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Managing Summer Camps: A Study of Culture and Practices at Environmentally Conscious Camps

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MANAGING SUMMER CAMPS: A STUDY OF CULTURE AND PRACTICES AT ENVIRONMENTALLY CONSCIOUS CAMPS

by

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ABSTRACT

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by

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Managing natural systems for sustainability is an important and complex endeavor. In the United States, sixty-one percent of land is privately managed. Because so much of the country's ecosystems exist on private land, it is crucial that we better understand sustainable management of private land to continue the development of best management strategies. There are over 14,000 summer camps in America that account for a significant portion of the privately managed land. Many summer camps already have cultures that value natural systems and pushed the organizations to improve their land management practices. However, there is a lack of guidance developed for best land management within a summer camp context. The study presented in this paper demonstrates current land management practices within summer camps who claim a value of earth care as part of their culture and explores the process these camps went through to implement sustainable practices that align with intended land use. The

discovery of best practices at both administrative and land management levels that led to increased sustainability could be replicated by other camps. Organizational change theory is utilized to understand how these practices came to be implemented and how they changed the camps to support other camps or private landowners in accomplishing similar change. The study adds practical guidance for the sustainable management of summer camp properties. This guidance for property management can be used to raise awareness within the camping industry around sustainable land management while providing direction for implementation. Helping summer camps improve their land management practices improves sustainability on a significant portion of private land. The study also provides a framework for how similar, best management practices could apply to other types of private lands.

(176 pages)

PUBLIC ABSTRACT

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Supporting private landowners as they manage their land is essential to sustainability because sixty-one percent of land in the United States is privately owned and managed; therefore, it is crucial that we better understand the management practices implemented by private landowners and continue to development best management strategies. A significant portion of these land holders are summer camps. There are over 14,000 summer camps in America. Many summer camps already have cultures where they value their land and the ecosystems on their property; many have also sought to improve their land management practices as well. However, there is a lack of guidance developed for best land management within a summer camp context.

To help meet this need for increased guidance, I propose a study demonstrating practices currently used within summer camps where a value of the natural world is an important part of their culture. This study will also consider the process camps have gone through to implement these practices. Discovering best practices at both administrative and land management levels of camp operations led to an increase in organizational sustainability which could be implemented by other camps. Organizational change theory

was utilized to understand how these practices were applied by the camps and how they led to change so others can accomplish similar change.

This study adds practical guidance on the management of summer camp properties. This guidance for property management can be used to raise awareness within the camping industry around the need for land management and provide direction to implement more effective management practices. Helping summer camps improve their land management practices supports the ongoing efforts of improving private land management across the country. This study also supports efforts for developing similar management practices and support strategies for other types of private land.

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Chapter 1:

Introduction

The management of privately held land is a vital component of caring for the environment across the globe (Moon & Cocklin, 2011). Over sixty percent of the United States' land is privately managed, and, as of 2002, 422 million acres of the forested land in the United States are managed by private landowners (Lubowski et al., 2006). These individuals have a unique potential to improve the health of the natural world. The land owned and managed by these private landholders has important roles in the wider, interconnected natural systems (Raquez & Lambin, 2006). Policies and programs should be enacted to empower landowners to manage their land with sustainability in mind (Kilgore et al., 2007), and educational resources should be developed to demonstrate that it is in their best interest (Cocklin et al., 2007b). To understand these environmental impacts and the strategies to improve them, I conducted a study of landowners who implemented practices to examine their decision-making process and the influences that allowed them to take meaningful steps towards managing their land in environmentally sustainable ways.

Summer camps are an interesting case study of private landowners because they are organizations that often both own and operate their own land (Stryker, 2017). There are more than 14,000 camps in the United States (*Start A Summer Camp*, 2017; *Who We*

Are, 2021). Many of these camps already recognize the role they play in supporting environmental education and improving the environmental behavior of their campers (Collado et al., 2013). Summer camps are typically sponsored or operated by churches or other non-profit organizations but some are also managed by independent administrators. (Henderson, Whitaker, et al., 2007). Many children experience their first lessons of living in a community at summer camps, and the lessons and memories typically remain with the campers into adulthood (Schwartz, 1960; Paris, 2008). The purposes of summer camps vary from program to program, but most are educational and are designed to help children learn community building skills. Recently there has been an expansion of the types of programs offered within the summer camp context (Schwartz, 1960; Michalski et al., 2003). However, the relationship between their environmental awareness and the ways in which they manage their property has not been studied. Through this study, I investigate the relationship between environmental awareness and property management. I look carefully at the management processes and the organizational culture that contributes to how land-use decisions are made at summer camps. This examination of management's decision-making processes lays the foundation for future exploration of how other summer camps, and other private landholders can be encouraged and supported to actively participate in the efforts of sustainability.

1.1 FRAMEWORK

Grounded Theory and case study methodology act as the guide for thinking about how the study was conducted and how to analyze the gathered data (Dabrowski & Breunig, 2019; Savin-Baden & Howell-Major, 2013). The different aspects of a camp's culture and operations can each impact the decision-making process. Thus, through the research I seek to understand these aspects. To understand the decision-making process, I used a research method that would allow for a broad understanding of the culture and other elements that drive decisions at the camps. I also ensured the participating camps would be comparable despite inevitable contextual differences.

My research is grounded in two frameworks. The first is Kurt Lewin's Organizational Change Theory which explains the process by which organizations successfully implement change by identifying the patterns that lead to success (Hussain et al., 2018; Lewin, 1947). Other studies that are also built on Lewin's theory additionally, support the findings of how camps are implementing sustainable land management changes (Boje et al., 2011). The other framework I use is Best Management Practices. To support these two frameworks I rely on research that has proven the effectiveness of certain land management practices to evaluate the land management decisions of the camps in my study (*Best Management Practices for Pennsylvania Forests*, 2017). I also rely on research that has explored how opinions on the importance and action of sustainability impact the ways sustainability is achieved to help understand the opinions and perspectives of the camps and how they impact their decision-making process (Ruckelshaus, 2014a).

Given the study will be relying on qualitative data, a system to get beyond the act of estimation and to avoid the influence of preconceptions has to be used to ensure this study is beneficial to both practice and future research (Glaser, 1998). To ensure beneficial results, I use Grounded Theory as it is an "inductive methodology" that systematically generates theory from systematic research (*What Is Grounded Theory?*, 2014). A previous study, "'Unfreezing' Year-Round Programming", examined management processes leading to shifts in actions at summer camps serves as reference in the process of implementing Grounded Theory (Dabrowski & Breunig, 2019). Along with Grounded Theory, the study will also be conducted using a case study methodology, a process used when wanting to understand a phenomenon within its context to be implemented or achieved within similar or different contexts (Yin, 2017). Using Grounded Theory to develop categories out of the concepts uncovered in the research will allow for other landholders to take away applicable practices that will be effective in their contexts. While the concepts that are identified will be contextually constrained to the specific site and management structure in which they were implemented, by developing categories out of these concepts the replicable principles will be identified (Corbin & Strauss, 1990).

To capture the complexities that are involved in the decision-making processes at summer camps, I chose a semi-formal interview structure as the primary research method. Semi-formal interviews allow for breadth of context to be shared and discussed making it suitable to capturing the uniqueness that is inherent within each summer

camp's culture and management structure (Mills et al., 2009). The interviews were set up with different explicit sections allowing the interviewees to consider the broad contributing factors or the specific details without having to go back and forth between the two. The literature demonstrates the importance of management plans and policies, and these are things that some summer camps will develop as a part of their decision-making process (Muth, 2016b). Both interviews and existing literature are used to support the conclusions of the research.

1.2 PROJECT OBJECTIVE

Through this study I intend to establish patterns in the management decisions of summer camps that have identified care for the environment as a crucial part of their mission and consider what that means for their land management practices. I focus on how the management practices were selected by the camps rather than evaluate their efficiency myself. I look to the existing literature for evidence of their intended effectiveness. To understand the process of choosing practices, I examine both the administrative culture of the camp as well as the current land management practices. I identify recurring themes in both areas of management throughout each camp's process of becoming more environmentally conscious. Many summer camps are organized around an idea or set of principles that guide the mission and all actions of the camp. The core of their mission is what establishes the culture of the camp. For some, their guiding mission comes from affiliation with a faith tradition. Faith traditions in America have

adopted youth summer camp programs as a part of the expression and transmission of their faith (Sorenson, 2016). Many faith traditions also have theological values of earth care (Gottlieb, 2006). These elements of a camp's culture provide opportunities to compare different camps whose cultures and missions are structured the same and share common ideals around how their mission should relate to the environment.

Recognizing the full potential of faith-based summer camps to develop and instill best practices for environmental sustainability is an important step towards facing the pressing environmental concerns resulting from loss of biodiversity and threatened ecosystems. Institutions, such as organized faith traditions and their ministries, such as summer camps, can be powerful tools in changing the way we think and act (Tatay Nieto & Devitt, 2018). The literature demonstrates robust evidence, acting as the context for the study, specifically for the benefit of considering the role faith traditions play in environmental stewardship; therefore, leading us to draw the important connections between the environmental conscience of camp administrators and programs, and the ways they think about and manage their land.

This study focuses on two parts of a camp's decision-making process, both the administrative and practical, for determining the land management practices they implement. There are three questions that guide this research:

1) Are summer camps, that claim a value of earth-care, making management decisions that can lead to intentionally practicing known best management practices for environmental sustainability?

2) Are there examples of camps excelling in specific areas of emphasizing sustainability and implementing best management practices?

3) Are there principles from these managerial changes and best practices that can be replicated by others who manage privately owned land?

Understanding how these organizations use their land, and how their practices could be improved may help spread best practices. These camps provide a compelling case study for understanding the context of the camp's culture and shared values that guide the decision-making process.

This study contributes to the efforts of increasing sustainable land management amongst private landowners. Specifically, this project supports movements towards environmental awareness and action within the camping industry. It begins the development of a list of management decisions and practices that have proven successful at camps committed to environmental sustainability. The camps in the study serve as case studies demonstrating how to effectively implement these practices allowing the possibility to transfer them to other settings in the camping industry and to private land holders in general. This study identifies how aspects like environmental education and cultural values impact these practices and pose further questions. These questions support the work of ensuring private landholders have the tools to implement sustainable management practices. The more research done around these facets of private land management, the more education and policy can better be used to support the efforts of

private landowners. This study is just the first step in a new line of questions that can continue to be explored in future studies.

Chapter 2:

Literature Review

In developing a study that examines sustainable management of privately held land, specifically land held by summer camps, I recognized the need to first establish the importance of the existing relationship between private landholders and sustainable practices. I also had to understand the many factors that influence landholders in their efforts of sustainability. In this chapter I have organized the findings of the literature review into three topics. First, an understanding of "sustainability" and how it specifically relates to my study using a definition grounded in the literature. A robust understanding of sustainability starts with recognizing both how our understandings of sustainability impact our actions, and the relationship between ecosystems and human systems. Second, I focus on land management exploring the benefits of sustainable management and known best management practices. This focus on land management will set up the study which functions as a case study where I seek to understand the process through which private land holders chose to become more sustainable. Finally, I explore the literature on Organizational Change Theory to ground the parts of the study that seek to answer why camps have implemented certain decisions and practices. In Section 2.3, Organizational Change, I focus on the impact organizational culture has on Organizational Change as this is both a key part of my research questions in how camps make decisions and

emphasis sustainability and has been demonstrated to be fundamental in understanding Organizational Change.

2.1 SUSTAINABILITY

The research around environmental planning recognizes the need to involve the participation of local residents in the planning process for achieving sustainability (Al-Kodmany, 2000; Healey, 1997; Selman, 2001). While there have been studies that have taken specific important categories of land owners and sought to understand their relationship with sustainability there hasn't been a study focused on summer camps despite their importance (Atari et al., 2009; Greiner & Gregg, 2011; Moon & Cocklin, 2011; Ameri et al., 2014). The conservation of public lands such as parks or other protected areas is not comprehensive enough to sustain important ecological features such as biodiversity, so the potential for conserving private land is significant on the global scale (Kamal et al., 2015). Many ecosystems exist either mostly or wholly on private land (Moon & Cocklin, 2011). There have been attempts at creating priorities and methods to support environmental and community planners to support landholders in protecting the valuable features of their properties like critical habitats (Theobald & Hobbs, 2002). This study relies on the efforts of past researchers to understand the potential of private land management where landowners can be engaged through relationship so they will take on responsibility for developing policies based on practices they have found to be effective and manageable. The study also contributes to this

important research by focusing on summer camps as both an important category of landowner that has not been considered in the field of environmental planning research and as a case study for how other landholders may implement changes to become more sustainable allowing future decisions to be more applicable to all sorts of unique landholders.

What is Sustainability?

Sustainability, a word with origins as a technical term first used in 18th century German forest management, came into prominence in political discourse starting in the 1980's when the United Nations started using it (Caradonna, 2017; Scoones, 2007). (Scoones, 2007; Spindler, 2013). Researchers argue that the inability to define the term sustainability led to it becoming a cultural buzzword that permeated all parts of the 21st century which has consequently been titled the century of sustainable development (Caradonna, 2017; Spindler, 2013). However, recently the term has begun to receive more robust definitions as a result of the development of tools such as the Triple Bottom Line Accounting or the Ecological Footprint Analysis (Caradonna, 2017).

Most definitions of sustainability share elements, even across different disciplines. Understanding the concepts of sustainability through the framework of the triple bottom line, where problems are viewed in relation to the environment, the economy, and society, is a common approach (Vos, 2007). Environmental planners often affirm a similar definition as well While they may place extra emphasis on the environment, they recognize the importance of economic development without

compromising the future of society (Scoones, 2007). In this study, sustainability is defined as the promotion of natural systems through strategies that change human behaviors while maintaining beneficial human uses. This definition of sustainability is based on the efforts of Julia Moore to develop a comprehensive definition of sustainability, as well as Liana Pater's systematic definition (Moore et al., 2017; Pater & Cristea, 2016; White, 2013). I came to this definition because it balances the benefits of sustainable efforts on both the natural world and the human populations that rely on the land. One of the general understandings of sustainability Moore identified in her study is the preservation or continuation of desired aspects of both ecosystems and human systems. The Triple Bottom Line, one of the tools that has supported the clearer definitions of sustainability, posits that sustainability is the culmination of three performance factors being in balance, economics, society, and environment (Slaper & Hall, 2011). The purposes of preserving ecosystems for the benefit of ecosystems or human systems for the benefit of human systems is apparent, but the ways preserved ecosystems benefit human systems is more difficult to quantify.

Human Oriented Sustainability

The broad understandings of sustainability that have arisen from the complex history has led to various methods of application. Definitions of sustainability that are grounded in the framework of the triple bottom line are inherently human oriented as the economy and society are human structures (Vos, 2007). Environmental sustainability is necessary for humans and has become an area of concern because of the threats

environmental concerns pose to society (Goodland, 1995; Ruckelshaus, 2014b). Mary Ruckelshaus of the National Capital Project argues that if we view nature as something we are a part of and greatly benefit from we will not lose it, while if we continue the old model that we only disrupt it and so must protect it for its own sake we run a greater risk of failing, because we fail to recognize our own needs (Ruckelshaus, 2014).

Given the important benefits of increased land use opportunities and more sustainable long term management that can be gained by better conserving private land private landowners may see the value in enacting more sustainable practices (Kamal et al., 2015). Nalini Nadkarni, an environmental researcher activist, conducts her research while supporting unique expressions of socially marginalized groups. Through her work she has found that ecology has direct overlaps with economics, ethics, history, and health. These are all areas where connections can be made with people who otherwise may not express a direct interest in ecology, because they highlight how ecosystems support human systems (Nadkarni, 2018).When people recognize their livelihood comes from the land, they are more inclined to practice what they see as best practices in land use, but that their social affiliations also play a large role in how they view their relationship to the land (Goodland, 1995; Prell et al., 2010).

The human oriented understanding of sustainability is an essential part of the definition of sustainability because of the recognition that organizations such as camps are going to be balancing with environmental concerns of their property and with the other human aspects of their organization (Ameri et al., 2014). The needs or wants of

people do not always guide action to what is best for the environment, but there is enough overlap that if we were to more readily lean into the solutions that benefit both we would see real long-term improvement.

Private Land Management and Sustainability

As of 2002, in the United States sixty-one percent of the land is privately managed and much of the country's ecosystems exist on private land (Lubowski et al., 2006). In Pennsylvania, as an example, 70 percent of the woodlands is owned and operated by over 730,000 private land holders (D. Jackson et al., 2017). Any comprehensive action to ensure we are sustainably maintaining the ecosystems in the United States will require the support of the owners of these private lands. Understanding the barriers and motivations of the private land holders and the potential benefits they could both provide and receive is important.

While there are laws and regulations that attempt to limit the environmental damage that can be done on private land (Farrier, 1995; Meiners & Parker, 2004), and educational programs attempting to change landowners' perceptions and behaviors to their land (Cocklin et al., 2007b), there is ongoing debate about the effectiveness of regulations (Cocklin et al., 2007b; Kilgore et al., 2007; Knowler, 2015; Moon & Cocklin, 2011). What is clear is that the majority of the responsibility for sustainably managing private land is on private land holders (Moon & Cocklin, 2011). Because of need for sustainably managed private land, researchers and policy makers rely more on voluntary action and incentivized tactics to promote more sustainable land use practices on private

land. The move away from strict regulatory practices on the part of a government is based on research showing that better education can greatly impact landowner management practices beyond the capabilities of regulations (Cocklin et al., 2007a).

Some factors, such as region or profession, can be an indicator of how a person views sustainability and the part they play in those efforts (Lange et al., 2015). To be as supportive as possible, policies and research needs to appreciate the environmental awareness and concern of local land managers. Local landowners can have a better understanding of their natural amenities than anyone else, and supporting them to combine their passion with best practices can be instrumental in addressing our current environmental challenges (Raquez & Lambin, 2006). Understanding the context and background of land holders is crucial in supporting their efforts of sustainability.

Summer Camps and Sustainability

In the United States there are over 14,000 summer camps and the American Camp Association accredits more than 12,000 camps and other programs (*Start A Summer Camp*, 2017; *Who We Are*, 2021). Only an estimated 9% of all summer camps utilize public land for running their program, so the vast majority are using private land that either they own or they are renting ("Public Lands Use - Resources for Camps"). Because camps often manage their own land, the American Camp Association recognizes the importance of a camp's relationship with environmental sustainability and provides resources for camps to develop environmental stewardship plans (*Planting the Seeds to Grow an Environmental Stewardship Plan*, 2007). The recognition from the American

Camp Association demonstrates that summer camps are an important case study for understanding sustainable land management of private land as they have seen firsthand the potential management of summer camps to be of great benefit or disservice to the environment.

While the relationship between sustainable land management and summer camps is still lacking hard data, there is evidence that intentionality within the programs to educate campers can have a positive impact (Brain et al., 2015). A study of 4-H camps found that they wasted an average of 30% of the prepped food each week, but that this number was reliably brought down with education (Chen, 2018). The study's finding on the significance of education is supported by another study that took a broader view of the possibility of camps being used as educational facilities to improve the environmental behavior of the campers. The study demonstrated that not only did the change in behavior such as the reduction of waste, last through the week at camp, but it also followed the campers back home (Brain et al., 2015). Danny Sudman, the Executive Director and Founder of Green Camps sees environmental education as a great way to use the program to guide a camp towards becoming more sustainable in other ways (C. Jackson & Kallal, 2021.; Sudman, 2011). The emphasis on environmental education is an important cultural aspect of many summer camps that connects to sustainability and will be explored further in section 2.3, Organizational Change.

There is an increased desire for sustainable action at summer camps beyond the American Camp Association or camps themselves. Parents who send their children to

summer camps agree that camps should minimize their environmental impact (*Environmental Sustainability and the Camp Experience*, 2020). Despite the growing call for action, there is still a lack of research into the ways camps chose sustainable practices or their potential effectiveness. In 2014, Green Camps Initiative was started to increase awareness of the important relationship between camps and sustainability, and promote sustainable land management within the summer camping industry (Ameri et al., 2014). Green Camps Initiative is beginning to emphasize the need for further research and have found that the primary reason camps are interested in pursuing sustainable practices is the cost savings associated with them more than the environmental benefits (Ameri et al., 2014).

Sustainability is an important framework for guiding efforts to promote the protection and beneficial use of the natural environment and human-oriented sustainability can help landowners see the connection between the land's wellbeing and their own (Scoones, 2007; Ruckelshaus, 2014a). Summer camps are places where the closely tied relationship between the human population and the natural world is uniquely evident. Summer camps also typically have management teams so they can be an important case study for understanding how private landholders can accomplish the process of identifying sustainability as a necessary goal and implementing changes to pursue it. This is beneficial because the decision making process plays out externally through meetings and public decisions instead of internally and privately by an individual landholder (Stryker, 2017). Similar studies have been conducted, but they haven't looked

at summer camps(Atari et al., 2009; Moon & Cocklin, 2011). There is also still uncertainty in how landholders' views of sustainability impact their efforts to achieve it.

2.2 LAND MANAGEMENT

Given the importance of private landholders in sustainably managing the natural environment, ensuring these landholders have the knowledge and skills to do their part is important. I identified specific land types and management practices common in the regions the camps are located (Figure 3, page 53) to understand what camps are doing to sustainably manage their land, and how they are making the decisions to try to protect the natural features they rely on. To understand the processes camps take to understand their context and implement meaningful changes, I conducted in depth research into these selected land types and the benefits they provide to human systems, such as summer camp operations. I also sought to understand the current best management practices so I could select meaningful ones, or ones that were likely to have evidence within the summer camp context to support their effectiveness.

Land Types

For summer camps throughout New England and around the Great Lakes, the focus area for this study (See Figure 3), there are common land types. The seven common land types I selected for the focus of this study based on the collection are: Forest, Trails, Lake/Pond, Streams, Lawns, Parking Lots, Gardens. The seven land types are listed in table 1. These land types are not restricted to naturally occurring types and include built

features such as parking lots, gardens, and trails. Even the other four types, forest, lakes, grass fields, and streams, may refer to both naturally occurring and constructed features.

Table 1

List of Selected Land Types and Corresponding Management Practices

Land Type	Management Practices			
Forest	Forestry/ Logging	Forest Edge Conditions	Habitat Provision	Site Inventory
Trails	Location	Erosion Control		
Pond/Lake	Riparian Buffer	Sedimentation Prevention	Water Flow	Aeration
Stream	Riparian Buffer	Tree Canopy	Erosion Control	Aeration
Grassy Spaces	Mowing	Fertilizer	Drainage	
Parking Lots	Runoff Treatment	Tree Canopy		
Garden	Composting	Water Collection	Plant Location	

The most common natural feature in most camps in the Northeast is a forest (Children and Nature, 2015). The definition of a forest provided by the U.S. Forest Service is an area of at least one square acre that is fully unmaintained as lawn with at least 10% stocked with trees (D. Jackson et al., 2017). The 14,000 plus summer camps in

America own some of the privately-owned 422 million acres of forests and represent 56% of all America's forest land (Lubowski et al., 2006). Forests can be important features for a camps outdoor education program, and hiking trails are an important feature for facilitating this connection between campers and the natural world. At summer camps, when children can get out on the trails and experience nature first-hand this sets them on path to become future forest stewards that will learn to care for and appreciate their own land someday (Smith et al., 2015).The development and use of hiking trails come with risk to users and can also potentially put the forests at risk. When seeking to utilize the forest for the recreation ecosystems services readily available it is important to keep safety and stewardship in mind (Hesselbarth, 1996).

Ponds or lakes are also naturally abundant in the Northeast, and many more have been built. Beyond the purpose of increasing water supplies, they also have been constructed for recreation purposes such as swimming, boating, or fishing (Swistock, 2000). The other common water feature type on camp properties is those with running water. Running water features can range in size from perennial streams to rivers, and each different type provides unique ecosystems and ecosystem services. The geological context also adds the diversity of conditions. A mountain brook is different from a creek running along a valley floor (Allan & Castillo, 2007). Despite these differences, there are still patterns in the hydrology that allow for transferability in management practices.

As mentioned above, open grass spaces are another important and common land type at summer camps. The most common of these open grassy areas are manmade

features that serve as ball fields (Stryker, 2012). Depending on the uses of these spaces there are different ways of managing them in the most sustainable ways. Parking lots are another land use that are generally open, and all camps must manage parking in some way. In fact, the American Camp Association has included an evaluation of the parking plan at camps as a part of their standards for accreditation (American Camp Association, 1998).

Some camps also have garden spaces that can serve as a part of their outdoor educational programming. These spaces call for unique management and present their own questions of sustainability. A survey of executive directors of summer camps found that between 2011 and 2013 15% of the camps introduced gardening as a part of their programing and that 14% started using their garden yields to supplement their food sources (American Camp Association, 2013). As camps are increasingly incorporating a garden into their use of their land, the many benefits as well as unique challenges of gardens are becoming common knowledge in the industry (Elvy & Mitchell, 2021).

These seven land types were derived from research I gathered from the Penn State Extension program. I reached out to one of the contributing authors to this collection of articles who is a professor in the Wildlife and Fisheries Science Department at Penn State, and they suggested I use this collection as a database for relevant land types and practices. Penn State Extension has an ongoing project where they are compiling the common land management concerns for these land types within Appalachia and providing potential solutions for private landowners. I also found other sources that

corroborated the conclusions of these articles (Allan & Castillo, 2007; Batlz & Moyle, 1984; Christopher, 2011; Knight & Bottorff, 1984; Litman, 2018; Yumlu, 1994). As I selected management practices to focus on for this study I chose those that were described in these sources to be manageable by private landowners and crucial for the health of these land types and the ecosystems that relied on them.

Benefits of Land Types

One widely used method for understanding the human oriented benefits of the natural world is by understanding the goods and services they provide (World Bank, 2005). These goods and services (or benefits) people obtain from the environment have been titled "ecosystem services." These ecosystem services are categorized into 4 sub-types: 1) supporting services that make the rest of the services possible; 2) provisioning services, or goods such as food or fresh water; 3) regulating services, or natural processes provide benefits to humans such as water purification processes; and 4) cultural services where ecosystems provide cultural value such as aesthetic, spiritual, or educational value. (Reid, 2005). Environmental planners and land planners have used the framework of ecosystem services to help land users and other stakeholders develop goals and management plans. Studies have shown that stakeholders benefit from the concept of ecosystem services because it gives them tools to understand the benefits they receive from the land and prioritize them (Darvill & Lindo, 2016). Using the framework of ecosystem services also helps stakeholders identify points of disagreements on which services are of greatest priority, this creates complexity in making management decisions,

but provides the necessary understanding to arrive at compromises (Darvill & Lindo, 2016; Ghazoul, 2007). This study relies on the findings from others who have explored the complexities of developing land management strategies using ecosystems services as a tool and the ways it has been shown they can improve the outcomes of the decision-making process (Eppink et al., 2012).

Different private landowners might benefit more from different ecosystem services so, management will look different for everyone based on what benefits they are hoping to receive. Seeking to understand these benefits the land types can provide to the summer camp setting and how these benefits can be promoted supported the process of selecting the known best management practices.

Forests can offer many potential benefits, such as an inviting place for animals to live, financial profit from timber harvesting, and recreational benefits such as hiking or other adventure activities. Privately owned and managed forests typically fall short of their full potential, but could reach it simply with proper tending (D. Jackson et al., 2017). Biodiversity acts as a supporting service that makes the rest of the services of a forest possible and is an important indicator of the forests health (Reid, 2005). There are three levels of biodiversity that are important in ensuring the long-term health of a forest: 1) genetic diversity, the variety within a gene pool; 2) species diversity, the number of different species within a forest; and 3) ecosystem diversity, the number of different ecosystems within a forest. Each of these levels are interconnected and if one of these is suffering it can lead to the collapse of diversity at each level (Muth, 2016a).

Another significant service camps can receive from forests is in the form of lumber. Harvesting trees can bring in money for the camp, and, if done well, will increase the other ecosystem services that will benefit a camp. Harvesting can improve the habitats within the forest which can enhance the educational opportunities, and allow forest regrowth processes that expand supporting forest services such as biodiversity, soil formation, and the nutrient cycle. (D. Jackson et al., 2017). The recreational benefits of forests often come through hiking trails. Trails are for people and can be a great tool for connecting people with the natural world in an inspiring way. Studies have shown that the aesthetic value of nature promotes emotional and physical well-being by reducing blood pressure, heart rates, and breathing (Muth, 2016c). Trails are a great way to experience the aesthetic wonders of the forests and the physical activity of walking has its own benefits (Weinreb-Welch & James, 2021). Hiking at summer camps can also be a great way to educate campers about the forest and the creatures they see on their hike (Muth, 2016c).

Ponds often serve multiple purposes such as provisioning services like irrigation, or fire prevention (Reid, 2005). However, the greatest ecosystem services of a pond or lake are often the cultural services that provide aesthetic, and recreational value to the landowners (Swistock, 2020). Camps that use their lakes for fishing often do so as a recreational activity, but fishing could also be a provisioning service depending on whether the ecosystem is able to support the presence of fish, or if it relies on stocking as most fish ponds of the Northeast require (Swistock, 2000). If the aquatic ecosystems are

healthy these bodies of water can also boost the biodiversity at a camp. From plankton to fish or the plants making up the riparian buffers and the animals that benefit from them, large bodies of water allow a whole array of animals to call a camp home that otherwise wouldn't be able to (Swistock, 2006, 2014). Riparian buffers are the space between the water bodies and the surrounding land types. They play an important role in the interplay between the ecosystems, hydrology, and geology of the water bodies and the land around them (Knight & Bottorff, 1984). The rise in biodiversity within the water or along the riparian buffer increases the educational opportunities provided by the pond or lake.

Streams are another feature that provides unique habitats that can increase the biodiversity of the property (Allan & Castillo, 2007). The green corridors of healthy streams provide aesthetic value, and at camps the amount of different species present can also provide unique educational value (LaRosa, 1984). Other ecosystem services provided by healthy streams are provisioning, primarily in the form of drinking water (Reid, 2005). Over 80 percent of the drinking water in Pennsylvania, for example, is sourced from local creeks that are naturally filtered by the forested watershed they are a part of (Swistock & Smith, 2005). Rivers and streams with healthy riparian buffers, banks, and floodplains also provide an important regulating service. They can holdback more water and mitigate the damage of floods, which are the most common and one of the most costly natural hazards in the United States (Birkland et al., 2003; Palmer & Allan, 2006).

While the benefits most readily recognized in open spaces is the aesthetic value of the clean lawns or the recreational potential, they provide there is more advantages to having open space than just these cultural ecosystem services. Open spaces can provide critical habitat for animals from insects to rabbits (Brittingham, 2001; Karl, 2019). Open spaces can become an unlikely way for landowners to increase their biodiversity and support the other ecosystems of their property. Open spaces such as meadows attract rare and endangered animals, including pollinators. Landowners can get more benefits from their open spaces if they diversify the types on their property, which can also lead to saving time on management as many less common types of open space require less upkeep (Karl, 2019).

The opportunity to easily profit from provisioning ecosystem services is perhaps the most obvious benefits of having a garden, though there are many others (Elvy & Mitchell, 2021; Reid, 2005). Perhaps the greatest benefit at a place like a summer camp is the teaching opportunities it provides. Gardening is a simple activity that children can learn and take home with them (Elvy & Mitchell, 2021; Reefer, 2018). Successful gardens are controlled parts of larger ecosystems, and the campers can learn about plant growth, pollinators, and the importance of soil, all hands-on in a garden (Brittingham, 2013; Reefer, 2018). Gardens can also benefit the other species in these ecosystems by providing food and habitats for the pollinators such as butterflies, as well as the birds which supports the biodiversity of the property (Brittingham, 2013; *Gardening for Birds*, 2017; Schmotzer, 2018).

The goal of land management should be to ensure these spaces are enjoyable and safe to use, while not compromising the health of the ecosystems or living species within them. This allows trails and all these common land types to be a lasting benefit to both users and the forest itself (Hesselbarth, 1996; Marion & Leung, 2004) Each of the land types identified within this study provides different ecosystem services therefore, will have different management goals (World Bank, 2005). D

Management Practices

To ensure these ecosystem services support the camp to the fullest potential an important first step is to develop a sustainable land use and management strategy. A good place to start is by compiling a forest management plan. The objective of a forestry management plan is to outline the goals for the forest, such as timber production or biodiversity, and then it guides all activities within the context of those goals (Muth, 2016b). There are many best practices including and beyond those explored in this study that should make up a forest management plan, and the goals should align with the management goals for other land types throughout the property. The awareness and actions of private land holders, such as summer camps, are important for maintaining biodiversity (Muth, 2016a). A best management practice for maintaining biodiversity is simply keeping track of the species that have made the various features of the property their home. Land managers should know the plants and animals on their property, the things they need to thrive, and whether or not they are invasive (Brittingham, 2016).

Having knowledge of their property guides other management practices and should be a part of the development of a forest management plan (Muth, 2016b). Not all best management practices work within the context of every forest, but when private landowners can discover which ones are feasible and effective for their forest management these should be included in the forest management plan as a sort of tool box (D. Jackson et al., 2017).

Tree harvesting within a forest can do far more than provide an additional source of income for a private landholder. Using best practices, harvesting trees can become the most important tool for meeting the objectives of a forest management plan, such as improving habitat, increasing biodiversity, and maintaining the aesthetic appeal of the forest (D. Jackson et al., 2017). It typically takes about 80 years for a mature tree to grow and be suitable for timber, and the bigger trees can bring in the most money. However, the sheer amount of time means landowners must also consider the long-term impacts of harvesting. Removing all the large trees at once make it less likely that equally high-quality trees continue to develop, just like killing the best plants within a field reduces the long term-quality of the whole crop (Muth, 2016b). Removing old trees that are declining in health and quality, while not the most profitable in the short run can improve the overall health of a forest in the long run. Also, thinning out a forest without leaving large bare patches can help the forests natural cycle of regrowth (D. Jackson et al., 2017). Best harvesting practices work in tandem with other practices to improve habitat provision, such as caring for the forest edge conditions as forest edges provide places of shelter and

often have more food for animals. Caring for forest edges means ensuring there is a lot of growth and habitat provision can include providing artificial habitats such as bat or bird boxes to support threatened species (Brittingham, 2019).

Responsible trail design and upkeep is vital for ensuring the forest can be enjoyed through recreation for the long-term. Trails, and the forest itself can be designed and managed to promote all these benefits of hiking. When harvesting the trails and the views hikers will have should be considered. The clearings created could be used to the landowners advantage by seeding the opening with plants for the wildlife to forage increasing the chances hikers will encounter wildlife (Muth, 2016c). Trail management should also be a part of the forest management plan because high-quality and timely maintenance will extend the life and enjoyment of the trail. Water erosion will likely be the greatest challenge for any trail, but this can be mitigated with intentional planning and design, and simply by paying attention to the problem areas and how fast erosion is occurring (Hesselbarth, 1996; Marion & Leung, 2004).

It is important to consider a forest as a piece of a watershed, because for many watersheds the forested land that are included in them are very important for the health of the water and can have mitigating impacts far down stream. Forests can slow the release of water into the water bodies of the watershed and hold back sedimentation or pollutants (Muth, 2016d). The condition of the land a stream or river runs through, or a pond is situated within is a significant determinant of their health. Dramatic changes to that surrounding land, such as disturbance from timber harvesting can have an equally

dramatic effect on the water chemistry. However, even with disturbances such as timber harvesting, continued use of other best management practices in tandem with sustainable timber harvesting can moderate the streams or ponds conditions and ensure long term health. It is imperative that the relationships between the ecosystems, and hydrological systems of the stream and the surrounding features is understood by those caring for a stream (Allan & Castillo, 2007).

The total management for a pond or small lake typically matches or exceeds that of land of similar size (Swistock, 2000). Perhaps the most important aspect of pond management is to ensure the pond or lake is providing a healthy habitat for any plants or animals that live within or around it (Swistock, 2020). Aside from posing a potential concern to fish, sedimentation also fills the pond or lake with silt, eventually demanding dredging (Birtwell, 1999, Swistock, 2006, 2000). Having healthy riparian buffers or catch pools around lakes to collect any sedimentation from water flowing into it can keep the sedimentation levels low (Swistock, 2013).

The issues of sedimentation and benefits of riparian buffers are similar for streams. Too much sedimentation in a stream also has negative impacts on the streams ability to provide healthy habitats, and can cloud the water impacting the plant life (Muth, 2016d; Xenophon, 2020). Sedimentation can also lead to higher levels of embeddedness in the streams. Embeddedness is the measurement of how embedded features on the stream bottom are into the silt, sand, or mud. The less imbedded the rocks or snags are in the silt the better because many aquatic bugs use the small spaces between the features

and the stream bottom as their habitat (Koch, 2020). There's a correlation where healthier streams tend to have more bank cover, and unhealthy streams have more exposed bank (Xenophon, 2020). Researchers are continuing to understand how to best manage these unique environments and ecosystems, but it is clear that management is important and has broad impacts as the benefits can have pay offs far down stream (Dwire & Lowrance, 2006). Diversity of riparian buffers is just as important as their health. Different riparian plants and levels of cover provide habitats for different animals, including fish species. This special habitat condition is attributed to temperature levels created by differences in shade and the various growth patterns that provide different types of cover (Batlz & Moyle, 1984; Xenophon, 2020).

Evaluating whether or not the stream is supporting aquatic bug life is a reliable means of determining the health of the stream (Koch, 2020). Other evaluations can be made regularly by simply looking at the stream for specific indicators. A close estimate of the streams embeddedness level can be made simply by looking at the stream bottom and evaluating the ratio of rocks and other sunken features opposed to mud or sand (Koch, 2020). The health of the riparian buffer can be evaluated simply by looking at the diversity of plants especially the amount of broadleaved plants that provide shade and protection over the banks and water (LaRosa, 1984).

The vegetative cover of a bank can also be a direct indicator of the health of a water body (Xenophon, 2020). Other aspects of a pond or small lake that needs to be monitored is the waterflow and aeration. Many have a water source, such as a feeder

stream or a spring, however it is important to ensure the water is not staying stagnant so the pond can naturally clean itself and expel excess nutrients that would otherwise lead to large algae blooms that may kill other living things in the pond. Water flow helps keep the water aerated providing the oxygen augitic animal life needs. By reducing the amount of plant or algae growth in the pond or lake that can choke out fish or simply using a commercial continuous aeration device it keeps the oxygen levels up (Swistock, 2015). Also, ponds without a reliable source of water, ponds and lakes lose a lot through evaporation during the summer months reducing the aesthetic value of the pond and removing the water edge from the riparian buffer (Swistock, 2013).

Nutrient pollution, when there is to high a concentration of nutrients, often from fertilizers, in a body of water poses a great threat, especially those waterbodies near lawns, but there are environmentally friendly and sustainable methods for using fertilizers such as controlled-release systems or phosphorus-free solutions that increase the intake capacity of the plants or reduce the nutrient runoffs (Khachatryan & Zhou, 2014). Along with concerns about fertilizer runoff is the question of water flow on grassy areas in general. Drainage systems for open fields can reduce the nutrient runoff that makes it into the water system as well as slow the rate at which water gets from the field into the neighboring water bodies. Slowing the water flow can also reduce erosion and flooding. Sustainable drainage systems are accepted as the most effective design and management solution to the problem water runoff (Everett et al., 2016).

If not needed, allowing lawns to naturally become meadows by mowing only once a year is a great way to add biodiversity and manage them in a sustainable way (Huhta & Rautio, 1998). Part of the sustainability comes from the reduction of mowing required reducing the amount of emissions released from the lawn mowers, but it also allows the grass to capture more greenhouse emissions. Yard and garden equipment combined generates about 5 percent of America's air pollution (Christopher, 2011). The process of allowing a lawn space to become a meadow can be supported by planting native grasses and perennial wildflowers (Karl, 2019). The type of grass can also be changed or replaced with a mix of grasses and sedges that still allow for the lawns to be used for recreation, but also thrive in the site without the need for extra watering or fertilizer, and while increasing biodiversity (Karl, 2019; Landschoot, 2016).

Storm water runoff from paved surfaces is another significant source of pollution. As water flows over impermeable surfaces it gathers pollutants. Many of these pollutants in parking lots would be unnatural to typical water systems, but the majority often is just be an increased amount of sediment because the soil is not slowing the water down and filtering the sediments out (Jarrett, 2016; Mansberger, 2020). Water retention systems are an effective way of mitigating the pollution runoff from parking lots (Roseen et al., 2006). Even low impact developments that simply capture runoff directly from the pavement and put it in contact with soil are effective at removing pollutants (Jarrett, 2016).

While parking spaces are generally open, tree shade on paved parking lots are another sustainable implementation that can improve the performance of the pavement reducing cracking and other distresses. This reduction in cracks is a result of the shades impact on the pavements temperature. When the temperature is regulated less damage occurs which means that repaving becomes less frequently required (McPherson & Muchnick, 2005). The shade from trees covering a parking lot also mitigates the temperature increase of the area around the lot from the solar gain from dark colored pavements (Litman, 2018) As mentioned before, garden equipment along with lawn equipment generates about 5 percent of the air pollution in America every year. The concern of air pollution is significant but is not nearly as concerning as the use of potable water that is used for gardening (Christopher, 2011). Another potential problem is the use of fertilizer to grow crops in a garden. Only natural fertilizers should be used in exact measurements, as any extra will either be wasted or do damage to the environment (Hubbard, 2018). Fertilizer should not be applied before heavy rain to avoid it getting into the stormwater runoff, polluting the water system (*Green Gardens Clean Water*, 2016). These concerns can also be addressed with best management practices such as composting or collecting rainwater to replace potable water (Christopher, 2011). Planting native species attracts native species of pollinators and other animals to the garden increasing the biodiversity of the site (Russell, 2012). A garden becomes more sustainable, and resilient when the management processes mimic those of natural ecosystems (Christopher, 2011).

Summer Camps and Land Management

Along with promoting environmental stewardship plans the American Camp Association also provides resources for camps on how to manage their natural features (Stryker, 2012, 2017). In these resources there is an emphasis on management of goods such as recycling or conserving energy and water (*Planting the Seeds to Grow an Environmental Stewardship Plan*, 2007; Stryker, 2017). However, there is some discussion in these resources about the maintenance of program areas like ball fields and implementing a composting system (*Planting the Seeds to Grow an Environmental Stewardship Plan*, 2007; Stryker, 2012). Green Camps is developing an accreditation system for evaluating the environmentally sustainable efforts of camps and to inspire them to continue to make progress. A part of this accreditation process is land management practices, but there is still more research needed (Ameri et al., 2014).

To understand the complexities of land management it is important to understand the various possible practices and how different landowners are choosing and implementing them. My study adds to our understanding of the complexities of land management by identifying the context in which different landowners choose to focus on specific proven practices. In the sources compiled by the Penn State extension program there were always caveats with each practice that they may not be implacable in all contexts, and the more study done around what practices are most practical in certain scenarios, the better landowners can be supported individually. My study also expands the research by including summer camps as a case study of a different type of landowner

that experiences many similar questions and challenges in land management as other landowners. The inherent differences between summer camps and other landowners who have been frequently studied can expand our understanding of how other organizations with lots of land such as hospitals or universities can become more sustainable in their land management practices. The similarities between camps and other landowners creates room for new perspectives on the old questions of land management to promote new ideas.

2.3 ORGANIZATIONAL CHANGE

When institutions implement any significant changes in operations (e.g. changing land management practices) there are shifts that must first occur at the administration level (Daft, 2007). A whole field of research has been developed around understanding how organizations change, and I rely on this research to support my own study of how the camps in this project have changed their administrative and land management practices. According to Organizational Change Theory, there are two important steps administrators can take to support successful organizational change. The first is to ensure they have an understanding of the cultural context of the organization (Blau & Scott, 2003; Boje et al., 2011). The second is to be intentional when planning change by implementing a tested strategy of Organizational Change (Burnes, 2004; Burnes, 2012).

Culture

The culture of an organization is rooted in the larger social systems they are a part of (Blau & Scott, 2003). A specific organization is comprised of people that share some of the same values that come from the broader cultures they are a part of, and these values shape the culture of the specific organization (Blau & Scott, 2003; Dabrowski & Breunig, 2019). To create a cohesive culture that can flourish, these values that brought the individuals together need to be front and center in all leadership actions and decision-making processes (Aycock & Corley, 2021). A successful organizational culture will see these values expressed in normalized actions within the organization from all levels of the hierarchy (Daft, 2007). Organizations with strong cultures recognize certain decisions as culturally based in both how a decision is evaluated and decided (Boje et al., 2011).

The influence from other connected organizations is an important piece of an organizations culture (Blau & Scott, 2003). Some organizational cultures may also be heavily influenced by cultures that also function in some form as an institution, whether that be a religion or a political movement such as environmentalism (Boje et al., 2011). To effectively guide an organization to meeting its mission, or implementing a needed change, understanding the culture and the influences on that culture is imperative (Blau & Scott, 2003). Environmental planners have recognized the importance of understanding the social context of private landholders to support the adoption of sustainable practices to manage their land (Cooke et al., 2012). Research has also examined the influence of social capital, or the mutual interdependence that holds communities together, on promoting more sustainable land use. Environmental planners have been encourage to

utilize these structures of social capital to instill sustainable values and practices in organizations (Selman, 2001). At most summer camps environmentalism is built into the culture as a part of the experience or educational programming, and these cultural values has important implications for the camps potential for becoming more sustainable (Dresner & Gill, 1994, Zygmunt & Djanogly, 2016). Summer camps also have an important role to play in improving and promoting spiritual well-being and for many camps their responsibility comes from an affiliation with a specific faith tradition (Browne et al., 2011, Rothenberg, 2016). For understanding the culture of the summer camps, I focused on two common aspects of cultural influences at camps in the United States: environmentalism, and religion.

Environmentalism

A key objective of the environmentalism movement is to increase awareness on environmental issues through education (Martin, 1988; Baragh & Glass, 2010). Environmental education has been used to support the development of environmental consciences in both children and landholders with varying levels of effectiveness (Cocklin et al., 2007a; Sobel, 2011). Placed-based education is a specific method of conducting environmental education programs that is well suited for encouraging localized sustainable management practices (Sobel, 2012). This placed-based method has been linked to a deep connection with nature that is better developed through a tactile relationship than a collection of learned facts. Given the recognized potential in the role environmental education can play in promoting sustainable land management practices,

understanding the influence of environmental education programming at camps has over the broader culture may provide insights to how the administration values sustainability and makes management decisions to implement changes.

The importance of context in environmental education is continually being demonstrated. When environmental education is coupled with place-based education student volunteer work and activism increases, and they get involved with supporting their local environment and become advocates for important changes within their schools and even broader communities (Sobel, 2012). This involvement in turn bridges the gap between environmental stewardship as being a part of their identity to it becoming a calling, not just to the benefit of nature, but also to the benefit of their neighbor (Chawla, 2018). A researcher at the Swiss National Science Foundation examined two common pathways of approaching environmental education. One is to rely on media and education ensuring that children have the facts of the environmental problems we are facing, and the other is to share these facts as they naturally come up through tangible experiences in the natural world. This research on approaches to environmental education found that the second path was effective while the first was in fact counterproductive (Sobel, 2011). When the pressing environmental concerns are taught as abstract concepts that are occurring on a global scale children either cannot fully comprehend what is being taught to them (Sobel, 2012), or they understand it as a problem they are helpless to prevent, and they lose hope (Sobel, 2011). This overwhelming feeling of helplessness has led to what researchers call ecophobia, which is the pervasive anxiety over global environmental

degradation. It is this ecophobia that leads to the first path of environmental education being counterproductive. The way to effectively teach children about the pressing reality of environmental degradation is to only do so after a foundation of care and appreciation for the earth and the environment at a local level is established (Sobel, 2011). They must see their role models take it seriously and do their part. If not, the child may either grow to not take it seriously themselves, or worse, they will only get a sense of hopelessness (Chawla, 2018).

Cultures of environmentalism are forming in many organizations and corporations, and are leading to a push within these organizations to guide changes that integrate environmental issues with their operations (Coddington & Florian, 1993; Banerjee, 1998; Fernández-Sánchez & Rodríguez-López, 2010). Corporations have noted that promoting environmental changes within their organization can provide opportunities for growth, which is paralleled in the camping industry (Banerjee, 2001; Amiri & Nakane, 2009). Promoting a culture of environmentalism through educating employees often serves as a driver for organizational changes that can improve the sustainability of the organization as well as the services the organization provides (Lee & Klassen, 2016). The ability for administrations to instigate organizational change is itself a known important step towards the organization becoming more environmentally conscience and active (Loknath & Azeem, 2017). For organizations that have a culture of environmentalism, and especially ones that actively promote environmental education, facilitating Organizational Change around issues of sustainability becomes a relatively

simple task. Many summer camps fit this description of environmentally-minded organization.

The benefits of summer camps are abundant and many of them are well documented (L. Browne, 2015; L. P. Browne et al., 2011; Henderson, Bialeschki, et al., 2007; Sorenson, 2018). A benefit that has only recently been explored in the research is the support summer camps can offer in environmental education (Dresner & Gill, 1994). Environmental education within a summer camp context can be grounded in place-based education where campers are taught regionally applicable environmentalism rather than intricacies of ecosystems and regions they may never see. And as explained above, just having "long-term exposure" to nature improves a child's ecological behavior more even than a specific environmental education program (Collado et al., 2013), and intentional environmental education programming can spark conversations and lead to more sustainable action in both the campers and the staff (Sudman, 2011).

A study, "Engaging with the Natural Environment" which examines the impactful connection between campers and the environment found that a key component was constructing a self-identity that incorporated one's connection to the natural world (Hinds & Sparks, 2008). Another study explored the impact of this connection on behavior by comparing two camps that were held in outdoor natural settings: one with an environmental education program and one without. They also studied a control camp that was held in an urban context and also did not have an environmental education program. This study found that the natural context of the camp had a greater impact on the

camper's connection with the environment and their environmental behavior than the addition of the environmental education program (Collado et al., 2013).

Behavior changes that occurs at camp has been demonstrated to be lasting even after campers leave (Brain et al., 2015; Browne et al., 2011). There are also indirect benefits of this relationship campers can develop with the environment at summer camps. This connection and new environmental behaviors can be passed on when the campers return to their community. Studies have shown that campers leave camps with environmental education programming empowered to return to their communities to be leaders and problem solvers on environmental issues (Browne et al., 2011). All summer camps can receive an abundance of educational value from their land when managed well.

Faith Traditions

Religion can often function as a shared set of values that, in turn, create culture (Boje et al., 2011). These values also form the framework through which camps understand sustainability (Aycock & Corley, 2021). While there are differences between different faith traditions in how they relate to environmentalism, there are enough similarities that understanding the religious motivations camps have for pursuing environmentalism is important in understanding their decision-making process and how they implement change.

The Oxford Handbook of Religion and Ecology lays out the complexities in the various theological schools of thoughts in the major world religions. Each expression of

religiosity has arisen at least in part out of a need to make sense of the material world, arguing that all religions is built on the relationship between humanity and the natural environment; thus, all religions have a responsibility to continue a healthy relationship with the environment (Gottlieb, 2006). All theologies have impacts when applied through religious structures that change behavior, and these theologies that incorporate responsibility for the environment can also be harnessed to support ecological action (Tatay Nieto, 2019). Jamie Tatay has identified similarities between the various dimensions of religious experiences and ecological and sustainable practices. Because of these similarities between faith practices an environmental practices faith traditions can and will have an integral part to play in tackling the challenges presented by the complexity surrounding the socio-environmental conditions (Tatay Nieto, 2019). This relationship and support from faith on the environmental movement is not a new phenomenon. Just as all major faith traditions are contextualized through the environmental conditions of their adherents, the modern American environmental movements all find their roots in the religious contexts from which they arose (Gould & Kearns, 2018). Communication between faith traditions, and environmentalism will bring helpful perspectives and clarity to the pressing environmental concerns (Gould & Kearns, 2018).

For the purposes of this study, I have decided to focus on two categories of faith traditions: Jewish traditions and Christian traditions. In the Jewish tradition, there is no one consensus on the relationship between Judaism and environmentalism amongst

various traditions and Jewish thinkers (Gerstenfeld, 1998; Goldman et al., 2020). Judaism often gets accused, alongside Christianity, as culpable for the current environmental degradation because of the alleged anthropocentrism in Judeo-Christian influences on society. Many have defended the Jewish tradition from this accusation, including Hava Tirosb-Samuelson, a professor at Arizona State University (Tirosh-Samuelson, 2001). Tirosh-Samuelson has argued that Judaism offers a meaningful cultural imagination for society in the Anthropocene because it is a tradition that seeks human flourishing grounded in societies historical and ecological context (Tirosh-Samuelson, 2020). Tirosh-Samuelson recognizes there is currently little overlap between some traditions of Judaism and the modern environmental movement, but that the biblical text can be a point of shared knowledge (Tirosh-Samuelson, 2002). The Bible and the Talmud are both sources for exploring ancient concepts of morality and environmental practices addressing use of resources, treatment of animals, and improving the world (Friedman & Klein, 2010, Richter, 2010).

There are many today within the Jewish tradition working to bring Judaism into the conversations of environmentalism. Hazon, the largest faith-based environmental organization in the United States is seeking to combine the efforts of promoting Jewish heritage and environmental sustainability. They are also supporting other groups like the Adamah Fellowship program and Eden Village Camp who put this vision of environmental sustainability through a Jewish tradition into action through education and experience. These organizations and others are demonstrating that treating the

environment in accordance to the values of Judaism can have meaningful impacts and preserve the world for future generations (Tirosh-Samuelson, 2001).

In many ways the Christian ethical take on creation care is a continuation as much as a deviation on the framework set up through Jewish thought (O'Donnell & Wynward, 2019). Environmental activist Bill McKibben, posits the primary difference between the understanding of creation care in the Old Testament and in the modern age is exemplified in the book of Job, where God taunts Job by asking him questions such as, "have you seen the heavenly store houses of snow?" or "can you tell the waves where to break?" Job has no reply, for him these things are impossible, but ever since the first explosion of an atom bomb, humanity has realized these things are no longer impossible to us, in fact, we can and have changed where waves break (McKibben, 2013). Another author and activist John B. Cobb Jr. began his ethical framework with the recognition we live in a world of limits: "The finitude of our planet requires us to work toward a human society that accepts limits and seeks a decent life for all within them (Cobb, 2007). This primary ethical calling comes directly from his Christian faith. The result of accepting a world of limits as the context for our ethics has led others, such as author and activist Todd Wynward to pursue a life of simplicity. Wynward has developed a wholistic approach to living in a finite world in a responsible and ethical way that he calls the "Watershed Way." In this framework, he combines philosophies and practices of his Navajo neighbors and Christian Anabaptist tradition. Wynward's ideas are localized solutions, ones which Cobb touches on, but Cobb's work focuses more on systemic change at larger

levels. Cobb acknowledges the truth in Wynwards arguments that change must happen at the local level within the local contexts, but he is more interested in how to spread the ideas that prove effective to other contexts. He suggests there are multiple possible solutions before us, and that all can achieve a livable life while also maintaining sustainability. He borrows New Testament imagery of the Kingdom of God to imagine what an ethical, sustainable, and livable future could look like.

A unique aspect of organizations with a shared faith tradition is the different perspective of authority they have compared to secular organizations. All decision-making processes within the organization are expected to be made in alignment to the principles of the shared faith (Hinings & Raynard, 2014). Within organizations, shared faith traditions offer a shared vision for promoting intentional changes, and this can lead to successful implementation of new practices the ensure long-term improvements (Ling, 2008). Just as cultures of environmentalism can have impactful implications on Organizational Change, cultures guided by faith traditions can as well. It is important to understand how the commitment to faith is guiding decision-making processes and how the organization responds to those changes. Summer camps are also a compelling case study because of their similar structure as mission driven organizations as well.

Along with improving environmental behavior summer camps can also be a place where children's spiritual well-being can be improved (Browne et al., 2011). It is accepted within the industry that summer camps are places that excel at providing improved spiritual well-being, but this is something that is hard to measure. The Effective

Camp Research Project is seeking to close this gap in the research. They have begun to demonstrate that the positive behavior changes that improve their spiritual well-being and connect their identity to a rich faith tradition last beyond the time campers spend at camp (Browne et al., 2011). Like the connection campers can develop with the environment connecting with a faith tradition at a summer camp also is rooted in self-identity. In the book, *Serious Fun at a Jewish Community Summer Camp: Family, Judaism, and Israel*, Celia Rothenberg examines the impact of attending a Jewish summer camp. The book takes Camp Ben Frankel in Illinois as a case study to look at the connection between a Jewish summer camp and one's identity and spirituality within the Jewish community (Rothenberg, 2016). It is also becoming clear that summer camp experiences facilitate increased orthopraxy, correct action, more than orthodoxy, correct knowledge (Sorenson, 2018). These findings on the spiritual experiences and educational programs of summer camps align with the impacts of environmental experiences and educational programs. Understanding these cultural values together and how they influence each other at summer camps could help quantify the connection between religion and ecology within the experiences summer camps provide, as well as the way they impact the administration's decision-making process and the organization change process towards sustainability.

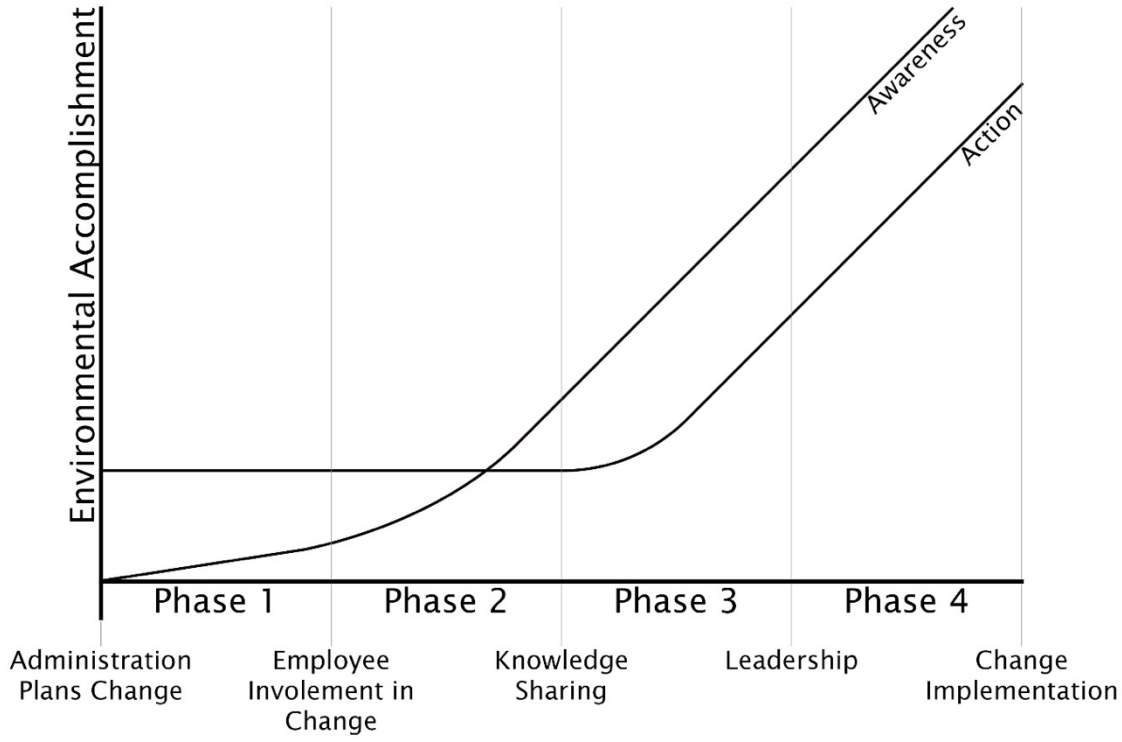
Planned Change

Even though change is a constant part of any organizations life, there are vast differences in how it is understood and approached (Burnes, 2004). It is accepted that for

Organizational Change to be successful the change should be planned, and there are many theories on how to best plan changes (Kritsonis, 2005). When studying Organizational Change, the strong connection between the effectiveness of change and the context of the organization needs to be understood to draw any meaningful conclusions (Badham et al., 2003; Boje et al., 2011).

Figure 1

Representation of Lewin's Organizational Change Model



One of the more well-known of these theories is Kurt Lewin's Three-Step Change Theory. Lewin is seen as the founder of the academic study of Organizational Change (Burnes, 2012; Dabrowski & Breunig, 2019). In his model there are five steps in the process organizations must go through to successfully implement change. The first, which is the far left of the graph in Figure 1, is when someone, typically management decides to instigate a needed change in the organization. The next moment is when employees become involved in promoting the change which leads to the third moment when the knowledge sharing in the organization guided by the employees begins to reflect the desired change. Once this knowledge sharing is occurring the leadership encourages the change through their management and then the efforts of officially implementing the change successfully becomes possible (Lewin, 1947; Hussain et al., 2018). The moments do not occur uniformly throughout the organization. In some areas the organization may be able to begin implementing changes while employees in other areas are still only beginning to become involved in the changes (Burnes, 2004; Burnes, 2012; Dabrowski & Breunig, 2019). Any successful change within an organization needs to understand and be rooted in the existing culture of that organization (Kotter, 2012; Cao et al., 2000; Boje et al., 2011). As Richard Daft, Author of *Organization Theory and Design* gives examples of Organizational Change case studies he makes it clear that when planning any change within any organization the questions of how the culture should impact the change and how the change will impact the culture needs to be forefront of all decisions (Daft, 2007). One solution that can lead to a more harmonious union between

culture and change is to make a willingness to change one of the cultural values of the organization. If change becomes a unifying value the defines the organization, when needed change arises, which it does constantly, it can be easier (Boje et al., 2011).

Summer Camps and Organizational Change

The summer camps participating in this study have gone through processes of change where adoption of sustainable practices was achieved. For mission driven organizations, such as summer camps, agreed upon values are the fundamental aspect of their culture. These values are expressed through the culture in how staff members treat each other, how campers are taught and led to experience the camp, and in the things the staff spend time on. It requires more than simply claiming the values, but putting action behind them and making them a part of the organization at every level (Aycock & Corley, 2021). The study examined the impact that each camp's culture had on the changes towards becoming more sustainable. For each of these camps, understanding the impact of religion and the environment on these cultural changes help identify which principles and practices would be helpful to others who want to make similar changes.

To fully understand the research being gathered in this study and others on what practices landowners are implementing to better manage their private lands there must also be more research into why these decisions are being made and what factors are prompting these changes. The study begins to fill this gap in the existing research by also seeking to understand the culture of these summer camps and how this culture impacts

the land management decisions. Organizational cultures are complex and difficult to completely understand in both their origin and impact, so for this study I have chosen to limit the aspects of the organizational cultures I am focusing on to faith tradition and environmentalism. This focus to these two aspects of the camps' cultures, along with Lewin's framework of planned change allows tracking of the process from cultural value through management practice implementation. Understanding how landowners come to have their values and how those values impact that land use and management will support environmental planners and policy makers better support their efforts.

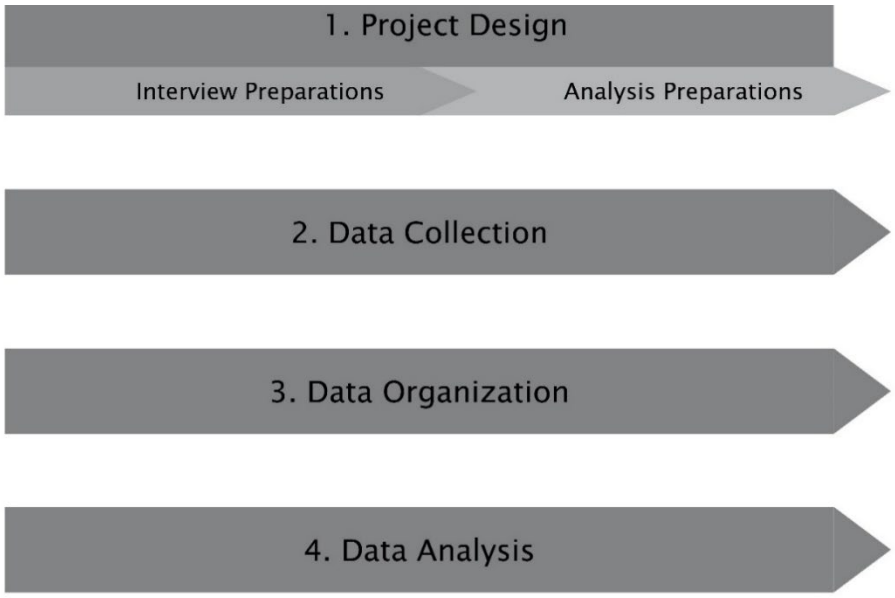
Chapter 3:

Methods

After I conducted the background research to frame this study and guide the process, I began to map out how I would conduct the study from data gathering to data analysis. The methodology is described within a framework (Figure 2) of four distinct phases that follow the process from project conception to conclusion. In the project design step, I made decisions on what information was relevant to the study, how I would gather it, and how I would organize and analyze it. In step two, I began the process of collecting data. In this section, I explain how I selected camps for the study and how I conducted the interviews. Steps three and four included taking the data and systematically extracting conclusions from it that would help answer my research questions. I accomplished extracting the conclusions through, first, organizing the interviews by responses to the various questions and, then, following through with the analysis plan.

Figure 2

Organizational Map Developed for Conducting the Study



3.1 PROJECT DESIGN

The first step, before I could gather data for this study, was to design the project, planning out the details including how I would gather the needed data and how I would organize and analyze that data. The design of the project included the process of creating the interview structures and developing the questions. After developing the initial project design, I still had to refine the interview process before I was ready to begin. Part of the process of defining what data I was looking to extract from the interviews was deciding how I was going to organize and analyze the data once it was collected.

Interview Preparations

I chose to use interviews as the primary method for conducting the case studies because they provide a holistic view, allow the participants to express themselves freely, and allow the researcher to seek clarification (Alshenqeeti, 2014). Interviews are also more conducive to answering "how" and "why" questions. The subjects of the interview process were the directors or administrators of the camps, or at their suggestion, the facilities directors/managers. The process of selecting participants allowed for connection between land management and the camps shared values of sustainability to be understood as the participants of the study are the ones overseeing the decision-making process. While I only spoke to one or two members of the administrative team from each camp, I asked the participants to explain the different understandings of the connection expressed by other staff members at the camp. Effective and in-depth interviews allowed the participants to verbally reconstruct events and processes the researcher has never experienced. Interviews are used in environmental planning studies with similar objectives of understanding land use and land values within the sociocultural context of the participants. Planners recognize the need to better incorporate information on uses and values into their management plans (McLain et al., 2013).

I designed the interview questions into five sections: 1) background, 2) sustainability context, 3) land use types, 4) land use management practices, and 5) relevance of sustainability to land use management practices. The full set of interview questions compiled into the 5 sections can be found in Appendix A. The interviews took

a broad view to give context surrounding camps' current efforts towards sustainability. The interview design allows for anecdotes to be used as examples supporting camps' personal view of their commitment to sustainability. Anecdotes can be an important piece of qualitative data, but they must be supported with rigorously collected data through intentional sampling and then examined by a systematic analysis process (Green & Britten, 1998).

In the first section of questions, I gathered background context before getting into the focuses of the study. These questions asked for name of the camp, name of the interviewees, as well as job titles and descriptions. The primary purpose of these questions was to organize the transcriptions during the data analysis process. Also, in the cases where the administrators requested I speak with the facilities directors, tracking the participants roles allowed for clarity on the source of the information and identify gaps that the administrators could fill if needed. These identifiable details were excluded from the report and all materials in the appendix.

The next grouping of questions, Section Two, was about the mission of the camps and how the value of sustainability impacted the camp's mission. There is also a question that allowed the participants to speak to how their faith influenced the relationship between their mission and values and sustainability. I designed these questions to inform the conversation around the next two sections of questions which focused on their land and land management practices.

Section Three is designed to understand the physical features of the camp and the specific uses of each of these features. Before the risks of Covid-19 became a factor, the plan was to do the interviews in-person allowing an opportunity to see the features of the camps. To ensure the safety of the participants and myself the interviews were conducted remotely. This section of questions was designed to replace the intended step of conducting a site visit to understand the physical contexts of each camp. This section focused on the identified seven land types or uses that are common throughout at summer camps in Appalachia. These were derived from articles I gathered from the Penn State Extension program's work on describing common land management concerns within Appalachia. Each interviewee had the opportunity to describe the features of their property and highlight those they viewed as most important before I directed them to describe these seven in greater detail.

Section Four, then, was about the management practices the camp utilized for each of these land types. The specific practices described above were used as the focus for these conversations, but the questions allowed for the participants to describe other context-specific practices in maintaining these land types. The interviewees had the option to replace this portion of the interview by filling out a questionnaire after the interview. The questionnaire option was intended to allow administrators who may not have an intimate knowledge of the details in the camps management plans to consult others who did and provide the best responses. In the interview setting the first question for each land type asked the camp representative to explain any and all practices for

maintaining that space, then any of the specific management practices not yet mentioned in the conversation were circled back to and discussed. The questions on the questionnaire were more direct because there was not an opportunity for discussion. There are questions about each of the specific land type management practices compiled based off the research gathered from Penn State's Extension program. The questionnaire included both questions that resembled the interview process along with a space for the participant to elaborate on other practices or details not covered in the initial questions.

The final section, Section Five, focused on relating the specific land management practices back to the camps broader mission and values. These questions mirrored the questions in the second section, but this time the interviewees were asked to consider how their understanding of the mission, values, and faith tradition of the camp influenced the details of their land management and decision-making process. This part of the interview design provided a space for the participants to summarize their thoughts and confirm that the key points I gathered from the conversation were accurate (Rubin & Rubin, 2011). Another goal of this section was to better understand the connections between the cultural influences of the camp and the specific actions they were taking to become more sustainable.

To evaluate the effectiveness of the interview questions I conducted a mock interview to test out the questions. The participant for the mock interview was never a camp administrator but had worked as a program coordinator for a camp and served as board chair for that camp for multiple terms. The camp this participant worked at was not

part of the study, and the results of that interview were not kept or used in any way other than gauging what type of answers the questions would elicit from a camp professional. The participant also provided their insight into the validity of the questions and their perceived effectiveness at collecting the answers I was looking for.

This is a minimal risk research study. That means that the risks of participating are no more likely or serious than those encountered in everyday activities. The foreseeable risks or discomforts to participating camps include the sharing of opinions on land use management practices and how they reflect the camp's mission and theology. To minimize those risks and discomforts, I will not keep personal sensitive data, and the interview responses will be used in an aggregated fashion. Thus, no data will provide a means to identify respondents or their individual choices.

Analysis Preparations

There were two types of questions I hoped would be answered through the interviews. The first questions pertain to the administrative practices of the camps and specifically how they relate to their efforts of sustainability. The second set are about their land management practices. It was clear once the interviews began that these would both be important areas to focus on in this study because they inform each other within the fabric of the camps. So, I had to develop methods for analyzing the interviews in ways that would highlight both sides of the decision-making process.

I used the study "'Unfreezing' Year-Round Programming" as a guide for the analysis of administration practices at the camps within this study. The example study

examined the process required before a summer camp can implement successful winter programming. In the study, eight themes were identified as necessary components to achieving successful winter programming. Not all themes were necessary, but the study found that a combination made the programs more likely to succeed (Dabrowski & Breunig, 2019). I similarly identified themes in the administrative practices that led to the ability to implement sustainable land use practices. The eight themes were first identified in literature on organizational theory, and then sought for in the processes the camps used. The themes in my study were identified by the interviewees and then compared to the literature. To effectively identify and substantiate these themes, I implemented Grounded Theory throughout my analysis process to allow the findings to guide the results while still grounding it in past knowledge.

For understanding and reporting the practices in place to manage the camp properties, I used a borrowed coding system. A scale was previously developed in a study that evaluated local climate adaptation plans by coding those plans based on how they addressed each of a list of criterions developed in the study (Baker et al., 2012). I adapted the scale for use in my study. Instead of evaluating the mention and details of specific practices as they are found in documentation, I evaluated the description of the practices mentioned in the interviews against the details I found in the literature that discussed the significance of each practice. This use of the literature grounded the findings on the management practices in the literature.

Grounded Theory ensures that the information gathered through interviews and the results derived from analyzing those interviews is supported by other sources to avoid bias in the participants' responses and the investigators' observations (Corbin & Strauss, 1990; Eisenhardt & Graebner, 2007). An important part of the process is to consider the broader context that impact the focus of the study (Corbin & Strauss, 1990; Seidel & Urquhart, 2016). In this study of the sustainability practices at summer camps, I sought to understand the outside impacts to these land management practices, awareness of sustainability, and the cultural influences of the organizations. Another aspect of this study that Grounded Theory demands, is to understand the processes that have led to the current conditions (Corbin & Strauss, 1990). To accomplish this understanding of the past, I designed questions that prompted the interviewees to describe the processes they have seen lead to their current commitment and actions towards sustainability, and I relied on the literature of Organizational Change to support their assertions.

3.2 DATA COLLECTION

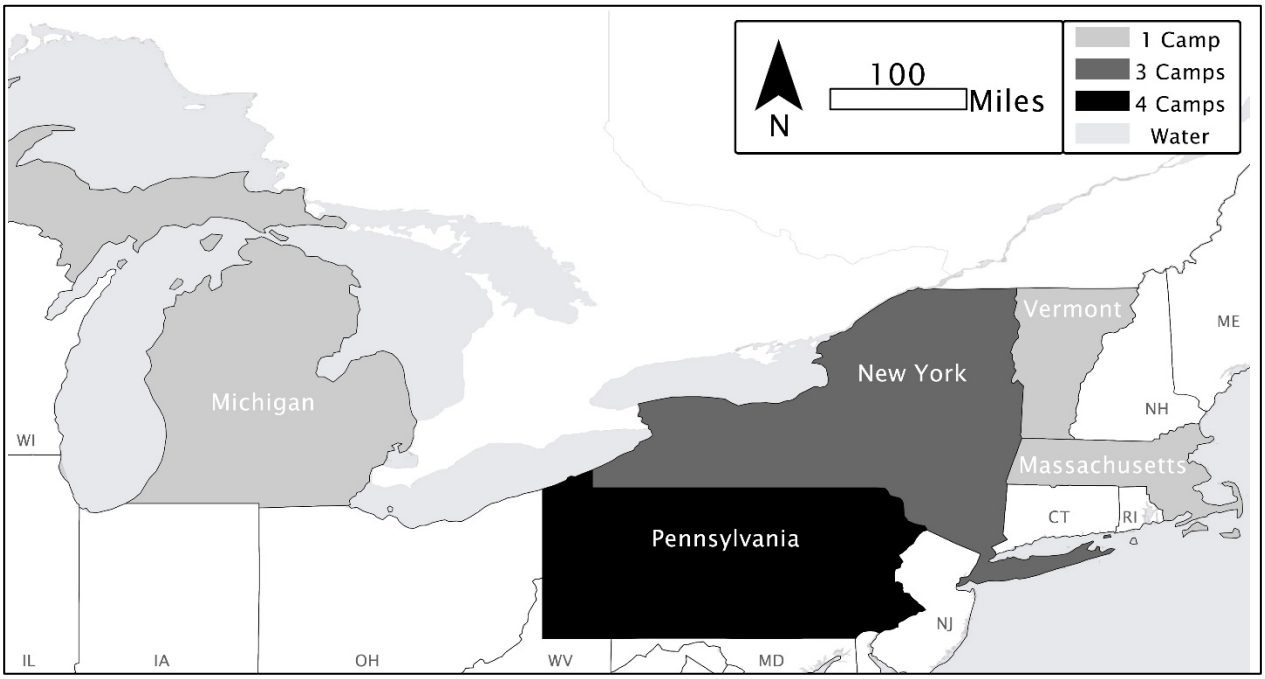
I conducted a search for summer camps that would fit the criterion for the study by searching through various databases which list camps. I evaluated the camps in these databases by multiple criteria including: 1) affiliation with Christianity or Judaism, 2) public commitment to sustainability, 3) Private land ownership, and 4) outdoor interactive programming in natural environments. These criteria were chosen for two important reasons. First, these specificities about the camps would allow each to

contribute to the findings on the Organizational Change Process because it would ensure the similarities in culture; these cultural influences should dictate how they value and care for their land. The foundation of understanding the camp cultures supported the second purpose to ensure comparability between all the camps to facilitate drawing conclusions and providing guidance on how to transfer desirable findings to other contexts. In my search for qualifying camps, I identified 40 camps that fit these parameters and would be good candidates for the study.

The invitation process began with an introduction email that established the research team and explained the intention and methods of the study. It also provided information about the Internal Review Board (IRB) approval. The first email simply asked if the camp administrator receiving it would be interested in learning more about the study and possibly participating. The email also made it clear that participation was optional and at any point in the study they could chose to discontinue their involvement for any reason. Camps that expressed interest were then given more information about the study as well as the informed consent form if they were ready to begin the process. Out of the 40 camps contacted, 14 responded and 10 agreed to participate. These 10 camps were spread across the American Northeast and Great Lakes regions with most being in Pennsylvania and New York as shown in Figure 3. Three of the camps were affiliated with Jewish faith traditions and seven with Christian traditions. Six of the Christian affiliated camps were connected to Anabaptist denominations.

Figure 3

Map of Study Area and Participating Camps



Interviews ranged from 40 to 90 minutes, depending upon the level of detail provided by the interviewees. At the beginning of the interviews there was a brief structured time for introductions and any further requested explanation. Some interviewees were curious about the origins of the study and the relevant experience I had in the camping industry, so introductions often went longer than anticipated. After introductions and answering any questions participants had, each interviewee was asked

to confirm they had read the informed consent document and then gave oral consent to supplement the written consent.

The first section of the interviews (Appendix A) where I gathered background on the camps often went quickly. With the participants discussion on the history and mission of the camp I was able to smoothly bridge this section into the second section about the camp's relationship with sustainability. The second section set the scope for the rest of the interview, as I was able to reference back to the answers provided in this section when seeking broader connections between their specific management practices and their camps values. The second section also supported the intent of the final section to function as a summarizing conclusion of the discussion. The mirrored design of the final section to the first helped the participants keep oriented in the conversation and tie everything back together.

The third and fourth sections that focused on the physical features of the camps and their management practices were the ones that varied the most in length and detail. While the interviewees were describing the camp's property, I had a map that I used to follow along. I either got the map from the camp website, if one was available, or I requested one before the scheduled interview. When a map of the property was not available before the interview, I viewed the property on Google Maps for reference. Two of the camps selected to conduct the management specific questions through the questionnaire while the other eight opted to use the interview format for that section. In the context of the interview, I gave the participants an opportunity to discuss the

management practices they implemented to maintain the seven land types. I would occasionally ask follow-up questions when necessary to get at specifics. These follow-up questions were generally based on the practices deemed important by the Penn State Extension program. The fifth and final section of questions recapped the conversation with broad questions about how these concepts all fit together in how the camp made decisions.

3.3 DATA ORGANIZATIONS

The interviews were conducted on Cisco Webex, a video conferencing software until the university switched to using Zoom, another video conferencing software near the end of the summer. After the interviews, I transcribed them to be analyzed. The software used to aid in the transcription process was Trint, a web-based software. The software transcribed the interviews but contained many errors, so I had to listen through the interviews and correct the transcripts. I still saved time in the end by using Trint despite the errors. There were also parts of the interviews where some nonverbal communication was important to the conversation, so I included that into the transcriptions where necessary. The inclusion of nonverbal communication was also part of my efforts to provide sufficient details for when I would begin to organize and analyze the transcripts. While a transcription never captures all that took place during an interview, it is important to approach the transcription phase seeking to preserve the discussion as much as possible without prematurely reducing or simplifying the text

(McLellan et al., 2003). After the interviews were recorded and the transcriptions were complete, they were uploaded to Microsoft Box, an encrypted, cloud-based storage system.

After the transcriptions were edited and finalized, I was able to start organizing the transcripts into a manageable collection. An important part of organizing transcriptions of in-depth interviews is labeling. The labeling process includes having headers with the interviewees information to keep them clear and therefore I started the interviews by gathering this information. Labeling also refers to making note of who said what and dividing the interviews into sections based on the topics (McLellan et al., 2003). I began by organizing them by the sections of questions and then sorted individual questions within so I could start the coding process. Because of the conversational aspect of the interviews, the answers were not always direct, and not always clearly organized, so I had to rearrange some of the responses to clarify them for analysis. Rearranging the responses supported the analysis process by organizing significant parts of an interview into categories that similarly answer the research questions and can lead to discernable patterns (Rantala & Hellström, 2001). A thematic analysis approach to synthesizing qualitative data can ensure insightful interpretations while keeping the findings contextually grounded, so I organized the responses in the transcriptions according to these themes (Lapadat, 2013). In the process of setting up the thematic analysis approach I was able to identify the sections and questions that best addressed the various aspects of

the study such as the history of sustainability, administration commitments to improved sustainability, or land use planning.

After the initial labeling and coding, I then set up a Microsoft Excel spreadsheet to organize the coded information from the transcripts. First, I organized all the answers to the background questions like position titles and how long the interviewees had been in those positions. Then I organized all the answers that pertained to sustainability, how they defined it, how they changed aspects of the camp and their decision-making process because of sustainability, and how they connected the value of sustainability to other parts of their culture. I also created categories for organizing their descriptions of their land features and the management practices they use to maintain them.

3.4 DATA ANALYSIS

With the interviews transcribed and organized into the relevant sections for coding, I began following the initial design. I started with the coding of background context for each camp and their relationship to sustainability including how they understood the term, and how it informed and was informed by their mission, values, and faith commitment. The parts of Section One of interview questions I focused on were the history of the camps, and the history of valuing their land as part of an earth-care approach. I also coded the mission statements and the context around these statements the interviewees discussed in a similar way noting the connections that were made between the mission and environmentalism. I was able to connect these details of the camps

history and mission from section one to their descriptions and stories of their commitment to sustainability in Section Two.

From the information in Section Two of the interview questions, in addition to information scattered throughout the rest of the interviews, I was also able to determine where the camps were in the process of achieving their sustainability goals. Combining insight from the literature about institutional processes of change and the interviewees themselves, I categorized the camps by where they were along the path to implementing sustainable practices. In Section Two, I also started to highlight parts of the conversations where the interviewees were discussing how they have gotten to this point where sustainability is an important part of their administrative practices and decision-making processes.

In Section Three of questions, where we discussed the physical context of the camp, I separated important information into two different categories. The first was the description of the relevant land types and any details that were related to the land management practices I chose to focus on for this study. The second was the various uses of these land types that the camps had incorporated into their programming. Separating the information into these categories helped provide the context explaining the purposes of their management choices.

In Section Four of questions, as we dug into the specifics of their practices, more details were provided that fit into these two categories, but much of the coding in this section was the details of their practices. I split the information on these practices into

categories which were relevant to the land management practices I was focused on and others. Some of the interviewees remembered other details relevant to the questions in the first two sections while providing this virtual tour of their property and I categorized the relevant information accordingly.

In the final section of questions, I focused on highlighting the information that shed light specifically on how the camps prioritized sustainability in their administrative practices. As the interviewees considered the connections between everything else we had discussed in the interview, they shared insights into how the camp made and implemented decisions and how changes typically happened in the various departments such as programming or groundskeeping. They also spoke to the goals they had in becoming even more sustainable and what lessons they are applying from their successes. There was a lot of reflections on how their other cultural values like environmentalism and religion played into these decisions as well. I paired the analysis from this section with the coding efforts from the first two sections as this provided some deeper context to those concepts.

After initial simplification and interpretation of the context of each interview I began searching for themes in the interviewees' description of how the camp's view of and commitment to sustainability has changed over time. After these themes were identified I collected the individual descriptions of each theme from the camps that listed them as an important part of their process. These findings were cross referenced with other sources from the literature on organizational theory and used to develop the

principles of the process of positive change towards sustainability goals within a summer camp.

The way I organized and analyzed the interviews created the categories that defined my results. The more organization that goes into these steps the more straightforward the process of arriving at meaningful conclusions becomes (Rantala & Hellström, 2001). I was able to identify important steps along the camps journeys to becoming more sustainable, and I was able to present findings on how they use and manage their land.

Chapter 4:

Results

From the analysis process, I arrived at conclusions that answer the three research questions I developed for the study, listed in Chapter One. To come to these conclusions, I only used findings that were reported by multiple camps and were grounded in the literature around sustainability, Organizational Change Theory, and land management. The findings presented here follow the categories I developed while coding and analyzing the interviews. There are four key findings from this study that together answered the three questions I developed:

1) Culture is a significant influence over organizational change
2) Camps committed to environmental sustainability and implementing Organizational Change had positive impacts sustainability of their camp
3) There are administrative practices that support change when organizations are becoming more sustainable
4) There are best land management practices that are both feasible and effective in the summer camp context

First, the results of this study corroborate the argument that culture is a significant influence over organizational change. The participants were able to point to examples where their cultural values of environmentalism and their faith traditions directly

influenced practices allowing them to achieve greater sustainability. Second, I found that camps who have made intentional commitments to environmental sustainability and have followed best practice strategies for implementing Organizational Change had positive impacts both on the overall sustainability of their camp, the increased awareness of their staff and campers, and the management of their land. Third, I identified a list of administrative practices that support the change process when organizations are becoming more sustainable; this list came from common themes that were reported by multiple participants and is corroborated by the literature. Finally, I identified which of the known best land management practices are both feasible and effective in the summer camp context.

4.1 ADMINISTRATIVE PRACTICES

I reached out exclusively to camp administrators for the interview, but a few of them directed me to other members of their staff as they would be able to answer my questions with further context. For seven of the camps I interviewed Executive Directors, presented in table 2, and then I also talked to two facilities directors, an outdoor education director and a finance and operations director, as these were the staff members at the forefront of the changes within the camp to become more sustainable. The executive director from Camp 1 had only had the job for 6 months at the time of the interview, so many of the changes had started before they came to the position. The co-executives from Camp 4 had been at their camp for 29 years at the time of the interview.

The range in knowledge is representative of the industry where some of the participants had a career of experience at one camp, some had a career of experience working for multiple camps, and some have recently started working in the industry.

Table 2

Camps and Participants

Camp	Name of Position	Time in Position
Camp 1	Executive Director	6 months
Camp 2	Executive Director	25 years
Camp 3	Facilities Director/Office Coordinator	1 year
Camp 4.1	Executive Co-Director	29 years
Camp 4.2	Executive Co-Director	29 years
Camp 5	Executive Director	5 years
Camp 6	Facilities Director	9 years
Camp 7	Executive Director	6 years
Camp 8.1	Outdoor Education Director	15 years
Camp 8.2	Facilities Director	15 years
Camp 9	Finance and Operations Director	8 years
Camp 10	Executive Director	1 year

For the first part of the analysis for this study, I sought to understand the practices that the administrators have implemented in how they manage the camp and make decisions. I compiled a list of these practices that were successful and looked for patterns in the context through which these practices were implemented. To understand this context, I explored the cultural influences behind the implementation of these practices. I learned how these practices supported the change process of the organizations and led to the execution of the land management practices.

Sustainability

Two of the early questions I asked these interviewees, after the initial background questions, asked them to describe their understanding of the term sustainability and how that understanding guided them in making decisions as an organization and as an administrator or other type manager. These two questions often elicited a lot of detail, so I condensed the responses into sentences capturing the main points the interviewees emphasized. For example, Camp 7 was asked by their denominational leaders to "look at [their] role in environmental sustainability, in fighting climate change and educating [their] campers on climate change." They also noted their camp was "very social justice oriented," which, along with understanding water scarcity, were initiating ongoing conversations within their educational programming, and they drew direct connections between these issues and sustainability. From these points, I summarized the organizations definition of sustainability as "fighting climate change, pursuing social justice, reducing ecological footprints, and teaching this to the next generation."

I then compared these summaries and identified areas of similarity in the definitions. For this study, I focused on the similarities, but there were important differences in the language some camps used to define sustainability. For example, most of the camps used language of stewardship of either the environment or the camps resources in general, but then distinguished stewardship from maintenance. Camp 1 understood environmental stewardship as being responsible for caring for and using the environment to the best of their ability, while environmental maintenance was maintaining the environment as it was when they first bought the property, something the camp sought to do to maintain their rustic identity. Camp 4 emphasized both using language of environmental protection and improvement and saw these as two different goals. Noting these differences, I synthesized four points from all the definitions which are shown in Table 3.

Table 3

Analysis of the Participants Definitions of Sustainability

	Camp									
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Resource Management										
Complete Resource Management	***X***				***X***	***X***				

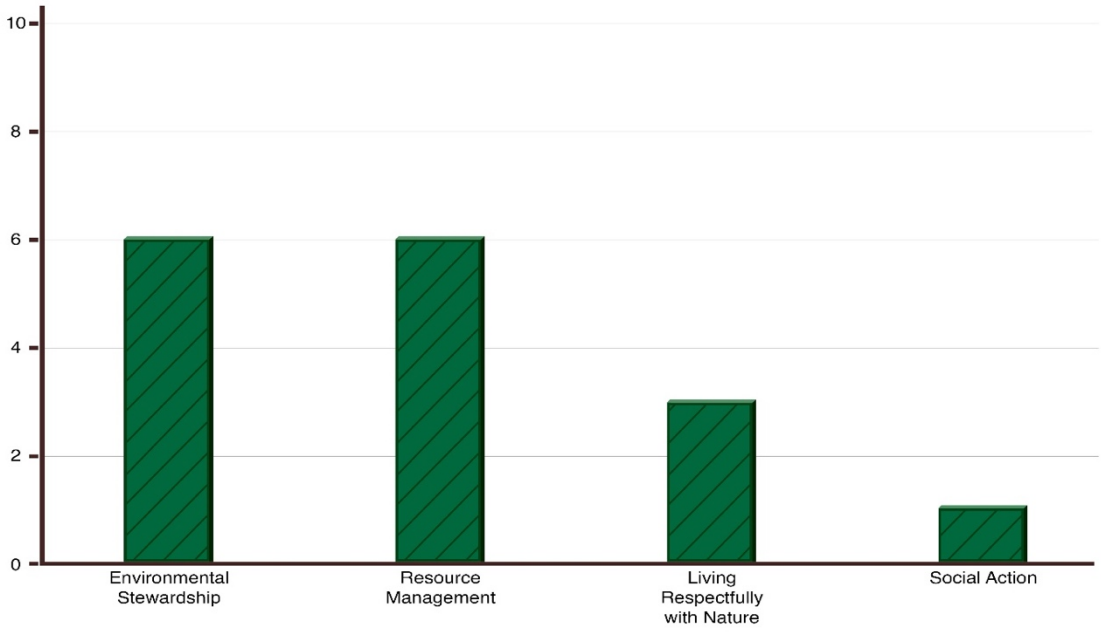
Reduce, Reuse, and Recycle		***X***						***X***		
Environmental Stewardship										
Environmental Stewardship	***X***	***X***				***X***	***X***			***X***
Environmental Maintenance	***X***									
Environmental Protection				***X***						
Environmental Improvement				***X***						
Social Action										
Climate Action							***X***			
Social Justice							***X***			
Education							***X***			
Living Respectfully with the Land										
Living Respectfully with the Land			***X***	***X***					***X***	

Figure 4 shows the respective proportion of agreement on each of the four points. The most agreed upon aspect of sustainability for six of the ten camps is resource management and specifically environmental stewardship. Some camps understood as either being a steward of all the resources the camp has such as environmental, built, or financial resources. Camp 5 identified stewarding their staff and seeking sustainable staffing was fundamental to their understanding of sustainability. Others saw resource management as being responsible with their part in the lifecycle of material resources by being intentional in reducing waste, reusing what they can, and recycling what they

cannot. Three of the camps understood sustainability to be living respectively with nature. Camp 3 said the goal of their commitment to sustainability was “to live in harmony with nature in a way that [would] allow the camp [to] continue to be here in the same way for future people and campers.” Camp 4 and Camp 9 emphasized the moral aspect of their understanding of sustainability which was predicated on respect of the natural world they operate within. As mentioned earlier, one of the camps understands social justice to be a vital component of the definition of sustainability.

Figure 4

Participant Definition of Sustainability



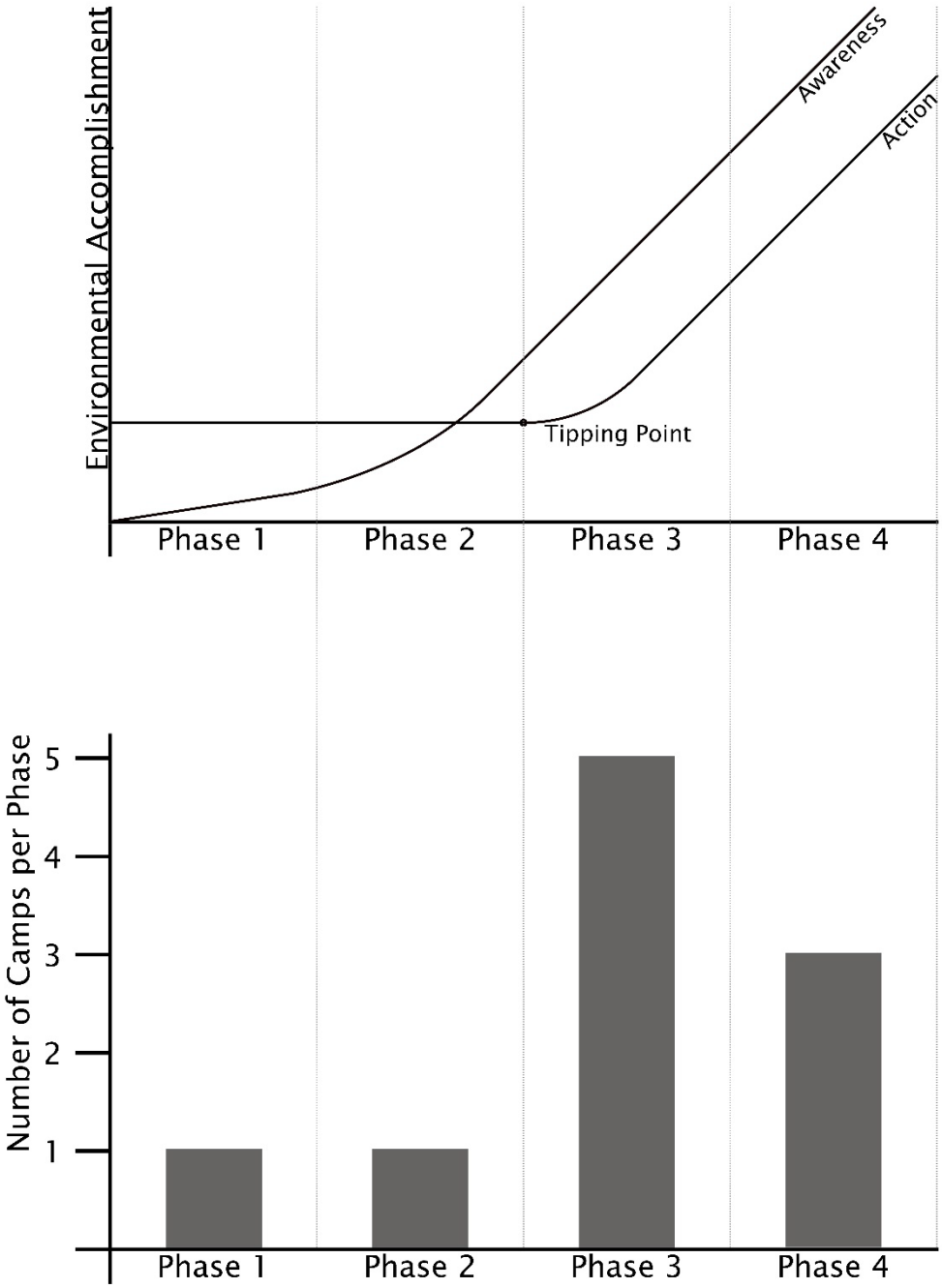
Organizational Change

After I asked how the camps understood sustainability and what it meant for their decision-making process, I asked how their understanding and commitment to sustainability had changed over time. All the camps had stories to share of the camps being set up as a place for offering children religious education in an outdoor setting, so the land was an important part of choosing the locations when building the camps. However, all but one of the camps reported that environmental sustainability has become more important to their camp recently. Camp 1 said, that while they have not seen a decrease in awareness at the board and leadership level because the "board has always understood the importance of the land," the camp used to have sustainability education built into their programming, but this has been lost in the last few years, and their campers are no longer given the opportunity to fully appreciate the work being done by the camp. Some of the camps (3, 4, and 7) have longer histories of sustainability where almost from their beginnings there were movements within their denominations raising awareness, pushing camps to become places to live out this aspect of their faith. While others have more recently made it a priority because of the expertise or promptings from their staff members, or a recognition that it is in the best interest of the camp's long-term success.

No matter when the camp first made a commitment to environmental sustainability, they all found that getting from the initial commitment to being able to implement truly effective practices was a process. Figure 5 is an abstraction of what the

change process looked like for the camps. At some point, each of them made their commitment and, since then, are increasing their own awareness to the challenges and solutions inherent to sustainability. Those that have made significant progress reported that at some point there was enough institutional awareness to start increasing the actions needed to achieve their goals of sustainability. So, the delay foreseen in the literature where action is constantly behind awareness was proven again during these camps' change processes. Below the line chart in Figure 5 is a bar graph that shows where the camps interviewed are along this process. I broke the process into four phases so I could determine which identified practices appeared in which phase.

Figure 5


Environmental Accomplishment
Awareness
Action
Tipping Point
Phase 1
Phase 2
Phase 3
Phase 4
Number of Camps per Phase
1
2
3
4
5
Phase 1
Phase 2
Phase 3
Phase 4

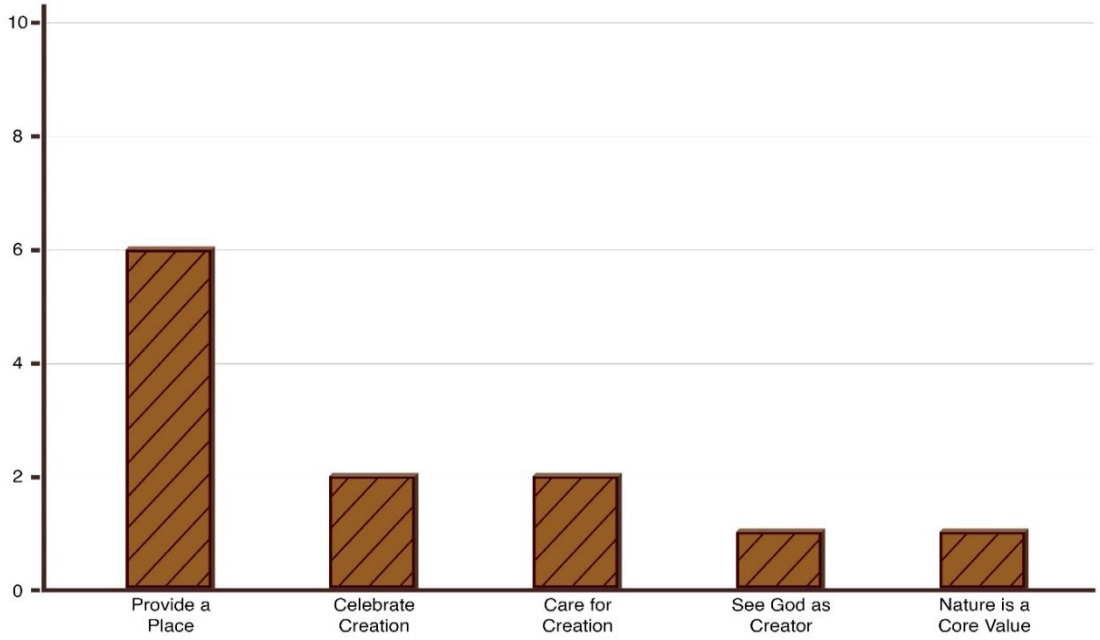
Both phase one and phase two had only one camp. Camp 10 hired a new administrator a year ago because they had just made a commitment to sustainability and the new hire had the expertise needed to make the changes desired. Camp 8 has staff members who have worked at the camp for a while and who have been raising the environmental awareness of the camp board and administration. Half of the camps have recently passed the tipping point and are still in the process of learning and trying new things but can do so with support from the whole community. Three of the camps are at a point where they reported an entire cultural shift where sustainability has become a fundamental part of the decision-making process for the administration and the staff members. The method of analyzing the camps by the phases they are in relies on Kurt Lewin's change model (Dabrowski & Breunig, 2019). As described in the literature review (See Chapter Two), the change model has five stages in the process organizations must go through to successfully implement change.

A crucial part of the process came from creating awareness of what sustainability is and what it meant to each camp through taking action to achieve goals influenced by their unique cultures. The camps strive to have their cultural values permeate every aspect of the organization, so I asked multiple questions about the camp's culture and its impact on their understanding of commitment to sustainability. I isolated key points from their mission statements that referenced their commitment to the natural environment and present these in Figure 6. Six of the camps' mission statements emphasized that a

fundamental responsibility of the organization was to provide a place in a natural setting. Camp 10's mission statement ends with "…in a wooded setting," so most of the camps recognized in their mission statements that having a space in the natural environment was crucial to their mission. Two of the camps had either celebrating or caring for creation explicitly written into their statements, and one had a goal of helping campers see "God as creator" in theirs. One camp did not have anything about the natural world as an explicit part of their mission statement but did list nature as one of their core values that supplemented the mission statement. Two camps had no explicit language referencing the natural world in their mission statements or other supporting documents.

Figure 6

Connection Between Mission Statements and Land Management



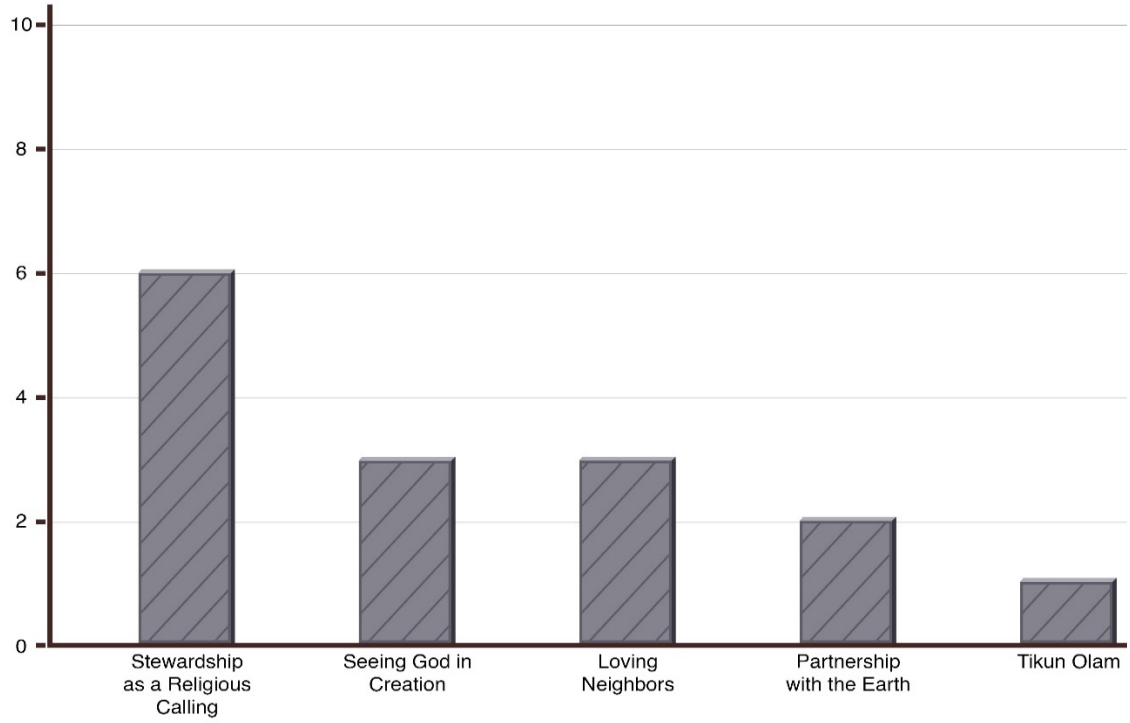
Some of the camps have also integrated their commitment to sustainability into their curriculum. Typically, this integration happened through environmental education times built into the schedule where campers were taught about sustainability and what the camp was doing to become more sustainable, including the way they used and managed the land. Camp 5 offers hay wagon rides for weekend groups that takes the visitors into the forest, and this often is accompanied by a staff person explaining the forestry management practices the camp has implemented. Even the camps that did not have explicit connections between land management practices and the camp programming reported that campers or other guests that would ask questions about various land management issues were enthusiastically answered by staff. All the camps were able to share other ways they connected their commitment to sustainability to their programming and camp culture. For example, Camp 7 got a grant to install LED lighting which required the camp to put up informational material explaining the benefits of the new lights. They turned this project into a competition one week which had the campers learn all about the benefits of the new lights and design posters to hang up describing them.

Since each of these camps were affiliated with a specific faith tradition, each camp's culture was also greatly influenced by the values of their faith. Similar to the definitions each camp gave for how they understood sustainability, I went through their discussions on how their faith influenced their commitments to sustainability and identified reoccurring key points. These key points are presented in Figure 7. Six camps referenced their understanding of sustainability as good stewardship and saw that as a

religious calling. Many of the camps referenced passages of scripture, such as parts of Genesis, where humanity is called to tend to the created world. One of the staff members of Camp 8 said, “there are enough passages about wasting, about taking care of animals or about taking care of the whole world, so, it’s the idea that we are guardians of the world as opposed to using the world just for our own playground that we can do whatever we want with.” Out of the four camps that did not speak of a religious requirement or calling towards environmental stewardship, three saw the connection in the commands to love one’s neighbor. Camp 5 said, “when the Bible says love your neighbor, we would understand that to say we love our neighbor and we love our neighbors’ grandchildren… [sustainability] is not a hobby, it’s not a tree hugger activity that we do on the side, it’s really central to who we are.” The last camp that did not bring up either of these as the main influence their faith had on their commitment to sustainability was one of the Jewish camps. For them, the primary influence was the concept of Tikun Olam which they describe as “leaving the world a better place and repairing the world.” So, six of the camps see their responsibility to honoring the Creator by stewarding creation, three see their responsibility to honoring others by loving their neighbor, and one sees their responsibility directly to the world by repairing it and leaving it in a better condition. Understanding the differences in the cultural influences at each of the camps can explain some of the differences in sustainability priorities and practices; while understanding the similarities can help identify the practices that are effective in more than one context.

Figure 7

Connection Between Faith Traditions and Land Management



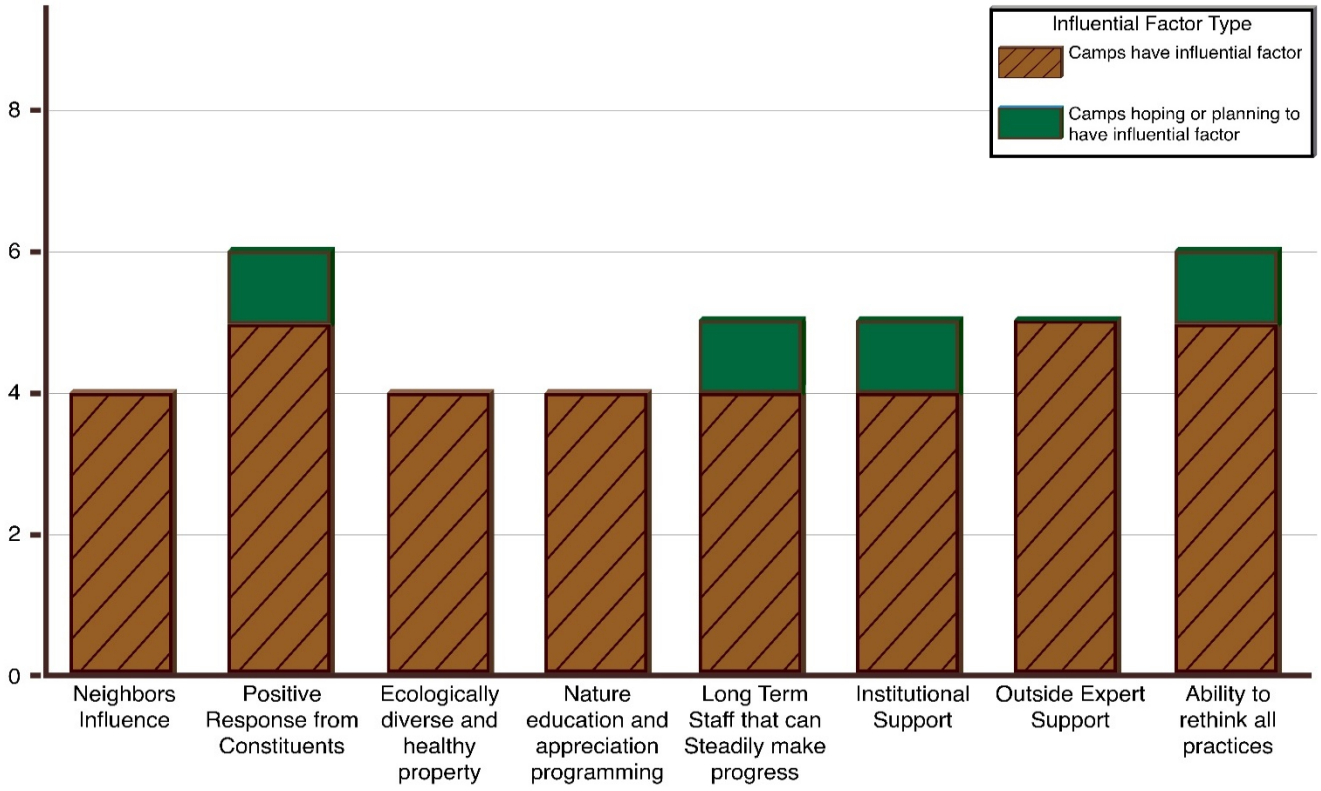
Best Practices

Through the conversations about sustainability, how the camps understood it, how that understanding has changed over time, and how it connects to their organizational culture, eight influential factors were identified. These factors are aspects of the camps that led to or made it easier for the camps to pursue sustainability as a goal and implement actions that would get them there. The specific influential factors either were

mentioned specifically by four or more of the camps, or they were derived from recurring themes in the interviews, or both. Figure 8 lists each of these influential factors and how many of the camps mentioned them as being a part of their process in achieving sustainability.

Figure 8

List of Administrative Practices



The first four influential factors are all aspects of the site and location, some of which are at least partially out of the control of the current camp administration. Four of the camps discussed the influence their neighbors have had on their process to becoming more sustainable. The agreement was that when neighbors are invested in the management practices of the camp and how their own properties will be affected, the camps put in the effort to address any concerns and try to be better neighbors, which means being more sustainable with the land. For example, Camp 3 used to spray for weeds, but their neighbors asked them not to and they have since stopped and are currently in the process of figuring out a better method for controlling the weeds without polluting. Other camps were not doing things that upset their neighbors but were inspired by their neighbors to be better. Camp 4 is situated in the middle of a state forest, so their neighbors set a standard of land care they aspire to. Camp 3 also has a church nearby that is inspiring them to think about sustainability, as this church has solar panels, and they give the camp some of their excess electricity. Other studies that have demonstrated the potential for neighbors, like this church, to influence the environmental behavior of others, specifically around working together to solve environmental problems that are impacting the whole community (Videras et al., 2012).

Like the positive influence from neighbors, four camps also noted that getting positive responses from their constituents, especially their younger staff or parents of their campers was a big factor in taking sustainability seriously. Camp 9 emphasized the influence the younger staff of the camp has had on persuading the management to make

sustainability a priority and told the story that "when [they] announced that [they were] doing composting, [the] staff stood up and cheered in the dining room." Camp 8 recently installed solar panels on their barn and have incorporated that into their educational programming. Since they started, they have received positive feedback from parents whose children shared all they learned about them at camp. Camp 4 is the camp who noted this factor was something they were still working at. They have received positive feedback from staff and some visitors, but they recently installed low flow shower heads and received complaints from some of the retreat group guests, and they wanted to do better at making sure guests are aware of the benefits of their changes because they often only hear the complaints. There are examples of studies that have explored the impact employees can have on organizations and these findings agree with what others have found; when employees can demonstrate that the environmental changes are in line with the existing values of the organization the administration is more likely to implement the desired changes (Onkila, 2017).

Other factors that four camps noted as being influential in making sustainability a part of their culture was the existing ecological diversity and health of their forest and the emphasis or connection this had in their programming. Camps who can see existing value in their natural features and have utilized these values through their programming seemed more likely to work to preserve them. Camp 10 has a forest that is not very healthy, and they are working on removing invasive plants that make up much of their understory. However, they have the only forested area in their township, and they want to be able to

offer that as an amenity to their community. Camps who have a culture and history of environmental education were able to use this culture to bring up the conversation of sustainability and tie it directly into their mission. Camp 1 is currently located on what used to be their adventure out camp site. They had to sell their original property but moving to their new site has engrained the rustic values and programming of the adventure camps into their identity which has pushed them to care for their property. The way we use our environmental context to define our identity is important for shaping environmental behavior because our identity is fundamental to our behavior. Identity is shaped by the cultures we are influenced by and the way these cultures value the environment, so when a cultural value of nature exists within an organization it is more likely for the organization to put effort towards caring for the environment (Owen et al., 2010).

The rest of the factors are things that administrators can choose to pursue, such as promoting management staff retention, ensuring new staff can spend more than just a couple of years working for the camp. Camp 5 said that this factor was foundational and that they would never have been able to seriously tackle sustainability issues without getting this right first. Before they decided to seek sustainability for the organization within their staffing, the longest a fulltime staff member had spent at the camp was four years. They recognized that “when the camp was turning over staff at a very high rate and every person that left was burned out and couldn't wait to leave and was underpaid and overworked, [they] just couldn’t address issues of sustainability in terms of anything

because [they] were not sustainable." Researchers are beginning to explore the connection between staff retention and improved sustainable practices within the organization and the findings suggest that when employees are satisfied and committed to a future with the organization they are more eager to support the environmental management plans of the organization (Wagner, 2013).

The next two factors both address where camps seek influence from outside of their organization, either from other institutions or from outside experts. Camps 3 and 7 said they have looked to their denominations directly for support in their process of becoming more sustainable, while camps 4 and 5 both were able to lean on other camp networking institutions to learn best practices. Camp 4 also has a partnership with a university who operates an outdoor environmental education program on their property. Through this collaboration they have worked with the professors to develop management plans to be better stewards of their land. Camp 7 has a creek on their property that is classified as an exceptional value creek, so they have developed a relationship with their state's Department of Environmental Protection to develop a restoration plan for the creek. Through this relationship they have received advice and management strategies for other parts of their property, and they have had experts come lead classes teaching the campers about the creek and forest. The literature around environmental cooperation between organizations and experts alike reveals the complexities found in this study, however there can be a positive environmental outcome from these efforts of cooperation as demonstrated in this study. (Yu et al., 2020).

The last influential factor is also the most important. Having the ability to rethink the camp's practices in order to achieve better environmental sustainability is critical for being able to implement effective changes. This factor is a direct result from identifying and understanding the implementation of the other beforementioned factors. As camp 5 mentioned, once they had achieved sustainability in their staffing, they had long term staff that developed a deep sense of care for the property and had the time and energy to begin to improve it. When camps receive positive responses from neighbors, staff, and guests, they are inspired to rethink other ways they can make similar changes; having perspectives outside their organization can help them identify effective strategies to adopt. None of the camps mentioned every one of these influential factors in their interviews, yet they are each still successfully in the process of becoming more sustainable. So, these are not requirements for camps to become sustainable, but some combination of them makes the journey easier. In the literature, this action of rethinking all current practices is at times referred to as organizational learning. Using organizational learning to improve sustainability is an intentional process of creative or abstract thinking to question the sustainability of current practices while trying innovative new ways of accomplishing goals. This factor keeps organizations from getting complacent and in turn improves all aspect of the organization's culture and outputs (Lozano, 2014).

While these factors are a list of features that existed as part of the context of these camps, it can also serve as a guide for other camps who are seeking to make progress on

becoming more sustainable. The list is supported both by the experience of the camps in this study and by the literature on Organizational Change and sustainable management. It is not a comprehensive list, as there were other factors raised by only one or two camps, but there was not enough supporting data to include them as influential factors.

4.2 LAND MANAGEMENT PRACTICES

The following examination of management practices and history of sustainability is pulled from the parts of the interviews that was establishing context. The focus of the interviews was the management practices themselves. I started by seeking to understand the land types that the camps had and how they used them before asking questions about management. This context painted a picture of what land management looks like at these camps, and how it ties into their commitment to sustainability because conditions and uses of land correlates to the selection and intensity of management practices needed (*Best Management Practices for Pennsylvania Forests*, 2017). Context was important for understanding the specific practices each camp had implemented and how these practices may be similarly applied by others.

Context

Two of the camps do not have any lake or pond, another two camps did not have any streams, rivers, or creeks, and all but one camp had a garden. The rest of the land types are found at each of the camps, and all the camps had at least six of the seven land types. Despite some of the camps not having each of the land types, they each had

enough to be beneficial case studies in this project. Even though each of these camps are in the same bioregion, there were still variations between the land types across the camps. For example, some camps were located off the shore of a natural lake, and some on a lake that was made by damming up a river, while others had dug out man-made ponds. Similarly, the forested areas at some camps had previously all been clear cut, while others had forests with minimal and non-invasive tree removal. One of the camps had a forest that was primarily made up of ash trees, so they recently lost a significant number of trees to the emerald ash borer. Another has a forest that has never been clear cut, yet is overrun by invasive species. The sizes and conditions of the built features like gardens, parking lots, or trails also varied greatly. The largest garden was half an acre while the smallest was only five raised beds, and some camps had paved parking lots that could fit more than 60 cars while others use grass fields for parking.

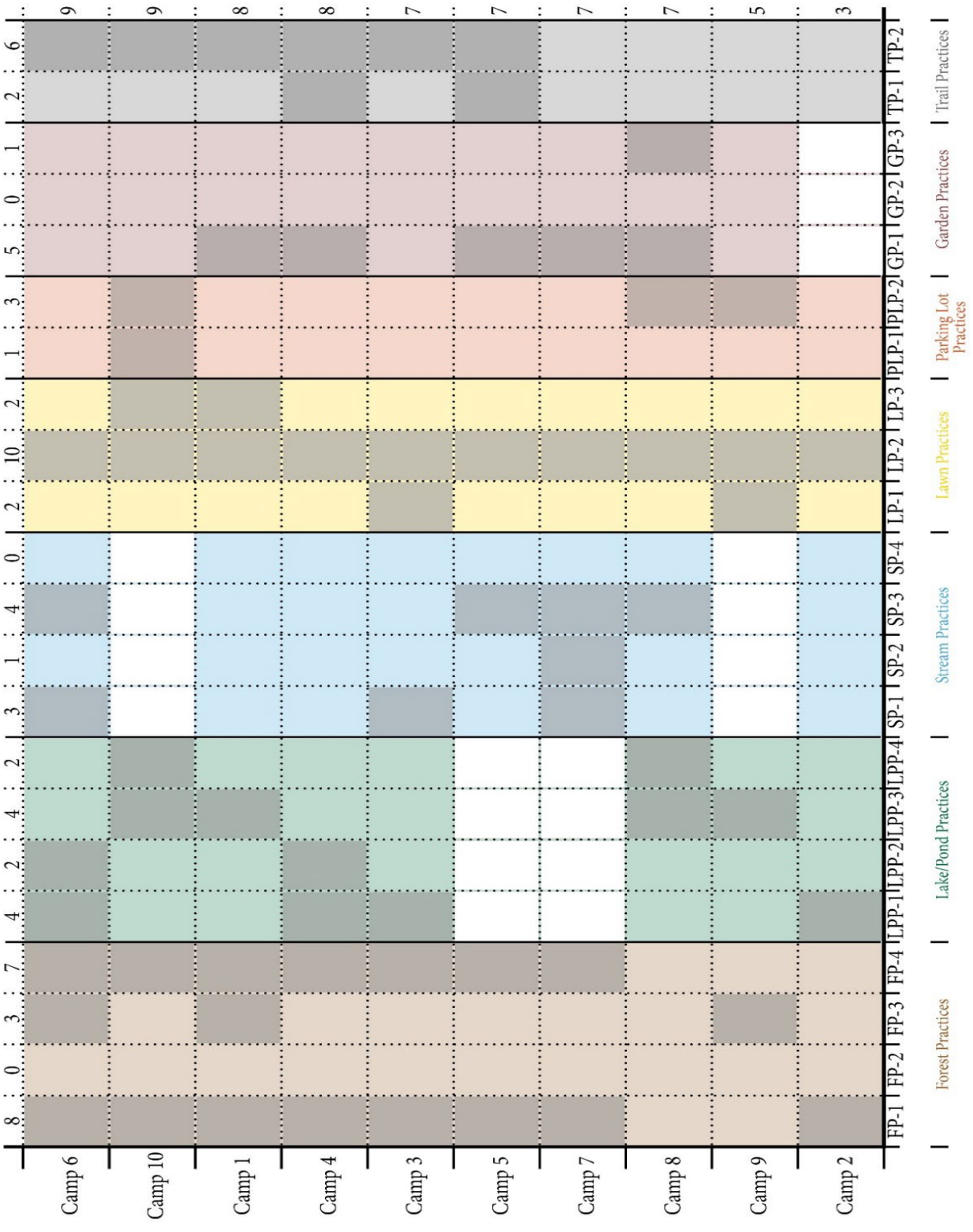
There was more continuity across the camps in how they used the various land types. A lot of the camps use their lakes or ponds for swimming which means they have specific health factors they must comply with that impact the land management practices they can use. Each of the land types are used primarily for a source of cultural ecosystem services, recreation, and education. The forest is also used by many of the camps as source of income from logging, and the gardens provide food either for the staff or for the whole camp, so they are also used for their provision ecosystem services. Understanding how the camps use the land types and what their current conditions are helps to explain why camps chose to emphasize certain management practices over others.

Best Practices

In the interviews we discussed the practices for one land type at a time. I first asked what practices they used to care for each feature. After the interviewees shared, I then asked specifically about any practice they did not mention. Figure 9 shows which camps are using which best management practices. The graph is arranged with the camps that are implementing the most of these practices at the top and ones who have implemented the least at the bottom. Camp 6 has implemented nine of the best management practices, and this camp is in phase 4 along their progression towards becoming more sustainable meaning they are ready as an institution to start implementing bigger changes under leaderships guidance. Another camp that is in phase 4 was Camp 4 which has implemented eight of the practices. Camp 3, which also has eight of the practices is in phase 3, and Camp 5, the other camp in phase 4 has seven of the practices.

Figure 9

List of Land Management Practices and Implementation



While Figure 9 does demonstrate a correlation between camps that have successfully made the shift to focusing on sustainability and management practices of their land, there are gaps in this presentation. Camp 5, the camp in phase 4 with only seven implemented practices do not have any lake or pond, which the other two camps in phase 4 do and they each have two management practices for this land feature. Excluding the lake or pond practices, all camps in phase 4 have implemented seven practices each.

Another factor that must be considered when analyzing this data is the need for these practices. Two of the camps in phase 4 have management practices to address erosion along their creeks, but Camp 4 does not. This is not an oversite for Camp 4, because they determined there was not erosion or any other issues with their stream that need immediate attention, so they can focus on other areas. Most of the camps had similar stories where they have not implemented some of the practices singled out in this study because they always had some level of awareness and protection for parts of their land. This finding reinforces the idea that having a history in the camp culture of valuing and protecting the land makes it easier to consciously become more sustainable, because there is already a foundation to build on. The finding also explains Camp 10, one of the camps in phase one along their process towards becoming sustainable that has implemented nine of these management practices. Camp 10 is the one which recently hired a new administrator who has begun to make sustainability a priority and has developed plans and begun directing resources into land management. So, while this

camp is doing a lot, most of these are practices only just begun, and they are still doing the work to prove to their community that this is an important new direction.

Despite these gaps in the comparability, there is a lot that can be learned from this data. There are three practices identified that were not implemented by any of the camps. This finding demonstrates that these are not things any of the camps interviewed have considered. Regular watering was not a practice identified by any of the camps, so it seems the gardens in these regions get enough water naturally, so setting up water collection systems would not be practical. The other two practices not implemented by any of the camps, forest edge management and stream aeration, were simply things that none of the camps had reportedly considered. This suggests that either the benefits of the practice are not known to the camps, or they are not needed as the forests' edges are healthy enough and the streams have enough oxygen.

Some of the practices only had one camp implement them, and these all are situations where only this one camp has a need for these practices. For example, the only camp to implement a parking lot runoff management strategy was the only camp with a paved parking lot. Also, only one camp has implemented measures to keep their stream shaded, but the rest of the camps have not had to worry about it because most of their streams are in the forest and not at risk of losing their shade. The other interesting finding in the lack of camps implementing a practice is the rotation of plants in the gardens. The only camp that regularly rotated their crops was the one with the half acre educational farm.

Only one of the practices was implemented by each of the camps, and that was sustainable mowing practices. For many, sustainable mowing just meant considering how much they were mowing and making sure they were only mowing when they had to. Some of the camps, however, have taken it farther and have begun to turn parts of their lawn spaces into meadows which they only mow once a year. This practice has led to greater biodiversity on their camp and has created new and unique areas for nature education.

The next most common management practice is developing a forestry plan that includes logging, followed by taking an inventory of the species the camps have in their forests. It is encouraging because, as noted in the literature review, these two practices are important first steps for private land managers to take to develop their priorities and routines for maintaining their property. This finding also shows that there is a lot of experience in these practices with success stories that can be shared.

Chapter 5:

Discussion

The findings of this study contribute to the growing awareness in the summer camping industry on the importance of sustainability as well as the necessity of understanding how landholders manage their property. In this chapter I provide interpretation on the findings of this study that are grounded in the literature. I also provide commentary on the findings that extend beyond scope of this study, examining the implications on the areas of context I set up for the study within the Literature Review, Chapter Two. The summary of my findings alongside an acknowledgement of the limitations from this study maps out the need for further research. I conclude this chapter with my proposals on what questions related to this study should be answered next.

5.1 TRANSFERABILITY

The intended application of this study is to identify strategies that have led to camps' success in their journey towards becoming more sustainable, so these strategies could be transferred and implemented by other private landowners. I explored the camp's strategies from two sides, the organizational changes that allowed for sustainable decisions to be made and the practices that achieved more sustainable land use. The important part of considering which practices would be best to replicate is the context in

which these practices were successful, so I will be providing examples of the promising practices explained within their context.

Administrative Practices

Practices at the administrative level that came up in the interviews could be replicated at other camps and organizations that own and manage land. As mentioned earlier, the influential factors that were identified are not all required for an organization to become sustainable, but they are areas that should be considered. Some may be more attainable than others for certain organizations, so selecting a few to pursue would be a good first-step in the cultural shift towards centering sustainability within the decision-making process.

Outside expert support was the factor that was reportedly most impactful for those camps who had it. For Camp 4 and Camp 7, these outside experts got involved in helping with the decision-making process almost randomly, while other camps have sought out outside experts. Because the state took interest in Camp 7's exceptional value stream and has helped the camp develop a stream restoration plan, those connections are now important voices the camp trusts. When the camp realized they were going to continue to lose many of the trees to the emerald ash borer, the camp reached out to their contacts at various governmental agencies for help, developing a plan to replant new trees in hopes to ensure there is still a forest there for future generations of campers. Camp 4 partnered with a local college to run outdoor educational camps on their property; this school has become a key part of their decision-making process. All the trails at the camp were

constructed and are maintained by the college, and recently there seemed to be an issue with the camp's white pine trees and they had a tree expert from the college look at it. Their relationship with the college inspired them to make more connections, and when they wanted to do some more logging, they reached out to the forest manager of a nearby state forest that developed a logging plan that was lucrative while also benefiting the forest. Camp 10 has recently hired an ecologist to be a consultant for their maintenance team. Together, they have a plan to restore the forest parcel by parcel.

Just as this influential factor of having an outside expert support land management decisions has played out differently for each of these camps, replicating it elsewhere will also look different. What we can learn from these examples is that there are likely always other organizations that care about a parcel of land just as much as the owner. There may be mutually beneficial partnerships that can be formed around this shared value, such as a college running outdoor education programming or state agencies working to improve the watersheds the land is a part of. Even if a partnership of this nature is not an option and landowners have to pay for outside expertise, it is still worthwhile. Camp 10 is starting with restoring the forests that are visible to their guests with the long-term plan to develop more trails and become a place for the community to come and enjoy nature. This effort will, in turn, increase the visibility of their organization and increase their number of campers. The details of how outside experts best support(ed) the camps was different for each, and it took time to find a relationship that worked, which is to be

expected (Yu et al., 2020). When seeking to implement this factor in other contexts, it is important to understand that it is a complex process.

Other Influential Factors

There are likely more influential factors beyond the eight identified in this study that would support a camp or other organization in their process of becoming more sustainable. There were some practices reported that had been implemented at only one of the camps and did not fit into any of the identified influential factors. With further research, more examples of organizations implementing similar practices successfully may be found. One specifically interesting practice was reported by Camp 5. When they decided to develop a forestry management plan, part of that plan was a forestry stewardship team. The team spends one weekend a year walking through the forest marking trees to be taken down that year. The team is made up of both foresters and members of the camp's community that care deeply about the value of the forest; the team follows a set of parameters, such as they cannot take down any tree that is within a certain distance from a hiking trail or another tree that will come down the same year. However, they can still spend about 15 to 20-minutes arguing over which trees should be taken down, each debating the aesthetic, environmental, or economic value of the tree either being left alone or cut down. The executive director said forestry weekend was one of his favorite weekends of the years, and he tied it back to the Anabaptist tradition of the camp where they value community consensus in all discissions, even in which trees should be logged. It is this connection between values and land management I sought to

uncover through this study as it sheds light on how decisions are made, and sustainability is achieved.

Land Management Practices

Transferability of land management practices would likely be more straight forward than for the administrative practices. Trail erosion, for example is something that six of the camps have strategies in place for addressing. Erosion is an issue that does not vary much based on the context so what works in one location typically works in another. However, there are important differences that should be considered based on the context of what the land types are used for and what the historic conditions of the land and the larger ecosystems have been. It is also important to remember that the list of practices used in this study is not conclusive, so these findings should not be taken as the full scope of practices to be considered.

Another practice that was of great benefit to the camps who employed it, and could be done anywhere despite the context, is taking inventory of the site and using that to develop management plans. Seven of the camps did this to some extent, and all of these were aware of the invasive species that posed threats in their forests. Some were also aware of the animals that called their property home and used that knowledge to target their efforts to support these species. One camp in particular, Camp 6, has a natural fen which is home to Mitchell's Satyr Butterflies, an endangered species. They have worked with various agencies to ensure the habitat remains viable for the species and that has directed the way they manage the surrounding areas as well.

When implementing land management practices, understanding the cultural and environmental context of the land and how the land is used must be considered (De Vente et al., 2016). The objectives and values of those implementing the practices as well as the intended uses for the land have impacts on the effectiveness; in certain ecosystems or regions some practices may cause more detriment to the land or the surrounding region (Darvill & Lindo, 2016; Dickson et al., 2014). The results of this study demonstrate the importance of context. The prioritized ecosystem services, land uses, and the most crucial needs of the land were all key factors in the decision-making process and all specific to each context. When using the successes of other organizations and landholders to develop a list of practices, the context and differences need to be acknowledged, but there are often still principles that can be transferred from other contexts.

Other Management Practices

There are other practices examined in this study that could be transferred if the important contextual differences are considered. Some of the camps in the study have been intentionally trying to reduce the amount of mowing they do and have decided to let some of their open space become natural meadows. They now only mow these spaces once a year and they become habitats for many more species and have been included in the educational opportunities of the camp. However, these had to be spaces that were not being used as open playing fields for the program, and the camps did the research into what species would benefit the most from a meadow to ensure that the spaces would have the greatest impact. Contextual factors would differ from camp to camp.

There were other management practices implemented by the camps that were not on the list I developed for this study and many of these could also be replicated by other organizations to achieve greater sustainability. A few of the camps have plans for planting trees and other native plants to combat the invasive species and guide the forests in a way that is beneficial for both the camp and the forest. Some also organize volunteers to come pull out invasive plants as well. I also did not include proper practices for dredging lakes or ponds as part of my study, but many of the camps who have lakes or ponds reported that dredging is a primary aspect of their maintenance of those features. They have also found best practices that work for them, such as how often dredging should happen, and that when they drain the lake it is a perfect time to remove invasive plants like cattails.

Another part of land management that could be shared and replicated elsewhere is the process behind the land management. As with many camps, each of the camps in this study had maintenance staff members who oversee the management (Stryker, 2012, 2017). Some rely largely on volunteers, some hire seasonal staff, and others hire outside maintenance firms to do the work. Each of these various strategies are best suited for the specific camps, and other organizations may be similar enough to benefit from the same or similar strategies. Some of the camps are not open during the winter, so seasonal staff are the best option. For these camps the busiest time of the year is when they are getting ready to reopen the property and there has been no maintenance for months, so having a volunteer force to help on weekends for a month before summer may be best. The

decision-making process also varies by camp based on organizational structure or context. For some of the camps the decisions are made in tandem by the executive director and facilities director, in others the facilities director has more unilateral control. Many of the camps reported having a continually running list of things that needed to get done, and the facilities director was responsible for prioritizing the items on that list and delegating the work to either the staff or the volunteers.

Some of the camps discussed their own successes in replicating practices from other camps. Camp 5 was first inspired to make real progress in becoming sustainable by Camp 6, and since then they have continued to share successful ideas back and forth. Camp 5 has also built a sawmill on their property so all the lumber they use for their various building projects are sustainably harvested on site. This harvesting process has allowed them to design and build sustainable cabins at a relatively low cost. They have shared the plans for those cabins with other camps, but without their own sawmill and 200 acres of forest to harvest the trees from, the plans may be out of the reach of many camps. The executive director reflected on this saying, “I know that it's not a transferable concept 100 percent, but you can transfer some of it.” Finding similar organizations that have met shared goals of sustainability and replicating practices from the administration level all the way to the specifics of land management can save landowners from repeatedly reinventing the process.

5.2 OTHER FINDINGS

As discussed, in the literature review, the context of this study was complex because I sought to understand the process by which private landholders implement sustainable land management practices using summer camps as a case study. The results and conclusions I have arrived at using the literature around topics of sustainability and Organizational Change can add to the discussions around these fields of study. These areas of interest fall outside the scope of the research questions that guided this study, but are worth noting because it highlights how this study is part of larger fields of learning. The most important areas of interest are the influential fields of study I explored in my literature review (Section 2), and I briefly explore some of these important points of discussion in the context of these fields.

Sustainability

For each of the camps in this study. land management was only one aspect of how the camps were addressing issues of sustainability. Some of the other methods were addressed earlier, but it is important to note that this is not a comprehensive study of what sustainability efforts at summer camps look like. Practices like reducing waste, or the use of water and electricity were common at all the camps and many of them have begun to instill these values into their campers. All these aspects of sustainability are important in different ways as was discussed earlier. Sustainable land management is, however, the most important thing they can do for their local environments as they are the ones responsible for the future of land (*Best Management Practices for Pennsylvania Forests*, 2017).

While the exact understandings of sustainability at each of the summer camps varied, they each understood at least a part of sustainability to be human-oriented. For many of the camps, their immediate concern was for their campers and neighbors. Some of the camps were able to make the case for how these constituents would benefit and explained how this inspired them to pursue sustainability. Ruckelshaus' argument that when we view nature as something we are a part of and benefit from, we will not lose it is displayed by camps who are able to see and demonstrate the benefit they receive from their land (Ruckelshaus, 2014b). Looking at the ecosystem services that could be enhanced by the land management practices implemented also supports Ruckelshaus; she claims there is enough overlap between human wants and needs, and the needs of the environment, that supporting the needs of one may often support the needs of both (Ruckelshaus, 2014a).

There are many ways to define the importance of sustainability efforts at a summer camp. As the study by Green Camps demonstrated, most parents who send their children to camp claimed that camps should minimize their environmental impacts and teach the campers to value the natural world, so sustainability practices are an important way to keep their constituents happy. It can also be a means of saving money. For example, the camps that have installed solar panels used the cost saving benefits as their argument to get approval from boards or constituents. Also, the camps that have sustainable tree harvesting plans in place can now plan on a steady income from that process that will continue as long as they keep up the practice.

Organizational Change

Many of the camps have identified a natural setting as core to their mission. Camp 10 said, “If we don’t have [a wooded setting], then that’s a different program, we’ve become a different ministry… maybe a good ministry, but it’s not going to be what [we have been] which is the idea of bringing kids out of their normal environment and bring[ing] them into the midst of God’s creation.” Camp 5 simply said the core connection between their mission and sustainability was to first “create a sense of place and a sense of love and then that will change… the bigger picture of how people think about sustainability.” The camps also discussed how they leaned on their mission statements for ensuring that all their small decisions were in line with the fundamental shared values, so the way camps communicate these values is critical in how they guide their decisions. These findings align with the research on Organizational Change. When wanting or needing to make organizational change it is most successful when the change is led by the shared culture of that organization.

Organizational Cultures

The opportunities for camps to increase their cultural values of environmental education is both a driver and an outcome of the change to become more sustainable. When the camps increase the health and biodiversity of the natural systems on their property through improved management practices, they can take advantage of the improved cultural ecosystems, such as a tool for education being one of many outcomes. The camps are in various phases of integrating environmental education with their efforts

of sustainability, just as they are each in different phases in their journeys to sustainability. For those that have begun to connect these two aspects of their camp, the results are supporting the claims made by Sobel and Chawla that environmental sustainability can be a positive experience for students or campers and can have lasting benefits for the local ecosystems. Camp 2 has an earth science component to their curriculums for campers and one of the lessons is on erosion control. They have the opportunity in the curriculum to use their own maintenance practices to control erosion as a demonstration and show the campers that the camp implements the very things they are teaching. For camps with gardens, designing program where campers can interact with that space would probably be the place where these two parts of camp overlap the most. Camp 4 collects worms and raises them, so they multiply and then every year introduce some of them back into the garden. For some of the camps, they see the long-term impacts these lessons have in the staff that value the property and environmentalism because of the time staff spent as campers.

Each of the camps were also able to identify clear connections between their culture as a part of a faith traditions and their commitment to sustainability, but a common theme was that this connection often got lost on the small scale. Camp 1 talked about how the big picture of caring for creation was an easy connection point between the two ideas, but when they make the small decisions everyday about how to manage their land, it was harder to keep that connection in mind or be intentional about ensuring their faith was a part of the decision. The interviewees from camps 3 and 4 both remarked that

the connection at the smaller scale becomes easier when they take time to walk around camp and enjoy the canopies that are full of birds or being aware of even the small bugs that share the space. When they take time to appreciate nature for themselves there is a sense of privilege that their calling is to create a space where they can live peaceably with nature and even restore, improve, and invite others into that process. Even across boundaries of denomination between Jewish and Christian camps there was similarity in language and goals. Many of the camps who have shared their successful practices have done so within denominational boundaries, but this study suggests that they could also be effective outside of those boundaries which would open camps to future innovative, sustainable solutions. The environmental concerns we face are a part of the concern these camps, and all faith traditions claim, concern for the created world and for each other (Ankele & Macksoud, 2014).

There was evidence in the interviews of how the frameworks through which the camps valued the environment impacted their management practices. Some of the camps who had an ethic of earth care grounded in the goal of benefiting human populations, approached land management from the perspective of benefiting their visitors and their neighbors above their nonhuman populations on their property, while other camps did make some decisions with the only goal of improving the lives of the nonhuman species. These slight differences in priorities derived from their value systems led to different focuses in their land management plans. For example, one of the camps has a tree that has been dead for some time, and they considered taking it down, but it is a preferred tree for

snakes to live in, and there are almost always snakes in the tree. Based on the forestry plans of other camps in this study, the snake tree would have come down to improve the aesthetic value of the camp, or to make space for new healthy trees, but the camp has chosen to let it fall on its own time because of the benefit it is providing to the snakes. The story of the snake tree an example of why it is important to understand the culture of the organizations managing the land because decisions are ideally made based on shared values and these decisions may be slightly different between organizations.

Institutional Knowledge

The camps that have made it to phase four in their journey towards sustainability are the ones who have implanted the eighth influential factor; they are able to question all their practices and continually try better ways of doing things. For these camps, they have made changing things to be more sustainable a core value and willingness to change has become an expected part of the culture of the organization. Another aspect of Organizational Change that was brought up in these interviews, that is important for pursuing sustainability, is retaining institutional knowledge. Some of the camps have begun compiling a list of these best management practices so they do not get lost when staffing changes are made, and almost all the camps that have a forestry management plan have it in writing. Many administrators said that the bar has been set and going forward when hiring new staff they will seek this level of awareness and concern in potential employees because sustainability has become core to their mission and values. Institutional knowledge retention is an important part of ensuring organizational change

has been successful and will continue to be effective, and a strategy to ensure knowledge retention should begin at least two years before an employee retires (Liebowitz, 2008). Ideally institutional knowledge retention should become a part of the culture of an organization similar to a willingness to change (Boje et al., 2011; Liebowitz, 2008). However, it is important to balance both knowledge retention with change as relying too heavily on one undermines the other (Madsen et al., 2002).

Limitations

This study is one of the first to examine summer camps and their role in sustainability as private landowners, so there are still more questions than answers. A specific limitation of this study was that interviews were done remotely, so I did not get a chance to visit the properties and land features in person. The intention was to do site visits and conduct the interviews in person, but I was unable due to the global COVID-19 pandemic. As a result, I am unable to verify the conditions of the land features at these camps and am trusting the interviewees reported them accurately. To overcome the limitation of not seeing the sight, I did gather maps of each site to get the best sense of what was there.

Along with disrupting my plans to conduct site visits as part of this study, the global COVID-19 pandemic also disrupted the whole summer camping industry. Only 82% of residential summer camps ran programming in the summer of 2020 when I conducted the interviews (Suh et al., 2021). I found in my efforts of eliciting the participation of summer camps that either way the administration teams of most camps

were overwhelmed with trying to get through the summer. The camps that were able to participate were likely outliers. Some of the camps I interviewed did still run programming while others had taken the summer off and focused on other projects they had been putting off. The unique context of the selection process means the camps that were able to participate may not be representative of the camping industry but are still representative of other camps with commitments to sustainability.

Beyond the implications a limited sample size has on this study, the geographic limit of the study means that the cultural and ecological context is in no way comprehensive. There were still variations in context which can be used as examples of the importance of understanding context and what to consider when transferring practices to other contexts, but the examples of what this transferring may look limited. This study is also one of the first to examine summer camps and their role in sustainability as private landowners, so there are still more questions than answers this study could provide. While these unanswered questions are a limitation of the study it also lays the groundwork for more targeted future studies.

5.3 FURTHER RESEARCH

With acknowledgement of these limitations comes opportunities for further research to continue the work started here. This study was set up to gain a preliminary understanding between the administrative and land management practices of summer camps and sustainable land use. For example, another study could be done looking

specifically at the connection between sustainability and faith or environmental education as that was only tangential to the results of this one. While the results of this study are promising and can be a great resource for camps that want to take on the challenge of implementing sustainable land management, there are still many details that warrant further study. Further research will support the camping industry in making sustainability a priority, and the ongoing efforts to help all private landholders become aware of their impact on the environment and better manage their land.

Camping Industry

In the camping industry, sustainability is a growing area of focus, but the lack of literature and studies on this topic as it relates to summer camps have made it difficult to gain meaningful traction (Ameri et al., 2014). There are questions raised by this study and left unanswered. Such as the empirical impact each of the practices has on the organization and environment and which ones would be most important for others to pursue. Also, there is a need to understand whether a list of principles can be developed for transferring practices from one context to another. Another is to examine the efforts of sustainable impact that benefits other aspects of a camp's culture such as education or community building to provide more incentives for camps to engage in sustainability.

This study has begun the work of crafting a road map towards sustainability. Camps can use this study to begin the process, but as we have seen with the ten camps in this study, the exact path will look different for every camp based on a multitude of factors unique to the context of each camp. An obvious next step would be to take the

results of this study and develop an environmental management strategy as a road map for other camps to benefit from the successes of the camps in this study. A camp's management strategy can continue to be modified as more research is conducted, and the strategy itself will allow future researchers to see where there are still gaps in our understanding. Another obvious next step would be to scale this study up. Ten camps are still only a fraction of the camps that have made a commitment to sustainability and this study was intentionally limited to the region of northern Appalachia and the great lakes. Two of the most important contextual differences that impact how the camps address issues of sustainability is the environment they are in and the cultures they are a part of. Many of these practices, at both the administrative and land management levels, would look differently in different parts of the country.

Other ways to further the efforts of this study are to evaluate the effectiveness of how camps are implementing these practices to ensure camps are getting the most benefit from them and seeing the potential for the transferring of methods from one camp to another. Studies of this nature will reinforce the conclusions made from this study. Other questions that will be important to answer to support the camping industry in the shift towards sustainability go beyond this study.

The context that this study was set in would be the next obvious places where further understanding is warranted. One particularly interesting question is, how does the increased efforts of sustainable land management impact the rest of the camp culture. In this study, I uncovered several examples, from having a more sustainably maintained

property led to more environmental education opportunities, or more awareness of how decisions at camp impact the environment led to more willingness to change within the organization. A study looking at the reverse effects of the four areas of context I defined for this study may demonstrate even more benefits from pursuing sustainable land management. There is much left to discover, but the results of this study promise that the camping industry could become a leader in sustainability and sustainable land management.

Other Private Land Mangers

I have proposed that summer camps can be an important case study for understanding how private landowners manage their land and what can be done to support their efforts to be more sustainable. The results of this study demonstrate that there is a lot that can be examined in these institutions around how they manage their land which can be replicated elsewhere. This study relied on literature exploring organizational structure and culture to establish the application of the case study method, but it is unclear how far the similarities may go between summer camps and other landholding organizations. It will be important to find effective methods of transferring the successful practices form the camping industry to other types or landowners.

The obvious next step to answer these questions is to conduct a study that evaluates the replicability of the successful practices of the camps in this study by other types of landholders to see if similar success can be achieved. Understanding the process people take when gaining environmental awareness and then implementing action can

help outside experts identify private landholders to partner with, like the college and government agencies partnered with the camps in this study. It will give them the common ground to work together.

For other institutions that own large parcels of land, such as hospitals or company headquarters with large campuses, there is a lot in this study that is directly applicable, but even for individual private landholders, the findings about how camps have implemented known best management practices is relevant. Further studies should be conducted to examine the replicable portions of these findings to these other types of landowners. Also, like the camps in this study, landowners value their land in different ways and for different reasons. Using the cultural examination of this study as a guide for future studies could attempt to understand the cultural values that drive landowners to manage their land so that different methods of support can be developed to come alongside their efforts.

Future research can continue to improve all types of land ownership and management. To accomplish these improvements, research must look to practice as practice continues to look to research. In this study I have used sought to look to practice by using the framework of human oriented sustainability guiding me through the development and execution of my research while focusing on the environmental aspect of achieving sustainability.

Chapter 6:

Conclusion

This study sought to better understand how private landholders integrate sustainability into their land management practices. Learning about their decision-making process(es) can support policy makers, environmental planners, and others improve land management. I developed three research questions to guide the research process:

1) Are summer camps, that claim a value of earth-care, making management decisions that can lead to intentionally practicing known best management practices for environmental sustainability?

2) Are there examples of camps excelling in specific areas of emphasizing sustainability and implementing best management practices?

3) Are there principles from these managerial changes and best practices that can be replicated by others who manage privately owned land?

I used summer camps as a case study and conducted interviews to understand the factors that allow camps to implement known, best management practices for environmental sustainability. From these interviews, I identified both administrative practices that guide the culture of the organizations and land management practices that guide the maintenance teams towards sustainability.

Semi-formal interviews conducted over video conferencing software relied on gathering information from camp administrators and managers as data to be later analyzed. I crafted comprehensive questions to facilitate conversations in these interviews. The questions also facilitated organization and the coding process when analyzing the interview transcripts. This study was designed to be a case study with only ten participating camps that met certain criteria to ensure comparability. These camps provided information on the history of their commitment to environmental sustainability, the administrative practices they found effective for increasing the organization's environmental awareness, and the land management practices that were currently implemented to improve the land. I also sought to understand the cultures and organizational structures of the camps to contextualize the findings so that the practices could be transferred to other contexts effectively. I organized my findings into two categories: 1) cultural and administrative influences the camps reported which enabled them to pursue environmental practices, and 2) principles they learned from implementing land management practices.

Before conducting the interviews, I compiled a list of known, best land management practices developed by researchers and educators within the study region so they would be directly applicable to the ten camps (Table 1). I found that some of these land management practices were already being used by camps, but others were not applicable. The list was useful in providing examples for understanding how summer camps use and manage their land types and how they prioritize the ecosystem services

they can provide. The list of management practices also furthers the needed understanding of what practices are important to focus on when policymakers are supporting landowners improve the sustainability of their land management.

There were eight administrative practices reported by interviewees as foundational to a cultural shift towards sustainability (Figure 8). These practices were identified by four or more of the camps and then supported by outside studies on Organizational Change. The most important of these practices was getting an organization to a place where all decision-making processes and practices can be questioned and changed with ease. These practices were used to build an understanding of how mission driven organizations can achieve meaningful changes in land management. These findings can be used to support other camps and organizations to improve their land management practices.

These findings on both the administrative practices and land management practices were presented within the context of each camp. This camp-specific approach recognized that the practices that work for one organization in one area may not work at another. For the administrative practice, I sought to understand the cultural context of the organization looking at the shared values that guided the decision-making of the administration. For the land management practices, I sought to understand the environmental context of the properties. However, the broad principles presented in the results will be of benefit to all organizations or individuals that are seeking to become more sustainable in the care of their land. Some of the camps in the study have already

begun to share their successful practices with others and there is evidence of benefits from these knowledge transfers. Further studies should be conducted to demonstrate and understand the potential of replication of the sustainable land management processes seen in this study.

A fundamental goal was to provide insight for other camps and private landowners to support the transfer of practices that have been successfully implemented by these ten camps. One important insight that can be transferred is an administrative practice that was essential for the camps was inviting outside expertise to support camp leadership. The outside expertise took different forms for different camps such as hiring an environmentalist or partnering with government organizations or universities. The support of these experts ensured the efforts of the camps were backed up by data and had an advocate to hold the camp accountable. Another insight is the land management practice of developing a physical forest/land management plan. The camps who had taken the time to construct these plans were able to retain the knowledge of effective practices within the organization. They were able to use the plans and reasons behind them to adopt and implement new practices that would further their progress. The details of these plans were dependent on the uses and needs of the camps and reflected the specific values of that organization, but they were of great benefit to all camps who had them.

The study also uncovered interesting findings and new questions about sustainability, Organizational Change, and organizational cultures. I examined these

tangential facets of the study and proposed future studies around each concept to promote adoption of environmentally sustainable practices by other camps and landowners. The primary data of the study will need more answers to the other questions raised for camps and other landowners to fully enjoy the benefits of the suggested practices.

The study will support the growing efforts in the camping industry to promote sustainability. Others currently promoting sustainability in the industry are organizations such as Green Camps or the American Camp Association. So far there has been little research on how summer camps manage their land or how that connects to their purpose and value as institutions. We know summer camps in natural settings helps to promote the mental and spiritual health of campers (Browne et al., 2011; Sorenson, 2016), improve their connection to their community while finding their own identity in it (Mitchell, 2018; Sorenson, 2018), and increases their environmental consciences (Ruckelshaus, 2014a; Sobel, 2012). For all these reasons, it is important to help camps ensure their natural resources are well maintained and available for future generations of campers to receive the same benefits.

The significant findings of this study include affirmation in the importance of culture in promoting organizational change, the impact administrative action can have on culture and promoting change, and specifics in how summer camps are effectively managing their land. Previous studies and publications have discussed the impact culture has on whether or not change is successful (Aycock & Corley, 2021; Boje et al., 2011; Daft, 2007). This study corroborates these conclusions and adds insight into how culture

is driven by a mission built upon a shared set of values and how it can impact land management decisions. Camps that were able to connect their mission to their desire to pursue sustainability were able to incorporate sustainability into every aspect of camp management including land management. A list of best practices for camp administrations that are committed to becoming more sustainable was developed from the interviews (Figure 8). The process of identifying these practices examined the influence administrations have on culture and how they can use this influence to shape change. For example, the interviews provided evidence that camps partnered with outside expertise were more likely to address a wider range of land management issues, or the reports from several camps that sustainable decisions were easier to make when their constituents responded positively. The list of administrative practices can be a guide for camps to start considering how they can shift their organizations to sustainability using some of these practices and the principles behind them. Finally, the list of best land management practices used to guide the interviews can be used as a starting point for camps to rethink their own land management. The conversations elicited questions camps had to consider around land use and environmental context that can help frame how other camps attempt to improve their practices through asking similar questions. The camps also discussed how the shared values of the organization lead to what types of improvements they sought to make to the natural systems on their land.

This study provides insights into how land management decisions are made by private landowners. It examines the cultural values that guide these organizations to

pursue sustainability and the obstacles that are presented when choosing which management practices they will implement. These findings can provide an understanding to support planners, policymakers, environmental planners and others, as well as improve regulations, incentives, and education programming to better align with the values and capabilities of private landholders. These improvements would allow the work on stewardship agreements to be furthered and even more successful (Knowler, 2015; Pierce, 1996). These findings can help researchers who study and present land management to best express their research in ways that are understandable and relatable to the audience of private landholders. To ensure ecosystems that fall within privately owned properties can be protected, we need to be able to work in partnership with those that manage the land.

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APPENDIX A

Camp Manager Semi-Structured Interview

Question Types:
(P) – Primary Question
(S) – Secondary Question -as needed-
(T) – Tertiary Questions -as needed-

Section 1: Background Information
(P) Camp Name
(P) Manager's Name
(P) How long have you been in this position?
(P) How would you describe your job?
(P) Can you share some of the history of the camp?
(S) What is the mission of the camp?

Section 2: Background on Commitment to Sustainability
(P) Can you describe how your camp views sustainability?
(S) What does this understanding of sustainability mean for how decisions are made at the camp?
(S) How would you say the camp's view of and commitment to sustainability has changed over time?
(S) Can you tell me how, in your view, this commitment to sustainability connects to the camp's mission?
(P) How do you see this commitment to sustainability influence how you manage the camp?
(S) Can you share some example practices the camp has implemented to help achieve the camp's goal of sustainability?
(P) In what ways do you see the camp's commitment to faith influence the camp's commitment to sustainability?
(S) If so, can you provide some examples of how faith influences this commitment to sustainability?

Section 3: Land Use Typologies
(P) If you were going to describe the camp to someone who hasn't been there, what would you tell them about its physical characteristics?

(S) Can you tell me more about the forested space(s) within the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?
(S) Can you tell me more about the pond/lake within/adjacent to the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?
(S) Can you tell me more about the stream(s) that flow through the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?
(S) Can you tell me more about the lawn space(s) within the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?
(S) Can you tell me more about the parking lot(s) within the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?
(S) Can you tell me more about the garden(s) within the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?
(S) Can you tell me more about the trails/paths throughout the camp?
(T) What are the physical characteristics? How do you utilize this space? How often does the space get used?

Section 4: Management Practices
(P) Please describe in general how the land is managed at the camp.
(S) Can you describe the camp's management practices for the forested space(s)?
(T) How often does management occur?
(S) Can you describe the camp's management practices for the pond/lake?
(T) How often does management occur?
(S) Can you describe the camp's management practices for the stream(s)?
(T) How often does management occur?
(S) Can you describe the camp's management practices for the lawn space(s)?
(T) How often does management occur?
(S) Can you describe the camp's management practices for the parking lot(s)?
(T) How often does management occur?
(S) Can you describe the camp's management practices for the garden(s)?
(T) How often does management occur?
(S) Can you describe the camp's management practices for the trails/paths?
(T) How often does management occur?

(P) How are land management decisions made at the camp?
(S) Is there a list of best management practices that the camp has developed or adopted?

(S) Is there a connection between the camp's land management practices and the summer programming where the campers can learn about them and become participants in the land management of the camp? If so, can you describe that connection?

Section 5: Relevance of Sustainability to Management Practices

(P) Do you see any connections between the camp's commitment to sustainability and the camp's land management practices?
(S) Does the camp's commitment to sustainability guide the camp's land management practices in any way?
(T) If so, can you give an example?
(P) What is, in your view, the connection between the camp's broader mission and the camp's land management practices?
(S) Does the camp's commitment to faith guide the camp's land management practices in any way?
(T) If so, can you give an example?

Section 6: Conclusion

(P) Are there any final thoughts you have on anything we have discussed?

APPENDIX B

Land Management Practices Questionnaire

This questionnaire is designed to develop an understanding of the practices used to manage the camp property. If there are practices that are not covered in the questionnaire that you would like to share and discuss, please do so in the final entry. Thank you for giving your time to this study.

Forest Management

If you have no forests under your care indicate here and skip this section.

Forest management is not applicable: ___

Does the camp have management practices in place specifically for the forest edges on the camp's property?

(Forest edges provide unique habitat spaces, food and shelter for many animals)

Yes: ___ No: ___

If yes, please provide details: (e.g., practices, frequency, process, etc.)

_____

_____

_____

_____

Does the camp have management practices in place to provide habitat for animals on the camp's property?

(Providing bird or bat boxes or other habitat structures is an easy way of ensuring animals have safe places to live within your land.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have an inventory list of the native animal species or habitat zones within the forest(s)?

(It is important to know what animals might be present on your land and what they need to thrive so you can know if what you are doing for them will be effective.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Pond/Lake Management

If you have no pond or lakes under your care indicate here and skip this section.

Pond/lake management is not applicable: ___

Does the camp have management practices in place to protect the natural banks and buffer of vegetation around the pond or lake?

(Vegetated buffers slow water runoff into the pond or lake letting it filter out nutrients or other pollutants, and they also provide habitat and shelter for both aquatic and terrestrial life.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place to prevent the accumulation of sediment within the pond or lake?

(Sedimentation will eventually fill in a pond or can drastically change the aquatic environment of a lake. This will take away habitat for aquatic species.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place to ensure constant water flow through the pond or lake?

(This will prevent drastic changes in the water level and other physical aspects that animals will rely on.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place that ensure the water in the pond or lake is able to maintain oxygen levels to support species?

(Having consistent oxygen levels in the water will ensure the stability of the plant and animals' life in the pond or lake.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Stream Management

If you have no streams under your care indicate here and skip this section.

Stream management is not applicable: ___

Does the camp have management practices in place to protect the natural banks and the buffer of vegetation around the stream(s)?

(Vegetated buffers slow water runoff into streams letting them filter out nutrients or other pollutants, and they also provide habitat and shelter for both aquatic and terrestrial life.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place that protect and ensure tree canopy cover over the stream(s)?

(Shade regulates the temperature of the water ensuring the stability of the plant and animal's life in the pond or lake.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place to prevent erosion of the banks along the stream(s)?

(Erosion degrades the habitats and other functions of the vegetated buffer and increase the sedimentation in the water which can be harmful for aquatic animals.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place that ensure the water in the stream(s) is able to maintain oxygen levels to support species?

(Having consistent oxygen levels in the water will ensure the stability of the plants' and animals' life in the stream.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Lawn Management

If you have no lawns under your care indicate here and skip this section.

Lawn management is not applicable: ___

Please describe the mowing practices you use for all lawns (e.g., frequency, type of mower, etc.).

_____

_____

_____

_____

Please describe the fertilizer practices you use for all lawns (e.g., frequency, type of fertilizer, etc.).

_____

_____

_____

_____

Does the camp have a drainage system in place to keep any of the lawns dry? If so, please explain how it works and how it is managed.

(The water movement in and around lawns has repercussions on the natural water systems of the site.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Parking Lot Management

If you have no parking lots under your care indicate here and skip this section.

Parking lot management is not applicable: ___

Does the camp have green infrastructure in place to manage runoff from rainwater landing on the camp's parking lot(s)?

(Water that falls onto or flows across parking lots picks ups lots of various pollutants. If these are not allowed to settle out of the water before entering the rest of the water systems, the pollutants will damage aquatic ecosystems.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have management practices in place that protect and ensure tree canopy cover over the camp's parking lot(s)?

(Shade reduces the excess heat in the air caused by asphalt and prevents the asphalt from experiencing extreme temperature fluctuations which wears it out faster.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Garden Management

If you have no gardens under your care indicate here and skip this section.

Garden management is not applicable: ___

Does the camp have a system in place to compost organic waste produced from the garden(s)?

(Composting reduces the outputs of a garden that would otherwise go to waste.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have a system in place to collect rainfall on site to irrigate the garden(s)?

(These systems reduce the energy cost of maintaining a garden and prevent excess water from entering the local water systems.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have a system in place where plants are rotated around the garden to protect their health and the soil productivity?

(Changing the location of plants every growing season decreases the risk of soil-borne diseases and helps avoid soil depletion.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Path/Trail Management

If you have no paths or trails under your care indicate here and skip this section.

Path/trail management is not applicable: ___

Does the camp have any trail or path management strategies that are unique to certain fragile environments? For example: are there elevated walkways over streams or wetlands?

(Trail or path placement and design can be severely detrimental to the surrounding ecosystems or can be unobtrusive and provide unique experiences to the users.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

Does the camp have any management practices in place to prevent erosion of the paths or trails throughout the camp's property?

(Trail or path erosion can divert water changing the health of the surrounding ecosystems, and degrade the soil and nearby root systems, killing the plants along the trail or path.)

Yes: ___ No: ___

If yes, please provide details:

_____

_____

_____

_____

If there is any further information pertaining to the camp's land management practices that you would like to share; please do so here. (e.g., other management practices not covered above)

_____

_____

_____

_____

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_____

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