

Perceptions of stakeholders regarding wilderness and best management practices in an Alaska recreation area

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This article focuses on the collaborative and voluntary Wilderness Best Management Practices (WBMP) for managing recreation in Tracy Arm-Fords Terror Wilderness in Alaska. Stakeholder definitions of wilderness, opinions about the WBMP, and whether these opinions are reflective of their perceptions of wilderness are examined. Interviews with tour operators, agency personnel, cruise industry representatives, and local residents showed that most expressed some degree of purism in their definitions of wilderness (e.g. solitude and minimal impact), although cruise representatives had less purist definitions. With the exception of cruise representatives, most felt that the wilderness character of this area is threatened by vessel traffic. Most supported the WBMP as alternatives to regulations because they allowed for freedom and input, but many felt that these practices may be unable to address future impacts. A few small and more purist operators felt that if the wilderness characteristics were threatened, they might support regulations. Others, however, displayed a type of cognitive dissonance by expressing concern over threats to this wilderness, yet rejecting regulations that may be needed for protecting the wilderness experiences they value the most.

Keywords: wilderness, stakeholders, collaboration, best management practices, codes of conduct, recreation management

INTRODUCTION

The increasing popularity of nature-based recreation activities coupled with their potential impacts on social and biophysical conditions (e.g. crowding, erosion, and litter) has led resource managers to search for innovative and adaptable methods of management (Manning, 2011; Needham & Rollins, 2009). One increasingly popular form of adaptable management is the reliance on stakeholder collaboration to understand and ameliorate impacts of recreation. Selin and Chavez (1995) defined collaboration as “a joint decision-making approach to problem resolution where

power is shared and stakeholders take collective responsibility for their actions and subsequent outcomes from those actions” (p. 190). Collaboration “involves individuals or groups moving in concert in a situation in which no party has the power to command the behavior of the others” (Wondolleck & Yaffee, 2000, p. xiii).

Collaboration can be challenging when stakeholders involved share different perceptions about the resource being managed (Bryan, 2004). These different cognitions are particularly relevant and complicated in places labeled as “wilderness” because this has both a legal definition in some countries, as well as competing and changing social

interpretations (Cronon, 1996; Shultis, 1999). Since the passage of the United States (U.S.) Wilderness Act in 1964, designated wilderness areas within the U.S. National Wilderness Preservation System (NWPS) have been important resources for recreationists seeking relatively remote and primitive nature-based experiences. If stakeholders disagree about what it means to have a wilderness experience, however, they may also disagree on the best approaches for managing the experience or setting. Understanding different stakeholder definitions and perceptions of wilderness is important for collaborative processes associated with managing use in these areas because recognizing potential contradictions may help managers understand some barriers to achieving successful collaboration and other long-term management goals (Gray, 1989; Lauber & Decker, 2011).

The U.S. Congress has designated millions of acres of federal land to be managed as wilderness areas as part of the NWPS and in accordance with the Wilderness Act. Tracy Arm-Fords Terror Wilderness in Alaska is one of these areas, and impacts from increasing visitation in this area prompted the U.S. Forest Service in 2007 to implement a collaborative process for creating and managing voluntary codes of conduct known as the Wilderness Best Management Practices (WBMP) for this area. Stakeholders (e.g. agencies, tour operators, cruise lines, and local residents) have participated in this collaborative WBMP process by helping to create and implement its guidelines, manage the area through self-enforcement to ensure that guidelines are not violated, monitor and evaluate the success of these guidelines and stakeholder interactions, and update and revise this process. This article examines stakeholder definitions and perceptions of wilderness, opinions about the WBMP for managing recreation use in this area, and whether these opinions about this collaborative

process are reflective of their perceptions of wilderness.

CONCEPTUAL FOUNDATION

Collaboration has been examined in various recreation management contexts such as designation of river use (Plummer, 2006), regulations on hunting (Sandström, 2009), local recreation policies (Bramwell & Sharman, 1999), and restrictions on commercial tour operators (Pomeranz, Needham, & Kruger, 2013a, 2013b). Collaboration is an emergent process where stakeholders are independent, solutions emerge by dealing constructively with differences, joint ownerships of decisions are involved, and stakeholders assume collective responsibility for future directions (Gray, 1989). In contrast to regulation, collaboration provides a decision-making process that offers opportunities to explore new sources of knowledge, empowers individuals normally excluded from external mandates, creates a sense of shared ownership over decisions, and should be adaptable to change given its evolving nature (Bryan, 2004; Lauber & Decker, 2011).

One potential barrier to collaboration arises from differences in how participating stakeholders and managers value the resource being managed (Wondolleck & Yaffee, 2000). When these differences occur, individuals may be loath to cooperate due to fear of compromising their values (Bryan, 2004). This can be problematic, as research has shown that successful collaborative endeavors are predicated on willingness to compromise (e.g. Selin, Schuett, & Carr, 2000). Collaboration should help to develop a shared resource identity among stakeholders and encourage those with different values to recognize that “in spite of *our* differences, *we* are all in this together” (Bryan, 2004, p. 892). Creating common goals is an important step in collaboration and allows for institutionalization of collaboration that

should foster efficient and coordinated processes (Lauber, Stedman, Decker, Knuth, & Simon, 2011). Understanding stakeholder values and goals associated with resources such as wilderness areas may provide insight into conflicts faced in collaboration, and mediators might then be positioned better to achieve compromise that builds on shared goals despite potentially divergent values.

The idea of wilderness has been defined and redefined many times. Once a place to be feared and conquered, by the end of the nineteenth century, wilderness was constructed as a romanticized and pristine space in stark contrast to rising urbanization and industrialization (Cronon, 1996; Hannigan, 1995). Various scholars attempted to define wilderness and describe its value, thereby making a case for its protection. Leopold (1941), for example, described the value of wilderness as a “base-datum of normality” for landscapes and their biota (p. 3). The scientific view of wilderness as a dynamic and complex ecological system has been referred to by some as “wild community” (Allen, 1979; Nelson & Callicott, 2008; Spurr, 1963). Marshall (1930) had a more human-oriented definition by identifying wilderness as primitive and far from modern sources of transportation where one must rely only on oneself to survive and achieve physical, mental, and aesthetic benefits. Rolston (1985) identified 12 major values for wilderness: economic, life support, recreational, scientific, genetic diversity, aesthetic, cultural symbolization, historical, character building, therapeutic, religious, and intrinsic. Others have attempted to explicitly identify the monetary value of wilderness to establish an economic justification for protection (e.g. Loomis & Richardson, 2001; Walsh, Loomis, & Gillman, 1984). Dawson and Hendee (2008) condensed this diversity of definitions associated with wilderness into four major themes: (a) experiential (i.e. immediate and

personal benefits of experiencing wilderness); (b) scientific (i.e. significance of wilderness as a pharmacological resource, habitat for threatened or endangered species, and place to research human behavior); (c) symbolic and/or spiritual; and (d) economic (i.e. bequest, existence, and option values).

Wilderness as a legal land designation in the U.S. was classified in the 1964 Wilderness Act as:

In contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.

This wilderness construct was tangibly defined as an area of “undeveloped federal land” with “outstanding opportunities for solitude or a primitive unconfined type of recreation”, and “ecological, geological, or other features of scientific, educational, scenic or historical value” (Wilderness Act, 1964). This definition presents a particular concept of wilderness where humans are viewed as largely separate from nature. Tucker (1982) viewed this definition of wilderness as “an attempt to create what are essentially ‘ecological museums’ in scenic and biologically valuable lands” (p. 131).

This conceptualization of wilderness has also been reflected in international models of this concept (e.g. Russia’s zapovedniks or “forbidden areas”, Australia’s wilderness world heritage areas, and mapping of Britain’s wild areas; Bentrupperbäumer, Day, & Reser, 2006; Carver, Evans, & Fritz, 2002; Dawson & Hendee, 2008). In New Zealand, for example, wilderness is even more primitive with stock use and human structures strongly discouraged; wilderness areas in this country are basically developed so that day visitation is practically impossible (Higham, Kearsley, & Kliskey, 2000). Other concepts of wilderness are less rigid. Given

issues related to the vastness, accessibility, and native resource use of wilderness areas in Alaska, for example, motorized access, cabin maintenance, and subsistence use are legislatively allowed in these areas based on the 1980 Alaska National Interest Lands Conservation Act (Dawson & Hendee, 2008). More recent conceptualizations of wilderness around the world also take these types of social concerns into account, such as Canada's Vuntut National Park that not only gives native people subsistence rights, but also allows for cooperative and collaborative management (Sherry, 1999).

Despite the working definition and legal classification of the Wilderness Act, people continue to define wilderness in various ways (Dawson & Hendee, 2008). Shultis (1999), for example, explored how closely the New Zealand public's definition of wilderness aligned with the definition of the New Zealand Wilderness Policy (similar to the U.S. Wilderness Act) and found significant differences, confirming a duality of perceptions where wilderness exists both as a political and popular concept. Recognizing this variety of wilderness definitions held by individuals, researchers have attempted to develop typologies based on these definitions. As early as 1946, for example, MacKaye noted that there exist "two poles in the sphere of outdoor recreation living: a pole of intensive recreation for the gregariously-minded many, and a pole of extensive recreation for the solitary-minded few" (p. 3). MacKaye (1946) thought that wilderness users fell on the solitary side of this sphere, but other studies have found that distinction to be too simplistic. Catton (1969) recognized that wilderness user motivations vary greatly and developed a spectrum categorizing wilderness users from utilization to preservation motivations. Stankey (1973) developed a wilderness purism scale based on the notion that recreationists with high purist tendencies would value experiences, such as solitude and non-motorized

transportation, that are more in line with the Wilderness Act. This scale, which according to Shafer and Hammitt (1995) describes an "attitudinal orientation toward an ideal", consists of 14 resource characteristics derived from the Wilderness Act (p. 16). Users with distinct levels of purism may differ in awareness and preferences of resource impacts and social conditions (e.g. solitude).

Stankey and Schreyer (1987) found that users of wilderness areas have become more purist, supportive of use restrictions, and in favor of more preservationist-oriented experiences as opposed to consumptive uses. More recent studies, however, have contradicted these findings. Hall, Seekamp, and Cole (2010), for example, studied wilderness users in Oregon and Washington (U.S.) and found that regardless of how purist a user was, restrictions were not overwhelmingly desired because people preferred individual freedom as opposed to regulations on use. This suggests an interesting paradox about wilderness where people may desire experiences such as solitude, but do not endorse direct regulations required to ensure these experiences (Hall et al., 2010). These contradictions may be understood by exploring stakeholder definitions of wilderness and the implications for managing natural spaces.

There are reasons why managers would want to understand stakeholder perceptions of wilderness. Identifying the level of purism among individuals may be beneficial for monitoring the state of a wilderness resource because people "with well-developed attitudes toward the resource (purists) can provide the level of specificity needed in the selection of resource indicators used to monitor the health of recreational experiences in wilderness" (Shafer & Hammitt, 1995, p. 28). In addition, manager perceptions of wilderness are likely to be different from those of users and other stakeholders because managers may tend to consider

more heavily the objective qualities of wilderness (i.e. legally defined) as opposed to subjective values held by users (Shin & Jaakson, 1997). Subjective values are defined as a type of social cognition that functions to facilitate adaptation to environments (Homer & Kahle, 1988). These values are shaped by sociocultural and socioeconomic experiences, and they influence attitudes and other cognitions associated with particular concepts or objects (Manfredo, Teel, & Bright, 2004). Catton (1969), for example, found that individuals on the preservationist end of his utilization–preservation spectrum were more highly educated and likely to live in cities. Likewise, Tucker (1982) called wilderness areas “parks for the upper-middle class” (p. 140). Understanding differences in stakeholders and their definitions and values associated with wilderness areas is important in the context of collaborative processes because recognizing any contradictions in these cognitions may help explain any difficulties in achieving compromise among participants.

This study builds on this previous research by using the collaborative WBMP process in the Tracy Arm-Fords Terror Wilderness area as a case study example to address three research questions. First, how do commercial tour operators, local residents, and agency personnel define and value wilderness? Second, what are the opinions of these stakeholders regarding the collaborative WBMP for managing recreation in this wilderness area? Third, to what extent are these opinions about the WBMP reflective of their perceptions of wilderness?

METHODS

Study Area and Context

Tracy Arm-Fords Terror Wilderness is a 653,000 acre protected area in southeast Alaska located off Stephens Passage about

50 miles southeast of the city of Juneau (Figure 1). This wilderness is managed by the U.S. Forest Service as part of the Tongass National Forest and includes two narrow and deep granite-walled fjords, Tracy and Endicott Arms, both of which contain active tidewater glaciers. At the head of Tracy Arm are the twin Sawyer Glaciers (North and South), and at the head of Endicott Arm are the twin Dawes Glaciers (North and South). Both of these fjords are approximately 30 miles in length with 20% of the area covered in ice. Both are also home to seals and other wildlife such as bears, whales, and Dall sheep (U.S. Forest Service, 2003). Despite these similarities, vessels are sometimes forced to divert to Endicott Arm because navigational challenges such as ice conditions can be more common in Tracy Arm.

Given this protected area’s wildlife viewing opportunities and tidewater glaciers, it is a popular destination for people arriving by cruise ship, and tour boats offering full-day tours are also common (Dugan, Fay, & Colt, 2007). Tours operating in this area also accommodate some independent visitors who are not associated with the cruise industry. To capture the cruise market, some operators have opted to pre-sell tours on board and collect clients directly from cruise ships to allow the necessary travel time to both Tracy and Endicott Arms (Dugan et al., 2007). Limits on visitation by cruise ships to nearby Glacier Bay National Park have increased the volume of large vessel traffic visiting these two fjords, as many cruise ships are now using this area as an alternative to Glacier Bay (U.S. Forest Service, 2003). Other than cruise ships and tour boats, the area is also popular for smaller boat operators, charter and private yachts, kayakers, and other wilderness recreationists and enthusiasts (Dugan et al., 2007).

Although Tracy Arm-Fords Terror Wilderness is a federally protected wilderness

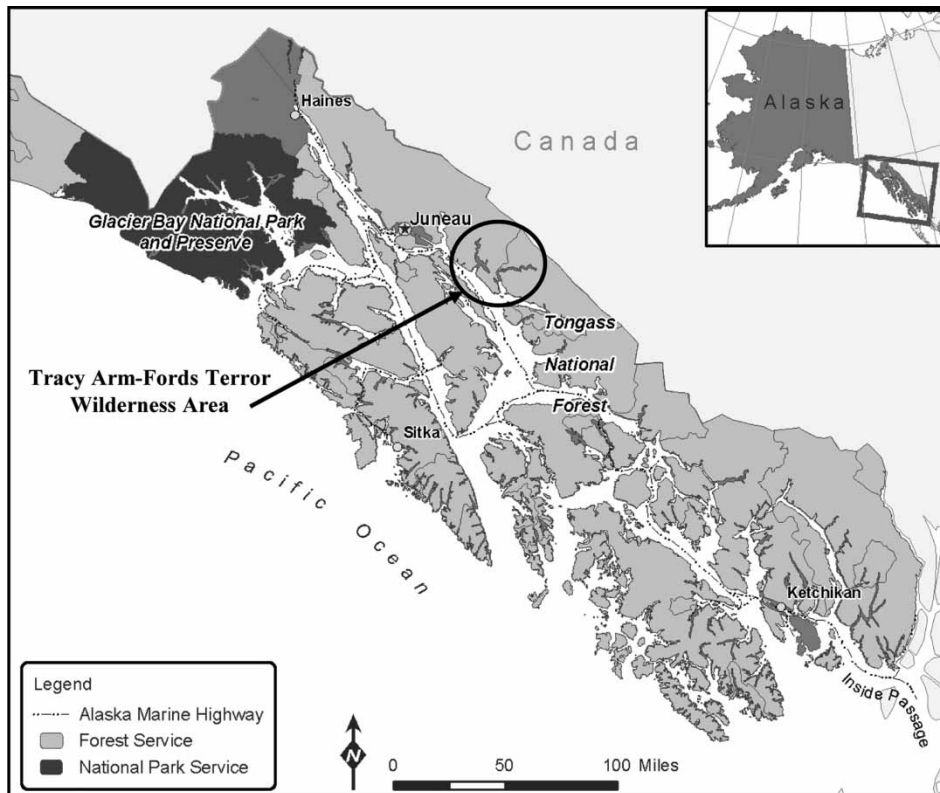


Fig. 1. Map of Study Area

Source: Adapted from Pomeranz et al. (2013a, 2013b) and Zegre, Needham, Kruger, and Rosenberger (2012).

area, most visitors do not enter the national forest and instead remain on boats. In contrast to Glacier Bay National Park where the U.S. Park Service has regulatory control over the waterways, the U.S. Forest Service has no regulatory control over the water, only the uplands of Tracy Arm-Fords Terror Wilderness. The State of Alaska maintains jurisdiction over the waterways although it has not exercised much regulatory action with respect to vessel behavior in the area. Some aspects of the environment are regulated by other agencies such as the National Oceanic and Atmospheric Administration that oversees protection of endangered wildlife and mammals, and Alaska's Department of Environmental Conservation that oversees water quality standards.

Some regulations concerning ships in Juneau's port and the surrounding waters have been partially supported by citizen action given that the U.S. Forest Service has no jurisdiction over the water and, therefore, little managerial control over operator behavior. Regardless, this agency has been attempting to facilitate implementation of the collaborative and voluntary WBMP with the cruise industry and other commercial operators and stakeholders in this area since 2007 (Neary & Griffin, 2008). The WBMP were inspired by the Tourism Best Management Practices (TBMP) that were developed in 1997 by the City and Borough of Juneau, tour operators, the cruise industry, and transportation services. The TBMP (2009) contain codes of conduct for

minimizing negative environmental and social impacts of visitation in the Juneau area. Similarly, the WBMP (2011) process is “intended to minimize the impacts of tourism and vessel operations... in a manner that addresses both concerns for natural resources and operators’ concerns for safety and passenger service”. Major categories of guidelines in the WBMP include preserving quiet (e.g. limit announcements to cruise passengers to five minutes), maintaining clean air (e.g. improve emissions monitoring), protecting wildlife (e.g. comply with the Marine Mammal Protection Act), preserving solitude (e.g. vessels with 250 passengers or more should try not to use Endicott Arm), communication (e.g. use WBMP blog to report ice conditions), and keeping the WBMP process active (e.g. use WBMP in employee training). Participants meet annually in Seattle, Washington to discuss issues from the previous season and update current practices. In addition, operators are encouraged to provide feedback to wilderness rangers who frequent the area. The WBMP process is still in its infancy with new stakeholders recently becoming involved, such as cruise ship pilots and some environmental organizations.

Data Collection

A qualitative approach was used for addressing this article’s research questions. Qualitative techniques are useful for exploring and describing elements of a problem in depth and detail, and examining situations with characteristics that may not be easily represented in numerical format (Leedy & Ormrod, 2010; Patton, 2002). This research was conducted using qualitative semi-structured interviewing or “conversations in which a researcher gently guides a conversational partner in an extended discussion” (Rubin & Rubin, 2005, p. 4). Semi-structured interviewing often uses an interview

schedule, which is a collection of questions and topics in the form of a guide that the researcher wants to cover (Bernard, 2006). Three slightly different schedules were created for tour operators and cruise line representatives, agency personnel, and local residents because a few questions were specific to the type of stakeholder interviewed (e.g. how long they operated tours (operators and cruise lines only) and how long they worked at the agency (agencies only)). Questions addressing perceptions of wilderness and the WBMP, however, were identical across these schedules (e.g. “what does wilderness mean to you” and “in what ways has implementation of WBMP positively or negatively affected the environment of the Tracy Arm area, policies and regulations, the local economy, and people in communities such as the Juneau area, if at all”). Semi-structured interviewing allowed the researcher to follow leads, ask additional probing questions, and let the interview take its course. The schedule is only intended as a guide, not an explicit set of questions that each respondent must answer (Bernard, 2006). Interviews ended when no new information was forthcoming (i.e. saturation point).

A total of 28 interviews were conducted in August and September 2010 (Table 1). This is a relatively large number of participants for a qualitative study involving semi-structured interviews, and none of the individuals declined after being asked to participate (Bernard, 2006; Patton, 2002). Interviews lasted between 20 and 90 minutes, averaging approximately 50 minutes. Interviews were conducted with direct stakeholders (i.e. involved in guideline creation, management of the area, or directly impacted by the WBMP) in the Juneau–Douglas area in respondent homes or offices, aboard vessels, at local coffee shops, or over the telephone.

The sampling technique used for selecting participants was a combination of purposive

Table 1. Interview List of Stakeholder Participants

Pseudonym	Interview length	Role
<i>Cruise representatives</i>		
Chester	48 minutes 27 seconds	Cruise industry representative
Abe	1 hour 18 minutes 3 seconds	Cruise ship pilot
Herbert, Calvin, Sarah	32 minutes 45 seconds	Captain, Crew, 40-passenger cruise (group)
Ben	43 minutes 49 seconds	Director, local branch midsize cruise company
<i>Smaller tour operators</i>		
Ted	34 minutes 14 seconds	Catamaran manager
Warren	23 minutes 13 seconds	Helicopter tour employee
John	48 minutes 24 seconds	Captain; 24-passenger vessel
Elizabeth	47 minutes 40 seconds	Owner, day boat tour
Thomas	41 minutes 17 seconds	6-passenger sailboat owner and operator
Hayes	43 minutes 12 seconds	Kayak tour guide
Louisa	31 minutes 36 seconds	Owner, kayak tour guide company
Andrew, Rachel	51 minutes 13 seconds	6-passenger yacht owner and operator (group)
James	30 minutes 46 seconds	10-passenger yacht operator
William	51 minutes 47 seconds	6-passenger yacht owner and operator
Zachary	1 hour 22 minutes 22 seconds	6-passenger sailboat owner and operator
Franklin	21 minutes 17 seconds	6-passenger vessel owner and operator
Wilson	34 minutes 11 seconds	Naturalist and tour guide
<i>Agency representatives</i>		
Grover	38 minutes 6 seconds	Former U.S. Forest Service ranger
George	53 minutes 6 seconds	U.S. Forest Service wilderness manager
Dolley	18 minutes 32 seconds	U.S. Forest Service intern
Anna	1 hour 9 minutes	U.S. Forest Service employee and whale tour naturalist
Martin	1 hour 3 minutes 8 seconds	U.S. Forest Service wilderness ranger
<i>Local residents</i>		
Martha	29 minutes 4 seconds	Juneau Bed & Breakfast proprietor
Abigail	1 hour 13 minutes 23 seconds	Juneau resident, former tour contractor
Grant	51 minutes 2 seconds	Grassroots attorney for environmental organization
Hannah	52 minutes 1 seconds	Juneau Visitors Bureau employee
Julia	50 minutes 15 seconds	Alaska native elder
Millard	48 minutes 3 seconds	Manager, local native tourism corporation

and snowball (i.e. respondent-driven) approaches. Purposive sampling is a non-probability judgment sample that is useful for identifying respondents who have specific attributes that the researcher is interested in studying (Bernard, 2006). In this study, commercial operators were selected based on their direct involvement

in the WBMP process and according to other attributes such as operator type (e.g. flightseeing, sport fishing, sightseeing, adventure tours, and marine charters) and whether the service is locally owned and operated. U.S. Forest Service personnel were also selected purposively and consisted of informants who work or previously

worked in the area as resource managers or wilderness rangers and have been involved in the WBMP process. Interviews with local residents and users of this wilderness area were useful for gathering information on resident perspectives of the area and its management.

Most respondents were identified from internet searches, past research, and a WBMP mailing list containing people who were still available or living in the area (Janson, 2008; Zegre et al., 2012). The WBMP mailing list was provided by the U.S. Forest Service and was up to date as of January 2010. Discussions in June 2010 with the U.S. Forest Service ranger responsible for convening meetings helped to identify respondents who were still involved in the process, and all potential respondents were contacted for interviews.

Snowball or respondent-driven sampling was also used for locating other stakeholders not initially contacted. In snowball sampling, the researcher asks respondents to recommend anyone who the researcher should interview (Bernard, 2006). This technique yielded eight interviews bringing the total number of interviews to 28 for as close to complete coverage of those directly involved in the WBMP as possible. In addition, the final few interviews revealed little new information, indicating that a saturation point was starting to be achieved (Bernard, 2006). Interviews were digitally audio recorded and transcribed verbatim. To preserve anonymity, all respondents were given pseudonyms (e.g. *John* and *Hannah*).

Data Analysis

According to Rubin and Rubin (2005), the goal of qualitative data analysis is “to discover variation, portray shades of meaning, and examine complexity . . . by portraying it in the words of the interviewees” (p. 202). Through an immersive analysis of interview content, the data were examined using

inductive coding, which allows themes to arise from the data through iterative close readings of transcriptions (Bernard, 2006). Coding refers to applying a label to a segment of text relating to an identified theme or category. Typically, analysis of qualitative data involves two stages – coding transcripts to identify themes or analytic concepts, followed by comparing and linking emergent themes or concepts across respondents (Rubin & Rubin, 2005). This second step also involves comparison with other concepts and issues identified in the literature.

An open coding process was used where thematic coding occurred as interviews were systematically transcribed. This resulted in numerous broad themes or codes, not all of which were relevant to this article’s research questions. Subsequently, through an axial coding process, these codes were refined, distilled, and organized. Axial coding involves the disaggregation of broad themes or codes, and relating them to each other (Strauss & Corbin, 1998). As part of this axial coding process, both free (i.e. independent) and hierarchical (i.e. nested) codes were revealed. A free or independent code represents a theme that may not contain any subthemes or related codes, whereas a hierarchical or nested code can represent a subtheme or code of a related broader theme or code. These main themes and codes are listed as subsections in the following results section and are illustrated by select verbatim quotes from respondents.

RESULTS

Definitions of Wilderness

Respondents’ definitions of wilderness usually involved some degree of purism, as interviewees frequently employed common words associated with wilderness such as “pristine” and “solitude”, and citing

attributes such as “untrammled” wildlife, quietude, and landscapes as requisite for a wilderness experience. Distances from human construction and crowds were also commonly identified as a required characteristic of wilderness. For example, *Louisa*, a kayak tour operator, defined wilderness as “pristine and untouched, and just an area that we could get away from crowds of people that’s off the beaten path and wild with animals”.

Many interviewees stated language from the 1964 Wilderness Act as part of their definitions. In fact, many agency personnel and some small operators directly (and possibly unconsciously) cited this Act as representative of their personal definition of wilderness. Wilderness is cited in this Act as a place “where man himself is a visitor who does not remain”. *George*, a U.S. Forest Service manager, echoed this sentiment in his definition of wilderness:

It [wilderness] is not just a place we go for our own selfish interest, but it is a place we should go and think... I am a visitor here and how should I be conducting myself in a way that really allows the animals and the soils and the waters and the air to function as if I were not here.

One of the most succinct definitions of wilderness was provided by *James*, a 10-passenger yacht captain, who directly stated that it is “the congressional statute”.

Some larger operators and cruise industry affiliates, however, were less purist or rigid in their definitions. For example, *Chester*, a cruise industry representative, stated that wilderness is “something that is quiet and somewhat solitude, somewhat nature-bound, somewhat calming, and soothing”. Although citing some of the same attributes as other respondents (e.g. solitude), he indicated that wilderness only needed to “somewhat” embody these characteristics. Cruise ship pilot *Abe* expressed an opinion contrary to most respondents, explaining that he felt

it was more than acceptable to have large numbers of people in a wilderness area at once because the most important characteristic of wilderness is that people experience these areas. He stated:

What is the purpose of wilderness areas, but to make it available so people can see it, and where you get the biggest bang for your buck [is] 3,000 people on a cruise ship that is run by professionals... why would you not want vessels to go and see the wilderness?

This opinion is contrary to many who described solitude and distance from people as requisites for wilderness. Attitudes such as *Chester’s* and *Abe’s*, therefore, differed from the majority of respondents.

The Study Area as Wilderness

Although most respondents identified Tracy Arm or Endicott Arm as places where they can have wilderness experiences, many noted that opportunities to experience wilderness in the area are currently threatened. As *Hayes*, a kayak tour operator, stated: “compared to some of the other wilderness areas we go to, Endicott [Arm] is becoming less of an opportunity for us to have those wilderness solitude moments”. For many respondents not affiliated with cruise lines, large cruise vessels and increasing vessel traffic in general were often identified as the major threats to wilderness characteristics of this area. Although the increase in small vessel traffic to the region was noted, many stakeholders cited cruise ships as the most significant threat to wilderness opportunities. According to *Franklin*, a six-passenger vessel operator:

It [Tracy Arm-Fords Terror Wilderness] is mostly a wilderness experience. But, it is seriously interrupted when a cruise ship intrudes... there is a huge difference between a cruise ship that is hundreds of feet long and a couple hundred feet high, and is at times polluting the air in addition to the water, to a small yacht or small

cruising boat; the effect is totally different ... my preference would be that cruise ships never enter Endicott Arm.

A minority of respondents who had the most purist definitions of wilderness explained that the wilderness characteristics of the Tracy Arm-Fords Terror Wilderness area are already completely lost. *John*, a 24-passenger vessel operator, stated:

I think it is unrealistic and really unfair to ask somebody who uses the main arms of Endicott and Tracy in accessing the wilderness area whether or not they are having a valid or good wilderness experience. That is not a wilderness experience. It is not until you get off the boat, and hike far up one of the side fjords ... then you can talk about the wilderness experience.

It is clear that perceptions of crowding and vessel traffic in both Endicott Arm and Tracy Arm have seriously debased the wilderness experience for *John*. Local Juneau resident *Abigail* explained further that a wilderness area such as Tracy Arm lures visitors precisely because it is accessible to cruise ships. Perceived crowding and use of this congressionally designated wilderness by cruise ships has, for *Abigail*, destroyed the wilderness character to the point that non-designated settings may actually provide a more "pure" wilderness experience:

Tracy Arm Wilderness ... by the very nature of the designation they [visitors] want to go, but the way in which they go destroys the value of the "W" ... sometimes you can get better wilderness by being away from the capital "W;" in a sense ... the people who want a really real nature experience are not on the cruise ships.

For *Abigail*, a "really real" wilderness experience is no longer achievable in this area.

A small number of respondents, however, felt that wilderness and related experiences are not necessarily threatened by use in Tracy or Endicott Arms. For example,

cruise ship pilot *Abe* explained that he did not think that use of these fjords would increase substantially, and vessel usage is no longer a threat to the region:

The system is kind of self-limiting just by where you can put a ship every day ... if there is a graph that shows increase usage, I do not see that thing continuing; there are only so many ships that you can get into this pattern.

Similarly, day boat operator *Elizabeth* stated, "I do not think the fjord is going to be overcrowded." *Ben*, a director of regional operations for a midsize cruise company, felt that the WBMP has actually improved the wilderness experience in Tracy Arm:

I think it [the environment of the area] is better, I do not think there is anybody, well, I do not believe there should be anybody around that table who would say that it is worse ... I guess I do not have any major concerns because I think that we can continue to work progressively with the small operators and industry and U.S. Forest Service if they stay involved, which I hope they will, and come up with a general resolution. So from a wilderness environment and perspective, I think it improves that experience.

Perceptions of the WBMP

A majority of respondents were generally supportive of the WBMP as an approach for preserving or improving characteristics of this area, particularly in contrast to potential regulations. This perception was prevalent from small six-passenger vessel operators to large cruise ship operators. *Abe*, a cruise ship pilot, explained that government regulations in other areas are often too restrictive compared to alternatives such as the WBMP: "we do not want a bunch of hokey rules that jeopardize us ... we do not want to be restricted by saying 'oh you can't go here' ... there really needs to be an alternative like WBMP". *Zachary*, a six-passenger

sailboat charter operator, echoed these sentiments by explaining that operators who are familiar with the resource and social conditions of this area may be better situated to formulate codes of conduct: “government does not always have the right answer, but the guys doing this every day, we can probably nail the right answer because the government will more often than not miss the mark”. He also explained that “regulation would have to be written for probably the worst case scenario”, fearing that potentially larger or more irresponsible vessel operator behavior will force regulations that may limit operators such as himself, who may be behaving responsibly.

The voluntary WBMP provides an alternative to government regulation and an opportunity for stakeholders to actively participate in a decision-making process, as opposed to passively receiving mandated rules, as explained by cruise industry representative *Chester*:

In situations like this, voluntary is probably better than regulation because...for all those who participate... there is some ownership. It is not just somebody saying “you have to do this”... at the end of the day there is some pride taken in the fact that we have worked together to come up with these things and you are doing your best to honor them... that is why it is probably better than regulation.

Hannah of the local convention and visitor bureau expressed a similar opinion by describing pride that comes from a voluntary as opposed to mandated endeavor:

I think operators take pride in that program and it is self-regulated. So, they are imposing good practices of their own, which I think is better when you own it as opposed to somebody saying this is how you will operate. Now it becomes something that you want to be a part of.

Former U.S. Forest Service ranger *Grover* explained that given the lack of jurisdiction

by this agency in the area, he would only advocate for voluntary guidelines, describing the original conception of the WBMP:

I did not want to be put into a position enforcing something in an area where I really had no jurisdiction or authority, or very questionable jurisdiction or authority. There are some things that we could do... but some of the other things, they are voluntary guidelines [and] I would not have advocated for making them mandatory, regulation, or law.

In contrast, local resident and attorney *Grant* felt that if voluntary guidelines are unable to protect wilderness, which legally the U.S. Forest Service is mandated to protect, then this agency should advocate for regulation: “they [U.S. Forest Service] can’t try to influence legislation, but policy, they can do that and they can identify the issue and they can create forums for addressing it”. He also explained:

When congress defined wilderness, they made it clear what it was supposed to include and not include. And, it was not to include mechanized transportation. Now we have an unique situation here that to protect some of these uplands it makes sense to allow mechanized use of the water, boats... that is considered okay as long as the level of use is compatible with maintaining the area’s value. And it is not at all clear that they [WBMP] are achieving that.

He also faulted this agency for not fighting for jurisdiction at the outset of the creation of this wilderness area:

Given the lack of clarity in terms of jurisdiction, the U.S. Forest Service gave it up. They gave it up. I think they had a reasonable claim that the tidelands and submerged lands, particularly in wilderness waters, were not going to be given up.

Six-passenger vessel operator *Thomas* explained that non-compliant vessels in the

voluntary WBMP-managed environment (as opposed to a regulatory environment) may take advantage of more responsible vessels:

We definitely feel that given the effort and expense that we go through, it definitely would be unfair for somebody else... to be taking advantage of it and not going through the same expenses and so on... it would be unfair for us to have to carry the burden on that.

Local resident *Abigail* expressed a desire for both regulation and voluntary codes of conduct: "I am skeptical of WBMP. I think that if people operate with integrity that they can be valuable, but I think that regulation is important as well." Wilderness ranger *Martin* had a similar opinion and explained that "some things are better handled through regulations and other things could be better handled or at least adequately handled through volunteer efforts".

For vessels and companies that may have been accused of irresponsible behavior in the past or suffer from a negative public image, involvement in the WBMP was frequently cited as an opportunity to ameliorate a damaged image. As kayak tour operator *Hayes* noted:

I think it is [WBMP participation] a good first step and I think from the publicity side of cruise ships that are coming in and out of there I think that is a good angle if they are getting really bad publicity... they are going to change their practices to benefit their public image.

Former U.S. Forest Service ranger *Grover* stated that the WBMP should be enticing for businesses due to advertising benefits: "part of the reward for these companies involved is that we publish in the paper that these companies subscribe to the WBMP, and they are free to use that fact in their advertising".

Limitations of the WBMP

Pervasive throughout interviewee responses was recognition that the WBMP alone would not be sufficient to address future effects and adequately ensure the wilderness character of this area. Some of the most fervent support for regulations only came from respondents with the highest degree of wilderness purism. As *James*, a small yacht charter operator stated: "some things are too precious, if ultimately... we as small boat operators or large boat operators, if we had adverse impacts on the area overall, I would rather see everybody get kicked out". He impassionedly asked, "what is going to be there for your kids? If we allow some of these places to literally go without regulation, what is going to be there for you? For your children?" His support for a Tracy Arm-Fords Terror Wilderness area that is devoid of commercial operators, however, was not a common sentiment. *Grant*, an attorney for a local non-profit environmental organization, gave one explanation for why some stakeholders such as *James* feel that the WBMP are already insufficient: "they are volunteer based... let's be goody-good neighbors; does it work? Maybe to some degree it has improved things. Has it resolved the issues? No... because you have some actors who will always put their dollar ahead of everybody else".

Instead of the more direct support for regulations or skepticism toward the WBMP as voiced by *James* and *Grant*, support for heightened regulatory control was more frequently expressed on the condition that use of the area continues to increase substantially. This was not the preferred outcome for most respondents, but was seen as a potentially unavoidable result due to perceived limitations of the WBMP, such as its inability to address future growth of vessel traffic in the area. As six-passenger vessel operator *William* stated, "if there is a substantial continued growth in usage I

think it inevitably will become a permit area. If the growth stabilizes at what it is today, then I think a voluntary agreement just might work”.

Many respondents were concerned that future use might impede the wilderness character of this area since, for many, wilderness experiences in the area are already affected by increasing vessel traffic. Six-passenger sailboat captain *Thomas* illustrated the need for some regulatory intervention if his perception of wilderness is to be protected: “if we start seeing violations or we start losing some of the pristine character of the area, then I would fully support active law enforcement”. *Franklin*, a small boat operator, echoed this statement by noting that despite his preference for a non-regulatory environment:

I think it is going to get worse. And it [regulations] is not something that I would prefer, but it is a special place, and it is going to deteriorate seriously without someone having more control than they have now.

Frequently, however, respondents’ recognition of potential limitations of the WBMP in protecting the very wilderness definitions and qualities they valued was expressed as tensions and contradictions throughout the interview process. One example of these contradictions in opinions about the WBMP was evidenced in an interview with small yacht charter operator *Andrew*. When initially asked what he would like to see in Tracy-Arm Fords Terror Wilderness, he stated: “I would like to see cruise ships not allowed in there [Tracy Arm]. Anything over some footage, maybe 200 feet, not allowed in there. That would be nice.” This seemed to imply the use of formal restrictions or regulations, as indicated by the phrase “not allowed”. A few minutes later, however, he was asked a follow-up question about how cruise ships could be prohibited from the area without regulation. He responded:

I wouldn’t say not allowed, I would like to see them negotiate to where they do not go in. Through the best management practices ... I think something like I guess where everybody decides well we are going to do this and okay I will give you this, I can do that, would be a much better way to solve it.

At this point, *Andrew* seemed to believe that cruise ships would willingly and voluntarily ban themselves from the area. When asked if he was optimistic that this would be a successful tactic and the WBMP would work to achieve his goals, he replied: “they might, yeah, but not really”. *Andrew* seemed to hold contradictory views where he did not support regulations, but without regulations his preferred scenario most likely could not exist. Among operators, these contradictions between regulations versus voluntary codes of conduct seemed to reflect a tension between defending personal freedom and protecting wilderness characteristics and values.

Among agency personnel, however, a different type of tension was evident between protecting wilderness characteristics through greater agency power versus protecting the community building goals and outcomes of collaboration associated with the WBMP. Wilderness ranger *Martin* explained why he is reluctant to prefer regulatory measures over the voluntary WBMP or vice versa:

Why am I not just saying, yes, of course I would want regulations? I suppose, certainly, that would be best, but this sure has been fun ... one of the reasons I say that is because we have built such a strong sense of community ... I would be surprised if you did not come across the sentiment from the smaller and midsize operators that they feel part of and they feel connected to the stewardship of the place.

He implied that as agency personnel, it might be expected that he should support regulations that would ameliorate the

jurisdictional incapacity of the U.S. Forest Service, but regulatory action may undo the fruits of collaboration. He continued, "I do not have a clear answer...to be honest with you, but it seems like regulation would achieve our goals...my only hesitation is that making regulations could alienate some of the allies that we have had." Among interviewees of this agency, their definitions and values of wilderness were reflective of the Wilderness Act, but empowering themselves to fulfill the mandate of this Act through regulation is not necessarily their desired outcome. Even agency members such as *George*, who would impose regulations if he could, recognized drawbacks to mandatory action:

If I had a wand I would wave it [and give the U.S. Forest Service jurisdictional control] certainly, because that would give me tools in my toolbox that do not exist now. There are ramifications to that though. If we could make rules, we would be less collaborative because we would have the authority to make those rule changes.

DISCUSSION

This article examined definitions and values of wilderness held by commercial tour operators, local residents, and agency personnel, and the extent that these may have been reflected in their perceptions of the WBMP in the Tracy Arm-Fords Terror Wilderness area in Alaska. Most respondents' definitions of wilderness contained some aspect of purism, a concept proposing that purist individuals should value wilderness experiences and managerial decisions aligned most closely with tenets of the 1964 Wilderness Act. Language such as "solitude" and descriptions of land without crowds and motorized equipment frequently arose, closely mirroring this Act. In fact, the Wilderness Act itself was at times quoted verbatim, particularly by wilderness managers and

small commercial operators. Given that wilderness managers are trained in the use of tools derived from this act (e.g. Wilderness Attribute Rating System), this finding is not unexpected. Managers have also been found to differ from other stakeholders in various ways, including their perceptions of the quality of wilderness resources (Shin & Jaakson, 1997).

Larger tour operators and cruise industry personnel, however, tended to be less purist than agency personnel and small operators, which may be a reflection of the business models of these large operations whose scale may be seen as out of place in wilderness where solitude often implies distance from large groups. There may be a tension between the largely profit-driven goals of these operators that "encourages a catering to customer comforts" versus what managers deem to be permissible in a "pure" wilderness setting (Hendee & Dawson, 2002, p. 358).

This article also examined whether the Tracy Arm-Fords Terror Wilderness was a place where respondents felt that they could achieve a wilderness experience. Similar to findings of Shafer and Hammitt (1995) whose purist respondents were concerned about "human impacts", "natural processes", "solitude", and "management confinement" of wilderness areas, respondents here were also concerned about the wilderness characteristics of the area (p. 26). Except for cruise industry representatives, many other stakeholders interviewed felt that the wilderness character of the fjords was threatened by large vessel use. For the minority of interviewees with the most purist views, considering this designated wilderness area as "wilderness" was viewed as nearly akin to an oxymoron. These findings are comparable to Hall et al. (2010) who found that remoteness and solitude were the most desired characteristics of wilderness experiences by purist users, but also those aspects that were the least frequently attained.

Overall, most interviewed stakeholders were generally supportive of the voluntary and collaborative WBMP as opposed to potential mandatory regulations. Most respondents, especially larger operators and cruise ship personnel, appreciated the freedom that the WBMP allow and the ownership they maintain over the process because they are able to negotiate rules of their behavior in a way that may not jeopardize their businesses. Small operators were also supportive of the WBMP and expressed negative opinions about any possible capability of the government to designate appropriate regulations. Some of these views may be derived from a fear of being “locked out” of places such as nearby Glacier Bay National Park where operators are rarely able to obtain entry permits into the park. One of their only alternatives for viewing tidewater glaciers is in the Tracy Arm-Fords Terror Wilderness. The convergence of both large and small operators in support for the WBMP should lend some optimism to U.S. Forest Service facilitators that continuing with this voluntary model may be an appropriate method for management in a location where they do not have direct regulatory power. There was some disagreement among operators regarding whether or not the WBMP conferred more or less responsibility on operators engaging in depreciative behaviors, but there was general agreement that this process provided good publicity for participants.

Despite this support for the WBMP, there was some recognition that these practices may be insufficient in curtailing major issues and future effects to the wild community of this area. Some of the most purist respondents even noted a self-sacrificing willingness to be prohibited from this wilderness area to preserve the ecological characteristics of this area. More frequently, however, support for regulations was conditional; purist respondents stated that if the “pristine” character of this area

significantly deteriorates in the future, they would support regulations such as prohibition even though this is not their desired outcome. These individuals hold a sincere respect and passion for the area, and were willing to compromise some of their own freedoms in the event that impacts become uncontrollable through voluntary codes of conduct. These attitudes toward regulations reflect the rationalization for regulation proposed by Nash (2001):

Wilderness recreation is... a game that cannot be played at any one time and place by more than a few people. Solitude is not easily shared. Respect for the quality of the wilderness experience argues for acceptance of regulation... inconvenience and frustration are inevitable. But the rules at least ensure that when one's turn arrives wilderness enthusiasts will find what they seek. (p. 341)

Findings presented here are also consistent with those of Hall et al. (2010) who found that wilderness users with perceptions most closely associated with the Wilderness Act tended to be more in favor of regulations such as use limits. Support for regulations in Hall et al. (2010), however, was relatively weak, suggesting “when forced to choose, wilderness visitors including the most purist segment... prioritize[d] freedom over control and solitude” (p. 121). Findings in the present study are similar and suggest that most stakeholders would not prefer regulations. Although many operators recognized threats to the wilderness character of Tracy Arm-Fords Terror Wilderness, there was tension between personal ideologies that reject government interference and recognition that the wilderness definition they maintain may not be able to be upheld without government interference.

A reverse type of cognitive dissonance and discomfort arose in interviews with managers who recognized that as individuals tasked with managing wilderness,

jurisdictional and regulatory power might theoretically make their jobs easier. In a regulatory environment, however, these individuals would lose the fruits of collaboration and voluntary management, such as increased communication and understanding among groups. These findings point to contradictory recommendations for managers who wish to maintain wilderness conditions and the wild community, but recognize that stakeholders do not desire regulation. However, given that regulation is not an option for U.S. Forest Service managers who do not have jurisdiction over the waterways of the fjords, it is advisable that they continue investing in the voluntary WBMP to address wilderness management concerns. The voluntary WBMP that allow for stakeholder input in designing behavioral guidelines perhaps best satisfy the contradictory perceptions of stakeholders who desire wilderness experiences, but reject government regulation.

Understanding stakeholder perceptions associated with wilderness is a critical aspect of management (Dawson & Hendee, 2008). It should be encouraging to agency managers that many respondents demonstrated some aspects of wilderness purism that closely mirrored aspects of the Wilderness Act. A recognition that smaller operators tended toward more purist definitions of wilderness than did larger operators and cruise industry representatives may provide insight into potential conflicts or contradictions that could arise as the WBMP are monitored and revised. If problems occur, it may be helpful to understand that they could derive from different values and expectations of experiences in this wilderness area. Differing values among stakeholders present a possible barrier to successful collaboration because values are deeply held and shaped over the course of a lifetime (Manfredo et al., 2004; Wondolleck & Yaffee, 2000). It is important for mediators and managers of collaborative approaches

such as the WBMP to foster communication that recognizes shared goals for the resource beyond divergent values (Lauber et al., 2011).

Given that most respondents were supportive of the WBMP, the role of the U.S. Forest Service as facilitator should be upheld. Monitoring of social and environmental conditions, however, must occur to test the efficacy of the WBMP since there is some recognition among respondents that it may not be able to curtail future effects and the program is still in its infancy. Monitoring and evaluation are important parts of adaptable collaborative processes, and allow those involved to amend their practices in response to changing conditions (Wondolleck & Yaffee, 2000). Monitoring is also a component of collaboration that is frequently ignored, so it is important that the WBMP conveners attend to this recommendation because it will enhance their understanding of guidelines that require attention (Wondolleck & Yaffee, 2000).

Given that the methods in this research are qualitative and based on interviews with a sample chosen in a purposive (i.e. non-probability) manner, results may not be statistically representative of a particular population. These findings, however, may be analytically generalizable to other areas that are witnessing similar recreation conditions, particularly in areas where the managing agency has little direct managerial control (Yin, 2003). There may be commonalities in themes and findings that arose here with studies or situations in other locations that may suggest a general trend or theory with respect to voluntary codes of conduct and collaboration. In addition, results of this qualitative approach may aid in future development of survey instruments for quantitative studies that could be used for informing and refining the WBMP agreement for the Tracy Arm-Fords Terror Wilderness area. Although purism studies have typically focused on visitors to wilderness areas, the

sample in this study did not include visitors (e.g. recreationists), but rather commercial operators, managers, and local residents. Future research, however, should include these visitors and other potential stakeholders not identified or examined here (e.g. Juneau businesses that benefit from cruise passengers), and compare them to other stakeholders to provide a complete understanding of stakeholder perceptions of this wilderness area and its WBMP process.

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