

PUBLIC COMMENTS, NATURAL VALUES, AND SOCIAL-ECOLOGICAL DYNAMICS
AT POINT REYES NATIONAL SEASHORE

by

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This paper is dedicated to my daughter, and to all who value public natural spaces.

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ABSTRACT

Public comment is a common participatory process in U.S. federal agency rulemaking. This paper offers an interpretive content analysis of public comments solicited by the National Park Service. Comments involve agency proposals related to commercial ranching and wildlife protection at Point Reyes National Seashore. A review of history and theory from the social and environmental sciences is used to discuss how differing perceptions relate to social conflicts and ecological concerns in public natural space. A frame analysis is used to quantify and discuss conflicting values and beliefs about nature in the comments. Results suggest higher participation of women, a disconnect between administrative intent and public perception about the participatory process itself, and a majority orientation toward intrinsic values of nature and wild species.

PREFACE

This paper is an outgrowth of a project conceived for Dr. Jackie Eller's Spring 2018 Qualitative Methods graduate seminar. For this project, I identified a set of hashtags and location tags corresponding to different public natural spaces in Marin County, and used their recent history to collect a non-probability sample of public images posted to the social media website Instagram. My analysis of these images identified several themes and narratives related to nature and culture. Using Arjen Buijs' theoretical 'images of nature' cognitive frameworks, my interpretation suggested broad preferences for aesthetic landscapes, as well as for images of human connection with nature.

I am interested in the sociology of public natural spaces because of the benefits of natural spaces for human culture, my desire for common and equitable access to public space, and my concern for the careful management of natural and human environments. I am also motivated by my work in administrative support of international education at Middle Tennessee State University, and nonprofit environmental education and resource preservation at Point Reyes National Seashore Association (PRNSA). I maintain that the preservation and promotion of public natural spaces is in the public interest. I am also convinced that the public interest requires a critical analysis of problems and conflicts arising from the production of public spaces, regardless of the purpose of their preservation.

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LIST OF ABBREVIATIONS

NPS	National Park Service
PRNS	Point Reyes National Seashore
GGNRA	Golden Gate National Recreation Area
NEPA	National Environmental Policy Act
EIS	Environmental Impact Statement
GMP	General Management Plan
WUI	Wildland-Urban Interface

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CHAPTER I - INTRODUCTION

Public comments are collected by United States government agencies when promulgating rules and rule changes, and much of this collection process now occurs electronically through the internet. Public comments have been studied for their degree of effectiveness influencing rulemaking decisions (Shapiro, 2007), and elsewhere as a source of information on public opinion for policymakers (Syme, Yelland, Cornelison, Poey, Krajicek & Doll, 2016).

The General Management Plan amendment planning process at Point Reyes National Seashore (PRNS) stems from a legal settlement with three environmental advocacy groups: Resource Renewal Institute, Center For Biological Diversity, and Western Watersheds Project. These groups claim that NPS violates federal environmental regulations by continuing to permit beef and dairy ranching on leased properties in the national park, without conducting required environmental impact studies. In a settlement agreement resolving this suit, NPS is ordered to produce an Environmental Impact Statement (EIS), and to amend its GMP based on its findings¹. Public comments were solicited by NPS between October 17 and November 22, 2017 (NPS, 2018b) to “refine the conceptual range of alternatives, identify issues, and ensure that we have the information needed to move forward in the planning process” (NPS, 2017).

As a case study, I offer a content analysis and critical ethnographic reading of public comments in a participatory planning process. Offered as a supplement to any official NPS analysis, this paper interprets the range of beliefs, values, and opinions concerning nature expressed by interested parties. I interpret comments using proposed cognitive frameworks, and

¹ See STIPULATED SETTLEMENT AGREEMENT AND ORDER, U.S. District Court, Northern District of California, Case No. 4:16-cv-00688-SBA (KAW), Document 143, page 6 of 43.

consider how these differing frameworks reveal certain social and ecological dynamics in a large, public natural space. Beyond providing a range of information and alternatives, I find that these public comments reveal conflicting public values and beliefs about nature and public space. Additionally, they reveal a prevalent disconnect between administrative intent and public perception in the participatory process.

CHAPTER II - LITERATURE REVIEW

Historical Context

Marin County

Marin County, California, is located on a peninsula just north of the city of San Francisco, across the Golden Gate. Marin is notable for its rural and natural character, especially when compared with more industrialized and urbanized counties surrounding the San Francisco Bay. Historian Louise Nelson Dyble has noted that these characteristics have been deliberately constructed and preserved by powerful political and economic actors in Marin since the 1960s. Examples of these actions include the creation of the Point Reyes National Seashore, the Marin County Open Space District, and the Marin Agricultural Land Trust (2007). Based on their own reported statistics and census data¹, these organizations alone protect approximately 138,000 acres of Marin County from development, or approximately 41% of its total land area.

These land regulations and protections contribute to high land rents (Barton, 2011) and reduced population growth. Despite its proximity to densely populated cities in the Bay Area, Marin County has the second smallest population of any Bay Area County (Metropolitan Transportation Commission and the Association of Bay Area Governments, 2018). Dyble (2007) has chronicled the emergence of a dominant political regime of growth-control in Marin County, founded upon broad-based resistance to new transportation projects. For example, Dyble points to the rejection of new freeway construction in San Francisco, the failure of proposals for

¹ See Park Statistics, retrieved from <https://www.nps.gov/pore/learn/management/statistics.htm>; Protected Lands, retrieved from <https://www.malt.org/MALT-map>; Open Space: General Information, retrieved from <https://www.marincountyparks.org/depts/pk/divisions/open-space/main/info>; Quick Facts - Geography, retrieved from <https://www.census.gov/quickfacts/fact/table/marincountycalifornia/LND110210>.

additional bridges spanning the Golden Gate, the defeat of two proposed east-west highways providing access to West Marin, and the rejection of a Bay Area Rapid Transit (BART) system extension to Marin County.

While Dyble finds that population growth in Marin has been significantly limited by these efforts, the county's extensive public parks and open spaces still attract a large number of visitors. Point Reyes National Seashore alone saw 2.5 million visits in 2015 (NPS, 2016). Visitors, residents, and workers all contribute to the social and ecological dynamics at PRNS.

Point Reyes National Seashore

PRNS is a unit of the National Park Service (NPS), and the United States' first designated national seashore, established in 1962. PRNS occupies the majority of the Point Reyes Peninsula, a landform on the Pacific Plate, which meets the North American Plate at the San Andreas Fault in Marin County. The park is known for its forested ridges, rugged coastline, estuaries, beaches, and agricultural landscape. Perhaps its most famous cultural landmark is the lighthouse on the western tip of the Point Reyes Headlands, constructed in 1855. Early twentieth-century radio transmission sites located in the park are recognized for their historical significance (NPS, 2017). Although the park was created primarily for public recreation and coastal access, and as a way to protect landscape from commercial development, it is also host to a large designated wilderness area, several privately-leased, working cattle ranches, a reconstructed Indian ceremonial complex, and substantial environmental research (Watt, 2002).

The continued presence of private, commercial operations within a national park appears to be atypical across NPS units. For comparison, Margaret Lynn Brown's history of the Great

Smoky Mountains National Park describes how the land was “etched from the holdings of eighteen unwilling timber and mining companies and the homesteads of more than 1,100 small landowners” using “unprecedented” powers of eminent domain (2000, p. 92). She notes that the few private leaseholders who remained in that park were wealthy and politically influential (p. 99). While similar practices of condemnation, eminent domain, and removal were also used in PRNS, NPS made a large and clear exception for the continuation of historic ranching operations (Watt, 2002), and today these privately-leased ranches are interpreted by PRNS within its narrative of cultural resource preservation (Watt, 2015).

Indigenous culture is another key component of this narrative. Archaeological evidence suggests significant human habitation in PRNS since around 3,500 years before present (Anderson, 2005). However, historians Sokolove, Fairfax, and Holland note that during the early decades of Point Reyes ranching in the nineteenth century, “dominant narratives. . . focused on removing Indians from the path of white settlement” (2002, p. 28). Consequently, indigenous cultural resources in PRNS are fewer, and interpretation depends more on historical reconstructions than ongoing cultural activities. Coast Miwok², the oldest known culture of what is now PRNS, were never provided reservation land by the United States government, and only achieved federal tribal recognition in December 2000. The Coast Miwok were once granted a shared tribal claim to a 15-acre rancheria, but this claim was terminated in 1966, when that property was subdivided to individual owners (Sokolove, et al., 2002). Sokolove, Fairfax, and Holland note that up to the first two decades of the establishment of PRNS, Coast Miwok were

² “Miwok” is an indigenous word for “people.” NPS interpretive information about the Coast Miwok, and about PRNS’ reconstructed Coast Miwok ceremonial complex Kule Loklo is made available at https://www.nps.gov/pore/learn/historyculture/people_coastmiwok.htm

commonly thought to have disappeared. When Coast Miwok finally achieved federal recognition, it came only under the umbrella designation *Federated Indians of the Graton Rancheria*. Nevertheless, Coast Miwok cultural identity and activities have increased in Marin and Sonoma counties, aided in part by NPS interpretive activities, including its reconstructed ceremonial complex, Kule Loklo (2002).

Ranching and Tule Elk

Beef and dairy ranching are a major feature of the landscape in rural Marin County. Cattle ranching has existed in the area of PRNS since its introduction by Spanish missionaries in the mid-nineteenth century. In the 1960s and 1970s, the cooperation, compromise, and sacrifice of Point Reyes ranching families were important factors in the successful establishment of PRNS (Livingston, 1993). Though a number of ranches have ceased operations, and seen their structures either removed or repurposed for agency purposes, NPS has granted and renewed leases for private ranches since the founding of PRNS (Watt, 2015). Cattle, ranch workers, dairy trucks and machinery are commonly visible from park roads leading to popular destinations like Drakes Beach, the Point Reyes Headlands, and Tomales Point. While ranching has a rich cultural history in and around PRNS, it is significant to note that ranching helped displace indigenous cultures throughout the region (Pellow & Park, 2002), and was partly responsible for the previous extirpation of Tule Elk on the Point Reyes Peninsula in the 19th century (Livingston, 1993).

Tule Elk are a subspecies of elk endemic to California, which were brought to the edge of extinction in the late 19th century by hunting and habitat loss (Watt, 2015). From only a few

remaining individuals, twentieth century conservation efforts have helped the statewide population of Tule Elk reach more than 4,000 (p. 294). Tule Elk were reintroduced to PRNS in 1978. From an original herd of 10 elk, fenced into the northern peninsula at Tomales Point, the population at PRNS has grown to more than 300, including two free-ranging subherds living partly on active ranch lands in the southern peninsula (Watt, 2015).

A study by Howell, Brooks, Semenoff-Irving, and Greene (2002) posited a maximum range carrying capacity of between 350 and 1,000 elk in the enclosed Tomales Point preserve, depending on the amount of annual precipitation. The authors found scant evidence of elk predation by coyotes, and no evidence of predation by either mountain lions or bobcats. By 1998, they report the population in Tomales Point had increased to over 500. With no natural predators, the authors determined Tule Elk would require significant management, in order to not exceed dry-year carrying capacity during wet years. To alleviate the apparent overpopulation in Tomales Point, later in 1998 the NPS transported elk out of the enclosure, to the wilderness area near Limantour Beach (Watt, 2015).

Nevertheless, the consequences of overpopulation at Tomales Point became evident during California's next major drought. It is reported that between 2012 and 2014, some 250 elk died in the Tomales Point preserve due to drought-related starvation. During this same time period, elk living outside the preserve apparently increased their population by over 32% (Cohen, 2015). With the expansion of new southern, free-roaming sub-herds, elk have encroached on pastoral lands, and ranchers in the PRNS have been impacted by loss of forage and damage to property. This has led to substantial disputes between ranch operators, including historic ranching families, the National Park Service, and environmental advocates (Watt, 2015).

Legal and Legislative History

Historian Dewey Livingston (1993) traces the legal history of Point Reyes to the founding of the Spanish Franciscan Mission at San Rafael in 1817. After Mexico achieved independence from Spain, land grants at Point Reyes were obtained by private Mexican citizens. Following California's entry into the United States, titles were obtained by U.S. citizens through a series of legal challenges, particularly those mounted by attorneys from San Francisco named Shafter. The Shafers and relatives owned much of Point Reyes and helped develop its growing dairy industry from 1857 until 1939. The first public parks in Point Reyes were established by Marin County, beginning in 1938 at Drakes Beach (Livingston, 1993).

The legislation establishing PRNS was sponsored by U.S. congressman Clem Miller in 1961, who stated, "the combination of dairy country and wild natural shoreland is part of the charm of Point Reyes, and we think the combination ought to be preserved" (Watt, 2002). When PRNS' Wilderness Area was officially designated in 1976, Congress amended its enabling statute to require that PRNS

be administered by the Secretary without impairment of its *natural values* [emphasis added], in a manner which provides for such recreational, educational, historic preservation, interpretation, and scientific research opportunities as are consistent with, based upon, and supportive of the maximum protection, restoration, and preservation of the natural environment within the area...³ (Watt, 2002).

The 2016 lawsuit alleges that PRNS is in violation of the National Environmental Policy Act (NEPA). NEPA requires all federal agencies to conduct formal environmental impact assessments for any actions affecting the natural environment (Mandelker, 2010). The claimants

³ 16 USC Sec. 459c. Point Reyes National Seashore; purposes; authorization for establishment

allege that PRNS is in violation of this act by continuing to extend commercial ranching leases, without conducting adequate environmental impact studies and assessments. The settlement agreement of this lawsuit compels the NPS to produce an amendment to its General Management Plan (GMP) for PRNS and parts of the Golden Gate National Recreation Area (GGNRA) in Marin County, after completing an Environmental Impact Statement (EIS). In its planning process for the amendment, NPS is required to investigate *at least three* management alternatives: no ranching, no dairy ranching, and reduced ranching⁴. The EIS and GMP amendment are to be completed by July 2021. As a first step in its planning process, and as required by laws governing administrative procedure in federal agencies (Shapiro, 2007), the NPS solicited public comments in late 2017. In documents published prior to the public comment period, NPS (2017) proposed a total of *six* possible alternatives:

1. No Ranching and Limited Management of Tule Elk
2. No Dairy Ranching and Management of Drakes Beach Tule Elk Herd
3. Reduced Ranching and Management of the Drakes Beach Tule Elk Herd
4. Reduced Ranching and Management of the Drakes Beach Tule Elk Herd
5. Continued Ranching and Removal of the Drakes Beach Tule Elk Herd
6. Continue Current Management (No Action)

These alternatives primarily involve two concerns: the environmental suitability of ranching in PRNS, and the management status of the protected Tule Elk within the park.

In September 2018, U.S. Representative Jared Huffman introduced legislation which has the potential to preempt significant portions of this settlement agreement and GMP amendment process. Specifically, H.R. 6687 (2018) authorizes new 20-year leases for all “working dairies and ranches on agricultural property” in PRNS and northern GGNRA, and orders the Secretary

⁴ STIPULATED SETTLEMENT AGREEMENT AND [PROPOSED] ORDER, U.S. District Court, Northern District of California, Case No. 4:16-cv-00688-SBA (KAW), Document 143, page 6 of 43.

of the Interior to ensure separation of Tule Elk from these properties. Although the bill orders the completion of the GMP amendment and EIS “without delay,” by mandating elk removal and explicitly reauthorizing all ranching leases, it appears to rule out all but management alternative number 5, “Continued Ranching and Removal of the Drakes Beach Tule Elk Herd.” This appears to conflict with the settlement agreement order, which requires NPS to consider at least *three* alternatives, including no ranching. Nevertheless, the new federal law would supersede the court order.

Theoretical Approaches

Public Comments

A public comment period, following a public notice, has been a standard part of U.S. federal agency rulemaking since the mid-twentieth century. Stuart Shapiro (2007) describes considerable scholarly debate and skepticism around the effectiveness of this participatory process, especially since the advent of electronic comment submission over the internet, with some scholars arguing that broader participation precludes deeper deliberation by policymakers. By analyzing nine separate cases of federal rulemaking, Shapiro finds that public comment is most likely to change rules when a large volume of comments are received on a proposal with little media interest and few political pressures. By implication, Shapiro’s research suggests that federal agency rules pertaining to highly politicized issues are unlikely to change, even when a high volume of public comments is received.

Nevertheless, comments may inform an understanding of public opinions and preferences on important issues, and could provide useful information to policymakers in related contexts.

An example of this mode of inquiry can be found in the work of Syme et al. (2016), who conduct a content analysis of public comments ($n=1194$) submitted on the New York Times website in response to a news story about a man engaging in sexual activity with his wife, who was a dementia patient living in a nursing home. Their analysis explores a distinct social phenomenon, occurring in care facilities, and offers qualitative public opinion research to inform care facility policymakers.

Natural Values

Values and beliefs about nature are instrumental in shaping the relationships between nature and culture. In his book *Morel Tales*, sociologist Gary Fine states that “nature is a social construction” (Fine, 1998). Elaborating on the relationship between culture and nature, he writes:

Even those who are not searching for wilderness far distant from civilization are still in the woods because they are different. We attempt to respect this “other,” while remaining comforted by its otherness. Whether we are humanists, protectionists, or organicists, the segregation of these other spaces is critical. We attempt—within the limits of our desires to use nature—to erase our civilized selves. But our own needs—perhaps the “need” to carry a picnic lunch, a six-pack of beer, or a basket to collect natural objects—remind us that our presence in nature is connected with its use value. (p. 251)

Buijs, Elands, and Langers (2009) find that use value can vary substantially between cultures. PRNS is protected from certain practices considered destructive to nature, such as mining, logging, hunting, and private development. However, its official statutory purpose is for “public recreation, benefit, and inspiration”⁵. As with other public spaces, human needs are a

⁵ 16 USC Sec. 459c. Point Reyes National Seashore; purposes; authorization for establishment

central consideration at PRNS. In order to fulfill its statutory duties, NPS officials must therefore consider what is recreational, beneficial and inspirational.

Studies have identified certain social, psychological, and physical health benefits of exposure to nature and proximity to natural spaces. In the United Kingdom, researchers found correlations between natural environments, psychological well-being, and physical activity (Kinnafick & Thøgersen-Ntoumani, 2014). A study in Spain found that children with nearby access to natural spaces exhibited higher resilience to stress (Corraliza, Collado & Bethelmy, 2012), though a study in Canada found only a weak correlation between emotional well-being of youth and proximity to public natural spaces (Huynh, Craig, Janssen & Pickett, 2013). Researchers in Norway found that hospital patients' recovery experiences were improved by indoor plants and views of nature (Ranaas et al., 2014). A qualitative study of the meanings and motivations of campers in Australian national parks finds that public natural spaces are used by visitors to facilitate experiences of high-order meaning in their personal and social lives (Hassell, Moore, & MacBeth, 2015).

Bratman, Hamilton, and Daily (2012) write of an emerging, interdisciplinary literature demonstrating various cognitive and mental health benefits of exposure to natural environments, but they note scholars' incomplete understanding. They summarize dominant theoretical approaches to the question of psychological benefits. These include a theory of *attention restoration* by exposure to nature, a *stress reduction* theory, and the theory that personal *opinions* about nature mediate the experience of benefits.

The degree of perceived benefit from exposure to nature has been shown to be highly variable, depending on both the quality and location of a natural space. Psychologists from the

University of California found that exposure to subjectively ‘beautiful’ nature led to an increase in prosocial tendencies (Zhang, Piff, Iyer, Koleva & Keltner, 2014). In a study of Southern California beach visitors, researchers noted decreased reports of psychological restorativeness on days when air quality was poor, but also on days when air quality was simply *perceived* to be poor (Hipp & Ogunseitan, 2011). A study from the United Kingdom suggests that coastal and forest locations strongly outperform urban natural spaces like athletic playing fields, in terms of visitors’ reported feelings of restorativeness (White, Pahl, Ashbullby, Herbert & Depledge, 2013).

While the literature makes it clear that natural environments provide important benefits to human health, it is also evident that these benefits are context-specific, and strongly tied to perceptions and opinions about nature. Stamou and Paraskevopoulos (2004) conducted a qualitative critical discourse analysis of messages left in visitor books at a forest reserve in Greece, comparing text from an information center with text from a forest observation site. They conclude that social practices in the reserve tend to emphasize either a “tourism image (the reserve as a place of economic activity and/or recreation). . .” or an “. . .environmentalist image (the reserve as a place of environmental conservation and/or learning)” (p. 106). With few images falling into the conceptual middle, the authors argue that these conflicting images create a “dualism” around ecotourism (p. 124).

In his paper, *Lay People’s Images of Nature: Comprehensive Frameworks of Values, Beliefs, and Value Orientations* (2009), Arjen Buijs identifies five distinct images of nature, which correspond with different, interrelated perceptions of nature. Based on results of a qualitative sociological study in the Netherlands, Buijs argues that each image, or cognitive

framework, corresponds to a related set of value orientations, ideas about the nature-culture divide, and associated goals for the management of nature. Buijs argues that the “vocabulary” of these frameworks could “sensitize” policymakers to public concerns, and help structure discussions in participatory processes (p. 430). The GMP amendment public comment period is just such a process, and I utilize Buijs’ theoretical frameworks to categorize and discuss these public comments, with regard to their stated and implicit beliefs and values concerning nature.

Sociology of Public Natural Space

Public natural spaces are created, protected, utilized, and managed for a diverse range of values and interests. This is evident in park histories, park rules and regulations, in the meanings and motivations of park-goers, and in the diverse views in these public comments. Many interests are based on *anthropocentric* value orientations, for example: the visual appeal of landscapes (sometimes called *viewscape*⁶), the potential for resource extraction and agriculture, opportunities for recreation, interpersonal connection, solitude, excitement and danger. Watt (2002) notes the emphasis put on recreational opportunities during the founding of PRNS. Historians of Golden Gate Park in San Francisco have observed how its establishment and development may have been partly aimed at providing a residential amenity “to attract and hold elite professional and managerial workers” (Abbott, 2005).

Other interests are based in more ‘natural’ values, focusing on issues of environmental health, air and water quality, biological diversity, the autonomy of nature, and habitat protection for threatened species. These values, characteristic of environmentalist movements of the 1960s

⁶ For a discussion of this concept and its sociological implications, see van Auken (2010).

and 1970s, found expression in the Wilderness Act of 1964, and the subsequent designation of a large Wilderness Area in PRNS (Watt, 2002). Within these ‘natural’ values, some make a distinction between values that are *ecocentric* and those that are *biocentric*. Horvadas (2012) explains that “Ecocentrism is different from biocentrism in that the former grants intrinsic value to natural systems, e.g. ecosystems, while the latter grants intrinsic value to non-human individuals or species” (p. 1469).

Sociologist Lyn H. Lofland (2010) writes that public space represents a ‘front stage,’ visible and accessible to anyone, but subtly negotiated on a continuum between public and private property. Perhaps it is appropriate, then, that the public bus route connecting Marin County’s urban eastern corridor with PRNS is called the West Marin Stagecoach, or simply “the Stage.” Public transportation provides access to PRNS and its surrounding communities to workers, retirees, students, and those without access to private automobiles. However, as NPS notes in its own transit analysis, “the vast majority of Point Reyes National Seashore visitors arrive by private automobile” (NPS, 2009).

Tourists travel to PRNS for personal and social experiences. They visit various natural areas and structures within the park, as well other public spaces, businesses and homes in the surrounding communities. MacCannell (1973) has described how social spaces are constructed to communicate *authenticity* to visitors in tourist settings. He finds that tourists themselves tend to seek the ‘backstages’ of spaces in tourist settings, and that the managers of these spaces tend to deliberately ‘stage’ back areas to reinforce the overall experience of authenticity. Practices identified by Watt (2002) in PRNS, such as the erasure of historic dairy operations within designated wilderness areas, and the selective display of “historic ranch” signage, could be

considered examples of such staging (pp. 67-68). In summary, while PRNS is a public space where any member of society can experience nature and cultural history, a sociological investigation reveals careful negotiations between private and public, wild and domestic, and native and invasive.

Social-Ecological Dynamics

Human society has an enormous impact on environmental systems, and historians of the San Francisco Bay region note the many ways in which human settlement, agriculture, and industry have polluted soils and water, harmed wildlife, altered ecosystems, and caused human injury and illness (Pellow & Park, 2002). In *Morel Tales*, Gary Fine observes:

To be sure, the impact on nature differs according to one's activity, but even a step kills plants or insects, and a breath alters the ratio of oxygen and carbon dioxide in an ecosystem. The self can never be totally erased, and so battles occur over where lines should be drawn. Typically lines are drawn to include *our* preferred activities, excluding *theirs* (1998, p. 251).

In the early nineteenth century, indigenous activities in what is now California were permanently disrupted by European-American hunting, trading, logging, and colonization. Many new, dominant species were introduced, natural resources were depleted, and cultural patterns were overthrown. Mining famously brought many settlers to the region during the Gold Rush, and runoff from mercury mines polluted Bay Area estuaries (Pellow & Park, 2002). In Point Reyes, the development of major dairy operations coincided with rising demand from a growing San Francisco (Livingston, 1993).

As the economy matured and wealth accumulated in the twentieth century, changes in preferred activities continued to shape the landscape, perhaps culminating in the conversion of

much of the Point Reyes peninsula to military use during World War II. Gayle Baker (2004) describes Japanese tenant pea farmers being arrested and sent to internment camps, and Abbot's Lagoon being converted to a bombing range. In the postwar period, subdivision and development began to encroach on the formerly-remote ranching peninsula, until the NPS intervened with its intention to purchase and condemn private property, in order to create the first-ever national seashore. Even at that time, radical supporters of the park criticized ranchers for their record of environmental degradation, while ranchers and landowners defended their cultural value and land rights (pp. 95-101).

Despite the relatively greater environmental protections afforded by parks, they are still significantly impacted by human activity. Brown (2000) has documented historical patterns of ecological mismanagement, unequal access, and environmental injustice at the Great Smoky Mountains National Park. At PRNS, the NPS has been severely criticized for both its alleged neglect of Tule Elk (Cohen, 2015), and for its continuing allowance for commercial ranching (Alexander, 2016). Nevertheless, PRNS remains a popular public destination for visitors, and an area of active conservation and environmental education. In general, parks and green spaces contain crucial habitat for many species (Nielsen, van den Bosch, Maruthaveeran & van den Bosch, 2014), and large parks like PRNS preserve multiple types of biological communities (Hameed, Holzer, Doerr, Baty & Schwartz, 2013).

Bar-Massada, Radeloff, and Stewart (2014) explain the social-ecological significance of *wildland-urban interface* zones, or areas where human settlements “abut or intermingle with natural or seminatural landscapes” (p. 429). These areas have primarily been studied for purposes of wildland fire management, as they pose increased risks of ignition and property

damage, but Bar-Massada et al. argue that they also have an array of unique biotic and abiotic effects on the environment. According to the map they produce of the continental U.S., PRNS is not within a WUI zone, but in a “vegetated” zone with “very-low-density housing” (p. 435). However, while more habitat is preserved at PRNS, the habitat remains fragmented by roads and structures, and large numbers of visitors exert different pressures on the local ecology.

Bar-Massada et al. identify biotic invasions, disease spread, fire ignitions, subsidized wildlife, and habitat loss as processes associated with human settlement. Importantly, they note the impacts of *road networks* in addition to housing, and even the impact of hiking on wildlife (pp. 431-433). The lands in PRNS have experienced many of the biotic and abiotic processes they describe. The 1995 Vision Fire is one significant example of an abiotic process (wildfire ignition) which had extensive biological effects. The fire burned over nineteen square miles of forest on the Inverness Ridge, causing significant damage to wildlife habitat and tree communities (Fellers & Osbourne, 2009; Harvey, Holzman & Davis, 2011). It is clear that PRNS will continue to be impacted by social-ecological processes, regardless of whether it is used for recreation or other cultural practices.

CHAPTER III - METHOD

The 2,967 individual comments received during the official public comment period are dwarfed by the number of annual visits to PRNS. Instead of a representation of the general public served by NPS, these comments offer insight into the opinions and perceptions of *interested parties*: groups and individuals with strong awareness, concern, or engagement with the issues in question. These parties are likely to play a role in the continuing participatory processes of park management, and may also have a disproportionate influence on culture in and around the park.

Using a random sequence generator¹, I produced a random sequence of 297 numbers between 1 and 2,967, which I used to sample 10% of the comments. I copied the text of comments in my sequence to a Google spreadsheet, along with the original sequence number and the commenter's first name, if provided. This spreadsheet was used to make copies, categories, excerpts, and notes, and to identify duplicate text. Each unique comment was coded with a single "image of nature," according to the frameworks described by Dutch sociologist Arjen Buijs (2009). My theoretical approach is a qualitative analysis of the text, beginning with Buijs' five distinct frameworks, and working outward to identify themes of social conflict, environmental concerns, and participant perception. I attempt to contextualize my interpretations by referencing historical accounts and research from the social and environmental sciences, as described above.

¹ Random.org/sequences, accessed July 2018.

CHAPTER IV - RESULTS

Images of Nature

The public comment analysis produced for NPS simply identifies and categorizes distinct management alternatives and concerns (NPS, 2018a). My analysis interprets a sample of the comments (NPS, 2018b) as a representation of interested parties as a whole, and I attempt to categorize their comments using Buijs' cognitive frameworks, thereby describing the parties' associated axes of beliefs, values, and value orientations. I do not consider these frameworks as rigid typologies without overlap. However, by employing a research-based frame analysis, I aim to offer a cognitive map of the parties in this participatory process.

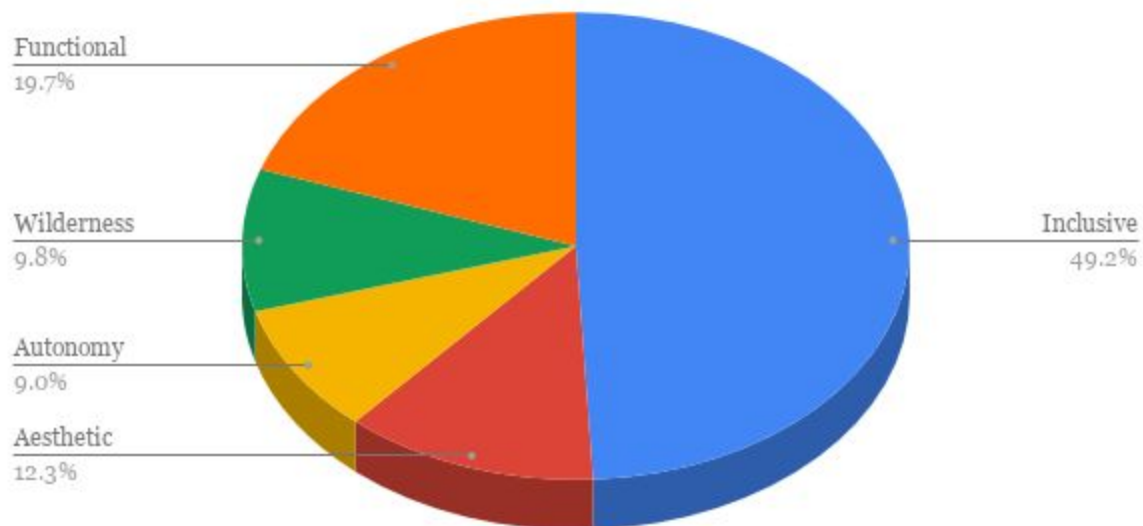
Buijs (2009) summarizes the characteristics of his proposed 'images of nature' frameworks as follows:

Table 1						
<i>Buijs' (2009) images of nature characteristics</i>						
Ideal types of images of nature	Values	Beliefs: Nature-culture divide?	Beliefs: Fragile-Resilient	Beliefs: Balance-change	Value orientations: Level of management	Value orientations: Goal of management
Wilderness	Ecocentric	N ↔ C	Fragile	Balance	Hands off	-
Autonomy	Biocentric	N ↔ C	Resilient	Change	Hands off	-
Inclusive	Biocentric	N + C	Fragile	Change	Limited mgmt.	Nature
Aesthetic	Weak anthropocentric	N + C	Fragile	Balance	Limited mgmt.	Landscape
Functional	Anthropocentric	N + C	Resilient	Change	Hands on	Agriculture / Forestry

Some comments provide specific management recommendations, while others provide explicit or implicit statements of values and beliefs. Other comments contain both, and I look to both statements and recommendations to inform my classification choices.

Figure 1

Unique comments, as interpreted with Buijs' (2009) images of nature frameworks



An Inclusive Image

I interpret approximately half of the unique comments in my sample¹ as portraying an *inclusive* image of nature. As Buijs (2009) describes, the inclusive image sees culture and nature as connected, nature as dynamic but fragile, and therefore a need to protect and cultivate nature through limited management. This cognitive framework is distinguished by *biocentric* values, often expressed in terms of concerns for particular plants or animals. Within this framework, for instance, Buijs identifies invasive species as a major concern.

I find the same themes in PRNS public comments, most prominently in comments supporting protection of the Tule Elk. A majority of comments in this category mention elk specifically. Commenters describe elk as “noble” and “beautiful animals,” who “belong at Point Reyes.” The excerpts below highlight some of the ways commenters assign intrinsic value to the elk:

Please protect the tule elk because they are a significant part of the Point Reyes ecosystem. - Elizabeth

As tule elk were dominant grazer in this area before their extermination, populations were reintroduced to help maintain healthy ecosystems within the Seashore. - Crystal, The Humane Society of the United States

We have no idea what unusual characteristics these animals may someday be revealed to have. Other such animals have been allowed to go extinct, and then the residents of the areas realized (when it is too late) just how valuable they were... - Edra

Please, don't declare war on this strand in the web of all life. Enlarge their habitat and ecosystem. And, remember, this is a helpless, defenseless animal that Earth, alone, selected for life in California. - Tess

Tule Elk once ranged over much of California but are now confined to a few small areas... - JoEllen

¹ Unique comments are $n=121$, or approximately 41% of the sample. Duplicated comments are discussed later in this section.

The Tule elk is a California native and they were almost brought to extinction...- Kathy

These beautiful [sic] animals were reintroduced at this location so that people could come and see these endangered animals at this location since they are not in any other location within the 50 United States, this was their home first. - Laura

In these excerpts, elk are assigned value for their ecological function, unique qualities, rarity, and for the historical adversity they have endured. These values are intrinsic, and do not depend on any cultural use value.

Among the comments not focused on elk, most mention protecting wildlife or wild animals, or voice opposition to current ranching and proposed agricultural practices. In each case, the commenter advocates a limited management approach for the benefit of nature. Tamara writes, “Too many wild animals are losing as development encroaches. We must adapt to live *with them* [emphasis added] not against them.” On behalf of the Marin Chapter of the California Native Plant Society, Carolyn requests “a detailed inventory of rare plant populations and native plant communities” in the GMP amendment planning area. The Resource Renewal Institute, one of the plaintiffs in the lawsuit against NPS which prompted the GMP amendment process, identifies several species by name, including native plants, insects, amphibians, fish, birds, and elk, as subjects requiring conceptual study and protective management. This correspondence also recommends a critical investigation of specific issues related to ranching operations in the park.

Cattle ranching, as well as other proposed commercial agricultural activities, are seen by these commenters as invasive and destructive to nature. Bob, a former professor of environmental planning, highlights problems of overgrazing, soil erosion, and water pollution from cattle waste runoff. He argues that new leases must incorporate mechanisms to better

mitigate the harmful effects of ranching, and to protect species. Although Bob focuses more on ecological systems than on species protection, he advocates for a hands-on solution. For Bob, the goals of land management should be restoration and protection of nature, rather than improvements for visitors, or cultural preservation. The idea that the well-being of nature depends on cautious human intervention is a commonly repeated theme in this set of comments.

A Functional Image

Conversely, in a functional image of nature, *cultural* well-being depends on management of nature. This cognitive framework is based on strongly *anthropocentric* values. While nature is still seen as dynamic and connected with culture, it is regarded as resilient, rather than fragile. This belief is associated with management goals that favor *intensive* land use over protection and restoration of natural ecosystems or species. I interpret 19.7% of the unique comments in my sample as fitting the functional image framework. Buijs (2009) notes that this framework values nature for its “productive capacity,” and frequently sees *unmanaged* wild spaces as “messy” (pp. 427-428).

In his public comment on behalf of the California Farm Bureau Federation, Jack submits the following:

Elk cause thousands of dollars of damages and lost forage on ranches. Additionally, the elk carry Johne’s disease, which can be transmitted to cattle. USDA estimates that lost productivity from Johne’s disease in dairy cattle could be costing dairy producers between \$200 and \$250 million annually. Elk in the PRNS were reintroduced by humans and have been managed since their reintroduction. The PRNS must improve its management by maintaining the roaming elk herds on the Limantour wilderness and preventing them from damaging ranches in the area.

Pamela and Charles state the following in their comments:

. . .removing the agricultural management that the ranchers now provide would result in an increase in invasive plants like thistle, broom, and eucalyptus - problems that will erupt without the Parks ability to control them. These lands would also become a nursery for weeds and would require significant management demands on the Park.

They continue,

The visitor experience is enhanced rather than diminished by these traditional uses of the land. . .Agriculture in the Park represents \$18.3MM (19%) of Marins total \$96.5MM gross production value. . .

Another commenter, Charity, states the following:

I want to insure the long and vibrant history of agricultural food production in Marin County will remain intact. The rights of neighboring family ranches that currently operate within the Point Reyes National Seashore are threatened as special interests work to phase out agriculture within the National Park. . . These lands have had cattle since the gold rush. Its [sic] a beautiful area that seems to be managed well by their guardians, the family farmers that have been there since the 1800's.

In this subset of comments, value is predominantly assigned to the activities and interests of human culture, and particularly the historic ranching culture in what is now PRNS.

Commenters cite both the social and economic importance of local agriculture. These commenters include loyal consumers from the local area, and at least one lease-holding producer. The Spaletta Families write:

We support Continued Ranching of all ranching practices, beef & dairy in the PRNS and GGNRA with 20 year- Lease /Permits. We wish for renewable lease/permits if possible to support the historical cultural and natural resources that ranchers have been caring for well over 100 years. These Ranches and dairies account for nearly 20% of agriculture production in Marin County. If ranches were to shut down or be reduced, a large portion of agriculture products from this area would be gone forever. These ranches contribute to the sustainability of West Marin's economic viability and farther. People want a local product and want to see where it comes from.

We would like to see if Tule elk can also be removed in the Limantour-Estero road area for those ranchers as well? If this was added to this alternative, it would give all ranches relief from elk conflicts.

However, not every comment I identified with the functional image of nature is supportive of ranching. James comments, “This land was purchased from the farmers and ranchers years ago for the American public. They have never left. Now they want to expand? That is beyond my comprehension. Please do not allow this.” This transactional view, where purchase and ownership overshadow occupancy or use, is also strongly anthropocentric. Referring back to Buijs (2009), this goal orientation seeks to improve one “utilitarian value” at the expense of another.

My sample happens to include the comments of Laura Watt, an environmental historian at Sonoma State University, and a prominent scholar of Point Reyes National Seashore. In April 2018, Dr. Watt testified before a U.S. House of Representatives Committee on Natural Resources hearing titled “The Weaponization of the National Environmental Policy Act and the Implications of Environmental Lawfare.” Acknowledging the partisan appearance of this hearing, Dr. Watt stated at the time she was “concerned that some members of Congress might be looking for information that could be used to weaken environmental regulations and review” (Gullixson, 2018). Yet, in her public comments submitted to NPS, Dr. Watt argues strongly and in great detail for the immediate removal of elk from pastoral lands, without further environmental assessment. The basis for her argument is that previous environmental assessments found “No Significant Impact,” with regard to private lands bordering the park. In addition, she calls for intensive management efforts to preserve and even grow the historic ranching culture in PRNS. She states, “The value of the cultural landscape is based on the interaction between people and their environment; and the focus of management is on this

relationship.” This statement speaks to the connection between nature and culture. Elsewhere, she adds,

The NPS needs to recognize that residents have a different relationship to place than visitors, and particularly that *working the land* [emphasis added], especially over generations, creates a unique connection and knowledge that should be respected and incorporated into management practices.

This last statement clarifies her value orientation, from a general anthropocentrism with respect to nature, to a specific use value. A preferential orientation toward “working the land” could diminish or exclude alternative use values, such as admiring the land, studying the land, or protecting the land.

An Aesthetic Image

The aesthetic image of nature falls into the category of admiration. Here, nature and culture are connected, but nature is in a fragile balance, requiring protection for the continued enjoyment of nature lovers. Landscape is the primary value, and as with art, beauty is in the eye of the beholder. Buijs (2009) describes how the aesthetic image of nature is closely related to the Western cultural concept of *Arcadian nature*, an ideal which is traceable in the landscapes of European art since the Renaissance. Interestingly, commenters in this category do not share the same management goals. Kathryn writes,

My friend had told me about the dramatic scene he'd witnessed of elk rutting in a previous visit. I didn't get to see that, but was excited to see two herds of elk on cliffs overlooking the sea, as well as elephant seals, a coyote, and many different types of birds. There are few places outside our parks where these animals can be seen in the wild. . . Please keep them as places where animals can live in nature on their own terms and Americans can enjoy seeing them do so.

Here, the emphasis on *viewing* wildlife sets the comment apart from the more biocentric inclusive image. Marily speaks of a different landscape:

The ranchers could have easily sold to developers, reaped a huge profit and seen the lands forever changed. There could be mansion houses, subdivisions, and shopping centers - as opposed to *gorgeous rolling hills* [emphasis added] under well managed generations of families caring for the lands.

Here, it is simply the appearance and physical properties of the land that are important. Land is “cared for” when it appears pleasant. I identified only 12.3% of unique comments with this framework. I hypothesize that the low number may reflect a lower awareness and engagement with specific issues among those with an aesthetic image of nature.

Images of Wilderness and Autonomy

I interpret 9.8% of comments as fitting a wilderness image of nature, and 9% as fitting an autonomy image of nature. Both of these frameworks are distinguished by a “hands-off” approach to management goals, and a perceived separation between nature and culture. The *ecocentric* wilderness image focuses on undisturbed ecologies, while the *biocentric* autonomy image focuses more on the freedom and self-determination of organisms.

Emphasizing a sharp division between nature and culture, the fragility of nature, and supporting a hands-off approach, CJ typifies the wilderness image:

Please support Free-ranging Tule Elk at Point Reyes. The protection of wild places is needed, for this planet won't be able to filter the human waste any longer. "Man is the most insane species. He worships an invisible God and slaughters a visible nature without realizing that this Nature he slaughters is the invisible God he worships." Hurbert Raeves

Focusing more on animals, Brian succinctly captures the autonomy image, writing “Leave nature alone. Let animals wander where they will. It was their land first. We are the Intruders.” I hypothesize that wilderness and autonomy images of nature may be more prevalent in remote parks, where ecosystems are more clearly insulated from human activity.

Cultural Conflicts and Environmental Concerns

Cultural conflicts expressed in these comments primarily involve three groups: the government (NPS), the ranching and agricultural industry, and environmental activists. An anonymous commenter writes:

This is another instance of overreach by government. The people who brought this law suit [sic] have no skin in the game. They use the Tule Elk as an argument to support their agenda. No one considers that these small businesses are a part of the fabric here and not to be casting disruptions on. People that live in this area matter.

Peter argues the other side:

I have lived in Marin County on and off for over fifty years. It's time to remove cattle from the National Park. They were supposed to be out by now. Cattle are not compatible with a natural area, and it is a handout to a few people. The former Interior Secretary Ken Salazar was biased in favor of cattle, being a rancher himself. . . I see this whole process as crooked, with wealthy, well-connected ranchers having undue influence.

Environmentalists deploy some of the strongest statements of moral outrage against both ranchers and the NPS. Charlotte writes:

These animals were here long before humans, cows, and sheep. This is THEIR LAND. Why do you think it is OK to come in and make these animals beneath you, where you have the say whether they live or die? GOD created animals before he created humans. Think about that.

Conflicts involving economics and social class are also evident. Erin chastises the practice of commercial agricultural in public natural areas:

Would you please keep your greedy hands off our parks and natural areas. We don't need farms here. Why do you want to pollute these beautiful areas with farms that will likely pollute pesticides. Many animals call these lands home and they need this space to live their lives. Stop thinking about how you can line your coffers and think once about the future of this beautiful country. agriculture is not needed in these lands. Hands off!

Though PRNS is prohibited by statute from charging admission fees, Barbara laments:

Worked since I was 14, could never afford a vacation or take an extended vacation to see anything. Finally retired with health issues. All that tax money paid and now you price me out of visiting the parks I've always wanted to see. Breaks my heart. Cut the benefits for gov workers first, I never had them and I don't understand [sic] why they have them!

Environmental concerns run the spectrum, from alleged benefits and harms of grazing, to disease, biotic invasions, protection of native species, and climate change. Coinciding with the autonomy, wilderness, and inclusive images of nature, the majority of concerns favor protecting native wildlife and their habitat over the interests of ranch operators. Although it is acknowledged as a major concern in environmental management literature and by NPS², wildland fire mitigation is mentioned only once, as a purported benefit of “managed coastal grasslands” created by “[s]ustainable cattle ranching and agriculture.” In the five instances where visitors are mentioned, it is never for their environmental impact. Instead, there is a concern about their potential disruptiveness to “ranchers, their families and employees and the cattle.” In two other instances, commenters mention visitors as beneficiaries of cultural preservation and an open agricultural community. The remaining two instances note visitors’ need for more and better trails (a functional use value), and how visitors are affected by the “eyesores” of dilapidated ranch structures and dairy operations. In general, commenters’ environmental concerns are

² See Fire Management Plan: Operational Strategy - August 2006. National Park Service. Retrieved from https://www.nps.gov/pore/learn/management/planning_fmp_opstrat_2006.htm

highly correlated with their values and beliefs about nature, and tend toward *biocentric* value orientations. I attribute this tendency to the subject matter of the participatory process. Because this amendment planning process stems from a conflict between human activities and a restored native species, public interest is heightened among those with a biocentric value orientation.

Frequency and Duplication

One hundred sixty-two comments (54.6% of my sample) contain duplicated text I refer to as the *natural values* comment. Most are signed with an individual first name. Approximately 32 of these duplicates contain personal alteration, truncation, or amendment. The full text of the repeated “natural values” comment states the following:

I am writing in support of the free-roaming tule elk herds at Point Reyes National Seashore, and I object to any fencing, removal, sterilization or killing of elk in the park. Tule elk are an important part of the landscape of Point Reyes, and their recovery has been an exciting success story for restoring native species and ecosystems, consistent with the mission of the National Park Service.

Commercial lease holders on our public lands shouldn't dictate wildlife removal or exclusion policies. Any cattle-ranching operations must be managed to accommodate elk and other native wildlife, and shouldn't harm habitat for endangered species.

I also urge you to reject any conversion of national park lands to row crops or expansion of commercial livestock farming to introduce sheep, goats, turkeys, chickens or pigs. This would create conflicts with predators and degrade wildlife habitat and water quality.

The Park Service's amendment to the General Management Plan should prioritize protecting the *natural values* [emphasis added] of Point Reyes National Seashore.

I associate this comment with the inclusive image of nature, due to its biocentric focus on Tule Elk, wildlife, and endangered species. It calls for management of public natural space, but for the purpose of nature. Its repetition of the term *natural values* is also significant, as that language was added to the enabling statute of PRNS in 1976.

The frequency of this comment suggests organizational preparation, and a concerted effort of popular engagement. In an amended version, Judith adds the following:

P.S. We were formerly from the Bay area and loved to go to Point Reyes to hike and one of the most wonderful attractions for us were the Elk. Please do not go forward with such a barbaric activity!!! Livestock takes up enough of the planet, for goodness sake!! It is a major contributor to the climate crisis and now you want to displace these fine animals and add to the climate disaster at once!!! This is ludicrous!!

The presence of this and other personal amendments to an otherwise-duplicate comment suggests more than simple vote-casting by these parties. While the repetition of the comment may be counterproductive to NPS information-gathering, its significance with regard to public opinion is considerable. If combined with the unique comments I interpreted with an inclusive image of nature, it indicates approximately 75% of interested parties share similar biocentric values and beliefs about nature.

One other comment was duplicated, however, though only six times in my sample. The comment is lengthier, and essentially pro-ranching. Below is an excerpt:

Ranches on PRNS provide important economic, cultural, and *ecological values* [emphasis added] to the local community. Losing a significant portion of West Marin's agricultural community would mean not only a loss of local food production, but a significant loss to its economy and culture. I urge you to offer 20-year lease/permits to ranchers on PRNS and to improve elk management and return the elk to the wilderness areas where they will not impact the ranches.

The repetition of this comment also suggests organization, but on a smaller scale. I associate this comment with the 'functional image of nature,' since it favors anthropocentric (cultural) values, and advocates intensive management toward anthropocentric goals. Its argument that ranching provides "ecological values" is remarkable, and speaks to how those with a functional image of

nature see nature as connected to culture. In this view, the value of providing desirable local food products is not only natural, but *ecological*.

A final observation regarding frequency has to do with gender. Approximately 61% of commenters provided a typically female first name, while only 24% provided a typically male first name. This appears to suggest greater awareness, interest, and engagement among women.

CHAPTER V - DISCUSSION

In this paper, I use a mixed-method approach to analyze differing perceptions of nature among parties in a participatory process involving public land management. Studies of other public comments on proposals in other public lands would be useful in examining this topic. I would also like to note the potential value of public comments as ethnographic and historical texts.

I employ the quantitative approach of random sampling as a way to excerpt a manageable but meaningful amount of text, and I use Buijs' proposed cognitive frameworks for categorization and a qualitative frame analysis. Regardless of the approach, I find that analysis of public comments on rules pertaining to public natural space requires significant environmental and social context. While a scholarly literature exists around PRNS, other cases may require interviews or alternative primary sources to establish this context.

I would also like to comment reflexively on my role as researcher. As a recent transplant, and as something of an outsider geographically and culturally, I may be better positioned to evaluate different perspectives objectively. However, my depth of knowledge and experience are limited. My individual cultural and economic experiences inform certain opinions and implicit biases. However, I attempt to offer observations and suggestions based on an inductive reading of the comments and scholarly literature. Reflecting on Buijs' frameworks, I see myself as moving from an aesthetic image of nature toward an inclusive image of nature. While I see nature and culture as connected, I increasingly see the necessity of protecting natural areas for their own intrinsic value, rather than for human interests.

CHAPTER VI - CONCLUSION

These comments suggest cultural conflict around the management and use of public natural space, and this observation is in line with research-based theory on public space (Lofland, 2010). A key finding of my interpretive analysis is that a significant majority of interested parties express biocentric value orientations, while policy appears to favor an orientation toward aesthetic and functional landscapes. The reintroduction and recovery of a once-threatened, megafauna species is a compelling narrative, which may relate to increased biocentrism among interested parties, as well as defensiveness from parties with more functional interests. The gendered aspect of the participatory process is also noteworthy, with women appearing to outnumber men by more than two-to-one in my sample.

Although the NPS explicitly described the public comment period as an information-gathering process, many commenters submitted opinions and grievances. Others simply duplicated a prepared text, as if casting a vote. This disconnect between public perception and administrative intent could lead to feelings of exclusion from the participatory process. To ensure a responsible and representative management plan, agency rulemakers should consider and address not only the specific alternatives and concerns submitted, but also the cultural conflicts between interested parties.

Finally, this study supports Shapiro's (2007) thesis that "agencies are most likely to change their proposals when they receive a high volume of comments on highly complex rules that are not very politically salient" (p. 33). The proposed rules at PRNS are extremely complex but also quite political, and in this case, recent legislative action suggests that the public

comment period and rulemaking process can ultimately be superseded by sufficient political pressures.

References

- Abbott, C. (2005). The new urban park: Golden Gate National Recreation Area and civic environmentalism. *Journal Of American History*, 91(4), 1491-1492.
- Alexander, K. (2016, February 20). Backlash over cattle grazing on public land hits Point Reyes. *San Francisco Chronicle*. Retrieved from <https://www.sfchronicle.com/bayarea/article/Backlash-over-cattle-grazing-on-public-land-hits-6844746.php>
- Anderson, R.S. (2005). Contrasting vegetation and fire histories on the Point Reyes Peninsula during the pre-settlement and settlement periods. Center for Environmental Sciences & Education, & Quaternary Sciences Program, Northern Arizona University, Flagstaff, AZ. Retrieved from https://www.nps.gov/pore/learn/management/upload/firemanagement_fireecology_research_anderson_0506.pdf
- Baker, Gayle (2004). *Point Reyes, A HarborTown History*. HarborTown Histories: Santa Barbara, CA.
- Bar-Massada, A., Radeloff Volker, C., & Stewart Susan, I. (2014). Biotic and abiotic effects of human settlements in the wildland–urban interface. *Bioscience*, (5), 429.
- Barton, S. E. (2011). Land rent and housing policy: a case study of the San Francisco Bay area rental housing market. *American Journal Of Economics & Sociology*, 70(4), 845-873.
- Bratman, G. N., Hamilton, J. P., & Daily, G. C. (2012). The impacts of nature experience on human cognitive function and mental health. *Annals of the New York Academy of Sciences*, 118-136.
- Brown, M. L. (2000). *The wild east: A biography of the Great Smoky Mountains*. University Press of Florida: Gainesville, FL.
- Buijs, A. E. (2009). Lay people's images of nature: Comprehensive frameworks of values, beliefs, and value orientations. *Society & Natural Resources*, 22(5), 417-432.
- Buijs, A. E., Elands, B. H., & Langers, F. (2009). No wilderness for immigrants: Cultural differences in images of nature and landscape preferences. *Landscape And Urban Planning*, 91, 113-123.
- Cohen, R. (2015, May 20). While protected elk dwindle, wild herds bedevil ranchers. *The New York Times*, A12(L).

- Corraliza, J.A., Collado, Sylvia & Bethelmy, Lisbeth. (2012). Nature as a moderator of stress in urban children. *Procedia - Social and Behavioral Sciences*, 38, 253-263.
- Dyble, Louise Nelson. (2007). Revolt against sprawl: Transportation and the origins of the Marin County growth-control regime. *Journal of Urban History*, 34(1), 38-66.
- Fellers, G. M., & Osbourn, M. S. (2009). Fire effects on the Point Reyes mountain beaver (*Aplodontia rufa phaea*) at Point Reyes National Seashore, 10 years after the Vision Fire. *Northwestern Naturalist*, (3), 189.
- Fine, Gary A. (1998). *Morel tales: The culture of mushrooming*. Cambridge, Mass.: Harvard University Press.
- Gullixson, P. (2018, April 25). Sonoma State professor testifies before House Committee on Natural Resources. *SSU News*. Retrieved from <http://news.sonoma.edu/article/sonoma-state-professor-testifies-house-committee-natural-resources>
- Hameed, S. O., Holzer, K. A., Doerr, A. N., Baty, J. H. & Schwartz, M. W. (2013). The value of a multi-faceted climate change vulnerability assessment to managing protected lands: Lessons from a case study in Point Reyes National Seashore. *Journal of Environmental Management*, 121, 37-47.
- Harvey, B. J., Holzman, B. A., & Davis, J. D. (2011). Spatial variability in stand structure and density-dependent mortality in newly established post-fire stands of a California closed-cone pine forest. *Forest Ecology and Management*, 262, 2042–2051.
- Hassell, S., Moore, S.A. & Macbeth, J. (2015). Exploring the motivations, experiences and meanings of camping in national parks. *Leisure Sciences*, 37, 269-287.
- Hipp, J. A. & Ogunseitan, O.A. (2011). Effect of environmental conditions on perceived psychological restorativeness of coastal parks. *Journal of Environmental Psychology*, 31, 421-429.
- Horvadas, T. (2012). A critical reading of ecocentrism and its meta-scientific use of ecology: Instrumental versus emancipatory approaches in environmental education and ecology education. *Science & Education*, 22, 1467–1483.
- Howell, J., Brooks, G., Semenov-Irving, M., & Greene, C. (2002). Population dynamics of Tule Elk at Point Reyes National Seashore, California. *The Journal of Wildlife Management*, 66(2), 478-490.

- Huynh, Q., Craig, W., Janssen, I., & Pickett, W. (2013). Exposure to public natural space as a protective factor for emotional well-being among young people in Canada. *BMC Public Health, (1)*.
- Kinnafick, F.-E., & Thøgersen-Ntoumani, C. (2014). The effect of the physical environment and levels of activity on affective states. *Journal of Environmental Psychology, 38*, 241–251.
- Livingston, D. (1993). *Ranching on the Point Reyes Peninsula: A history of the dairy and beef ranches within Point Reyes National Seashore, 1834-1992*, Historic Resource Study. Point Reyes Station, CA: National Park Service.
- Lofland, L. H. (2010). Review Essay - American public spaces - Whose property?. *International Journal of Urban and Regional Research, 34*, 709-713.
- MacCannell, D. (1973). Staged authenticity: Arrangements of social space in tourist settings. *American Journal Of Sociology, 79(3)*, 589-603.
- Mandelker, D. R. (2010). The National Environmental Policy Act: A review of its experience and problems. *Washington University Journal of Law & Policy, 32*, 293-313.
- Metropolitan Transportation Commission and the Association of Bay Area Governments (2018). Bay Area Census. Retrieved from <http://www.bayareacensus.ca.gov/index.html>
- National Park Service (2018a). *Public comment summary report*. Retrieved from https://www.nps.gov/pore/getinvolved/upload/planning_gmp_amendment_initial_public_comments_analysis_180315.pdf
- National Park Service (2018b). *All correspondence*. Retrieved from https://www.nps.gov/pore/getinvolved/upload/planning_gmp_amendment_initial_public_comments.pdf
- National Park Service (2017). *2017-10 General Management Plan Amendment newsletter*. Retrieved from <https://parkplanning.nps.gov/document.cfm?documentID=83408>
- National Park Service (2016). *Park statistics*. Retrieved from <https://www.nps.gov/pore/learn/management/statistics.htm>
- National Park Service (2009). *Transit access study, Point Reyes National Seashore, Final report*. Retrieved from https://www.nps.gov/pore/learn/management/upload/planning_gmp_transitaccessstudy_final_090304.pdf

- Nielsen, A. B., van den Bosch, M., Maruthaveeran, S., & van den Bosch, C.K. (2014). Species richness in urban parks and its drivers: A review of empirical evidence. *Urban Ecosystems*, *17*(1), 305-327.
- Pellow, D. and L. S. Park (2002). *The Silicon Valley of dreams: Environmental injustice, immigrant workers, and the high-tech global economy*. New York: New York University Press. ISBN: 0814767109.
- Raanaas, R. K., Patil, G., & Alve, G. (2016). Patients' recovery experiences of indoor plants and views of nature in a rehabilitation center. *Work*, *53*(1), 45-55.
- Shapiro, S. (2008). Does the amount of participation matter? Public comments, agency responses and the time to finalize a regulation. *Policy Sciences*, *41*, 33-49.
- Sokolove, J., Fairfax, S. K., & Holland, B. (2002). Managing place and identity: The Marin Coast Miwok experience. *Geographical Review*, *92*(1), 23-44.
- Stamou, A. G. & Paraskevopoulos, Stephanos (2004). Images of nature by tourism and environmentalist discourses in visitors books: A critical discourse analysis of ecotourism. *Discourse & Society*, *15*(1), 105-129.
- Syme, M. L., Yelland, E., Cornelison, L., Poey, J. L., Krajicek, R., & Doll, G. (2016). Content analysis of public opinion on sexual expression and dementia: Implications for nursing home policy development. *Health Expectations*, *20*(4), 705-713.
- To direct the Secretary of the Interior to manage the Point Reyes National Seashore in the State of California consistently with Congress' long-standing intent to continue to authorize working dairies and ranches on agricultural property as part of the seashore's unique historic, cultural, scenic and natural values, and for other purposes., H.R. 6687, 115th Cong., 2d Sess. (2018). Retrieved from <https://www.congress.gov/bill/115th-congress/house-bill/6687>
- van Auken, P. M. (2010). Seeing, not participating: Viewscape fetishism in American and Norwegian rural amenity areas. *Human Ecology: An Interdisciplinary Journal*, *38*(4), 521-537.
- Watt, L. A. (2015). The continuously managed wild: Tule Elk at Point Reyes National Seashore. *Journal of International Wildlife Law & Policy*, *18*, 289–308.
- Watt, L. A. (2002). The trouble with preservation, or, getting back to the wrong term for wilderness protection: A case study at Point Reyes National Seashore. *Yearbook of the Association of Pacific Coast Geographers*, *64*, 55-72.

White, M. P., Pahl, S., Ashbullby, K., Herbert, S., & Depledge, M. H. (2013). Feelings of restoration from recent nature visits. *Journal Of Environmental Psychology, 35*, 40-51.

Zhang, J. W., Piff, P. K., Iyer, R., Koleva, S., & Keltner, D. (2014). An occasion for unselfing: Beautiful nature leads to prosociality. *Journal Of Environmental Psychology, 37*, 61-72.