HEIRLOOM WILDERNESS:

INTEGRATING CULTURE AND WILDERNESS AT THE BEUHAM ORCHARD,

SLEEPING BEAR DUNES NATIONAL LAKESHORE

by

GENNA MICHELLE MASON

(Under the Direction of Marianne Cramer)

ABSTRACT

National Park Service (NPS) wilderness and cultural landscape management policies were developed separately for geographic areas that reflect dichotomous values. When wilderness and cultural landscapes occur in the same place, management of one can inhibit that of the other. This thesis evaluates the historical contexts, laws, and policies that guide current NPS wilderness and cultural landscape management to determine factors that inhibit integrating management. Goals, objectives, and tactics that address those factors are derived from case studies and organized into a projective management design framework. This thesis applies the framework to the Beuham Orchard on North Manitou Island, Sleeping Bear Dunes National Lakeshore, proposing tactics for integrating NPS cultural landscape and wilderness management to convey the values of both wilderness and culture within the site.

INDEX WORDS: Cultural landscapes, cultural landscape management, cultural landscapes in wilderness, historic preservation, landscape architecture, land management, orchard preservation, National Park Service, North Manitou Island, Sleeping Bear Dunes National Lakeshore, wilderness, wilderness law, wilderness management policy

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DEDICATION

I dedicate this thesis to family, friends, and colleagues with whom I have explored

our country's National Parks. These explorations inspired the idea behind this work, and

were enriched by those who shared in them.

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INTRODUCTION

<u>Background</u>

The National Park Service (NPS) mission states that it "preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations."[1] The statement calls out two primary resource types: *natural* and *cultural*. These two NPS resource types are described within the context of this thesis as designated wilderness (natural) and cultural landscapes (cultural); designated wilderness will also be referred to as wilderness.

Wilderness refers to areas designated by the U.S. Congress with "the highest level of conservation protection" within public lands managed by the following four federal agencies: the Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), Forest Service (FS), and National Park Service (NPS).[2] The Wilderness Act, which defines wilderness for Congressional designation, states: "a wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor and does not remain."[3]

1. "National Park Service: About Us," National Park Service, accessed December 15, 2015, http://www.nps.gov/aboutus/index.htm.
2. "Wilderness: Gateway to National Park Service Wilderness," National Park Service, accessed February 12, 2016, http://wilderness.nps.gov/faqnew.cfm.
3. Wilderness Act. Pub. L. No. 88-577 (16 U.S.C. 1131-1136), 1964.

Cultural landscapes as defined by the NPS are "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values."[4]

The definitions of both wilderness and cultural landscapes, as listed above, are cultural constructs that reflect ideas of nature and culture in the United States, and describe resources grouped within a type and category but viewed as being in separate locations. Organized by land coverage or zones for management purposes, these resource types are subject to different management treatments, policies, and standards. Designated wilderness and cultural landscapes, however, are not mutually exclusive; although wilderness areas are not often included as part of cultural landscapes, cultural landscapes are frequently found within the boundaries of wilderness areas. (Figure 1.1).
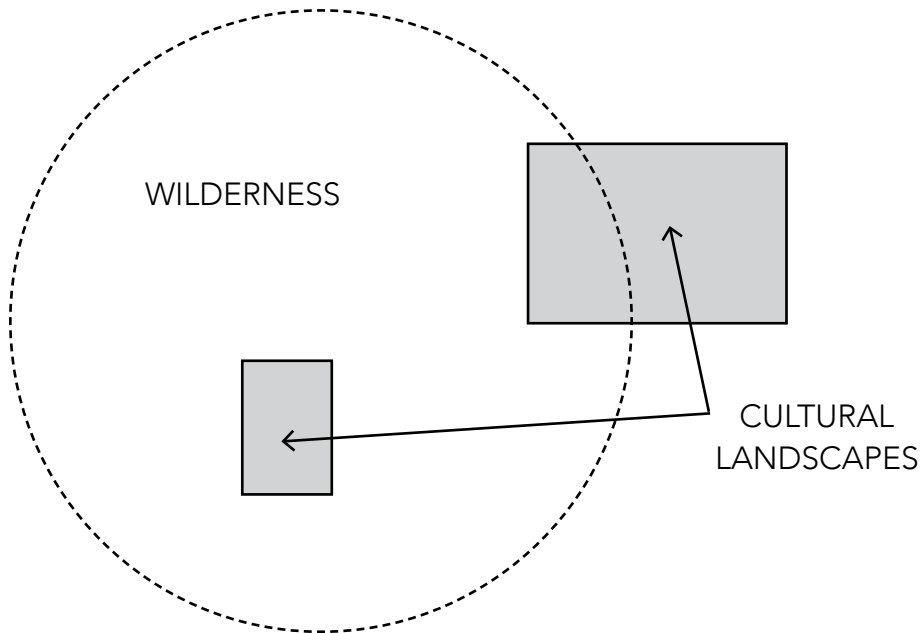
Figure 1.1: Cultural landscapes within wilderness. Represents the overlap of wilderness and cultural landscapes in the same geographic areas.

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4. Charles A. Birnbaum and Christine Capella Peters. *The Secretary of the Interior's Standards for the Treatment of Historic Properties: With Guidelines for the Treatment of Cultural Landscapes* (Washington, D.C.: U.S. Dept. of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, Historic Landscape Initiative, 1996), 4.

Areas designated as wilderness that include cultural landscapes raise management questions because the two resource types are managed according to different protocols developed specifically for each type. The management needs for wilderness areas and cultural landscapes do not always comply with those of the other. Questions about the management of areas that overlap requires evaluation and reconsideration of these traditionally separate policies. Despite recognizing the need to manage cultural resources within wilderness, current NPS practices are widely based on a traditional notion that wilderness areas should be free of the evidence of human impact. Conversely, some cultural resource management approaches rely on methods that do not value the role of natural systems. The NPS mission, however, states that it will preserve both natural and cultural resources–implying that the values of one do not outweigh the other.

The overlap of designated wilderness and cultural landscape areas presents an opportunity for the integration of practices, ideas, and values. Cultural landscape sites within designated wilderness demonstrate the historic American construct of the relationship between humans and nature. The author believes that these areas can help convey the idea that nature extends beyond the boundaries of designated wilderness into other areas where humans interact with their environment, and that humans and nature interact as part of a living system regardless of drawn boundaries. Ultimately, these areas can help convey the message that humans impact the natural world and should practice environmental stewardship whether within the bounds of a wilderness area or in their own backyard.

Case Study

The Beuham Orchard at Sleeping Bear Dunes National Lakeshore is a clear example of a cultural landscape within a designated wilderness area. Sleeping Bear Dunes National Lakeshore is located along the Lake Michigan shoreline of Leelanau and Benzie counties in the northwestern edge of Michigan's lower peninsula (Fig. 1.2). Along with the mainland unit, the park includes two islands: North and South Manitou. Located on North Manitou Island (NMI), the Beuham Orchard cultural landscape consists primarily of a large historic orchard developed in the 1890s by Frederic Beuham, a bachelor farmer from the Michigan mainland (Fig. 1.3).[5] The site is also referred to as the Frank Farm or Stark Orchard in some documents, but will be called the Beuham Orchard throughout this thesis.

Figure 1.2: North Manitou Island and Sleeping Bear Dunes National Lakeshore context map. Located in northern lower Michigan along the Lake Michigan shoreline. Map by author, March 1, 2016. Data sources: ESRI, ArcGIS online.

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5. Eric MacDonald and Arnold Alanen. *Tending a 'Comfortable Wilderness.'* (Omaha: U.S. Dept. of the Interior, National Park Service, 2000), 195.

Figure 1.3: Beuham Orchard on North Manitou Island context map. The orchard is approximately 1 mile west of the island dock. Map by author, March 1, 2016. Sources: ESRI, ArcGIS online.

The orchard site, located one mile west of the current primary access point on

North Manitou Island, spreads over 600 acres and once consisted of as many as 2,500

pear and apple trees from the Missouri-based Stark Brothers Nursery.[6] Beuham entered

into a contract with Stark Brothers that was typical of the era, agreeing to send the

company "any three pear or two apple crops yielded by the trees, to be selected by Stark

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6. MacDonald and Alanen. *Tending a 'Comfortable Wilderness,'* 195, 201.

Figure 1.4: The Beuham Orchard. Apple trees and encroaching vegetation during summer 2015. Photo by author.

Bros., within a period of 15 years after planting," using the land as collateral until the company received payment for the trees.[7]

The Beuham Orchard site was operated as a commercial orchard into the 1930s, after which time the majority of the island was in private ownership and managed as a sport hunting destination. Since commercial operations ceased at the Beuham Orchard, the site has been subject to natural processes and has received minimal maintenance.[8] Historic buildings associated with the site no longer remain, however cultural features still shape the landscape. Many acres of fruit trees extend in a grid through open fields, over hills, and into encroaching successional forest (Fig. 1.4). Old roads and trails bisect

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7. MacDonald and Alanen. *Tending a 'Comfortable Wilderness,'* 196.
8. MacDonald and Alanen. *Tending a 'Comfortable Wilderness,'* 197.

the area, as well as stone piles and ditches–remnants of irrigation and field preparation. These features form a cultural landscape that represents part of the agricultural industry that once thrived on the island, in an area now also managed as designated wilderness. Hikers approaching the site cross an invisible management line marked by a wooden trail post that reads "Entering wilderness."

The Beuham Orchard is a fragment of the human history on North Manitou Island, which extends from a pre-historic Native American presence to current NPS occupation. Physical evidence remains that represents the history of agriculture, logging, maritime industry, summer resort cottages, non-native species introduction, sport hunting, and NPS management on the island (Fig 1.5). North Manitou Island was officially

Figure 1.5: Historic photo of sawmill and hotel on NMI. Logging, agriculture, and recreation were all industries that shaped the NMI landscape. Source: www. manitouislandarchives.org

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included as part of Sleeping Bear Dunes National Lakeshore in 1984.[9] Most of the island, including the orchard, has been managed by the NPS as wilderness since that time, and received official designation in 2014 (Fig. 1.6).

Management practices for the Beuham Orchard, now a cultural landscape within a designated wilderness area, need to be re-evaluated and integrated to reflect the relationship between natural and cultural resources. The author believes that the management practices of one resource type should not undermine the value of the other, but should enhance both where they overlap. Land should not be prioritized as either wilderness or cultural landscape where both exist. Instead, management should seek a balance to address the needs of both and convey the dual values inherent in such areas. The question this thesis seeks to answer is: **What tactics should be applied to the Beuham Orchard site at Sleeping Bear Dunes National Lakeshore that integrate the requirements and values of wilderness and cultural landscape management?**

Purpose

The purpose of this thesis is to develop ideas for how land managers at Sleeping Bear Dunes National Lakeshore might integrate cultural resource and wilderness management practices to convey both the cultural landscape *and* wilderness values of the Beuham Orchard. While the orchard site is a specific type of cultural landscape, ideas presented within this thesis may influence thinking on cultural landscape and wilderness management interactions more broadly.

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9. MacDonald and Alanen. *Tending a 'Comfortable Wilderness,'* 64.
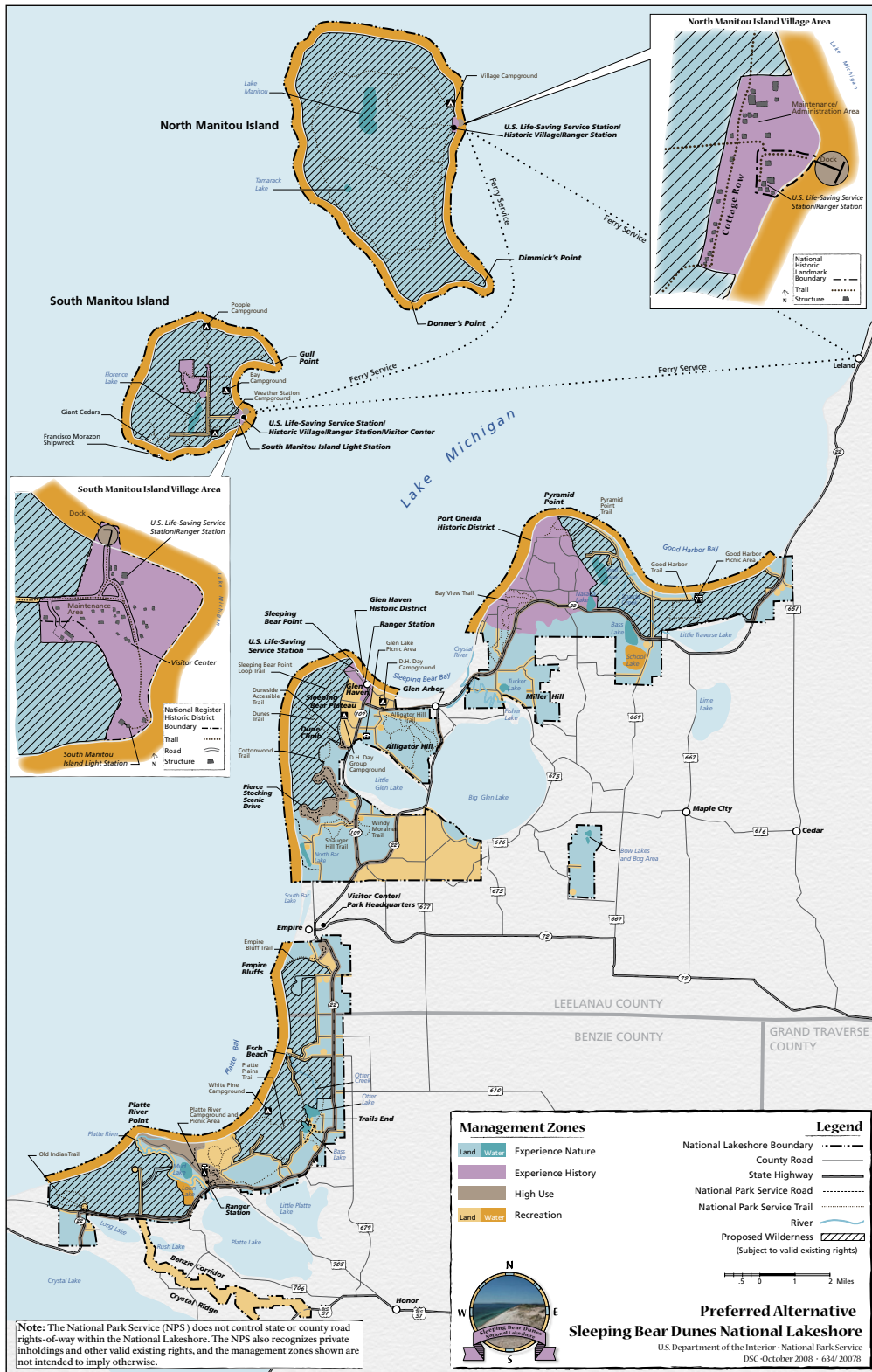
Figure 1.6: Sleeping Bear Dunes National Lakeshore Management Zones map.
Representing management zones and designated wilderness area. Source: www.
parkplanning.nps.gov.

<u>Significance</u>

Cultural landscapes within designated wilderness areas are an important component to witness the juncture between culture and nature. Overlapping cultural landscape and wilderness areas exemplify the relationship between humans and nature, depicting ways in which people have lived harmoniously or otherwise with nature, the impact humans have on nature, and the resilience of nature. There is a stewardship message within overlapping cultural landscapes and wilderness areas that can help alter the way people view, value, and interact with the resources around them. The management practices presented by this thesis will be applicable to sites throughout the NPS that overlap cultural and wilderness resource types. The implementation of these ideas might guide a change in how the connection between cultural and natural resources is perceived by NPS managers, employees, and visitors.

An investigation of integrating cultural landscape and wilderness management also addresses the NPS Centennial objectives which aim to help national parks remain relevant to future generations. As a celebration of the 100th anniversary of the creation of the National Park Service (2016), the agency developed a program called the Centennial Initiative that lists goals and actions for parks to maintain relevancy as the NPS enters a second century of existence. Under the theme *Preserving America's Special Places*, goals listed that relate to the purpose of this thesis include:

- Manage the natural and cultural resources of the National Park System to increase resilience in the face of climate change and other stressors.
- Cultivate excellence in science and scholarship as a foundation for park planning, policy, decision making, and education.

- Achieve a standard of excellence in cultural and natural resource stewardship

  that serves as a model throughout the world.

- Collaborate with other lands managers and partners to create, restore, and

  maintain landscape-scale connectivity.[10]

These goals are followed by a list of actions suggesting steps the NPS might take

toward achieving the goals. Actions listed under the above mentioned goals that relate

to this thesis include to "modernize historic preservation methods and technologies,"

and "show how historic structures can be made sustainable."[11] These actions relate to the

significance of this thesis because it reconsiders historic preservation methods and seeks

to develop a system to increase sustainability of cultural landscapes through management.

Another initiative listed that relates to this research is the broad goal to connect

people to parks. Demonstrating a historical connection between nature and culture

through a cultural landscape-wilderness experience offers a medium for people to connect

to parks. The Beuham Orchard site on North Manitou Island can be considered part of a

gateway wilderness, suitable for visitors seeking a less extreme wilderness experience.

Finally, this thesis builds on existing research, ideas, and foundations set by

others. Many sources, such as NPS white papers (which clarify policy and provide

guidance), scholarly articles, theses, and curricula from the Arthur Carhart National

Wilderness Training Center, advocate the integration of cultural resources and wilderness

management. Two theses that establish a research base for the ideas presented by this

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10. "A Call to Action: Preparing for a Second Century of Stewardship and Excellence." National
Park Service, 2011.
     11. "A Call to Action."

thesis include "'Back to the Land and All Its Beauty': Managing Cultural Resources,

Natural Resources, and Wilderness on North Manitou Island, Sleeping Bear Dunes

National Lakeshore, Michigan," by Katelyn Fredericks, and "A Case for Storied

Landscapes: Wilderness and Historic Preservation," by Laura Kirn. Fredericks details the

cultural history and NPS administrative history of North Manitou Island, recommending

park managers acknowledge "the practice of rewilding established on North Manitou

Island" and the "human activity that created the perceived need for rewilding."[12] Kirn

thoroughly investigates the history of the wilderness concept, wilderness management,

and cultural resource management within the context of wilderness areas, to address

realistic and sustainable management of cultural heritage within wilderness areas,

"recognizing the fundamentally irreplaceable nature of both wild places and heritage

resources."[13] This thesis presents tactics for bringing wilderness and cultural landscape

management together at the Beuham Orchard site to respect both the human history and

wilderness designation on the island, exploring land management methods that address

Fredericks's and Kirn's recommendations.

Methodology

The research methods of this thesis include literature review and descriptive case

studies to inform a projective management strategy. The research is structured by four

parts: classification of wilderness culture in the U.S., classification of cultural landscape

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12. Katelyn Fredericks. "'Back to the Land and All Its Beauty': Managing Cultural Resources, Natural Resources, and Wilderness on North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan." (Master of Arts in History thesis, Indiana University, 2014), 124.
13. Laura Ann Kirn. "A Case for Storied Landscapes: Wilderness and Historic Preservation" (Master of Arts in Historic Preservation thesis, Goucher College, 2013), 4.

theory in the U.S., classification of literature that discusses wilderness and culture

together, and descriptive case studies and classification of supporting literature that

demonstrate integrating wilderness and cultural landscape management practices.

The wilderness section addresses history, law, current NPS practices, and cultural

landscape considerations, gathering information from the Wilderness Act, National

Environmental Protection Act (NEPA), NPS management guidelines, and critical and

foundational writings on wilderness. The cultural landscape section addresses history,

law, current NPS practices, and wilderness considerations. Information is gathered

from the Antiquities Act, Historic Sites Act, National Historic Preservation Act, NPS

management guidelines, and explanatory and critical texts on cultural landscapes.

The section on wilderness and cultural landscapes considers literature that specifically

addresses wilderness and cultural resource overlap in theory and practice, including

issues and considerations for integration.

     The primary research question is supported by the following sub-questions within

the sections described above:

- What are current NPS Wilderness management policies that help or hinder

  inclusion of cultural landscape management?

- What are current NPS cultural landscape management policies that help or

  hinder the inclusion of wilderness area management?

- How are wilderness and culture connected?

- What issues and opportunities exist between managing both wilderness and

  cultural resources?

• Based on case studies, what are the principles that could govern the management

of both wilderness and cultural landscapes in the same geographic area?

• What techniques and policies are employed that integrate cultural and wilderness

management within the NPS?

• What are current and emerging best practices that integrate cultural and

wilderness management?

• How can NPS wilderness and cultural resource management policies be

integrated to exhibit the value of culture and nature at the Beuham Orchard site?

Thesis Organization

This thesis focuses on the mechanism of NPS land management and the ways in

which management might shape both the land and visitor experience. Chapters 2 through

4 include basic contextual overviews of wilderness and cultural landscapes intended

to provide enough information to understand the breadth of issues. Literature review

sections, with supporting data collection questions listed above, are found sequentially

within Chapters 2 through 4. Chapter 2, Wilderness in the U.S., provides an overview of

the wilderness concept within the United States, introducing history, laws, and current

NPS management practices. The chapter also addresses the question: what are current

NPS Wilderness management policies that help or hinder inclusion of cultural landscape

management? Chapter 3, Cultural Landscapes in the US, gives an overview of cultural

landscape practice within the United States, including the origins and development

of the idea, foundational laws, and current NPS practices. The chapter also discusses

the question: what are current NPS cultural landscape management policies that help

or hinder the inclusion of wilderness area management? Chapter 4, The Relationship Between Nature and Culture, demonstrates how wilderness and cultural landscape management can be brought together. The chapter is divided in two parts. Part I includes perspectives on nature and culture and the values of wilderness and cultural landscapes. Questions addressed in the first section include: how are wilderness and culture connected? And what issues and opportunities exist between managing both wilderness and cultural resources? The second part presents a selection of case studies and classification of associated literature that represent examples of integrating wilderness and cultural landscape management from both within the U.S. and internationally. The following supporting questions are addressed in Part II of Chapter 4:

    • Based on case studies, what are the principles that could govern the management of both wilderness and cultural resources in the same geographic area?

    • What techniques and policies are employed that integrate cultural and wilderness management within the NPS?

    • What are current and emerging best practices that integrate cultural and wilderness management?

    • How can NPS wilderness and cultural resource management policies be integrated to exhibit the value of culture and nature at the Beuham Orchard site?

    Chapter 5 assesses the key points from Chapters 2 through 4, outlines concepts that can encourage integrating management, and presents a management framework for integration. Chapter 6 includes a detailed description of the Beuham Orchard, a history of management, description of current management, and applies the framework to the

Beuham Orchard, presenting opportunities to integrate wilderness and cultural landscape

management. Chapter 7 includes analysis and the conclusion.

<u>Delimitations</u>

This thesis considers wilderness and cultural landscapes within the context of

federal land management and definitions, specifically addressing wilderness and cultural

landscape management within NPS units. This thesis is an academic exercise which

does not take into account limits on resources financial and otherwise, nor the realities of

resource prioritization due to those limits. Land management tactics suggested within the

thesis are intended to push traditional wilderness and cultural landscape management, in

some cases going beyond legal and feasible boundaries. The NPS Park System Planning

process is not included in this thesis. Planning in general, however, is considered in

Chapter 6.

The management framework proposed in Chapter 6 would require major changes

to current policy and practices. The framework is applied to the Beuham Orchard as

defined by the unofficial boundary outlined on Fig. 1.3, which is based on current

aerial imagery. The site could also be considered within the context of a larger cultural

landscape as described in Chapters 3 and 7.

CHAPTER 2

WILDERNESS IN THE UNITED STATES

Background

The concept of wilderness is based on perspective, which differs according to time and place. Environmental historian Roderick Nash describes the term "wilderness" as subjective, stating that "a universally acceptable definition of wilderness is elusive," and that it "is so heavily freighted with meaning of a personal, symbolic, and changing kind as to resist easy definition."[14] In the U.S., one definition, or concept, of wilderness is found within federal policies that were developed to designate and manage geographical areas to represent an American idea of wilderness. These policies reflect the values of a culture, influenced by history, philosophy, location, politics, administration, and experience. The following section introduces a brief history of the cultural movement that drove the development of wilderness policy in the U.S., recognizing that the complexities of wilderness extend far beyond federal policy.

In the U.S., wilderness as a distinctly American asset was historically linked to the American core value of independence.[15] After gaining independence from Britain, Americans needed cultural symbols to represent their young country and encourage

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14. Roderick Nash. *Wilderness and the American Mind*. (New Haven: Yale University Press, 2001), 44-45.

15. William Cronon. "The Trouble with Wilderness Or, Getting Back to the Wrong Nature." (In *Uncommon Ground: Rethinking the Human Place in Nature*, edited by William Cronon. New York: W.W. Norton & Co., 1995), 13.

patriotism. One such symbol was found in the vast and diverse expanses of the American

frontier, which was considered untamed wilderness from the Anglo-European viewpoint.

Nash explains that "wilderness had no counterpart in the Old World," and that "by the

middle decades of the nineteenth century wilderness was recognized as a cultural and

moral resource and a basis for national self-esteem."[16]

    As wilderness took hold as an American symbol, westward expansion made

it a vanishing resource. Influential figures to American culture during the era, such as

writers, artists, explorers, naturalists, and politicians, recognized the need to preserve

wilderness as an American asset–a sentiment that grew into a conservation movement

during the later part of the 19th century. The movement supported protecting wild areas

and the natural resources within them, seeking to perpetuate the frontier experience as an

important patriotic symbol.[17] A key figure in the success of the conservation movement

was President Theodore Roosevelt, who encouraged Americans to keep in contact with

wilderness as a cure for what ailed the nation.[18]

    The idea of wilderness as a protected entity grew during the first half of the 20th

century. While national parks and forest preserves were created beginning in 1872 with

Yellowstone National Park, they were not created to specifically preserve wilderness.

During the first half of the twentieth century, three wilderness advocates whose efforts

propelled later federal policy in protecting areas as wilderness included Aldo Leopold,

Bob Marshall, and Arthur Carhart. All three experienced the American wilderness

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16. Nash, *Wilderness and the American Mind,* 193.

17. Sean Kammer. "Coming to Terms with Wilderness: The Wilderness Act and the Problem of Wildlife Restoration." Environmental Law 43 (2013): 83.

18. Nash, *Wilderness and the American Mind,* 381.

working in various units of the National Forest Service during its early establishment. Carhart, employed as the Forest Service's first landscape architect in 1919, recommended to the service that "areas of superlative wild scenery in the National Forests be managed for their value as wilderness."[19] In 1935, Marshall founded the Wilderness Society, an organization whose mission is to "protect wilderness and inspire Americans to care for our wild places," by contributing to better protection, stewardship, and restoration of public lands.[20] Aldo Leopold later became president of the society.

Leopold campaigned extensively for the establishment of wilderness protection and much of his thought guided policy creation. He described wilderness as a "wild, roadless area where those who are so inclined may enjoy primitive modes of travel and subsistence,"[21] and encouraged that people "must learn to understand and manage wild places."[22] To Leopold, wilderness preservation signified "an intelligent humility toward man's place in nature."[23] He advocated the importance of understanding wilderness ecologically and aesthetically as key to the health of both land and culture.[24]

Foundational Laws

The following section describes two influential laws that guide NPS wilderness management, including the Wilderness Act of 1964 and the National Environmental

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19. Nash, *Wilderness and the American Mind,* 464.

20. "Wilderness Society." Accessed February 5, 2016. www.wilderness.org.

21. Aldo Leopold, Susan Flader, and J. Baird Callicott. *The River of the Mother of God and Other Essays.* (Madison, WI: University of Wisconsin Press, 1991), 135.

22. Bonnie Stepenoff, "Wild Lands and Wonders: Preserving Nature and Culture in National Parks." (In *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice*, edited by Richard Longstreth, 91-105. Minneapolis: University of Minnesota Press, 2008), 92.

23. Aldo Leopold, "Why the Wilderness Society," Living Wilderness, 1 (1935), 6.

24. Nash, *Wilderness and the American Mind,* 489.

Protection Act. These laws reflect the continuation of the historical development of the

wilderness concept and federal resource management in the U.S.

The Wilderness Act of 1964, authored primarily by wilderness advocate

Howard Zahniser, intended to allow Congress to set aside and protect parts of the

American landscape from development and exploitation. Prior to the act, agencies could

administratively classify areas as wilderness, but designation and management was not

federally codified; this was unacceptable to Zahniser, who sought to create a higher

level of land protection.[25] Influenced by the wilderness principles outlined by Leopold

and others, Zahniser described a fundamental need for wilderness areas as "not only

recreational and spiritual but also educational and scientific, and withal essential to a true

understanding of ourselves, our culture, and our place in all nature."[26]

Within the act, wilderness is legally defined at a national level thusly:

"A wilderness, in contrast with those areas where man and his works dominate
the landscape, is hereby recognized as an area where the earth and its community
of life are untrammeled by man, where man himself is a visitor who does not
remain. An area of wilderness is further defined to mean in this Act an area of
undeveloped Federal land retaining its primeval character and influence, without
permanent improvements or human habitation, which is protected and managed
so as to preserve its natural conditions and which (1) generally appears to have
been affected primarily by the forces of nature, with the imprint of man's work
substantially unnoticeable; (2) has outstanding opportunities for solitude or a
primitive and unconfined type of recreation; (3) has at least five thousand acres of
land or is of sufficient size as to make practicable its preservation and use in an
unimpaired condition; and (4) may also contain ecological, geological, or other
features of scientific, educational, scenic, or historical value."[27]

25. "Howard Zahniser: Author of the Wilderness Act," Wilderness.net, accessed February 4, 2016, http://www.wilderness.net/NWPS/zahniser..

26. Howard Zahniser, "The Need for Wilderness Areas." (The Living Wilderness, No. 59, Winter-Spring, 1956-1957, 43-58), 46.

27. Wilderness Act. Pub. L. No. 88-577 (16 U.S.C. 1131-1136), United States Statutes at Large. 1964.

Recognizing the cultural influence on wilderness, Zahniser also stated that "the idea of wilderness as an area without man's influence is man's own concept. Its values are human values. Its preservation is a purpose that arises out of man's own sense of his fundamental needs."[28]

The National Environmental Policy Act (NEPA) is a second law that is foundational to current wilderness management practices. The broad mission of NEPA is to "foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."[29] Addressing that natural resources are finite, the law sought to change the trajectory of environmental damages set forth by industrialization, balancing "environmental concerns with the social, economic, and other requirements of present and future generations of Americans."[30]

NEPA influences the NPS land management process. The law implemented an interdisciplinary approach to Federal land management, requiring officials to add environmental consideration to their other decision making factors. Federal agencies, such as the NPS, each have a unique NEPA implementing procedure based on agency needs. All actions, such as proposed projects or the adoption of new regulations, must go through an analysis process, called a Minimum Requirements Analysis, resulting in a decision to either apply a Categorical Exclusion (CE), prepare an Environmental Assessment (EA), or prepare an Environmental Impact Statement (EIS). CEs are actions

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28. Zahniser, "The Need for Wilderness Areas," 46.
29. "NEPA.gov: National Environmental Policy Act," Center on Environmental Quality, Executive Office of the President of the United States, accessed January 10, 2016, https://ceq.doe.gov/welcome.html.
30. "NEPA.gov: National Environmental Policy Act," https://ceq.doe.gov/welcome.html.

that "will normally have no significant individual or cumulative effect on the quality of the human environment."[31] EAs analyze the significance of the environmental impact an action poses, used as a tool for agencies seeking to minimize those impacts. EISs and EAs involve the participation of interested parties (like the public). EISs are more intensive because they identify necessary studies and determine the environmental issues related to the proposed action. The NEPA process is essentially a component of all NPS management-scale decision making.

NPS Wilderness Management

The NPS is one of four federal agencies in the U.S. that manages lands governed by the National Wilderness Preservation System (Fig. 2.1).[32] Each park containing wilderness is required to develop a wilderness management plan that seeks to satisfy the management guidelines set out in NPS policy, however no formal regulations codify wilderness management within the system.[33] NPS wilderness areas across the U.S. are comprised of incredibly varied landscapes that present a wide range of management challenges, which would be impossible to address under an umbrella list of regulations. In general, NPS guidelines direct managers to preserve wilderness character, allowing managers to interpret how to successfully allow recreational use based on protecting that

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31. "NEPA.gov: National Environmental Policy Act," https://ceq.doe.gov/welcome.html.

32. John Hendee, George Stankey, and Robert Lucas. *Wilderness Management.* (Washington: Forest Service, U.S. Dept. of Agriculture, 1979), 1.

33. Sandra Zelmer, "Wilderness Management in National Parks and Wildlife Refuges." Environmental Law 44, no. 2 (Spring 2014): 524.
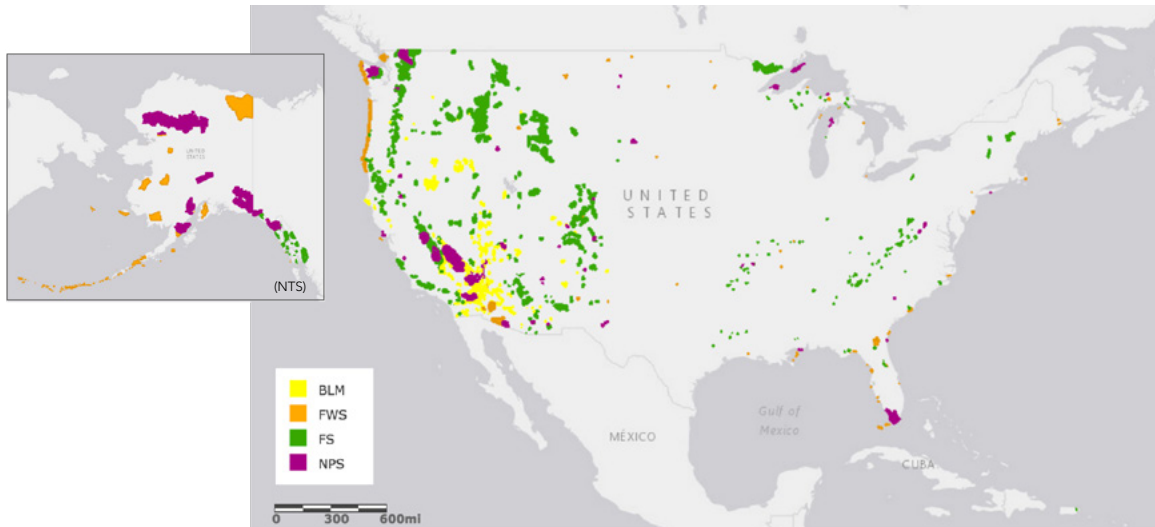
Figure 2.1: National Wilderness Preservation Program map. Representing wilderness areas managed by federal agencies. Source: ESRI, ArcGIS online.

character.[34] The guidelines direct management efforts overall but allow decisions to be made at the park level.

Guidelines require that management decisions follow the minimum requirement concept, which is "to document the determination of whether a proposed action (project), which involves a prohibited use, is necessary to meet minimum requirements for the administration of the area for the purpose of wilderness."[35] Park wilderness management plans are developed in accordance with the justifications for wilderness allocation, and indicate desired future conditions, establish standards, conditions, and thresholds for management treatments, and reduction of human impact.[36]

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34. Sean Kammer. "Coming to Terms with Wilderness: The Wilderness Act and the Problem of Wildlife Restoration." Environmental Law 43 (2013): 83, 104.

35. National Park Service, "Director's Order #41: Wilderness Stewardship." Washington, D.C., 2013.), 9.

36. Zelmer, "Wilderness Management in National Parks and Wildlife Refuges," 525.

NPS Wilderness Management Policies and Cultural Resources

The following section includes an overview of wilderness planning as defined by NPS Management Policies, park Wilderness Management Plans, and wilderness character within the context of NPS planning, with the intention of answering the following support question: *What are current NPS wilderness management policies that help or hinder inclusion of cultural landscape management?*

NPS Management Policies provide guidance on all aspects of park planning and management. The wilderness planning section states that "Lands and waters found to possess the characteristics and values of wilderness, as defined in the Wilderness Act, can be studied to develop a recommendation to Congress for wilderness designation," qualifying wilderness characteristics and values as the primary factors for designation.[37] The policies indicate that "the Wilderness Act directs agencies responsible for managing wilderness to study wilderness resources and values," encouraging park managers to incorporate wilderness studies and plans, developed by the NPS, within general management plans.[38] Within the Wilderness Resource Management section, the policies state that: "In addition to managing these areas for the preservation of the physical wilderness resources, planning for these areas must ensure that the wilderness character is likewise preserved."[39] Derived from the Wilderness Act, wilderness character and values are not explicitly defined in the policies, but are defined within other NPS documents as described below.

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37   *Management Policies 2006*. (Washington, D.C.: U.S. Dept. of the Interior, National Park Service, 2006), 26.

38   *Management Policies 2006*, 25.

39   *Management Policies 2006*, 80.

The NPS Management Policies directly address cultural resources within wilderness areas, stating that "cultural resources that have been included within wilderness will be protected and maintained according to the pertinent laws and policies governing cultural resources using management methods that are consistent with the preservation of wilderness character and values."[40] The section reinforces that historic preservation laws "remain applicable within wilderness but must generally be administered to preserve the area's wilderness character."[41] For more information on laws governing cultural resources, see Chapter 3.

NPS Wilderness Management Plans are a primary tool for defining management of wilderness resource within individual parks. The management documents identify "desired future conditions, establish indicators, standards, conditions, and thresholds beyond which management actions will be taken to reduce human impacts on wilderness resources."[42] NPS Management Policies provide guidance for the development of Wilderness Management Plans. The policies, as described above, give equal weight to cultural and natural resource considerations, stating: "Wilderness management plans will be supported by appropriate documentation of compliance with the National Environmental Policy Act and the National Historic Preservation Act. The plan will… contain specific, measurable management objectives that address the preservation and management of natural and cultural resources within wilderness as appropriate to achieve the purposes of the Wilderness Act and other legislative requirements."[43]

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40. *Management Policies 2006*, 83.
41. *Management Policies 2006*, 83.
42. *Management Policies 2006*, 80.
43. *Management Policies 2006*, 81.

Understanding wilderness character as defined within NPS policies is key to successfully integrating wilderness and cultural landscapes. Derived from wording in the Wilderness Act, wilderness character refers to a "combination of biophysical, experiential, and symbolic ideals that distinguishes wilderness from other lands," and is defined by the following five tangible qualities: natural, untrammeled, solitude or a primitive and unconfined type of recreation, undeveloped, and other features of value.[44] These qualities create quantifiable categories that help describe diverse resources within a geographic area, identifying unique aspects within a wilderness that need to be managed. In an effort to promote clarity and consistency in wilderness planning and management, the NPS has developed guidance and tools for including wilderness character in park planning and management.[45] They define wilderness qualities as follows:

- *Natural*–Wilderness ecological systems are substantially free from the effects of modern civilization.

- *Untrammeled*–Wilderness is essentially unhindered and free from the intentional actions of modern human control or manipulation. This quality is influenced by any activity or action that intentionally controls or manipulates the components or processes of ecological systems inside wilderness.

- *Solitude or a Primitive and Unconfined Type of Recreation*–Wilderness provides outstanding opportunities for solitude or primitive and unconfined recreation. This quality is primarily about the opportunity for people to experience wilderness, and is influenced by settings that affect these opportunities.

- *Undeveloped*–Wilderness retains its primeval character and influence, and is essentially without permanent improvement or modern human occupation. This quality is influenced by what are commonly called the "section 4(c) prohibited uses" or "nonconforming" uses, which are the presence of modern structures,

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44. National Park Service Wilderness Character Integration Team. "Keeping It Wild in the National Park Service: A User Guide to Integrating Wilderness Character into Park Planning, Management, and Monitoring." (Washington, D.C.: Dept. of the Interior, 2014), 8-9.

45. National Park Service Wilderness Character Integration Team, "Keeping It Wild in the National Park Service," 9

installations, habitations, and the use of motor vehicles, motorized equipment, or mechanical transport.

• *Other Features of Value*–Wilderness preserves other tangible features that are of scientific, educational, scenic, or historical value. This quality is based on the last clause of section 2(c) of the Wilderness Act which states that a wilderness "may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value." This quality captures important elements of the wilderness that may not be covered in the other four qualities, such as cultural or paleontological resources.[46]

NPS planning documents address that some wilderness qualities might appear to contradict one another, yet can simultaneously occur in an area.[47] They also point out that while the first four qualities are always present in a wilderness area, the fifth quality, *Other Features of Value,* which is the only quality that includes cultural resources, may or may not be present. This raises the argument that cultural value is an inherent part of wilderness and is therefore alway present, which goes beyond the scope of this thesis, yet relates to the theme of integrating wilderness and cultural landscape values. Cultural landscapes, as cultural resources, are categorized as "other features of value," which according to the NPS may or may not be present within a wilderness.

When present, a cultural landscape is an integral and equal quality of wilderness character. With guidelines that directly address that cultural resource preservation laws still apply within wilderness, conflict over whether cultural features belong in wilderness still arise, as does the issue of determining allowable actions that can be taken to preserve those features. One way in which current wilderness management development policy inhibits integrating cultural landscape management occurs when contradictions between

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46. National Park Service Wilderness Character Integration Team, "Keeping It Wild in the National Park Service," 9.
47. National Park Service Wilderness Character Integration Team, "Keeping It Wild in the National Park Service," 10.

wilderness character qualities, are not accepted as an allowable phenomenon. The Beuham Orchard demonstrates an example of wilderness character quality contraditction in the presence of cultural features, or "Other Features of Value," that contradicts the Natural quality, because the orchard still represents the influences of a man made ecological system. As a quality that is not present in all wilderness areas, "Other Features of Value" that include cultural features could be perceived as contradicting all other wilderness qualities (Table 2.1). If managers prioritize qualities to prevent contradiction, for example, the "Undeveloped" quality, with which the presence of cultural resources could appear to contradict, might lead them to manage resources to promote "undeveloped" rather than devising ways to manage both. Therefore, although wilderness management guidelines express that cultural resources can be included as qualities of wilderness character, the contradictions perceived between wilderness qualities inhibits cultural landscape management because cultural features are not considered a wilderness character quality present in all wilderness.

Table 2.1: Wilderness Character Qualities Comparison: "X" represents possible perceived contradictions within wilderness character, given a wilderness quality compared against other wilderness qualities when present.

	WILDERNESS CHARACTER QUALITIES				
	ALWAYS PRESENT				SOMETIMES PRESENT
WILDERNESS CHARACTER QUALITIES	NATURAL	UNTRAMMELED	SOLITUDE	UNDEVELOPED	OTHER FEATURES OF VALUE– CULTURAL
NATURAL	---				X
UNTRAMMELED		---			X
SOLITUDE			---		X
UNDEVELOPED				---	X
OTHER FEATURES OF VALUE– CULTURAL	X	X		X	---

CHAPTER 3:

CULTURAL LANDSCAPES IN THE UNITED STATES

<u>Background</u>

This chapter outlines the concept of cultural landscapes in the U.S. to address

the question: *What are current NPS cultural resource management policies that help or*

hinder inclusion of wilderness management? A brief account of the development of the

cultural landscape concept in the U.S., descriptions of cultural resource laws that guide

NPS cultural landscape management, and an explanation of the primary documentation

framework that guides NPS cultural landscape management are provided to answer the

question.

The concept of cultural landscapes was developed to describe the imprint of

culture on a place, a dynamic resource type, and is essentially a "method of considering,

analyzing, and evaluating a place."[48] The practice of cultural landscape preservation

is unique in that landscapes are both artifact and system, or product and process, and

that they can encompass a scale of time.[49] The origin of the concept and phrase *cultural*

landscape is attributed in part to geographer Carl Sauer and the study of cultural

geography. Sauer, a professor at the University of California at Berkeley between 1923

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48. Richard W. Longstreth. *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice.* (Minneapolis: University of Minnesota Press, 2008), 1.
49. Alanen and Melnick, *Preserving Cultural Landscapes in America*, 16.

and 1957, saw cultural landscapes as a method of observing landscape and form.[50] He

defined the cultural landscape in 1925 as being "fashioned out of the natural landscape

by a cultural group. Culture is the agent, the natural area is the medium, the cultural

landscape is the result," bringing together nature and culture.[51] Cultural landscapes were

recognized as a distinct resource by the NPS beginning in 1981.[52]

Foundational Laws

The following section describes three laws that set the foundation for cultural

resource management in the U.S. and are influential to NPS cultural landscape

management. They include the Antiquities Act of 1906, the Historic Sites Act of 1935,

and the National Historic Preservation Act of 1966. The establishment of these laws

reveals a sequence of development in the field of cultural resource preservation, from

the early recognition that cultural resources were entities that needed protection, to an

increasing appreciation for the complexities of such resources and their management

needs. Thus, the following laws provide insight into NPS cultural resource management

methods.

The Antiquities Act of 1906 was one of the earliest measures taken by the U.S.

government to protect cultural resources. Predating major natural resource protection

legislation, the act establishes that no one shall "appropriate, excavate, injure, or destroy

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50. Julie Riesenweber, "Landscape Preservation and Cultural Geography." In *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice*, edited by Richard W. Longstreth. (Minneapolis: University of Minnesota Press, 2008), 24.

51. Carl Ortwin Sauer, William M. Denevan, and Kent Mathewson. *Carl Sauer on Culture and Landscape Readings and Commentaries*. (Baton Rouge: Louisiana State University Press, 2009), 46.

52. Manish Chalana. "With Heritage so Wild: Cultural Landscape Management in the U.S. National Parks." Preservation Education & Research 3 (2010): 3.

any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands

owned or controlled by the Government of the United States, without the permission of

the Secretary of the Department of the Government having jurisdiction over the lands

on which said antiquities are situated."[53] Subsequent legislation built on the resource

protection precedent set by this early act.

The Historic Sites Act of 1935 adds another dimension to cultural heritage

preservation, defining "that it is a national policy to preserve for public use historic

sites, buildings, and objects of national significance for the inspiration and benefit of the

people of the United States."[54] This act moves toward connecting the public with cultural

resources in the U.S., justifying historic preservation as a means of inspiration and

benefit. The act also establishes administrative powers for the Secretary of the Interior

in support of that policy, including research, documentation, operational, and treatment

responsibilities.

The National Historic Preservation Act of 1966 further established formative

cultural heritage preservation in the U.S. The first four policy declarations in Chapter 1 of

the act establish the significance of preserving cultural heritage:

> (1) the spirit and direction of the Nation are founded upon and reflected in its
> historic heritage;
> (2) the historical and cultural foundations of the Nation should be preserved as
> a living part of our community life and development in order to give a sense of
> orientation to the American people;
> (3) historic properties significant to the Nation's heritage are being lost or
> substantially altered, often inadvertently, with increasing frequency;

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53. Antiquities Act, 16 U.S.C. 431-433, 1906.
54. Historic Sites Act, 16 U.S.C. 461-467, 1935.

(4) the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans.[55]

To achieve these aims, the act requires federal agencies assess their impact on historic properties through Section 106 review, which "requires federal agencies to consider the effects of projects they carry out, approve, or fund on historic properties," and does not mandate but encourages preservation.[56]

An amendment to the National Historic Preservation Act made in 1980 additionally requires federal agencies to identify and protect historic properties.[57] The act also enables the Secretary of the Interior to establish, expand, and maintain an inventory of historic properties, known as the National Register of Historic Places.[58] Resource types listed on the National Register include buildings, sites, structures, districts, and objects "significant on a national, State, or local level in American history, architecture, archeology, engineering, and culture," of which cultural landscapes can be included under site or district.[59]

NPS Cultural Landscape Management

The NPS has been a leader in developing methods of identification, definitions, and policies for managing cultural landscapes since they began recognizing them as

55. National Historic Preservation Act of 1966, 16 U.S.C. 470 (1966).

56. Advisory Council on Historic Preservation, "Citizen's Guide to Section 106 Review," 4, accessed January 3, 2016, http://www.achp.gov/docs/CitizenGuide.pdf.

57. Chalana, "With Heritage so Wild," 2.

58. Advisory Council on Historic Preservation, Federal Historic Preservation Case Law, 1966-2000, updated by Javier Marqués, 2000, accessed January 12, 2016, http://www.achp.gov/book/sectionII.html#IIA.

59. Advisory Council on Historic Preservation, Federal Historic Preservation Case Law, http://www.achp.gov/book/sectionII.html#IIA.

a resource in 1981.[60] The NPS cultural landscape management system was devised to

comply with the acts listed above, using methods applicable to the diverse resources

that fall within the landscape category, relying on codification to simplify the process.[61]

The NPS defines a cultural landscape as "a geographic area (including both cultural and

natural resources and the wildlife or domestic animals therein), associated with a historic

event, activity, or person or exhibiting other cultural or aesthetic values."[62] Four general

types of cultural landscapes are defined within NPS guidelines, and are not mutually

exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and

ethnographic landscapes. They are defined by the Secretary of the Interior's Standards

for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural

Landscapes as follows:

> • *Historic Site*–a landscape significant for its association with a historic event, activity or person. Examples include battlefields and presidential homes and properties.

> • *Historic Designed Landscape*–a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, engineer, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person, trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.

> • *Historic Vernacular Landscapes*– a landscape that evolved through use by the people whose activities or occupancy shaped it. Through social or cultural attitudes of an individual, a family, or a community, the landscape reflects the

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60. Alanen and Melnick, *Preserving Cultural Landscapes in America*, 7.

61. Alanen and Melnick, *Preserving Cultural Landscapes in America*, 17.

62. Charles A. Birnbaum, and Christine Capella Peters. *The Secretary of the Interior's Standards for the Treatment of Historic Properties: With Guidelines for the Treatment of Cultural Landscapes.* (Washington, D.C.: U.S. Dept. of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, Historic Landscape Initiative, 1996).

physical, biological, and cultural character of everyday lives. Function plays a significant role in vernacular landscapes. This can be a farm complex or a district of historic farmsteads along a river valley. Examples include rural historic districts and agricultural landscapes.

• *Ethnographic Landscapes*– a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, sacred religious sites, and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components.[63]

Cultural landscapes are a complex resource, encompassing diverse components or features within them. The NPS developed two documentation types for simplifying and quantifying individual cultural landscapes: the Cultural Landscape Inventory (CLI) and Cultural Landscape Report (CLR).[64] The CLI is an inventory that describes a cultural landscape's history and existing conditions in quantifiable, organized categories, and assesses and evaluates the integrity of its physical attributes. CLRs are supplementary research documents that provide more details on history, existing conditions, and integrity analysis and evaluation in a narrative and graphic format, but most importantly is a management document. Both aid in understanding the resource, while CLRs additionally direct treatment solutions and resource management.

Cultural landscapes are described in CLIs and CLRs in terms of their component parts known as landscape characteristics,[65] or the "physical forms that characterize

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63. Birnbaum and Peters, *The Secretary of the Interior's Standards for the Treatment of Historic Properties.*

64. Alanen and Melnick, *Preserving Cultural Landscapes in America*, 7.

65. Different systems exist for documenting cultural landscape features. The system used within the NPS describes landscape components as "landscape characteristics."

the appearance of a landscape and aid in understanding its cultural value."[66] The

classification system used to define landscape characteristics includes the following

categories: natural systems and features, spatial organization, land use, cultural traditions,

cluster arrangement, circulation, topography, vegetation, buildings and structures, views

and vistas, constructed water features, small-scale features, and archeological sites.

Landscape characteristics in these categories, if found within the cultural landscape,

are documented throughout all sections of CLRs and CLIs. This system of inventory

and description helps depict the cultural landscape throughout time and is used to help

determine and evaluate treatment solutions for critical issues.

NPS Management Policies state that "treatment of a cultural landscape will

preserve significant physical attributes, biotic systems, and uses when those uses

contribute to historical significance," and are determined based on "historical significance

over time, existing conditions, and use."[67] Also considered in determining treatment are

"natural and built characteristics and features of the landscape, the dynamics inherent

in natural processes and continued use, and the concerns of traditionally associated

peoples."[68] Four treatment options approved for managing NPS cultural landscapes,

and cultural resources in general, as defined in Secretary of the Interior's Standards

for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural

Landscapes, include:

> • *Preservation*–The act or process of applying measures to sustain the existing
> form, integrity and material of an inventory unit. Preliminary measures to protect

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66. "Landscape Lines 3," (Washington, D.C.: U.S. Dept. of the Interior, National Park Service,
Cultural Resources), 4.

67. *Management Policies 2006*, 69.

68. *Management Policies 2006*, 69.

and stabilize the property may be taken, but preservation work focuses upon the ongoing maintenance and repair of historic material and features rather than extensive replacement and new work.

• *Rehabilitation*–The act or process of making possible an efficient compatible use for an inventory unit through repair, alterations, and additions while preserving those portions of features that convey its historical, cultural or aesthetic values.

• *Restoration*–The act or process of accurately depicting the form, features, and character of an inventory unit as it appeared at a particular period of time (period of significance), by the removal of features present from other periods in its history and/or the reconstruction or replacement of missing features from the period of significance.

• *Reconstruction*–The act or process of depicting, by means of new work, the form, feature, and detailing of a non-surviving inventory unit or any part thereof, for the purpose of replicating its appearance at a specific time and in its historic location."[69]

The first three options of preservation, rehabilitation, and restoration are determined as appropriate treatments for extant cultural landscape, based on condition and park management objectives.[70] Critics warn, however, that these treatment options were developed for the broader context of preservation, and that "in cultural landscape preservation, restoration, and rehabilitation, there is always the challenge to understand the dynamics of natural systems and to incorporate that understanding into plans, designs, and various degrees of intervention," indicating that perhaps different approaches to cultural landscape treatments would be more appropriate.[71] Natural systems include

69. Robert Page, Jeffrey Killion, and Gretchen Hilyard. "National Park Service Cultural Landscape Inventory Professional Procedures Guide." Washington D.C.: U.S. Dept. of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 2009), 9-2.

70. *Management Policies 2006*, 69.

71. Alanen and Melnick, *Preserving Cultural Landscapes in America*, 19.

biotic resources that live and change with the cycles of time, presenting challenges to the concept of preservation.

Biotic cultural resources are an important component of natural systems within the context of cultural landscapes. They are described by Ian Firth in his 1985 document for the NPS Southeast Region, as "communities of plants and animals associated with human settlement and land use in historic districts."[72] Writing early in the development of the NPS cultural landscape concept, he points out in his document that "existing NPS guidelines for the management of historic districts do not address the unique characteristics of biotic cultural resources."[73] He describes that the "feasibility of a preservation or restoration [treatment] strategy depends on the available historical information, an ability to recover past characteristics and to maintain those characteristics," and that when preservation or restoration are not feasible, alternative management methods must be developed.[74]

Firth also describes that, although some management is necessary for natural resources, protecting natural resources "means we must accept natural changes in a historic landscape. This involves not only daily and seasonal cycles in vegetation and wildlife, but permanent changes which are an inherent part of the development of natural systems."[75] Other scholars refer to processes and cycles inherent to landscapes, stating

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72   Ian Firth. *Biotic Cultural Resources: Management Considerations for Historic Districts in the National Park System*, Southeast Region. (Atlanta, Ga: U.S. Dept. of the Interior, National Park Service, 1985), 1.
73   Firth, *Biotic Cultural Resources*, 1.
74   Firth, *Biotic Cultural Resources*, 1.
75   Firth, *Biotic Cultural Resources*, 5.

that "Landscape preservation is at its best when it is adaptive and continual–a long-term process, not a one-shot project."[76]

NPS Cultural Resource Management Policies and Wilderness

As wilderness areas are typically larger geographic areas that can encompass cultural landscapes, the hierarchy of larger to smaller instinctively leads to investigating how the larger inhibits inclusion of the smaller. The following section explores a perceived problem in reverse, answering: *What are current NPS cultural resource management policies that help or hinder inclusion of wilderness management?*

The implementation of prescribed cultural landscape treatments can inhibit preservation of wilderness character qualities (Table 3.1). Performing preservation, rehabilitation, restoration, or reconstruction on cultural landscapes within wilderness areas might require actions not typically allowed in wilderness. These activities could be considered disruptive of wilderness character as described in Chapter 2. For example, if a cultural landscape within a wilderness area needs to be mowed as a preservation treatment, mowing the area and any use of mechanized machinery would disrupt wilderness character qualities, such as Natural, Untrammeled, and Solitude. In such cases, managers can gain special permission from their agency through the minimal requirements process. Plans, proposals, and evaluations are required to gain special permission to perform most treatments on cultural landscapes within wilderness, following NEPA protocol. While unmechanized options are occasionally available, such

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76   Randall Mason. "Management for Cultural Landscape Preservation: Insights from Australia." (In *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice*, 180-196, edited by Richard Longstreth. Minneapolis: University of Minnesota Press, 2008), 184, 182.

as mules for transport or handsaws in place of chainsaws, these options can require

extensive planning, add undue demands to workers, can be less economically sustainable,

and still reduce wilderness qualities. Therefore, logistical barriers to accomplishing

cultural landscape treatment solutions inhibit integrating cultural landscape and

wilderness management.

Table 3.1: Cultural Landscape Treatments and Wilderness Character Qualities:
"X" indicates cultural landscape treatments that could, upon implementation, inhibit
preservation of wilderness character qualities.

		WILDERNESS CHARACTER QUALITIES				
		ALWAYS PRESENT				*SOMETIMES PRESENT*
		NATURAL	UNTRAMMELED	SOLITUDE	UNDEVELOPED	OTHER FEATURES OF VALUE– CULTURAL
CULTURAL LANDSCAPE TREATMENTS	PRESERVATION	X	X	X	X	
	REHABILITATION	X	X	X	X	
	RESTORATION	X*	X*	X	X*	
	RECONSTRUCTION	X	X	X	X	

*Restoration sometimes requires the removal of features present from periods other than
the target period of significance, or the era represented, which could positively impact
wilderness character quality.*

CHAPTER 4:

THE RELATIONSHIP BETWEEN WILDERNESS AND CULTURE

<u>Introduction</u>

The following chapter is organized into two parts. Part I further explores the

division between wilderness and cultural landscape management introduced in chapters

2 and 3, with classification of literature on the subject. Part II then explores connections

between wilderness and culture through case studies and related literature classification.

Case study investigations and related literature review include the following NPS sites

that provide examples of managing both wilderness and cultural landscapes: Gates of

the Arctic National Park and Preserve, Isle Royale National Park, and Apostle Islands

National Lakeshore. An investigation of the World Heritage Convention's approach

to cultural landscapes and nature conservation also reveals applicable concepts. The

following section also answers the question: *What is the connection between wilderness*

and culture? The conclusion section summarizes the findings from Parts I and II, listing

issues that inhibit integrating NPS wilderness and cultural landscape management, thus

affording opportunities to list goals that encourage management integration.

<u>Part I: Division</u>

The following section continues to explore the relationship between wilderness

and culture in management, investigating the separation between management

frameworks introduced in Chapters 2 and 3, semantics, and the spectrum of wilderness and cultural landscape places that need to be managed by the same agencies. This section addresses the question: *What issues and opportunities exist between managing areas as both wilderness and cultural landscapes?*

Chapters 2 and 3 demonstrated how the existing NPS wilderness and cultural landscape management systems are divided, based on a history of separate theories, laws, and management development. While NPS management guidelines recognize that cultural resources can exist within wilderness, the existing NPS frameworks that direct both wilderness and cultural landscape management remain separate. These frameworks are rooted in the agency's history of fostering a dichotomy between nature and culture and reflect trends of the eras in which they were developed.[77]

Separation between wilderness and cultural resources continue to be manifest by NPS management zones, which clearly delineate areas according to their dominant qualities (Fig. 1.6). This method is intended to help ensure that resources receive appropriate and necessary management. The process, however, reinforces the dichotomy between nature and culture when areas are carved out of wilderness zones and labeled for cultural significance.

Identifying and defining boundaries around all cultural evidence in wilderness areas is an impossible and counterproductive task, so there exist many cultural resources of varying scale and significance within wilderness. Some of these cultural sites have not yet been documented, just as many wilderness areas within NPS managed lands have not been fully surveyed–a monumental task not required by the Wilderness Act. As Manish

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77. Kirn, "A Case for Storied Landscapes," 57.

Chalana points out, collectively the "CLI program is not comprehensive in its approach to creating a baseline inventory" of cultural sites, yet focuses on cultural landscapes that are eligible for the National Register of Historic Places, misrepresenting the full spectrum of cultural landscape diversity.[78] As stated in Chapter 1, prioritization of resources is a necessary reality, yet can have a negative affect by perpetuating a separation between wilderness and cultural resources.

Current guidelines strive to harmonize managing both wilderness and cultural resources where they overlap, yet, as described in Chapters 2 and 3, discrepancies still arise over how to successfully and sustainably manage the same area under two distinctly different management regimes, set at opposite ends of a spectrum (Fig. 4.1).[79] Writing on nature and culture in historic landscape preservation, Robert Melnick points out that "land management agencies and those charged with natural and cultural landscape preservation are invested in a contract that emphasizes landscape differentials at the expense of commonalities and potentials and thereby entrenches and polarizes opinions."[80] Addressing NPS land management efforts, Melnick points out that

Figure 4.1: Nature & Culture Spectrum: A traditional perception of nature and culture sets them at opposite ends of a spectrum.

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78. Chalana, "With Heritage so Wild," 13.

79. Robert Melnick. "Considering Nature and Culture in Historic Landscape Preservation." In *Preserving Cultural Landscapes in America*, edited by Arnold Alanen and Robert Melnick. (Baltimore: Johns Hopkins University Press, 2000), 24.

80. Melnick, "Considering Nature and Culture in Historic Landscape Preservation," 24.

"integrated resources are treated separately" and that "today's management system is not

a synthesis of efforts," referring to cultural and natural resources.[81] The systems devised

to inform land management divide and categorize to simplify the process, making it

adaptable and applicable to diverse resources. These systems, however, isolate resource

types and force categorization which divide parts of a whole, rather than considering

an integrated complex system.[82] Instead, Melnick supports an inclusive management

approach that treats the landscape as an "integrated and dynamic whole," bringing

together management of cultural and natural resources.[83]

The term "untrammeled" as used in the Wilderness Act sometimes perpetuates

the polarized view between culture and nature. Many interpret the word to mean "un-

trampled," or essentially not stepped upon, which would indicate a place devoid of

human presence. Others support that the word, as used by the act's author Howard

Zahniser, means "being not subject to human controls and manipulations that hamper the

free play of natural forces," using this interpretation to infer that humans are an intrinsic

part of wilderness, having made the conscious decision not to interfere.[84] Regardless

of the definition, in an era that recognizes the far reaching influence of humans on the

natural world with impacts such as climate change, it is impossible to pinpoint a place

uninfluenced by human presence. Conversely, it is impossible to pinpoint a physical

location uninfluenced in some way by nature, illustrating that "untrammeled" represents a

goal for managers to strive for within wilderness.

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81. Melnick, "Considering Nature and Culture in Historic Landscape Preservation," 28.
82. Melnick, "Considering Nature and Culture in Historic Landscape Preservation," 29.
83. Melnick, "Considering Nature and Culture in Historic Landscape Preservation," 43.
84. Kammer, "Coming to Terms with Wilderness," 112.

Critics of a wilderness concept devoid of cultural presence also point out that

the central paradox of that approach is that man and nature are separate, yet a cultural

presence is essential for wilderness to exist because it is a cultural construct.[85] Others

point out that, as a product of policy and practice, wilderness is a human and natural

creation that indicates "land that will no longer be subject to much human presence."[86]

Environmental historian William Cronon describes the complexities of the culture

and wilderness relationship, stating "the natural world is far more dynamic, far more

changeable, and far more entangled with human history than popular beliefs about the

'balance of nature' have typically acknowledged," expressing that the two are intricately

woven into the same fabric of landscape.[87]

Part II: Integration

The following section investigates NPS case study examples, related literature,

and international methodologies, to answer the following questions:

> • *What techniques and policies are employed that integrate cultural and*
>
> *wilderness management within the NPS?*
>
> • *What are current and emerging best practices that integrate cultural and*
>
> *wilderness management?*

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85. William Cronon. "The Trouble with Wilderness Or, Getting Back to the Wrong Nature." (In *Uncommon Ground: Rethinking the Human Place in Nature*, edited by William Cronon. New York: W.W. Norton & Co., 1995), 7.

86. Richard W. Longstreth. *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice.* (Minneapolis: University of Minnesota Press, 2008), 10.

87. William Cronon. *Uncommon Ground: Toward Reinventing Nature*. (New York: W.W. Norton & Co., 1995), 85.

• Based on case studies, what are the principles that could govern the management of both wilderness and cultural resources in the same geographic area?

Each NPS unit is encouraged to have its own management plan that outlines goals and objectives specific to each park. Management at different parks, therefore, reflect varying degrees of integrating wilderness and culture. The following case studies provide examples of national park units that contain cultural landscapes within wilderness areas moving toward integrating wilderness and culture, including: Gates of the Arctic National Park and Preserve, Isle Royale National Park, and Apostle Islands National Lakeshore. While each park manages unique assets, there are approaches that can be applicable and useful throughout the system. Criteria for the following case studies included:

1) National Parks with wilderness areas that contain cultural resources, and

2) management documentation and additional literature that address those resources in an innovative way.

The case studies, along with an additional investigation of an international approach, reveal examples and management concepts that address both wilderness and cultural resources.

Gates of the Arctic National Park and Preserve

Gates of the Arctic National Park and Preserve (GAAR) encompasses a vast 8.4 million acres of northern Alaska and is considered the "premier wilderness park in the

national park system, protecting ... diverse arctic ecosystems."[88] Foundational documents

thoroughly acknowledge the cultural significance within wilderness, based on the park's

purpose statement:

> The purpose of Gates of the Arctic National Park and Preserve is to preserve the vast, wild, undeveloped character and environmental integrity of Alaska's central Brooks Range and to provide opportunities for wilderness recreation and traditional subsistence uses.[89]

Significance points are also provided to expand upon the purpose, stating that GAAR

"protects habitats and resources in consultation with local rural residents to provide

subsistence opportunities on lands that have supported traditional cultures and local

residents," and that it "protects a 12,000-year record of human cultural adaptations to

high latitude mountain environments and an unbroken tradition of living on the land."[90]

In essence, GAAR not only protects the land from future development, but also protects

existing ways of life. GAAR protects ongoing cultural activities, but it considers them an

intrinsic part of wilderness, recognizing cultural landscape and wilderness together.

The NPS Alaska Regional Management Guidelines also state that "[cultural

landscapes] are often an assemblage of resource types that when considered collectively

reveal emergent historical value often overlooked by the standard National Register

of Historic Places process of identification and evaluation, and herein lies their

value," acknowledging the value of cultural landscapes that might not be eligible for

consideration according to National Register standards.[91] Ranger Steve Ulvi describes

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88. "Gates of the Arctic National Park and Preserve Foundation Statement." U.S. Dept. of the Interior, National Park Service. 2004, 8.

89. "Gates of the Arctic National Park and Preserve Foundation Statement," 4.

90. "Gates of the Arctic National Park and Preserve Foundation Statement," 4.

91. "NPS Alaska Regional Management Guidelines." (Gates of the Arctic National Park and Preserve, U.S. Dept. of the Interior, National Park Service. 2013), 9.

the culture-nature dynamic at GAAR as "a heritage cultural landscape. A reservoir of answers for questions we have not yet thought of about the dynamic nature of the natural world and human adaptations and responses."[92] He also argues that there are "conceptual advantages and potential program coherence in treating the Gates of the Arctic wilderness as a complex cultural landscape," explaining that "We have unheralded opportunities to achieve the greater public good in these large, intact northern biotic systems precisely because they are meant to be inclusive of, and imbued with, human culture. Biomes that still blur the arbitrary distinction between people and nature."[93] The integration of culture and wilderness at GAAR overcomes what he describes as a "lack of interagency will to manage for a spectrum of wilderness areas, using as a yardstick measurable quotients of wildness and naturalness."[94] He also explains that the opportunity at GAAR to combine culture and wilderness "necessitates creative and unconventional agency management strategies," advocating "Unique solutions for unique challenges."

Isle Royale National Park

A geographically and historically similar park to Sleeping Bear Dunes National Lakeshore, Isle Royale National Park (ISRO) is an island in the northern waters of Lake Superior. Part of Michigan, the remote island is closer to Canada and Minnesota than the mainland of its own state, and, much like North Manitou Island, must be accessed by

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92. Steve Ulvi. "On common ground: an enduring wilderness as cultural landscape and biotic reserve." (In *Crossing Boundaries in Park Management: Proceedings of the 11th Conference on Research and Resource Management in Parks and on Public Lands*, edited by David Harmon. Hancock, Michigan: The George Wright Society, 2011), 277.

93. Ulvi, "On common ground," 277, 275.

94. Ulvi, "On common ground," 274.

boat. The history of ISRO parallels that of Sleeping Bear Dunes, spanning from a Native American presence to European contact, influenced by eras of mining, nautical and navigational significance, and recreational uses such as sport hunting, NPS possession, and wilderness designation.

A historical context report on ISRO written by Philip Scarpino is intended to direct cultural resource management for the park. He describes that "the 'environment' of Isle Royale in the present is a product of the interplay between people and nature over an extended period of time," and that the "long trajectory of history ... provides the context for assessing the significance of the surviving cultural resources on Isle Royale National Park and ... argues for integrated planning for, and preservation of, cultural resources and wilderness on the Island."[95] The context provides an evaluation of the park, combining environmental history, material culture, and historic preservation, stating that the island park "is as much a human artifact as it is a natural place," shaped and reshaped by hundreds of years of human activity.[96] About 90% of the island is managed as wilderness, yet Scarpino warns that "managing Isle Royale as an 'actual' wilderness not only denies or greatly diminishes the long and essential role of human history on the Island, but it also severs the intimate links between Lake Superior and Isle Royale; between water and land in shaping the meaning of that place over time.[97]

Within the ISRO context report, Scarpino draws comparisons between parks with similar cultural resource issues, including Sleeping Bear Dunes. Former NPS cultural

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95. Philip Scarpino. *Cultural Resources on Isle Royale National Park: An Historic Context.* (Indianapolis: Indiana University/Purdue University, 2010), 3.

96. Scarpino, *Cultural Resources on Isle Royale National Park*, 3.

97. Scarpino, *Cultural Resources on Isle Royale National Park*, 11, 12.

resource treatments for these parks included a policy concerning moldering ruins. The author describes:

> The policy and practice of "erasure" or "moldering ruins" has resulted in the significant destruction and deterioration of cultural resources in four historical wildernesses situated on the Great Lakes: Isle Royale (1931/1946), Apostle Islands National Lakeshore (1970), Sleeping Bear Dunes National Lakeshore (1970), and Voyageurs National Park (1975). An important comparative lesson from the experiences of these four National Park Service units is that erasure due to deliberate policy or neglect is not an acceptable outcome for cultural resources in an historical wilderness.[98]

He asserts the significance of integrating cultural resource and wilderness management to convey a comprehensive story of the park, describing:

> On Isle Royale the material culture of resource exploitation and navigation, of recreation and conservation exists as physical symbols of the intertwined historical movements that shaped and reshaped the "face" of the Island. Their existence; their survival; and their meaning are products of the interaction between human and natural forces. Indeed, the primary artifact is the Island itself, shaped and reshaped by human action over time -- mined and fished and logged and burned and cleared and restored.[99]

In reference to the shift away from the "moldering ruin" policy previously accepted by parks, the author asks the essential question, "what happens to cultural resources after the Park Service spares them from erasure?"[100] The answer provided is to develop "management plans that integrate human and natural history" as an important measure, with the caution that "integrity ties the important physical characteristics of cultural resources to their significance," which in many cases relies on use.[101] Scarpino recommends the following actions to integrate management: "A sound historic

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98. Scarpino, *Cultural Resources on Isle Royale National Park*, 77.
99. Scarpino, *Cultural Resources on Isle Royale National Park*, 26.
100. Scarpino, *Cultural Resources on Isle Royale National Park,* 78.
101. Scarpino, *Cultural Resources on Isle Royale National Park,* 78.

preservation plan should envision nomination to the National Register of Historic Places,

a program of maintenance consistent with the 'Secretary of the Interior's Standards

for Rehabilitation,' and continuing use as part of a community that is consistent with,

and respectful of, the historic context that defines their importance," suggesting the

establishment of an historic preservation commission of NPS personnel and permit

holders to make recommendations on treatments, and to "develop a plan to put the

holders of multi-year special use permits 'to work' as volunteer advocates for,

and even fund-raisers for, preserving and protecting and interpreting the cultural

resources on Isle Royale."[102]

     According to the park website, the NPS, in consultation with the public, is

currently working on a Cultural Resource Management Plan for ISRO.

Apostle Islands National Lakeshore

     Another geographically and historically similar park to Sleeping Bear Dunes

National Lakeshore, Apostle Islands National Lakeshore (APIS), is a collection of islands

located in the western waters of Lake Superior. The park has a rich human history that

parallels that of Sleeping Bear Dunes National Lakeshore. Although the park General

Management Plan does not address wilderness and cultural resources in an innovative

way, wilderness and culture are brought together in the park interpretive plan, which

defines educational themes for rangers to convey to the public about the park. The

interpretive plan outlines goals for the future of the park's outreach and education

program, relating wilderness and culture in the first three points:

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    102. Scarpino, *Cultural Resources on Isle Royale National Park,* 84.

1- At the center of the continent, Lake Superior has long served as a highway of commerce connecting the Apostle Islands region to a global economy, thereby transforming the landscape and its people.
2- The Stories of Apostle Islands National Lakeshore reveal themselves along edges where water meets land and sky, field meets forest, culture meets culture, and past meets future.
3- After being altered by centuries of exploitation, the Apostle Islands' environment is restoring itself and regaining its wilderness characteristics.[103]

In his book about APIS, James Feldman explores the opportunities the islands present for altering the way park managers and visitors consider wilderness and culture. He describes the Apostle Islands wilderness as a rewilding landscape that needs active and continued management, because "Human choices have shaped the rewilding of the Apostle Islands for decades, and this role should continue."[104] His concept of rewilding expresses a storied approach to the human-nature relationship, explaining that "rewilding landscapes should be interpreted as evidence neither of past human abuse nor of triumphant wild nature, but rather as evidence of the tightly intertwined processes of natural and cultural history."[105]

Feldman also warns that:

It is the way that NPS policies have interpreted the wilderness ideal that has created the apparent conflict between wilderness and history. Wilderness might even be a vehicle for protecting historical resources, and protecting them in a way that helps explain not just human history but also the way that the natural world framed and informed this history. Historical resources would thus be a part of the wilderness landscape, not an intrusion upon it.[106]

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103. "Long Range Interpretive Plan: Apostle Island National Lakeshore." (U.S. Dept. of the Interior, National Park Service, 2002), 24.

104. James Feldman. *A Storied Wilderness: Rewilding the Apostle Islands*. (Seattle: University of Washington Press, 2011), 230.

105. Feldman, *A Storied Wilderness*, 230.

106. Feldman, *A Storied Wilderness*, 230.

He advises that interpretation and management can help "inform visitors about the rich histories of the islands, their vibrant environments, and the ways that these two seemingly distinct categories overlap," which would help visitors "recognize the consequences of human habitation in nature."[107] Thus, connecting wilderness and culture allows for a wilderness "layered with stories," that convey a stewardship message.[108]

Bill Cronon expresses that to recognize the past human impacts on the Apostle Islands does not "call into question their wildness; it is rather to celebrate, along with the human past, the robust ability of wild nature to sustain itself when people give it the freedom it needs to flourish in their midst."[109] He considers the management dilemma posed by all such places, asking: "In a much altered but rewilding landscape, where natural and cultural resources are equally important to any full understanding of place, how should we manage and interpret these islands so that visitors will appreciate the stories and lessons they hold?"[110] Cronon supports managing the islands as a historical wilderness, suggesting that instead of erasing human evidence, the park should interpret them to convey the "intricate and profound" process of rewilding, suggesting that orchards are an ideal example of the process.[111]

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107. Feldman, *A Storied Wilderness,* 231.
108. Feldman, *A Storied Wilderness,* 233.
109. William Cronon. "The Riddle of the Apostle Islands: How Do You Manage a Wilderness Full of Human Stories?" (Orion Magazine, May/June, 2003), 36-42.
110. Cronon, "The Riddle of the Apostle Islands."
111. Cronon, "The Riddle of the Apostle Islands."

International Sites and Methods

The World Heritage Convention, overseen by the United Nations Educational,

Scientific and Cultural Organization (UNESCO), defines the system by which World

Heritage Sites are listed.[112] The convention requires an anthropological approach

that focuses, on "human co-existence with the land and human beings in society,"

which reflects that "material and immaterial, natural, spiritual, and cultural factors are

complexly intertwined in the heritage of many countries."[113] Applying a similar approach

to the Beuham Orchard site could help emphasize the complex relationship between

wilderness and culture and could inform management methods.

The World Heritage definition and categories of cultural landscapes also help

inform concepts for integrating wilderness and cultural landscape management. The

Convention defines cultural landscapes as:

> The combined work of nature and of man. They are illustrative of the evolution
> of human society and settlements over time, under the influence of the physical
> constraints and/or opportunities presented by their natural environment and of
> successive social, economic and cultural forces, both external and internal.[114]

Stating that "the term 'cultural landscape' embraces a diversity of manifestations

of the interaction between humankind and its natural environment," the Convention's

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112. Nora Mitchell, Mechtild Rössler, Pierre-Marie Tricaud, and Carmen Añón. "World Heritage Cultural Landscapes: A Handbook for Conservation and Management." (Paris: UNESCO World Heritage Centre, 2009), 19, accessed December 2, 2015. http://whc.unesco.org/documents/publi_wh_papers_26_en.pdf.

113. Nora Mitchell and Susan Buggey. "Protected Landscapes and Cultural Landscapes: Taking Advantage of Diverse Approaches." (In *Landscape Stewardship: New Directions in Conservation of Nature and Culture,* The George Wright Forum 17(1), 1. The Georgia Wright Society, 2000), 43.

114. Mauro Agnoletti. *The Conservation of Cultural Landscapes*. (Wallingford: CABI, 2006), xii.

approach to cultural landscapes addresses a more fluid spectrum.[115] World Heritage

guidelines also recognize diversity in cultural landscapes around the world, categorizing

them as follows:

> • *Category 1*–The most easily identifiable is the clearly defined landscape
> designed and created intentionally by man. This embraces garden and parkland
> landscapes constructed for aesthetic reasons which are often (but not always)
> associated with religious or other monumental buildings and ensembles.

> • *Category 2*–The second category is the organically evolved landscape.
> This results from an initial social, economic, administrative, and/or religious
> imperative and has developed its present form by association with and in
> response to its natural environment. Such landscapes reflect that process of
> evolution in their form and component features.

> Both categories can fall into two sub-categories:
> • a *relict (or fossil) landscape* is one in which an evolutionary process came to
> an end at some time in the past, either abruptly or over a period. Its significant
> distinguishing features are, however, still visible in material form.

> • *continuing landscape* is one which retains an active social role in contemporary
> society closely associated with the traditional way of life, and in which the
> evolutionary process is still in progress. At the same time it exhibits significant
> material evidence of its evolution over time.

> • *Category 3*–The final category is the associative cultural landscape. The
> inclusion of such landscapes on the World Heritage List is justifiable by virtue
> of the powerful religious, artistic or cultural associations of the natural element
> rather than material cultural evidence, which may be insignificant or even
> absent.[116]

Although parallels can be drawn between them, the World Heritage Convention

categories recognize interaction between humans and nature differently than do the NPS

cultural landscape categories. The World Heritage List further enforces integrating culture

and nature with the following inclusion criteria that emphasize natural qualities:

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115. Mitchell, Rössler, Tricaud, and Añón, *World Heritage Cultural Landscapes*, 20.

116. "Cultural Landscapes," United Nations Educational, Scientific, and Cultural Organization and World Heritage Convention, accessed January 20, 2016, http://whc.unesco.org/en/culturallandscape/.

VII–contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance; or

VIII–be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features; or

IX– be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals; or

X–contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.[117]

The guidelines specifically integrate nature conservation with cultural landscapes to emphasize sustainable land use, stating that "protection of cultural landscapes can contribute to modern techniques of sustainable land use and can maintain or enhance natural values in the landscape."[118] The intention is to recognize that "Cultural landscapes are at the interface between nature and culture. They represent the permanent interaction between humans and their environment, shaping the surface of the earth.... Adapted protection and proper management is urgently needed"[119]

Cultural landscapes within wilderness areas represent a dialectic between the cultural and natural world. A shift toward recognizing the interaction and influence between humans and nature challenges the historic concept of a boundary between

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117. Mitchell, Rössler, Tricaud, and Añón, *World Heritage Cultural Landscapes*, 21.

118. Mitchell and Buggey. "Protected Landscapes and Cultural Landscapes, 36.

119. Plachter von Droste, quoted in Landscape Stewardship: New Directions, 43.

nature and culture, on which NPS policy is widely based.[120] An emphasis on the

connection between humans and nature illustrates the impact people have on the 'natural'

world, which, as described above, is recognized as being far greater than previously

considered.[121] A demand for an environmental ethic that helps us understand how to

better use nature, representing sustainable practices, rather than a focus on not using

it, coincides with the educational value of cultural landscapes that demonstrate the

connection between nature and culture.[122] Rather than perpetuating the polarization

of nature and culture by continuing to focus on differences between wilderness and

cultural landscapes, managers should focus on commonalities to integrate management

and convey that value.[123] Parallels and overlapping goals exist between wilderness and

cultural landscape management concepts, and highlighting these parallels can aid in the

development of integrated processes.

Analysis

  This section compiles the issues found in Chapters 2, 3, and 4 that inhibit

integrating wilderness and cultural landscape management practices (Table 4.1), and

the concepts employed within NPS units and internationally that support integrating

management practices (Table 4.2). Table 4.2 describes the goals and objectives that

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   120. Manish Chalana. "With Heritage so Wild: Cultural Landscape Management in the U.S. National Parks." Preservation Education & Research 3 (2010): 1.

   121. William Cronon. *Uncommon Ground: Toward Reinventing Nature*. (New York: W.W. Norton & Co., 1995), 85.

   122. Cronon, *Uncommon Ground*, 85.

   123. Robert Melnick. "Considering Nature and Culture in Historic Landscape Preservation." In *Preserving Cultural Landscapes in America*, edited by Arnold Alanen and Robert Melnick. (Baltimore: Johns Hopkins University Press, 2000), 24.

create opportunities for integrating wilderness and cultural landscape management. The

following chapter describes opportunities for encouraging integration.

Table 4.1: Issues identified that inhibit integrating wilderness and cultural landscape management. Summary of issues identified in Chapters 2, 3, and 4, and the policies from which they originate. Referenced by letters in Chapter 5.

POLICY	ISSUES
Wilderness	A. Contradictions perceived between wilderness character qualities.
	B. Activities and actions within wilderness areas are strongly regulated.
Cultural Landscapes	C. Treatments options for historic properties might not be most appropriate for application to cultural landscapes.
	D. Existing documentation systems might not recognize full spectrum of cultural landscapes.
Both	E. Implementation of cultural landscape treatments might inhibit preservation of wilderness character qualities.
	F. NPS management zones reinforce dichotomy between wilderness and cultural landscapes.
	G. Semantics are a source of division.
	H. Recognizing the full spectrum of diversity within wilderness and cultural landscapes challenges NPS management policies, which must be applicable and adaptable to the full range of landscapes.

Table 4.2: Goals and objectives identified for integrating wilderness and cultural landscape management. Summary of goals and objectives presented in case studies and related literature classification. Goals referenced by number in Chapter 5.

CASE STUDY	GOALS	OBJECTIVES
Gates of the Arctic	1. Recognize culture as intrinsic part of wilderness; humans are part of biotic systems in wilderness.	Develop creative and unconventional strategies that integrate wilderness and cultural resource management.
	2. Acknowledge value of cultural landscapes might not be recognized by traditional documentation methods.	Develop new documentation methods that recognize wider spectrum of cultural landscapes.
Apostle Islands	3. Recognize concept of historic wilderness or storied wilderness.	Apply rewilding interpretive framework that recognizes continued management from humans in wilderness areas.
		Use interpretation as a tool to bring wilderness and culture together; wilderness is layered with stories.
Isle Royale	4. Recognize and respect human and natural history together.	Construct a management plan that incorporates continued use to help retain integrity and significance of historic properties.
		Involve public interest groups in developing management plans, treatments, maintenance, and interpretation.
World Heritage Convention	5. Recognize cultural landscapes as combined works of man and nature.	Develop different cultural landscape type categories that help reinforce wilderness as part of cultural landscape.
		Emphasize interpretation of sustainable land use in all landscape categories.

CHAPTER 5:

MANAGEMENT FRAMEWORK DESIGN

<u>Introduction</u>

This chapter examines the issues, goals, and objectives identified in Chapter 4,

to develop a management framework with steps toward integrating the requirements

and values of wilderness and cultural landscape management. First, connections are

drawn between issues and specific goals. The goals represent parts of the primary goal

of integrating wilderness and cultural landscape management. They can act as building

blocks that guide objectives and inspire tactics, which are derived from those objectives.

Next, objectives derived from the goals are applied to the issues, transforming the issues

into opportunities to integrate management. Some of the objectives correlate to those

listed in Table 4.2 while others present new ideas. The objectives also refer to activity

implemented at two different NPS management levels, system-wide and park level,

yet some apply to both. Finally, the objectives are organized as steps in an adaptive

management framework, referencing Firth and other scholars (Chapter 2), who support

an adaptive framework that recognizes change inherent to landscape.

It is important to note that the NPS already addresses many of the issues

identified, as acknowledged below. The actions in this chapter are intended to support

those efforts, pushing the concept to further integrate wilderness and cultural landscapes.

<u>Wilderness Issues</u>

• *Issue A:* Contradictions are perceived between wilderness character qualities.

• *Goal 1:* Recognize culture as intrinsic part of wilderness; humans are part of biotic

systems in wilderness.

• *Objective:* Wilderness management guidelines specify cultural features as Wilderness

character quality that is always present.

      Although this issue is addressed within existing systems as described in Chapter

2 (NPS planning documents address that some wilderness qualities might appear to

contradict one another, yet can simultaneously occur in an area), further action would

support integrating management.[124] System-wide acknowledgment that "Other Features

of Value" are *always* present in wilderness, instead of *sometimes* present, would minimize

perceived contradictions. The character quality could be titled "Cultural and Other

Features of Value," indicating that cultural values are always present and other features

are sometimes present.

• *Issue B:* Actions within wilderness areas are strongly regulated.

• *Goal 4:* Recognize and respect human and natural history together.

• *Objective:* Develop, document, and share creative alternative solutions for cultural

landscape actions in wilderness.

      This issue is also already addressed by existing systems. Through the minimum

requirements process, as described in Chapter 2, managers can get special permission

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124. National Park Service Wilderness Character Integration Team, "Keeping It Wild in the
National Park Service, 10.

to perform activities within wilderness that might disrupt wilderness character. This process, however, still inhibits integrating management. A way to help mitigate the issue is the development of creative methods to perform tasks that need completion within wilderness. Creating a network of managers and employees who could offer each other insight, ideas, and collaboration on creative solutions would promote consistency and cohesion for those facing similar challenges throughout the NPS. Continued use could be considered a creative solution that would need to go through the existing minimum requirements system. This objective requires coordination at both the system-wide and park levels.

Cultural Landscape Issues

• *Issue C:* Treatment options for historic properties might not be most appropriate for application to cultural landscapes.

• *Goal 5:* Observe cultural landscapes as combined works of man and nature.

• *Objective:* Modify cultural landscape treatments for wilderness.

As described in Chapter 3, Firth expresses that treatment options for historic properties might not be suitable for biotic resources. He suggests "replacement with equivalent community, replacement with a grassland community, and release to allow the return of native vegetation and wildlife" as alternatives.[125] Other options might include a combination or hybridization of treatments, with selective or experimental preservation or rehabilitation. For example, plant or animal species might be reintroduced to a site, such as specific plants or pollinators, to encourage natural systems as they were with

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125. Firth, *Biotic Cultural Resources*, 1.

a different degree of human influence. Susan Dolan, manager of the NPS Cultural

Landscapes Program, states that treatment plans "should be based on clearly defined

management objectives that are compatible with the type and level of significance of the

property."[126] Modification of the existing treatment types acknowledges issues unique to

cultural landscapes within wilderness areas and would be determined at the park level.

• *Issue D*: Existing documentation systems might not recognize full spectrum of cultural

landscapes.

• *Goal 2:* Acknowledge that the value of cultural landscapes might not be recognized by

traditional documentation methods.

• *Objective:* Include wilderness as part of CLI.

The concept of cultural landscapes as a "method of considering, analyzing,

and evaluating place," parallels the methods devised by the NPS to inform wilderness

management, as described in chapter 2. The two methods developed for quantifying

wilderness and cultural landscapes reflect the cultural filters through which they were

created. Adapting the existing cultural landscapes inventory framework for application

to wilderness areas could help illuminate means of integrating management for both.

Documenting a wilderness area following cultural landscape documentation, assessing

wilderness area "as a continuum through history" as a cultural landscape is assessed,

connects the two and creates an opportunity to synthesize the findings as described in

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126. Susan Dolan. *Fruitful Legacy: A Historic Context of Orchards in the United States, with Technical Information for Registering Orchards in the National Register of Historic Places*. (Seattle, Wash.: National Park Service, Olmsted Center for Landscape Preservation, Pacific West Regional Office, Cultural Resources, Park Historic Structures and Cultural Landscapes Program, 2009), 194.

Table 4.2. The exercise could also highlight possible additions to the cultural landscape documentation process to aid understanding how to address wilderness as part of the CLI. Wilderness would be added to the CLI at the system-wide management level.

Issues for Both Wilderness and Cultural Landscapes

• *Issue E:* Implementation of cultural landscape treatments might inhibit preservation of wilderness character qualities.

• *Goal 1:* Recognize culture as intrinsic part of wilderness; humans are part of biotic systems in wilderness.

• *Objective:* Harmonize cultural landscape treatment actions to support wilderness character.

Identifying treatments appropriate for a cultural landscape and wilderness hinges on the uniqueness of that particular setting. This objective requires give and take between balancing wilderness character as it is currently recognized with human activities in wilderness. While this objective can be implemented independently, the implementation of other objectives support this action. It is closely related to both Issues A and B and would be administered at the park level.

• *Issue F:* NPS management zones reinforce dichotomy between wilderness and cultural landscapes.

• *Goal 4:* Recognize and respect human and natural history together.

• *Objective:* Create zones that include both wilderness and cultural features.

Zones help delineate treatments and actions allowed, yet hard lines divide parts of the same resource. To mitigate the dichotomy perpetuated by zones, option are to recognize a spectrum of zones or convey overlapping or inclusive zones, still respecting wilderness boundaries. The wilderness at GAAR is considered a cultural area managed through a framework devised to recognize both wilderness and culture together, without the delineation of a cultural zone. Looking at areas as cohesive geography instead of defining lines based on greatest apparent value might alter how people perceive wilderness and culture completely. Zones would be altered through planning efforts at the park level.

• *Issue G:* Semantics are a source of division.

• *Goal 3:* Recognize concept of historic wilderness or storied wilderness.

• *Objective:* Use interpretation to establish storied wilderness concept.

Interpretation provides information about park resources to help people learn about and connect with parks. Interpretive initiatives and programs that convey storied wilderness will help alter perceptions about the connection between nature and culture. The concept of combining culture and wilderness as storied, historic, or heirloom wilderness creates greater opportunities to implement management that addresses a more comprehensive resource. Historic wilderness as a concept also suggests that there could be different types of wilderness or wilderness areas with varying wilderness character distinction. The concept also recognizes wilderness as a cultural landscape composed of the combined works of man and nature. Interpretive initiatives would be developed at the park level.

• *Issue H:* Recognizing the full spectrum of diversity within wilderness and cultural landscapes challenges NPS management policies, which must be applicable and adaptable to a full range of landscapes.

• *Goal 1:* Recognize culture as intrinsic part of wilderness; humans are part of biotic systems in wilderness.

• *Objective:* Address cultural landscapes and wilderness in park planning at both the system-wide and park level with adaptive management.

An adaptive management plan organizes a cyclical system that adjusts management to improve outcomes and reflect changing needs over time. An abbreviated adaptive management plan would include the following steps: identify issues, develop solutions, implement, evaluate outcomes, identify issues, and so on. Adopting management practices that can be reviewed and adjusted is the overall structure for the framework proposed in the next section. This objective would be applied at both the system-wide and park level management.

Framework

The objectives presented in this chapter illustrate how issues can become opportunities to integrate wilderness and cultural landscape management values and requirements. The objectives relate to different levels of NPS management and implementation, including those that would be implemented system-wide, and those that would be executed at the park level. Objectives that apply to both include adopting an adaptive management plan and developing, documenting, and sharing creative and alternative solutions for cultural landscape actions in wilderness. System-wide objectives

include designating cultural features as a wilderness character quality that is always present and integrating wilderness as part of the CLI. Objectives that pertain to the park level include use of interpretation to establish the concept of storied wilderness, create zones that include both wilderness and cultural features, modifying cultural landscape treatments for wilderness, and harmonizing cultural landscape treatment actions to support wilderness character.

Connections exist between all of the goals, objectives, and opportunities, which can work together to shape a path toward integrating cultural landscape and wilderness management. Figure 5.1 offers an adaptive management framework that organizes a hierarchy for the objectives, according to management level and order that guide the development of tactics to encourage integrating wilderness and cultural landscape management. While each objective can be pursued singularly, the framework outlines steps that cumulatively support one another.

The next chapter explores how this framework might be implemented within the Beuham Orchard on NMI, suggesting tactics to fulfill the objectives and achieve goals.
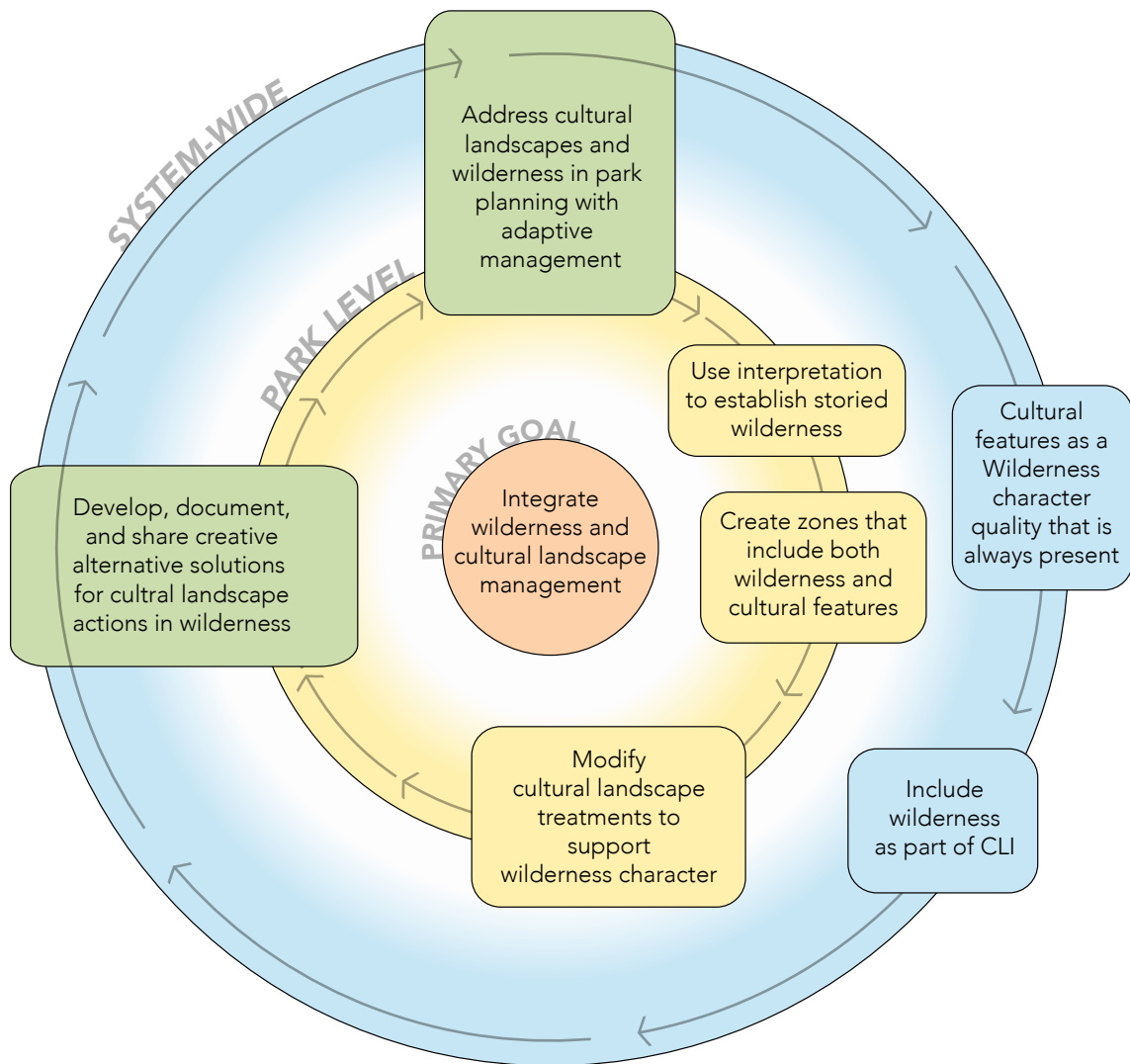
Figure 5.1: Integrative management framework. Represents steps in an adaptive management cycle at two levels, system wide and at the individual parks, that support the goal of integrating wilderness and cultural landscape management.

CHAPTER 6:

THE BEUHAM ORCHARD: APPLICATION & ANALYSIS

Introduction

This chapter provides an overview of management at the Beuham Orchard,

from the historic era to current NPS strategies. The framework described in Chapter

5 is applied to the orchard, suggesting tactics, impacts, and implications to explore a

wide spectrum of wilderness and cultural landscape integration. The following chapter

addresses the question: *How should NPS wilderness and cultural resource management*

policies be integrated to exhibit the value of culture and nature at the Beuham Orchard

site?

NMI Management History

A broader historical context of NMI, including logging, agriculture, maritime

industry, and recreational activities, is essential to understanding the sequence of human

influences on the Beuham Orchard. European settlement began on NMI in the 1840s,

driven by the timber industry and followed by agriculture. Cycles in the timber industry

directly influenced island operations, population, and agriculture, due to its remoteness.[127]

Located along what continues to be a major Great Lakes shipping route, the island was

also important to maritime industry. A life saving station began in 1854 when a Volunteer

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127   Fredericks, "'Back to the Land and All Its Beauty,'" 14.

Rescue Station was built; a United States Life-Saving Services (USLSS) station was built

on the island in 1874 and operated until 1932, under the U.S. Coast Guard beginning in

1915.[128]

The island became a recreational destination beginning in the 1890s, when NMI

land owners devised a plan to develop summer cottages near the USLSS station.[129]

A resort business was established, and later fell under ownership of and operation by

a partnership of land investors first known as the Manitou Island Syndicate.[130] The

partnership changed their name to the Manitou Island Association (MIA) in the mid-

1920s, at which time members owned most of NMI.[131] The MIA "carried on diversified

operation during the 1920s, engaging in traditional island activities such as fruit farming,

logging, commercial fishing, and supplying ice, wood, dairy products, and fresh

vegetables to the local coast guard families and summer cottage owners."[132] Along with

their large free-range cattle herd, the MIA released a small herd of white-tailed deer

on the island, planning to establish recreational deer hunting.[133] The deer population

significantly altered island ecology and had to be maintained through feeding programs.

In the late 1950s, the MIA began advertising the island as a pristine wilderness,

marketing to sportsmen to visit for hunting trips.[134] The MIA continued logging, sport-

hunting, and deer feeding programs on the island through the 1970s.[135]

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128   Fredericks, "'Back to the Land and All Its Beauty,'" 18.
129   Fredericks, "'Back to the Land and All Its Beauty,'" 30.
130   MacDonald and Alanen. *Tending a 'Comfortable Wilderness*,' 52.
131   MacDonald and Alanen. *Tending a 'Comfortable Wilderness*,' 55.
132   MacDonald and Alanen. *Tending a 'Comfortable Wilderness*,' 54.
133   MacDonald and Alanen. *Tending a 'Comfortable Wilderness*,' 55.
134   Fredericks, "'Back to the Land and All Its Beauty,'" 52.
135   Fredericks, "'Back to the Land and All Its Beauty,'" 56.

NMI was officially included as part of Sleeping Bear Dunes National Lakeshore

in 1984.[136] After the park conducted a 1981 wilderness study that included NMI, 31,000

acres of the park were identified as recommended wilderness and thereafter managed

as wilderness.[137] Supporters of wilderness designation within the public realm viewed

wilderness restrictions as a way to "control the pace of change brought by the new

lakeshore."[138]

Historically, park management emphasized protection of natural resources. Based

on legislation that established Sleeping Bear Dunes, the park purpose, as listed in the

park's 2008 General Management Plan (GMP), is:

> To preserve outstanding natural features, including forests, beaches, dune
> formations, and ancient glacial phenomena in their natural setting and protect
> them from developments and uses that would destroy the scenic beauty and
> natural character of the area, for the benefit, inspiration, education, recreation,
> and enjoyment of the public.[139]

While no mention is given to cultural resources in the purpose statement, a section of the

significance statement references historic resources as follows:

> The collection of historic landscapes—maritime, agricultural, and recreational—
> in the National Lakeshore is of a size and quality unsurpassed on the Great
> Lakes and rare elsewhere on the United States' coastline.[140]

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136. MacDonald and Alanen. *Tending a 'Comfortable Wilderness,'* 64.

137. "Sleeping Bear Dunes National Lakeshore General Management Plan and Wilderness Study." (U.S. Dept. of the Interior, National Park Service, 2008, 10.) Accessed September 10, 2015. http://www.nps. gov/slbe/learn/management/mgmt_gmp_ws_summary.htm.

138. Theodore Karamanski. *A Nationalized Lakeshore: The Creation and Administration of Sleeping Bear Dunes National Lakeshore.* (Dept. of the Interior, National Park Service, 2000, chapter 3), accessed February 2, 2016. http://www.nps.gov/parkhistory/online_books/slbe/.

139. "Sleeping Bear Dunes National Lakeshore General Management Plan and Wilderness Study," 11.

140. "Sleeping Bear Dunes National Lakeshore General Management Plan and Wilderness Study," 11.

Fredericks points out in her history thesis about NMI that until 2002 all park superintendents of Sleeping Bear Dunes had strong backgrounds in natural resource management, which might also have influenced overall park management to prioritize natural resources.[141]

The current GMP prescribes four defined zones within the park that represent a gradient of management intensity, from high to low: 1–high use, 2–experience history, 3–recreation, and 4–experience nature.[142] The GMP indicates that cultural landscape management will "specify particular treatments or range of treatments for historic properties by management zone,"[143] but also indicates that cultural resource treatments appropriate within each zone generally follows: 1–preservation to rehabilitation, 2–preservation to restoration, 3–preservation to rehabilitation (natural resource protection is a high priority), and 4–preserved "but may be modified to preserve or restore natural resources" (natural resources are very high priority).[144] The Beuham Orchard and the majority of NMI fall into zone 4–experience nature, as most of the island is wilderness (Fig. 1.6). One section near the main dock and heart of the village area is zoned "Experience History" for its high concentration of cultural features. It is also the center for ranger and maintenance activity.

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141. Fredericks, "'Back to the Land and All Its Beauty,'" 65.

142. "Sleeping Bear Dunes National Lakeshore General Management Plan and Wilderness Study," 40.

143. "Sleeping Bear Dunes National Lakeshore General Management Plan and Wilderness Study," 10.

144. "Sleeping Bear Dunes National Lakeshore General Management Plan and Wilderness Study," 34-37.

Figure 6.1: Heritage apple historic illustration. The King of Tomkins County (source: www.healingtreefarm.com) is found in the Beuham Orchard on NMI.

Current NPS Management of Beuham Orchard

Current management efforts related to the Beuham Orchard focus on preserving the genetic material of historic biotic resources, expanding future management options. Apple surveys are conducted throughout the park, which is replete with historic fruit trees, to identify varietals. Survey teams include orchardists, Leelanau Conservation District fruit experts, horticulturists, and the park's historic architect, who organizes the surveys and manages preservation efforts throughout the park. During the spring, scion wood is also collected to create grafts that will grow into trees of the same variety. The apple survey trips are conducted in the fall, when apples are ripe and exhibit identifying characteristics. Apples identified in the Beuham Orchard during a field session in

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September 2013 include Redspy, and Seek No Further varieties. Apples identified during

fieldwork in September 2015 include Pippin, Russett, Wolf River, and King of Tomkins

County (Fig. 6.1). Some of the varieties have not been found in park mainland orchards,

increasing their significance as part of the island landscape.[145]

Contributing to the cultural history of life on NMI, each apple varietal identified

in the orchard also has it's own unique story. For example, Pippin apples are believed to

have "originated as a chance seedling or 'pip' near a swamp estate of Gersham Moore,

in Newtown, Queens County, New York in 1730," and is thought to be one of the oldest

varieties in the U.S.[146] King of Tomkins County apples originated from a cultivar started

in New Jersey in 1804, and are characteristically very large apples that keep well.[147] As

cultural resources, apple varieties produce living connections to the past each season,

growing apples that were cultivated through history for their unique attributes.

Plans are set for an apple tree scion wood collecting trip to NMI in spring 2016.

The trip will include the Beuham Orchard, with the intent of collecting enough wood

for 50 grafts of apples that were unidentifiable during previous survey trips, and of the

Stark Red Delicious variety.[148] These grafts, along with grafts from the previous year, will

open future management options, such as replacement of deceased trees. At this time, no

other management actions are outwardly visible at the site–consistent with wilderness

management practices. The orchard is, however, called out in some interpretive materials

(Fig 6.3).

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145. Kimberly Mann, email communication with author, February 25, 2016.
146. Kimberly Mann, email communication with author, February 25, 2016.
147. Beach, S.A. The Apples of New York, 345-349.
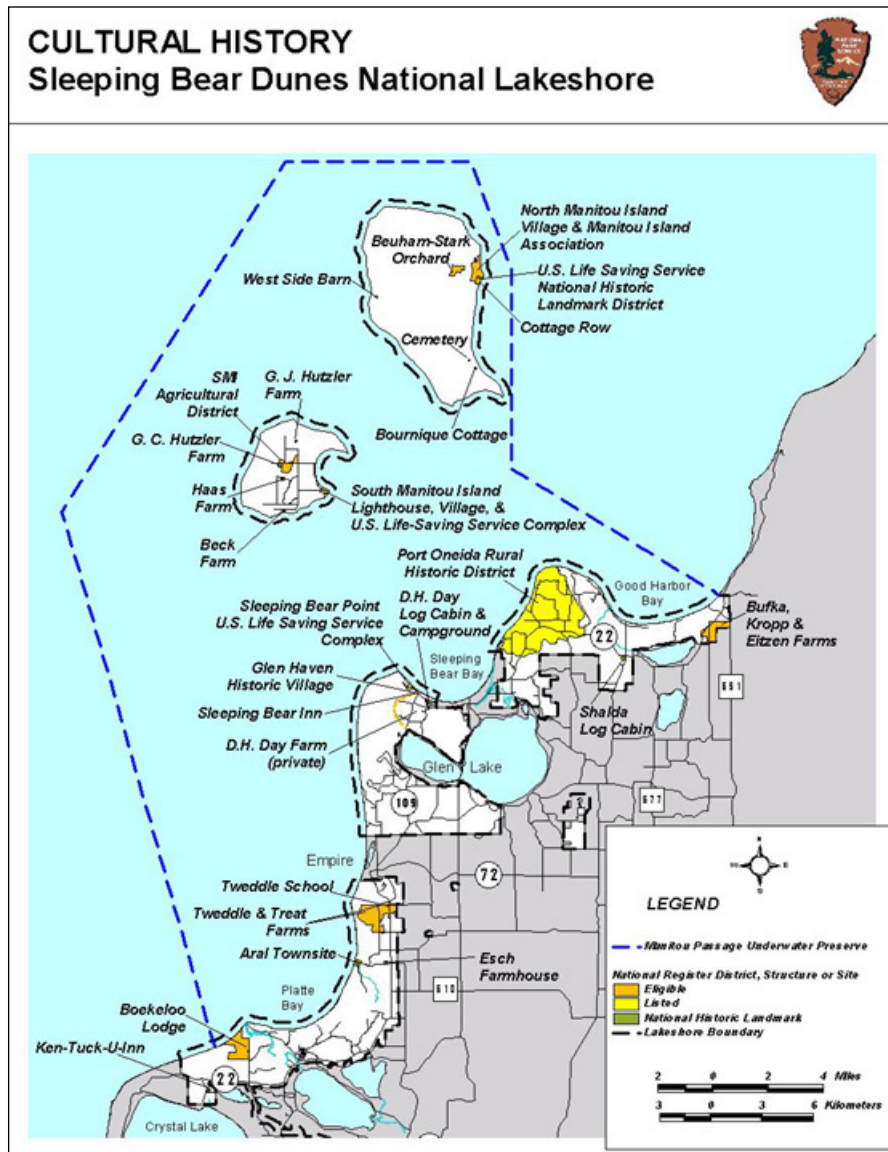148. Kimberly Mann, email communication with author, February 25, 2016.

Figure 6.2: Cultural History map of Sleeping Bear Dunes National Lakeshore.
Representing cultural sites eligible or listed on the National Register of Historic Places, or are National Historic Landmarks. Source: www.nps.gov/slbe.

Application

In the following section, the integrative framework described in Chapter 5 is applied to the Beuham Orchard. Management opportunities for the site are considered cumulatively through the framework objective steps. Tactics are presented of how each step might be implemented and what impacts they would have on the orchard. The

framework is intended to augment current management practices, with the ultimate goal of conveying the values of both wilderness and cultural landscapes at the Beuham Orchard. The application begins at the system-wide level, which creates opportunities at the park level, addressed second.

• Address cultural landscapes and wilderness in park planning at both the system-wide and park level with adaptive management.

Adopting an adaptive management plan system-wide opens opportunities for adjusting tactics, such as those listed in the framework. As the first step in the framework design, adaptive management is the structure for the framework itself, allowing the steps that follow to be evaluated, adjusted, augmented, or removed to fit park goals, needs, and outcomes. Using adaptive management in park planning to address cultural landscapes and wilderness together at both the system-wide and park levels can open sustainable management options and allows adjustments within management practices to improve results.

Adaptive management is part of current Beuham Orchard management. For example, identifying tree varieties and collecting scion wood for apple grafts creates future management options, such as replacing deceased trees. Further adaptive management steps for the orchard would be to create a long term vision of how those apple grafts should be used on the site or elsewhere in the park. Another step would be to determine how the site could be a model for integrating wilderness and cultural landscape management and defining goals toward achieving that vision.

• Cultural features as a wilderness character quality that is always present.

Acknowledging cultural features as a wilderness character quality that is always present is a major opportunity to integrate wilderness and cultural landscape values at the system-wide level. The tactic expresses that, to some degree, culture is an intrinsic part of wilderness. It also introduces the idea of heirloom or historic wilderness as wilderness areas with a greater concentration of tangible historic character. Tangibility of culture varies greatly system-wide, as do the other wilderness character qualities.

If an area is considerd an heirloom or historic wilderness, a wider range of activity might be considered acceptable, as humans are an important factor for shaping that wilderness. For example, the use of grazing animals could be considered acceptable in a historic wilderness. Despite being a sign of humans in the wilderness, they are a compromise with wilderness character qualities such as natural, untrammeled, and solitude. At the Beuham Orchard, this tactic reinforces that cultural resources belong in the wilderness area and are part of what makes that wilderness unique.

• Include wilderness as part of CLI.

Wilderness would be included as part of the CLI at the system-wide level. At the Beuham Orchard specifically, a full CLI would be completed that demonstrates the role of wilderness as part of the site history. Ideally, a CLI would be completed for all of NMI, and the Beuham Orchard would be considered a component landscape of an NMI Historic District, or perhaps an NMI Historic Wilderness. MacDonald and Alanen's *Tending a 'Comfortable Wilderness'* is a thorough history of the island, similar to a cultural landscape report. It provides substantial information relevant to a CLI, but given

that it was completed in 2000, significant changes in the landscape could have occurred since completion.

If a CLI of the Beuham Orchard were completed, a period of significance would need to be established. For the purposes of this exercise, anything beyond 50 years will be considered within the period of significance (pre-1966), which excludes the NPS. Those writing the CLI would need to carefully weave the wilderness processes into the existing categories, to be mindful of the historic approaches and processes that influence how the site appears today. The goal would be to demonstrate how wilderness could be combined into a CLI of the Beuham Orchard to reveal as much about the integration of historic and current landscape processes as possible. Information about wilderness designation and management as it relates to the site today would likely appear within the CLI summary section, Regional Land Context Type (within the Political subcategory), in the chronology and physical history (date of wilderness study and when the site became part of the park).

Wilderness as a historic process (rewilding) at the Beuham Orchard could be listed within landscape characteristics under land use and cultural traditions. For land use, defined as "the principal activities in the landscape that have formed, shaped, or organized the landscape as a result of human interaction," the encroaching forest could be listed as "rewilding," reflecting the historic cessation of commercial operations, and land use shift to a wilderness sport-hunting ground initiated by the MIA in the 1950s.[149]

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149. Robert Page, Jeffrey Killion, and Gretchen Hilyard. "National Park Service Cultural Landscape Inventory Professional Procedures Guide." (Washington D.C.: U.S. Dept. of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 2009), 7-7.

For cultural traditions, which are defined as "the practices that have influenced the

development of the landscape in terms of land use, patterns of land division, building

forms, stylistic preferences, and the use of materials," rewilding or wilderness could also

be considered a land use related to the MIA management era.[150]

• Develop, document, and share creative alternative solutions for cultural landscape

actions in wilderness.

At the system-wide level, this step primarily provides parks the opportunity to

share ideas. Many parks face related challenges–developing a system-wide network for

communicating challenges and solutions creates the opportunity to exchange ideas and

offer support between parks. The actual solutions would be developed and documented at

the park level.

Current management practices for the Beuham Orchard, such as the preservation

of biotic resources, exemplify creative solutions to managing cultural resources

within wilderness. Additional actions could include developing unique partnerships

to help address cyclical management needs or adaptive management experimentation

through hands-on community involvement or education programs. One example

could be partnering with schools or universities that have programs related to orchard

management, agriculture, or preservation that could use the site for an annual class.

Another possible partnership could be with local cideries interested in making ciders

with historic apple varieties or using historic techniques. The cider would not be sold, as

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150. Page, Killion, and Hilyard, "National Park Service Cultural Landscape Inventory Professional Procedures Guide," 7-7.

commerical operations are prohibited in wilderness. Instead, interpretive demonstrations and educational programs could be devloped to represent, for example, the historic use of a cider press.

Another example of a possible partnership is an adopt-a-tree program, similar to that at the Buckner Homestead at North Cascades National Park. A $25 adoption fee through the Buckner Homestead Heritage Foundation goes to support annual tree maintenance for the adoptee.[151] A different manifestation of an adopt-a-tree program would rely on a corps of adopters who agree to participate in an tree care workshop to learn about maintaining historic apple trees. The adopters would also agree to visit the orchard at least once a year to monitor and maintain a tree (or multiple trees) of their choice. For consistency, they would use either GPS coordinates to locate and identify their tree, or the tree could be subtly tagged.

Developing partnerships like those described above would create opportunities to engage with the landscape in ways that both respect human and natural history together and promotes sustainable land use. The addition of restricting group sizes prevents disrupting the solitude wilderness character quality.

• Use interpretation to convey the concept of a storied wilderness.

Semantics do not visibly impact the landscape, but heavily influence our actions, which do alter the landscape. Therefore, semantics have a strong indirect influence on the landscape. Interpretation can be a tool for integrating wilderness and cultural

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151. "Buckner Homestead Heritage Foundation," accessed February 2, 2016, http://bucknerhomestead.org/adopt-a-tree/.

landscapes that shapes viewpoints and can act as a catalyst for change. Initiating an interpretive program that conveys the idea of a storied, historic, or heirloom wilderness on NMI would shape how people read the landscape. The concept of combining culture and wilderness as storied, historic, or heirloom wilderness creates greater opportunities to implement management that addresses a more comprehensive resource. Historic wilderness as a concept for NMI admits that there is a strong human history that shaped the island wilderness and recognizes the entire island as a cultural landscape composed of the combined works of man and nature.

Visitors to NMI currently have limited contact with interpretive park rangers, which seems appropriate for a wilderness setting. Upon arrival, however, all visitors go through a brief regulations and safety orientation with a ranger. A subtle way to convey wilderness and cultural landscape integration would be for park employees to refer to NMI as an heirloom or historic wilderness during these orientation talks. Written interpretive material, such as descriptions on websites and maps, could also be a source for conveying the concept of storied wilderness. Other interpretive opportunities might surface if special projects or management practices were implemented.

• Create zones that include both wilderness and cultural features.

The current "Experience History" zone on NMI carves out a small area around the main village and dock site, where visitors begin their trips to the island. In reality, visitors experience history all over the island. They also enter wilderness during their journey from the mainland, transitioning across the open water of Lake Michigan from the noise of everyday life to the quiet of an isolated, controlled island. As they disembark from

the ferry, they must survive on their own (with the comfort of knowing that park rangers are nearby), whether they are in the "Experience History" zone or within the wilderness boundary.

The concept of an heirloom wilderness (or heritage, storied, or historic wilderness) combines the two zones into one. It redefines how the area is perceived and integrates nature and culture. The island could be considered both fully wilderness and fully cultural as a historic wilderness zone, which would overlay the entire island, including the designated wilderness area and the current "experience history" area (a zoning that would be removed). The area near the dock is not suitable for wilderness inclusion, which would inhibit necessary maintenance activity. This is an area where vegetation is managed, grass is mowed, and buildings and facilities receive constant attention. Removing the "experience history" zone, however, and overlaying an all encompassing zone would not change activities allowed in either the designated wilderness area or the area outside of designated wilderness; instead, it would recognize the island as a cohesive geography while still regulating activities.

• Modify cultural landscape treatments to support wilderness character.

As described in Chapters 4 and 5, cultural landscape treatment options might not be fully compatible with management needs for sites within wilderness. The following describe what the Beuham Orchard might look like under each existing cultural landscape treatment option:

Preservation: Preservation is the current treatment, which entails site stabilization. Ongoing research and the collection of scion wood create opportunities for future site stabilization. Challenges for preservation are determining which features need stabilization, to what extent, and how much of the site to include.

Rehabilitation: Rehabilitation could yield interesting results if a combined use, such as a backcountry camping area, was implemented. Currently, dispersed backcountry camping is permitted all over the island except for within the "Experience History" zone. A series of established backcountry campsites is located a short distance north of the zone, popular because they are close to both Lake Michigan and the dock. Dispersed camping is permitted in the Beuham Orchard site, but increased concentrated use of the site could have both positive and negative impacts. An example of rehabilitation could be establishing a backcountry campground or encouraging more camping and increased activity within strategic areas of the site. This would increase foot traffic and could inhibit successional growth, esspecially where tents impacts vegetation. Increased use with rehabilitation would need to be balanced with preservation efforts.

Restoration: Full site restoration would require the replacement of deceased trees, and intensive vegetation removal. Essentially, it would entail orchard processes and operations be re-established without the convenience of motorized equipment, to respect wilderness character. In this case, full site restoration would be a colossal undertaking, and ultimately unfeasible due to project scale and resource limitations.

Reconstruction: Reconstruction would push the restoration treatment to a more intensive

level. It would involve reconstructing buildings, roads, and any irrigation structures that

were either removed from the site or eroded over time. This treatment is also unfeasible

and incompatible with wilderness character.

Adaptation and combination of the above treatments could offer a means for

integrating cultural landscape and wilderness management. A hybridized treatment that

seeks a balance between preservation and rehabilitation, for example, could respect

wilderness character and support cultural landscape integrity. Research into historical

practices might yield clues about the historic balance of human influences on natural

systems. Replicating such balances might positively augment existing condition and

passively stabilize the site. Information about other biotic elements, such as whether

a specific ground cover type was used, or presence of certain animals, could present

opportunities for hybridized preservation and rehabilitation. Re-establishing or

mimicking historic biotic elements could support current management needs, such as

the need for pollinators due to climate change. One example relates to animals: sources

indicate free-range grazing was practiced on the island.[152] The current deer population

could be considered a modern replacement for other historic free-range animals, but

managers have little control over where they graze. Using animals such as goats or sheep

on the island as temporary vegetation control could offer historically based management

options. Introduction of animals would require extensive research and planning,

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152. MacDonald and Alanen, '*Tending a Comfortable Wilderness,'* 55.

but might be more consistent with wilderness character than the use of mechanized equipment.

Description of Findings

The tactics listed above envision the Beuham Orchard as a site of opportunity for integrating wilderness and culture, and altering perceptions about the presence of cultural landscapes within wilderness. While the tactics are radical from both a wilderness and cultural landscape perspective, they strive to represent a creative balance between the values and requirements of both. Implementation of the tactics would significantly increase human activity at the site, selectively reviving the orchard to preserve the historic integrity of biotic resources in a way that respects the historic sequence of land use and current wilderness designation.

CHAPTER 7:

CONCLUSION

<u>Analysis</u>

The goals, objectives, and tactics suggested for the Beuham Orchard address the

purpose of this thesis, which was to develop ideas of how land managers might integrate

cultural resource and wilderness management practices to convey both the cultural

landscape and wilderness values of the orchard. The tactics offer means of conveying

connections between nature and culture within the site. The stewardship message within

overlapping cultural landscapes and wilderness as areas that exemplify the relationship

between humans and nature, described in the significance section in Chapter 1, could be

more strongly conveyed through interpretive materials.

The goals, objectives, and tactics also address the Centennial Initiatives

goals listed in Chapter 1, offering options that support management of natural and

cultural resources to increase resilience in the face of climate change, that cultivate

science and scholarship in park planning, policy, decision making, and education,

that strive to achieve excellence in cultural and natural resource stewardship, and that

cultivate collaboration between land managers and partners. The tactics also support

the Centennial Initiative actions to "modernize historic preservation methods and

technologies," and that support sustainability within historic preservation. Broadly, the

goals, objectives, and tactics suggested for the Beuham Orchard support the goal of

connecting people to parks by creating opportunities to interact with a uniquely dual

landscape that exhibits both wilderness and cultural landscape values. The framework

suggests a route toward achieving those goals and objectives within similar contexts.

<u>Critique</u>

Methods

The issues, goals, objectives, framework, and tactics are based on information

gathered from listed sources, which does not represent an exhaustive list (see Future

Research below). There are also other ways of addressing the issues with the same goals

and objectives not listed. Further research of case studies and examples would better

inform the design. A thorough site inventory of the Beuham Orchard would also help

better inform the tactics suggested.

Management Framework Design

The adaptive management framework design offers greater flexibility for

application to a range of sites with differing goals. The framework could, however, create

inconsistencies in park management. It also requires major changes in current policy and

practices. The framework could also better represent the balance between system-wide

management and park level management.

<u>Future Research</u>

Other case studies and materials that could further inform the integration of

wilderness and cultural landscape management include information from other NPS

units, other federal agencies that manage both wilderness and cultural landscapes, and international sources. The international approaches could be especially useful to provide insight into other concepts of wilderness and cultural landscapes. The tactics suggested would also all require extensive research and planning.

Conclusion

The titles storied, historic, heritage, or heirloom wilderness have been used interchangeably throughout this thesis to indicate a similar message, describing a place where culture is a tangible part of wilderness. Each word carries a slightly different meaning. Defined as "a piece of property that descends to the heir as an inseparable part of an inheritance of real property," or "something of special value handed on from one generation to another," heirloom is also defined as "a horticultural variety that has survived for several generations usually due to the efforts of private individuals."[153] Combining the definitions of heirloom yields the connotation of valuable land varieties handed from one generation to the next. "Heirloom wilderness" represents the Beuham Orchard and North Manitou Island story as a wilderness rich in human history, or an heirloom variety of wilderness.

Areas that are both wilderness and cultural landscape are valuable to understanding our human relationship with nature. Continued conversations and collaborations are essential for harmonizing management of these connected resources–

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153. Merriam-Webster Dictionary, s.v. "heirloom," accessed February 28, 2016, http://www.merriam-webster.com/dictionary/heirloom.

integrating wilderness and cultural landscape management will help future generations

inherit the values of both wilderness and culture present in these places.

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