ACKNOWLEDGEMENTS

There are many individuals to whom I owe tremendous gratitude for their encouragement, guidance, and dedication towards my further development as a Geographer and towards my completion of the Master’s Program.

I would first like to thank the Geosciences Department for granting me the opportunity to continue my education in geography and for the chance to share my enthusiasm for the subject with students during my tenure as a teaching assistant.

Also would like to thank the Faculty for sharing their substantial knowledge of the discipline with me, and the faculty for whom I was a teaching assistant for their assistance and for their guidance through my first efforts at teaching. I also owe a great debt of gratitude to the office staff who have always provided me with direction and information.

I would like to thank my head advisor Dr. Ron Doel for his support and many contributions during my graduate student years.

I would also like to thank Dr. Anne Nolin for her guidance, patience, and understanding as an advisor.

I would like to thank all my committee members, Dr. Ron Doel, Dr. Larry Becker and Dr. Julia Jones, who went far beyond their required duties to provide support at both the professional and personal level. Their assistance supplied the faith and confidence necessary for the completion of my goals.

Despite the thousands of miles separating us, I must show gratitude to my family for a lifetime of caring and unwavering support. Their contributions in my life are immeasurable and I cannot thank them enough or display appropriate appreciation for their assistance. Also to my fiancée, who also was thousands of miles away, I would like to give thanks for her patience, support, and willingness to travel to Corvallis, which helped me focus and complete the degree on time.

I would also like to thank my fellow graduate students for their advice, suggestions, and company over the past two years. Their invitations and inclusion of me in activities imparted the necessary dose of enjoyment and breaks from the rigors of the graduate student life.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. 1

INTRODUCTION ........................................................................................................ 2
  Study Area and Study Questions ............................................................................. 2
  Significance ............................................................................................................. 2
  Perceptual Geography ............................................................................................. 5
  Geographic Setting ................................................................................................ 5

OVERARCHING THEMES AND PARADIGMS .............................................................. 7
  Landscape ............................................................................................................... 8
  Possibilism .............................................................................................................. 8
  Regional Studies .................................................................................................... 13

LITERATURE REVIEW ............................................................................................... 13

METHODOLOGY AND SOURCE MATERIAL ............................................................... 17

PERCEPTION CATEGORIES ......................................................................................... 20
  Reverence (4,000 Years Before Present to early 19th Century) ............................... 20
  Respect (Late 18th Century to late 19th Century) ................................................... 22
  Obstacle (Mid 19th Century to late 19th Century) ................................................... 30
  Exploration (Late 19th to early 20th Century) ...................................................... 34
  Livelihood (Mid 19th Century to Present) ............................................................... 38
  Economic Development (Turn of 20th Century to Present) .................................... 50
  Conservation and Preservation (Turn of 20th Century to Present) ......................... 59
    Fire Policy (1910s to Present) ................................................................................ 67
  Research (Early 20th Century to Present) .............................................................. 71

CONCLUSION ............................................................................................................ 74

BIBLIOGRAPHY .......................................................................................................... 82
  Sources for Etches and Engravings: ...................................................................... 92
LIST OF FIGURES

Figure 1 .............................................................................................................. p.  4
Figure 2 .............................................................................................................. p.  11
Figure 3 .............................................................................................................. p.  12
Figure 4 .............................................................................................................. p.  23
Figure 5 .............................................................................................................. p.  25
Figure 6 .............................................................................................................. p.  26
Figure 7 .............................................................................................................. p.  26
Figure 8 .............................................................................................................. p.  27
Figure 9 .............................................................................................................. p.  27
Figure 10 .......................................................................................................... p.  28
Figure 11 .......................................................................................................... p.  28
Figure 12 .......................................................................................................... p.  33
Figure 13 .......................................................................................................... p.  37
Figure 14 .......................................................................................................... p.  41
Figure 15 .......................................................................................................... p.  45
Figure 16 .......................................................................................................... p.  48
Figure 17 .......................................................................................................... p.  51
Figure 18 .......................................................................................................... p.  54
Figure 19 .......................................................................................................... p.  55
Figure 20 .......................................................................................................... p.  56
Figure 21 .......................................................................................................... p.  56
Figure 22 .......................................................................................................... p.  57
Figure 23 .......................................................................................................... p.  58
Figure 24 .......................................................................................................... p.  62
Figure 25 .......................................................................................................... p.  68
Figure 26 .......................................................................................................... p.  77
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>p. 39</td>
</tr>
<tr>
<td>Table 2</td>
<td>p. 44</td>
</tr>
<tr>
<td>Table 3</td>
<td>p. 44</td>
</tr>
<tr>
<td>Table 4</td>
<td>p. 50</td>
</tr>
<tr>
<td>Table 5</td>
<td>p. 52</td>
</tr>
<tr>
<td>Table 6</td>
<td>p. 78</td>
</tr>
<tr>
<td>Table 7</td>
<td>p. 78</td>
</tr>
</tbody>
</table>
HISTORICAL LANDSCAPE RECONSTRUCTION AND PERCEPTUAL GEOGRAPHY OF MOUNT HOOD, OREGON

ABSTRACT

This research seeks to understand the influences of perception on land use around the Mount Hood area of Oregon and evaluate how it has evolved over the past 4,000 years. The study addresses three specific questions:
1) How has the study area evolved over time into the modern landscape?
2) What land use practices have developed in response to various public perceptions of Mount Hood?
3) How have the land uses impacted the landscape and physical environment?

This in-depth analysis of the historic landscape describes the effect of external environmental stimuli and local culture on land use in this region of Oregon. This study develops a classification system to describe how perceptions of Mount Hood have changed over time, and also investigates associated land use within each of these categories. Eight perception categories are employed: Reverence, Respect, Obstacle, Exploration, Livelihood, Economic Development, Conservation and Preservation, and Research.

This historic landscape reconstruction employs comprehensive acceptance, integration, and comparison of various source materials to minimize bias. First, primary sources and commentary on these sources allow for an understanding of the local population’s general attitude toward the landscape. Second, perceptions of the local landscape were inferred through an analysis of land use activities. The various perceptions of the local population towards Mount Hood and the landscape within the Mount Hood Land Use Planning Unit Boundary have guided land use choices through time. These uses have resulted in significant changes to the landscape over the period of recorded history.
INTRODUCTION

Study Area and Study Questions

This study seeks to reconstruct the historic landscape of the area within the current Mount Hood Land Use Planning Unit boundary in Oregon to better understand the connection between local perception, land use, and the physical environment. Three specific questions are addressed during the analysis:

1) How has the study area evolved over time into the modern landscape?
2) What land use practices have developed in response to various public perceptions of Mount Hood?
3) How have the land uses impacted the landscape and physical environment?

The Mount Hood Land Use Planning Unit provides the most appropriate approximation for a study area based on an established boundary (Figure 1). The broad temporal range (4,000 years before present to the present) analyzed in the study, combined with the ephemeral nature and lack of a continuous politically imposed boundary, make it difficult to delineate a specific boundary for the study. However, the majority of activities analyzed in this study are encompassed within the Mount Hood Land Use Planning Unit boundary (Figure 1).

Significance

Landscape architect Kenneth Helphand illustrates the value of historical analysis of land use when he comments,
“Landscapes carry legacies and lessons. Legacies are the inherited evidences of tradition and mores. Not all are to be respected or cherished, but they demand to be understood. Lessons may instruct us, remind us of original intentions, help us avoid mistakes, clarify our ideas, or act as an inspiration” (Helphand 1991, xxiv).

Historically, humans have engaged in activities without knowledge of the consequences of their actions. Landscape reconstruction shows how different land use choices over time have influenced the landscape of a specific area (Caldwell 1990, 174). The importance and relevance of the present study is to provide a more complete understanding and knowledge base of past events, not only defining the land use and the resultant landscape, but also the cultural values operating during the time, indicating why such choices were made. This is important when creating land use policy because the response of society to certain policy can be more accurately predicted and anticipated. Ideally, land use policy will be proactive rather than reactionary and would respect the desires and needs of the local population.

This study contributes to the literature on historic landscape reconstruction and provides a more complete representation of Cascade Mountains Region in the Pacific Northwest. The analysis of landscape impact through specific land uses, as well as the extended time frame and inclusion of perceptual influence on human action, produce this unique study.
Figure 1:
Location of Mount Hood Land Use Planning Unit (shown as shaded area). Portland, OR in Northwest corner.
Source: Dane, Meador, White 1977, 325; Oregon Geospatial Clearinghouse, Cartography by Dan Belgam
Perceptual Geography

People and their environments are inextricably linked. The perceived environment is transformed into a personalized environment through the application of ideals and experience to create perceptions (Amadeo & Golledge 2003, 135, 139-40; Holdt-Jensen 1999, 121). Perceptions guide the activities and interactions on the landscape (interface between humans and environment). Humans are complex and their actions can be unpredictable or even irrational; however, the study of perceptual geography lends insight into the reasoning behind land use choices.

Evidence for patterns of land use over time can be extracted from a landscape by employing the concept of sequent occupancy, which involves analyzing the successive occupation of an area by different peoples and cultures and assessing these influences on the landscape (Holt-Jensen 1999, 49). Once a timeline is established and sources of evidence secured, one can delve into the cultural and societal perceptions of the landscape to address the questions of why the landscape was manipulated or utilized in a certain manner. The perceptions of a culture towards a landscape can provide proper context and specific insight in reconstructing the past landscapes of Mount Hood.

Geographic Setting

This paper provides a proper description and background of the environmental features of Mount Hood, because in combination with local culture, Mount Hood has influenced perceptions, land use options, and potential resources for the study area. This
stratovolcano is located approximately 160 km from the Pacific Ocean within the Cascade Range in northern Oregon, 45°22’24.3” latitude and 121°42’49.6” longitude (Lillquist & Walker 2006). Mount Hood is situated on the border of Oregon and Washington along the Columbia River Gorge, the major transportation route of the area into the 20th century. The local topography allows an unobstructed view of the mountain from all directions (weather permitting), an unusual feature that accentuates the strength and majesty cast by the mountain (Atkeson 1977, 10). The high visibility and solitary setting create a visual illusion, exaggerating the mountain’s height. This led to overestimation of the mountain’s elevation of several thousand feet by early settlers (Atkeson 1977, 6). An example of this can be found in the journal recordings of the Late Judge of the Oregon Supreme Court and Corresponding Member of American Institute, J. Quinn Thornton, during his travels through Oregon and California in 1848: “It is estimated to be from twelve to sixteen thousand feet high” (Thornton 1973, Vol. I, 256). More reliable measurement techniques, such as barometer use, were applied in the late 19th century to obtain more accurate figures (Gannett 1896). The National Forest Service lists the current elevation of Mount Hood at 11,239 feet (U.S. Forest Service: Mt. Hood National Forest Frequently Asked Questions). The basal area at a 4000-foot elevation is approximately 80 miles in circumference around the mountain (American Guide Series 1940, 4).

The Pliocene epoch (5.3 to 1.8 million years ago) was the major period of mountain building, while subsequent outpourings of lava, erosion, and weathering have continued to shape the mountain (American Guide Series 1940, 9). Currently eleven glaciers cover the mountain, slowly altering its appearance (Lillquist & Walker 2006),
while six rivers and two-dozen creeks divert melt water from the glaciers (American Guide Series 1940, 4).

Examination of volcanic deposits can provide an understanding of the processes and environmental conditions present during the eruptions. There have been three eruptive periods within the last 15,000 years (Crandell 1980). The first of which, the Polallie eruptive period, occurred during the end of the last glacial maximum on Mount Hood, the Fraser Glaciation, 29,000-10,000 years ago (Crandell 1980). The second eruptive period, Timberline, was active approximately 1,500 to 1,800 years ago, while the final episode, the Old Maid eruptive period, occurred between 200-300 years ago (Crandell 1980). A dacite dome appeared within the volcano’s crater during the Old Maid age (Crandell 1980). Pyroclastic flows and mudflows were the primary geologic hazards responsible for landscape alteration. The volcano is dormant, though small-scale fumaroles and gas vent activity occurred into the mid 19th century (Topinka 2008). Minor volcanic activity can also impact the landscape. For example, a portion of Ghost Forest was reduced by volcanic activity in the beginning of the 19th century, leaving behind deposits of ash (Lawrence 1948). Tree ring analysis approximated the year of the event to be 1800 A.D. (Lawrence 1948). Mount Hood has been a dominant force in shaping the physical landscape, as well as influencing perception and local culture.

OVERARCHING THEMES AND PARADIGMS

Approaching this study under a framework acknowledging the influence of external environment and human culture in land use choice (possibilism), and analyzing unique local qualities and characteristics (regional studies), provides a focused, site-
specific evaluation. The concepts of *possibilism* and *regional studies* therefore act as guiding principles while evaluating land use over time through a historical reconstruction of the landscape.

**Landscape**

The concept of a landscape is central in this paper and therefore must be properly defined. The definition of a landscape provided by Kenneth I. Helphand, landscape architecture specialist, is appropriate for the purposes of this paper:

“The interaction of people and place is embodied in landscape. Landscape is not scenery, although it includes the scenic, nor is it the natural world without the human presence. The landscape is a creation, the record and repository of the discourse between people and the physical environment.” (Helphand 1991, xxi)

This definition emphasizes the interaction of culture and the physical environment and need to evaluate both the human and environmental influences when reconstructing a landscape.

**Possibilism**

The term possibilism, coined by French historian Lucien Febvre in 1922, values and advocates an analysis of both human and environmental elements as equal contributors to environmental impact and cultural evolution (Livingstone 1993, 267;
Holdt-Jensen 1999, 45-46). Geographer Arlid Holdt-Jensen comments, “The possibilists did not deny that there were natural limits to the activities of humanity but emphasized the significance of humanity’s choices of activity, rather than the natural limitations to it” (Holdt-Jensen 1999, 45). The natural and cultural landscapes are considered intimately related, requiring attention of both concepts during analysis.

The method of analyzing multiple contributing factors in the creation of a landscape follows the concept of chorology. Geographer Alfred Hettner developed the idea of chorology, which provides a scientific explanation for the interconnected relationship between various phenomena, each with an equal influence on a place (Livingstone 1993, 263; Holdt-Jensen 1999, 45). Applying the concept of chorology to the possibilist theory provides a framework where equal focus is given to culture and the environment as impacts of the landscape at a specific place (Holdt-Jensen 1999, 45). Geographer Friedrich Ratzel applied the tools and methods of systematic study that had been developed for natural phenomena to cultural phenomena and landscape studies (Figure 2) (Holdt-Jensen 1999, 43).

George Perkins Marsh was one of the initial American geographers to introduce and utilize the concept of possibilism for environmental analysis in the United States. In his 1884 work, *The Earth as Modified by Human Action*, Marsh describes that humans have chosen to manipulate inorganic nature, modifying and to a point determining the structure of the landscape surrounding them (Marsh 1884, 8). These human choices were often detrimental and greatly influenced flora, fauna, timber, soils, water quality, rivers, and dunes among other environmental systems (Marsh 1884).
The concept of environmental determinism, which suggests that the natural environment significantly influences and constrains human activity, culture, and choices of land use however, continued to be an influential tradition within the discipline during the late 19th and early 20th centuries (Holdt-Jensen 1999, 79, 219). The ideas and approaches that arose out of a renewed focus on environmental and natural systems studies as a result of Charles Darwin’s research (Holdt-Jensen 1999, 42), carried over into the discipline of geography and are reflected in Friedrich Ratzel’s works:

**Anthropogeography, or Outline of the Influences of the Geographical Environment upon History and Political Geography.** Ratzel regarded cultural forms as products of natural environment and determined by the conditions available (Holdt-Jensen 1999, 42). A student of the Ratzel, Ellen Churchill Semple, continued research under these principles, and along with geomorphologist William Morris Davis, continued the determinist tradition in the United States (Holdt-Jensen 1999, 43).

Following the lead of George Perkins Marsh, political geographer Isaiah Bowman diverged from the deterministic trend of geography in the late 19th century, acknowledging the strong influence of environmental factors, but also realizing the impact of culture and human choice in land use (Livingstone 1993, 250). His appointment as the Director of the American Geographical Society in 1915 granted him an influential position and forum in which to further develop and encourage the approach of possibilism in the American geographical tradition (Livingstone 1993, 251). Carl Sauer was another instrumental proponent for the use of this approach in research.

Progressing further from the environmental determinist school, Sauer combined the ideas of Kulturlandschaft (cultural landscape studies) with temporal analysis of cultural
behavior on the landscape presented in studies by historic anthropologist Franz Boas (Livingstone 1993, 291). In the 1930s Sauer then applied the principles of cultural geography and possibilism to his research for a more in-depth appreciation of a place’s character (Livingstone 1993, 291). These two frameworks (determinism and possibilism) co-existed over the past two centuries (Figure 2).

Figure 2:
Major Conceptual Schemes in Geography 1750-1950
Source: Holdt-Jensen 1999, 68

Progressive studies, beginning in the early 20th century, considered the concepts of environment and culture distinct entities in studies, enabling a more comprehensive, in-depth analysis of the factors influencing land use and landscape progression (Lowenthal 2001). Geographer Arlid Holdt-Jensen describes the place of landscape studies within the discipline when he comments, “In the German geographical tradition,
landscape geography (*Landschaftskunde*) forms a transition or bridge between systematic geography and regional geography (*Laenderkunde*) which is the most complex form of geographical integration” (Figure 3) (Holdt-Jensen 1999, 11).

---

**Figure 3:**
Hierarchy and Complexity of Geographic Studies
Source: Holdt-Jensen 1999, 10
(Original from Uhlig 1971; Weichhart 1975)
Regional Studies

A regional approach to landscape studies is one of the main tenets under the French-dominated possibilistic technique (Holdt-Jensen 1999, 48). From the inception of the possibilism theory, French geographer Vidal de la Blanche supported small natural regions for study (Martin 2005, 198). The landscapes in question hold certain qualities unique to the specific area, and in order to fully appreciate the interplay of local culture and the natural landscape, this study conducted analysis under such precepts (Holdt-Jensen 1999, 46). Using a regional approach allows for a more integrated, complex, and universal explanation of the area. This approach elevates the depth of the study to higher level of integration of disciplines and knowledge (Figure 3) (Holdt-Jensen 1999, 49).

LITERATURE REVIEW

The study of environmental history, a component of this research, explores the various elements of the interaction between humans and the natural environment over time. The field arose in the 1970s in response to global environmentalist movements and an open global discussion on the current state of the environment (Merchant 2005, 3). Over the last three decades, the field has continued to re-evaluate the premises that define the discipline and has subsequently expanded to include analysis in both urban and rural settings. This paper primarily addresses the agro-ecological component (human/environment interaction in non-urban regions) within the discipline of environmental history (Rothman 1998, xiii), but also considers the influence of economic development on the landscape and how urban development influenced perception and
helped determine land use. In this sense, it incorporates the ideas of American environmental historian William Cronon, American historian Donald Worster, and political economist and sociologist Karl Marx, who suggest the potential for land use and subsequent environmental impact is determined by labor and the valuation of material resources (Mitchell 1998, 17-18; Cronon 1991, 149). This study focuses on a particular region, but addresses economic impacts on a larger scale with the Federal Government involvement at Timberline Lodge. Such analysis references the important regional landscape influences of economic network, source, and flow patterns of capital as discussed by William Cronon (1991) in *Nature’s Metropolis* (xv).

Additional studies that address how cultural and physical components produce a local landscape have been conducted in the fields of environmental sociology, historical ecology and applied ecology, and geography. Such research often focuses on vegetation succession and the impact of humans on disturbance regime (Swetnam, Allen, and Betancourt 1999), or the influence of alpine land use and resulting vegetation and environmental change on agriculture (grazing) (Olsson, Austrheim, and Grenne 1999; Simpson, Dugmore, Thomson, and Vésteinsson 2001). Recognition of landscape patterns has led to studies addressing the driving forces responsible for landscape change through systems analysis of landscape elements, actors, and institutions (Bürgi, Hersperger, and Schneeberger 2004). Further analysis of driving forces has addressed the rate and direction of landscape change based on economic and transportation system development (Schneeberger, Bürgi, and Kienast 2007). Studies tracing cultural development, land use, and environmental impact on alpine landscapes over time have used comparable approaches (possibilism) and themes (economic network analysis, local resource
availability, valuation of resources and cultural trends at the local and national scale) to those of the present study as a guide for their research (Freudenburg, Frickel, and Gramling 1995).

Within the Pacific Northwest, attention to historic landscape change and analysis of the components responsible for land use change in alpine environments has been limited. The Cascade Mountains are frequently viewed purely as a dividing line between two distinct landscapes of East and West Oregon (Marsh 2004). Studies in the Pacific Northwest often focus on reconstructing forest patterns of historic old growth-dominated landscapes (e.g. Dunwiddie 1986), with little research the human activities responsible for such change on the landscapes.

The study *The Ups and Downs of Mountain Life: Historical Patterns of Adaptation in the Cascade Mountains* by environmental historian Kevin R. Marsh, compared Native American land use in the Pacific Northwest to other global alpine environments and traced the development of the logging industry and its impact on local culture as well as the adaptations required for life under such economic conditions (Marsh 2004). Marsh recorded similar trends of seasonal Native American land use and subsequent logging activities at Skykomish Valley to those discovered in this current research paper at the Mount Hood Land Use Planning Unit boundary (Marsh 2004). A central theme responsible for certain land use choices and resource development within the Cascades was the social connection to more populous, low-lying areas and trade routes, allowing for the integration of local economies into regional and national levels (Marsh 2004). The transportation access afforded by the Northern Pacific Railroad and market demand for timber and agricultural products acted as driving forces for similar
economic development and utilization of natural amenities of forest and farmland throughout the Pacific Northwest (Runte 1979, 66). Residents of small cities throughout the Cascade Range often depend on a mobile lifestyle for job security. This flexible lifestyle was necessary under the narrow, specified economy associated with natural resource extraction in the late 19th and early 20th centuries (Marsh 2004). Local tourism developed during the 20th century and provided an alternative source of income for the areas surrounding Mount Rainier and Mount St. Helens in comparable progression to the landscape of Mount Hood.

Although influenced by similar economic and land use trends, the Mount Hood Area has additional attributes that set it apart, resulting in a slightly different local landscape than those of other areas in the Cascades. Its close proximity to the Columbia River facilitated the establishment of transportation networks and larger scale economic integration. The Columbia River also provided a source of water for irrigation and combined with the large variation in landscape over a short distance, created a diverse agricultural economy on the Mount Hood landscape. Another difference between Mount Hood and other areas within the Cascade Range is the impact of the conservation and preservation movements. While Mount Rainier is a National Park, Mount Hood has National Forest status. These different federal designations operate under distinct policies governing land use, resulting in two very different landscapes. The area within the National Park was preserved to retain an unimpaired landscape, while the Mount Hood National Forest has been governed by a multi-use management system. The multi-use system allowed grazing, timber, and fewer restrictions on tourism to change the landscape, leading to over-utilization of land and increased development of recreational
facilities. In the late 19th and early 20th centuries, Washington better protected the preservation and conservationist ideologies than Oregon due to their constitutional and legal safeguards that limited sales of government granted land. Washington retained roughly twice the amount of land compared to Oregon from original grant date to 1960 (64.5 percent to 37.4 percent) (Robbins 1974, 33). In contrast with other areas throughout the country, the Pacific Northwest has retained a prosperous, large-scale timber industry. The timber industry, in combination with other livelihood options, enabled permanent settlement around Mount Hood since the late 19th century. Local vernacular and culture is also reflected in the toponymy within the Mount Hood Land Use Planning Unit boundary, preserving local involvement and history of the landscape.

The present study provides an in-depth analysis of the influence from local landscape perceptions on land use and the resulting impact on the landscape through a comprehensive reconstruction of the historical landscape in the Mount Hood Land Use Planning Unit boundary. An economic network analysis evaluates the impact of local perceptions as a driving force in landscape change and land use policy. This study seeks to address why specific land use choices were made and how these choices have shaped the natural landscape and provides a focused site-specific evaluation in the Cascade Region of the Pacific Northwest that also contributes to the broader literature of landscape studies.

METHODOLOGY AND SOURCE MATERIAL

A classification system was developed to analyze land use and landscape alteration based on prevailing landscape perceptions over the past 4,000 years. The
perception categories defined in this study include: Reverence, Respect, Obstacle, Exploration, Livelihood, Economic Development, Conservation and Preservation, and Research. Two methods were used in an attempt to discern various perceptions of the landscape through time. First, primary sources and commentary on these sources were used to gain an understanding of the local population’s general attitude toward the landscape. Second, perceptions of the local landscape were inferred through land use activities. The classification system focused on perceptions of the general population that were relevant to physical use and alteration of the landscape occurring within the Mount Hood Land Use Planning Unit boundary. The categorized perceptions sometimes overlap or occur concurrently, but are all included and analyzed separately in the present study, as they are each major contributors in the shaping of the landscape. Over time, these perceptions may also fade in intensity and pervasiveness, fluctuating between popular beliefs of the masses to more restricted ideas held by factions of the local population, which will determine the extent to which the landscape is altered under each perceptual category. The analysis focused on the introduction of each general perception and the landscape influence at the height of its popularity.

A variety of source material was used to reconstruct the past landscapes, each with its respective advantages and disadvantages. Period source material for pre-European-influence Oregon often takes the form of archaeologically recovered artifacts or recorded mythology and legends. These records often incorporate both myth and fact into their testimony, which local resident and author F.H. Balch (1940) comments on in his romanticized account of native American life, Bridge of the Gods: “Among a superstitious race, every fact becomes mingled more or less with fable; every occurrence,
charged with fantastic meanings” (272). When evaluating such sources, one is charged with the task of sifting through the material and maintaining an open mind during interpretation, analyzing all details closely in an attempt to draw out evidence of past landscapes and the influence of human activity. Oral histories and recorded myths and legends are influenced by cultural changes over time and a comparison of material preserved the historic attitudes of the culture and symbolism in the landscape (Leffler & Brent 1992; Meinig 1979). Some of the materials used in this analysis were secondary sources, such as newspaper commentary or written histories citing historic journals or Native American activity, and have gone through prior interpretation. Records of this type can be biased by egocentric and ethno-ecological ideas, thus this study compared material from a variety of sources to uncover and provide a fair representation of the processes and parties responsible for historical landscape change (Cronon 1983, xvi; Russell 1997, 19-35).

The written record extending from the time of European contact may be considered more reliable in terms of its authenticity and accuracy; however, a comparison of sources (for example newspaper, historic atlases, journal entries, published articles, books, federal, state, and county reports and policies) was again utilized to minimize potential bias. A more vivid reconstruction displaying transitions over time was also established by combining photographs and paintings with other sources of data. The use of photographs provided both an objective source and relevance for a modern audience. Analysis through comprehensive acceptance and integration of various source materials was necessary for a complete reconstruction of a landscape, as described by historical
ecologist Emily W. B. Russell “all evidence needs to be corroborated before it can be more than a tantalizing suggestion of conditions in the past” (Russell 1997, 23).

PERCEPTION CATEGORIES

Reverence (4,000 Years Before Present to early 19th Century)

The first perceptual category evaluates the impact of the earliest land occupation and is classified in this paper as the perception of reverence. Native American settlement of the region is estimated to have begun between 8,500 and 13,000 years before present; however, archaeological evidence of sites within the study area can reliably trace the date to only 4,000 years before present (Burtchard 1990). Although heavily reliant upon oral tradition, some aspects of Native American society were recorded to preserve the culture and belief systems. Recorded histories of Native American tribes focus on myths and creationist stories of the mountain and surrounding landscape. Various local tribes in the area, such as the Clackamas, Klickitat, Tygh, Mollala, Wasco, and Paiute, produced different myths to provide meaning to the environment before them (Atkeson 1977, 11). Similar details often arise in the analysis of these legends, describing a love story involving the personification of multiple mountain peaks, with a great warrior god, referred to as Wy’east, Sal-leks, or De-aubs, entombed within Mount Hood after death (Atkeson 1977, 11, 14). The volcanic nature of Mount Hood is thus explained by the fierce warrior within. These myths describe a land viewed with awe and reverence, with a spiritual and sacred sentiment projected onto the mountain.
The characteristics associated with potential small-scale eruptions could have a large influence on the interpretation of events by native people and feed into the mythology of the mountain that generated the perception of reverence. According to Crandell (1980), these signs could include “clouds of white or gray steam and ‘smoke’ rising above the volcano. A glow in the sky above the volcano at night. Loud rumbling noises or sharp explosions. Darkening, by tephra, of snow on the volcano’s flanks” (64). Records from Thornton’s journal entries of 1848 report “The Indians affirm that they have frequently seen fires in the chasms of this mountain,” confirming volcanic activity of that time period (Thornton 1973, Vol. I, 256).

Land use on the mountain during the period of pre-European contact was restricted to seasonal big game hunting, berry gathering, and small-scale burnings to improve the productive capabilities and secure food from the natural bounty (Burchart 1990). Small-scale fire use also provided a means of communication and to direct animal movement (Krech 1999, 101-122). The USDA reported in 1940 that no proof existed of large-scale Indian burnings, and the sentiment that Native American fire use was done under a conservationist mindset, having obtained knowledge of ecosystems through experience, was publicly adopted in the Noble Indian Movement of the 1970s (Krech 1999, 102). Mount Hood was used as a landmark for travel and local populations established trails along the foothills of the mountain during the treks of various tribes to gathering sites along the Columbia River (Balch 1940). The Columbia Gorge offered transportation, ample supply of local goods, and a central location for trade opportunities. Other direct influences on the mountain were quite limited, allowing natural disturbance cycles (processes that affect change and recovery in landscapes) to dominate the area.
This respect and admiration for the mountain continued into the period of initial European contact.

**Respect (Late 18th Century to late 19th Century)**

The next perceptual category, respect, traces land use and the resultant landscape during the period of initial European contact in the early 19th century. The medium of paintings from the mid 19th century to the late 19th century is also discussed under this perception.

The first recorded European sighting of Mount Hood is attributed to Lieutenant William Broughton of the Vancouver Expedition in 1792 (Grauer 1975, 8). An exploratory party lead by Broughton, referencing maps of the inlet produced during an earlier expedition by Captain Robert Gray of the ship *Columbia Rediviva*, proceeded up the Columbia River with the goal of establishing a more detailed description of the inlet and surrounding landscape (Mockford 2003). During the Vancouver Expedition, Lieutenant Broughton named and recorded general descriptions of landforms and prominent features. Broughton named Mount Hood in honor of famed British naval officer Lord Samuel Hood (1762-1814) (Mockford 2003). The mountain was addressed by various names over time. Explorers Meriwether Lewis and William Clark noted in 1805 that the mountain had been referred to as Falls Mountain or Timm Mountain, where Timm was a Native American name referring “to the falls area in the river just above the site of the Dalles” (Grauer 1975, 9). The Dalles refers to an early settlement in the canyons of the Columbia River. William Clark also noted “The mountain was the Mount Hood of Vancouver”, referring to the Vancouver expedition (Grauer 1975, 9). Among
certain American settlers and travelers, the mountain, situated within The President’s Range, was known by the name of Mt. Washington, as recorded between 1846-1848 by Quinn J. Thornton: “Mount Washington is that known among the British as Mount Hood” (Thornton 1973, Vol. I, 256). The name Mount Hood, however, gained acceptance and has subsequently been used when referencing the mountain.

The mountain captivated early 19th century visitors to Fort Vancouver, established by the Hudson’s Bay Company, who admired the enormity of and shared in the respect for the mountain attributed by Native Americans (Figure 4).

Figure 4:
Fort Vancouver 1852
Located outside the current city of Vancouver, WA in the Portland, OR Metro Area
Source: Williams 1912; image by Gustave Sohon

These sentiments are borne out of journal entries, such those by botanist David Douglas in 1825, describing the mountain as “insurmountable” and Captain Nathaniel J. Wyeth in 1832, referencing the “large, snowy mountain...a more stupendous pile than any of the Rocky Mountains” (Grauer 1975, 9). Although deeply fascinated by the Willamette Valley, Reverend Gustavus Hines, during a journey initiated in 1839, commented in his
journal that Mount Hood “…presents a magnificent object, on which the eye can gaze without weariness, from innumerable points more than one hundred miles from its base” (Hines 1973, 322).

The overriding perception of respect is also reflected in the mediums of lithographic printings, etches, and engravings. Paintings and other pictures of the American West display a transition from idyllic myths and exaggerations in generalized western scenes to site-specific detail (Robbins 1994, 5). The landscape style of the Hudson River School (beginning in the 1820s to 1830s) and Rocky Mountain School (emerging in the 1850s to 1860s) often portrayed an embellished grandeur of the landscape (Runte 1979, 23). This is evident in paintings of Albert Bierstadt and Thomas Moran (e.g. Mountain of the Holy Cross, based on W.H. Jackson’s 1873 photograph) (Runte 1979, 23; Spence 1999, 34; Kinsey 1992, 163). The sublime view of nature from the Dutch School also influenced paintings in the Rocky Mountain School as these images frequently displayed exaggerated features and more vivid colors that would sacrifice realism in an attempt to convey the splendor of the landscapes in the American West (Kinsey 1992, 20; Runte 1979, 23). Such sentiments reflected the nationalist attitude prevalent during the 19th century and captured the cultural identity of the landscape (Runte 1979, 23). Moran and others also used landscapes as visual metaphors, connecting the unique landscapes with something culturally familiar such as architecture (Kinsey 1992, 20). Metaphors could be made through associational means, combining the unique landscape to something more culturally familiar through style, such as using the template of a European scene and applying this style to represent the new landscape, or typological means, where the artist would determine characteristic features and
exaggerate these factors making them more dramatic or recognizable to an idealized form (Kinsey 1992, 20). Some artists, such as George Catlin and Thomas Cole, also included cultural aspects, recognizing the unique populations of Native Americans that would add another dimension in the character and emotion of the painting (Runte 1979, 26; Spence 1999, 12).

Early images depicting Mount Hood share the characteristics and follow in the tradition of these art movements, and also frequently included a developing urban component in the image. In etches and engravings from the 19th century, the mountain is often portrayed as white and featureless, with occasional attempts made to outline the general shape of the mountain (Figures 5-7, 10, 11) (Warre 1848; Sohon 1850; Stanley 1853; Wellge 1884; Clohessy & Strengele 1890).

Figure 5: “Etching of Mount Hood and American Village (Oregon City)”. (Warre 1848)
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon
Figure 6:
“Engraving, Fort Vancouver, with Mount Hood in the background”.
(Sohon, 1850)
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon

Figure 7:
“Engraving, Columbia River Area Indian Camp at The Dalles, Oregon, with Mount Hood in the background.” (Stanley, 1853)
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon
Figure 8:  
“Engraving, Mount Hood from the Columbia”.  
(Gifford 1874; Engraving by R. Hinshelwood)  
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon

Figure 9:  
“Detail of engraving of Portland, Oregon and Mount Hood”.  
(Glover 1879)  
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon
Figure 10:
“Closer-in detail from engraving of The Dalles, Oregon, and Mount Hood”.
(Wellge 1884)
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon

Figure 11:
“Detail from engraving of Portland, Oregon, with Mount Hood.”
(Clohessy and Strengele 1890)
Source: USGS: The Volcanoes of Lewis and Clark: Mount Hood, Oregon
Other images have a romanticized appearance, where less care was directed at a faithful recreation of the true mountain (Figure 7) (Stanley 1853). Some early surveys and more technical reproductions of the mountain occurred in the 1870s, where attempts were made to create a detailed image through observation and interpretation of various prominent features; however, less attention was occasionally given to the proper scale, affecting overall accuracy (Figure 8) (Gifford 1874). The coloration of the mountain also indicates detail and can accentuate the emotion generated by the feature. The existence of potential details such as smoke (Figure 9) (Glover 1879), provides additional evidence and can validate written accounts. Through all the figures, the prominent façade and imposing figure of Mount Hood is visible. Although the mountain is often not the focus or central subject of the picture, the mountain is included and its image is visible in the background, implying its importance through recognition of its existence.

The dominant movement of the mid to late 19th century in western American art, Rocky Mountain School, and individual artistic license must be considered during the analysis of the images, as they can impact how the prints depicted the mountain and the intended interpretation in terms of meaning and context. For example, some images may have been created for research or survey value rather than a specific picture to indicate local economy or a romantic image of Native American activities for aesthetic value. The pervasive perception of the time, however, often dictates how the mountain was interpreted before its integration into the major art movement. The existence and inclusion of the mountain that is pervasive through all pictures and all styles referenced within the paper indicates the importance of Mount Hood within the culture of local populations.
Under the perceptual category of respect, natural environmental systems continued to dominate Mount Hood, as direct human contact with the mountain was quite limited. The mountain was observed from afar, since no monetary value was ascribed to the feature. Various depictions of Mount Hood in paintings and drawings, some more accurately representing the mountain than others, illustrate this distant appreciation of the mountain as a dominant figure on the landscape. Interest during this period was focused on the Columbia River and its development, with Mount Hood relatively ignored aside from its aesthetic appeal. The perception in this era of appreciation for the spectacle of nature’s majesty was later transformed into an attitude in which the mountain was regarded as a barrier to westward movement for an increasing number of settlers.

**Obstacle (Mid 19th Century to late 19th Century)**

Under the obstacle perception, early settlers of the 19th century viewed Mount Hood as a barrier for travel in their quest to homestead in rich soils of fertile river valleys. The arid and imposing climatic conditions and landforms of the American West influenced perception and analysis of initial surveys by John Wesley Powell, generating a sense of determinism that was reflected in American historian Frederick Jackson Turner’s interpretation of Powell’s reports (Rothman 1998, xi; Worster 1994, 12-18). These reports created a certain pervasive idea of the west for pioneers, a region that would require focused attention and cooperation of local populations to utilize and survive the harsh landscapes (Worster 1994, 16). However, pioneers traveling to the Willamette Valley and Mount Hood area were exposed to a landscape in contrast to reports from initial surveys and general attitudes of the American West. This landscape was one of
ample precipitation, verdant old growth forests, and distinct difficulties and challenges, such as crop selection, adapting to new climate and weather patterns, clearing trees for houses, and creating roads through thick vegetation. The natural amenities present in this landscape reduced the limiting factor of environment present in other areas of the American West, and created a setting where both a unique local culture and environment would shape the landscape, a landscape that allowed for a choice in how the land was utilized.

The concept of manifest destiny arose within the nation during the 19th century and an ever-increasing number of eager settlers sought new land and a new beginning in the untamed wilderness of the American West. Routes of travel followed the previously established Oregon and Lewis and Clark trails along major river systems. The Columbia River, where navigable, became heavily utilized. However, multiple contributing factors necessitated the development of alternative routes and networks for safe travel by land. Rapids in the river required portaging and the rough terrain associated with the gorge created bottlenecks of wagons, such as those at the Dalles (Woolley 1959, 6). Boats were specifically prepared for the task of ferrying wagons, and ferrymen took advantage of the high demand for safe navigation of dangerous river sections. They offered the only early form of passage along the Columbia River at the Dalles and established inflated fares, reflected in this passage from local resident, physician, and partner of an early automotive passenger service, Ivan M. Woolley’s (1959) book Off to Mt. Hood: An Auto Biography of the Old Road, “The fees charged by boatmen were high and this expense added to the cost of food and stock feed during the long time he [Samuel K. Barlow] would need to wait for his turn, would be a serious drain on his funds” (6).
prospect of a new route was further complicated by the presence of the Cascade Mountain Range, including Mount Hood, which proved to be a substantial obstacle to westward migration.

The challenge of establishing a new path was met by a convoy including the Barlow and Palmer parties. The two families met at the Dalles in 1845 and quickly united under the common need for a passageway across the Cascades (Grauer 1975, 12). While exploring potential pathways, records indicate that William Barlow documented the environmental impact from a volcanically induced event (Grauer 1975, 13). He recorded that a torrent of sand-entrained water had surged down the mountain from the glacial-covered cliffs near the summit of Mount Hood, destroying a grove of trees (Grauer 1975, 13). Sightings that provided evidence of the raw power and ability of the mountain to alter landscapes, combined with a few near mishaps amid glacier fields, generated a renewed sense of appreciation for the dangers produced by the mountain (Grauer 1975, 13-15).

The team decided to create a southern route around Mount Hood, known as the Barlow Road, along what is presently Highway 26. This route was based on an old Native American trail, which had been used to cross the Cascade Range at the south slope of Mount Hood (Woolley 1959, 6). Although a separate trail had been established from Hood River utilizing the Lolo Pass to the northwest of the mountain for use by cattle drivers, the Barlow Road became popular enough to be taken advantage of as a toll road (Grauer 1975, 20-21). The exact route as well as the ownership and location of the gate along the Barlow Road have changed over time, but the toll road remained in operation for approximately 70 years (1845-1915), with two thirds of immigrants into the
Willamette Valley utilizing this route (Figure 12) (Grauer 1975, 21; Museum of Oregon Territory Clackamas County, 1976). A few small settlements developed along the toll road, most notably Government Camp, whose name arose from the remains of an overburdened wagon train left behind during the passage led by Lieutenant William Frost in 1849 (Rogers 2008). Government Camp was also referred to as Pompeii, visible on Metzger’s Atlases into the 1950s. However the name Government Camp gained favor and primary usage when describing the town (Metzger’s Atlas Clackamas County 1937; 1951; 1966).

Figure 12: Toll Gate on Barlow Road 1885 with local resident from Rhododendron and Bull Run Source: (Woolley 1959, 90)

Over the decades following the establishment of the Barlow Toll Road, the mountain had been summited by a few daring individuals; however, the public perception of the mountain considered the feature to be a significant obstacle to travel. Public
sentiments also retained a wariness and awe of the raw nature and towering presence of Mount Hood. The initial transportation network may have slightly reduced the intimidation factor, granting a slight feeling of control over the mountain to the local population. The consequence of increased attention and population influx to the area was a larger human influence on the natural landscape. Humans began clearing vegetation for trail and road construction, though on a much smaller scale than subsequent development (Figures 12, 14, 16, 20, 21). The roads during this period followed local terrain, where gradient leveling was for the most part absent. Such techniques resulted in sentiments describing the Barlow road as narrow, steep, rutted, debris strewn, composed of treacherous holes and rocks, and having an uneven surface that in places made it dangerous to travel (Woolley 1959, 21-28, 42). The potential for invasive species introduction was also increased as a result of lengthier travel distances and rising populations. Human manipulation of the landscape increased, yet the use of land specific to the mountain was still limited since the majority of homesteaders headed to the growing city of Portland or to the fertile Willamette Valley (Museum of Oregon Territory Clackamas County, 1976). More complete exploration of the mountain allowed local populations to realize the full potential of Mount Hood and the local landscape.

**Exploration (Late 19th to early 20th Century)**

The exploration perception created improved knowledge and an awareness of the mountain’s resources through the activities of local mountaineering clubs and individuals at the turn of the 20th century. Mount Hood aroused curiosity, attention, interest and a sense of adventure within certain local citizens to tread into unexplored alpine territory.
Groups of outdoor activists came together surrounding a desire to explore their stoic neighbor in greater depth. One of the initial groups in this movement was the Oregon Alpine Club, which held its first meeting in 1887 (Grauer 1975, 130). Group interest waned in 1891, however, and the group soon dissolved. Three years later, some past members of the club met and began what was to become the most influential mountaineering organization on Mount Hood.

The Mazamas Club was founded in 1894 with membership based on a successful scaling of Mount Hood, or display of equal ability by achieving a climb to the summit of a comparable peak (Constitution of the Mazamas 1896). During the first year, over 100 members were initiated, composed of both men and women (List of Members 1896). This group had a major impact on alpine culture and with other early mountaineering groups, was responsible for an attitude of conquest over the mountain while still maintaining respect for the forces responsible for its existence. One of the original 1894 bylaws of the Mazamas stated their purpose was: “...to explore mountains, to disseminate authoritative and scientific information concerning them, and to encourage the preservation of forests and other features of mountains in their natural beauty,” (Mazamas Grants, para. 1) however, by revealing more details about the mountain and in response to their mere presence and activity on the mountain, the prowess and capacity of humans to utilize this landscape were displayed. This activity would lead to much different land use practices on the local landscape as a result of changing attitudes towards the mountain.

Between the Mazamas Group and other mountaineering clubs such as the Wiyeast Group and Crag Rats search and rescue club, a much larger proportion of the mountain
was mapped, and research committees were founded for the purpose of improving knowledge of the mountain (Mazama Research Committee 1925). Government agencies such as the United States Geologic Survey, General Land Office, and National Forest Service, also created more accurate maps utilizing land surveys and techniques of mapping from photographs (Wernstedt 1922). The mountain was exposed to a wider audience through the motion picture The Crystal Ascension (1923), set on Mount Hood (Grauer 1975).

Specific individual achievements and efforts, promoting further knowledge and safety on the mountain, were recognized in local lore. One such figure was Elijah “Lige” Coalman, whose efforts in road upkeep, forest service, and as a climbing guide, among other activities, led to his designation of “Lige Coalman, the man of the mountain” (Woolley 1959 p. 47). Famous and influential figures, including Coalman, were recognized through the naming of prominent features on Mount Hood, such as glaciers, in their honor.

Opening the mountain to access by automobile occurred in 1903, when John B. Kelly successfully utilized the Barlow Trail Road by means of a “white” Stanhope steam carriage (Figure 13) (Woolley 1959, 11).
During the trip, Kelly ascended 8,000 feet from his Portland starting point to visit his friends and family who were camping on the mountain (Woolley 1959, 11; Museum of Oregon Territory: “1st Automobile Trip to Mt. Hood”). The toll gate operator was quite amazed by the feat and presented a certificate to Mr. Kelly, as reported in the article “1st Automobile Trip to Mt. Hood”:

“This is to certify that I passed Mr. J. B. Kelly through the Toll Gate, on Aug. 29th, 1903, and returned on Sept. 2nd, with his “White” Automobile, it being the first automobile to ever pass through the gate.

John Marony, Gate Keeper of Mt. Hood and Barlow Road” (p. 1).

With focused attention on the mountain, this period of exploration acted as a transition point for land use in the area. Small-scale use had dominated the landscape in previous perception categories, but with increasing access through trails and improved
mapping, the mountain was in effect demystified, leaving it vulnerable to more permanent settlement as well as development and increased tourism. These new land uses would impact the landscape to an extent not yet experienced, both in terms of scale and intensity.

**Livelihood (Mid 19th Century to Present)**

Beginning in the mid 19th century, early homesteaders engaged in certain activities as a source of livelihood that became entrenched in local culture, many of which have shaped land use into modern times. A progression occurred under this perception category, from an environmental determinist influenced perception to a more possibilist ideology in local culture as a result of human needs and choices dictating land use. In order to survive and thrive in an environment under a capitalistic doctrine, a source of revenue is required to secure food, shelter and other basic needs.

One of the earliest sources of income was agriculture. Newspaper contributor Don Taylor, in an *Oregonian* article entitled “A History of Agriculture in Oregon” (1926), proposed that farming in Oregon began in 1810. Taylor was skeptical of other sources indicating prior Native American agricultural activities, such as tobacco farming, since this was unsubstantiated in the diaries of Lewis and Clark. As Taylor wrote, “Oregon Agriculture dates back to 1810, and no further if we except as evidence of its earlier practice such inferences as might be drawn from the pages of M. Le Page du Pratz’ “Historie de la Louisiane” and such recorded instances of subsequent tillage as could be considered in any way indicative
of a prehistoric husbandry. At least there now exists no positive proof of earlier tillage” (Taylor 1926, para. 1).

Reverend A. F. Waller, known as “Father” Waller, commented on regional agriculture from Willamette Falls in 1842, noting that “Produce of all kinds, except corn, does well here, so far as it has been fairly tried” (Museum of the Oregon Territory, Morning Enterprise, 1926 para. 2). Crop production for Clackamas County in 1846, as ascertained in part by assessors and in part through estimates, was recorded by Thornton (1973) and indicates local agricultural diversity (Table 1):

<table>
<thead>
<tr>
<th>County</th>
<th>Wheat</th>
<th>Oats</th>
<th>Pease [sic]</th>
<th>Potatoes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackamus</td>
<td>19,867</td>
<td>12,140</td>
<td>4,900</td>
<td>9,000</td>
</tr>
</tbody>
</table>

(Data in Bushels)

According to an article in the *Morning Enterprise* newspaper from Oregon City, “In 1850, agriculture in Oregon and Clackamas county was given a boost with the passing of the land grant bill by Congress, a provision allowing 320 acres of government land to each single man, and 640 acres to each married man filing a claim” (Museum of the Oregon Territory, Morning Enterprise, 1926, para. 3). The Donation Land Law of 1850 legitimized white land ownership already in place and enticed further development, specifying that claims prior to 1850 received 320 acres and claims between 1850-53 would receive 160 acres however, after 1853 only two years were required to secure a claim (Robbins 1974, 7). Some provisions within the act were even extended to Washington Territory in 1854 (Robbins 1974, 7). The Land Law of 1878 provided
guidelines for subsequent pricing and acreage for purchase by settlers and nonsettlers (Robbins 1974, 12). The Oregon Land Law of 1887 added further incentive and urged the sale of state land, removing many legislative obstacles for these purchases (Robbins 1974, 14). The resulting increase in claims during the 1880s necessitated the appointment of a state land agent to oversee operations (Robbins 1974, 19). Governor Oswald West observed the limited control on state land sales and acknowledged local concern over future resources and landscape aesthetics by improving management and protection of state land, after his election in 1910 (Robbins 1974, 29).

The Hood River Metzger’s Atlas (1931) indicates plot ownership under multiple McIntosh names, a possible connection to the introduction of the McIntosh variety of apples grown in Oregon. Diversification of crops, small-scale intensive farming practices, federal subsidies, and fairly stable markets allowed agriculture to develop in Oregon’s Hood River Valley as well as the irrigated fruit growing areas of Yakima and Wenatchee Valleys in Washington (Robbins 1994, 138). By 1950 approximately 1,030 farms existed in Hood River County (Oregon College of Agriculture Hood River Extension Reports, 1954), though technological transitions and industrialized institutions of production and sales soon led to a decrease in small acreage farms and growth of partnerships and corporation management (Robbins 1994, 161). The most salient crops in Hood River Valley were associated with fruit production in orchards. The two dominant crops for Hood River County by the 1960s were apples and pears, making up over eighty percent of the agricultural income (USDA Oregon College of Agriculture Hood River Extension Reports, 1968).
Another early source of income for this area came through grazing. Evidence of this activity is recorded in journals and publications. Mazama Club mountaineers mentioned that sheep were often encountered on various parts of the mountain during climbs (Figure 14) (Lee 1921).

Evidence for this land use can also be seen in the agricultural reports for Clackamas and Hood River Counties, where interest and participation in 4-H activities and annual county fairs indicates proportionately high activity surrounding animal husbandry (USDA Oregon College of Agriculture Clackamas Extension Reports, 1929; 1930). Grazing opportunities on public lands in Oregon were tax exempt and well utilized (Figure 14) (Robbins, 1974, 4). The U.S. Forest Service recorded that 1,500 head of cattle and horses
and 31,000 head of sheep were grazing under permit on the Mount Hood National Forest in 1930 (U.S. Department of Agriculture [USDA] and U.S. Forest Service [USFS] Map, 1931).

Timber was another profitable resource. Thornton (1973) records that logging was heavily practiced on private land in the counties surrounding the Columbia River and mills had an ample supply of lumber. In April 1847, the state produced 171,000 feet of lumber (Thornton, 1973). Improved transportation systems diminished the impact of market distance and improving technologies of the 1880s reduced the cost of production, which enticed companies to invest and secure holdings in the forest rich areas of the Pacific Northwest (Robbins 1994, 128). Around the turn of the 19th century, overproduction of timber often occurred in the Pacific Northwest as a result of bonded indebtedness, taxes, fire-production costs, and over extension of manufacturing facilities (Robbins 1994, 130).

Timber resources on public lands in the national forest were also utilized as a source of livelihood. Extensive public lands in the Pacific Northwest, and especially Oregon, were important to the regional economy in terms of profitable timber resources, as they were tax exempt (Robbins 1974, 4). The Timber-Cutting Act of 1878 authorized residents in specified areas to harvest timber on government lands without charge and with the stipulation that the timber be used for agricultural, mining, or domestic building purposes (Walton & Robertson 1983, 352). The government worked to secure an influence in the timber market with the General Revision Act of 1891. This act added stipulations and provisions for land ownership and timber harvesting, making it increasingly difficult for wealthy individuals to control the timber market (Walton &
Robertson 1983, 371). Timber was harvested and sold during the late 19th and early 20th centuries to secure ever-larger future harvests (Walton & Robertson 1983, 372). According to economic historians Gary Walton and Ross Robertson, “The increasing size of the American market, which kept expanding until 1920, led to economies of scale in manufacturing that played a significant role in productivity changes” (Walton & Robertson 1983, 316). Regional specialization in production also occurred during the early 20th century. The progressive conservation approach utilized by President Theodore Roosevelt and chief forester Gifford Pinchot, considered timber a crop within national forest reserves (Worster 1994, 21-22). Data from U.S. Forest Service surveys, which began in 1917, and the Copeland Reports from 1933, provide an idea of the land use and perception of the forest resources (Table 2) (Robbins 1985, 32). These survey results promoted an approach to timber harvesting in which production would be postponed until trees achieved a specific size for optimized harvest potential. This approach is reflected in the lower harvesting values at the beginning of Figure 15.

The impact on local vegetation is reflected in data from harvested stands of timber in the Mount Hood National Forest for 1931 (Table 3).
Table 2:
1972 Mount Hood National Forest Inventory of Land Available for Logging

<table>
<thead>
<tr>
<th>Total Forest</th>
<th>Area in Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Forest Land</td>
<td>869,839</td>
</tr>
<tr>
<td>Unproductive Forest Land</td>
<td>118,722</td>
</tr>
<tr>
<td>Non Forest</td>
<td>64,408</td>
</tr>
<tr>
<td>Productive Reserved</td>
<td>6,381</td>
</tr>
<tr>
<td>Total</td>
<td>1,059,350</td>
</tr>
</tbody>
</table>

Source: USDA and USFS Forest Inventory 1972
The 1972 inventory was based on data from 1970-71 field studies and estimated the amount of land available for logging activities.

Table 3:
Mount Hood National Forest Harvest 1931

<table>
<thead>
<tr>
<th>TREE TYPE</th>
<th>BOARD FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas fir</td>
<td>7,735,000,000</td>
</tr>
<tr>
<td>Hemlock</td>
<td>3,804,000,000</td>
</tr>
<tr>
<td>Noble and Silver fir</td>
<td>1,700,000,000</td>
</tr>
<tr>
<td>Western yellow pine</td>
<td>1,038,000,000</td>
</tr>
<tr>
<td>Other species</td>
<td>788,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>15,065,000,000</td>
</tr>
</tbody>
</table>

Source: USFS Map 1931

Successive policy re-evaluated timber resources and directed appropriate use. According to independent community development consultant William Kay, research scientists
Ellen Donoghue and Susan Charnley, and Director of the Ecosystem Workforce Program at the University of Oregon, Cassandra Moseley, “The allowable sale quantity (ASQ) of the 1990 Mount Hood National Forest Plan was 189 million board feet (MMBF). Under the Plan, the probable sale quantity (PSQ) was set at 67 MMBF, then lowered to 64 MMBF in 1995” (Kay, Donoghue, Charnley, and Moseley 2007). Historic use of timber resources within the Mount Hood National Forest from 1923-2001 is displayed in figure 15 (Kay et. al 2007).

![Figure 15: Volume of timber harvested, Mount Hood National Forest, 1923 to 2001. (MMBF = million board feet)](image)

Source: Kay et al. 2007, 18

After World War II, a focus was placed on improving the economy through increased consumer spending (Rome 2001, 32-33). The government fostered growth in the housing market through emphasis on higher living standards and a desire for the
American dream of homeownership. The expanding housing market promoted consumer spending and provided a source of income for many Americans (Rome 2001, 32-33). An efficient and cost effective method for mass production of housing units was required to satisfy demand (e.g. Levittown). Oregon has remained a top producer within the lumber industry since the late 1930s (Portland Chamber of Commerce 1950, 14). The volume of timber harvests has fluctuated in response to the national economy and housing market demand. Global integration and networking capabilities along with transportation network have created access to international markets as well.

The American environmental movement beginning in the 1960s, promoted efficient use of natural resources, and strongly supported protection of wildlife listed on the Endangered Species Act of 1973 such as the northern spotted owl (Rome 2001, 6-8). In response to the northern spotted owl being place on the endangered species list in 1990, the 1994 Northwest Forest Plan greatly reduced the timber production in the forest, creating safe havens and preserves for the northern spotted owl (Figure 15) (Kay et al. 2007, p. 17, 20). The plan also attempted to diversify the economy and profit and livelihood source for town surrounding the forest that previously had a heavy reliance on the timber market.

An evaluation of the local timber industry reveals that the city of Portland was a major source of capital and market demand during initial development of the industry. Portland, like many cities of the west, became the initial market for the hinterlands that were rich in timber resources (Cronon 1991, 148). In 1899 thirty three percent and in 1947 about twenty percent of total wage earners of all manufacturers in the city were employed in the lumber industry (Portland Chamber of Commerce 1950, 14). Much of
the lumber produced in Oregon was shipped by rail or ocean transportation in a rough or semi-finished state; however, increased production and diversification into finished wood products has since occurred (Portland Chamber of Commerce 1950, 15). The majority of sawmills from the late 19th and early 20th century industry were located within Portland, however, beginning in the 1940s and 1950s, the many mills have relocated to the southern end of the Willamette Valley. This loss of sawmills was partially offset by encouragement of fabrication, re-manufacture, and other processing jobs that were still available in the Portland area timber industry (Portland Chamber of Commerce 1950, 14).

Lumber companies such as the Jones Lumber Company purchased large tracts of land in the area surrounding Mount Hood (Metzger’s Atlas Clackamas County 1951; 1966). Companies such as Publishers Papers Company that required timber for publishing and book production activities also increased their claim on land plots (Metzger’s Atlas Clackamas County 1951; 1966). The loss of forest cover through timber activities and the restoration and planting of manicured forests has had a large influence on native flora and fauna species distributions. In early practices, traditional old growth forests were replaced by rows of same-aged tree stands, creating a very different landscape (Kay et al. 2007).

Timber was also locally used for homestead and hotel construction. An increase in the number of regional jobs and the economic prosperity of the late 19th century provided incentive to establish a local tourism industry. Several hotels and inns were constructed during the 1880s-90s. However intense development of the tourism industry would not occur until the 1920s.
Under the livelihood perception, land use practices had a much greater influence on the landscape. Grazing and livestock operations require vast tracts of land, impacting the meadows around Mount Hood in addition to forests where land was cleared (Figure 14, 16). Resource extraction proved to be a founding principle in the Oregon economy, as timber harvesting impacted landscapes on both public and privately controlled land. In an attempt to reduce the costs of logging, timber-harvesting practices often left steep slopes that increased the probability of erosion and led to higher siltation of streams and flood severity (Rome 2001, 255).

A reduction of forest cover left patchwork patterns of harvested forest sections, reduced biodiversity over time due to alterations in stand structure composition, and a decrease in breeding potential (Caldwell 1990, 144).

Figure 16:
1892 Government Camp
Source: Grauer 1975, 32
Population growth and land use choice resulted in a loss of soil capacity to nourish vegetation or be utilized in continued human actions and influenced drainage and erosion rates (Caldwell 1990, 135). Orchards restructured the landscape through forest clearing, soil agitation, and water system alteration by irrigation. Once a sufficient baseline income was established, attempts were soon made to optimize profits from agriculture and other sources of livelihood discussed above. Agriculture and lumber farms spread across the landscape. While these activities had a much greater impact spatially surrounding the mountain, it was the tourism industry that would more intensely change the landscape of Mount Hood itself. The tourism industry relied on the development of towns and accommodations that would attract and provide ease of access for tourists. Houses and lodges were constructed beginning with the Cloud Cap Inn in 1889 (Grauer 1975, 85). In addition to accommodations, roads were required and sightseeing opportunities and activities needed to be developed. Funding from private sources was augmented by profits from National Forest activities. The National Forest returned a portion of its revenue from economic activities within the forest to neighboring counties, as described on the USDA and USFS Map from 1931, “Twenty-five per cent of the receipts from the national forests, including receipts from the sale of timber, grazing fees, water-power development fees, and rental of lands, is returned to the counties in which the national forests are located, to be used for roads and schools” (USDA and USFS Map 1931). The amount received by counties surrounding the forest from 1906 to 1930 (inclusive) is reported in Table 4.
Table 4:
Mount Hood National Forest Revenue Returned to Neighboring Counties

<table>
<thead>
<tr>
<th>County</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackamas County</td>
<td>$ 59,555.69</td>
</tr>
<tr>
<td>Hood River County</td>
<td>$ 20,285.98</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>$ 20,216.26</td>
</tr>
<tr>
<td>Marion County</td>
<td>$ 28,413.68</td>
</tr>
<tr>
<td>Multnomah County</td>
<td>$ 7,269.66</td>
</tr>
<tr>
<td>Wasco County</td>
<td>$ 22,410.36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 158,151.63</strong></td>
</tr>
</tbody>
</table>

Source: USDA and USFS Map 1931

These funds along with private investment would provide the capital and incentive that would aid in the evolution of the perception and further development of Mount Hood.

**Economic Development (Turn of 20th Century to Present)**

Improved transportation and access to the mountain occurred in the early 20th century, transforming the local perception from one of livelihood to one emphasizing the economic development of local resources. National interest is also evident under this perception, reflected by the construction of Timberline Lodge in the 1930s. The land use trends under the perception of livelihood continued as the question of how humans could use what was provided by the landscape for their needs was transformed into how humans could shape the landscape to suit their wants.

Along the transportation networks, towns and villages began as stopovers for long trips or as final destinations for weary pioneers. The development of an improved road network surrounding Mount Hood connected early towns such as Rhododendron, Government Camp, and Hood River to one another and facilitated growth. This network
included the Mount Hood Highway from Portland to Hood River that opened in 1915, a paved road joining Government Camp to Portland, completed in 1919, and a road from Hood River over Bennett and Barlow Passes to Government Camp, which completed the Loop Highway around the base of Mount Hood in 1925 (Figures 17, 20, 21) (Atkeson 1977, 22). The Lolo Pass Route opened in 1954 among other ancillary links in the network (Grauer 1975, 22). Other major roadways providing access to the Loop Highway include the Columbia River Highway, built along the Columbia River between 1913 and 1922 (Grauer 1975, 22-30; Atkeson 1977, 22), and the Mount Hood Scenic Byway connecting Troutdale with Hood River (Grauer 1975, 22-30).

Figure 17:
1925 Map of Loop Highway

Prior to the development of the local road network, several railroad lines offered transportation in the Mount Hood area. An example of this is the electric railroad that offered passage to the town of Boring (Woolley 1959, 11). Other railroads would
transport passengers to larger cities in the region such as Hood River, but further travel was restricted to alternate means. Local resident, physician, and partner of an early automotive passenger service, Ivan M. Woolley, commented that “The earliest automobile stage line was established by George Routledge in 1906 when he began to operate a Thomas Flyer of 1905 vintage to Welches and adjacent resorts,” (Woolley 1959, 11-12), otherwise four horse carriages would supply transportation. Historic signboards from the 20th century along the Barlow Road, such as the one mentioned in Woolley (1959), suggest the type of traffic through the area (Table 5).

Table 5: Rates for Barlow Road

<table>
<thead>
<tr>
<th>Mode of Transport</th>
<th>1916 Price</th>
<th>2007 Price Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autos</td>
<td>$2.50</td>
<td>$50.66</td>
</tr>
<tr>
<td>Wagons</td>
<td>$2.00</td>
<td>$40.53</td>
</tr>
<tr>
<td>Horses</td>
<td>$.50 c</td>
<td>$10.13</td>
</tr>
<tr>
<td>Cows</td>
<td>$.25 c</td>
<td>$ 5.07</td>
</tr>
<tr>
<td>Sheepses [sic]</td>
<td>.2 c</td>
<td>$.41</td>
</tr>
</tbody>
</table>

Approximate date: 1916 – The stage line motorcar would only cost $.50 for the car and $.10 for passengers.

The improved accessibility and altering perceptions of the landscape led to further attraction to the mountain.

Local populations viewed Mount Hood as a valuable resource not only aesthetically, where one could engage in intimate contact with unspoiled nature, but also from a strictly economic sense where the resources provided revenue. Developers eventually realized the potential of the area from the interest in outdoor activities and numbers of tourists visiting the mountain. Modern data indicates continued attention
from tourists as the National Forest recorded 4,076,119 visitors to Mount Hood National Forest in 2003 (Kocis et al. 2004).

O.C. Yokum initiated hotel construction at Government Camp in 1899 with the Mountain View House (Grauer 1975, 98). The 1920s experienced increased construction with such hotels as Timberline Hotel (1924) and the Battle Axe Inn (1925) (Grauer 1975, 45-49). Unfortunately, the Mountain View House and Battle Axe Inn were destroyed by fire in the 1950s (The Magic of Mount Hood 2006). Hood River also saw a chance for development as ski facilities arose, with growth that continued into the 1970s, as discussed in the U.S. Department of Agriculture Hood River Agricultural Report 1970:

“The ski development at Mt. Hood Meadows and the improvement of Highway 35 has brought an influx of ski enthusiasts to the area. Hood River County is expanding and improving county park facilities to accommodate a greater number of tourists...Tourism is expected to be a major contributor to the economy of the county in the years ahead” (1-2).

Winter recreational activities, especially skiing, were major attractions to the region (Figure 18). Prosperity associated with the integration of regional economies into a national system in the years surrounding the two world wars and a mobile population with disposable income for travel and leisure, increased attention to these ski facilities (Robbins 1994 147, 161).
The first ski facilities, including the still operational Summit Ski Area (est. 1927), developed on Mount Hood with an interest in ski jumping (Grauer 1975, 52-55). Ski jumping required fewer runs and had less of an impact on the landscape in comparison to modern downhill ski facilities. Multhor and Ski Bowl, now a single ski area, developed after Summit’s creation, with continued interest in jump hills. Ski clubs soon arose, such as Mount Hood Ski Club, Cascade Ski Club, Viking Ski Club, and the Cascadians, who began sponsoring competitions (Figure 19) (Grauer, 1975, 55).
The activity at the ski areas attracted tourists, and the ski areas began adding runs and chairlifts along with lodges. Construction of the ski resorts at Mount Hood Meadows on the eastern slope and Cooper Spur on the north face of Mount Hood greatly increased access to the mountain. The ski industry on Mount Hood became very successful and continues to thrive today.

The potential for economic development was not only acknowledged locally, but also at the national scale. As part of the national economic relief programs established by President Franklin Delano Roosevelt during the Great Depression, Timberline Lodge became a project for the Works Progress Administration (WPA). President Roosevelt dedicated the lodge, constructed in a unique Cascadian Architectural Style, on September 28, 1937 (Grauer 1975, 63). The ski potential at Timberline Lodge, unique blend of stone and wood architecture, and local artifacts and crafts used to decorate the interior attracted many visitors to Mount Hood (Figure 18) (Grauer 1975, 63).
Under the economic development perception, road construction vastly altered the native landscape, both in terms of its physical construction and the influence it had in attracting additional development. Construction methods increased erosion and the possibility for landslides due to destabilization of the hill slope (Figure 20, 21).

Figure 20:
Mount Hood Loop Road 1922
Source: Grauer 1975, 22

Figure 21:
Mount Hood Loop Road 1922, Photographer: USFS
Source: Grauer 1975, 23
The construction of hotels, ski facilities, parking lots, chair lifts, and manicured runs changed the face of the mountain, leaving indelible marks of human influence (Figure 22).

![Image](image-url)

Figure 22:
Government Camp 1928, Photographer: Everett Sickler
Source: Grauer 1975, 52

Effects on various aspects of the landscape can be seen in the environmental impact assessments for further proposed development of Multorpor Mountain (Figure 23). These impact assessments were conducted under the premise that analysis and results would be unbiased; however, they may have been influenced by economic development pressure at various levels of administration. The potential for exploitation, however, was partially impeded by the creation of Mount Hood National Forest.
Figure 23:
1980 Multorpor Mountain Environmental Impact Assessment, Comparison of Proposed Development Plans
Source: USDA and USFS “Multorpor Ski Bowl Master Plan: Environmental Impact Statement Mt. Hood National Forest” (103)
Conservation and Preservation (Turn of 20th Century to Present)

The conservation and preservation movements began in the late 19th century and with the establishment of the Mount Hood National Forest in 1924, the perception of conservation and preservation had a significant impact on the Mount Hood Land Use Planning Boundary Unit. Policies at various governing levels guided land use on public land, influencing perceptions and the local landscape. The movement utilizing the perception of conservation and preservation towards the natural landscape originated locally, but was imposed upon the local landscape by the National Government. The concepts of Progressivism and New Nationalism, associated with administration of President Theodore Roosevelt (1901-1909) and his chief forester Gifford Pinchot, were primary influences on the emergence of the conservation movement (Worster 1994, 21-22). One of the essential themes of progressive conservation involved rational planning that would promote efficient development and use of natural resources (Worster 1994, 22). The preservationist movement, promoted by John Muir, supported the ideas of retaining pristine nature as a sacred wilderness, and often conflicted with conservationist national policy (Krech 1999, p. 24). John Muir’s message was continued through lobbying efforts by groups such as The Wilderness Society, founded in 1935, and the Sierra Club, founded 1892, which found that cooperation among groups with similar goals could help elevate their position and voice in politics as they believed that the legislative path was the most appropriate course of action to accomplish their objectives (Gottlieb 2005, 77, 79). Both movements heavily influenced policy and subsequent land use. The forested wilderness image, depicted through landscape paintings, such as those of Albert Bierstadt in Yosemite National Park and Thomas Moran in Yellowstone
National Park, provided visual proof of the uniqueness of the American landscape (Runte 1979, 14). These images generated sentiments of scenic nationalism that considered these landscapes to be assets, and once they had a value ascribed to them, it was a logical progression to establish methods to protect these resources (Nash 1967, 67; Runte 1979, 71). These ideas built upon actions of prior administrations and heavily influenced subsequent policy and perception.

The first parcel of land set aside for preservation was the Bull Run Timberland Reserve in 1892 by President Benjamin Harrison, allocating a pristine water source for the growing city of Portland, which was fervently protected (Grauer 1975, 189). The 1904 Bull Run Trespass Act prohibited entry into the reserve by all people not on official business of the state or federal government, or the water board for the city of Portland (USDA and USFS Bull Run Planning Unit Final Environmental Statement 1979). Local and National administrations passed several policies and pursued various actions to maintain the protection of the watershed, including lawsuits over timber in the 1970s (USDA and USFS Bull Run Planning Unit Final Environmental Statement 1979).

In 1893 President Grover Cleveland established the Cascade Range Forest Reserve, including most of the Cascade Mountain Range (Grauer 1975, 189). The reserve was divided into north and south sections and operated under the management of the General Land Office. In 1907 the Cascade Range Forest Reserve name was shortened to the Cascade Forest Reserve. In 1908 it was broken into several national forests and Mount Hood was included in the Oregon National Forest (Grauer 1975, 189). An executive order in 1924 resulted in a renaming of the forest to the Mount Hood
National Forest. The forest has subsequently been managed through various approaches according to prevailing perceptions and policies.

One of the first policies impacting land use was the Organic Act of 1897, under which timber production and watershed protection were designated as the primary purpose of the national forests (Anderson & Olson 1991). Additional sentiments were displayed in 1928 by the supervisor of the Mount Hood National Forest, Thomas Sherrard. During his discussion of potential recreation development with friend, local resident, and hotel owner Everett Sickler, Sherrard commented that ”There are only two functions for this forest...One is to provide watershed area. The other is for grazing land” (Grauer 1975, 54).

In 1931 a portion of the forest was designated a primitive area and in 1940 regional forester Lyle F. Watts announced a change in designation from primitive area to a wild area to preserve 14,800 acres around Mount Hood from timber harvesting (See Figure 24) (Grauer 1975, 193). In this area roads, timber cutting, and business were not allowed, only recreation such as hunting, fishing, or skiing were permitted, with a small area excluded from the designation for a road to Cloud Cap Inn to preserve the historic building and maintain a contiguous wilderness boundary (Grauer 1975, 193).

The Sustained Yield Forest Management Act of 1944 mainly reflected the interest in securing timber resource and economic development, with a slight influence from conservationist and preservationist ideas. Under this act, the Forest Service was authorized to determine sustained-yield units to “promote the stability of forest industries, employment, communities and taxable forest wealth, through continuous supplies of timber” both on public and privately owned land (Anderson & Olson 1991). Few units
were established however, though sentiments of community stability and employment opportunities are present in other policy and literature (Anderson & Olson 1991).

The Multi-Use Sustained-Yield Act of 1960 emphasized that “due consideration” should be applied to recreation, range, timber, watershed, and wildlife and fish resources in their management tactics (Anderson & Olson 1991). Although timber production still
accounted for much of the National Forest Service budget, national level administration provided additional attention towards various land use options and their impacts on the landscape.

In 1964 the Wilderness Act was passed, establishing the national wilderness preservation system to manage wilderness areas, and defined the term wilderness in the following manner: “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” (USDA Mount Hood Wilderness Map, 1983).

The National Forest Management Act of 1976 directed the National Forest Service to “provide for the diversity of plant and animal communities”, illustrating the first explicit congressional recognition of the importance of biodiversity for the health of the forest (Anderson & Olson 1991). The upsurge in environmental consciousness of the nation generated interest for research to evaluate the environmental impact of various land uses and policies for management (Caldwell 1990, 15). Congress adopted the National Environmental Policy Act in 1969, which provided guidelines for environmental impact research and assessments (Caldwell 1990, 17). Government-sponsored research conducted formal impact analysis and technology assessments beginning in the 1970s. This research provided a significant source of scientific information and environmental policy analysis used to determine future policies (Caldwell 1990, 33). Such actions signified a more responsible approach under this perception, attempting to fully appreciate human impact and plan appropriate measures for future preservation.
Local interest in the visual aesthetics of the Mount Hood landscape is apparent from the 1976 Mt. Hood Planning Unit Proposed Interagency Plan. The visual management system, published by the U.S. Forest Service in April of 1974, provides an outline and method for quantifying beauty in terms of visual character and visual quality. The goal was to provide an inventory of visual resources and measurable standards for management. The standards, referred to as visual quality objectives, include physical features (landscape variety class) and people’s concern for scenic quality (sensitivity land). The objectives represent five terms defined as visual resource management goals: Preservation, Retention, Partial Retention, Modification, and Maximum Modification that refer to the degree of acceptable preservation or alteration. The end product is a weighted tally of the number of scenic features per area based on the various management plans, which provides a basis for action. Landscape architecture specialist Robert Ribe has conducted further evaluation of aesthetics as an influence on land use policy in the Pacific Northwest. His study discusses utilization of landscape architecture in forest land management that takes into account aesthetics of various groups and also a parameter of landscape acceptability to determine the best case scenario or the highest level of appeasement for various group (Ribe 2002). Ribe suggests that improvements of traditional policies should account for the input of local population. Perceptions of environmental impact vary and the observer may use differing criteria to judge such impact, therefore fair representation of all views is needed for policy evaluation (Caldwell 1990, 70).

Environmental Impact Assessment Alternative Plans propose management goals ranging from no action to preservation-based or economic development-based plans.
determined by the projected impact on a variety of parameters (Figure 23). Proposals for action resulting from these plans incorporate ideas at several levels of administration and undergo a complex approval process. The decision process for proposals such as Mt. Hood Planning unit involves: creation of a draft, review of the draft, circulation and publicity at local levels, workshops, county involvement (Planning Commission and Board of Commissioners), state acceptance, U.S. Forest Service acceptance, Bureau of Land Management acceptance, and then final publication (USDA and USFS Mt. Hood Planning Unit Proposed Interagency Plan; Draft Environmental Statement 1976). The hierarchy of involvement at the county level is as follows: The Clackamas County Comprehensive Plan is applicable to the Mt. Hood area; however, the Mt. Hood Community Plan takes precedence where conflicts between the two documents exist (Clackamas County Comprehensive Plan: Chapter 10 – Mount Hood Community Plan).

The carrying capacity of the land is also calculated in some of these environmental assessments as the limiting factor determining the extent and impact of current land use compared to the potential of the land to absorb the impacts of various proposed options for further land use and development. The Mount Hood Community Plan accounts for twelve parameters in these calculations, each of which are analyzed based on current resource availability and estimations of future population growth: Highway System’s Available Land, Available Water, Water Quality, Wildlife Diversity, Scenic Quality, Public Recreation, Regional Allocation and Perspective, Air Quality, Energy Consumption, Public Services, and Public Attitudes and Opinions (USDA and USFS Mt. Hood Planning Unit Proposed Interagency Plan; Draft Environmental Statement 1976). The data obtained through these studies provides guidelines for current
policy such as the Mount Hood Community Plan in the Clackamas County Comprehensive Plan (Clackamas County Comprehensive Plan: Chapter 10 – Mount Hood Community Plan).

The Northwest Forest Plan of 1994 instituted a new collaborative approach to federal forest management in the Pacific Northwest. According to Kay et al. 2007, the plan primarily dealt with four main socio-economic management goals. The first goal involved local resource protection in terms of sustainable and predictable levels of timber sales, non-timber resources, and recreational opportunities. The second goal proposed guidelines to maintain stability in local and regional economies on a long-term basis. The third goal involved instituting a plan to diversify local economies that would minimize impacts to more specialized rural communities affected by a change in resource management. The fourth goal was to establish terrestrial and aquatic reserves (heavily influenced by the controversy over northern spotted owl protection) and use practices that would allow the landscape to mimic qualities of late-successional old-growth forests (Kay et al. 2007).

Current plans of development and land use on private and state controlled public land within the study area incorporate prior environmental impact assessments that evaluate economic development, transportation networks, water quality, and land planning. Revisions and additions to these documents are adopted as background reports, which guide future policies and designations within the Mt. Hood Community Plan (Clackamas County Comprehensive Plan: Chapter 10 – Mount Hood Community Plan).

Local policies, influenced by the conservation and preservation perception, also recognize the historical value and impact of the landscape on Native American tribes and
culture. Numerous Native American tribes were displaced during the course of early European settlement. The treaty of 1855 established the Warm Springs Reservation, where many groups were forced to relocate or settle (Wang, Anderson, and Jakes 2002). “The issue of continued traditional use on the Mount Hood National Forest is probably greatest among residents of the Warm Springs Reservation. The Mount Hood region has been a vital part of the history of the area” (Wang et al. 2002, 364). One approach that embodies these sentiments is to utilize heritage management in cooperation with Confederated Tribes of the Warm Springs Indians (Wang et al. 2002). Policies created at several levels of administration have incorporated conservationist and preservationist ideas, which also influenced land use and the local landscape.

*Fire Policy (1910s to Present)*

The conservation and preservation perception extends to fire management as well. In addition to agricultural value, grazing of sheep during the early 20th century served the purpose of fire control, where it was believed that sheep would have the influence of keeping fires from starting, keeping fires from spreading, and rendering fires less destructive (Rachford 1923). The 1911 Weeks Law allowed states to receive federal funds for private and state land protection located near navigable rivers and watersheds, with the condition that states match funds and establish forest protection agencies (Robbins 1985, 54).

The major objective for forest fire work in the Pacific Northwest during the 1910s was to adhere to protection policy and guard timber reserves (Robbins 1985, 72). Fire law at this time also mandated that an official be appointed with the duty of researching
state forests and characterizing the condition and composition of these forests (Robbins 1985, 73). Beginning in 1912, the Forest Fire Association and State Forest Office combined their efforts to assist in fire response and monitoring, providing support to timber owners who were required, under the Oregon Compulsory Patrol Law of 1913, to patrol their own investment plots (Robbins 1985, 73, 74, 80). Chief Forester Henry Graves commented in 1913 that the fundamental duty of the Forest Service, taking precedent over all other activities, was to prevent losses from forest fires (Pyne 1982, 260).

The major approach to fire during the early 20th century was comprehensive suppression (Figure 25).

<table>
<thead>
<tr>
<th>Date</th>
<th>Problem Fire</th>
<th>Policy</th>
<th>Strategic Concept</th>
<th>Tactical Emphasis</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910–1929</td>
<td>Frontier fire</td>
<td>Economic theory</td>
<td>Systematic fire protection</td>
<td>Administration</td>
<td>Fire as forestry Economics, planning, statistics of fire</td>
</tr>
<tr>
<td>1930–1949</td>
<td>Backcountry fire</td>
<td>10 A.M. Policy</td>
<td>Hour control</td>
<td>Manpower</td>
<td>Fire as physics Laboratory Field experimentation</td>
</tr>
<tr>
<td>1950–1970</td>
<td>Mass fire</td>
<td>10 A.M. Policy</td>
<td>Conflagration control</td>
<td>Mechanization</td>
<td>Fire as biology Natural laboratories Simulation experiments</td>
</tr>
<tr>
<td>1971–present</td>
<td>Wilderness fire</td>
<td>Fire by prescription</td>
<td>Fuel modification</td>
<td>Prescribed (broadcast) fire</td>
<td></td>
</tr>
</tbody>
</table>

Figure 25: Wildland Fire Protection: The U.S. Forest Service Experience, Fire Perception, Policy, and Management Strategies From 1910 to Present Source: Pyne 1982, 261

To aide in this task, a fire lookout station was created in 1915 on the summit of Mount Hood as part of the firefinder system for fire observation and in 1916 Timberline Cabin was built for the U.S. Forest Service (Grauer 1975, 57). The 10 A.M. Policy initially referred to experimental burnings where any fire should be put out before the next day’s
burning period commenced (Pyne 1982, 271). This approach was then utilized until 1977 as a wide-scale total fire suppression approach for all areas under the Forest Service jurisdiction (Pyne 1982, 271, 294). Another tactic under the total fire suppression approach was the 10 Acre Fire policy (1972-75), where fires should attempt to be contained within 10 acres (Pyne 1982, 292).

The prevailing approach to fire management has changed based on current knowledge from a perception supporting full fire suppression to a perception within an educated local population that has embraced natural disturbance regimes as necessary for the health of the forested landscape. Fire ecology conferences from 1962-1975 encouraged the re-evaluation of fire policy and at a 1977 National Fire Planning Meeting, both the 10 Acre and 10 A.M. policies were abandoned and fire prescription burning was introduced along with a system that allowed a fire boss to suggest an alternative course of action if initial suppression efforts fail (Pyne 1982, 291, 294). In 1979, prescribed burns, when beneficial to local ecosystems, were retained in national policy, solidifying prescribed burns as the new approach to fire management (USDA and USFS An agency Strategy for Fire Management 2000). The proactive approach was continued in the 1995 policy, addressing “Wildland fire, as a critical natural process, must be reintroduced into the ecosystem. Fire will be allowed to function as nearly as possible in its natural role to achieve the long-term goals of ecosystem health” (USFS Wildland Fire Policy, para. 5). The Healthy Forest Restoration Act of 2003 continues with the tradition of prescribed burns to provide further fuel reduction (Cortner & Field 2007, vii).

The National Forest Plan (2000) addresses needed response to community distress caused by fires (Cortner & Field 2007, vii), as protection of human life and property are
still top priorities when threatened. The role of federal agencies (Departments of the Interior and Agriculture) in the wildland-urban interface of public lands include: wildland firefighting, hazard fuels reduction, cooperative prevention and education, and technical assistance. Primary responsibility, however, rests at the state and local levels (USFS Wildland Fire Policy).

The state system approach combines fire prevention, suppression and fuels management. The Oregon Department of Forestry fire policy states, “The goal of the program is to create and use environmentally sound and economically efficient strategies which minimize the total cost to protect Oregon’s timber and other forest values from wildfire while also minimizing wildfire damage to protected resources.” (Oregon Department of Forestry Protection from Fire: Program Background and Purpose para. 2 2008). The program goals also provide effective protection from fire to other forest amenities, such as water and watersheds, fisheries, wildlife, recreation, aesthetics, soil productivity and soil stability. A four-level industrial regulation system dictates both the specific industrial uses allowable within the forest and the time of operation when such activities are permitted to reduce the probability of wildfires (Mt. Hood National Forest: Industrial Fire Protection Level System 2008). The policies regarding fire are continuously evaluated to improve clarity of objectives, organizational efforts and coordination of response at multiple levels of management.

The perception of conservation and preservation mitigated development and human influence on the landscape of Mount Hood. A succession of national policies, declarations, and designations, influenced by current movements, groups such as the Wilderness Society and Sierra Club, improved knowledge, national perception,
environmental impact assessment data and the valuation of amenities, were imposed to regulate land use on local landscapes. Activities were only allowed in specific areas, giving the landscape a somewhat parceled appearance. The wilderness area secured sections of forest that would be protected and kept in as natural a state as possible. For instance, the Bull Run Reserve established a well-protected freshwater source for the Portland area (Figure 24). Early systems of fire management (Figure 25) altered natural processes, forest-stand evolution, forest structure, nutrient and energy flow patterns, and dispersed species, producing a fragmented landscape managed and controlled by humans (Baker 1994; Pyne 2001, 15). Subsequent approaches have sought to maintain and mimic natural conditions and disturbance regimes. Environmental impact assessments provide estimates for current and future landscape impact based on several land use management choices. Institutionally implemented policies have attempted to minimize the human impact and determine an acceptable model for future land use activities based on calculated carrying capacities and acceptable ideals of beauty for the landscape under present local perceptions. The human influence on the landscape, however, is still clearly evident.

**Research (Early 20th Century to Present)**

Organized scientific measurements were first recorded in the early 20th century by the Mazamas Club and more intense research started in the 1970s. A cultural transition towards education through research on environmental trends and the influence of anthropogenic activities occurred. The discipline of glacial studies gained attention for the capacity of glaciers to reflect climatic conditions (Haeberli & Hoelzle 2003). Mount
Hood proved to be an important site for such studies due to the long period and good quality of measurements that were begun by the Mazamas research group in 1925 (Mazamas Research Committee 1925). Efforts to determine the influence and relationship between climate and snow pack have also been conducted on Mount Hood and Mazamas research has compared data between weather stations in an attempt to produce better spatial resolution for research (Heller 1963). Research on Mount Hood extends well beyond cryosphere, reflecting interests in all landscape components impacted by humans, such as meadow invasion by trees (Franklin, Moir, Douglas, and Wiberb 1971), impact of ski slopes on vegetation (Titus & Tsuyuzaki 1999), and forest management (Dane, Meador, and White 1977). The Mazamas organization has continued to make research a high priority, offering scholarships to relevant studies in addition to conducting their own additional research.

Increasing human population and interaction with the mountain has raised concerns about possibilities for volcanic eruptions and other destructive forces. Research has investigated past eruptions to better prepare for future events of similar character and for larger scale events. Suggestions for improving contingency planning include clear descriptions of the responsibilities of local, state, and federal agencies, updating plans when more information about the eruptive cycle of the volcano is available, and to include updated information about the local land use and monitoring systems (Crandell 1980). Based on the more recent eruptive history of the mountain, populations most at risk are located along the Zigzag and Sandy River valleys. Floods and mudslides, following the terrain, would drain into these low-lying areas. Characteristics of the glaciers can influence the impacts from an eruption, as they are a major source for water.
when melted that can lead to mudslides, lahars, and glacial outburst floods. Morphologic makeup is greatly influenced by scouring from glaciers (e.g. cirques, moraines) that can funnel the flow of materials (Crandell 1980). Studies of glacial outburst floods have also been conducted in attempts to minimize destruction to humans and transportation networks, such as the Highway 35 bridge over the White River.

The perception associated with research focused attention towards the mountain. In addition to specialized publications, general trends and results, especially relating to glacier studies, from research were sometimes conveyed in newspaper articles, attempting to draw awareness to the changing landscape in hopes for action to stabilize and protect the landscape (Mount Hood Glaciers Melting 2006; Milstein 2008). Methods themselves had little impact on the landscape; however, the potential change in land use resulting from the incorporation of research into future policies could be very considerable. Research has also allowed for development of contingency plans such as the Mount Hood Coordination Plan (Mount Hood Coordination Plan 2005). To preserve the health and well-being of local residents in regards to air quality, the Smoke Management Plan was implemented in 2005, which regulates prescribed burning on private, federal, state and local government forestland in Oregon (Oregon Department of Forestry Protection from Fire: Program Background and Purpose). This followed the EPA issued the Regional Haze Rule of July 1999 to improve regional visibility and diminish the impacts of fire-induced smog (USFS Policy for Categorizing Fire Emissions 2001). Modern studies have continued to take advantage of the quality baseline data available for Mount Hood, adding to public knowledge and creating a basis for future policy.
CONCLUSION

The perceptions of Mount Hood have influenced local land use and determined the modern landscape. A similar progression of driving forces in the Pacific Northwest has resulted in comparable development and land use in various regions of the Cascades over the past 4,000 years. Native American small-scale seasonal use of these landscapes was common throughout the region. Land surveys and images of western landscapes drew attention to the Pacific Northwest and transportation networks allowed greater access to the region. Demand for timber resources at the local, regional, and national economic levels made the timber industry the major source of livelihood for settlers beginning in the 19th century. National conservation and preservation movements have designated certain areas of the Pacific Northwest as National Parks or National Forests, mandating specific land use and fire policy. The timber industry has declined in recent decades, creating concern for boom towns heavily invested in timber production.

The Mount Hood Land Use Planning Unit boundary displayed similar changes in the landscape; however, unique environmental characteristics and local cultural values and perceptions have guided development and shaped the landscape. Local topography accentuated the height of the solitary feature generating a strong sense of respect for the mountain that is reflected in historic journal entries. The Columbia River was heavily utilized during westward migration. Local topography around the Columbia Gorge and Mount Hood acted as a barrier for migration into the fertile Willamette, requiring the development of new transportation routes, which strengthened the perception of Mount Hood as an obstacle. Further exploration of the Mount Hood landscape and construction of an improved road network revealed multiple land use possibilities that provided local
populations with a choice in how the land would be used as a source of livelihood. Diverse agriculture and tourism industries provided profitable alternatives to the timber harvesting. Local perception influenced land use policy, which affected the choice and extent of landscape use. National conservation and preservation movements also influenced the landscape through land use and fire policy. Land use policy mandated a multi-use management system for the Mount Hood National Forest leading to further exploitation of natural resources. A shift in the local consciousness changed perceptions of the mountain and led to an interest in research in land use and human impact on the natural environment.

Two distinct attitudes have developed in local culture as a result of past land use and current research. A conflict now exists between populations supporting local preservationist ideals and those advocating economic development, resulting in impassioned discussion and guiding the direction of policies and land development. Past policies and land use practices in the national forest established a lifestyle based on timber production. Groups such as the National Lumber Manufacturers Association seek to maintain this lifestyle through lobbying efforts (Robbins 1985, 186). The contrasting belief values a preservationist approach that limits continued alteration of the natural landscape. A strong local desire to preserve the quaint, rustic and genial character of the area is displayed in sentiments by local resident Jennie Welch, wife of Billy Welch who homesteaded with his father at Welches in 1882, in her letter on January 13, 1956:

“There are now about 300 summer homes built in this area, mostly on the property once owned by Billy and his father. It is a far cry from the old days when people gathered around campfires, roasted venison, sang songs and
camped in tents; when they brought their tin pails to the milk house for their milk and cooled it in the springs along the bank of the creek that ran close by, which incidentally has disappeared because of the drainage system in the golf course; when cowboys from eastern Oregon brought large bands of wild horses over the mountains and stopped over night at our place; when people came with teams and wagons and stayed all summer and grazed their horses in the pasture.”

(Woolley 1959, 89)

Written records of this type provide first hand accounts of the changing landscape and demonstrate the local response to such trends. For many local residents such ideas may be passing thoughts or concessions on a simple lifestyle of times passed, while other impassioned individuals use these sentiments to support their attempts to influence local land development policy.

Modern trends of population growth have also become a driving force of landscape change and point of contention for developers and preservationists. Increasing population pressures will lead to conflict over resources, dictating policy and redefining acceptable use of resources currently in protected status (e.g. National Forest and Wilderness). The following census data for census tract 243.01, which includes many of the small towns such as Government Camp, Rhododendron, Zig Zag, following Highway 26 to the west of Mt. Hood (Figure 26), illustrates some of the demographic changes occurring in the area from 1990-2000.
Figure 26:
Oregon Census Tract 243.01
Source: Oregon Geospatial Data Clearinghouse, Cartography by Daniel R. Belgam
### Table 6:
1990 Census Data, Oregon Census Tract 243.01

<table>
<thead>
<tr>
<th>Subject</th>
<th>1990 Census Tract 243.01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total population</strong></td>
<td>3,925</td>
</tr>
<tr>
<td><strong>OCCUPANCY AND TENURE</strong></td>
<td></td>
</tr>
<tr>
<td>Occupied housing units</td>
<td>1,515</td>
</tr>
<tr>
<td>Owner occupied</td>
<td>1,066</td>
</tr>
<tr>
<td>Renter occupied</td>
<td>449</td>
</tr>
<tr>
<td>Vacant housing units</td>
<td>1,537</td>
</tr>
<tr>
<td>For seasonal, recreational, or occasional use</td>
<td>1,364</td>
</tr>
<tr>
<td>Homeowner vacancy rate</td>
<td>2.6</td>
</tr>
<tr>
<td>Rental vacancy rate</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau

### Table 7:
2000 Census Data, Oregon Census Tract 243.01

<table>
<thead>
<tr>
<th>Subject</th>
<th>2000 Census Tract 243.01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total population</strong></td>
<td>5,570 100</td>
</tr>
<tr>
<td><strong>HOUSING OCCUPANCY</strong></td>
<td></td>
</tr>
<tr>
<td>Total housing units</td>
<td>3,793 100</td>
</tr>
<tr>
<td>Occupied housing units</td>
<td>2,228 58.7</td>
</tr>
<tr>
<td>Vacant housing units</td>
<td>1,565 41.3</td>
</tr>
<tr>
<td>For seasonal, recreational, or occasional use</td>
<td>1,356 35.8</td>
</tr>
<tr>
<td>Homeowner vacancy rate (percent)</td>
<td>3.6 (X)</td>
</tr>
<tr>
<td>Rental vacancy rate (percent)</td>
<td>12.8 (X)</td>
</tr>
<tr>
<td><strong>HOUSING TENURE</strong></td>
<td></td>
</tr>
<tr>
<td>Occupied housing units</td>
<td>2,228 100</td>
</tr>
<tr>
<td>Owner-occupied housing units</td>
<td>1,722 77.3</td>
</tr>
<tr>
<td>Renter-occupied housing units</td>
<td>506 22.7</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau
Although development could be spread out or more focused within the census tract, the data provides an overview of the change occurring within the study area. The total population and number of occupied housing units has increased however, the seasonal occupational housing has remained about the same, with a slight decrease from 1990-2000. The increase in population as well as year-round occupants could lead to more intensive utilization of the land and a change in the general landscape. Such attention on the mountain will ultimately increase until the carrying capacity of the land or density tolerance of the culture is saturated.

Humans, as part of the landscape and environment/natural system, always have an influence on their surroundings, impacting both rate of change and also magnitude of landscape alteration. They also exhibit an ability to engineer solutions to preserve aesthetically pleasing landscapes that reflect current cultural needs and desires. Local culture will influence what technological advances are adopted, which will lead to changes in attitudes and perceptions based on what is possible to achieve through the employment of technology (Pacey 1990, viii)

Popular culture is transient and the value placed on certain resources could change abruptly and influence policy. This is evident from a decrease in the once thriving timber industry, where trends in the late 20th century indicated a declining timber industry that would result in loss of jobs, displacement of people, and could also change the local perception of the forest as a resource (Anderson & Olson 1991). Environmental pressures resulting from climate change may also shape the landscape and put certain constraints on productive capabilities of the natural system. As a nation and culture that
embraces a capitalistic doctrine, resource availability (supply) and cultural values (demand) weigh heavily on policy.

The local population and the national government have maintained a cap on the amount of change and development allowed on the landscape. The land use policy of Oregon has been very progressive, reflected in 1973 Oregon Land Use Act (SB 100) and the Marginal Lands Act of 1983 (Oregon Blue Book 2008), which lend credence to the idea that future development will be controlled in areas under their jurisdiction. An idea that local supporters hope will be reflected in the policy of the national government to maintain the definitions and limitations imposed on the current landscape in the face of pressure and cultural change. Future policy will need to improve on ideas of eco-development and sustainable development to create long-term solutions. Such policies will require a balance between economic progress and minimal environmental impact (Caldwell 1990, 177). The recent upsurge in environmentalism creates a population that is preoccupied with pro-environmental ideals without considering the full consequences or complex systems of the economy that are reliant on the landscape due to past choices of land usage (Caldwell 1990, 122). There is a delicate balance that must be identified between economic viability of actions and the desire to retain certain landscape qualities and aesthetics. Oregon is distinct because their public tradition and political actions have reinforced the desire to protect natural resources, providing a unique component to the Pacific Northwest region (Robbins 1974, 1)

Specific activities and their associated land use practices were influenced by the general perceptions of Mount Hood and dictate how the landscape was viewed. The scale of human impact depends not only on the land use practice but also on the
popularity, activity, and administrative persuasiveness of people ascribing to a perception. Popular movements, attitudes of the time, and wants, have shaped public perception. It was the adoption or dismissal of these general public perceptions that in turn influenced policy and the trends of land use. Local perception was a dominant influence on the landscape, along with outside influence from the national government that mandated particular land uses and imposed a specific perception. The variations in perception of Mount Hood have resulted in significant changes to the landscape surrounding the mountain over the period of recorded history, the impact of which can be better appreciated after a complete reconstruction of the historic landscape.

The importance and relevance of the present study is to contribute to literature on landscape change and environmental impact by providing a more complete understanding and knowledge base of past events. This study not only defines the land use and the resultant landscape for the past 4,000 years, but also the cultural values operating during this times, indicating why such choices were made on the landscape within the Mount Hood Land Use Planning Unit boundary.


Haeberli, W. & Hoelzle, M. (2003). Alpine Glaciers as a Climate Proxy and as a Prominent Climate Impact. Multi-centennial climate variability in the Alps based on instrumental data, model simulations and proxy data (ALP-IMP Project) as part of the FP5-EESD-2001; Environment and sustainable development, KA 2: Global Change, Climate and Bio-diversity, Better exploitation of existing data and adaptation of existing observing systems (1.1.4.-2.4.1). Vienna, Austria.


Metzger Maps. (March, 1951) *Metzger’s Atlas of Clackamas County*. Tacoma, WA Seattle, WA & Portland, OR. Copyright Chas F. Metzger.

Metzger Maps. (September, 1966) *Metzger’s Atlas of Clackamas County*. Tacoma, WA & Seattle, WA. Copyright Chas F. Metzger.


Museum of the Oregon Territory Library. 211 Tumwater Dr, Oregon City, OR 97045 Vertical Files: Barlow Road. Clackamas County 1976.


U.S. Department of Agriculture and National Forest Service. Mount Hood National Forest Oregon: Its Purposes and Resources. 1 mile is approximately .3 in. Regional Office. Portland, OR, April 1931. [map].


Sources for Etches and Engravings:


http://vulcan.wr.usgs.gov/LivingWith/Historical/LewisClark/Info/summary_mountain_hood.html
Original source for image: The U.S. War Department's Reports of explorations and surveys to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean, 1860, v.12, pt.1, pl.43. University of Washington Libraries Collection, #NA4170.

http://vulcan.wr.usgs.gov/LivingWith/Historical/LewisClark/Info/summary_mountain_hood.html
Original source for image: Washington State University Archives Collection #WSU554.

http://vulcan.wr.usgs.gov/LivingWith/Historical/LewisClark/Info/summary_mountain_hood.html