# STAKEHOLDER PERCEPTIONS OF INDICATORS OF TOURISM USE AND CODES OF CONDUCT IN A COASTAL PROTECTED AREA IN ALASKA

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This article focuses on a collaborative approach for addressing impacts of watercraft-based tourism in Tracy Arm-Fords Terror Wilderness, Alaska. This approach is the Wilderness Best Management Practices (WBMP) and involves codes of conduct for managing use in this area. This article examines use-related indicators that stakeholders prioritize for inclusion in the WBMP and stakeholder motivations for complying with these codes of conduct. Interviews with tour operators, agency personnel, cruise industry representatives, and local residents showed that vessel use levels, noise, pollution, and impacts on wildlife (e.g., seals) were important social and environmental indicators. Economic and institutional indicators were considered to be less important and included opportunities for inclusive stakeholder communication. Motivations for compliance mainly involved self-interest reasons (e.g., company image, public relations), but some stakeholders were motivated by peer pressure, awareness, and a sense of stewardship.

Key words: Indicators; Codes of conduct; Use levels; Prism of sustainability; Stakeholders; Protected areas

## Introduction

Tourism is among the world's largest and most profitable industries (Lück, 2008; Weaver, 2008). Expanding tourism to new locations or increasing use levels in existing tourism settings, however, can create social (e.g., crowding, conflict), environmental (e.g., vegetation or coral reef trampling, wildlife disturbance), economic (e.g., increasing cost of living), and managerial or institutional impacts (e.g.,

pressures on facilities) (Manning, 2011; Shelby & Heberlein, 1986). Planning and management frameworks have been designed for understanding and addressing these impacts. These frameworks include the limits of acceptable change (LAC), visitor experience and resource protection (VERP), visitor impact management (VIM), and tourism optimization management model (TOMM) (Manidis Roberts Consulting, 1997; Manning, 2004).

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Common among many of these frameworks is the requirement of measuring a number of indicators to reveal standards or guidelines for acceptable conditions. Indicators are measurable and objective social, environmental, economic, and managerial variables defining experiences and settings (e.g., use levels, noise, wildlife impacts) (Manning, 2011). It has been suggested that approaches for selecting indicators and addressing impacts should be predicated on collaborative stakeholder processes that "integrate different perspectives and allow multiple views to be expressed and debated" (Robinson, 2004, p. 381). These processes include codes of conduct and regulatory standards that focus on indicators and conditions that stakeholders care about. However, given that many tourism areas contain a multitude of user groups and are governed by policies shaped by various agencies and interest groups, these processes can be difficult if stakeholders have competing views regarding appropriate indicators and conditions (Needham & Rollins, 2005; Shelby & Shindler, 1992). In addition, ensuring compliance with codes of conduct and standards can be challenging and may not occur as frequently as managing agencies desire (Quiros, 2007; Wiley, Moller, Pace, & Carlson, 2008). Among for-profit tour operators, for example, a tension can exist between desires of their clientele and the social, environmental, and managerial goals, indicators, and standards in codes of conduct (Hendee & Dawson, 2002).

This article focuses on a collaborative approach for addressing impacts of watercraft-based tourism in the Tracy Arm-Fords Terror Wilderness area in Alaska. This approach, initiated by the US Forest Service in 2007, is known as the Wilderness Best Management Practices (WBMP) and involves codes of conduct for managing use of this area's two narrow fjords by kayak tour operators, cruise ships, yachts, and other commercial charter vessels. This article examines: (a) use-related social, environmental, and economic indicators that stakeholders prioritize for inclusion in the WBMP, and (b) stakeholder motivations for complying or not complying with these codes of conduct designed for minimizing impacts to these indicators.

# Conceptual Background

Managing tourism use requires understanding social, environmental, and economic components of

the destination that can sometimes become debased by development and expansion; local cultures can undergo changes, natural resources can degrade, and economies can be subject to leakage (Manning, 1999). This process has been explained in a number of models, including Butler's (1980) tourist area life cycle that describes stages of tourism use in an area (e.g., evolution, development, stagnation, decline, rejuvenation). Doxey (1975) stated that resident attitudes toward tourism follow similar stages (e.g., euphoria, apathy, annoyance, antagonism). Given these potential impacts, Manning (1999) asked "how can the industry protect itself from its own excesses and act as a positive catalyst to sustain the values which are core to its future and that of the destinations which it targets?" (p. 179). One approach for addressing this issue involves selecting and managing indicators and standards that address potentially competing stakeholder values in a participatory manner. Indicators are conditions that stakeholders believe are important and need addressing in an area (e.g., crowding), whereas standards or guidelines are conditions that are considered to be acceptable or unacceptable for these indicators (e.g., less than 30% of residents should feel crowded by tourists). Managers may need to take action when monitoring shows indicator conditions violating their standards or guidelines (Manning, 2011).

According to McCool and Stankey (2004), indicators should have three roles: (a) help depict existing conditions of complex interdependent systems; (b) facilitate evaluation of the performance of management actions and policies implemented; and (c) alert managers about any impending changes in social, environmental, and economic systems. Indicators allow monitoring of a system by focusing on a few facets of that system. The "prism of sustainability" is one framework for understanding indicators (Cottrell, Vaske, Shen, & Ritter, 2007; Spangenberg, 2002). This prism has four dimensions—sociological, ecological, economic, and institutional (Fig. 1). According to Cottrell et al. (2007), the economic dimension "satisfies the material needs of humans," the ecological dimension recognizes the biological limits of the environment, and the sociological dimension concerns the "individual's need to live a dignified and healthy life" (p. 512). The institutional dimension is less commonly examined, but just as important and crucial for implementing goals defined

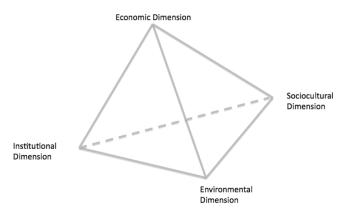


Figure 1. Prism of sustainability. Adapted from Cottrell et al. (2007) and Spangenberg (2002).

in these other dimensions (Spangenberg, 2002). In a study in Chongdugou, China, for example, the strongest indicators of local resident satisfaction with tourism were items in the institutional dimension (Cottrell et al., 2007). This institutional dimension refers to rules guiding societies such as government structures and capabilities, organizations, and mechanisms (Valentin & Spangenberg, 2000). The shape of this prism implies the importance of understanding and addressing links among these dimensions.

Many indicators related to tourism use have been suggested and studied (see Miller & Twining-Ward, 2005; Sirakaya, Jamal, & Choi, 2001; Vaske, Whittaker, Shelby, & Manfredo, 2002, for reviews). Donnelly, Vaske, DeRuiter, and Loomis (1998), for example, found that facility development, economic diversification, and the number of paying visitors were important economic indicators. Commonly studied social indicators include use levels, crowding, and noise (see Vaske et al., 2002, for a review). Soil erosion and compaction, vegetation trampling, litter, and wildlife impacts are commonly studied environmental indicators (e.g., Belnap, 1998; Cole, 2002). Institutional indicators have been examined less frequently, but examples include communication between stakeholders and managers (e.g., local residents to industry or agencies) or public involvement in decision making processes (Cottrell et al., 2007; Manning, 2011).

Selection of indicators can be achieved through various methods. Vaske et al. (2002) suggested that laws and policies, professional judgments of managers, biological research, and public involvement through survey research can inform selection. McCool and Stankey (2004) stated that selection should be a collaborative process that "represents the best possibility for revealing diverse, often competing, public interests...and is as much political and value based as it is scientific, more iterative than linear, and less private than public" (p. 304). In tourism, it is important to specify relevant social, environmental, economic, and institutional indicators; how stakeholders prioritize these indicators for measurement and monitoring; and guidelines or standards of quality for these indicators. Behaviors aligning with these indicators and standards can then be specified in the form of codes of conduct or best management practices.

One method for identifying and managing indicators and their conditions is through collaboration, which "implies 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" (Selin & Chavez, 1995, p. 190). Examples of collaboration are codes of conduct and best management practices. Codes of conduct are general statements that organizations and companies agree to and are expected to follow as one way of demonstrating commitment to minimizing impacts, and best management practices are typically more specific behavioral directives and guidelines to ensure fulfillment of this commitment (Ayuso, 2007). Codes of conduct and best management practices are beneficial because they can be less prone to lengthy and expensive litigation, less costly to implement and monitor, and allow flexibility in design and implementation (Wiley et al., 2008). If codes are internalized by a company or organization, they can hopefully become part of its internal culture and socialization (Malloy & Fennell, 1998). Effective collaborative and voluntary codes of conduct may also obviate the need for externally imposed rules and regulations (Zegre, Needham, Kruger, & Rosenberger, 2012).

Given the voluntary and collaborative nature of many codes of conduct in tourism (Ayuso, 2007; Rivera, 2004), exploring whether or not participants such as commercial tour operators are complying with the indicators and guidelines that they helped to select is critical for assessing the effectiveness of these programs (Zegre et al., 2012). Stakeholders may express concerns that voluntary guidelines are not being properly followed by operators whose own motives may compete with goals of the guidelines. Without compliance, voluntary indicators and guidelines become meaningless. Sirakaya (1997) listed two categories in compliance motivation theory-motivations based on economics and those not based on economics (e.g., altruism, self-interest, social pressure). Rational actor theory suggests that individuals make choices that maximize utility or benefits (i.e., their own needs) and minimize costs (Ritzer, 2007). This theory underscores the importance of the goals of the actor, scarcity of resources, and opportunity costs (i.e., costs of giving up other competing options) (Ritzer, 2007). In contrast, social motivations for compliance may derive from other issues such as personal attitudes and values, normative sanctions (e.g., peer pressure), and altruism (Dietz, Ostrom, & Stern, 2003; Sirakaya, 1997).

Studies on volunteerism, which may have similar motivations as the decision to comply with voluntary codes of conduct or best practices, have suggested that individuals volunteer to serve psychological functions such as to fulfill personal values, build knowledge, encourage personal development, develop career experience, enhance social relationships, diminish negative feelings such as guilt, or build self-esteem (Clary & Snyder, 1999; De Young, 2000). In other words, reasons for engaging in voluntary behaviors are not motivated solely by altruism (i.e., benefit the actor less than recipient) or selfinterest, but some combination of the two (Clary & Snyder, 1999; Piliavin & Charng, 1990). Research also suggests that self-interest, often considered a cause of environmental degradation, may actually

help to promote more environmentally responsible behavior (De Young, 2000). A study on tour operator motivations for compliance with the International Ecotourism Society's Ecotourism Guidelines for Nature Based Tour Operators found that internal motivations such as personal morality were the most important reasons for compliance, whereas noncompliance was motivated by lack of awareness about negative effects of noncompliant behavior (Sirakaya, 1997). In addition, Fennell and Malloy (1999) found that smaller tour operators have a higher level of education, smaller organizational size, and are more inclined to behave ethically than larger operators. Studies such as these suggest that, in some cases, the rational actor theory of behavior may be less explanatory than other motivations such as values and subjective judgments (Lindstad & Solberg, 2010).

For larger corporations such as cruise lines, however, researchers have suggested that "enlightened self-interest rather than altruism" motivates accountability and compliance (Piliavin & Charng, 1990, p. 57). Normative pressures can increase social responsibility because they lead company officials to perceive that socially responsible behavior is in a corporation's best interest and ethical decisions are made because they preserve company wellbeing (Piliavin & Charng, 1990). For voluntary indicators and codes of conduct that may lack legal punishments for noncompliance, extralegal sanctions such as diminished reputation, lower sales, guilt, or shame may further motivate corporations to abide by voluntary guidelines and standards (Furger, 2002).

This article focuses on the collaborative and voluntary WBMP developed for managing water-based vessel tourism in the Tracy Arm-Fords Terror Wilderness area in southeast Alaska. Since 2007, the US Forest Service has been facilitating implementation of these codes of conduct in this coastal protected area by engaging the cruise industry, smaller commercial tour operators, local residents, and other stakeholders in selecting indicators and developing guidelines or standards to mitigate negative social, environmental, and economic impacts of tourism use in this region. This article addresses two primary research questions. First, what use-related social, environmental, and economic indicators do these stakeholders prioritize for inclusion in the WBMP for this area? Second, what are stakeholder motivations for complying or not complying with these

codes of conduct designed for minimizing impacts to these indicators?

#### Methods

# Study Area and Context

This study focused on water-based tourism in the 653,000 acre Tracy Arm-Fords Terror Wilderness area, located 50 miles southeast of Juneau, Alaska (Fig. 2). Managed by the US Forest Service, this coastal protected area is a part of the Tongass National Forest and includes two narrow granite-walled fjords called Tracy Arm and Endicott Arm. These fjords contain the Sawyer and Dawes tidewater glaciers and are home to harbor seals, grizzly bears, Dall's sheep, and other wildlife. These characteristics attract many cruise ship tourists en route to and from Juneau, as well as independent travelers on full-day boat tours, midsize cruise ships, catamarans,

charter yachts, sailboats, or kayaks (Dugan, Fay, & Colt, 2007). Cruise ship entries into this area have risen substantially over the past decade following a 2001 lawsuit that restricted cruise ship visitation to nearby Glacier Bay National Park. To offer a tidewater glacier experience to visitors, many ships are now sailing directly into Tracy and Endicott Arms in lieu of Glacier Bay.

The majority of visitation to the Tracy Arm-Fords Terror Wilderness area occurs via water-based vessels; few visitors physically set foot on the land. This has been problematic for the US Forest Service because this agency only maintains jurisdiction over the uplands and not the waterways, so it has little managerial control over the behavior of cruise ships and other commercial operators (Neary & Griffin, 2008). This situation is in contrast to Glacier Bay National Park where the US Park Service has regulatory control over the waterways. The State of Alaska maintains jurisdiction over the waterways in

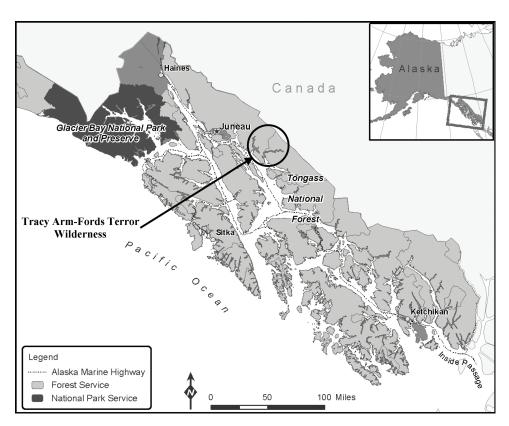


Figure 2. Southeast Alaska and the Tracy Arm-Fords Terror Wilderness area. Adapted from Zegre et al. (2012).

the Tracy Arm-Fords Terror Wilderness area, but it has exercised little regulatory action with respect to vessel behavior. Some aspects of the environment in this area are also regulated by other agencies such as the National Oceanic and Atmospheric Administration that oversees protection of wildlife and marine mammals, and Alaska's Department of Environmental Conservation that oversees water quality issues. Some regulations concerning ships in Juneau have also been partially supported by citizen action.

Given the lack of US Forest Service jurisdiction in the area, this agency has turned to implementing collaborative and voluntary best management practices as an alternative for managing use levels and impacts. Since 2007, this agency has facilitated development and implementation of the WBMP in coordination with commercial tour operators, cruise industry representatives, and environmental organizations (Neary & Griffin, 2008). The WBMP were inspired by and are an addendum to Juneau's Tourism Best Management Practices (TBMP), which are codes of conducted developed in 1997 as a collaborative effort among the City and Borough of Juneau, tourism operators, the cruise industry, and transportation companies to address social, environmental, and economic impacts of tourism in Juneau (TBMP, 2009; Zegre et al., 2012). Similar to the TBMP, the WBMP are designed to "minimize the impacts of tourism and vessel operations...in a manner that addresses both concerns for natural resources and operator concerns for safety and passenger service" (Neary & Griffin, 2008). Guidelines in the WBMP include preserving quiet (e.g., limit ship announcements to 5 min), maintaining clean air (e.g., improve emissions monitoring), protecting wildlife (e.g., compliance with Marine Mammal Protection Act), preserving solitude (e.g., vessels with more than 250 passengers should try not to use Endicott Arm), and increasing communication (e.g., use of WBMP blog to report ice conditions). Stakeholder meetings are held annually in Seattle, Washington, to discuss the previous season and make any necessary revisions to the WBMP guidelines.

## Data Collection

This research was conducted using a qualitative approach, which is useful for exploring issues in

depth and detail, especially those not easily represented numerically (Bernard, 2006; Strauss & Corbin, 1998). Data were obtained from semistructured interviewing or conversations where a researcher "gently guides a conversational partner in an extended discussion" (Rubin & Rubin, 2005, p. 4). An interview schedule or guide consisting of questions and topics to address was developed for each type of respondent tour operators, agency personnel, cruise industry representatives, and local residents (Bernard, 2006). The schedules were similar in content with questions addressing perceptions of indicators and guidelines for the WBMP and compliance with these indicators and guidelines (e.g., "what types of issues are most critical for inclusion in the WBMP," "what guidelines from these WBMP does your company follow when operating in the Tracy Arm area"). Semistructured interviewing also allowed the researchers to ask follow-up questions and let the interview progress along its natural course; the interview schedule was only a guide, not a list of formal questions that all respondents were required to answer (Bernard, 2006). Each interview was digitally audio recorded and transcribed verbatim. Interviews ended when no new information was generated (i.e., saturation point). Interviews lasted between 20 and 90 min (average of approximately 50 min) and were conducted in the Juneau-Douglas area in respondent homes, aboard vessels, at local coffee shops or offices, and on the telephone.

This study used nonprobabilty purposive sampling techniques for selecting respondents, which ensured that individuals representing relevant attributes were interviewed (Bernard, 2006). Respondents were mainly identified from a WBMP mailing list, internet searches, and past research (e.g., Zegre et al., 2012). This study was interested in direct stakeholders (e.g., involved in the WBMP, users of the area) and did not include other stakeholders who may be peripherally invested in the area or its WBMP. Tour operators and cruise lines were selected based on their involvement in the WBMP and other attributes such as operator type (e.g., flightseeing, marine charter, sport fishing) and whether or not they were locally owned and operated. Purposive sampling was also used for selecting US Forest Service informants who have been involved in the WBMP process or currently or previously worked in the Tracy Arm-Fords Terror Wilderness area as managers or rangers. Local users and involved residents were interviewed to obtain their perspectives of this area, its management, and the WBMP. This study also utilized snowball or respondent driven sampling to identify additional residents, agency personnel, and operators not initially contacted. This involved asking initial respondents to recommend any other individuals who they believed should be interviewed (Bernard, 2006). This technique yielded eight additional interviews and a more saturated and representative sampling frame. In total, 28 interviews were conducted during August and September 2010 (Table 1). To preserve their anonymity in the results, all respondents are referred to using pseudonyms (e.g., John, Rachel).

# Data Analysis

Interview data were examined using inductive coding, which allows themes to emerge from the

data through repeat close readings of transcripts (Bernard, 2006). Coding involves applying a label to a segment of text relating to an identified theme or category. The goal is "to discover variation, portray shades of meaning, and examine complexity... by portraying it in the words of the interviewees" (Rubin & Rubin, 2005, p. 202). Data analysis consisted of two stages—coding transcripts to identify themes or analytic concepts, followed by comparing and linking emergent themes or concepts across respondents to identify a theory of what has been learned, frequently by relating to concepts identified in published literature (Rubin & Rubin, 2005). An open coding process was used where coding occurred as interviews were systematically transcribed, and this resulted in a number of codes, several of which were relevant to this article's research questions. Subsequently, through an axial coding process, codes were refined, distilled, and

Table 1 Interview List of Stakeholder Participants

No.	Pseudonym	Interview Length	Respondent Attributes
1	Ted	34 min 14 s	Catamaran manager
2	Martha	29 min 04 s	Juneau bed and breakfast proprietor
3	George	53 min 06 s	US Forest Service wilderness field manager
4	Wilson	34 min 11 s	Naturalist and tour guide
5	Warren	23 min 13 s	Helicopter tour company employee
6	John	48 min 24 s	Captain, 24-passenger vessel
7	Ben	43 min 49 s	Director, local branch midsize cruise company
8	Abigail	1 h 13 min 23 s	Juneau resident, former tour contractor
9	Grover	38 min 06 s	Former US Forest Service ranger
10	Dolley	18 min 32 s	US Forest Service intern
11	Chester	48 min 27 s	Cruise industry representative
12	Elizabeth	47 min 40 s	Owner, day boat tour
13	Thomas	41 min 17 s	Six-passenger sailboat captain, owner, and operator
14	Hayes	43 min 12 s	Kayak tour guide
15	Louisa	31 min 36 s	Owner, kayak tour guide company
16	Andrew	51 min 13 s	Six-passenger yacht, captain, owner, and operator
	Rachel	Same interview	Six-passenger yacht, owner and operator
17	James	30 min 46 s	Ten-passenger yacht operator
18	Grant	51 min 02 s	Resident and attorney for an environmental organization
19	Hannah	52 min 01 s	Juneau Visitors Bureau employee
20	Anna	1 h 9 min	US Forest Service employee and whale-watching tour naturalist
21	Martin	1 h 3 min 08 s	US Forest Service wilderness ranger
22	Julia	50 min 15 s	Alaska native elder
23	William	51 min 47 s	Six-passenger yacht, captain, owner, and operator
24	Abe	1 h 18 min 03 s	Cruise ship pilot
25	Zachary	1 h 22 min 22 s	Six-passenger sailboat, captain, owner, and operator
26	Herbert	32 min 45 s	Captain, 22- to 40-passenger cruise yacht
	Calvin	Same interview	Crew, 22- to 40-passenger cruise yacht
	Sarah	Same interview	Crew, 22- to 40-passenger cruise yacht
27	Millard	48 min 03 s	Manager, local native tourism corporation
28	Franklin	21 min 17 s	Six-passenger vessel, captain, owner, and operator

organized by identifying relationships among categories and subcategories (Strauss & Corbin, 1998). Both free (i.e., independent) and hierarchical (i.e., nested) codes were used for analyzing interviews. Identified themes were illustrated using verbatim quotes from respondents.

#### Results

Social Indicators

Use Level and Vessel Traffic. The first research question focused on use-related social, environmental, and economic indicators that stakeholders prioritize for inclusion in the WBMP. One of the most common observations was that vessel traffic in Tracy Arm-Fords Terror Wilderness has been increasing over the past few years. Many commercial tour operators had an opinion similar to six-passenger yacht operator William: "one of the more obvious [changes] is a substantial increase in cruise ship traffic...moderate increase in overall traffic, I haven't kept records, but anecdotally I'd say I'm more likely to see more vessels up at the head of the fjord than I used to." Cruise ship pilot Abe also noted that now "there's probably more cruise ships scheduled per day...for the longest while it seemed like it was only one cruise ship, now you see two, sometimes three a day." For a number of smaller operators, the increase in vessel traffic in Tracy Arm influenced their decision to start using the other fjord, Endicott Arm, to experience more solitude. For example, sixpassenger vessel operator Franklin stated:

We started going to Tracy Arm in the beginning, but there was so much traffic there, we specialize in wilderness experiences and...even though it's a spectacularly beautiful place, more spectacular than Endicott Arm, you just can't have a wilderness experience with a lot of traffic. And so we started to use Endicott Arm.

Sailboat operator *Zachary* explained that "the reason we go to Endicott as opposed to Tracy Arm is because we generally don't see anybody there. And we don't want to see anybody there."

To address this increase in traffic, the WBMP have a guideline for preserving solitude by limiting "vessels with more than 250 passengers" in Endicott Arm with the caveat that "some visits to

Endicott Arm may occur when ice, tidal conditions, vessel traffic, fog, or other vessel and passenger safety concerns limit operations elsewhere." Lack of adherence to this guideline, however, was the most frequently cited and contentious grievance by respondents. According to wilderness manager George, "entry into Endicott by the cruises is clearly the most critical [guideline]." Many small vessel operators also viewed adherence as negligible. As 24-passenger vessel operator *John* stated, "I think the cruise ships have more or less abrogated their responsibilities in following it because they don't observe their initial agreement to make every effort to stay out of Endicott Arm." For many respondents, compliance with this guideline would be a mark of success for the WBMP. Kayak tour guide Hayes explained, "the measure of success would be how many boats are actually following those practices and ultimately see fewer cruise ships coming into Endicott." Based on his observations and conversations with operators, wilderness manager George expressed: "if only under extreme conditions would those ships use Endicott Arm, I think we would see people really applauding [WBMP] as a success." Former ranger *Grover* thought that many operators already abandoned their confidence in the WBMP process and turned to litigation: "I think the midsize companies, at last I heard, are still trying to influence potential legislation to have one or both of the Arms off limits to cruise ships...if you can't get everything you want through negotiating, you try some other way."

Not all respondents, however, agreed that this WBMP guideline has been ineffective. As six-passenger yacht operator *William* noted:

There were only a few times this season that we happened to be up there at the same time as the cruise ships, so it's not very solid data, but it appears that the best management practices agreement is having an effect there because that was certainly something that we had observed in earlier years.

Herbert, a captain of a midsize yacht, also observed less cruise ship traffic: "I think this year is the first year, we'll see what the statistics show, but I'm guessing they are going to show fewer cruise ships [in Endicott]." *Thomas*, a sailboat operator, even said that he had not noticed any cruise ships

during the previous season: "I definitely notice there are no cruise ships this year. I think that was a big part of the Tracy Arm best practices deal is that the cruise ships would try to stay in Tracy Arm, leaving Endicott for smaller vessels and kayakers and people who might not want to see a cruise ship." Wilderness ranger *Martin* was less enthusiastic, but was optimistic that behaviors are changing: "I think we're really having momentum away from cruise ships not using Endicott Arm...I think we're coming over a hump, we're not quite there yet."

In contrast, some respondents were not only critical of the guideline allowing cruise ships into Endicott Arm under certain circumstances (e.g., fog or ice elsewhere), but also believed that cruise ships should not be allowed in either fjord under any circumstances. Some operators, such as six-passenger yacht owner *Andrew*, stated, "they [cruise ships] shouldn't be allowed in there at all." Local resident Abigail expressed a similar opinion: "I just feel like there should be some places that we don't exploit commercially." James, a 10-passenger yacht operator, felt that large ships are inconsistent with values of a wilderness area, stating that "cruise ships have no business in the area to begin with...it's a wilderness area and by congressional designation a wilderness area is limited to 12 people." In response to these opinions, cruise ship pilot Abe countered:

I don't know why you'd want to prohibit vessels from going to Endicott Arm, I don't understand that. I mean it's a wilderness area, what's the purpose of wilderness area but to make it available so people can see it, and where you get the biggest bang for your buck, 3,000 people on a cruise ship...why would you not want that vessel to go into Endicott Arm to see the wilderness area?

Noise. Concern about noise in the fjords was also commonly described by respondents as an important social indicator, with opinions mixed on whether it has improved since adoption of the WBMP. The type of noise most frequently discussed was the use of ship loudspeakers that, according to wilderness manager Grover, were not appropriate for a wilderness area: "it was our folks [US Forest Service rangers] who were out there all the time saying 'gosh, you know there are campers out here and the public address announcements (PAs) are announcing breakfast on the F deck'

and it isn't really in keeping with wilderness values." Wilderness ranger Martin explained how serious the noise problem can be: "ships have a smaller impact on the area socially if they're not running their PAs, the cruise ship PAs we've documented are audible up to five miles and then smaller ships, maybe two or three miles." The WBMP guideline established to "preserve the quiet" advises operators to limit the frequency, volume, and length of announcements to the minimum necessary and to avoid announcements prior to 8:00 AM. Most respondents agreed that this guideline had a substantial impact on the area. Wilderness manager George explained that noise reduction has been one of the more tangible results of the WBMP: "they're [tour operators] seeing some results, I think, they're perhaps recognizing that the ships aren't making these announcements as much." Six-passenger sailboat operator Zachary expressed a similar opinion by stating that "it seems to be working for everybody, the cruise line if they go in there won't be doing their loudspeaker." Cruise industry representative Chester did state that some cruise ship captains had informed him that "we went up to Tracy Arm today and there was this small 20 passenger boat from Juneau with the outside PA system blaring away." However, he said that in these cases "we're going to take the high road and maybe they just forgot...I think there's room for everybody to have a mishap."

For some stakeholders, however, this guideline is not strict enough. According to local resident and grassroots attorney *Grant*, the WBMP should prohibit loudspeaker announcements:

You don't need a PA, I don't know why you would need a PA in Tracy Arm. If the cruise company's got to pay for a few more guides to hop on the boat and have somebody on every deck and give a little presentation as they're going in and then be around to answer questions, do it, you don't have to put [the PA] on, you know. I can understand if there was some emergency or whatever, nobody's saying that, but otherwise there is absolutely no need.

## Environmental Indicators

*Pollution.* One commonly mentioned environmental concern in the area is air pollution. The WBMP guideline addressing this issue states that "all vessel

operators agree to comply with the Marine Vessel Visible Emissions Standards (18 AAC 50-.070) and take all available and reasonable steps to minimize visible stack emissions while in Tracy Arm-Fords Terror Wilderness." As described by 10-passenger yacht operator James, "well if you've ever been in there [Tracy Arm] when a cruise ship is in there, you'll see the smoke trail they leave...and it doesn't dissipate because of the special geological conditions in Tracy Arm." Many operators cited cruise ships as the largest offenders regarding pollution, as exemplified by six-passenger vessel operator Franklin: "there's a huge difference between a cruise ship that's 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 cruising boat where the effect is totally different." Wilderness ranger Martin's concerns with emissions had less to do with visibility and more with melting ice:

I would like to see less cruise ship traffic in there unless cruise ships can demonstrate that they have a cleaner way to visit the area. Their air emissions trapped in that inversion there are just terrible and putting 200 ships each with four diesel engines in close proximity to an ice field is not good... research shows that particulate matter from burning a diesel engine goes onto snowfields...they're exacerbating our disappearing ice.

Six-passenger vessel operator *William* expressed that the cruise companies could do more to address pollution:

Twenty minutes after one of those cruise ships goes through you can still see the pall of blue hanging in the fjord and my understanding is most of those vessels are capable of doing a fuel shift like they do in the harbors...I realize it costs them, but I think they can do a lot more about smoke emissions.

Wilderness manager *George* also said that old technology and operator choices should change:

If we could actually affect the process such that ships were all running clean, not just most of them, but all of them. Even though a lot of days are not smoggy, there are a fair number that still are and that's because of a variety of factors. Some of the ships have older engines, older technology, they spew out dirtier stuff, they do other things, maybe it's the fuel they're using or the way they're using

their fuels or the way they're using three engines instead of just two or the way they're moving through the ice, all of this has an effect.

Wilderness ranger *Martin* remained pessimistic that the WBMP can actually mitigate emissions despite assurances by cruise lines: "they [cruise lines] agreed to do what they can, engineered solutions and what not to minimize pollution, well, I think the WBMP has probably had little to no effect in that area." Cruise representative *Chester* suggested that the WBMP may not be the place for addressing emissions, as there are regulations in place already: "I've talked about the emissions thing and that's just the law, it's in here and there really doesn't need to be anything else that talks about [it]."

Wildlife. Concerns about wildlife were commonly raised by respondents, especially maintaining a minimum 100-yard distance from harbor seals as required by the WBMP and the US Marine Mammal Protection Act. For example, when six-passenger sailboat operator Zachary was asked about what he considered to be the most important guideline in the WBMP, he responded, "well definitely the one about the distance from seals, that's the biggie." Yacht operator William said that only the seal guideline in the WBMP has influenced behavior:

The only real way that the best management practices agreement has affected us is that we're much more careful about not approaching seals. We used to try never to disturb them, but if we happen to be floating close to them we just ignored that. Now we deliberately move off.

*John*, a 24-passenger vessel operator, also explained that he is most vigilant of the guideline regulating distance from marine mammals:

We voluntarily, enthusiastically, support practices involving the maximum closest approach to seals or sea lions or whales; all the marine mammal provisions. We support those and we watch out for them, and when we see people violating them, whether it's us or somebody else, we take note. If it's us, we remind one another. It's kind of a self-policing thing.

He continued by explaining that he believed that impacts on wildlife are the most critical measures of success of the WBMP: "I think that's critical; if we start seeing population trends of the harbor seals declining, then we know that this isn't working."

Despite conveying a generally indifferent attitude toward the WBMP, cruise ship pilot *Abe* agreed that guidelines concerning seals are agreeable: "not disturbing the seals, nothing wrong with that; no one wants to charge through the seals or scare animals." Wilderness ranger *Martin*, however, felt that tour operator behavior toward seals could still be improved: "I would like to see either a heightened awareness or perhaps a regulation about seals, especially during pupping season." Some operators explained that maintaining appropriate distances from seals is difficult and the guideline may be inadvertently violated. Catamaran operator *Ted* explained:

My problem with that [guideline] as an operator is, I don't know if you've visited icebergs with seals on them very often, but when you do they're [seals] sometimes really hard to see because the icebergs are on one side of it and you're going by on the other side of it, and you're not very far away. So I thought that this might be something that if you were actually honest, integral, and following the rules, you would feel bad because you're like 'I didn't knowingly know I was approaching the seals.'

Only one operator disapproved of this WBMP guideline. *Elizabeth*, a day tour boat owner, was critical of the belief that having vessels in close proximity to seals was a disturbance:

The seal people are always talking about how we impact the seals. I don't think we do. I think the seals are very, I can't think of the word, 'adaptive' I guess...They're smart animals, they know, and sure they watch us go by, but you know what? They'll come over and they'll pop their little heads up like 'look at us,' they'll see us, they'll be laying on an iceberg, and they'll see our boat stop and it's floating, watching the ice, watching the glacier, and they'll slide off of the iceberg, come over and look at us, and then take off again. They're curious.

*Elizabeth*'s views, however, were not shared by other respondents; most expressed concerns about the seal populations and were committed to avoiding behaviors that could harm wildlife.

Vessel Speed and Wake. A slightly less common concern was the speed and wake of tour boats that

were seen as hazardous to wildlife, coastlines, and other vessels. The WBMP ask that operators slow down when approaching wildlife. William, a sixpassenger yacht operator, felt that "a mandatory speed limit is certainly something that should occur...going in there at high speed and creating huge wakes that both rocks the icebergs and the seals off the icebergs can certainly be hazardous to other vessels particularly if you're in tide ice." James, operator of a 10-passenger yacht, had a similar view: "everybody should really have a leave-no-wake policy, which we don't do, but we should...for us small boats obviously a cruise ship wake doesn't dissipate for a long time in the Arm and it becomes kind of a navigational issue." For some, the wake from cruise ships is the biggest concern, as stated by 24-passenger vessel operator *John*, "the cruise ships are not even bothering to slow down as they go by one of the only anchorages available to small vessels at the bottom end of Endicott Arm. That is irresponsible."

# Economic and Institutional Indicators

Across all respondents, economic and institutional indicators were among the least cited WBMP priorities. A minority of interviewees, however, noted that it is not economically viable for local residents and operators working on limited budgets to travel to Seattle, Washington, for the annual meeting of WBMP signatories. This guideline in the WBMP is designed to improve communication among operators and is an example of an institutional indicator (Cottrell et al., 2007). According to catamaran manager Ted, this decision "seems a little illogical" given that "Tracy Arm is in Juneau, not Seattle...at least let me conference call in. In these tough economic times it's hard to travel down there and get your boss's approval." Small sailboat operator Zachary commented that their company size precludes their ability to travel to Seattle: "we couldn't afford that." Local resident Grant lamented the inability of residents to be involved in the meetings: "it would be more effective if they were right here. I mean, I am not going down to Seattle. For those corporations [cruise industry], that's a business expense for them to come. The agency's up here and the people in the know are up here." These concerns exemplify a link between the economic and institutional dimensions in the prism of sustainability. When asked about the

meetings in Seattle, wilderness ranger *Martin* was unaware of this concern: "it's our [US Forest Service] perception that having it in Seattle is most convenient for the most number of people, but we are open and we'll do whatever is most convenient." He further explained a plan to add a telephone line for the meetings as well as their reasoning for the Seattle meetings:

Cruise industry, often their high level executives are in the Miami or Los Angeles offices or whatever, but they meet annually a couple times a year in Seattle, so we get the whole group of them together...but, for local folks here it is hard, and I know of more than a handful of operators who would like to attend the meeting but can't...so, I'm hoping to get a telephone line so that people, these more local folks in Juneau, can just call in, listen in, and participate.

Martin's willingness to discuss this concern is important because, although it is a minor concern, it may feed an existing perception among some stakeholders that the government caters to the cruise industry. Local resident *Abigail* explained in a frustrated tone about cruise lines:

There's so many games that the cruise industry is playing politically and it's happening at a little level here in Juneau and at a big global level and state level. Basically, you have a completely mobile, uninvested in the local community, operation that can pull some cruise ships and make our governor go down and beg to them...why isn't [cruise line executive] [coming here] and asking if he can have a meeting with our governor? Why does our governor have to go to Florida and grovel with them? Because of who has the most power.

Small yacht operator *Andrew* voiced a similar assessment about the perceived power of the cruise industry with respect to struggles that small commercial operators have in obtaining affordable permits for nearby Glacier Bay National Park. In his opinion and that of several other smaller tour operators interviewed, Glacier Bay has become the domain of cruise ships: "we can't get into Glacier Bay because we don't have a permit. They can go, they can bring 50 more cruise ships in there and the US Park Service loves it because they feed off it, it's more money...I think it's the agency wanting to appease the cruise ships."

Although not discussed in the context of being a critical guideline of the WBMP, many respondents also noted that communication and operator involvement in the WBMP is a success of the program. This is an example of an institutional indicator. As small operator *Thomas* stated, "the most important thing about best management practices is communicating." Cruise industry representative *Chester* explained that communication has improved: "I think overall the program [WBMP] has worked well...in many cases it's fostered better communication between small operators and the cruise ships." Similarly, wilderness ranger *Martin* explained,

I think that sitting at the table face-to-face gave human faces to the cruise ship industry and vice versa. The meetings, while they address some contentious issues and not everyone agrees on everything, they have certainly improved the tone and they've improved all parties' understandings of their goals and where they're coming from, most definitely.

Even operators who do not always attend the meetings, but do communicate WBMP concerns independently, such as sailboat operator *Zachary*, felt that their feedback is being heard and considered: "the [US Forest Service is] very good about accepting feedback."

## Compliance Motivations

Stewardship. The second research question focused on motivations for complying or not complying with the WBMP guidelines designed for minimizing userelated impacts to these indicators. One motivation for compliance was concern for stewardship. Herbert, a midsize yacht captain, explained his understanding of why the WBMP were established: "the push for WBMP was small vessel operators who wanted it and were feeling that wilderness was being trampled on." Sailboat operator Thomas stated that he cared about stewardship, but highlighted the difficulty of both using and protecting an area: "I would like to keep [Tracy Arm, Endicott Arm] remote, intimate, and unique as much as possible while being able to use it...that's the challenge, still being able to use it and yet keeping that uniqueness that it has because it's just incredibly beautiful." *James*, a 10-passenger

yacht operator, even expressed that if a balance between use and stewardship is not achievable in this area, he would rather deny himself access: "I've always had a 'leave-no-trace' [policy]...if we have an impact on what we observe then it's not a true experience, so I'd rather forego being part of it than destroying it in the process."

Wilderness ranger *Martin* perceived that the WBMP have made many operators more aware of impacts and "heightened awareness of stewardship of this area...they are more careful." Small tour operator *James* agreed by stating: "I think [the cruise ships] recognize that they do have an adverse impact on the environment, so they have attempted to minimize it wherever and whenever possible." *Martin*'s goal, however, is to instill a sense of stewardship for places other than the Tracy Arm-Fords Terror Wilderness area, which in his mind has yet to be achieved:

When you talk about this [WBMP] you're talking about one area on the map and you're talking about trying to get the whole group to buy into that, so it's like this evolution...we learn from year to year, so this whole thing is evolving and like I said earlier, where does it go? Where it actually goes is that when people leave Tracy Arm or Endicott Arm and then they travel over to Baranoff Island or some other place hundreds of miles away...they take that [WBMP] and carry it with them, that's why I hope that this evolves into an annual meeting on regional conservation issues and some kind of greater effect that way.

Awareness. Among larger companies interviewed, a frequently mentioned reason for noncompliance among their peers was lack of awareness of the WBMP or this program's significance. Ben, a director of a midsize cruise company, explained: "they don't realize there's this whole system of operator principles that are in place they may be violating...I think that's more so than anybody intentionally trying to neglect operating in a conscionable way...I don't see anybody disregarding [the WBMP] consciously." Cruise industry representative, Chester, had a similar opinion by stating that the major barrier to cruise ship adoption of the WBMP was their lack of "full awareness of the importance of the program on the community level."

Another issue raised in the interviews was that the structure of large corporations may inhibit communication of the WBMP to individuals at various levels within a company. After the first WBMP meeting, US Forest Service personnel realized some disconnects, especially between tour companies and their captains or pilots, as wilderness manager *George* explained:

We realized there's a disconnect between corporate headquarters in Miami and captains of ships; they're not communicating with each other even so that the captains when they show up in Tracy Arm say 'what, WBMP? What's that? What does that have to do with me?'

This lack of awareness may extend beyond captains or pilots to crewmembers and educators who are required to sign an employee agreement recognizing the WBMP. Whale-watching naturalist *Anna*, for example, was unaware of the WBMP: "I don't think I've ever had to sign the employee agreement...this is a great idea, but I don't remember this."

Wilderness manager *George* explained that the US Forest Service had to "really get to know what the cruise industry was structured like and how to incorporate all that." Cruise ship pilot *Abe* was unaware of the WBMP when first interviewed and provided an explanation as to why awareness may not be pervasive, stating that each pilot in control of ships in Tracy Arm or Endicott Arm is independent and part of an association with an elected representative:

You know, it's the mole that sticks his head up that gets shot at...I'm not an advocate one way or the other, I have a lot of years of experience, but I'm one of 50 guys, and we're all independent contractors. So, the other 49 guys might think that everything is just hunky-dory, and that's the way things should go. We have elected officials in the pilots association that speak for us and any involvement by the pilots per se really should come from them.

A number of respondents, however, suggested that without individual operator awareness of the WBMP or involvement in the process, addressing compliance is likely to be futile.

*Peer Pressure.* A slightly less cited motivation for compliance was peer pressure. Cruise industry

representative Chester used his position as a "spokesman for the industry" to address misconceptions of other operators who felt that the government was unfairly influencing them: "I say...they're asking you to consider this, voluntarily trying to conform with this, with the caveats that are around safety types of things. You're never going to compromise safety with any of this, and everybody realized that." The cruise industry's peer pressure on each other was noticed by other operators, such as Herbert, captain of a midsized yacht: "it took cruise ships narcing on other cruise ships to get it to stop because had that not happened, had they not been able to say 'hey, ice is great in Tracy Arm,' I can guarantee you those certain captains and companies would have just kept running into Endicott." He continued by saying, "this year probably more than anything, it was industry pressure from the other cruise ships that's been reducing the number."

The US Forest Service also felt that they had a role in pressuring cruise ships to conform to the WBMP. Previously, it was perceived that cruise ship operators failed to accurately report ice conditions or copied other ship reports as a reason to divert into Endicott Arm. This agency began pressuring cruise companies to report more specifically, as explained by wilderness ranger *Martin*: "this year I took a much more assertive role in this ice report...we started calling cruise ships directly and asking for an updated ice report and then saying, 'are you going to put that in the blog or would you like us to?" Although peer pressure was cited as a motivation for compliance, it was not as commonly cited as self-interested motivations such as public relations.

Self Interest. The most frequently mentioned motivations for WBMP compliance were linked with self-interested reasons. Wilderness manager *George* said that making these reasons resonate with operators was part of the US Forest Service's strategy in developing this process:

Just trying to get them out of a self-interest standpoint to say, 'wouldn't it make sense that your marketing a very wild Alaska product that you would try to keep it wild, so that the client does really have the experience that you try to picture in your magazine article where they're sitting on the back deck with views not of other boats, but of wild land.' This rationale resonated with a number of tour operators, such as sailboat operator *Zachary*:

We have as much incentive as them [the US Forest Service] that Endicott stays, 10 years from now looking exactly as it does today, or better; less boats down there, or less frequent boats or whatever. We have at least the same incentive...Endicott is the gem of our trip.

He also explained that the WBMP provides a valid reason for not engaging in environmentally depreciative behaviors that their clientele may request, and this may enhance company image:

The other benefit of the best management practices is that we get some guests who want us to drop them off on ice chunks...We can say now that we are signatories of the voluntary best management practices and then say, look we are going to get you as close as possible, but see the WBMP? It gives us a way to set a boundary and takes part of the heat off us...and is part of a better story than just we don't want to or the regulations. We're signatories to this voluntary user agreement. It turns people on too, like 'maybe I picked the right guys.'

Similarly, *Ben*, director for a midsize cruise company, explained that maintaining the scenery of the area is critical to their business:

We're always trying to protect that value of wilderness, that perception of wilderness, and the mystery of it; the attributes that identify wilderness are important for us for marketing. It has a value to it and it's arbitrary and hard to establish a value for that because it's not a commodity, but it does have value.

Given that all interviewed tour operators across a range of vessel sizes and types shared this reason for protecting the Tracy Arm-Fords Terror Wilderness area, it seemed logical to most operators to abide by the WBMP. *Sarah*, a crew member on a midsize yacht, said that "the more we help each other to do the right thing, the more good there is for everybody to enjoy."

Many operators also cited a public relations motivation for complying with the WBMP. Many interviewees perceived cruise lines as the most vulnerable to negative press, as illustrated by wilderness ranger *Martin*, "the cruise ship industry, their weak underbelly is any kind of bad publicity." For cruise

companies that may have experienced negative publicity in the past, the WBMP provides an endeavor that could boost public image. According to former US Forest Service ranger *Grover*, "part of the reward for companies involved is that we publish in the newspaper that these companies subscribe to the WBMP, and they're free to use that in their advertising." This is important for other operators who need to coexist in the community with local residents, as explained by catamaran manager *Ted*, "we live here, we go to the same grocery store, so we want to make sure that everybody likes us."

This public relations motivation, however, has also been perceived as an insincere rationale leading to some degree of cynicism. Local resident *Abigail* stated that "between the community and tourism, it's [WBMP] a veneer; they publish their little ads and...say 'oh aren't we wonderful' and 'we're doing such great things.' "Small yacht operator *Rachel* described her opinion of the mindset of cruise companies by stating that "if it gives me what I want, I'll do it." Yacht operator *Andrew* echoed this characterization: "I might be doing something wrong, but if I sign this, it makes me feel good and if all the people feel good then I'll do it."

Self-interest was also mentioned as a motivation for not adhering to the WBMP, although this was infrequently discussed. A few operators felt that it was unfair and unwise to allow others to influence their business model. *Elizabeth*, for example, is an operator of a tour boat who chooses not to subscribe to the WBMP: "I'm very much a, 'you stay out of my business and I'll stay out of yours' type of person, and that's why I didn't join...because I thought that they were sticking their nose in my business." Cruise industry representative Chester presented a similar rationale for why some companies do not comply: "there's some operators who don't necessarily agree because they think if there's no jurisdiction then the government shouldn't be telling us how to run our business." Ship captain Abe explained why in some instances it not only does not make business sense to abide by some guidelines but may also be logistically impossible:

You could do millions of dollars of damage just by leaning the ship over, turning it too fast, all these chairs go one way and the old ladies slip and fall and break their hips, and all the glasses and all the food comes off, and all the china and then the trinkets down in the shop go crashing onto the deck, and people go flying. And, you could do that just by turning too fast trying to avoid a whale or seal or something...that means that if all of a sudden something unexpected happens, a whale pops up in front of you, there's not a whole lot you can do.

Six-passenger sailboat operator *Zachary* presented a different explanation for why some operators do not want the WBMP to influence their business. He stated that this attitude may be part of a mindset of individuals in places such as rural Alaska that are perceived to be outside of the control of a central government, which may be one reason why some people move to Alaska:

Alaskans, in general, especially people who have been here a long time, they're probably going to be a little more leery of even a best management because I think there is a big mentality that we shouldn't need it, it's Alaska, it's huge...I think that is a definitely a part of the formula in Alaska, there is kind of this mentality, 'it's Alaska, we're different.'

According to wilderness manager *George*, this attitude is problematic even if only a few individuals choose not to comply:

If you have one person who doesn't agree, then they can really screw it up for everyone else, and then everybody points fingers at that one business getting a little bit of an advantage over them by not complying, and then they're less likely to want to comply because that other business isn't doing it and they're getting an advantage for it.

Sailboat operator Zachary agreed with this view:

This is a great thing as long as enough people conform to it that it actually has the end result that you're looking for. If only half the operators in Endicott Arm sign this thing, and the other half shoot right up to the seals and knock them off the ice or blare with their microphones or whatever, then all of the sudden this becomes basically worthless, right?

Compliance Due to Safety. One caveat to the compromise that cruise ships remain in Tracy Arm while other commercial vessels have access to Endicott Arm is that cruise ships are allowed to divert to Endicott Arm if there is a credible safety concern in Tracy Arm, such as one posed by ice or fog. This guideline, however, is causing contention among stakeholders because they feel that compliance is being disregarded. As wilderness manager *George* described:

Small operators said 'if we could just get them to not go into Endicott, that's the most important thing to us' and at the first meeting, the cruise ship companies agreed not to go into Endicott. They said it flat out, 'we won't use Endicott,' and that is the way it was written. But, it didn't happen that way.

Many stakeholders agreed at the outset of the WBMP process that this caveat is a fair compromise. As cruise industry representative *Chester* explained, "if we get down there [Tracy Arm] and it's foggy or there's ice or the tide is running really fast over the bars...then for safety concerns we make a conscious decision to abort Tracy Arm and...we can use Endicott." *Ben*, director for a midsize vessel operation agreed:

The most important thing is safety and concern of the vessel. That has to override even the guest experience. We must ensure we don't have a disaster in Tracy Arm, we don't want to have an Exxon Valdez type experience, so that's got to be the number one consideration...if it's not safe to go into Tracy Arm, I think they should be allowed to do that.

Deciding when safety is an issue can be difficult, as explained by former ranger Grover, "we can't substitute our own judgment for that of a pilot...I don't imagine they like being second guessed and judgment differs from pilot to pilot." This difference in judgment has become an issue, and some operators and agency personnel believe that safety is sometimes used as an excuse to divert when it is not a legitimate concern; it has become, in George's words, a large "loophole." As explained by midsize yacht captain Herbert, "they have every right to be there [Endicott] if safety is a concern in Tracy, we wouldn't want them to go, we'd want them to come to Endicott rather than put anybody at risk. But, I think most of us realize that's pretty rare." As ranger Martin explained, the ice report weblog has become in the eyes of small operators, "a hall pass...as long as you go onto the blog and got your hall pass you could go into Endicott." Wilderness manager *George* described what the agency perceived as happening on the blog:

[Cruise ship A] might go in there [Tracy Arm] in the morning...and the blog report on the way out will be 'oh there was a lot of ice and we weren't able to get quite as close as we want, but we still were able to make it in there' and then [Cruise ship B] either reads the blog report or hears from that captain or pilot in some way and says 'oh, too much ice, I'll just go into Endicott.' So they're making a pre-decision before they ever even go...because they want to get right up to the glacier, close, and they want to do that without having to go through this slow navigation and potentially not get close enough.

Former ranger *Grover* seemed in agreement with this assessment and explained:

The experience isn't seeing icebergs, it's seeing the glacier itself, and that isn't always possible due to ice conditions, so folks [cruise ships] would divert and not being able to see the glacier wasn't one of the original reasons that we had agreed upon [in the WBMP] and a reason for diverting to Endicott Arm.

Statements by some midsize and even large cruise companies suggested a similar explanation as that provided by agency personnel. As *Ted*, manager for a catamaran, explained:

We've started to use Endicott Arm a little bit more than Tracy Arm during a certain part of the season... [because] you can at least get passengers to within view of the glacier, which we feel is important for folks that this might be their one and only shot to visit Alaska, so to actually be able to view the glacier that they want to go see is important to us.

Cruise ship pilot *Abe* described that companies face pressure getting passengers to see glaciers:

There is pressure exerted by the companies that sold these tours. They got to go show it to them now, you got to see ice, you got to get us as close to the glacier as you can, and you got to do all these things. Many times, that pressure bumps up against good practices.

This difference interpreting when safety is a valid problem versus the lack of a clear definition of safety is causing different perceptions of compliance for this WBMP guideline.

#### Discussion

This article examined stakeholder priorities for indicators of tourism use in Tracy Arm-Fords Terror Wilderness in Alaska and their motivations for complying or not complying with codes of conduct (i.e., WBMP) designed for mitigating impacts to these indicators. Stakeholders prioritized more social and environmental indicators than economic or institutional issues. The most contentious social and overall concerns were use levels and vessel traffic, as well as the guideline for minimizing use and preserving solitude that instructs cruise ships to avoid Endicott Arm barring safety concerns in Tracy Arm. Although this guideline was implemented to address increasing vessel traffic in both of these fjords, most respondents felt that it has failed to achieve this goal. A few stakeholders, however, felt that this guideline has diminished cruise ship entries into Endicott Arm. This is important because several respondents believed that compliance with controlling cruise ship entries into Endicott Arm is an indicator of success for the entire WBMP.

Some disagreement and contention over this guideline may have arisen from the lack of a singular understanding of the language and intent of the WBMP. Respondents, for example, differed in their interpretation of what constitutes a "valid safety concern" in Tracy Arm (e.g., ice, fog). Cruise ship representatives felt that their diversions occurred when safety concerns were valid. Conversely, agency representative and many smaller tour operators felt that decisions to divert cruise ships were not always occurring when safety concerns were valid, but rather when tourist visibility of the glaciers in Tracy Arm might have been limited. At the beginning of collaborative processes, it is the responsibility of a facilitator to help build consensus, develop common definitions, be aware of each group's interests, and find options satisfying most interests (Gray, 1989). One way for overcoming barriers to collaboration and perceived compliance may be to improve discussion on what constitutes a valid safety concern and determine more effective ways of monitoring safety concerns. This could involve more rigorous and consistent use of the ice report weblog and encouraging smaller tour operators who may be without internet access while on the water to file reports when they are in port. Weblog entries can then be compiled and discussed at the annual meetings in Seattle. In addition to these issues, concern about noise from ship loudspeakers was also mentioned as a social indicator, but many respondents felt that this had improved since implementation of the WBMP. A few respondents felt that guidelines on this issue could be stricter, but this was not a widespread response.

Pollution was a frequently mentioned environmental indicator. Many stakeholders perceived that cruise ships could be operating in a cleaner and more efficient way, behavior that they feel the WBMP has failed to inspire. Other environmental issues discussed by respondents included wildlife and boat speed and wake, which cross both social (e.g., navigational issues for water vessels) and environmental (e.g., effecting seals on rocks) dimensions of the prism of sustainability. All stakeholders were especially concerned about seals and felt that maintaining distances from seal populations was important, so facilitators may want to position this guideline as a shared group goal, thereby instilling a sense of camaraderie (Wondolleck & Yaffee, 2000). In addition, current guidelines concerning boat speed and wake are somewhat vague, as the WBMP states: "operators will do their utmost to minimize the impact of wakes on paddlers, smaller boats, and wildlife, including bears, nesting birds, and hauled-out seals." WBMP participants may need to discuss revising this guideline by making it more specific, possibly outlining some behavioral directives to ensure uniformity in the application of this guideline.

In terms of economic and institutional indicators, a few respondents were concerned about their inability to afford attending the annual WBMP meeting because it is in Seattle instead of Alaska. These non-local meetings limit conversation among stakeholders, as small tour operators and local residents are often unable to attend. This perpetuates the impression that these meetings cater to cruise lines, which may inhibit building trust in the WBMP and among organizations involved in this process. Perceptions of power differences can inhibit successful attempts at collaboration (Selin & Chavez, 1995) and if the current organization of WBMP gives the impression that the cruise industry has more influence than

other stakeholders, the WBMP may fail to achieve its goals. Discussions about meeting locale should be included in the WBMP assemblies and correspondence. WBMP participants should consider holding an additional meeting in Juneau, Alaska, to allow cruise industry personnel, small operators, and local residents the opportunity to participate in a financially feasible way. Facilitators should also look at tools such as video conferencing for those who cannot be physically present at these meetings. Enhancing opportunities for participating in the WBMP process would improve the institutional dimension of tourism management in the Tracy Arm-Fords Terror Wilderness area. A second meeting or making the Seattle meeting more inclusive would nurture the collaborative WBMP by enhancing communication and encouraging participation (Cottrell et al., 2007). Providing opportunities for stakeholder interaction increases the likelihood of developing relationships, thereby creating shared norms and goals central to successful collaboration (Bryan, 2004).

Assessing priorities for indicators is one step in the collaborative process. Implementing clear guidelines and codes of conduct and ensuring compliance to minimize impacts to these indicators is a critical next step and where many collaborative processes fail (Gray, 1989; Needham & Rollins, 2005). One motivation for WBMP compliance mentioned mainly by smaller operators was an altruistic sense of stewardship for the area. This result is similar to what Fennell and Malloy (1999) found where smaller operators tended to have a "more heightened sense of ethical conduct than do their peers" (p. 938). Stakeholders also expressed a care for wilderness, and although this was not cited as a primary motivation by the cruise ship industry, some smaller operators and agency personnel felt that the WBMP has improved the cruise industry's awareness of its own impacts and instilled a sense of stewardship in their companies. This result is similar to Sirakaya (1997), who found that personal morality was the most important motivation for tour operator compliance with ecotourism guidelines.

One reason for noncompliance, particularly among the larger companies and cruise lines, was a general lack of awareness of the WBMP and its perceived importance to the community. This finding is also similar to Sirakaya (1997), who found that operator noncompliance with ecotourism guidelines was due

to lack of awareness of the negative impacts that noncompliance can incur. It may be helpful for WBMP facilitators or mediators to underscore the negative effects of noncompliance and educate all operators about the rationale for each guideline because if operators "know the externalities they inflict upon other parties or environments, they may internalize these externalities by creating a self-imposed sanction in the form of guilt feelings" (Sirakaya, 1997, p. 942). In addition, some respondents felt that the structure of large cruise lines may inhibit communication of the WBMP to other internal levels within these companies. Wondolleck and Yaffee (2000) argued that for collaboration to be successful it must be institutionalized within an organization and transcend personalities. This may take some time in large corporations such as cruise lines, but may be enhanced by encouraging ethical behavior and adoption of the WBMP guidelines by senior managers and supervisors (Wiley, 1998).

A slightly less frequently described motivation for WBMP compliance was peer pressure, especially among cruise companies. Agency personnel felt that their pressure on cruise lines for more accurate and honest use of the ice report blog for commenting on ice conditions and verifying cruise ship diversion to Endicott Arm had a significant positive effect. Negative feedback from peers and other informal social sanctions that trigger feelings of shame or guilt may be effective for encouraging compliance (Dietz et al., 2003; Furger, 2002). Bryan (2004), for example, stressed the importance of norms instilled through peer pressure and stated that the tacitly agreed upon social contracts should result in interdependence among involved parties.

The most frequently discussed motivations for complying with the WBMP were associated with self-interested reasons. Agency officials explained that it was part of their strategy to encourage operators to be involved with the WBMP because it may make good business sense to engage in behaviors that ensure a high quality product (i.e., wilderness). This resonated with many operators. Some operators also noted that the WBMP provided a tangible document to reference to their clientele as a rationale for not engaging in behaviors that might violate the guidelines. According to Hendee and Dawson (2002), needs of environmental or social indicators in a place such as Tracy Arm-Fords

Terror Wilderness may conflict with desires of tour clientele, so agreements such as the WBMP offer one way for reconciling this conflict.

Operators also recognized that involvement with the WBMP to minimize impacts from tourism use could improve their public image, especially for the cruise industry whose image has suffered (e.g., ocean dumping, passenger health issues, ship collisions) (Lück, 2008). Recognizing the possible selfinterested motives of the cruise industry, however, some local residents and tour operators maintained a negative perception of cruise lines due to the perceived insincerity of their compliance. Self-interest, particularly for large corporations, is a common motivation for engaging in responsible behavior. Piliavin and Charng (1990), for example, suggested that "normative pressures...lead corporate officers to perceive that socially responsible behavior is in the corporation's best interest" (p. 57). Noncompliance may result in extralegal sanctions, such as negative complicity and diminished sales, the prospect of which may be an effective motivator for complying with codes of conduct such as the WBMP (Furger, 2002). Sirakaya (1997) found that operators were frequently motivated by the possibility of negative publicity and suggested that in the event of noncompliance it may be beneficial to publicize the noncompliant behavior.

Self-interest was also a motivation for noncompliance. Some tour operators felt that it did not make sense engaging in the WBMP and this was an example of government intervention in their own personal lives. Although these issues were raised by a minority of respondents, agency personnel expressed some fear that even a small amount of noncompliance may encourage this behavior on a broader scale and operators may perceive the situation to be unfair. Furger (2002) suggested that it is crucial to identify and address "recalcitrant members" because "credibility of the collaborative effort may be jeopardized by noncompliance" (p. 290). Given that the WBMP are voluntary, however, coercive measures may be counterproductive and contrary to goals of the process, and successful collaboration typically occurs when participants are engaged on their own free will (Wondolleck & Yaffee, 2000). Depending on availability of resources, however, it may be helpful to offer benefits such as cost reimbursement for meeting attendance, or incentives for compliance (Dietz et al., 2003). It may also be useful to continue publicizing the WBMP and its successes, which may entice those not currently involved to begin participating in the future.

Given that data in this article are qualitative and based on interviews with a sample of stakeholders chosen in a nonprobabilistic manner, results may not be statistically generalizable to or representative of a larger population. Findings, however, may be analytically generalizable or informative for other areas witnessing similar water-based tourism issues or are instituting voluntary codes of conduct or best management practices. There may be commonalities in themes and findings described here with studies or situations in other locales that may suggest a general trend or theory with respect to indicators, collaboration, and compliance with codes of conduct. Results may also aid future development of survey instruments such as questionnaires for quantitative studies that could be used for informing and refining the WBMP agreement.

As selection and implementation of indicators, codes of conduct, and best management practices continue becoming increasingly popular for addressing use-related impacts of tourism, it is important to monitor and ensure compliance with these measures. Future research on efforts such as the WBMP may benefit from longitudinal or panel design studies examining these efforts as they progress over time. It is challenging to ascertain the success of developing and changing collaborative processes by examining their effects at only one point in time, especially early in the process. Long-term studies, therefore, may be useful for understanding use-related indicators and levels of compliance in the context of these voluntary and collaborative processes.

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