview responses tell the story of how PFLs experience
planning for the future of their land.

**Semi-structured Interview Results**

The semi-structured interview with PFLs consisted of five questions concerned with: 1) How they acquired their land (i.e., purchased or inherited); 2) How they used/use the land; 3) For
those who subdivided and sold/gifted, what has become of the land after selling or gifting; 4) If they considered other options for their land (omitted from the no action group); and 5) Future plans for the land they retained, including a question about giving land to heirs.

Depending on the phenomenological interview, some of these questions may have been addressed and were reflected in the phenomenological results section. Since the phenomenological interview was participant led, participants may not have addressed how they acquired their land, or their plans for the remaining acreage. This section begins with results from the subdivision group, followed by the no action group, and finally, results from the easement group.

**Subdivide and Sell Group**

*How did you acquire the land?*

Most from this group bought their land and have since subdivided and sold a portion. Five PFLs, representing four parcels, inherited, or both inherited and purchased land themselves. The brothers, Roddy and Steve inherited their parents’ land in York County, which has been in the family for two generations. Ross the farmer, inherited land from his father and has since bought other adjacent farmland. Henry and William both inherited large parcels from their parents, and both are actively trying to sell the land.

For the others who bought land, reasons were typically for a place that was: Private and they could call home; To retire; To expand their business; and As an investment. Several PFLs listed combinations of these reasons for purchasing land. For Jack and Jill, it was out of convenience. Jack is partner in a law firm based in Honolulu, Hawai’i, but much of his work is in the European Union. So, central Pennsylvania offered a mid-point location to work from. Jack
also wanted to live in a place that was secluded and far from neighbors who might cause trouble.

Jill was uncomfortable so far from neighbors.

It’s much more convenient to be based in PA, just than to be based in Hawai’i. Although, I’m still a partner in a law firm in Honolulu, my desk is here in PA because most of the people I deal with are in EU and the East Coast of the USA. Not wanting to be jet lagged for the rest of my life. Just, more appropriate to be based here than 5000 miles west of here.

John, the developer said this about why he bought his land:

I bought it strictly for business – strictly, to make money on it. I intended to keep it a forestland, to develop it into a housing project.

Reginald and Roberta bought their land to escape the city and for something to eventually give to their children.

This land has always been about our children. Also, we wanted to escape the inner city of Baltimore.

Asked about prior owners, participants generally did not know much about them; however, on occasion there were interesting connections, but not lasting, between seller and buyer. Jack and Jill kept in touch sporadically with the previous owner. They believed he was fond of the land. Jack reported that the land was never for sale; he simply liked it and offered the previous owner an offer he could not refuse. The previous owner visited several years ago. They have not heard from him since. John acquired his land from a family feuding over ownership. The family matriarch eventually put the land on the market instead of selling or gifting it to anyone in the family:

I’ve owned the land for five years. And the lady who owned it before, she was feuding with all her nieces and nephews and everybody, instead of selling it to them, they put it on the market so…

*How did/do you use the land?*

Asked how they used the land (both the land they divested and the land they retained) participants most often used part of it as a homestead, and part to grow crops on, farm, cut firewood, and recreate on (including hunting and hiking). Several did not interact with their land
(i.e., John, Jack and Jill, and Henry). For most, they no longer used the land they sold – it now belongs to someone else. David uses the land he retains for recreation and firewood.

I get firewood back there. Save on the electric bill. Helping make ends meet. I continually try to use it the land. There's some pretty good timber back there, I don’t know if I’ll ever cut it again or not. If I have to retire or sell it in 50 years, I can’t handle it anymore, I may re-timber it before I sell it... there is an old road back to the old foundation, to the old homestead. I keep logging trails open. My daughter loves to walk the dogs back here. When my kids visit they love to walk back there. It’s therapy just walking back there.

Some never got around to implementing their plans for the land. Jill had visions of raising cows and alpacas, but time constraints limited her ability to follow through:

**Jack:** We haven’t used the land for anything. We’ve never sold timber on it.

**Jill:** When we first moved up here, I thought we could have a cow, but that didn’t work out. Remember? And, then, I said I was going to get into alpacas. But then we were traveling in the beginning a lot, so my husband said, who’s going to take care of those. OK, I don’t know. I’ve had visions, you know.

For most, the land they subdivided and sold to individuals and families has been, or will soon be developed. While no one expressed feeling guilty about using their land and contributing to growth and development, several were not enthusiastic about having closer neighbors. For Lucy, having people build near them has taken some getting used to. They moved to their ground in the 1994 and were the first to build in that part of the valley. The three lots they subdivided, one has been built on, and construction is starting on the second. It has been an adjustment for her family:

I mean, growing up in town, I hate living in town and my husband grew up, he grew up on Valley View, which, it’s out of town, but he had neighbors really close and he hated that. So, we wanted to be out of the way and uh, you know, there wasn't anybody around us. Because, we were one of the first people to buy one of the lots that they had advertised. So, it took a little while to get used to the houses across the street; but, we got used to it. So we figured we'll get used to this here (referring to the new houses in front of their own).

Similarly for Nancy, she loves the privacy her land affords her. Thirteen new lots with houses are going to be an adjustment:
I do value my privacy and I just… I just fell in love with this place I mean… I just loved it. I don’t think we’ll see any neighbors, maybe our daughter. But the way the land lays, it looks like I won’t be seeing the neighbors. If there is a God in Heaven.

For Ross, the land he subdivided and sold turned into a 22-lot neighborhood:

Basically, it’s a private community that don’t really affect me, but still the kids in the area ride 4-wheelers and stuff on my land, but I tell them that as long as they ride on the edge of the fields, they can do it.

For the most part, this group consists of first-time sellers, with the exception of John, the developer, who has sold between 300 and 350 acres in Centre County over the past five years (See Table 6.1 for a list of acres subdivided by each owner). Ross gifted one acre of land to a local land trust, so they could build a parking lot.

*Did you consider other options for your forestland?*

With the exception of four participants, no one considered different options for their forestland. The four who did consider other options, two were interested in donating an easement, and the others were interested in using the land they sold to build another house or to develop horse trails.

Frank and Helen of York County considered donating an easement but decided against it because the county program could not offer the amount of money they wanted. Here is Frank:

We’ve been asked to do the York County Easement program, which I’m not going to uh…it’s just tight now in our life. We’re just not going to do it. It’s not feasible for us. If I was independently wealthy, yeah, we’d probably do something like that, but I’m not going to give a, you know, a million dollar property an easement for nothing…or a tax write-off.

Jack and Jill also considered an easement on their property, and despite recently subdividing and selling 11 lots on 60 acres, are still considering donating an easement on their remaining 130 forested acres.
Lucy, who owns a horse boarding business in Centre County, considered building horse trails through her wooded acreage. Instead, she subdivided and sold two small lots, because the pasture she could purchase with this money was more valuable to her.

Finally, Stan also considered other options for his forestland. He and his wife thought of building a smaller house on the forested acreage they retained after splitting their lot and selling the original house and acreage.

One of the considerations – when I was ready to retire was to build a small house there since we still had the ground and um, that was one of the things my wife suggested. But I think at that point in time, with having problems with Mom and Dad, we decided we were going to stay put. My wife is still working. She was surprised when I retired. I only had two more years – I would have gotten full retirement – well, yeah, I should have but…I didn’t know the economy was going to do this.

What about your future plans for the land you still retain?

There were a multitude of answers to this question. Charlie and Mary wanted to keep living the way they were until they can no longer do so. John, the developer, wanted to develop his remaining land, but since it was located in an area where selling lots may be difficult, he wanted to develop it as a seasonal recreation area instead. He envisioned a forested area with hiking and horse riding trails, camping, and hunting.

William and Kathy, Henry, and Frank and Helen wanted to sell their remaining land. For William and Kathy and Henry this decision was linked to not having to pay taxes and for Henry, as co-executor of his parent’s estate, to distribute inheritance among his seven siblings.

Frank and Helen were less forthcoming about their future plans. They did say they wanted to sell the land, but when asked about the details, they spoke of future uncertainty and simply not knowing what it holds.

Several spoke of gifting land to heirs. For example, Reginald and Roberta planned to subdivide the land evenly among their three children, unless the children came up with a more suitable plan. Ross will gift all his land to his son, who he hoped would continue to farm,
although he admitted feeling uncertain about the future of farming and worried about that for his son. David envisioned his daughter moving into his house and inheriting the land. Nancy was uncertain about whether to gift her land to one or all of her children.

The final grouping of four, expressed indecision about their future plans. Jack and Jill have heirs, but will not be gifting land to them. Jack suggested his children had different plans and would not be able to afford living there. Steve and Roddy suggested a whole range of ideas, from gifting to Steve’s heirs (although he questioned their attachment to the land), to allowing windmill companies to put turbines on their property because of its elevation, to selling it as parkland to the county, to donating an easement on the land. He was sure he did not want to subdivide further, unless he was forced due to financial exigencies. The following quote from Steve highlights the myriad choices he was considering:

… joint ownership, 50:50. They haven’t gotten the use out of it as a kid that I did. Uh, so there’s not an attachment there, sentimental or otherwise. I can see them maybe not having an interest in maintaining it, holding on to it, keeping it in the family, but uh, I’d also hate to see it be sold off. My solution to that would be to turn it into some kind of a state park or county park. I did pick up information at the farm show a year or 2 ago about the Farm and Natural Lands Trust. I haven’t done anything with it. It’s one of those things that you know…I ought to look into that. Well can’t this week because of this, this, and this. I can next week. Well, here it is a year later, so…

No Action Group

Semi-structured interview questions were modified to appropriately fit the no action group (i.e., the question concerning the land they recently sold or gifted was removed).

How did you acquire the land?

Only two of the 12 participants in this group inherited land from their parents. Ben’s father bought the land in 1970 and gifted it to his wife when they divorced. Ben later received it as a gift from his mother. Chaz was gifted eight acres from his father, who was gifted it from his
father. The land has been in the family since the early 1900s. The remaining 10 interviewees either purchased the land from their parents (or other family member), or purchased it from a seller not connected to the family. Most participants who bought land have owned it for 30, 40, and in two cases, over 50 years. The newest owners in this group are brothers, Joseph and Geoff, who purchased the land from their father in 1987. Their father acquired the land in 1964. When participants were asked why they purchased land, answers included: “I just liked it;” for hunting; to live there; to preserve it; and to enjoy it.

_How do you use the land?_

The majority of these PFLs use their land for recreation (e.g., hunting and walking). Several mentioned they have timbered their parcels. This was usually done to earn extra money. Ben has used his land for a variety of entrepreneurial purposes. He raised dairy cows for several years. Following that he started his own cabinet making business on the property. Currently, he runs a horse boarding and husbandry business. Walt was involved in controlling invasive plants/trees on his property. He was also engaged in growing blight resistant chestnut and elm trees. Several PFLs mentioned collecting firewood on their property.

Similar to the subdivide and sell group, the no action group has not recently sold or donated an easement. Bob sold 15 of his 270 acres to the power company several years ago. Willy donated approximately 250 acres to a local conservancy in 1985.

_What about your future plans for the land?_

Asked about their future plans for the land, their answers reflected similar ideas to those that emerged during the phenomenological interviews. Many in this group would like to pass land to heirs, but expressed concern about whether their heirs will want the land or will take care of it the way they would expect them to. Nathan had one daughter who would take ownership of the
land once he passes. Crazney will give one son (of four potential heirs) his 735 acres. Joseph spoke about giving land to one or all of his three daughters:

I would consider gifting the land to them, especially if they had the same connection to the ground as I did. It’s hard to see now, I’ll say that. Very hard to see.

Asked how he would gift it to them he replied:

Well it depends, if I knew one of them wanted to live there and keep it the way it was. I’d give it to them. If the others just wanted it to sell to get the money – tough, I won’t. But I don’t owe any of them anything. You know? Now, I might try to say you know, what I might do is sell, if I had time before I die, sell the development rights, take that money give the farm to the one that wanted to keep it the way it was and give the money from the development rights to the other kids. You know something like that.

When asked about giving land to heirs, Ben summed his thoughts up in the following comment:

I don't know, man who knows, you know? We could all be gone tomorrow. Live today. I mean you know, planning for tomorrow, but live today.

Finally, Chaz sums up his thoughts on giving land to heirs:

For me personally, it’s too early to say now. My oldest son is a senior at PSU and youngest a senior in high school. To be fair, it would really depend on the time that I do it. It would depend on what’s going on at the time I would decide to do it. Do they have a family? Do they have siblings? What is their situation? You know? There's all kinds of factors that come into play. What is my situation? I didn’t answer it the way you want it to be answered, but really….we’d all like to be in a wealthy enough position where we could just say, here, it’s yours. You know?

Ten of the 12 participants said they would not impose any use restrictions on future owners of their land, be it heirs or other. Joseph and Walt spoke of restricting their heirs concerning how the land is used if and when they take ownership. Walt will likely formalize these restrictions by donating an easement. Joseph said he would stipulate they keep it natural.
Conservation Easement Group

How did you acquire the land?

Five of the 13 participants in the easement group inherited land from their families; the remaining eight purchased their land. Two of the eight purchased their land from their family. For those who inherited land, or purchased from family members, the land had generally been in the family for at least one, mostly two, and sometimes for three or more generations. Samuel is a fourth generation owner and Crosby and Beth are both third generation owners. The remaining four participants were gifted land by their parents.

Those who purchased their property listed various reasons for doing so. The farmers of the group, Crosby, Samuel, and Meg and Jim bought land to farm and live on. Others spoke of buying it specifically to preserve it. For Jay, it was the proximity to the glider port that piqued his interest. Ceylon spoke of buying her acreage from a man who aggressively guarded the property from trespassers. Once she took ownership she started a small environmental center for children, and used her home as a sustainable living demonstration site.

How do you use the land?

Farming and recreation were the most common answers to this question. Several who have semi-retired from farming leased their land to others. Hunting, walking, family gatherings, and bird watching were often listed as recreational pursuits on the property. Several mentioned using the woods to obtain firewood. Ella and her family, with the help of a local conservancy that she helped create annually invited school groups to the property for hiking and nature education programming. She believed that a big part of conservation was educating young people.
How many acres have you sold or gifted in the past five years?

Two participants have in the past five years sold and/gifted land. Jane and Jim sold 70 acres in West Virginia. They have other land in Bedford County they are thinking about selling. Silas recently gifted three acres of land to his son who built a house and was living there with his family.

Did you consider other options for your forestland?

Several mentioned they have and/or still are thinking about timbering a portion of their land. Jay spoke about potentially building another house further back on his property. Lefty and Lucy were farmers and had always entertained the idea of selling all or a portion of their land to finance their retirement. Despite the land having been a family farm through two generations, they may be forced to sell the remaining land not under easement. Currently, they were not sure what they were going to do:

The non-conservation land, well we’re working on it…We don’t know. We’d like it to stay in farm. Or, if a conservancy wants to come in and buy it, that's fine. If they don’t want it, we’ll have to sell the land. Although, 40-50 acres will go to our son.

Ella spoke about selling or donating an easement on her land to the Western Pennsylvania Conservancy (WPC) or The Nature Conservancy (TNC), but reported they often wanted people to sell larger chunks of land or donate land having rare or endangered species on it. This inspired her and her husband, with the help of a lawyer friend, to create their own local land conservancy. Here she was talking about why they did not donate land to WPC or TNC:

They wanted us to give them more land. They wanted us to have unusual plants. They needed something rare to protect.

What about your future plans for the land?

Eight of this group will be giving all or some of their land to heirs. Of the remaining four, two did not have heirs and are planning to sell, and two are young, and do not yet have heirs. One
other did not answer the question. Referring to the eight who will be giving land to heirs, five of them have largely decided on the process and feel comfortable. For example, Ella has spoken to all eight of her heirs and they are fine “not receiving an inheritance” from her. Griff and his wife Martha have spoken with their son and are completely comfortable with him taking ownership of the land when it was time. Three participants were unsure about how they were going to handle the transfer. Ceylon’s plan was closer to being set than were the other two. Currently, both daughters would inherit the land together and will have to figure out how to deal with co-ownership:

Both daughters will be the deciders on it together. We’re thinking Jasmine will inherit one parcel and Lucia the other. Now – they both have to decide. One would have to buy the other out. They could sell it, but it’s got a couple of easements on it now so it’s sort of a done deal.

Jim and Marge may not gift their kids the land, but will forward the value of the land to them, or what is left of it, in some fashion:

I will give land to my heirs in one way or another. The value of this land will go to our heirs. If there is any value left that is. We have to have living expenses until the day we die.

Beth is not sure either of her two children will want the land. If both do, it will be up to them to determine how to divide it, sell it, or keep it whole:

I’ll stay here as long as I can. I have 2 children. I don’t know who’s going to want it or if they want to sell it or what. Our son lives near Quakertown PA and our daughter lives in Ohio. I don’t know who is going to want to fight it out over this place or sell it to split the difference. Hey, when I die, I don’t care. It’s not going to be my problem.

Semi-structured Interview Results Summary

Across the three groups, the majority have purchased, as opposed to inherited, their land. For those in the subdivision group, land was a way for them to make money and/or to enjoy retirement. Participants in the no action group spoke most often of using the land for recreation
and enjoyment. Those in the easement group spoke most often about purchasing the land to farm and/or to preserve its integrity.

For participants who inherited land from parents or family, families who put their land in easement have owned it the longest. Several families have owned the same land for a century and some, even two centuries. Whether PFLs purchased or inherited their land or both, previous owners rarely shared a particular vision for the property or made the new owners aware of any personal wishes or ways they would want to see the land treated. Exceptions generally had to do with previous owners wanting the ground to stay within the family.

Across the three groups, most have used their land to earn a living (i.e., farming, development, business), as a homestead, and for recreational purposes. Several in each of the groups spoke of timbering their ground in the past, or considered that option in the future. Harvesting was typically thought of as a way to make extra cash.

For PFLs who had subdivided and sold land, their property for the most part, had been developed. PFLs rarely expressed concern about this. Some admitted to experiencing an adjustment period and having to get used to others living closer to them.

In neither the no action nor the easement groups was it common to hear of anyone who has sold or gifted land in the past five years. Among those who have subdivided and sold and/or gifted land, this was typically the first time they had done so, with John the developer being the exception.

The majority of PFLs in the easement and subdivide and sell groups did not consider other options for the forestland (this question was omitted from the no action group instrument). For those who have sold or donated easements, they were committed to that action. Surprisingly, several in the subdivide and sell group had considered donating or selling an easement. For most, once they realized they would not receive the funds needed or thought the land was worth, they did not follow through. Subdividing and selling was easier and yielded more revenue.
No matter which group a PFL belonged to, their future plans were often linked to their heirs. Those who had settled on a plan and expressed confidence about its suitability had made efforts to communicate with their heirs about their decision (e.g., Samuel, Griff and Martha, Ross, Reginald and Roberta). PFLs in the no action groups did not express the confidence as PFLs in the other two groups. Their insecurities about passing land to heirs were often grounded in not knowing if their heirs wanted the land, not knowing how to divide the land among several heirs, not being sure if heirs would treat the land as they did, and/or not knowing whether they would have to divest land in the future to cover financial exigencies. PFLs with no heirs or who had heirs they knew were not interested, often considered selling land or simply holding on to it as long as they could.

The following chapter will present a summary of the findings and a discussion. Focus will be on merging the social demographic, phenomenological, and semi-structured data leading to key findings about the overall planning process PFLs engage both within and separate from their groups.
Chapter 7

Discussion

Using key informant, semi-structured, and phenomenological interviews and a socio-demographic instrument, this study sought to understand those factors that shaped the decision-making processes PFLs experience as they plan for the future of their forest. Simply, I wanted to develop an understanding of: 1) Thought processes PFLs engage when considering the future of their forestland, and 2) Those factors PFLs consider when planning for succession.

Three groups of landowners, those who: 1) Subdivided and sold forestland; 2) Sold or donated an easement on their forestland; and 3) Have not committed to either action, provided descriptions of their planning and decision making experiences through phenomenological and semi-structured interviews. The experiences described during these interviews provided a glimpse into the decision-making processes forest owners faced as they planned for their forest’s future. Needless to say, these findings are not generalizable to other forest owners; however, the study does provide insight into individual experiences.

This chapter presents a discussion of those factors and thought processes PFLs considered as they reflected on and engaged with the land planning experience. Drawing on the model presented in the Theoretical Framework (Chapter 3), I present a second model here that incorporates components from data collection efforts and findings presented in previous chapters that enter into the PFL planning experience (see Figure 7.1). Lastly, extending the ideas presented in the discussion and the model, I share my perspective on how this exploratory effort can inform a statewide mail survey addressing land planning and decision-making issues among PFLs.

Study findings shed light on two broad concepts. First, forest planning was a multidimensional process, involving a tenuous mix of economic, social, biophysical, and cultural
factors. Second, each landowner and his/her planning process were unique, born from distinct histories, and influenced by factors, both diverse and personal. Acknowledging the complexities and personal nature of the planning process, this research showed there are commonalities among those influencing factors and experiences.

**Forest Planning was a Multidimensional Process**

The process PFLs’ engaged in deciding to sell or conserve land was not simple or direct. For example, subdividing land was not solely about turning a profit, but involved complicated emotions affecting couples and families. Donating an easement was less about receiving benefits from tax incentives, and more about being able to control one’s environment, at times in very detailed and specific ways. Factors contributing to the planning process differed across groups, but several crossed group lines. For example, landowners across the three groups struggled with whether their heirs were interested in caring for the land or will care for the land according to their wishes.

Along with their descriptions of the decision-making process during the phenomenological interviews, PFLs placed particular emphasis on their relationship with the land itself. The themes that emerged from the interviews reflected this separation of experiences (i.e., land and decision). Following is an exploration of these greater, categorical themes and the thought processes and factors contributing to PFL planning experiences within and across groups.

Forest owner relationships with and attachment to the land emerged as an essential component in the decision-making process. This was true across the three study groups. Specifically, as individuals described their relationship with the land, how it was maintained, and in some cases, how the relationship formed.
Importance of Relationships with Land in the Planning Process

PFLs in the three groups enjoyed the communities where they lived. Key informants in each of the study counties acknowledged that residents exhibited a high degree of attachment to the area they called home. There was high value placed on living, for example, amongst the rolling agricultural land in southern York County with the convenience of an easy commute south on Interstate 83 to Baltimore or Washington. Similarly, working in Harrisburg, but living on farm land in pristine Perry County, far removed from the hustle of urban living, was well worth a 40 minute commute. The cultural and natural amenities in Centre County, easily accessible to residents, were unparalleled.

Further, participants across groups indicated having lived in their communities an average of 41 years, with only two having lived in their respective communities less than ten years. In many cases they had been born and raised in or near the same community where they currently lived. PFLs in this study liked where they lived.

According to KIs across the three counties, residents expressed more concern about loss of agricultural land than forestland. This sentiment was especially present in York County, where findings suggested the presence of agricultural preservation programs, including the county agricultural preservation program, results in increased development pressure on forestland.

Relationships with the land among those who subdivided and sold were grounded in a utilitarian dynamic akin to using the land to get what they needed. PFL needs were diverse, encompassing money, privacy, land for heirs, and a source of wood for heating and hobbies. Land enabled this group to meet their needs, whether they were monetary or based on an aesthetic value (e.g., privacy).

Land, for those in the no action group, was an integral part of their lives. They enjoyed spending time on their properties and getting to know the land in intimate ways. This connection
was based partly on the physical attributes of the land. The presence of forests, streams, and rolling hills contributed to PFLs attachment to the physical space where they lived. Stedman’s study of landowners in the Northern Highlands Lake District of Northern Wisconsin (2003) found similar connections between landowners and their physical environment. Further, no action PFLs described the land as a place to retreat, to be alone, and to gather strength.

For those in the easement group, land was a gift and they believed they had a responsibility to maintain and preserve it for its future owners. The intimate bonds and emotional attachment epitomized in both the no action and easement groups are supported by the extant literature on PFLs and their relationships with land. Davis (2003 and 2008) studied non-participant PFLs in Tennessee and described their relationships with the land as supporting a series of connections to, family, nature, place, and income. Similarly, Muth (2004) described PFLs in Deer Lodge, Tennessee, as being closely connected to their land, considering it a part of them and a place to which they were spiritually connected.

PFLs in the no action and easement groups were more active on their land than those in the subdivide and sell group. Past research has linked stronger levels of land attachment with increased levels of activity on the land. Davis (2008) found that those who actively managed their forest had stronger levels of personal attachment than those who did not actively manage. Semi-structured interviews found PFLs in both groups exhibited higher degrees of activity on their land compared to those in the subdivide and sell group. Several PFLs in the subdivide and sell group had no interaction with their land. For those who were active on their land across groups, farming, recreation (e.g., hunting, hiking, fishing), enjoying nature, and forest management were several of the activities engaged.

PFLs who inherited land described high levels of attachment. A number of participants in this study owned land that had been in their families for several generations. Semi-structured interviews revealed a third of PFLs interviewed (n=14) across groups, had inherited or purchased
land from their families as a place to live. The extant literature concerning PFLs attachment levels with their land does not contrast land inheritance versus land purchased. Do PFLs who have inherited their land have stronger levels of attachment than those who purchased land for themselves?

It was not the expressed purpose of this study to identify whether land attachment levels were stronger among those who inherited land versus those who purchased their land. However, case studies from this research were illustrative of the extreme attachment PFLs expressed toward family or generational land. Strong levels of land attachment were more frequent among PFLs who had sold or donated an easement on family or inherited land. Consider Bridgette, who was born in the farmhouse on her land, as was her mother. Her sister and she donated an easement on the farm a few years ago and were happy about their decision. Because she has no heirs and was less able to perform the duties accompanying farm ownership, she was taking steps toward selling it. She expressed sadness about this during the interview. Samuel was a fourth generation owner of his farm. He had donated an easement on a majority of his agriculture and forestland there. His attachment to the land was grounded in strong familial connections to it. In addition, he expressed closeness to his aunt, the previous owner, who envisioned the land staying in the family for generations to come. His decision to donate an easement was also tied to continuing the vision she had for the land. Several additional cases point toward the formation of a unique bond among PFLs who donate/sell easements and their relationship with the land.

**Formation of the PFL-Land Relationship in the Easement Group**

Relationships with land changed over time and this was evidenced by stories shared in the easement group. A specific incidence or a series of incidences or experiences with land influenced their attitudes and behaviors toward that land. The strong bonds with the land
experienced by PFLs in the easement group often developed through significant family and life experiences. For Violet, the memory of walking in the woods with her father and learning the names of the trees was an experience that shaped her relationship with the land. Her experience with the land and her decision to conserve it directly tied to that event or series of events.

PFLs in the easement group spoke of being stewards and not owners of the land. Several participants pointed to specific life-changing experiences that had bearing on their relationship with the land. For Ceylon, her experience as a teacher on a first nation reservation taught her land and preservation values and later in life directly inspired her to donate an easement on her own land:

I spent a couple of years on an Indian reservation and found that the way they view the world, especially the natural world so insightful and...for me I felt a kinship to their ideology, stronger than the one I was raised with. Once presented with that viewpoint I recognized it as the best. You’re really not an owner, you’re really, you are just a steward

Jim described an incidence that shaped his stewardship ethic and emotional bond with his land, which changed the way he treated the land. When I asked him to tell me more about how he arrived at his land stewardship philosophy, he said this:

It happened real quick. I needed to reseed this hill over here, and the farmer I worked for came out, he said “well just get Roundup and no-till grass. Don’t have to plow it, anything.” I did that. My wife sat on the front porch watching me. She cried because of what I was doing. From then on, I haven’t sprayed a bit of chemical on my farm.

These examples were among many that landowners in the easement group described as directly influencing their relationship with their land and guided them to consider selling or donating an easement.
No Action and Subdivide and Sell Groups’ Connection to Land

PFLs who had not committed to any action or who had subdivided and sold their land shared stories and experiences with me about their relationship with the land they owned or still own. The PFL-land relationships between the two groups were dramatically different. PFLs in the no action group were overwhelmingly active and attached to their land, whereas PFLs in the subdivide and sell group were not.

Participants in the no action group expressed strong and positive feelings toward the land during the phenomenological interviews. They described themselves as connected to the land. Their connection was rooted in family history and significant childhood experiences on the land. For some, the connection bordered on the spiritual, for others the connection was about being on the land as often as possible, walking the land, and checking on things. This group also expressed a high level of appreciation for nature. Conversely, the relationship between the land and those who subdivided and sold was based on an enabling quality. The familial connection was not expressed, nor was the appreciation for nature or the desire to be on the land as much as possible.

In this study, I have established, and the literature confirms (Muth 2004; Davis 2003 and 2008), PFLs who are more active on their land have a deeper attachment to their land. Many of the interviewees, across both groups, used their land for similar purposes, for example, living on the land, hunting, collecting firewood, using it for recreational purposes, and growing crops. However, PFLs in the no action group described being more engaged in direct, non-utility experiences with nature on their land compared to those in the subdivide and sell group. Direct, non-utility experiences with nature included activities such as, observing wildlife, walking, and actively monitoring plants and animals as a hobby.
Decisions about Land Planning were Multidimensional

Making decisions about land depended on a range of factors. Following is a discussion of key factors that emerged iteratively from the phenomenological and semi-structured interviews. The discussion topics cover factors specific to a single PFL group, as well as, factors across two and sometimes all three groups.

Decision about Land Planning Often Involved Others

For PFLs, forestland planning and decision-making was a process that involved others or ‘partners.’ Decision-making partnerships were formed among family and included heirs, spouses, aunts and uncles, grandparents, and friends. In some cases, partnerships had been formed with family who had since passed away. Often the death of a partner did not affect decisions or outcomes. Partnerships in the planning process were found among all three groups, but were most evident in the subdivide and sell group.

Spouses played an integral role in the planning and decision process. Jack and Jill (Centre County) were husband and wife and the quality of their relationship played a role in the planning decision. Both had dissimilar ideas of where they wanted to live (Jack in isolation in the middle of the woods; Jill in or near a neighborhood). The decision to subdivide and sell a portion of their land took two years to decide, but it catered to both their needs. For Jill, they subdivided 60 acres into 11 lots to create a neighborhood. For Jack, they retained a large forested parcel around their house, which acted as a buffer from the new neighborhood. During the two-year trial, Jill lived, by choice, according to Jack’s isolationist-like ideals. When she expressed wanting something different, they reached the compromise together.
Steve in York County, who subdivided and sold three lots from his family’s land, helped his father make the decision to subdivide. Steve’s father originally wanted to sell eight acres as one piece, but Steve argued for splitting the piece in thirds to make a profit. Part of his reasoning was if they sold a single piece, the buyer would split it and make a profit, so they should do it first. After it was decided they would divide the land, Steve’s Dad passed away. Steve completed the plan.

Relationships with heirs and other family members played a role in the no action group’s indecisiveness concerning next steps in the planning process. Not knowing if potential heirs would want or care for the land was mentioned on several occasions. Joseph had three high school aged daughters and considered giving one or more his land in the future. He expressed concern about how his offspring would care for the land provided they inherited it. Asked if he would give his land to heirs and, if he did, how he would select, he observed:

Well it depends, if I knew one of them wanted to live there and keep it the way it was. I’d give it to them. If the others just wanted it to sell to get the money – tough, I won’t. I don’t owe any of them anything. You know?

Other family members, aside from heirs, played a role in the decision-making process as well. Chaz and his brother jointly inherited eight acres from their father, who had inherited it from his father. Their grandfather passed away several years ago and for Chaz, the land remained his spiritual connection to his grandfather. He expressed concern over the flagging economy during his interview, and complained about future economic uncertainty. For him, his land was an insurance policy, or what he considered to be “money in the bank.” Despite this, it was very clear during his interview that he did not want to be perceived as profiting from his grandfather’s land (either from selling trees or selling the land itself). Profiting from that particular parcel of forestland seemed almost irreverent or disrespectful to him. This struggle between potentially profiting from his grandfathers land and preserving his grandfather’s memory, was part of Chaz’s decision-making process:
I don’t like the idea of being viewed as profiteering on something that was handed to us on good faith. It’s still part of my grandfather; it’s still part of his ground.

Even though Chaz’s grandfather had passed, their relationship and the good faith in which the land was handed down to him, continued to play a key role in his planning process.

Although decisions and land planning with others was not identified as a theme in the easement group, there were several relevant examples worth noting. Partnerships that factored into the planning process for those having sold or donated an easement were formed among neighbors. For example, Lefty and Lucy decided to put 100 acres of their land into easement. They sold the easement to a small, local conservancy who happened to own land adjacent to them. Their decision came fifteen years after the conservancy first approached them about selling an easement. During the interim, conservancy founders approached them multiple times urging them to consider selling their development rights. The conservancy held formal picnics, inviting multiple neighbors. They also made several informal visits to the house in effort to persuade Lefty and Lucy, and other interested locals, to consider selling easements. Eventually, the conservancy’s co-founder passed away and his children and a son-in-law in particular, continued the outreach process.

During the phenomenological interview, both Lefty and Lucy described feeling frustrated by the pressure exerted by the conservancy. Lefty and Lucy admitted not really understanding the easement concept at first. They also felt the conservancy founder did not understand the concept either. Only after the involvement of the son-in-law and other family members did Left and Lucy feel they had enough clarity to make an educated decision.

PFLs who sold or donated easements demonstrated a predilection toward advocacy by encouraging others who owned adjacent parcels to consider an easement as well. Ceylon and her husband recently approached their adjacent neighbors about donating easements on their land to
increase protected acreage in their area of Centre County. Similarly, Violet and Tobias in York County recently attempted to reach out to their neighbors as well.

There were two cases among the easement group in which relationships with extended family influenced decision-making. Both cases involved the relationship between parents and spouses of heirs. In one case, the spouse was perceived as a threat because of her influence over the heir. The parents believed if they did not put the land under easement, she would convince the heir to subdivide and sell the land for profit once he took ownership. In the second case, the parents formed a Limited Liability Corporation with four heirs. As a result of the threatening nature of a daughter-in-law’s questions regarding profit allocation, the parents made sure benefits and decision-making powers concerning the easement and the arrangement of the parent’s wills, excluded non-blood line relatives. The participant was visibly upset during the interview about his daughter-in-law’s behavior.

**Lack of Alternatives in the Subdivide/Sell and No Action Groups**

A perception of having no other alternatives but to subdivide, emerged as a theme among PFLs in the subdivide and sell group. This perception was strongest with those who had inherited land from their parents and were subject to significant tax burdens (see quotes from William and Henry in Chapter 6). However, perceiving a lack of alternatives also emerged among other PFLs who purchased their land and were choosing to subdivide and sell for a variety of other reasons, such as the declining health of parents and the desire to gift land to heirs (see quotes from Stan and Nancy in Chapter 6).

In almost all cases involving those who have subdivided and sold, PFLs described having no other alternative but to divest some land to fulfill their own or others’ expectations (others included parents, heirs, and siblings). As co-executor of his parent’s estate, Henry believed he had
no other alternative. It was his responsibility to pay the taxes on the 273 acres of family land in Perry County, while also managing the estate and ensuring his seven siblings benefitted appropriately. Subdividing and selling the land in small and affordable pieces was the only way Henry could satisfy his familial responsibilities. Given Henry’s circumstances, he was unable to identify other alternative; but, to divest all or a portion of the land.

Conversely, Frank and Helen decided to buy a 78 acre farm as an investment property. They lacked the capital to purchase the farm outright. To buy the farm, they negotiated an agreement to subdivide and sell a small portion of the total acreage to raise the money they needed. According to Peach Bottom Township rules and regulations involving Clean and Green² lands, landowners cannot subdivide and sell more than two acres annually (Peach Bottom Township 2010). Frank and Helen were able to find a developer/builder to purchase a single (1 to 1.25 acre) lot annually, and build a house on each lot over the course of three years. Through this arrangement they could afford to purchase the farm. Frank and Helen perceived no other alternative to their predicament. The nature and immediacy of their situation was however entirely different from Henry’s. PFLs’ perceptions of having no alternative to subdividing and selling land can vary dramatically.

Subdividing and selling land, when other options or alternatives may have been available, could potentially elicit feelings of shame, guilt, or embarrassment among PFLs. Difficulty in scheduling interviews with PFLs who subdivided and sold land, particularly in York County, suggested this group exhibited a tendency to avoid discussing their decisions. This is in contrast

² Clean and Green, or ACT 319, provides a real estate tax benefit to owners of agricultural or forest land by taxing that land on the basis of its “use value” rather than its “market value.” This act provides preferential assessment to individuals who agree to maintain their land solely devoted to agricultural use, agricultural reserve, or forest reserve use. http://www.pacode.com/secure/data/007/chapter137b/chap137btoc.html
to PFLs in the easement group, who delighted in the opportunity to speak to me about their decisions.

Scheduling phenomenological and semi-structured interviews with PFLs who had subdivided and sold forestland in York County was more difficult than in either Centre or Perry Counties. Approximately 140 phone calls were placed to schedule six interviews in York County compared to approximately 10 calls for one interview in Centre and Perry Counties. Scheduling interviews with PFLs who had sold or donated an easement on their land was relatively easy by comparison. Almost every phone call resulted in an interview. This issue will be addressed further in the conclusions chapter (Chapter 8).

A few PFLs in the no action group also spoke of a lack of planning alternatives. This manifested in their indecisiveness about how to plan for land succession. For example, Garth (Perry County) owned 75 acres, had five heirs, and expressed that he did not know how to gift land to each of them. During his interview, he articulated his lack of knowledge, and his lack of knowing how to address it. The only thing he could think to do was put all their names on the deed and let them sort it out. Geoff (York County) was also at an impasse. Perceiving no other recourse, he was prepared to sell his land and retire with the profits. Not knowing what else to do or how to think about the issue had resulted in his land planning strategy – to wait and not commit to anything.

**Decisions to Sell or Donate Easements**

While we cannot completely negate the influence of tax incentives and direct payments to PFLs for their development rights, neither emerged as dominant themes in the interviews. This finding challenges the current enthusiasm for incentive-based approaches to conservation (McLaughlin 2004; Fox and Nino-Murcia 2004; Stern 2006). PFLs who made a living from their
land and considered it their retirement were, in this study’s sample, more apt to consider tax
benefits as factoring heavily into their decision to donate or sell an easement (e.g., interviews
with Lefty and Lucy and Crosby reflected this position). According to the remaining participants
in the easement group; their decision to donate or sell an easement was consistently more related
to the environmental integrity of the land and controlling current and future activities.

The environmental integrity and its preservation of their land motivated PFLs to sell
and/or donate easements. In several cases, interviewees spoke about their non-consumptive
lifestyle and proposed that making money was less important to them than preserving the land.
Here is Jim describing his desire to preserve his land’s environmental integrity:

What matters to me is what shape it was when I got it and what shape it will be
when I pass it on. And that’s the important part in land ownership.

Emphasis on environmental over monetary values could be linked to income. Ownership
characteristics, particularly household income, may influence the emphasis on environmental
factors over monetary ones, but that case is difficult to make for those who participated in this
study. Three PFLs in the subdivide and sell group made at least $75,000 annually, while no one in
the easement group made more than $50,000 annually. Employment status might account for this
difference. While only two PFLs in the subdivide and sell group and seven in the no action group
were retired, nine of the PFLs in the easement group were retired. Higher retirement rates among
the easement group could account for the low reported incomes; however, reporting annual
retirement income does not include income generated and saved over a lifetime and other assets
that may have allowed them the financial freedom to donate an easement. It is impossible, from
the data collected in this study, to describe the degree to which income levels related to
willingness to donate or sell easements. However, it is an element worthy of continued
exploration.
In addition, the ability to control current and future actions and uses on their land motivated PFLs to sell or donate easements. These provisions and controls ranged from the general, such as preserving a view and being allowed to continue hunting on the land; to the specific, such as allowing falconers to continue to trap hawks and falcons in a specified area in perpetuity. From the perspective of one owner, private conservancies and land trusts allowed PFLs to retain greater flexibility and control. Whereas, public conservancies and trusts funded by the state or federal government tended to use standard easement templates and were less flexible.

**Land’s Economic Value was Important for Uncommitted PFLs**

PFLs in the no action group expressed interest in both subdividing and selling land and selling or donating an easement on their land, provided the price was right. Several individuals in this group considered selling or donating an easement on their land. Three were deterred because they believed the economic return was too low. Others assumed or were told the size of their land was too small or did not contain endangered or species of concern to justify the easement. Those who did not consider an easement believed they needed to retain the option to subdivide and sell their land if needed be in the future. This group placed high value on planning flexibility. Under their current situation committing to one action or the other posed problems for this group.

Lack of commitment to planning and the focus on economic returns for land among PFLs in the no action group could be problematic, particularly in high growth areas around the state. This study can speak directly to high growth areas such as, southeastern York County and eastern Perry County. BRAC at the APG in Maryland will push people into the southeastern portion of York County, particularly Peach Bottom and surrounding townships. Similarly, the movement of people from Harrisburg into rural areas of Perry County will increase development pressure on PFLs who valued planning flexibility, who are not yet sure if heirs are prepared to manage their
land, and who were potentially facing tenuous financial situations and would benefit financially from subdividing and selling.

**Lack of Direct Communication Concerning Land Planning Decisions**

Four PFLs in the no action group described a lack of direct communication with heirs concerning the land planning process. Due to the low number of interviewees who described this as an issue, this did not emerge as a theme among the uncommitted PFLs. However, three in the easement group also reported a similar lack of direct communication with heirs about land planning. The evidence that this issue crossed group boundaries and was described as a source of frustration among PFLs, affecting their planning and decision-making efforts, suggested it was an important factor. Lack of direct communication was potentially linked to a decision to evenly divide land among multiple heirs, or putting multiple names on a single deed. There were examples of communication problems among those in the easement group as well.

Among PFLs in the no action group, Garth spoke of not knowing how to broach the subject with heirs, resulting in his decision to will all of his property to all of his heirs. Two others described leaving heirs out of the planning conversation for undisclosed reasons. Crazney, however, specifically ensured he communicated his plans to his heirs. Three of Crazney’s four children were not communicating with him because he had decided to give his entire acreage to only one son. When asked directly during semi-structured interviews about giving land to heirs, participants discussed being either undecided or having decided to divide their land evenly among their heirs. Several were planning to give land to the only heir. Here is an excerpt from a semi-structured interview with a PFL in Centre County, in the no action group, who had four heirs, but was planning to give land to only one:
... my son Chris, he’s a big hunter, and he will take my company over and he’s a
big tree hugger so uh, I’m pretty sure it (the land) will stay as is OK?... I think
that’s natural (to pass land on). I have four kids; I hope that one of them uses this
as a homestead.

When asked how the others would feel about not receiving land, Willy was not sure:

Honestly I don’t know exactly uh, Willa my daughter is a realtor. She is a Penn
State grad and she is married to an architect who is also a Penn State grad and
they live downtown. Then Chris, I told you already (a grad student at Penn State
and married with a young son). And my daughter Sue and her husband work for
the University of Slippery Rock. Yeah. And uh, she said she would like to come
back here…yeah (smiles). She, if there would be an opening at Penn State or
something. And uh, my younger son Mark is out west in Portland Oregon. He
likes it out west. All the other kids like it here. What else can I tell you?

Willy is planning to give his land to his son Chris, who he believed would take good care
of it. However, when pressed about how the three additional heirs would feel about this
arrangement, he didn’t know. He had aspirations of someone using the home as a homestead, but
beyond that, he expressed uncertainty about how the others felt about his plan.

Conversely, Crazney had four heirs; two living in the same town as he, and two,
elsewhere. Crazney had communicated his intentions to gift the entire property to one son; he
believed his decision was justified, as the son receiving the gift had been engaged with the parcel
most of his life (managing the forest, helping build the cabin, keeping the lane clear), while the
other three were not. The remaining three children were very upset with their father and their
brother following this decision. Crazney described the relationship with his children as very
strained, and acknowledged the three heirs did not talk to him or his son. Crazney spoke of
compensating the three heirs by gifting them the parcel’s gas and mineral rights; although, he had
already leased those rights to a gas company that will drill in the near future.

Though it did not emerge as a theme among easement PFLs either, there were
communication issues with heirs. This was tied to a lack of trust toward extended family
members. Lefty and Lucy have discussed the easement and their future plans with their daughter,
but not their son. Exploring this further, they acknowledged distrust for their son’s wife with
assets that belonged to the family. Here, Lucy describes communicating with her daughter, but not her son:

I don’t know how our son feels about us selling the land to a conservancy because we don’t…we actually never really talked about it. Our daughter, she thinks it’s great because she knows…I mean I talk more to her because, you know, because she’s a daughter and, and she’s, she’s happy for it.

**Emotion and Mutual Benefit among Decision-Makers**

Emotion plays a role in planning and decision-making (Sanfrey et al. 2003; Bechara et al. 2000). As discussed in the literature review for this study (Chapter 2), bioregulatory signals such as those constituting feeling and emotion provide the principle guide for decisions (Bechara et al. 2000). Consider Bridgette who was emotionally distraught over having to potentially sell the family farm. She has no heirs and because she can no longer run the farm for various reasons. From a cost-benefit perspective, it makes sense to sell. However, she was having difficulty coming to terms with this outcome. Her emotional attachment to the farm was making it difficult for her to commit to the decision to sell. Here is Bridgette describing her conundrum:

I just feel really really sad right now that I have to sell it. Every day I think I’m making a mistake and I should take it off the market and when I get close to getting a buyer I get really nervous…that’s not a good thing maybe, I can get some help mowing the lawn and taking care of it. Maybe I should hang on a little longer. Because once sold, I can never get it back. I don’t know if I’m doing the right thing here.

Jack and Jill provide another example of decision-making influenced by emotion. Their decision to subdivide and sell land was not motivated by financial gain, but motivated by emotional equity or compromise between them. Violet and Tobias conserved their land because of the emotional bond they felt toward it. For Violet, this bond began with her father, who taught her the names of the trees on the property. For Chaz in the no action group, his emotional connection to the land and his grandfather has admittedly influenced his planning efforts.
Avoiding emotion plays a significant role in succession planning as well. PFLs in my sample had a tendency to avoid emotional conflict with heirs, resulting in a lack of communication about land and planning. This affected PFLs in each of the three groups. Garth, for example, did not know how to gift his land to all five heirs and has yet to talk to any of them about his thoughts. Lefty and Lucy have spoken to their daughter about the conservation easement and other land plans, but have avoided speaking to their son. Lucy’s reasoning for this was the close bond between mothers and daughters.

These cases suggest that learning how to connect emotionally with heirs about land planning and decision-making may be helpful for everyone involved and beneficial for the land as well. Garth’s predicament provides a particularly rich example because of its pervasiveness throughout the Commonwealth (i.e., 52% of PFLs wanting to give land to multiple heirs). Imagine for a moment, if Garth were to gather the family together for a meeting where he would talk to them about his predicament. It may be that one, two, or several of his heirs may not want the burden of owning the land. It may be that one of them really wants the land and the others are willing to support this outcome. There is no telling what may come of the meeting; however, the potential for reaching different, and fairer conclusions increases if lines of communication are opened and people are willing to connect emotionally and as a family rather than simply putting all five heirs on a single deed.

Sanfey’s experiments involving game theory and decision-making demonstrate that humans tend toward decisions that are mutually beneficial rather than decisions that tend toward financial self-interest (Sanfey et al. 2003). Considering my sample of PFLs, these findings hold true. The desire to gift land to heirs demonstrates their want to benefit others, which was especially true for PFLs in the no action and subdivide and sell groups. There seemed to be very little self-interest involved in their planning process and
decision-making. There were exceptions in the subdivide and sell group, John the developer was one. However, for the most part, their decisions were less about financial self-interest and more about mutual benefit, at least within the family unit.

PFLs in the easement group were able to extend the “circle” of mutual benefit beyond their families. Their decisions to conserve land were for the benefit of their heirs, and others, in the future, the watershed, and the landscape. This capacity and tendency toward mutual trust and benefit should provide a hopeful vision for the land in the future. By exploiting this tendency and showing PFLs that conserving forestland benefits communities, regions, watersheds, and landscapes, perhaps there is a chance to promote forest conservation among them.

**Summary: Re-addressing Study Questions**

This study was conducted to explore: 1) The thought processes PFLs engaged when considering the future of their forestland; and 2) The factors PFLs considered when planning for the future of their forestland. It is my hope that I expressed those individual thought processes and factors PFLs engaged when making decisions, through the quotes in Chapter 6 and discussion points in Chapter 7. Thought processes and factors presented here account for individual experiences, but speak to the collection of PFLs in each group.

**PFL Thought Processes**

Addressing the first question, PFL thought processes seem to relate to their relationship with their land and the decision that is best for themselves, their offspring, and the environment. The processes detailed below originated from the phenomenological and semi-structured
interviews, which directly relate to relationships with land and family. In addition, processes were contingent on both individual and familial motivations-incentives and rewards. The processes PFLs engaged, informed their decision to sell land, conserve land, or do nothing.

For those who subdivided and sold forestland, their decisions revolved around combinations of five key processes: 1) Land acquisition; 2) Decrease tax; 3) Decrease familial pressure; 4) Provide land for their offspring; and 5) Invest and benefit.

PFLs who decided to sell or donate an easement on forestland were clear and consistent, as a group, about their thought processes. They frequently expressed finality or unwavering decisiveness and were most often very happy and excited about their decision. Their decisions revolved around combinations of six key processes: 1) Land acquisition; 2) Remain connected to the land; 3) Control both theirs and other’s relationship with the land; 4) Benefit monetarily; 5) Advocate to others; and 6) Pass land forward.

PFLs who have committed to no action were the least consistent, as a group, when discussing their thought processes. Because they were both directly and indirectly engaged in the decision, they most often expressed doubt, indecision, and struggle. Their lack of decisions revolved around combinations of eight key processes: 1) Land acquisition; 2) Remain connected to the land; 3) Enjoy nature; 4) Provide land for offspring; 5) Communicate with family; 6) Ignore decision; 7) Wait on decision; and 8) Benefit monetarily (either through selling or conserving).

Factors

The factors PFLs considered while making or considering future planning decisions on their forestland extended from their thought processes. They are best described as distillations of
these processes and are represented by the model presented below (Figure 7.1). Factors follow with explanations:

**Land Acquisition**

First, PFLs considered how they acquired the land. To what degree this affected their decision is difficult to say based on the data collected. Suffice it to say, some spent time during the interview discussing how and/or why they acquired the land, particularly, those who inherited land from family.

**Relationship with the Land**

The relationship PFLs had with their land was part of their planning and decision making process. Generally speaking, people liked where they lived. Their relationship to the region where they lived was based on its physical beauty, proximity to natural and cultural amenities, and distance to work. PFL attachment to their land was related to how they used it and potentially how it was acquired, whether it was handed down through familial generations or purchased. Expressed relationships with the land tended to depend on the group to which interviewees belonged. For those who subdivided and sold, the relationship was based on utility, how they used the land. For those in the no action group their relationship with the land was based on being physically and psychologically close to nature, a place to escape and re-energize, and a place to visit often. For those in the easement group they described their relationship as emotional and one that inspired them to take responsibility to preserve the land in perpetuity. Connection to the land among PFLs in the no action groups was dramatically different than the connection among PFLs in the subdivide and sell group.
Family Relationships

Forestland planning involved family, heirs, and spouses. This was true across the three study groups, although, those who committed to divesting land more often mentioned others in their decision making process. PFLs in the no action group mentioned giving land to heirs most often, but were frequently indecisive about this outcome. Partnerships that factored into the planning process for PFLs who sold or donated an easement were formed among neighbors.

Family Communication

The lack of direct communication with heirs and family among PFLs in the no action and easement groups emerged as an issue requiring further exploration. Lack of communication among PFLs in the no action group contributed to indecision and frustration. Indecision and lack of communication was potentially linked to even land distribution among multiple heirs. Lack of communication among PFLs in the easement group was associated with trust issues among extended family, particularly in-laws who were described as motivated by profit.

Stewardship

The careful and responsible management of the environment was not a factor considered by everyone. Many PFLs in the easement and several in the no action group spoke of their stewardship ethic. Very few in the subdivide and sell group considered it in their decision.

Control

This factor was almost exclusive to the easement group. The desire to control who had access to their land and the kinds of activities that took or will take place on their land encouraged PFLs to donate and sell easements. The very act of selling or donating an easement and setting the parameters was an act of control.
Lack of Alternatives

Perceiving no other alternative or being forced into subdividing and selling land emerged as a theme among participants in the subdivide and sell group. Several PFLs described being forced into subdividing and selling. Others believed there was no other alternative, although they often described making a choice to divest.

Incentives

The economic value of land emerged as an important component in the land planning process among PFLs in the no action group. They expressed interest in both subdividing and selling land and selling or donating an easement on their land, provided the price was right. Land was “money in the bank.” Deep connections and strong attachment to the land versus economic uncertainty and lack of communication with heirs defined the struggle for PFLs who remained uncommitted to a land planning action. Tax incentives and direct payments to PFLs for their development rights, did not emerge as a dominant theme from the interviews in this study.

Figure 7.1 below represents the framework I began with (see Chapter 3) representing landowner and parcel characteristics and planning processes associated with succession and decision-making, but also considers new information that emerged from the research. These include land relationship and several factors in the planning process (i.e., control, lack of alternatives, incentives, and stewardship).
Figure 7.1. Factors and processes associated with future forest planning.
Facilitated Group Discussions

Prior to developing the statewide mail survey, it would be helpful to engage communities and landowners in facilitated group discussions concerning what we have learned during the first stage of this research. These discussions would also serve to verify our findings and potentially allow for new information to emerge. I recommend conducting facilitated discussions in Perry, Centre, and/or York counties, but including other counties would help us generalize our findings and should be a priority.

In terms of the presentation and discussion content I believe it is important to explain the premise of the study, why it is important/how it will help, timeline - where we are in the research process, and our objectives for the discussion. Following this we should present an overview about what we have learned thus far from the KI, phenomenological, and semi-structured interviews, leaving time for questions and comments. Ultimately, research outcomes will benefit landowners and the land. Engaging landowners during discussions is an important element that will contribute significantly to research outcomes. To this end, dividing landowners into smaller groups and giving them discussion topics and questions will encourage more open conversation. Allowing small groups to share highlighted points of their discussion with the larger group will be an important culminating step, followed by a short debriefing session.

Because land planning and succession can be personal and sensitive subject areas, questions and discussion topics should be limited to general issues. I anticipate participants may be reluctant to share personal information in a group setting.
Discussion topics/questions for small or large groups:

- What kinds of land planning options are available to landowners in Pennsylvania?
- What kinds of feelings and/or thoughts do land planning and decision-making elicit from you? Why?
- What kinds of things stand out to you about planning for the future of your forestland?
- What factors would you consider important in the planning and decision-making process?
- **Put yourself in these shoes activity**: We could present a series of case-study scenarios to each of the small groups and ask them what they would do if they were in that particular situation and why (i.e., put yourself in these shoes). For example, imagine inheriting 500 acres of land from your parents along with your four siblings. How would you go about planning for the future of that land? How would you decide what to do? What factors would you consider? Barriers? This activity allows participants to engage the issues in a personal kind of way (i.e., “I think it would be important to do x, y, and z”), but remain detached because the focus is not on their particular situation.

By discussing these questions in both small and large groups, there is potential to elicit information concerning participants’ thought processes and factors they would consider when planning and making decisions about the future of their forestland. This would serve to better inform the mail survey.

Survey Recommendations

Findings from this study will inform a statewide mail survey focused on PFLs and forest planning. Following is a recommended list of topical areas and specific questions that emerged from this research as central to the process PFLs engage as they plan and make decisions for their forests. Further inquiry into these areas via a survey will provide the insight needed to begin building programs, educational efforts, and areas to commit further funds to help PFLs make good decisions for themselves and the land. The following lists of questions are ideas and not
meant to be the actual questions. In several cases, questions posed here could translate to a group of potential questions about the topic.

**Land Connection and Acquisition**

How PFLs acquire their land and their level of connection/attachment to it will potentially help us understand factors they consider as they plan.

- How is land acquisition related to their decision-making?
- Does land acquisition affect how they want to divest land? (e.g., if they inherited land, are they more prone to gift land to heirs? If they purchased land are they more prone to sell?)

PFLs in the no action and easement groups expressed strong attachment to their land compared with those in the subdivide and sell group. This was something we expected from the easement group, but was a surprise from the no action group. PFLs from the no action group maintained a strong attachment to their land, but struggled with their lack of planning knowledge (also, lack of communication with heirs and financial uncertainty). This struggle resulted in their indecision and tendency to wait to make a decision.

- What connects PFLs to their land?
- What is the nature of their connection to the land? Is the strength of connection related to acquisition (e.g., are PFLS more connected to family land or land passed down through several generations, as opposed to land they purchased?)
- How does their connection to the land inform decision-making if at all?

**Family**

Family is a significant factor in the planning and decision-making process. The quality of the family relationship and the quality of communication both influence decision-making. We need to learn more about the role family plays in the decision-making process for PFLs. Further,
we need to better understand the difficulties families have communicating about land planning and decision-making, and learn how we can help.

- Do PFLs communicate with their family about the planning process? How often? Under what circumstances?
- Do PFLs consider family communication important in the process?
- What factors inhibit or facilitate family communication?
- What can we do to help?
- If PFLs have heirs, are they considering giving land to them? How? Have they considered other forms of compensation for heirs, aside from land?
- What is the heir’s role in the decision-making process?
- When is the right time to engage heirs in land planning?
- What factors do PFLs reflect upon when considering giving land to heirs?
- What role and to what level do spouses of heirs play?
- If PFLs have no heirs, what options are they considering for their land?

**Alternatives**

Participants in the subdivide and sell group reported they lacked perceived alternatives but to subdivide and sell land. We need to know if this really is the case.

- For those who have committed to a particular planning decision, did they consider other options?
- For those who are uncommitted, what options are they considering?
- Would a list of options and alternatives help PFLs plan and make decisions?

**Control**

PFLs in the easement group identified control as an important factor in their decision to sell or donate easements. Controlling who has access and the kinds of activities allowed on their land in easement, in perpetuity was attractive. The idea that PFLs lose control over their land if they sell or donate an easement is for these landowners an apparent misconception. What other misconceptions exist about conservation easements? We have a lot to learn from PFLs who have committed to some form of easement. For example, easement PFLs had had a high degree of engagement with neighbors about land planning. They apparently understand the ecological
importance of contiguous forested tracts. They also understand the importance of cross-boundary cooperation. How did they get to this point in their understanding?

Summary

We have learned that forest planning and decision-making was a multidimensional process for landowners, often mixing economic, social, biophysical, and cultural factors. Further, that each landowner and their planning processes were unique and influenced by factors, both diverse and personal. Acknowledging the complexities and personal nature of the planning process, this research shed light on some of the experiences landowners shared. The next chapter will serve to draw together and extend several of the ideas expressed in the dissertation thus far. In addition, I offer potential solutions or ‘next steps’ for a host of issues or concerns that have emerged from the research.
Chapter 8

Concluding Thoughts

The stories PFLs shared with me were not just about trees and land, but concerned details of their lives, their family’s lives, their connections to the forest, and their future plans. In a certain way, they were asked to consider their own mortality and how that might affect what they did with their property. The stories they shared were often very personal and sometimes emotionally difficult. On occasion, they shared details about their lives and their family’s lives that not even conveyed to their family. This took an extraordinary amount of courage on their part and I am grateful they trusted the research process and me with their story. The pieces of their stories I have presented in this dissertation, while remaining true to the essential meaning, can never capture the nuance and fullness of a story in its entirety. However, I am confident I have gotten as close as I can in balancing the brevity of their stories with the research objectives.

The stories I have captured herein were about the people next door, friends, and family often making complex and difficult decisions with their land that would permanently affect their lives and the lives of those around them. My goal for this study was to show the common experiences PFLs shared in their land planning process. As well, I have tried to point out the diversity and the uniqueness of their experiences. Understanding their thought processes, their struggles, and their successes as they crafted and carried-out plans for their land will hopefully contribute to better supporting the land and the people who draw sustenance from it.

Pennsylvania was second in the nation in daily loss of land to development (Brookings 2003). The migration of people into rural areas led to forest parcelization. Population growth, the desire to live in or near forests, and the lack of estate planning contributed as well. However, people need a place to live and land is finite. Learning to live intelligently on what is available is
our challenge. Understanding the behaviors, motivations, and thought processes of the people who own and make-decisions with their forest resource is one way to move closer to meeting the challenge.

I would like to use this last chapter to share further thoughts inspired by the research concerning the process PFLs engaged when planning for the future of their forest. Many of these thoughts, though inspired by the research, remain subjective and speculative. Nonetheless, I hope they encourage further conjecture and inquiry. I would also like to discuss the role natural resource professionals (NRPs) can play to encourage PFLs to consider other alternatives. Following each of the summary points are bulleted action items meant to encourage the application of this research.

**Shifting Relationships with Land**

Members of the no action group expressed strong feelings of connection to their land during the phenomenological interviews. Their connection was rooted in family history and significant experiences on the land. For some, the connection bordered on spiritual, for others the connection was about being on the land as often as possible, walking the land, and checking on things. This group also expressed a high level of appreciation for nature. Conversely, for those who subdivided and sold, the relationship was based on an enabling quality. The familial connection was not expressed, nor was the appreciation for nature or the desire to be on the land as much as possible.

I fully appreciate that while I assigned PFLs to groups in this study, the individual PFL-land relationship can potentially change as life circumstances change. For example, an individual who inherited land from his or her parents and lived on the land without conserving it or subdividing and selling it, would be assigned to the no action group, in accordance with the study
framework. However, when the same individual potentially subdivides and sells land, for whatever reason, their group designation changes. Does their relationship to the land change as well?

Based on the phenomenological interviews, there were differences in how people in the no action and subdivision groups related to their land. Did making the decision to subdivide and sell land affect their relationship with the land itself? Conversely, PFLs who maintained more of an enabling relationship with their land and were less connected or active on their land to begin with, would likely have a greater predilection to subdivide and sell. It was not in the purview of this study to determine if there were differences in PFL-land relationships among groups. However, the dramatic difference described in this study between the no action and subdivide groups emerged as something to explore in future PFL and land planning research.

While it was interesting to speculate on the reasons for this change and what it may mean for future land planning efforts, engaging PFLs from the no action group with planning options should take precedence. If it was true, as the data illustrated, they were deeply connected and attached to their land, extending the possibility they could maintain their connection with their land without parcelizing was critical. Preserving the land by selling or donating an easement was a sure way to do this, but it need not be the only way.

- **Develop future forest land planning curriculum:** The Department of Conservation and Natural Resources, Penn State Extension, land conservancies, woodland owner groups, and Penn State School of Forest Resources should develop a consistent and pervasive pro-land planning message (or curriculum) for PFLs, particularly those who have not yet committed to any action. Ideally, the curriculum would detail plausible options and courses of action for different types of PFLs. PFL type would be based on several factors including: individual’s goals and objectives for the land; amount of forestland owned; number of heirs; retirement plans; and income level.

- **Re-examine how Natural Resource Professionals (NRPs) interact with PFLs:** NRPs, particularly service foresters and extension educators can play a larger role in helping PFLs in this group connect with land planning strategies early in their tenure. We need a way to engage PFLs about land planning on their terms. To do this, I think it is necessary to re-examine NRPs current rules of engagement with PFLs. Past research (Parker 1992; Muth et al. 2002; Geiger and
Voege 2003) has indicated the relationship between NRPs and PFLs lacked a shared understanding of objectives. Unfortunately, forestry NRPs have an outsider-expert orientation, which promotes one-way information transfer between NRP and PFL, and limits the opportunities available for solving resource issues (Muth unpublished).

Engage PFLs in learning about forest planning and succession: Service Foresters in particular have the potential to engage PFLs and begin a conversation with them about forest and succession planning. Currently, this is not a significant part of their job description. Following is the job description and a list of services provided by Service Foresters posted on the Bureau of Forestry website: “A Bureau Service Forester is assigned to each county to advise residents on forest management.” Services provided by Bureau of Forestry Service Foresters:

- Forest management technical assistance
- Cost-share assistance
- Forest stewardship plans
- Regional planning advice
- Forestry and water Best Management Practices advice
- Information and education programs
- Urban and community forestry management
- Tree planting
- Riparian forest buffer restoration

Service Foresters have a wide range of responsibilities, all of them important. Much of the assistance they offer is technically oriented. Anecdotally, Service Foresters have too many responsibilities and not enough time to accomplish them. It is in the interest of our state environmental agencies (e.g., DCNR/BOF), as well as, Penn State’s School of Forest Resources, Penn State Extension, and PFLs across the Commonwealth to redefine the Service Forester’s position and job description to be more socially oriented and to consider land planning and succession a major job responsibility. Despite the limited scope of this study, the stories I heard concerning lack of communication among families, indecision, and lack of commitment about land planning, among other issues; point toward a PFL population in need of land planning assistance throughout the Commonwealth. Service Foresters are the educational arm of the state government’s conservation and natural resources programs. We need to continue to educate PFLs about the technical aspects of their land, forest and water management, and forest stewardship. We also need to expand our capacity to engage PFLs concerning their thoughts and plans for the future of their forestland. For Service Foresters this involves establishing a collaborative relationship with PFLs, listening to their stories about their land, establishing mutually beneficial goals and objectives, and beginning an open conversation about planning options that will work for them.
No Action: The Struggle with Uncertainty

Strong attachment to the land and a heightened desire to leave land to heirs, versus the potential to profit from land, particularly in high growth areas, defines the land-planning struggle for PFLs in the no action group. This group also expressed uncertainty concerning whether heirs will want the responsibility of caring for the land. Many spoke of being watchful, hoping for a sign from potential heirs that they are willing to accept responsibility of caring for the land and, importantly, in a manner consistent with how the parents cared for the land. Not knowing how to plan emerged as a common factor among those in the no action group. Their propensity toward dividing land evenly among multiple heirs or putting multiple heirs on a single deed demonstrated their lack of engagement in planning.

They also indicated a feeling of uncertainty toward their financial solvency in the future. As a result, some perceived their land as money in the bank. Financial incentives (e.g., tax breaks) to conserve land were attractive to some in this group, but the amounts never seemed sufficient. As Joseph (a PFL in Perry County) aptly put it, “I would need a life-changing amount to put my land in easement…not just so I can buy new car….”

- **Encourage facilitative role among NRPs:** This struggle emphasizes the role NRPs can play to inform and educate PFLs in the no action group concerning their land planning and succession options. As evidenced by several of my interviewing experiences, the simple act of sitting down with a PFL and discussing their thoughts about planning and potential actions was helpful for them.

Subdivide and Sell: No Alternatives versus No Perceived Alternatives

Many in the subdivide and sell group expressed having to or being forced to subdivide and sell land – there was no alternative. In several cases, there was no alternative. My perception is, facing substantial tax burden and helping ailing parents constitutes no alternative. What about the desire to give land to heirs? Wanting to live in a neighborhood? Wanting to lessen commuting
time? Wanting to farm more land? Wanting to make money? Do these wishes constitute no alternative? The answers really depend on the context. Regardless, PFL perceptions of having no alternative to subdividing and selling land vary dramatically.

Does subdividing and selling land, when other known options or alternatives may have been available, elicit feelings of shame, guilt, or embarrassment among PFLs? If so, might these feelings prompt PFLs to conclude they had no other alternative but to subdivide and sell? Further, might these feelings promote silence among PFLs who have subdivided and sold land? Difficulty in scheduling interviews with PFLs who subdivided and sold land, particularly in York County, suggested this group exhibited a tendency to avoid discussing their decisions. This contrasted with PFLs in the easement group, who delighted in the opportunity to speak to me about their decisions.

It is conceivable this is due to the negative stigma associated with subdividing and selling land, particularly in areas where more efforts have been invested, on a township and county level, to formally protect land. In York County much of the preservation effort has focused on protecting agricultural land (e.g., agricultural preservation programs). Other tools, such as Transferrable Development Rights (TDRs), the Official Map, and the formation of EACs, were identified by key informants as tools often used in York County to forestall development. In addition, York County had experienced a series of intense growth waves over the past 40 years, unlike Centre and Perry counties. This may also have contributed to individuals who have subdivided and sold land and associated feelings of guilt or embarrassment – for whatever reason, clearly, they did not want to talk about their actions.

- **Develop planning options for PFLs:** PFL awareness and understanding of the options available to them concerning land planning and succession is key.
Selling and Donating Easements: Marketing Conservation

PFLs in the easement group expressed a strong desire to control current activities on their land and in the future. The easement was a way for them to define and exercise this control. Evidence from this study (e.g., interviews with conservancy directors and planners, as well as phenomenological interviews with PFLs) and the Penn State PFL study (Longmire et al. pending), illustrated there was much confusion about what an easement was and how it worked. That easements would result in a loss of control over land was an often-mentioned misconception according to the PFL survey. With certain easements, this can be the case (e.g., Fish and Boat Commission easements allow anglers access to privately held lands with easements).

- **Re-define what an easement means – more control:** Marketing easements as a way to enhance control of one’s land currently and in perpetuity may attract more PFLs.

Evidence from this study suggests PFLs who have sold or donated an easement on their land were inspired to engage others, particularly neighbors, to consider conserving their land as well. These PFLs recognized the value in conserving larger blocks of contiguous forests and were willing to advocate this point of view to others.

- **Engage PFLs as advocates for easements:** Use the Pennsylvania Forest Stewards (PAFS) education and outreach objectives as a model to promote forest conservation among PFLs.

Educational flyers, workshops, and state run programs about forest conservation have limited reach and appeal. Peer-to-peer learning has the potential to reach PFLs who do not engage in educational programs and is likely more convincing (Goff and Muth 2006). Evidence from these interviews suggests PFLs who have sold or donated an easement were more likely than others to engage their neighbors about land planning. If easements were more attractive, this peer-to-peer engagement could result in blocks of contiguous land preserved. From an ecological
standpoint this would be more beneficial, versus smaller, discontinuous blocks (Soule 1991; Pulasky et al. 2005).

**Family Communication**

Stories shared by PFLs often involved family relationships and family connections to the land. Since decisions concerning land succession and planning are often made within the family structure, maintaining open communication among family members was important. This research highlighted relationships that were both conducive and not, to the planning process. Garth, an interviewee in Perry County, was planning to put multiple heirs (5) on a single deed. His admitted lack of communication with his heirs and his desire to give each of them equitable portions of land resulted in this decision. Giving land to multiple heirs can result in infighting and other problems. Further, it can lead to a decline in ecosystem health, as the needs, desires, and planning decisions among multiple owners can be diverse and result in different outcomes. Dividing land among multiple heirs, as well as, giving ownership rights to multiple heirs, has the potential to damage the environment.

Crazney (a PFL participant in Centre County) communicated his wishes to his four heirs. His son will receive his land in its entirety, while the other three will be compensated with royalties from the gas company. According to Crazney, his decision has produced a corrosive family environment. Currently, there is a lack of communication among heirs and parent. To Crazney, this decision was fair to his son. The decision was also fair to the land. It is unfortunate that Crazney’s family is in turmoil. There are other factors that potentially play a role in the communication process: How it is done; When it is done; and the Potential for additional compensation for heirs not receiving land.
Develop strategies to aid PFLs in engaging their families in open conversation about the planning process: Family relationships and communication are critical factors in the decision-making process. We need to explore what PFLs need to help them communicate with family about land planning and decision-making. Currently, there are a limited number of NRPs who have the capacity (ability and institutional support) to aid PFLs with family communication strategies. Oregon State’s Ties to the Land is a curriculum intended for PFLs and their families to help transition family forestland from one generation to the next (http://www.tiestotheland.org/). Ties to the Land would provide a framework for Pennsylvania as we try to better understand landowners in the state and their needs.

**Personal Experiences with Future Forest Planning**

A colleague conducted my bracketing interview on October 10, 2008. The personal views and reflections elicited during the interview provided a framework, which helped guide the investigation. Two useful items emerged from the bracketing interview: 1) My own land planning and decision-making experiences; and 2) Exposure of what I expected to hear from participants in my own study. Concerning the first item, my parents are currently considering selling the forestland where I grew up and moving to a different state. In light of this, I am experiencing the phenomenon I have asked others to tell me about. Using this study’s framework, my family would be members of the no action group. My experience as a potential heir and also witnessing my parents’ planning and decision-making process has helped me interpret others’ experiences. Concerning what I expect to hear during interviews with PFLs, the bracketing interview helped me become aware of what I thought I might here from PFLs in the field about their land planning decisions. Below is a collection of thoughts from that portion of my bracketing interview:

- Subdividers and sellers: Had to do it. Did it for the money. To pay for retirement. (Note: while preparing to conduct this research and talking to colleagues, friends, and family about the research, the universal sentiment concerning why/how PFLs decide to subdivide and sell always came down to money. This always disheartened me, because I was afraid people were right. This made me feel sometimes the investigation was meaningless because we already knew the answer.) I was also afraid of the flippant answer (e.g., “well, money of course”). I wanted PFLs to really engage me with a deeper answer. I wanted to hear about
their process: How did they arrive at the conclusion to subdivide and sell? What land planning tools did they know about and not? How long had they been considering?

- Conservers: I expect to hear they had always been considering land conservation. It was always the plan and it worked out. Worked out meaning – the kids were not interested in the land for example. The parents, as sole decision makers, were able to make it happen. They had the financial resources to do it. They have been connected to the land for a long time, perhaps generations. They had the ability to access the kinds of information they needed to make the decision.

- Middle group: I fear this group because I am not sure they will understand the question. I am afraid they will not see themselves as being involved in a decision-making process yet. I expect to hear: they have not thought about what they will do with the land; their spouse had a plan, but she/he is dead; they are completely unsure about what to do; they have a lot of children and are not sure how to talk about the land and make a plan; it is an emotional issue and therefore avoided. This parallels my own experience in that there is a tendency to avoid planning for the future of the land because it makes the loss seem more real.

Other Contributing Factors to Forest Planning and Decision-Making

The exercise of making my implicit framework explicit enabled me to better understand my particular biases and assumptions regarding planning for the future of forests. In addition, revealing my own internal framework helped guide the overall understanding of the process of how PFLs make decisions concerning the future of their forestland. We gather from the extant literature that the parcelization process is driven by several core factors: death, income, urbanization, taxes, regulatory uncertainty, and availability of cost share programs for PFLs. However, this only provides a partial model, one that potentially lacks the ability to tell the whole story. We also need to consider the following factors in addition to those provided in the literature:

- nature of relationship with heirs
- heirs involvement in planning
- level of engagement with land
- quality of the connection with the land and/or home
- knowledge of other available planning options
- ability to access planning information
- how participant thinks about planning
- quality of communication among decision-makers.
Reflections on the Research Process

The phenomenological method allowed me the freedom to simply listen. I have considered what this process would have been like had I not interviewed PFLs individually and used the phenomenological approach. If, for instance, I had collected qualitative data using focus groups or facilitated group discussions in each of the study communities, I am certain I would not have been afforded access to the personal stories my participants shared. Approaching PFLs individually, in their own home or place of business, and without an overt agenda, I was able to gain access to their private and emotional lives. Sharing a cup of coffee and talking about family and land helped to create a safe place that allowed for open conversation and honest reflection. Achieving a similar level of openness among a group of people would have been more difficult if not impossible. It is human nature to protect ourselves by withholding personal or sensitive information, particularly among groups of strangers. On occasion, PFLs were not prepared for such an open-ended interview. In these cases, they would give a short answer to my initial questions and wait to be prompted again. Typically, this would last a few minutes, and slowly they would begin to incorporate more details in their responses and eventually a story did emerge.

It is my opinion that it would have been a mistake to initiate the survey without the benefit of hearing, first-hand, individual stories about their planning and decision-making processes. Without their input, the survey would have been based on what we, as researchers, thought was important to ask and collect information about. Fundamentally, this research is about PFLs and for them. By shaking their hands, sharing their food and drink, touring their properties, and listening to their stories, we have taken significant steps toward making sure their voices have been heard and the solutions we develop will be based on an inclusive and collaborative process.

I also found strength in the phenomenological analysis group. Having trained colleagues read the interview transcripts and offer their own insights and reflections on the material were
extremely helpful and strengthened the theme development process. That said there were elements of the analysis I felt were particularly frustrating. For example, reflections that emerged from the phenomenological interviews, but were mentioned by less than half of the participants, were not necessarily included in themes (typically, themes are created from data that is consistent across at least 50% of the interviews). On occasion, I would hear several “clusters” of similar information from 25 to 30 percent of participants, which would prompt me to broaden the thematic perspective so as to be more inclusive. In this fashion, there was a tendency to lose those “clusters” of details. At times, the details would be incorporated in the semi-structured interviews where appropriate. On other occasions, several “clusters” of data surrounding a single issue (e.g., the no alternative theme in the subdivide and sell group) would help define a thematic spectrum concerned with no alternatives and the varied meanings that constitute the theme.

Phenomenological interviews prompted two things among interviewees that have been particularly helpful in considering the research implications germane to this study. After finishing the interviews and while making my exit, people would thank me for spending time with them discussing land planning and decision-making. PFLs in the no action group in particular were thankful for the opportunity to express some of the ideas they had been entertaining in terms of forest planning and succession. On a few occasions they had not previously engaged the planning process and were thankful for the “nudge.” Further, several PFLs were anxious to hear about what others were doing in terms of forest planning and succession. They wanted to know their options. They wanted more information on how others were approaching the issue. I think this gives a clear indication that a land planning and decision-making curriculum that makes use of case study material and real-world examples would be extremely helpful to PFLs.
Study Limitations

This study had a couple of limitations. First, the study population was small. Despite the qualitative and exploratory nature of this study, the limited number of interviews conducted with PFLs, particularly those who subdivided and sold forestland, resulted in themes that were broad and less specific than what I had envisioned. One of the challenges of this research was engaging PFLs, particularly from the subdivide and sell group. I would encourage future researchers interested in understanding decision motivations and thought processes among individuals who have subdivided and sold land, to engage groups of PFLs initially. Inviting PFLs to an information session about the research or about land planning in their community might help generate interest on an individual level. I would encourage this with undecided or non-committed PFLs as well.

Second, using only three counties to collect data limited the number and kinds of experiences possible. Extending interviews into other urban, rural, and quasi-rural counties, such as Berks, McKean, and Butler respectively, would have served to broaden findings and aid in theme development. Further, extending the study to additional areas of the state would have increased the potential for generalizing the results. How do people plan and make land-planning decisions in the absence of growth and development pressures? I saw some of this in Perry County, particularly the western end, which is much slower growing than the eastern and southern portions. However, the steady influx of Amish and Mennonite populations, as well as news of the large developments near Marysville served to increase awareness of change among Perry County residents.

Although, I think what I have presented here is adequate to inform survey development and engage a broader group of PFLs in the Commonwealth, further discussion with PFLs about the findings would be beneficial. Facilitated group discussions or focus groups among PFLs in
each of the three study counties would be a way to share findings with communities and gain additional insight and perspective. In addition, this extra step would serve to triangulate findings.
Literature Cited


Argow, K.A. 1996. This is their land: The potential and diversity of nonindustrial private forests. Journal of Forestry. 94(2):30-33.


Davis, M.L.E.S. 2008. Facilitating private forestland management: Relating landowners’ experience of their forestland and their conceptualization of forest management to their management behavior. PhD Dissertation. The University of Tennessee: Knoxville TN.


Appendix A

Key Informant Interview Instrument

Key Informant Interview Questions: Forest Parcelization and the Future of Penn’s Woods
Project Investigator: Joshua Gruver, The Pennsylvania State University

Name:
Interview #:
Job Title:
County:
Community:
Date:
Time:
Place:

1) How would you describe the quality of the natural environment in this county (i.e., water, trees, open space, recreation areas)?
   - How do you think others in the county/community would describe the quality of the natural environment?

2) How would you describe the quality and quantity of the forests specifically in this county?
   - Is your county currently losing/gaining forestland in the county? What do you attribute this to?
   - How would others in the county/community describe the quality and quantity of the forests?

3) Over the past 10 years, have people from other areas (of the state and/or nationally) been moving into your county? Why?
   - What effect has this movement had on your community/county?
   - How would others in the community describe these effects in the past 10 years?
   - Has this migration of people impacted the surrounding forestland in the community? How?

4) Where in your community/county is development occurring?

5) To what extent, if any, does your community feel a sense of worry, concern, or anxiety about the amount of development happening in the county?
   - What are people worried about?
   - How would you describe this level of worry in the community (high, medium, low)?
   - Has this level of concern changed over time?

6) How is development affecting communities in the county?
   - What types of impacts (positive/negative) are you seeing in communities?
7) To what extent, if any, does your community feel a sense of worry, concern, or anxiety about the amount of forest change?
   - What are people worried about?
   - How would you describe this level of worry in the community (high, medium, low)?
   - Has this level of concern changed over time?

8) How is forest development (forest loss) affecting communities in the county?
   - What types of impacts (positive/negative) are you seeing in communities?

9) Can you give specific examples of forestland in this county that has recently been subdivided and sold?

10) Are there initiatives that you know about (within the county or from outside the county) where work is being done to educate landowners about options for their forestland other than subdividing and selling (i.e., conservancies, NGOs, conservation districts) etc?

11) Are there other major forest, or development related issues occurring we haven’t discussed?

12) Based on the issues we’ve just discussed, are there other people in the county you believe I should talk with?
    Name: ___________________
    Phone: ________________
Appendix B

Semi-structured Interview Instrument

Semi-structured interview questions: Forest Parcelization and the Future of Penn’s Woods
Project Investigator: Joshua Gruver, The Pennsylvania State University

Name:
Interview #:
County:
Community:
Date:
Time:
Place:

1) Referring to the land you sold or gifted; how did you acquire the land?
   - Inherited it?
     - How long has it been in your family?
     - Had the previous owner(s) owned it long?
     - Do you know if they had a vision for the forest’s use when they passed it to you (or gifted it)?
   - Purchased it?
     - Why did you purchase the land?
     - Had the previous owner owned it long?
     - Do you know if they had a vision for the forests use when they sold it to you?

2) How did you use this land?
   - How did others (family, friends) use the land?
     - hunting, other recreation, vacation, place to get away, lived there…
   - If you still own land, how do you (and others) use it?
   - How were you attached/what was the connection?

3) What has become of the land you sold or gifted?
   - Did you know what was going to happen to the land or were you surprised?

4) How many acres have you sold or gifted in the past five years?
   - How many acres total have you sold or gifted?
   - How many parcels?

5) Did you consider other options for your forestland? (Options: holding on to it; selling or donating a conservation easement; gifting it away to family, friend, or organization)

6) How many acres total do you currently own? (If none, skip to question 10)
   - How many different parcels?
   - All in PA?
   - How much is forested?
   - Do you plan to give land to any heirs? How many? How will you divide it?
   - Will you impose any restrictions on their use of the land?
   - If not, are there things you would like to see them do with the land, but you don’t want to control?
- Will you sell it or gift it? When? Why?

Additional: collect socio-demographics using small form survey they fill out on the spot.
Appendix C

Sociodemographic Questionnaire

Forest Parcelization and the Future of Penn’s Woods
Project Investigator: Joshua Gruver, The Pennsylvania State University

Name: ___________________________ Date: ________________
Interview #: ___________________________ Time: ________________
County: ___________________________ Place: ________________
Community: ___________________________

1) What is your gender?   ___ Male    ___ Female

2) In what year were you born?   ___________ year you were born

3) What is your current employment status?

Please check one:

   a. ___ Full time
   b. ___ Part time
   c. ___ Retired
   d. ___ Student
   e. ___ Homemaker
   f. ___ Non-employed (looking for work/laid off)

4) What was the highest grade of school you completed?

Please check one:

   a. ___ None
   b. ___ Grade school
   c. ___ Some high school
   d. ___ Completed high school
   e. ___ Some college/technical school/beyond high school
   f. ___ Completed college
   g. ___ Graduate/professional school

5) How would you describe yourself politically?

Please circle one:

Liberal   Moderate   Liberal   Moderate   Moderate   Conservative   Conservative

6) How many children do you have?   ___________ number of children

Where do they live? ___________________________________________________________

7) Currently how many people, including yourself, live in your household? __________

8) How long have you lived in your present community? __________ number of years

9) What was the total income in your household (before taxes) last year?
   a. ___ Less than $15,000
b. ___$15,000 to $24,999


c. ___$25,000 to $34,999

d. ___$35,000 to $49,999

e. ___$50,000 to $74,999

f. ___$75,000 to $99,999

g. ___$100,000 to $149,999

h. ___$150,000 or more
Appendix D

Subdivide and Sell Contact Letter

Dear Forest Landowner,

I would like your help in a research project at Penn State about forestland ownership in Pennsylvania. Specifically, I need your help to better understand the decision making process forest landowners go through when deciding to sell or gift-away forestland. If you agree to participate, we would find a time convenient for you to meet and talk about your experience.

I identified you as a potential participant in this study by reviewing public records at “X” county courthouse. Those records indicated you might have subdivided and sold or gifted-away forestland during the past five years. As a forest landowner who has experienced selling and/or gifting forestland, your insights concerning the decision making process are invaluable. By agreeing to participate in this study, you will contribute a great deal to forest managers’ better understanding of the pressures, thought and planning processes forest landowners face as they make decisions about the future of their forests.

In a few days, I will call to discuss the study and your willingness to participate. Insights gathered from people like you will help other forest landowners in making decisions about their forests future.

Any information you give us during the interview will be completely confidential and will only be used in the context of summarizing findings for the entire study. No individual’s information can be identified. After the interview, your name and address will be deleted from the mailing list and never connected to the information you provided. Your participation is completely voluntary and you may end your participation at any time. You may also decline to answer specific questions in the interview which will take about an hour.

For legal purposes, participants must be 18 years of age or older to participate. Please keep this letter for your records or future reference. If you have any questions about this study please contact Mr. Joshua Gruver or Dr. James C. Finley at (814) 863-0401 or via email at jbg166@psu.edu or fj4@psu.edu respectively.

Thank you for your time and consideration.

Sincerely,

Joshua Gruver
Doctoral Candidate
Appendix E

No Action Contact Letter

Dear Forest Landowner,

I would like your help in a research project at Penn State about forestland ownership in Pennsylvania. Specifically, I need your help to better understand the decision making process forest landowners go through when making decisions about the future of their forestland. If you agree to participate, we would find a time convenient for you to meet and talk about your experience.

I identified you as a potential participant in this study by reviewing public records at the Perry County Tax Assessment office and choosing names randomly from a list of forest landowners. The records at the tax assessment office indicated you have not subdivided and/or sold, or gifted-away forestland in recent years. As a forest landowner who has not yet subdivided, sold and/or gifted forestland, your thoughts about planning and making decisions about your forestland are invaluable. By agreeing to participate in this study, you will contribute a great deal to forest managers’ better understanding of the pressures and the thought and planning processes forest landowners face as they make decisions about the future of their forests.

In a few days, I will call to discuss the study and your willingness to participate. Insights gathered from people like you will help other forest landowners in making decisions about their forests future.

Any information you give us during the interview will be completely confidential and will only be used in the context of summarizing findings for the entire study. No individual’s information can be identified. After the interview, your name and address will be deleted from the mailing list and never connected to the information you provided. Your participation is completely voluntary and you may end your participation at any time. You may also decline to answer specific questions in the interview which will take about an hour.

For legal purposes, participants must be 18 years of age or older to participate. Please keep this letter for your records or future reference. If you have any questions about this study please contact Mr. Joshua Gruver or Dr. James C. Finley at (814) 863-0401 or via email at jbg166@psu.edu or fj4@psu.edu respectively.

Thank you for your time and consideration.

Sincerely,

Joshua Gruver
Doctoral Candidate
Appendix F

Conservation Easement Contact Letter

Dear Forest Landowner,

I would like your help in a research project at Penn State about forestland ownership in Pennsylvania. Specifically, I need your help to better understand the decision making processes forest landowners go through when deciding to protect part or all of their forestland using a conservation easement. If you agree to participate, we would find a time convenient for you to meet and talk about your experience.

I identified you as a potential participant in this study by reviewing public records at the Centre County courthouse. Those records indicated you either purchased or donated a conservation easement on your land within the past several years. As a forest landowner who has experienced placing land under an easement, your insights concerning the decision making process are invaluable. By agreeing to participate in this study, you will contribute a great deal to forest managers’ better understanding of the pressures, thought and planning processes forest landowners face as they make decisions about the future of their forests.

In a few days, I will call to discuss the study and your willingness to participate. Insights gathered from people like you will help other forest landowners in making decisions about their forests future.

Any information you give us during the interview will be completely confidential and will only be used in the context of summarizing findings for the entire study. No individual’s information can be identified. After the interview, your name and address will be deleted from the mailing list and never connected to the information you provided. Your participation is completely voluntary and you may end your participation at any time. You may also decline to answer specific questions in the interview which will take about an hour.

For legal purposes, participants must be 18 years of age or older to participate. Please keep this letter for your records or future reference. If you have any questions about this study please contact Mr. Joshua Gruver or Dr. James C. Finley at (814) 863-0401 or via email at jbg166@psu.edu or fj4@psu.edu respectively.

Thank you for your time and consideration.

Sincerely,

Joshua Gruver
Doctoral Candidate
Appendix G

Phone Script

Phone-Call Script: Forest Parcelization and the Future of Penn’s Woods
Project Investigator: Joshua Gruver, The Pennsylvania State University

Good morning/afternoon/evening Mr./Ms. __________. My name is Joshua Gruver from Penn States’ School of Forest Resources. How are you today?

We are conducting a research project to learn more about forestland owners in Pennsylvania and the decision making processes they go through when planning for the future of their forestland. I recently sent you a letter explaining the study and asking for your participation. Do you remember receiving this letter?

If yes – continue to next section.
If no – confirm address. Provide a brief description of what the letter said and ask them if they fit into the category of PFL we are looking for (subdivided and sold and/or gifted). Continue to next section.

Great. Do you have any questions about the letter? Can I be of any assistance in making things clearer?

(Let them ask questions. Provide brief overview of the project and how their participation will really help. Let them know the interview is really more like a conversation. They don’t need to know anything about forestry. The conversation is more about their experience selling and/or gifting forestland. Remind them that any information they provide is strictly confidential.)

Would you be willing to participate in this study?
If yes – continue to next section
If no – thank them for their time and let them know if they change their mind to please call (814) 863-3591. (Contact information is also on the letter they were sent - provided they got a letter).

That is wonderful! Thank you very much for your willingness to participate. The next step is to set a time and a place to meet and conduct the interview. I will be in your area on the following days (give 3- day span). Which day and time works best for you? Where is it most convenient to meet?

Directions:

Thank you very much.
Confirm time and place.
Appendix H

Consent Form

Title of Project: Forest Parcelization and the Future of Penn’s Woods
Responsible Project Investigators at The Pennsylvania State University:

Joshua Gruver, Ph.D. Candidate          James C. Finley, Ph.D. Professor
School of Forest Resources          School of Forest Resources
320 Forest Resources Building          320 Forest Resources Building
University Park, 16801 PA (814)863-3591 University Park, 16801 PA (814)863-0401
jbg166@psu.edu          fj4@psu.edu

Purpose of the Study: To develop a better understanding of development patterns and forest loss associated with parcelization in Centre, Perry, and York counties; and to understand how forest landowners in these counties experience forestland divestment.

Procedures: Each participant will be asked a series of open-ended questions. If she/he agrees, these interviews will be audio-taped. The tape will be stopped at any point during the interview if the respondent desires. Results of this study (with no personal identifiers) will be disseminated in reports and academic publications. Interviews will take approximately 30-90 minutes to complete. Only Joshua Gruver and James Finley will have access to these recordings. The recordings will be destroyed in three years (2011).

Statement of Confidentiality: You may be assured of complete confidentiality. Your name will only be associated with your answers on the original tapes and notes that are only accessible by the investigators. If the information you provide is reprinted or published, no information will be used that would identify you.

Data Security: All collected data, including notes, audio tapes, and transcribed documents will be kept in a locked file cabinet in Joshua Gruver’s office located in 234 Forest Resources Building at The Pennsylvania State University or the investigator’s password protected computer.

Right to Ask Questions: You can ask questions at any time about the research. Please contact Joshua Gruver at (814) 863-3591 with any inquiries or concerns. A copy of this consent document will be given to you.

Voluntary Participation: Your participation in this research is strictly voluntary. You can end your participation at any time or choose not to answer particular questions. You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this study and to the terms above, please sign your name below:
<table>
<thead>
<tr>
<th>Permission to be Audio Taped</th>
<th>Permission for Portions of Interview to be Quoted</th>
</tr>
</thead>
<tbody>
<tr>
<td>I give my permission</td>
<td>I do give my permission for portions</td>
</tr>
<tr>
<td>I do not give my permission</td>
<td>of this interview to be directly quoted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participant Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Gruver</td>
<td></td>
</tr>
</tbody>
</table>

The following signature confirms that the informed consent procedure has been followed:

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Gruver</td>
<td></td>
</tr>
</tbody>
</table>
Vita
Joshua B. Gruver

Education

Doctorate of Philosophy (2010)
The Pennsylvania State University, University Park, PA
Forest Resources and Human Dimensions of Natural Resources and Environment

Master of Science (2005)
The Pennsylvania State University, University Park, PA
School of Forest Resources and Watershed Stewardship Option

Baccalaureate of Science (1994)
Virginia Polytechnic Institute, Blacksburg, VA
Biochemistry (Chemistry minor)

Research Experience

- Future of Pennsylvania’s Forests
  *PA Department of Conservation and Natural Resources Bureau of Forestry*

- CSREES/CEAP Water Quality Study
  *North Carolina State University, Raleigh-Durham, NC*

- Spruce Bark Beetle Alaska Study
  *The University of Illinois, Urban-Champaign, IL*

- Private Forest Landowner Study
  *PA Department of Conservation and Natural Resources Bureau of Forestry*

- Pennsylvania Highlands Conservation Assessment
  *U.S. Forest Service*

- Spruce Creek Watershed Assessment and Stewardship Plan
  *Center for Watershed Stewardship, PSU*

Peer Reviewed Journal Articles


- Luloff. A.E., J.C. Finley, W. Myers, D. Mataritta-Cascante, C. Harbison, A. Metcalf, J. Gordon and **J.B. Gruver**. Comparing the Public’s and Scientists’ Perspectives on Conservation Values (*in review*). *Society and Natural Resources*