



# Collaborative Research to Assess Visitor Impacts on Alaska Native Practices Along Alagnak Wild River

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The Alagnak (or “Branch”) River drains the eastern front of Aleutian Range peaks, descending through Nonvianuk and Kukaklek Lakes – among the highest-elevation sockeye spawning lakes in the world – and down through complexly braided channels to meet Bristol Bay tidewater. As one of the region’s famously productive salmon rivers, the Alagnak’s banks historically were lined with villages of both Yup’ik and Alutiiq residents, and archaeological data document millennia of human occupation (*Bundy 2007*). Certain twentieth century disruptions brought an abrupt end to year-round settlement. The ‘Spanish influenza’ epidemic at the end of World War I brought dramatic demographic contractions along this river, and federal policies requiring formal schooling for Native youth in the mid-twentieth century induced the relocation of surviving families to places off-river. They regrouped in larger villages, principally in the nearby Kvichak and Naknek River Basins, some not leaving the Alagnak until the late 1960s. Though displaced, many families continued to fish, hunt, and gather plant foods on the Alagnak, often for months at a time, maintaining cabins and Native allotments for this purpose. Into the late twentieth century, food gathered on the Alagnak still served as the

**Figure 1. Map of the Alagnak River.**

**Figure 2. A former village site near the forks of Nonvianuk and Alagnak Rivers that disbanded after the influenza pandemic of 1918-1920. A number of village sites are still apparent along the Alagnak; such locations make appealing campsites to river visitors, creating challenges in light of the cultural and archaeological sensitivity of these sites.**

Photograph courtesy of Douglas Deur

foundation of year-round subsistence, and social activities on the river represented a cornerstone of community life. For these people, the Alagnak is conceptualized both as “home” and as a resource-rich refuge, where families can return to harvest subsistence resources, reconnect with their heritage, and briefly escape modern village life.

In recent decades, however, the Alagnak’s natural bounty has been discovered by the outside world. Recreational lodges now dot the river’s lower reaches, and each summer a growing number of recreational fishermen and hunters from the United States, Europe, and Asia arrive on the Alagnak River. River life is further transformed by such unprecedented recreational activities as river rafting – an increasingly popular summertime pursuit for visitors from around the globe. Predictably, these changes have caused friction. Tourist visitation has compounded a number of other recent changes in Alaska Native community life, and Native use of the Alagnak has declined significantly in a generation’s time. Some 67 river miles of the Alagnak were designated in 1980 as one of the nation’s few “Wild Rivers” under ANILCA and the Wild and Scenic Rivers Act, and is now managed with Katmai National Park and Preserve. Still, the pressures on the river continue to expand, raising concerns among some Alaska Native river users that in time these changes might largely eliminate their presence from this valued corner of their traditional territory.

Recognizing that these developments presented the NPS with compliance and planning challenges, Katmai initiated a river management plan as well as several studies (*e.g., Deur 2008, Spang et al. 2006, Zwiebel 2003, Curran 2004*). Following guidance from a 1996 reconnaissance effort by former NPS anthropologist Michele Morseth, Dr. Jeanne Schaaf (Chief of Cultural Resources for Lake

Clark, Katmai, Alagnak, and Aniakchak) called upon Dr. Douglas Deur to initiate a broad ethnographic investigation of visitor impacts on Alaska Native communities through a Cooperative Ecosystem Studies Unit task agreement. The research strategy and methodologies employed as part of this project were somewhat unique. Deur worked collaboratively with an NPS research partner – Lake Clark National Park and Preserve Anthropologist and Alaska Native scholar, Karen Evanoff (Dena’ina). Together, Deur and Evanoff collaborated with residents from the villages of Igiugig, Levelock, Naknek, King Salmon, and Kokhanok in designing the current study. All of these communities possess some contemporary and historical ties to the Alagnak, although their different patterns of river use mean that visitor impacts manifest somewhat differently. With village input, they developed a research plan, identifying appropriate methodologies and envisioning final research products that might best convey community concerns to the outside world. Deur and Evanoff then recruited and helped train two Alaska Native research assistants from these villages – Adelheid Herrmann (Naknek) and AlexAnna Salmon (Igiugig) – to serve as part of a collaborative Alagnak research team. Herrmann and Salmon were able to assist the project’s lead researchers in organizing and conducting interviews and were also able to carry out independent interviews too, adding considerably to the depth of project findings. These local research assistants helped explain project objectives to their communities, while helping to translate and contextualize their communities’ concerns to the lead researchers. The research thus compiles knowledge while also building capacities – preparing the assistants for participation in future research or allowing them to be well-informed guides in future research endeavors

relating to Alaska Native interests on public lands.

While existing NPS and Alaska Department of Fish and Game files suggested a number of direct effects of visitors on the Alagnak (e.g., increased pressure on fish resources, and increased crowding), we predicted that these direct effects would have corresponding indirect effects, which were underreported but often of equal or greater concern to Alaska Native river users (e.g., secondary effects on Native cultural transmission and off-site effects on Native economic practices). The research team identified key people in each community who were knowledgeable about the study area based on personal use or inherited oral tradition. Additional interviewees were identified through “snowball sampling,” in which interviewees were asked to identify additional knowledgeable people in the community. These individuals participated in recorded qualitative interviews in turn, until the reservoir of all identified knowledgeable individuals who were able and willing to participate had been interviewed. Cumulatively, formal interviews were conducted with no fewer than 25 individuals – some being interviewed repeatedly. Interview content was transcribed and reviewed for recurrent

themes, and these themes were assessed with reference to preexisting archaeological, ethnographic, and biophysical data relating to the study area. In addition to conducting formal interviews and archival research to assess indirect effects, the Alagnak research team carried out field visits along the Alagnak River, mapping and photographing cultural sites, recording traditional place-based knowledge, and documenting Alaska Native river users’ concerns.

Visitor impacts on the Alagnak reported by Alaska Native participants in our study included the types of direct and readily quantifiable effects so well summarized in past subsistence research, but often focused instead on indirect, secondary and intangible effects. Of all reported concerns, Native interviewees mentioned bank erosion most frequently, but emphasized indirect as well as direct effects of erosion as being fundamental to their concerns regarding visitor impacts. Native river users report that increased river traffic, often involving jet-boats and other high-speed vessels, has accelerated erosion along portions of the river bank. Native allotments and cabins have been undermined by erosion in turn. Erosion was always part of life on the Alagnak, interviewees

sometimes noted, but today their adaptability to erosion has decreased as they are “locked in” to fixed land boundaries and there are logistical barriers to mobilizing large, youthful work groups. In addition to displacing some river users outright from their cabins and allotments, erosion is said, in turn, to affect riparian vegetation and potentially increase sediment deposition in fish spawning gravels downstream (*Deur 2008, Curran 2003*).

While river crowding was identified as an effect of increased visitation (*Zwiebel 2003*), interviewees made it clear that crowding had secondary effects that were of particular concern. Interviewees noted that summer and fall subsistence hunting was no longer safe in light of visitor densities and had been largely discontinued. Interviewees shared a number of anecdotal accounts of hunters nearly firing a shot at game, only to have river visitors appear in the line of fire from concealed positions in front of, or behind, the intended target along the complexly braided and vegetated river channels. Crowding was also widely believed to have contributed to reduced bear flight distance, which was said to pose new safety threats to Native and non-Native river users alike,



NPS photograph by Karen Evaroff

**Figure 3.** Igiugig elder, Mary Olympic, being interviewed by her granddaughter, research assistant AlexAnna Salmon, and Principal Investigator Dr. Douglas Deur. Research assistants received training in research methods and then applied these methods in collaborative tasks.



Photograph courtesy of Douglas Deur

**Figure 4.** Interviewee Annie Wilson inside one of the trapping cabins owned and used by members of her family along the Alagnak River corridor.



Photograph courtesy of Douglas Deur

**Figure 5.** One of several cabins still maintained on allotment inholdings within Alagnak Wild River boundaries. In recent times, Alaska Natives have used such structures when working on NPS archaeological teams or as trespass officers. “No Trespassing” signs accompany most cabins and allotments, but visitor use of these structures presents persistent challenges.

as bears hold their ground and come into closer proximity to humans than what was recalled historically. Crowding also reduced Native users' sense of solitude and privacy, as impromptu contact with unknown visitors and motor noise encroached on Native visitors' experience.

Many interviewees expressed objections to what are seen as demonstrations of outsiders' "disrespect" toward culturally significant plant and animal species – species whose persistence is traditionally believed to depend on displays of respect and reciprocity through ritual and other means. Clearly, the concept of what constitutes respect and disrespect are embedded in a constellation of values and experiences that are somewhat unique to these communities, which we sought to elucidate through this

research. Disrespectful and risky visitor behavior toward bears and other natural hazards is said to unbalance long-standing relationships and to place Native users at risk – by acclimating bears and by creating situations wherein Native river users must assist in emergency situations. "Catch and release" fishing was also cited as a form of disrespect that might have consequences for Native communities beyond merely material effects. Native users also expressed concern regarding forms of disrespect toward Native peoples and their private lands: interviewees reported trampling and littering, as well as occasional theft and vandalism on Native allotments. These were reported as material inconveniences, but were equally disconcerting to many interviewees as manifesta-

tions of disrespect from visitors, attenuated by perceived race and class bias. In turn, visitor numbers have brought about increased regulation and policing by federal and state authorities – a trend that is welcomed to the extent that it protects Native interests, but is simultaneously lamented as Native individuals increasingly feel that they are being monitored in their own traditional lands.

Visitor numbers are said to have been one of several variables contributing to decreases in traditional economic activity such as fur trapping, with changing game patterns and logistical challenges. Simultaneously, visitors have increased opportunities for cash employment related to NPS resource management, trespass enforcement, and charter operations, while also creating income-generating opportunities relating to the leasing or recreational use of Native allotment and corporation lands. In some cases, decisions about how to balance visitor impacts and economic opportunities pit traditionalists against proponents of modern economic development – a common and occasionally destabilizing dynamic in many Alaska Native communities. Reduced subsistence harvests on the Alagnak and elsewhere have hastened Native economic and technological transformation in the region—some suggest that this has increased Native dependence on outside economies, and adversely affected their "food security," though it remains unclear how proportionally significant displacement from the Alagnak may be in this larger trend. A number of interviewees noted that visitor pressures have changed the seasonality of subsistence river use, and reduced both individual and community reliance on certain species historically obtained during the summer months on the Alagnak, such as king salmon (*Oncorhynchus tshawytscha*).

Cumulatively, the evidence suggests that increased competition for game, increased hazards, and other effects together have contributed to a reduction in Alaska Native use of the river. This has corollary effects that had not been previously reported, including intensified subsistence hunting and fishing on non-NPS lands nearby. Of greatest concern to interviewees among



Photograph courtesy of Douglas Deur

**Figure 6.** A number of group interviews took place in the course of this research, often facilitating elders' recollections with prompts from other elders in the room. Information from these group interviews were compared with individual and field interviews to provide a more rich foundation for analysis. Here, interviewee Dallia Andrew describes traditional fishing sites with the input of other elders.



Photograph courtesy of Douglas Deur

**Figure 7.** Initial off-site interviews involved the use of maps and aerial photo mosaics to identify the locations of villages, camps, resource sites, named places, and other elements of the cultural landscape. These were later checked in the field, with the assistance of Alaska Native elders.



Photograph courtesy of Douglas Deur

Figure 8. Interviewees George and Annie Wilson with Lake Clark park anthropologist Karen Evanoff (center), checking field locations by riverboat on the Alagnak.



Photograph courtesy of Douglas Deur

Figure 9. Rafters camping along the Alagnak River in August 2012. Campers occupy riparian islands and shorelines throughout this complexly braided river system throughout the summer months.



Photograph courtesy of Douglas Deur

Figure 10. Remnants of fish smoking houses and other outbuildings that have eroded into Alagnak River in the last two decades.



Photograph courtesy of Douglas Deur

Figure 11. Igiugig elder, Mike Andrew, identifying the place where he was born along Alagnak River. He was born while his family trapped beaver on the river from a tent camp on a channel extending off of the middle river – now a popular staging area for recreational fishermen.



**Figure 12.** Archaeological excavations at a former village site along Alagnak River in 2004. Work overseen by Dr. Jeanne Schaaf has demonstrated the presence of large, permanent villages along the Alagnak, dating from no later than 2,300 years before present, that utilized riverine resources in ways similar to those described today by Yupik elders. Older sites along the river can be dated to the Paleoarctic tradition, between 7,000 and 9,000 years before present.

these indirect effects, perhaps, is the fact that declining access to the landscape has reduced inter-generational transmission of traditional knowledge pertaining directly to the Alagnak region—the passing on of place-based cultural and biological information from elders to children—potentially eliminating certain domains of cultural knowledge and practice, and affecting communities' sense of identity. Interviewees suggest that the traditional view of the Alagnak as both a home and a place of refuge is generally in decline, and the indirect effects of visitor uses are contributing to this trend.

No doubt, many NPS resource managers share the concerns of Alaska Native river users. Through this research, resource managers have gained an uniquely in-depth view of Native Alaskan perspectives on the landscape, and have access to the tremendous accumulated knowledge of multigenerational Native river users. The work—available publicly from the NPS Regional Office in summary reports by late 2013—gives cultural resource managers site-specific information on places and resources of concern to Native communities and gives natural resource managers testable hypotheses regarding resource trends that can be addressed in future river management planning and research. The work also points toward a variety of compliance implications under

federal law and policy relating to cultural resources and practices of Alaska Native peoples. Already, the work has fostered direct meetings between the park superintendent and Native communities on issues of mutual concern – from collaborative interpretative development opportunities to shared resource protection strategies. The Alagnak research team anticipates that the documentation resulting from this research will 1) aid these communities in articulating their concerns in resource management planning venues, including those indirect effects that are often difficult to enumerate in compliance-driven consultation, 2) identify future natural resource research needs, and 3) serve as a foundation for broader cross-cultural discussion and understanding that might allow continued recreational uses of the river while insuring that the Alagnak will continue to sustain Alaska Native communities – dietarily, economically, spiritually, and culturally – for many generations to come.

“We thank you a hundred times over for bringing us back here,” one of the elders said during the final fieldwork on the Alagnak. We, in turn, thank the elders who guided us on the river, documenting not just visitor impacts, but many other things: important places, stories, oral history, landscape changes, edible and medicinal plants, cabins, genealogy, and traditional

ecological knowledge. A project is truly collaborative when we realize how much we have learned, not just intellectually, to meet our project goals and objectives, but also at the personal level, in our hearts and our heads, that will enhance our perspectives for many years to come. We had the opportunity to learn from the original inhabitants of this land, gaining insights into the impacts of visitors to the Alagnak River area, and also gained a glimpse of the vast knowledge of these original inhabitants while exploring together on the land; this was one of the greatest highlights of this four-year project.

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