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Alaska Native Peoples and Conservation Planning: A Recipe for Meaningful Participation

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Participation by Alaska Native tribes, communities, and individuals in conservation projects on public lands is often inadequate. Increasing the quantity and effectiveness of Native participation in conservation should be of paramount importance to federal agencies in Alaska. Our purpose is to better understand and improve participation in conservation planning for Alaska Native peoples. Our objectives were to inductively develop a model of Alaska Native participation, identify and describe factors that impede and facilitate meaningful participation by Alaska Native peoples, and formulate recommendations for agency planners and managers. The core analytic theme—cultural appropriateness—reflects a lingering divide between Alaska Native cultures and ways of knowing on the one hand, and agency cultures and practices on the other. The findings reflect barriers, facilitators, and logistics related to communications, relations, and involvement. The recipe for meaningful participation requires agencies to develop and maintain capacities for greater cultural awareness and sensitivity, and flexibility in methods of communication and public involvement.

La participation des tribus, communautés et individus autochtones de l'Alaska dans les projets de conservation des terres publiques est souvent insuffisante. Augmenter le taux de participation des autochtones dans la conservation et son efficacité devrait être d'une importance primordiale pour les agences fédérales de l'Alaska. Notre but est de mieux comprendre la planification de la conservation pour les peuples autochtones de l'Alaska. Notre objectif était de développer un modèle de participation des peuples autochtones qui identifiait et décrivait les facteurs empêchant et facilitant une participation constructive des peuples autochtones de l'Alaska, ainsi que de formuler des recommandations pour les planificateurs et

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les gestionnaires. Le thème analytique principal—cultural appropriateness—reflète une division persistante entre les cultures autochtones de l'Alaska quant aux modes de connaissances d'un côté et les cultures et pratiques des agences de l'autre. Les découvertes reflètent les barrières, les protagonistes et la logistique connexes à la communication, aux relations et à la participation. La recette d'une participation significative requiert que les agences développent et maintiennent des structures promouvant la conscientisation et la sensibilité ainsi qu'une flexibilité dans les méthodes de communication et de participation publique.

Alaska Native peoples are the descendants of those who inhabited Alaska 10,000 years ago, and many live on lands traditionally occupied by their ancestors. Approximately 16% of the state's current population is Alaska Native, representing over twenty dialects and about a dozen major cultural groups, including Aleut, Alutiiq, Athabascan peoples, Cupik, Eyak, Haida, Inupiat, Saint Lawrence Island Yupik, Tlingit, Tsimshian, and Yupik. The United States legally recognizes 229 distinct tribes in Alaska.

Alaska Native peoples have a long history of interacting and coping with other governments and peoples who have come to Alaska from other places, including land managers, natural resource planners, and other government officials and employees. The scope of this paper admittedly does not capture the full and nuanced details of Alaska Native histories, or their levels of participation in conservation projects over decades past. Looking across the state and using a broad lens, our purpose is to better understand and help improve, in a general and preliminary sense, Alaska Native peoples' participation in federal land use and conservation planning. This paper should be evaluated based on its contribution to increasing the influence of Alaska Native peoples in shaping the future of the land that is so closely linked to the survival of their diverse cultures, beliefs, and traditional ways of life.

Today, the state of Alaska is divided into a patchwork of land ownerships and legal jurisdictions. In a highly politicized atmosphere, Alaska Native tribes, communities, and other groups compete for position and access rights alongside the state and federal governments, corporations, commercial interests, and individuals (e.g., Case, 1989, 1998; Gallagher & Gasbarro, 1989). Most of the federal lands in Alaska have conservation status and are protected and managed by a variety of agencies that use a comprehensive planning document as a general vehicle to direct

resource conservation and land-use management (Gallagher, 1988). Comprehensive area plans for agencies such as the U.S. Forest Service, National Park Service, Bureau of Land Management, and U.S. Fish and Wildlife Service are often rooted in differing missions and distinct enabling legislation, which can complicate conservation planning and create public confusion. Circumstances are further exacerbated by sheer geographical distance, remoteness, and the absence of roads in many parts of the state.

To meet requirements of the National Environmental Policy Act and other laws that establish federal planning processes (e.g., Alaska National Interest Lands Conservation Act of 1980), federal agencies in Alaska and elsewhere must conduct participatory planning during the development phase of land management plans and other projects that propose major actions or changes on federal lands—actions that could impact the environment and affect human communities. Participatory planning has been defined as a social, ethical, and political practice in which individuals or groups, assisted by a set of tools, take part in varying degrees during the overlapping phases of the planning and decision-making cycle to bring forth outcomes that may be congruent with the participants' needs and interests (Hofelli, 2002, p. 611). At various steps in the planning process, federal agencies gather public input by soliciting written comments and recording spoken testimony at public hearings (see **Appendix A**). When agency planners and managers use these tools alone, they do not achieve adequate and meaningful public participation with Alaska Native peoples living in rural communities.

Traditional ways of life, based in Alaska Native subsistence practices, have been well studied and documented (e.g., Wheeler & Thornton, 2005). Alaska Native subsistence involves more than food and nutrition; it is integral to the cultures, societies, and economies of most, if not all, Alaska Native peoples and their communities, both materially and spiritually (Brown & Burch, 1992; Case, 1989; Thériault, Otis, Duhaime, & Furgal, 2005; Thornton, 1998, 2001; Van Zee, Makarka, Clark, Reed, & Ziemann, 1994). Alaska Native peoples require continual access to the resources present on vast tracts of undeveloped and remote lands to maintain their traditional ways of life grounded in subsistence practices and Native ways of knowing. Ensuring access and retaining the essential link to the land and subsistence resources is vital to the survival of Alaska Native cultures and absolutely requires that Alaska Native peoples be able to meaningfully take part in the planning and decision-making processes used by federal agencies.

Land management decisions made by agencies can and do impact Alaska Native cultures and traditional ways of life. Accordingly, it should be of paramount importance to federal agencies to increase the quantity and effectiveness of Alaska Native peoples' participation in and influence on these decisions. However, Alaska Native involvement in planning and management of the state's vast territory and abundant resources has been described as inadequate for effecting the real changes that are needed to ensure complete protection of subsistence ways of life (Case, 1989; Flanders, 1998; Hensel & Morrow, 1998; Thornton, 2001). Moreover, Alaska Native peoples often feel that agency planners and managers do not respect, or hold negative and patronizing attitudes towards their cultures and traditional ways of knowing. Traditional knowledge held by Natives tends to be seen as anecdotal by agency professionals unless it has been independently verified using western science (Ellis, 2005; Hensel & Morrow, 1998; Natcher, Davis, & Hickey, 2005). When western science discredits Native traditional ways of knowing, feelings of disrespect are perpetuated. In return, agency workers feel that some Native individuals disrespect and do not follow their regulations. This may be because Alaska Native peoples do not have ownership and confidence in western sources of knowledge, and feel that the agency planners and managers are disconnected from their traditional subsistence ways of life and do not really comprehend what is happening on the land (Case, 1998).

There remains a critical need for researchers, managers, and other stakeholders to determine the extent and nature of this problem and to work to improve the practice of public participation with Alaska Native peoples. Our research objectives were to inductively develop a conceptual model of Alaska Native participation, explicitly identify and describe concrete factors that impede or facilitate Alaska Native participation in agency projects, and develop recommendations for how planners and managers can enhance the quality and quantity of Alaska Native peoples' participation in conservation projects sponsored by federal agencies.

Methods

We used grounded theory, originally developed by Glaser and Strauss (1965, 1967). Grounded theory is an approach to social science that is used to uncover concepts and categories, not to test hypotheses or repli-

cate theory (Glaser, 1992). Analysts who use grounded theory describe and conceptually organize textual data into categories based on their properties and dimensions—the precursors to theorizing (Cunningham, 2006). This inductive study design is appropriate for describing conditions that facilitate or impede meaningful participation by Alaska Native peoples in agency planning processes, arguably a complex social phenomenon. We chose this approach to discover patterns in the data and to generate an understanding of the current situation (e.g., Cunningham, 2006; Davenport, Leahy, Anderson, & Jakes, 2007).

We used semi-structured interviews with 31 key informants; of those, 20 were audio recorded, using a digital voice recorder, and 11 were hand-written. The interview times ranged from 30 to 90 minutes. All interviews were either transcribed or carefully rewritten, totaling 140 single-spaced pages. We selected informants with extensive knowledge of land use and conservation planning in Alaska, and who have experience working with Alaska Native groups and communities. Informants included 11 Alaska Natives and 20 non-Alaska Natives. The informants are government employees with the U.S. National Park Service and a variety of departments within the U.S. Fish and Wildlife Service, including the National Wildlife Refuge System, Office of Subsistence Management, Marine Mammals Management, and Migratory Bird Management. Five informants were employed at the University of Alaska Fairbanks: three as professors, one with the Cooperative Extension Service, and one as an advisor for Rural Student Services and the Alaska Native Science and Engineering Program (ANSEP). Informants reported having between 5 to 40 years of experience working in Alaska. Twenty-four informants were male and seven were female, indicative of the gender representation within the vocation of natural resources management and these particular agencies.

We used snowball sampling, or peer referral, to locate informants and asked them to name others who would be likely informants for this study (Bernard, 1994; Miles & Huberman, 1994). The interviews were conducted face-to-face by one researcher; one interview was done by telephone. The researcher followed a flexible format with a set of open-ended questions and probes designed to inspire in-depth discussions on a range of issues related to the participation of Alaska Native peoples in land use and conservation planning (see **Appendix B**).

After an initial reading of the individual interviews, we wrote a brief synopsis to present the overall message of each informant (see **Appen-**

dix C). Then we studied the transcripts and interview notes in detail and open coded the data based on the themes that emerged (Glaser, 1992). Throughout data collection and analysis, the questions, probes, themes, and categories were allowed to change and evolve in an iterative manner as we constantly compared emergent elements discovered in earlier interviews to data emerging in subsequent interviews (Cunningham, 2006; Dick, 2005; Glaser, 1992; Pidgeon & Henwood, 2004). As more data became available, we observed more interrelations among themes and categories, which allowed us to integrate all identifiable factors and aspects of the issue that emerged from the interview data.

Results and Discussion

The interview synopses in **Appendix C** reveal many broad barriers to and facilitators of Alaska Native participation in the work of the agencies. Commonalities are evident across several informants regardless of their affiliations, gender, years of experience, or belonging to a Native/non-Native group. Some informants focused on logistics and methods of public participation, while others talked about trust, or lack thereof, and the importance of building relationships and trust between Alaska Native individuals and agency employees.

The model of Alaska Native participation grounded in these interview data is encompassed by an umbrella theme, or core category, labeled cultural appropriateness (see **Figure 1**). An Alaska Native agency employee explained, "Alaska Native culture isn't the same as western culture, and this point isn't taken into account as much as it should be when it comes to both attitudes and [meeting] formats; things that work for western society won't necessarily be successful with Alaska Native peoples."

Interwoven with cultural appropriateness, we discovered four categories: communications; relations; involvement; and logistics (see **Appendix D**). These categories are interrelated and form the foundation of a preliminary conceptual model of Alaska Native participation in agency planning and management (see **Figure 1**). Logistics describes the physical issues of time and place. Logistical considerations play a central role in the success of communications, the ability of people to get involved, and the creation and maintenance of relationships. Logistics, including funding, determine the methods of public participation and indirectly impact the success of all related agency endeavors that involve collabo-

rations with Alaska Native peoples and communities. The categories of communications, relations, and involvement have overlapping boundaries. They are linked inextricably and connected on many levels, so that most aspects discussed by informants in the context of any one of these three categories also influence and are influenced by the other two in both cyclical and back-and-forth patterns (see **Figure 1**).

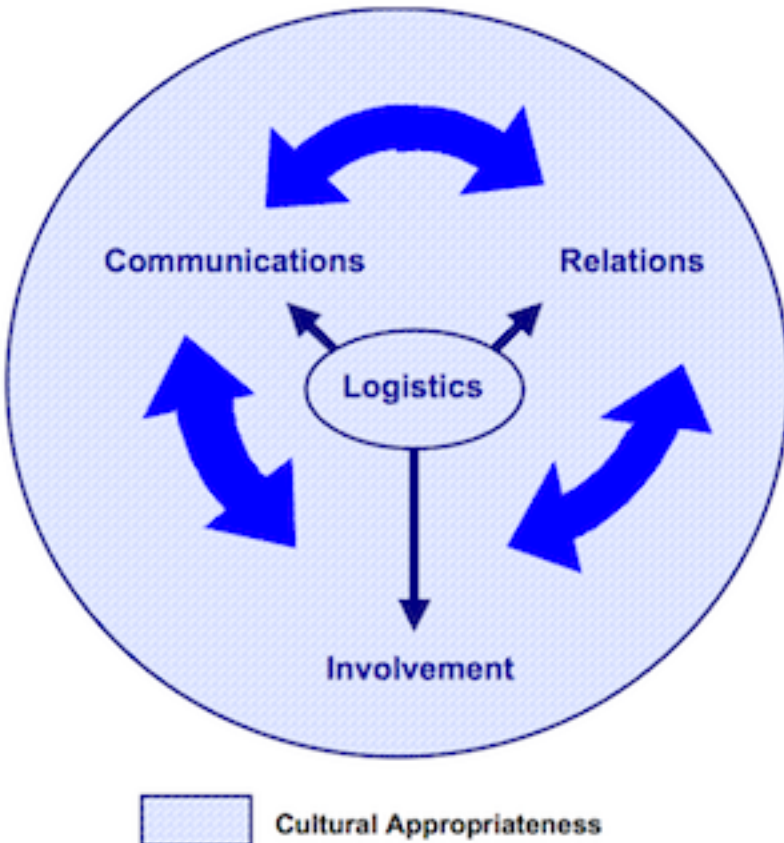
Communications

Similar to Gallagher (1993), we found that establishing clear, two-way reciprocal communication is essential for effective Alaska Native participation in agency planning and decision making. Within the general category of communications, we observed two specific subcategories: the information contained in discussions and exchanges, and the interactions between people and groups during communications (see **Appendix D**).

How agency workers present information to Native audiences, including the type of language and methods used, is crucial to success. To improve comprehension on the part of Native audiences, informants advised agency employees to eliminate technical jargon and bureaucratic terms: “Native communities have the same abilities to understand as other communities, including a general lack of knowledge of governmental and technical terms.” The method of delivery and format of messages must conform to life in rural Alaska:

Last year, I was able to help with the endangered species program. They wanted a different way of outreach in one of the communities, so they wanted to ... purchase such things as t-shirts and caps and give them out with a conservation message. ... I looked at their [request] and I said, “You have to tell them what real life is in village Alaska: there’s no road system, no billboards or graphic neon signs. You have to be creative. The locals probably know the best way of getting the word out. ... With a conservation message, if you put it on t-shirts, people use them every day; it’s always there.” Expecting that word is going to get out by posting notices or posters—they’ll just move on and forget it; you have to do things that really catch the eye and have meaning (Alaska Native agency employee).

Figure 1. A model of Alaska Native participation in conservation planning derived from interview data. Cultural appropriateness is woven throughout the planning process and directly affects all interactions between agency employees and Alaska Native peoples. Communications, relations, and involvement are interconnected and cyclical, influencing each other in both directions. These elements are affected by logistics and related practices used by agency employees.



Our findings agree with those of Vaudrin (1974)—deciding how to present or collect information requires careful consideration of audiences' various levels of education, ethnic and language backgrounds, and expectations for taking part in discussions with federal agencies.

The content of communications, or lack thereof, is important. We found a lack of clear and adequate explanations to be an impediment, as informants cited confusion on the part of Native audiences about agency regulations and a lack of understanding of the reasons behind various projects and plans:

Things the government tries to enforce are often counter-intuitive rules that do not make sense to the people, like the ban on shooting cow moose. Reasons are generally not explained well or not well understood; there needs to be basic explanations of reasons (non-Native agency employee).

A failure to explain clearly to Alaska Native audiences the reasons for actions or regulations proposed in a plan may also lead those audiences to interpret the plan as irrelevant to both their immediate situations and traditional ways of knowing.

The problem with public participation is that much is irrelevant ... many government plans are very abstract. This abstractness makes it inherently difficult to get a lot of participation, especially among peoples ... dealing with every day fundamental needs, like food and water. ... There are lots of other things to worry about in villages (non-Native agency employee).

Information must be communicated in ways that allow members of tribes and communities to see both the large-scale importance of issues and how they would benefit from the proposed actions. When this occurs, agencies are more likely to garner the support and willingness of Alaska Native peoples to participate in projects and thereby obtain more complete and accurate information.

In return, agencies need to provide tribes and communities with useful information such as clear and concise summaries of management plans or research results. Sharing results and reports from projects helps to establish a two-way flow of information—something that is, by many accounts, currently lacking. Few communities see the results of projects in which they participate, and most remain uninformed of

the reasons for changes in federal management regulations. This creates Native perceptions that the agencies act in arbitrary ways. A non-Native agency employee noted, "As much as the resource might be protected, that communication gap became bigger because the people think, 'You just arbitrarily changed my way of life ... my culture, with no communication.'" Sharing is a core value in most Alaska Native societies, and when agencies share information and reciprocate, they show respect for Native cultures.

The format of interactions can facilitate or prevent successful intercultural communications. Formal public meetings or hearings are popular forums for public participation commonly used by agencies in much of the United States; a non-Native agency employee explained, "In our white culture ... we are just big into meetings." However, this format is not compatible with the structures of most Alaska Native societies, and thus will limit discussions and may yield inaccurate information. She continued:

It's a cooperative society [that of Alaska Native peoples]; it's not a rising as an individual kind of thing, and people don't speak up in a meeting and contradict. Some people do, but those people are usually not ... favored, let's say, and a lot of times ... will end up off the council, because ... they dominate. [Most Alaska Natives] don't like that kind of behavior, and what you'll see happening is that everybody else gets really quiet.

Public meetings do not provide a comfortable setting for most Alaska Native peoples and will not produce satisfactory results because formality discourages participation. Several informants mentioned that the best way to be effective when working with Alaska Native peoples is to make the process informal and socially engaging; providing food and door prizes was recommended.

Differences in communication styles, which are linked to culture, are one of the main factors preventing effective communication between Alaska Native peoples and agencies (Gallagher, 1988; Morford, Parker, Rogers, Salituro, & Waldichuk, 2003; Schaubert, 2002). Failure to understand the communication styles of Alaska Native peoples, or unawareness of the role of style in generating stereotypes, may lead to misunderstandings, perceived disrespect or insult, and frustration for all

parties (Schauber, 2002; Scollon & Scollon, 1980). These factors may also lead to Alaska Native peoples not getting a chance to speak when in the company of non-Natives. A non-Native informant, speaking of a Native coworker, said, "You can tell sometimes he is about ready to say something, but he waits so long that by that time, someone else is talking."

The speaking styles of Alaska Native individuals often include long silences, which can be uncomfortable for non-Natives who are "afraid to give open awkward time." Alaska Native peoples tend to use an indirect manner of speaking, using stories or metaphors to imply a point without explicitly stating it (Ellis, 2005). Non-native agency employees tend to do the opposite when speaking, spending less time. A non-Native agency employee explained the need for agency workers to adapt to such differences: "At meetings, we try to put too much discussion into a short time, and when you cover too much ground, you don't get participation because you don't allow for engagements on their terms; you need to let them finish and get it off their chests."

To communicate effectively, both parties need to know who to talk with and have ready access to authorities and decision makers. As a non-Native agency employee explained, "A general rule that is important is accessibility; they need to know that the refuge manager is going to be glad to see them anytime they come to visit. They need to feel comfortable. They need to know that if there is an issue, they can talk about it." Likewise, agency employees need to know whether they should be talking to elders, tribal council leaders, or Native corporation leaders. Agency employees also need to know how to obtain access to Native leaders.

Western society tends to pride itself on its basis in democracy, which follows a "majority rules" philosophy, and thus, utilizes representation as a means of governance and decision making. The use of a small number of Alaska Native representatives to make decisions for larger groups may present an unfamiliar practice not traditionally used by some Alaska Native peoples, who are generally cooperative and community-oriented, operating on consensus. Three informants, two Native (agency and university) and one non-Native (agency), explained that selecting one person to speak for everyone can present a problem for some Alaska Native groups.

[Alaska Native peoples and the government] commune back and forth through a representative form of communication; the

rural advisory council has members that meet, they talk with [Subsistence] Board members in the government, and then, they talk with village members. The village communities don't talk with the Board and the Board's technical reviewers don't talk to the villages. ... Functionally, that interface is fractured; at best, disconnected ... dead in some cases. ... representative organization really doesn't work (non-Native agency employee).

Many agency planners and managers view the land from a perspective based on discrete data sets and short-lived visits, whereas many Alaska Native peoples and communities view the land from a perspective based on the observations of many generations and a much longer history living on the land. A more complete picture of a particular planning or management issue requires the reconciliation of differing points of view and effective management of interactions between groups (e.g., Natcher et al., 2005). Those involved with collaborative planning efforts need to integrate different ways of knowing, to the extent practicable, in order to improve intercultural communication:

So we [government scientists and managers] keep getting this series of snapshots, whereas ... somebody who goes out and hunts for subsistence or fishes—they may cover a smaller area in their day-to-day activities, but they have the benefit of a longer time scale. Their observations cover more than just a snapshot in time. ... The things that you might learn from a broad scale survey are one part of the story; the thing you might learn from repeated observations over time may be a different part of the story. ... If we could train Native [individuals] in wildlife management and biology, they would be that third person who could see both perspectives and help with the communication between the two (non-Native agency employee).

This observation is supported by the work of others and suggests that agencies need to work toward capacity building, where members of both parties are trained and acquire skills to understand and effectively communicate diverse cultural perspectives on management issues (Leech, Wiensczyk, & Turner, 2009), and also to create "bi-cultural standards"

that bridge worldviews and focus on common ground (Lertzman, 2010, p. 120).

Relations

We discuss the category of relations in the context of barriers and facilitators (see **Appendix D**). Barriers are conditions or practices that impede positive relations between parties, including the dimensions of trust, perceptions, attitudes, and differences in cultures and traditional ways of life. Facilitators of positive relations are situations, conditions, and practices that create and maintain trust and positive attitudes.

Lack of trust was repeatedly described in interviews as a barrier to creating and maintaining positive relations between Alaska Native communities and agency employees. Native populations have historically displayed a mistrust of all agencies, dating back to cases of oppression, unfair treatment, and outright suppression of Native cultural practices and languages, which generated a legacy of suspicion and skepticism:

That history leads to barriers on the part of Native outreach, but it also lends to the distrust when a federal agency reaches out, because there's this look of skepticism ... "Okay what are you looking for? ... [H]ow are we going to get screwed this time?" (non-Native university employee).

Mistrust prevents cooperation and the free flow of information. It can lead to serious misunderstandings. An informant gave an example when, due to lack of trust, the details of a particular planning map were misinterpreted:

There was an effort to look at all the lands within a refuge as to which lands we would be interested in, if people were willing to sell them. Those lands were put in red. The color red became an issue ... because it looked like [the agency] wanted, in the verbiage ... to take over those lands, no matter that the staff and others repeatedly said, "No, no, no, this is not a hit list; we're not saying that your allotment, in such and such location, is number three on our list; we're going to get your land." ... Even the color red became an issue, because people are taking it, "Wait a minute: I've lived there. That's my allotment," and that was a hassle to get, for one, and that's probably also where they did a lot of subsistence activities for their

family for generations. ... Then, they see this list of "Oh, we'd like that because it's got a lot of whatever habitat." ... Now, what was behind those two issues is the issue of trust: the trust was not high enough that people are going, "Oh, I know those guys; they're just making up a map, and they need to prioritize if they get money." The trust [and a positive relationship] was not there (non-Native agency employee).

Some Native individuals may hesitate to participate in harvest surveys because they do not trust the agency and fear being cited for violating harvest rules or regulations, and they do not expect productive outcomes from projects or surveys. Natives generally fear that information they share may be used against their interests by the agency (Gallagher, 1993). Under these circumstances, management agencies do not receive complete and accurate information, which can lead planners to produce ineffective plans and managers to set regulations that fail to reflect true conditions. The end result is that Alaska Native peoples and other stakeholders have to deal with regulations or other management decisions that are based on incorrect or incomplete information:

People doing harvest surveys often get false numbers, because people don't want to report taking animals out of season; they're afraid of enforcement. Alaska Native peoples harvest according to family needs and traditions, and animals are taken at much higher numbers than people know. Current wildlife management systems don't work because the counts are not accurate (non-Native university employee).

Alaska Native peoples and agency managers/scientists each interpret their observations of the natural world and natural resources according to different assumptions about reality and human knowledge (Hansen, 2011; Lertzman, 2010). These differing environmental worldviews often conflict and can lead to misunderstandings, which makes true listening critical for success. A non-Native agency employee explained:

[Many Alaska Native peoples] interface with the resource on a daily basis based on their cultural perspective. We do periodic studies. So, they have a long-term depth of knowledge based on that interface and their religious/cultural beliefs. We look at it from a scientific point of view on a periodic basis. So, our

time depth may be long as we consider it in western science, but compared to their time depth it's pretty shallow. Their's [time scale] is based on traditional stories and legends ... not "we saw 50 moose at this location" ... so, they have a deeper depth, which can be enlightening but also narrow. It's also the difference between the two resources [or how one views the land]; we look at it ... from a national perspective; they look at it as their backyard, and so that becomes a conflict at times. We also look at it as kind of our refuge, or our park or whatever, and at times that can be a language problem ... my main objective at this job is listening and asking. I think it's a lot more powerful if we have time to do that, and it's truly listening and truly asking what's going on.

Alaska Native peoples generally believe that humanity and nature are conjoined (Thornton, 2001; Van Zee et al., 1994). The environment as a whole, and all activities conducted within it, including hunting, fishing, and berry picking, have substantial meaning—spiritual and temporal—within Alaska Native cultures and societies (Nelson, 1983). Alaska Native peoples believe that the relationship between animals and humans is social, moral, and reciprocal, and that improper behaviors by humans will cause animals to withhold themselves from being harvested (Hensel & Morrow, 1998; Natcher et al., 2005). The western worldview generally holds that humanity and nature are separate. This worldview is often at odds with more holistic Native ways of knowing about wildlife. Federal and state agencies put into practice the western scientific perspective when formulating management policies and regulations (Thornton, 2001). As a non-Native agency employee described, "Hunting has a deeply spiritual meaning for a lot of people; it's how people live, and so kind of just boiling it all down to a little wire tag that you stick [on the harvested animal], and then a number is very western, very non-Native."

Informants described how to build relationships with members of Alaska Native communities by making personal connections, being accessible, listening and responding, and doing things to benefit a community: "There is no secret. They call; you call back. They ask; you answer. You listen and respond, and realizing when I travel to these different villages, I'm bringing in what they don't want [e.g., regulations]" (non-Native agency employee). In Alaska Native cultures, relationships are

not purely business-oriented. Successful agency employees build connections with Alaska Native people and communities by sharing information about themselves and their families. What is important is "who you are in context: who's your family, tribe, region, who do you know." Friendly relations and personal connections need to be built, in part, in contexts other than business. Doing activities or making visits not related to a specific agency project can greatly increase the quality of relationships (Shearer, 2007). Agencies, however, do not have the means to directly reward employees for creating and maintaining personal relationships on the job. Agencies value and hope to maintain strict business relationships with many different groups, which can conflict with Alaska Native culture, and employees frequently move from one duty station to another, which discourages continuity and long-term relationships:

What it requires is a relationship and government isn't always set up that way, career-wise as well as otherwise. . . . Generally speaking, if you're in a job three or five years or longer, some people consider that there may be a problem: 'why isn't this person advancing, moving, whatever?' Three to five years, as a relationship with a village, is pretty shallow, unless you're out there every two months or so, then it could work, or if you make a concerted effort to interface with them. But remember, we have national objectives; we have other audiences to deal with. It doesn't mean we have a check-off list, but we have to manage [for] all the user groups. We can't just listen to one group; we have to listen to all (non-Native agency employee).

Involvement

We discuss the category of involvement in the context of barriers and facilitators (see **Appendix D**). Barriers to Native involvement in land use and conservation planning include real or perceived irrelevance of agency issues and projects, real or perceived lack of authority for tribes and Native groups, lack of influence or impact on decision making by Alaska Native peoples, and real or perceived lack of qualifications or other capacities to be able to participate in meaningful ways. Facilitators are conditions or practices that create roles and opportunities for Alaska Native peoples to directly participate in agency projects.

The relevance of the issues brought before Alaska Native peoples is a factor that affects participation. According to informants, participation

is determined in part by personal assessments of an issue's importance and timeliness: "Amount of participation is at least partially dependant on the current relevance of the issues being discussed: if it's spring and the issue is fishing, everyone will come; if it's spring and the issue is moose, no one will come" (Native agency employee). Agencies can encourage maximum involvement by targeting meetings and public events on issues of greatest importance to traditional ways of life and at times that coincide with a community's subsistence calendar.

There remains dissatisfaction among Alaska Native peoples regarding their current status and authority. Tribes want government-to-government status, to be on equal footing with the agencies, and to be treated as real partners and co-managers. That Alaska Native peoples are often merely in an advisory role is detrimental to maintaining a healthy relationship, communications, and involvement. Tribes and other groups who are unhappy with the way they are being treated by federal agencies are generally unwilling to cooperate:

Some of the tribes realize that their goal may be to actually end up becoming Indian Country in their terminology [i.e., a sovereign nation living on a reservation]. And they're saying, "Well, we're willing to work in this world now until that may happen." Others just say, "No, we're not going to talk, because we are a sovereign nation. ... We've lived here for thousands of years, and until we're recognized as a sovereign nation and have authority ... we'll be polite to you, but we're not going to really work with you." And that makes it difficult on [the agency] because we have to move forward in planning and management. ... We would like their support, but then they're saying, "Well, we're not giving it until we're recognized fully as a government" (non-Native agency employee).

Despite having legal status, some Alaska Native tribes and other Native groups feel they have little power or influence on agency decisions, resulting in a sense of disillusionment and frustration. While Alaska Native peoples may sit at the table, there is usually no ability to have a real impact: agencies tend to "ask tribes to simply concur with agency decisions" (Shearer, 2007, p. 103). This is not a recent development. As informants explained, the Native peoples have a long history of "decisions being forced on them." People on both sides of an issue often view

Alaska Native participation as token involvement, intended to satisfy legislative and public demands with little real interest in Native input, opinions, or knowledge:

Native peoples experience process fatigue: they have spoken up a lot, but their points are continually ignored, so they get tired of it. This disillusionment is very prevalent. The government says that Natives will be involved, but they are just a token part of the process, and their input is usually discounted and excluded (non-Native university employee).

Indirect discouragement or outright barring of Alaska Native peoples' involvement reinforces the perception among Native peoples that the agency is disrespectful and discredits their traditional ways of knowing. Natives feel excluded and discouraged, and this situation damages relationships further.

Most federal agency jobs in conservation planning and management currently require a western-style, university education, which severely limits the options of anyone without a degree in biology or another specialized discipline. A non-Native agency employee explained, "You have to be a biologist to get promoted in management here; with those kinds of restrictions, people can't compete for jobs, and they can only go so far." Alaska Native peoples tend to view such educational requirements as a lack of agency faith in their systems of traditional knowledge. This situation is also frustrating for agency managers who wish to hire individuals from Alaska Native communities:

Native and non-Natives from rural communities have local expertise but may not always rate very highly. ... Many of these position descriptions are written ... for [people in] the lower-48 [states], so in many cases, people in local communities don't have the education ... haven't attained higher degrees ... They may have incredible expertise, but again, they just don't rate highly on a formal, standardized sort of government application (non-Native agency employee).

Rigid educational requirements for hiring disadvantage the agencies, denying them opportunities to form personal and professional connections with individuals in rural villages and barring access to large and rich banks of local knowledge.

Capacity building through training can be used to increase opportunities for Alaska Native involvement. Several informants cited the agency-supported Alaska Native Science and Engineering Program (ANSEP) housed at the University of Alaska as an excellent example of capacity building for Native students. One informant wished that the program were stronger in wildlife management and conservation:

If there were an educational program or initiative like ANSEP ... to train Native [individuals] to learn about wildlife biology and wildlife management, then you'd actually have more people who would have a foot in both worlds: they understand the perspective as an Alaska Native, as someone in a village, but they also understand from a wildlife management perspective. If we could maybe bridge that gap, I think that would be very helpful (non-Native agency employee).

Informants discussed another opportunity for Native individuals to become more directly involved: the Refuge Information Technician (RIT) program used by wildlife refuges in Alaska as a means to help raise trust, create personal connections, and facilitate effective communication:

We hire ... refuge information technicians, and that is our link with the community. And what success we have had ... because that RIT is in the village, and we pay for them to come out, and ... they go to the meetings, and they go back into the villages. When we go into the village, we work with the RITs ... [as liaisons] to walk around, whether it is knocking on doors or that whole interface (non-Native agency employee).

Individuals working as RITs provide a valuable link to the community by helping agency employees establish contacts and relationships with key leaders. Additionally, RITs often act as bridges between Alaska Native communities and the refuges. When a planner or outreach specialist from an agency is seen working alongside a local resident—an RIT or otherwise—other residents may feel more comfortable asking questions about the work and perhaps getting involved. Establishing local contacts or liaisons is one of the most important factors in creating trust, building relationships, and achieving public participation.

It is paramount that agencies involve Alaska Native leaders directly and concretely in projects and partnerships whenever possible. A non-

Native agency employee advised: “[We need to] have communities become full partners by taking on roles themselves, doing their own surveys, and collecting their own data, so they can ... show changes on the issues important to [the people].” The opportunity to participate in or conduct a survey or serve on a planning team allows for integration into the process by giving Alaska Native peoples a chance to see where the data and numbers originate. Participants develop a sense of ownership, commitment, and satisfaction, and they have more control, becoming full partners, both personally and professionally. After a long history of power being stripped away from Alaska Native peoples rather than being shared with them, any chance to place control in the hands of village residents is beneficial:

I think in dealing with rural people and rural communities, the more you can give them a sense of rural control, that they are in charge ... their village has the rules ... the more they can rely on the government not as a source of fear or ... capricious action, but as a partner, someone who’s accessible ... someone with a human face and a personality; then, you can get things done (non-Native agency employee).

Logistics

The category logistics includes tangible dimensions, such as flexible schedules, volume, location, and funding (see **Appendix D**). Flexibility in scheduling and the timing of public meetings and other events are important considerations for those working in rural Alaska. Volume refers to the observation that agencies tend to schedule a large number of meetings in a relatively short period, covering many issues that are framed from an agency perspective and unfamiliar or irrelevant to most rural residents. Location refers to the nearly ubiquitous difficulties presented by physical distance in Alaska. Funding relates to the financial side of public participation, especially to barriers that are monetary in nature. Logistical issues differ in relationship to the other main categories. Logistics affect, but are largely unaffected by, communications, relations, and involvement (see **Figure 1**).

Similar to the other categories, logistics is subsumed by issues of cultural appropriateness and sensitivity. Alaska Native culture and perceptions of time should be taken into account when scheduling meetings and other activities for public participation (e.g., Hansen, 2011).

Short, hurried, and to-the-point visits by agency employees are viewed negatively by people in Native villages because these send a message of business only: “They are in and out, with no time on the ground and not enough interactions.” The decision-making styles of Alaska Native peoples often differ in pace from that of non-Natives:

Natives need to mull over issues. A lot of federal and state representatives who go out come back disappointed because they do not get what they want right away. [Agency people] are in a society that is used to meeting and making decisions and moving on—that’s not the same in Alaska Native society (Native agency employee).

Short visits with full schedules do not allow time for “mulling over,” resulting in dissatisfaction for both parties. Longer visits enable visitors to get a more accurate sense of life in rural Alaska and allow for flexibility, which is important in communities that run on “village time” and generally do not follow rigid schedules. Subsistence activities require people to be resourceful and to take chances as they arise, meaning that plans for meetings and discussions may have to be changed on short notice.

Working by telephone, and over hundreds of miles, offers countless opportunities for misinterpretation, miscommunication, and mistrust. Frequently, rural Alaskans have neither the time nor the financial means to travel outside of their communities to attend agency meetings. For their part, agencies are often reluctant to hold events in rural villages because of the associated financial costs. Lack of funding often closes various lines of communication and reduces opportunities to interact face-to-face. Reducing the number of personal interactions is detrimental to relationships, and a lack of funding may contribute to the perception that an issue is not important to the agency. A Native agency employee stated, “It doesn’t show much interest in making a successful program, if there’s no funding. The government wants so much, and yet we don’t have the resources to get there.” Funding determines what events and activities are held, where they are held, and who is able to participate. The financial side of affairs heavily influences other logistical dimensions. Visits to villages are short and schedules packed to save money, and only a few Alaska Native representatives are hired to deal with a myriad of issues.

Implications

Following Cunningham (2006), we summarized the recurrent themes in the data by formulating six working propositions based on insights drawn from the analysis. With these, we demonstrate connections between the emergent themes, categories, and dimensions, and open a discussion of implications and recommendations for how to improve agency practice. We developed a list of useful tips for planners and managers working in rural Alaska and involved in public participation with Alaska Native peoples (see **Appendix E**).

Proposition 1: The use of methods and practices that are not culturally appropriate substantially impedes Alaska Native participation in agency planning processes.

Although work with Alaska Native groups has improved over the years, federal agencies are often guilty of conducting public participation in Alaska in the same manner as they do in the rest of the country. Continued use of western formats by agencies may be interpreted by some as indifference towards the traditions and preferences of Alaska Native audiences, and may therefore damage the relationships and connections that agency planners and managers need to establish. These formats and techniques, while suited for the western-based society of the lower-48 states, are ineffective when transplanted into a culture with radically different values, norms, and worldviews. The use of formats that are familiar to Native audiences would be more appropriate for them and would likely be more conducive to their participation.

This has implications for how federal agencies and their employees approach their work with Alaska Native peoples and what practices they use, especially in the collection and sharing of information. For example, when collecting input for public scoping or data for surveys, the lead agency employees should visit and talk with people in their homes in addition to holding public meetings. Placing the emphasis on building personal relationships before dealing with business is another way in which agency employees could conduct themselves so as to be more culturally appropriate. Planners and outreach specialists need to first learn what formats are familiar to the audience, and then learn how to adopt these formats in their work. In short, the agencies need to determine how to integrate non-western methods into a western process, and/or adopt and implement Alaska Native ways on a regular basis.

This has implications for the role of Alaska Native peoples in organizing outreach and other public participation efforts: if Native individuals, who understand the target audiences, are allowed to help plan and direct activities, these efforts would be more appropriate and attuned to those audiences. Agencies must involve more Native individuals in the pre-planning phases, during which work plans and public involvement plans are developed. This will enable agencies to steer projects in the right direction from the outset. Agency planners would also better account for differences in communication styles by allowing Alaska Native peoples to decide on their own terms the conditions of participation.

Proposition 2: Greater opportunity for Alaska Native involvement and participation strengthens relations and increases ownership.

Alaska Native peoples must be given more ownership in the planning process. People who are personally involved in a plan or a project are more invested in its success and are thus more likely to support and assist with various endeavors. When Alaska Native peoples feel that they are being listened to and actively involved, they will have a vested interest in the success of projects because it reflects, in part, their own success. This sense of a common goal can increase trust and willingness to cooperate, which will result in better and more fully rounded participation.

Agency employees should increase the number of relevant opportunities available for Native individuals. Contracting and hiring for work in rural villages directly increases Native involvement and may boost trust and improve relationships between the parties, while also enhancing the economy of rural Alaska (Shearer, 2007). Hiring more Native individuals would allow the agencies to build more checks against projects or ideas that are unsuitable for or irrelevant to life in rural Alaska. When an agency employs Alaska Natives, it shows that it respects and values Native knowledge and expertise as an asset to its work.

The agencies in Alaska should create roles and jobs for residents of Alaska Native communities that may not have a western-oriented education in the biological sciences. Not all of these have to be formal employment opportunities. Outreach efforts could include more specific opportunities aimed at public involvement and information sharing. For example, volunteers from Native communities could be asked to teach school children about local patterns of bird migration in relation to the subsistence calendar, or agency biologists could take village leaders along in the airplane while conducting wildlife population surveys.

In particular, recruiting and hiring more Native-agency liaisons (e.g., RIT positions) would directly improve attitudes, build positive relations, and open the doors for meaningful involvement and participation. Unfortunately, the RIT program is limited by funding. For example, there is only one RIT working with nine villages in the Yukon Flats refuge. The U.S. Fish and Wildlife Service in Alaska should direct more resources toward funding and maintaining its RIT program, which has proven to be successful despite limitations. New programs should be created by the other federal agencies that provide Native individuals with direct roles and responsibilities in land use and conservation planning.

Proposition 3: Low levels of trust between Alaska Native groups and the agencies impede cooperation and success.

Undeniably, there is a long history of mistrust and bad relations between the United States government and Alaska Native peoples. Many Alaska Native peoples are skeptical about the intentions of the agencies and are hesitant to participate in projects or contribute information to surveys. Mistrust and lack of participation by Alaska Native peoples may lead to one-sided or incomplete conservation plans and study reports that do not take into account factors that are important for Native subsistence and other issues. Gaps in agency knowledge and unreliable information can, in part, lead to ineffective decision making by agency managers, perpetuating Native mistrust and skepticism.

In their roles as stewards of public lands and resources, agencies must prioritize building trust with Alaska Natives and their communities as a first step in conducting any type of cooperation or coordination activities (Davenport et al., 2007; Hansen, 2011; Lachapelle, McCool, & Patterson, 2003). The actions of individual agency employees who interact directly with Native individuals have great potential to either increase or decrease trust (Lijebald, Borrie, & Watson, 2009). It is therefore imperative for agency workers to always keep promises and do everything they say they are going to do, no matter how small or seemingly insignificant. If something cannot be done as planned, it is essential that agency planners explain carefully and consistently to the people why this is the case and make efforts to keep people informed as changes arise.

Trust is established through building personal relationships, which requires time. One important implication is the need for continuity in an agency's personal presence in a community or region. A strong personal

presence can only be established if employees stay at their duty stations in the same or similar roles for long periods. When long-term employees do need to move on in an agency, substantial overlap between them and their replacements should be required for training, face-to-face introductions, and personal interactions with established community contacts. This would help to both initiate new relationships and carry over some existing trust from previously established relationships.

Agencies should pay greater attention to levels of public trust and follow up on their efforts to build it with community residents. Agencies should work with their community counterparts and research associates to monitor levels of public trust through time as an indicator of their success in keeping Alaska Native peoples connected to the public lands and subsistence resources on which they rely (Lijebald et al., 2009).

Proposition 4: Agency employees who are culturally sensitive and who effectively build personal relationships are more successful and efficient.

Every aspect of public participation happens in the context of culture (see **Figure 1**). Just as practices and methods used with the public need to be culturally suitable, the employees who conduct them need to be suitable. A culturally competent individual is able to conduct his or her professional work in a way that is congruent with the behaviors and expectations that members of Alaska Native cultural groups recognize as appropriate among themselves (Dahl, 1993, p. 150; Shearer, 2007; Simcox & Hodgson, 1993). Cultural awareness is an understanding of how other groups differ from one's own. Planners and project leaders can become culturally aware by recognizing differences in values, beliefs, manners of speech, and rules for making decisions (Elder, 2002). Increased cultural awareness on the part of agency employees will reduce misunderstandings, convey genuine interest in and respect for Native cultures, and show commitment to both conservation projects and personal relationships.

We recommend that agency workers make sure, upon their arrival in a village or community in rural Alaska, to explain basic things, including who they are and what are they doing there. To make lasting connections, establish trust, and increase the probability of success, agency employees must be willing to put forth the necessary time, effort, and patience (Davenport et al., 2007; Hansen, 2011). This includes making informal visits to communities in addition to business-oriented trips. To keep relationships and trust on a positive level, we recommend do-

ing things purely for the benefit of the community, such as speaking at schools, hosting or supporting science-culture camps and other events, or helping with youth activities.

Workers who are trained in intercultural communication and Alaska Native history, cultures, and languages will prove most successful (Shearer, 2007). Federal agencies in Alaska should recruit and hire for outreach positions individuals with demonstrated interest in or skills and experience with cultures different from their own (e.g., returned U.S. Peace Corps volunteers) or those who have completed coursework in cultural awareness and sensitivity (Leech et al., 2009). Agencies should provide more training opportunities that are focused on cultural competence to help agency employees acquire the skills needed for doing effective public participation with Alaska Native peoples.

Proposition 5: Lack of understanding of issues and proposed projects among Alaska Native/rural populations prevents participation.

Agencies often do not provide Alaska Native communities with adequate explanations of the reasons behind project proposals and planning decisions. This results in a lack of understanding on the part of Alaska Native peoples, and thus, a lack of participation. Like most people, Alaska Native peoples are hesitant to comment publicly or participate in a process to resolve a public issue that they do not understand. Better explanations and more effort on the part of the agencies to inform Native peoples about the intent and implications of federal proposals would lead to greater comprehension and an increase in both the quality and quantity of participation.

Agency planners should conduct both listening and information sessions with Alaska Native groups and communities early in the planning process and often enough to keep themselves and residents updated on issues, changes, and progress. Agency workers should allow community members the chance to give input in the form of spoken or written opinions and comments in order to facilitate a two-way flow of information. Agency planners should use clear explanations that are free of technical or bureaucratic jargon to increase audience comprehension.

Proposition 6: Logistical issues, including the location and scheduling of meetings, greatly affect participation.

Agency employees should carefully plan the logistics of public participation to make sure that critical elements are in place from the earli-

est stages of a project. For example, attendance at a meeting or other event is largely determined by location. Many rural Alaskans, Native or otherwise, lack the financial means or the free time to travel to urban areas or regional hubs for agency-sponsored planning meetings. Agencies should hold more meetings and events in rural villages and shoulder more of the cost burden for those who travel outside of their communities (Shearer, 2007). This would increase the number and variety of rural participants as well as the quality of their input. In general, more meaningful consultation usually occurs on Native turf (Shearer, 2007).

Another implication concerns the flexibility of meeting schedules. For maximum participation, the timing of meetings on certain issues needs to correspond to Native traditional ways of life. Agency planners need to be attuned to the subsistence calendar because rural people are busy, and they are likely to only attend meetings about issues that are immediately relevant. To address this reality more effectively, agency planners and managers should ask Native leaders to help schedule village visits and meetings so these can be timely and relevant. Agency planners and managers should be highly flexible in scheduling public participation activities.

Of equal concern is the hurried manner in which some agency employees tend to operate. Rushing to discuss the main points of business is generally counterproductive when working with Native communities (e.g., Hansen, 2011). The short time commitment demonstrated by agency workers tends to be perceived by Alaska Natives as a lack of dedication or as an interest in quickly getting the job done and getting home. Village or tribal councils do not operate in a hurried manner and prefer to make decisions within their traditional cultural frameworks, which usually allow for longer deliberations. Agency planners should spend more time with people in Alaska Native communities to show real commitment and dedication to their projects, the issues, and the people.

Conclusion

We used a broad lens to examine Alaska Native participation in land use and conservation planning processes used by federal agencies. Working with a methodology based in Grounded Theory, we interviewed agency employees, both Native and non-Native, and other key informants who work in natural resource management and conservation planning in Alaska.

The key elements of communications, relations, and involvement are interconnected and cyclical in nature (see **Figure 1**), with a failure in any one area amounting to a step backwards in the entire process of public participation and planning. The ease and success of communications between Alaska Native individuals and agency employees depends, in part, on the relations between the parties. If there are negative feelings and mistrust, even the most effective methods of communication will have limited success, whereas positive personal relations can create openness, honesty, and effective communication. Providing ample opportunities for involvement on the part of Alaska Native peoples improves relations, and improved relationships, in turn, allow for improved communications based on ownership.

The main ingredient in this recipe of meaningful public participation is respect for and understanding of Alaska Native cultures and ways of knowing on the part of agency planners and managers. In cases where agencies fail to engage Alaska Native peoples in meaningful participation, we attribute this failure, in large part, to a lack of cultural awareness and sensitivity as well as an inadequate amount of flexibility in the spirit and methods used by the agencies. Whether it be communicating in informal, one-to-one settings; establishing relationships that are personal as well as professional; or discussing issues at times when they are immediately relevant, practices that are more suited to Alaska Native cultures and ways of knowing will be more likely to produce meaningful public participation.

Relationships between groups with different cultural backgrounds and agendas are usually tenuous at first, vulnerable to faux pas or misunderstandings caused by cultural ignorance. Alaska Native peoples and federal land management agencies are no different. More importantly, the very notion of long-range planning, as practiced in the west, may be foreign to and historically absent from many cultures and languages of Alaska Native peoples (Gallagher, 1993), and the practice itself may be culturally inappropriate in many cases. This suggests a substantial challenge yet to be addressed by the agencies. The first step toward meeting this challenge is to increase cultural knowledge and sensitivity among agency employees.

This analysis is supported by and confirms some common tenets of communication and public involvement theory found in the literature, but it has by no means reinvented the wheel. To the contrary, we have discovered that the agencies have not advanced enough towards involv-

ing Alaska Native peoples meaningfully in land use planning and management since Gallagher (1988). The agencies in Alaska need to generously apply much more of the main ingredient. It is long overdue for managers and planners to cultivate and nurture more and better working relationships with Alaska Native peoples. This will move us closer towards the common goals of protecting and caring for public lands in a manner that benefits all people (Hansen, 2011, p. 45). We fully expect that satisfying the cultural requirements of public participation in Alaska will have wide-reaching and positive repercussions.

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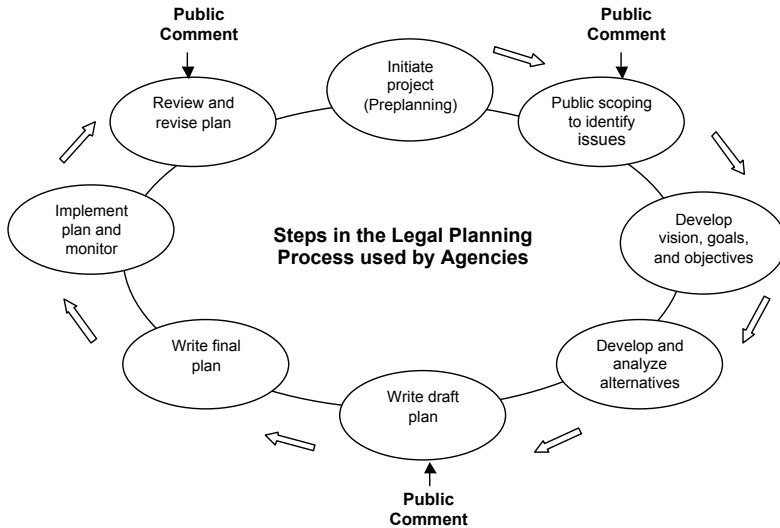
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Appendix A. Simplified model of conservation planning used by federal agencies in the United States. This process is consistent with planning requirements found in laws and policies that direct agency planning and public involvement. Agencies rely primarily on public meetings, hearings, and similar bureaucratic formats to solicit written comments or spoken testimony. These methods do not adequately account for Alaska Native cultures and ways of knowing.



Appendix B. Interview guide.

- What kind of work do you do? What kind of contact do you have with Alaska Native villages or communities?
 - What kind of things do you think prevent Alaska Native peoples/rural communities from participating in agency processes and projects? What things impede agency work with Alaska Native communities?
 - What facilitates your work with Alaska Native peoples? (Probes: What aspects are they invested/interested in? What do they desire in terms of processes and/or outcomes? What do they desire in agency employees?)
 - Do you think that different processes for gathering information, not formal meetings or hearings, would be more effective? (Probe: What are your ideas for better engaging Alaska Native peoples?)
 - What do you think is of value to Alaska Native peoples or communities regarding agency management and their interactions with agency workers?
 - Please tell me a story from your work with Native communities.
 - What would you tell a young manager about working with Alaska Native communities in 2010?
 - How have things changed in your lifetime regarding agency work with Alaska Native peoples? How do you see things changing in the future?
 - How can we help agency managers learn what is relevant or not to communities today? How can we better relate to communities, and how can we increase Native feelings of ownership?
 - Who else should we speak with for this study?
-

Appendix C. Key informants and interview synopses.

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|---|-----------------------------|---------------|-----------------------------|---|
| Agency land manager | 32 | Male | Native | Recognize that information technicians have the most knowledge of agency processes and how they affect the Native community, but that the high volume of meetings and issues makes it difficult for them to have the people's voices be heard in every issue. Present information in a simple and easily understandable way without technical and bureaucratic jargon. |
| Agency ranger | All his life | Male | Native | It is important to be flexible and be able to adjust things according to the needs of the village. In addition to having a local contact, visitors should be willing to "open up" to the community and form personal relationships. Establishing trust and personal relationships is crucial for success. Information should be presented in such a way as to highlight benefits for the community with facts, figures, and examples relevant to their daily life. |
| Agency information technician | All his life | Male | Native | Because of their ways of life, Alaska Natives have to live in the present and so, often, can only afford to deal with issues related to activities in which they are presently engaged. Any information presented needs to be solid and definite, with concrete numbers and facts to help people understand. |
| Agency | All his life/26 with agency | Male | Native | Viewpoints that could be considered fatalistic by westerners could lead to misinterpreting Native attitudes and feelings or viewing them as indifferent about a topic. For centuries, westerners have effectively ignored Alaska Native peoples, which has led to great disillusionment and further contributed to the perceived attitude of apathy. Western society loves democracy, but democracy, as majority rule, is not really fair, and it is not a practice that Alaska Native societies believe in or utilize. |
| Agency regional subsistence coordinator | 22 | Male | Native | People in rural Alaska have different ways of life and priorities; they often do not have the luxury of participating in public processes. Information is often presented in a very technical manner and is not understood and the purposes of projects are often not explained. |

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|-------------------------------------|----------------------|---------------|-----------------------------|--|
| Agency co-management council leader | 15 | Male | Native | Alaska Native peoples want to be kept informed on decisions and the status of agency projects, and included in the processes; this includes outreach efforts that adequately explain things and presentation of comprehensible information. Different communication styles need to be taken into account when scheduling and presenting. A high volume of groups seeking input may lead to reduced participation. Inadequate funding not only hinders what organizations or divisions can do, but also indicates a lack of interest in succeeding with involving Native communities. |
| Charter school teacher | | Female | Native | Agencies need to show more respect for Native lives and ways of knowing. Agencies really need to respond to the comments and concerns of Alaska Native peoples. |
| Village chief | All his life | Male | Native | The overall feelings between the agencies and Alaska Native peoples are not good. The agencies need to communicate more with Alaska Natives and involve them in the management process. |
| Agency community liaison | 25 | Female | Native | Organize programs that benefit the tribe and really work to include Alaska Native peoples. Include tribes in public meetings. Cover issues that the local communities are interested in; and keep them updated on what is happening. |
| Agency subsistence specialist | | Male | Native | Alaska Native peoples view resources differently; they tend to look at quality rather than quantity. To get to know the Alaska Natives in a community, you need to spend time with them and talk with them. |
| University advisor | | Male | Native | Agencies need to make sure that there is infrastructure in place to enable Alaska Native peoples in the villages to participate in management meetings and plans. Information needs to be provided in a variety of media formats in simple terms. Having more Alaska Natives in resource management-related jobs would increase Native representation and influence in plans and ideas. Representation as a method does not represent all views. Generally, no one person speaks for the tribe or the village. |

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|---------------------------------|---------------|--------|----------------------|---|
| Agency regional supervisor | 22 | Male | Non-Native | Agency documents and projects need to be more user friendly, and their structures need to be based on the idea of serving citizens as well as possible. Improve logistics to make it easier for Alaska Native peoples to participate. Present information in a simple way intelligible to the uninitiated citizen—no technical or bureaucratic terms, no acronyms. |
| Agency outreach specialist | 31 | Female | Non-Native | The practices that are used in the lower-48 states are not successful with Alaska Natives and in rural Alaskan communities because of cultural and lifestyle differences. |
| Agency visitor services manager | 16 | Male | Non-Native | Varying community schedules and different ways of life require flexibility in expectations and scheduling. You must be accommodating to change in all aspects. Show the public that you appreciate their time and their input. |
| Agency | 9 | Male | Non-Native | Conduct meetings and activities in the format preferred by the villager residents. Take into consideration the differences in communication styles, including the length of discussions and explanations, and silences. Native communication allows for lengthy discussions and explanations, with the importance of an issue indicated by the amount of time devoted to it. Not understanding each other's communication styles can block communication due to misunderstanding and misinterpretation. |
| Agency regional supervisor | 5 | Female | Non-Native | The agency needs to take into account the cost burden for Alaska Native peoples to attend a meeting or hearing. Holding the meetings in the villages would be much more effective. The agency needs to explain the purpose for management regulations, projects, and meetings. The agency needs to take into account Alaska Natives peoples' schedules and ways of life when planning meetings, show them respect, and communicate and explain things more clearly. |

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|--|---------------|--------|----------------------|---|
| Agency | 20 | Female | Non-Native | Give Alaska Native peoples a full say and a chance to participate in and affect the process. Empower them by giving them opportunities and tools. Be willing to spend time talking and listening, and make sure your schedule allows for such flexibility. |
| Agency land manager | 38 | Male | Non-Native | Good, long-term relationships between villages and the refuge are very important for establishing trust and thus making progress, although relationships have to be established on an individual basis. Most of the time, people do not understand the reasons behind certain regulations because these reasons are not explained properly. Support from the communities could be garnered by explaining that those regulations exist to ensure subsistence. Give Native leaders the opportunity to participate in activities and surveys whenever possible, so that they can feel that they are involved. Take advantage of the knowledge of those who live in and near the parks and refuges. |
| Agency | 30 | Female | Non-Native | Alaska Natives need to be fully and truly respected and included in agency processes and projects; this will work to the advantage of all parties involved in decision making. Western education hiring requirements severely limit agency employment opportunities for Alaska Natives. In some Alaska Native cultures, speaking out is frowned upon, so people are often hesitant to speak their mind in a public forum or meeting. More informal meetings and one-on-one meetings may be more effective than large group meetings. |
| Agency liaison to the Alaska Federation of Natives | | Male | Non-Native | Agencies need to involve Alaska Natives more in the management process and place more value in their lives and their knowledge to increase and improve relations and participation. Agencies need to make Alaska Natives full and equal partners in co-management. There is a general lack of respect for Natives and Native ways, including traditional ecological knowledge that greatly impedes the establishment of trust and relationships. |

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|---------------------------------------|----------------------|---------------|-----------------------------|---|
| Agency supervisory wildlife biologist | 45 | Male | Non-Native | Vary the way in which you present information to the different Alaska Native communities. Alaska Native peoples have different value systems than many non-Natives, which can be a barrier to communication. The Refuge Information Technician program is an excellent approach to establishing long-term communication and relationships with Alaska Native peoples. |
| Agency supervisory wildlife biologist | 22 | Male | Non-Native | An agency should be specific on the issue that it is trying to discuss. Inform Alaska Native people in advance when you will be visiting their village. The way in which a survey is conducted will oftentimes determine the level of participation. Establish and use local contacts and know the right person with whom to speak. |
| Agency supervisory wildlife biologist | 16 | Male | Non-Native | Cultural differences need to be noted. Effective lines of communication need to be established and kept open. There needs to be more funding to allow for local-level work and meetings to build better relationships and communication. Bringing people and groups together allows for that sharing of information and building a complete understanding. |
| Agency land manager | | Male | Non-Native | More effective methods for communicating are needed. Inform Alaska Native peoples of new regulations or processes that may affect them directly or indirectly, and tell them how to go through the political and legislative processes to respond. Cultural issues such as areas that are historically and spiritually important are difficult for many Alaska Natives to talk about. |
| University faculty | 25 | Male | Non-Native | Communication lines and authority figures are not clearly defined. This results in confusion and a feeling of inability on the part of many Alaska Natives. Communities are not given enough opportunities to participate and make an impact. Many laws need to be clarified, especially when they are enforced by more than one agency. |

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|---|----------------------|---------------|-----------------------------|--|
| University faculty | | Male | Non-Native | There is a long history of mistrust and dislike between Alaska Native peoples and the agencies. This mistrust creates a fear of enforcement, which prevents the free flow of accurate and useful information. It is very important to build good relationships with individuals by showing them respect, valuing their knowledge, and doing projects that are important to them. |
| Agency subsistence manager | | Male | Non-Native | There is a disconnect between the formal advisory bodies and the rural residents. Public outreach needs to occur in the villages. |
| Agency land manager | | Male | Non-Native | The structure of a community is dynamic and multifaceted, and no one meeting or method is going to gather the viewpoints of everyone. To gather a good representative sample of the views and opinions of a community, agency staff need to know the village and the village residents, listen to them, address their concerns, and involve them in as many activities as possible. It is important to have local hires because, not only can they provide local knowledge, but they also understand the political and social structures of the communities. |
| University faculty, cooperative extension service | | Female | Non-Native | Many Alaska Native peoples will not participate in meetings because they are disillusioned; they have spoken up in the past and their input was ignored. Agencies need to adjust ways of doing things to better suit the different cultures and societies of Alaska Native peoples. Every bureaucratic process needs to be analyzed in the context of the Alaska Native cultures and societies, including regulations. Tribal governments need to be treated as equals and their concerns noted and responded to. |

| Informant affiliation | Years working | Gender | Native or non-Native | Interview synopsis |
|---|----------------------|---------------|-----------------------------|--|
| Tanana Chiefs Conference, subsistence manager | 25 | Male | Non-Native | To get people involved in an issue, you need to respond to their concerns, explain what you do and how. Take time to explain these things in a comprehensive manner. Try to be humble and open to new ideas and ways of understanding the world. |
| University faculty | | Male | Non-Native | Respect Alaska Native peoples' traditional ways of knowing and work these into planning processes and regulations. There is general mistrust of agencies by Alaska Native peoples. |

Appendix D. Emergent categories coded during Grounded Theory analysis.

| Category and Subcategory | Dimension | Definition |
|--------------------------|----------------|--|
| Communications | | |
| Information | Presentation | The way information is presented, including diction; use of examples; format of proof, evidence, data, or explanations. |
| | Methods | How information is gathered, practices and formats, including media used for outreach, spreading messages, or publicizing meetings or other events. |
| | Content | What communications contain or fail to contain, often in terms of reasons and explanations; is information useful or confusing? |
| | Interpretation | How Alaska Native peoples understand statements, plans, or data in terms of its relevance to their traditional ways of life. |
| | Flow | Creating and maintaining a satisfactory flow of information (i.e., sharing). |
| Interactions | Format | How interactions are staged, including the setting, and formality. |
| | Style | Cultural or societal differences in styles or ways of communicating such as pauses when speaking, eye contact, directness, use of metaphors/stories. |
| | Access | Connections between parties; clearly knowing who the key players are and access to authority figures or decision makers. |
| | Representative | Using Native representatives to interact with agencies on behalf of larger groups, or other such democratic principles, is a barrier. |
| | Coordination | Capacity to reconcile differing viewpoints; working to get people together and to organize, combine, and integrate information from different sources. |
| Relations | | |
| Barriers/Facilitators | Trust | Levels of trust or mistrust between Alaska Native peoples and the agencies. |

| Category and Subcategory | Dimension | Definition |
|--------------------------|---------------------|--|
| | Perceptions | How the parties view each other; mostly how Natives view the agencies in terms of goals, productivity, agenda, and purpose. |
| | Attitudes | How parties evaluate and act toward each other, including respect for and confidence in the different sources of information used by each; respect for differing ways of life and cultures, or lack thereof. |
| | Worldview | Differences in culture, knowledge, or society that lead to different meanings of nature and humanity, views of reality, which cause misunderstandings. |
| | Building relations | Methods and habits for effectively establishing and maintaining personal relationships with Native individuals; informants' personal methods for doing this and views of success, or lack thereof. |
| Involvement | Authority | Confusing and wide distribution of agency authority; lack of authority, especially government-to-government status, for Alaska Native groups and tribes. |
| Barriers/Facilitators | Impact | The ability or lack thereof for Natives to have any level of influence. |
| | Qualifications | The prevalence of requirements, educational and others, which are western-based and greatly limit formal opportunities for Native individuals to work in agencies. |
| | Issue relevance | Importance, relevance, and timeliness, especially immediate relevance, of the issues at hand for Native cultures and ways of life. |
| | Liaisons | Working with local contacts and liaisons in rural Native communities, specifically Refuge Information Technicians (i.e., local hires). |
| | Roles/opportunities | The availability of meaningful jobs, roles, or opportunities for Natives to directly participate in and contribute to agency planning and management. |

| Category and Subcategory | Dimension | Definition |
|--------------------------|---------------------------|--|
| Logistics | Schedules/ flexibility | When meetings and events are scheduled, especially in relation to the subsistence calendar, the general lack of flexibility in scheduled trips and programs. |
| | Volume | The number of meetings/planning efforts and other time commitments that happen (often simultaneously), and the large number of issues that exist. |
| | Location | Where meetings and events take place (e.g., village or regional hub). |
| | Funding | The amount of monetary support given to groups, events, plans, or issues. |

Appendix E. Useful tips for public participation with Alaska Native peoples.

| Elements | Recommendations |
|----------------|--|
| Communications | <ul style="list-style-type: none"> ○ Practice true listening ○ Eliminate technical jargon and bureaucratic terms ○ Regularly update the public on new information ○ Explain actions and regulations in simple common language ○ Use creative presentation styles that build in humor and stories ○ Use clear concrete examples from rural Alaska ○ Share information ○ Give people time to think about issues ○ Do not expect an immediate response ○ Format meetings to be informal and socially engaging with food and fun |
| Relations | <ul style="list-style-type: none"> ○ Build and invest in personal relationships ○ Maintain continuity in your job, projects, and relationships ○ Make yourself available ○ Increase your cultural awareness ○ Appreciate perspectives that are different from your own ○ Respect local ideas and traditional ways of knowing ○ Frequently visit communities ○ Trust Alaska Native peoples |
| Involvement | <ul style="list-style-type: none"> ○ Interact frequently with local contacts and community liaisons ○ Schedule meetings and events on issues of greatest importance at the time ○ Provide training and workshops ○ Use local hires ○ Provide meaningful roles for community leaders and others in projects |
| Logistics | <ul style="list-style-type: none"> ○ Minimize travel costs for Alaska Native peoples ○ Hold meetings and events in rural communities ○ Be flexible when scheduling ○ Meet without an agenda for more than a day ○ Allow time for every participant to speak |

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