

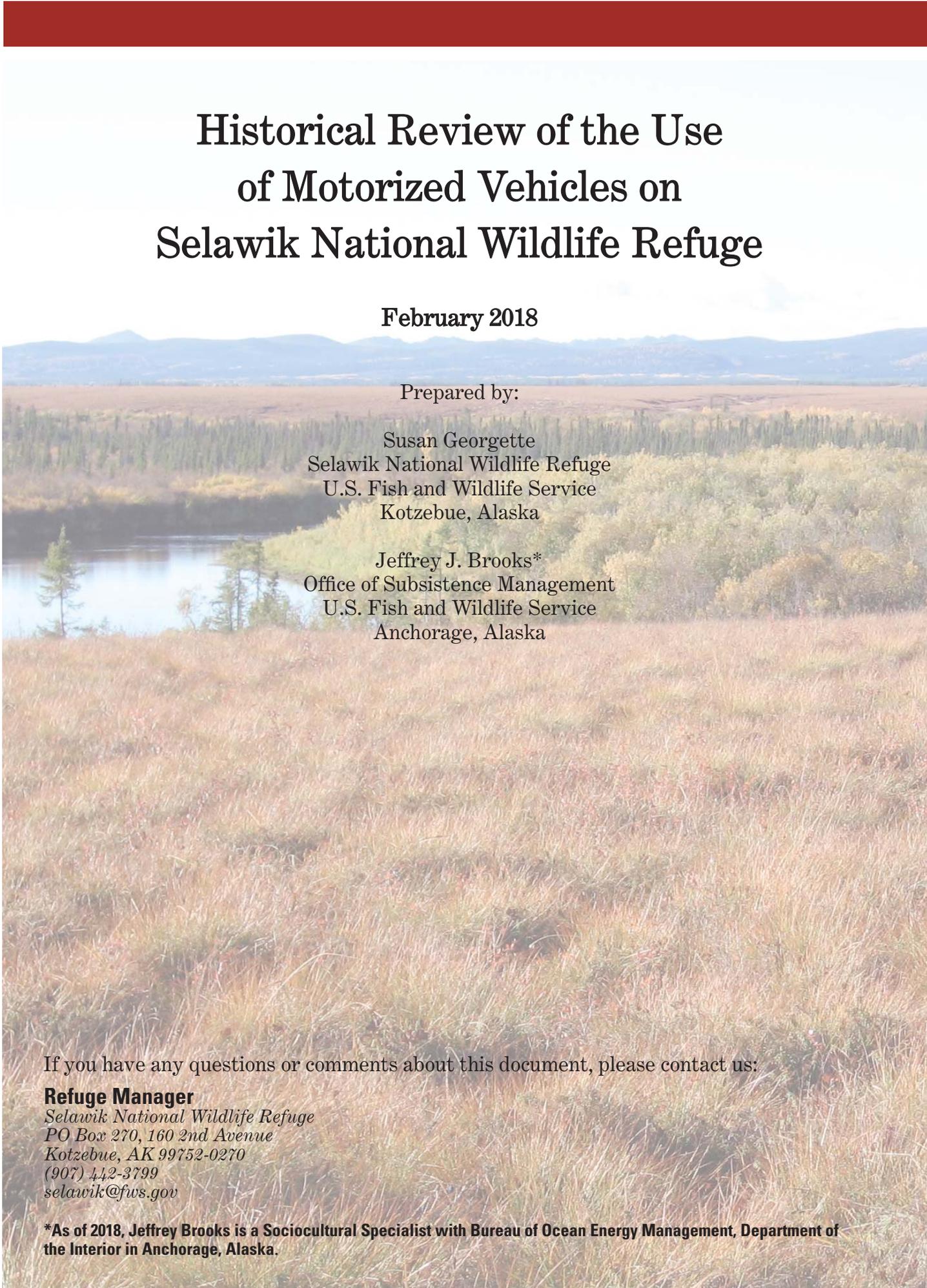
Historical Review of the Use of Motorized Vehicles on Selawik National Wildlife Refuge



Selawik National Wildlife Refuge
Kotzebue, Alaska
February 2018

Front cover photograph: USFWS/S. Hillebrand. *The landscape of northwest Alaska is dotted with subsistence camps, such as the one pictured here on the lower Selawik River. These camps are primarily used by the region's indigenous people—the Iñupiat—to harvest and process the bounty of the land and water.*

Back cover photograph: USFWS/S. Hillebrand. *The river deltas and wetlands that comprise much of the Selawik National Wildlife Refuge make excellent habitat for fishes, waterfowl, shorebirds, caribou and more.*



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February 2018

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The Mission of the U.S. Fish and Wildlife Service

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.



The Mission of the National Wildlife Refuge System

The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.



National Wildlife Refuge System Improvement Act of 1997

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List of Abbreviations

ANILCA	Alaska National Interest Lands Conservation Act (1980)
ATVs	all-terrain vehicles
DOI	Department of the Interior
ORVs	off-road vehicles
USFWS.....	U.S. Fish and Wildlife Service

Acknowledgements

The generosity of local residents with their time and knowledge makes projects like this a highlight of our working lives. We are grateful to the people of Noorvik, Kiana, Ambler, Shungnak, and Selawik who willingly shared their memories and insights about the history of motorized access to subsistence resources in their communities. We are similarly grateful to the tribal and city councils in these villages for their unflagging support of this project.

Sue Magee, Peter Boyer, and Andrew Levi with the State of Alaska participated actively in the design and review of this project, providing valuable guidance in its focus and methodology and insightful critique of the draft report. April Parrish with the State of Alaska researched the history of access in the state's files. Noah Naylor and Charlie Gregg at the Northwest Arctic Borough and Abraham Snyder at NANA Regional Corporation participated in early discussions about this project and reviewed the project design. Jeff Nelson and Rosie Barr at NANA Regional Corporation and Noah Naylor at the Northwest Arctic Borough carefully reviewed the draft report. David Jenkins of the Office of Subsistence Management, U.S. Fish and Wildlife Service, lent a critical eye to the draft as well. Scott McGee, cartographer at U.S. Fish and Wildlife Service, produced the excellent maps. Brittany Sweeney at Selawik National Wildlife Refuge extended her artful touch to the report's design and layout. We extend our gratitude to all these individuals for the considerable time and effort they put into this project.

Lee Anne Ayres and Tina Moran, Selawik refuge manager and deputy, supported this project at every step. Their trust in our judgment and assistance with myriad details did not go unnoticed.



Figure 1. Winter trails, such as this one near Shungnak, are the region's "highways" during the snow season.

Background

In 2011, the Selawik National Wildlife Refuge (Selawik refuge, refuge) completed a revised comprehensive conservation plan. Objective 7 under Goal 3 states:

Conduct a historical access study in cooperation with the State of Alaska and Alaska Native tribal elders and leaders living in communities within and adjacent to the refuge and NANA Regional Corporation and Northwest Arctic Borough as necessary (USFWS 2011, p. 2-11).

This project was conducted to implement this objective. The purpose of the report is to document historical motorized surface access (excluding motorboats and snowmachines) in Selawik refuge.

The Alaska National Interest Lands Conservation Act of 1980 (ANILCA) provides that “use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed” and “use of snowmachines ... motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities” shall be permitted subject to reasonable regulation.

A study of historical access to the lands that now comprise Selawik refuge will help determine where and what motorized activities have occurred on the refuge. A better understanding of historical access will assist the refuge in monitoring and managing current and future access, particularly access for subsistence purposes. This study provided an opportunity for cooperation and collaboration between the U.S. Fish and Wildlife Service, State of Alaska, Northwest Arctic Borough, and local communities.

Project Goals

1. Produce a written document summarizing the history of motorized surface access (excluding motorboats and snowmachines) for subsistence and traditional activities on Selawik refuge, especially around the time of ANILCA’s passage (1980).
2. Conduct the research in cooperation with Alaska Native communities and organizations, the Northwest Arctic Borough, and the State of Alaska to fulfill Objective 7 under Goal 3 of the refuge’s comprehensive conservation plan (USFWS 2011).

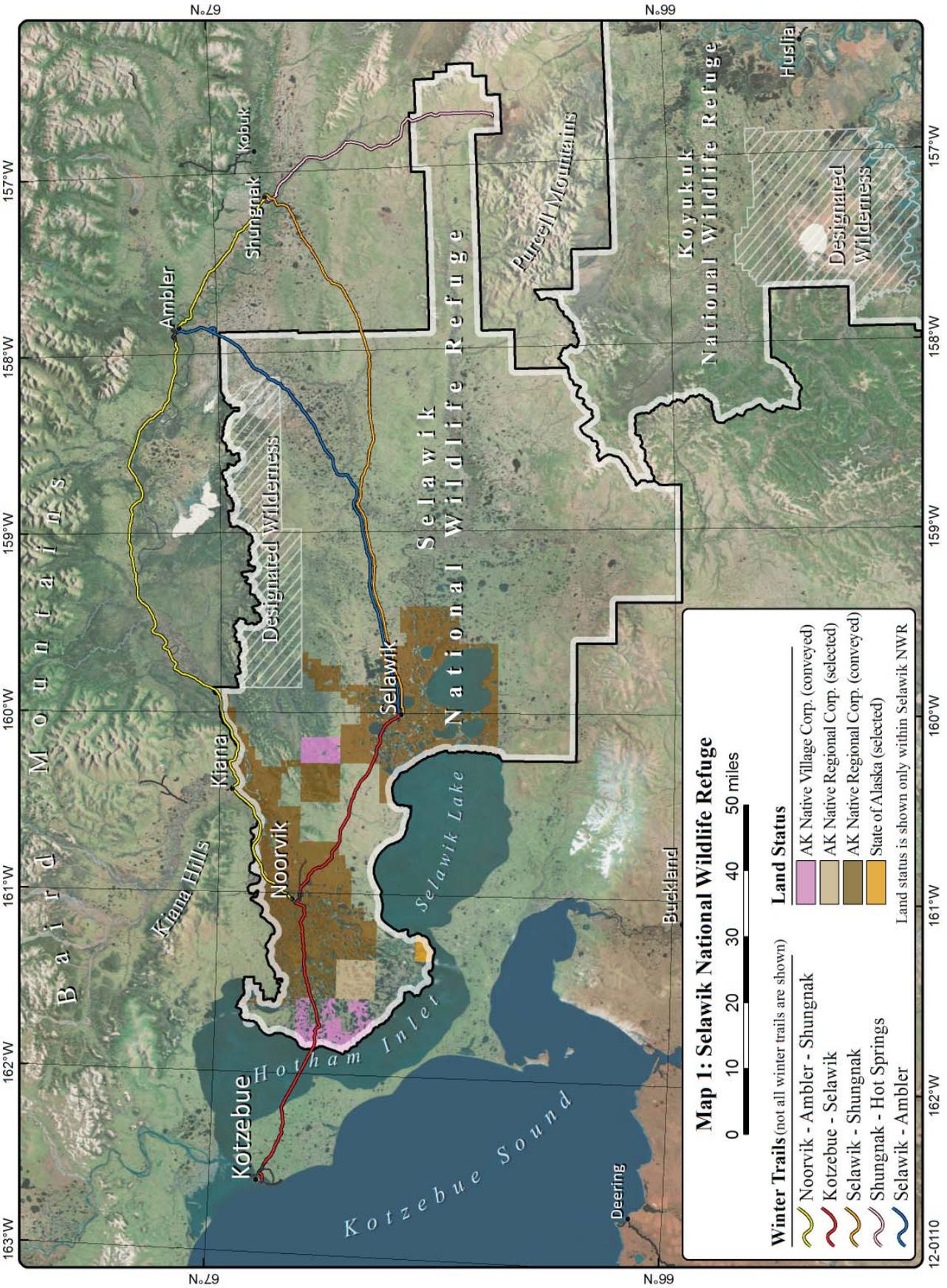
Project Scope

This project focused on motorized transportation practices (excluding motorboats and snowmachines) prior to the early 1980s on what are now federal public lands administered by the Selawik refuge (Map 1). Of particular interest was generally occurring, pre-1980 use of any type of wheeled or tracked off-road vehicle, all-terrain vehicle, amphibious vehicle, airboat, or any similar vehicle or their predecessors for the purposes of subsistence and traditional activities. Information on the use of motorized vehicles within communities or on Alaska Native, private, or other non-refuge lands was noted as mentioned, but was not documented in detail.

Extent of Collaboration

Extensive collaboration with the State of Alaska took place during this project, particularly in the design and planning phases. U.S. Fish and Wildlife Service staff communicated frequently by teleconference and email with the Alaska Department of Fish and Game, Alaska Department of Natural Resources, and the ANILCA Program Coordinator in the Office of Project Management and Permitting about the details of project goals, methodology, interview instruments, literature review, and study communities. Staff at the Alaska Department of Natural Resources reviewed their case files and other documents for information relevant to this project and forwarded their findings to the study's authors. The State of Alaska reviewed the summary report and provided comments that have been incorporated into this final version. The refuge acknowledges that nothing in this report affects or diminishes the State of Alaska's assertions or validity of RS2477s located within the refuge.

U.S. Fish and Wildlife Service also consulted with NANA Regional Corporation and the Northwest Arctic Borough in the design and implementation of this project. All the tribal offices in the study communities were contacted for approval to visit the community and conduct interviews with local residents. Tribal offices, NANA Regional Corporation, and the Northwest Arctic Borough were offered the opportunity to review this summary report. In its response, NANA Regional Corporation confirmed the accuracy of the information in this report; the Northwest Arctic Borough provided comments that have been incorporated into this final version.



Methods

This study documented the history of motorized access to refuge lands, using a review of pertinent documents and interviews with key respondents. The review included the Selawik refuge annual narrative reports (1981-2007), the 1987 Comprehensive Conservation Plan, and other relevant documents and publications of a historical nature. The State of Alaska reviewed relevant documentation within the Department of Natural Resources.

Key respondents were interviewed to document activities and methods of surface transportation used for access to subsistence resources that generally occurred before 1980 on federal lands that later became refuge lands. Elders and others from Selawik, Noorvik, Kiana, Ambler, and Shungnak comprised the bulk of the key respondents. The project had proposed a minimum of 8-12 individual interviews; we completed 37 interviews with 43 individuals who held substantial local and cultural knowledge about the topic (Appendix A). The interviews took place between January and July 2013.

The interviews utilized a semi-structured format and an interview guide outlining general questions and areas of discussion (Appendix B). We used the interview guide primarily as an aid for directing the conversation, and not as a progression of questions asked to every respondent. The content of each interview varied depending on the respondent's knowledge and experience and on information already documented through previous interviews in the community. We showed photographs of various off-road vehicles to most respondents as a visual prompt (Appendix C). We also frequently showed respondents a map of the Selawik refuge boundaries to clarify the lands of interest. Key respondents were identified through the recommendations of tribal councils and other community residents and our own familiarity with the communities.

Susan Georgette, at the time the Outreach Specialist for Selawik refuge, conducted the interviews in Selawik, Noorvik, and Kiana; Jeffrey Brooks, at the time a Social Scientist for U.S. Fish and Wildlife Service, accompanied Ms. Georgette on the interviews in Ambler and Shungnak. As a team, Mr. Brooks and Ms. Georgette had substantial experience in social science research and long-term familiarity with northwest Alaska.

We completed a draft of this report in 2014, soon after the interviews were conducted. The draft was reviewed by our project partners, including the State of Alaska, NANA Regional Corporation, and the Northwest Arctic Borough. Staff changes and competing priorities at Selawik refuge delayed the final completion of this report until now (2018).

Study Limitations

Key respondent interviews for this project were conducted in 2013, more than three decades after the passage of the 1980 Alaska National Interest Lands Conservation Act (ANILCA). This is a long time for people to accurately remember events, activities, and dates. ANILCA may have been a watershed event in Alaska's history, but it was not a defining moment in most people's lives. Few of the individuals interviewed for this study found 1980 to be a particularly distinctive year, and many did not readily separate their personal activities on a temporal basis rooted in calendar years (i.e., the mid- to late 1970s versus the early to mid-1980s).

The provisions of ANILCA made important distinctions between motorized boats and snowmachines on the one hand, and other types of motorized surface transportation (such as ATVs) on the other hand. Key respondents in this project saw a distinct difference between motorized and non-motorized transportation, but in general did not regard ATVs as inherently different from snowmachines—both were forms of motorized overland transport.

Many people have passed away or moved since 1980, and it is possible that the interviews missed some aspect of motorized surface transportation that took place around that time. However, nearly all of the respondents have lived in the region all their lives, mostly in small communities where residents' activities are highly visible. Motorized vehicles for surface transportation (excluding boats and snowmachines) were not common before the mid-1980s, and therefore it is unlikely that respondents neglected to mention or were unaware of generally occurring uses of these types of vehicles.

The authors acknowledge that this is not a static document, and if new information is discovered or presented to U.S. Fish and Wildlife Service, this report will be updated with revised conclusions, as appropriate. The U.S. Fish and Wildlife Service will consult with the State of Alaska and other stakeholders if regulatory action is needed in the future to address resource concerns associated with subsistence access.

Review of Historical Documents

Considerable anthropological and historical research has been conducted in northwest Alaska for more than 60 years. Taken together, this literature describes many details of Iñupiaq life in

northwest Alaska in the latter 19th and 20th centuries, including subsistence hunting and fishing, transportation, traditional knowledge, history, economy, and culture (Anderson and Anderson 1977; Anderson et al. 1998; Burch 1998; Burch 2006; Giddings 1961; Magdanz 2007; Uhl and Uhl 1977; Uhl and Uhl 1979). Some of this literature discussed motorized boats and early snowmachines, but none mentioned other types of motorized vehicles used for subsistence activities.

The 1974 final environmental statement for the proposed Selawik National Wildlife Refuge discussed transportation and subsistence in the region, stating: “Surface transportation routes in the Selawik-Kobuk region are presently limited to about 200 miles of sled trails and winter haul trails.” The transportation section of this document primarily focused on air and marine services, while the subsistence section discussed outboard motors, snowmachines, and sled dogs (DOI 1974, pp. 27-28, 74). Off-road vehicles were not mentioned.

The 1987 Comprehensive Conservation Plan, one of the early refuge documents, made no mention of off-road vehicle use taking place on Selawik refuge or of public interest in allowing such uses. Under “Access” in the Issues and Concerns chapter, the document stated (USFWS 1987, p. 14):

Residents of all villages visited stated that access to refuge lands should be allowed to continue by boat, foot, and float plane. Opposition was also voiced to constructing new roads and trails in the refuge. Many favored prohibiting permanent roads and trails, and prohibiting helicopters and ORVs unless specifically authorized under special use permit for designated routes and areas.

Another source of information on the history of motorized transportation is the refuge’s Annual Narratives. These were summaries written by refuge staff of each year’s activities and noteworthy events. One is available for Selawik refuge each year from 1981 to 1995 and intermittently from 2000 to 2007. The narratives were organized in a standardized outline with “Off-Road Vehicle Use” as one of the topics. The 1981-1983 narratives stated “nothing to report” in the Off-Road Vehicle Use section (USFWS 1981; USFWS 1982; USFWS 1983). In other sections, these annual narratives frequently commented on local use of snowmachines and dog teams for transportation and access to hunting, fishing, and trapping areas.

The 1984 annual narrative was the first one to discuss ATVs, in this case in association with the Selawik Farm Project (see p. 20 for more information on the “Spud Farm” Project):

Summer three-wheeler travel between Selawik Village and its Farm Project 10 miles to the north has caused erosion of tussock tundra vegetation down to bare peat and mud. Although the situation exists entirely on conveyed lands, there is some concern that such three-wheeler abuse could spread to refuge lands. [USFWS 1984, p. 71]

The 1985 annual narrative similarly mentioned:

Summer three wheeler damage on conveyed land between Selawik and the Selawik farm project, 10 miles north of Selawik, was again a problem in 1985. ...So far three wheeler use and subsequent habitat damage has been restricted to conveyed lands in and around villages. There is some concern that three wheeler damage may spread to refuge land. [USFWS 1985, p. 192]

ATVs are next mentioned in the 1988 annual narrative:

We are not aware of any specific use of refuge lands by three-, four- or multiple wheel all terrain vehicles (ATV's) but suspect it must occur at least on winter trails because of the popularity of these vehicles in all villages. They are the common form of transportation in the villages except during the winter when snowmobiles are more frequently used. Snowmachines are used all over refuge lands during the winter but stick mainly to popular trails. We are concerned that ATV's may be used off trails on refuge lands during the summer months. [USFWS 1988, p. 56]

The 1989 annual narrative discussed ATV use again, similarly reporting:

We are not aware of any specific use of refuge lands by three-, four-, or multiple wheel all terrain vehicles (ATV's) during summer months but suspect it may occur because of the increasing popularity of these vehicles in all villages. In December [Refuge] Manager Stroebele was passed by two four wheel ATV's on the Selawik-Noorvik trail....ATV's are the common form of transportation in the villages except during the winter when snowmobiles are more frequently used. [USFWS 1989, p. 56]

In the first half of the 1990s, the annual narratives essentially had this same summary:

We are not aware of any specific use of refuge lands by all

terrain vehicles (ATV's) during summer months, however, these machines are becoming very popular in villages and we intend to begin educational activities aimed at responsible use of these potentially destructive machines to head off a law enforcement issue. [USFWS 1991, p. 31]

No annual narratives were produced from 1996 to 1999. In 2000 and subsequent years, the standardized format was updated and the “Off-Road Vehicle Use” topic eliminated. These annual narratives discussed winter snowmachine use under the “Public Access” heading, but no mention was made of the use of ATVs or similar vehicles.

The Alaska Department of Natural Resources, Division of Mining, Land, and Water also reviewed literature for this study, pointing us to several possible sources, none of which yielded solid evidence of the use of motorized vehicles (excluding boats and snowmachines) for subsistence. All the village roads described in the Northwest Alaska Community Profiles (University of Alaska 1976) were located on non-refuge lands, and the historic trails were primarily used by winter snowmachine and dog team travelers. In Anderson and Anderson (1977), the main summer trail along the Selawik River was a water route traveled by boat, and not a land-based trail.

Summary of Interviews by Community

Interviews for this project took place in five communities within or adjacent to Selawik refuge. Summaries of these interviews are presented below, arranged in geographic order from the lower to the upper Kobuk River (i.e., Noorvik, Kiana, Ambler, and Shungnak), and then south to Selawik.

Noorvik

Noorvik is located on a high bluff along a delta channel of the Kobuk River (Fig. 2). It is within the boundaries of the Selawik refuge, but surrounded by large areas of Alaska Native Corporation lands.

Noorvik respondents recalled that Honda three-wheelers first appeared in the village in the 1970s. The Honda 110 was the early



USFWS

Figure 2. The community of Noorvik sits atop a high bluff along the Kobuk River near the head of the river delta.

model, followed by 185s and Big Reds. Four-wheelers arrived in the 1980s. Three-wheelers in the 1970s were mostly used around town and on the river ice in late fall to check nets when there was insufficient snow for snowmachines. “Three-wheelers were not good on tundra,” one resident said. “The front tire would twist and get stuck. People did not use them to go far in the 1970s. I had a three-wheeler for awhile, but I never did tundra riding with it.”

When a new Noorvik airport was built in the 1990s, a gravel road was constructed from the village to an upland gravel source east of town towards Hotham Peak (Map 2 and Fig. 3). This road gave the community better access to upland areas, and residents could now reach subsistence harvest areas on Hotham Peak using 4-wheel-drive four-wheelers. Fall caribou hunting, berry picking, and spring goose hunting were cited as the main activities in this area. One resident said, “People follow the gravel road to Hotham Peak for fall hunting. Some keep going past the end of the road. I don’t know how far back they go.” Another respondent had taken his four-

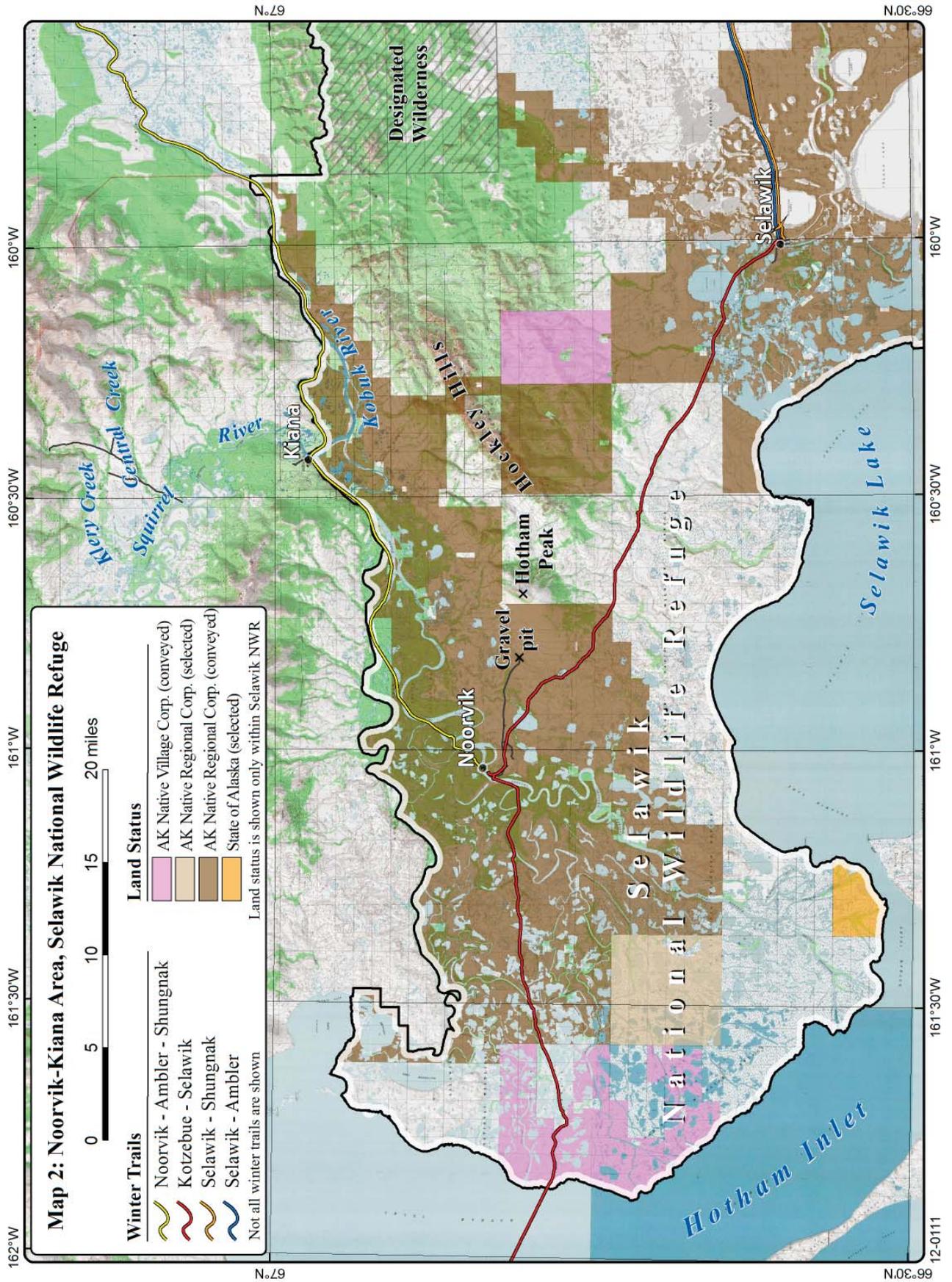




Figure 3. The road to Noorvik's gravel pit with Hotham Peak in the distance (nearest mountain). Tracks in the tundra to the right of the road mark the winter snowmachine trail.

wheeler to the top of Hotham Peak, and a few others knew people who had done so as well. One respondent knew of at least one instance where a Noorvik resident took a four-wheeler as far as the Hockley Hills. Much of the lands on Hotham Peak and in the Hockley Hills are owned by the Alaska Native regional corporation; however, one township on the east side of Hotham Peak is refuge land situated between large blocks of Alaska Native corporation lands. In contemporary times, ATVs continue to be used on frozen river channels in fall and spring to access fishing areas when there is inadequate snow cover for snowmachines.

Amphibious vehicles such as Argos have been rare in Noorvik. One resident owned one at the time of these interviews (2013), which he had purchased in recent years and used to take his wife berry picking along the road to the gravel pit. Respondents said that there have been a handful of other Argos or similar vehicles in Noorvik in the past, but these had never been used much. The store or tribal office

might have had one at some point to haul freight, and another resident recalled the Public Health Service in Noorvik using an 8-wheeler around town. An inoperative tractor rusting behind the old Mission in Noorvik had reportedly been used to haul firewood in the 1950s or 1960s, but none of the respondents were familiar with the details. Some Noorvik residents own or have owned motorbike-type ATVs, which were used around town or for fishing on the river ice.

Most respondents had not observed nor heard of Noorvik residents loading ATVs or other off-road vehicles into boats to transport and use elsewhere. One respondent, however, was familiar with a few examples of this. He said, “Once in awhile guys loaded three-wheelers into boats and took them upriver, on both the north and south sides of the river. Usually it was for bear hunting in the fall because you had to walk. You could go slowly in the tundra with a three-wheeler, about the pace of walking. But you had to be careful not to tip over. The early ones had a little rack in the back but nothing in the front. It wasn’t faster than walking, but you didn’t have to carry the animal out.” The specific locations and timing of this activity were not known, and there was no evidence that this took place as a generally occurring pattern of behavior in the community. Most of the lands on both sides of the Kobuk River upriver from Noorvik are owned by the Alaska Native regional corporation.

Noorvik respondents knew of one airboat in the village, owned by a local resident in the 1970s. He did not use it often, and it eventually drifted away and sank in front of the village. One resident recalled Noorvik teachers owning a homemade wooden airboat in the 1950s or 1960s; how often or what this was used for, this resident did not know.

In summary, off-road vehicles started becoming popular in Noorvik beginning in the 1970s with Honda three-wheelers. These vehicles, however, were rarely used beyond the village because of their instability on rough terrain. Prior to three-wheelers, a handful of other off-road vehicles had occasionally been owned by Noorvik residents, but these similarly had been used primarily within the community. Beginning in the 1980s, the more stable four-wheelers became widespread. Noorvik residents have occasionally traveled on refuge lands with four-wheelers after access to upland areas was improved in the 1990s by a road to a community gravel pit. However, these appear to be isolated cases in which residents were not aware of refuge boundaries or not familiar with ATV restrictions on refuge lands.

Kiana

Kiana is located on a high bluff on the north side of the Kobuk River at its confluence with the Squirrel River (Fig. 4). The community sits at the northern edge of the Selawik refuge, but is separated from refuge lands by the Kobuk River and by a swath of Alaska Native corporation lands straddling the river (Map 2).

Kiana has a long mining history dating back to the early 1900s. In the 1920s and 1930s, bulldozers bladed rough roads, locally called “Cat trails,” to Klery Creek mines north of Kiana in the Squirrel River drainage. (The expression “Cat trails” derives from the commonly used term “Cat” for bulldozers manufactured by Caterpillar.) Many of these routes are still visible, and have been used in the intervening years by Kiana residents for hunting and berry picking or to access their family camps in the Squirrel River area.

One resident recalled his father having an “8-wheeler” in the 1970s that he used to take his wife and others berry picking in the hills behind Kiana. “I’m not sure what it was called,” he said. “It was an



Photo courtesy James Magdanz

Figure 4. The community of Kiana is situated on the north side of the Kobuk River adjacent to uplands (visible in the photo's foreground). Kiana sits at the northern edge of Selawik Refuge, whose boundary runs along the north bank of the Kobuk River at this location.

awkward thing with four tires in the front and four in the back. I remember my aunt hanging on once it started moving.” This resident also remembered his father bringing a three-wheeler upriver by boat in the 1970s to their family camp on the Kobuk River. He used it to move supplies between the boat and the camp and to cut and haul firewood in the snow-free months. “But you couldn’t go very far with it,” this resident said, due to the rough terrain.

Respondents recalled that the first three-wheelers arrived in the village in the mid-1970s. “Only a few people purchased three-wheelers when they were first available,” one resident said. “When they came around, people used them mainly in the village. They’d only go about a mile or so out of town. In fall they couldn’t go far because we have timber and rough country. At freeze-up they might have used them to travel a little ways, but not for long because then there would be too much snow.” Many of the interviewees first purchased an ATV in the mid-1980s or later when four-wheelers became available.

“Before Hondas, there were track vehicles,” one resident recalled. “One Kiana family that had one would put it in their boat, take it up the Squirrel River to the boat landing, off load it there, and use old ‘Cat trails’ to get to where they wanted to go.” This resident said there have been “Cats” in the area for a long time. “We had what we called a Go-Devil. We would take it up to Klery Creek and hunt along the way. One time we got a bear along the way. It was slow—took us about six hours from Kiana. We would go in the summer and fall by Cat, but people also ran them in winter.” One resident recalled a Kiana family owning a tracked vehicle similar to an Argo in the 1970s that they took into the mountains towards the Squirrel River.

In addition to transportation within the village, four-wheelers have been used since the 1980s by some Kiana residents to hunt caribou in the hills behind town and along the Kobuk River downstream from the village. One resident explained: “There are some well-used trails that people use in the fall to hunt caribou with four-wheelers in the hills behind Kiana. They’re snowmachine trails, too. At first people go back there to hunt caribou, and then when they start migrating across the river, people take four-wheelers downriver along the beach to hunt caribou. Maybe five miles down. There’s one creek they have to cross, but it’s not bad if the water isn’t high.” Another resident said that today, people follow the trails with four-wheelers to Central Creek in the Squirrel River to hunt caribou, moose, and bear (Map 2). One resident said they once had a Honda four-wheeler that they used to travel to Klery Creek.

In contemporary times, Kiana residents occasionally transport four-wheelers by boat to their camps in the Squirrel River drainage, but this is not common. Four-wheelers are also occasionally used to travel on the river ice in late fall, mostly downriver towards Noorvik, before there is enough snow for snowmachines.

Airboats are owned by a couple of Kiana families. One respondent said they have used an airboat to fish far up the Squirrel River where Dolly Varden gather in shallow waters. “But there’s not much use for them on the Kobuk River where the water is deep enough for a regular boat,” this resident said. Other respondents said airboats in Kiana are not used often and are frequently in need of repair.

In summary, Kiana residents have a long history of using motorized surface transportation (tracked vehicles, “Cats,” and other off-road vehicles) for hunting, fishing, berry picking, and accessing family camps in the hills behind Kiana and in the Squirrel River drainage. None of these lands are on the Selawik refuge. Kiana residents were unanimous in their view that local residents have not used motorized surface transportation (excluding snowmachines) for any activities on lands that are now part of Selawik refuge.



USFWS/B. Sweeney

Figure 5. The community of Ambler is located on a high bank on the north side of the Kobuk River near the mouth of the Ambler River.

Ambler

Ambler is located on the north bank of the Kobuk River about 70 miles east of Kiana (Fig. 5). The northeast corner of Selawik refuge lies across the Kobuk River six miles south of Ambler (Map 3).

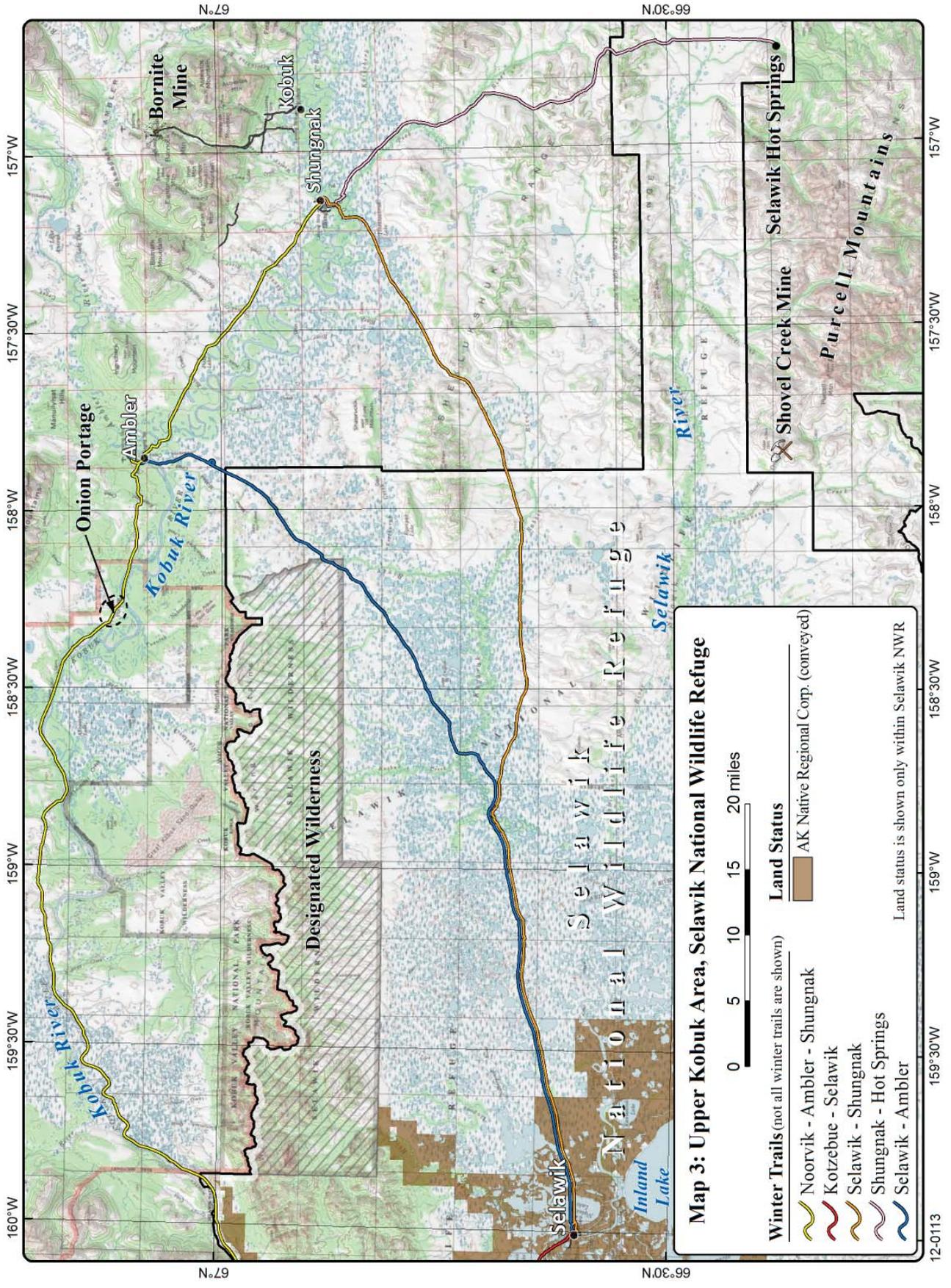
For the most part, Ambler residents could not recall any off-road or tracked vehicles in the community before the advent of three- and four-wheelers. One respondent, however, remembered an Ambler man owning some type of tracked vehicle in the 1970s. “He was always looking for gold,” this respondent said, “and he got the vehicle stuck somewhere across the river once and called for help on the radio. My memory is somewhere southeast of Ambler, but how far he got I don’t know.”

Ambler respondents could not recall exactly when the first three- and four-wheelers arrived in the community, but the 1980s was the most frequently mentioned date. Ambler residents have primarily used these ATVs around town. They have also been used in the hills north of Ambler for hunting and berry picking in the fall. “But people don’t go far,” one resident said, “because the creek banks are steep and you can’t get across them.”

Another respondent said, “Four-wheelers aren’t used much off the local road system. The terrain is too rough.” In the upper Kobuk, four-wheelers are not used as often on the river ice in late fall as they are in Noorvik, Kiana, and Selawik because the ice is not as safe for travel at that time of year.

A handful of Ambler residents have owned Argos, or still do. Respondents knew of a few instances where Ambler residents took these across the Kobuk River to the south side of the river. One had traveled with his Argo about five miles onto the refuge on two occasions, following the Selawik (winter) trail into low hills. “I went for the day and hunted around there,” he said. “I wanted to see it in summer. It’s wide open country, but too wet for four-wheelers.” This respondent had not realized that this area is part of the refuge. Argos were generally regarded as expensive, difficult to maintain, and less efficient on gas than four-wheelers.

In contemporary times, four-wheelers and Argos are occasionally used on the Kiana (winter) trail as far as Onion Portage or somewhat beyond, usually in late fall after freeze-up. Occasionally four-wheelers are used on winter trails in late spring when the snow is frozen hard. These conditions typically last only a short while, and residents are reluctant to go far in fear the snow will soften and they will not be able to return home.



None of the respondents knew of any airboat activity ever taking place on the upper Kobuk. “No airboats around here,” one respondent said. “People use outboard motors. Airboats are too loud for hunting.”

In summary, Ambler residents have occasionally traveled on refuge lands with off-road vehicles; however, these appear to be isolated incidents that took place in the 1990s or later. Off-road vehicle use since the 1980s was more common in the hills behind Ambler and along the first few miles of the Kiana trail, but neither of these areas are on or near refuge lands. No Ambler respondents had knowledge of any airboat use in the local area.

Shungnak

Shungnak is located on the north side of the upper Kobuk River about 25 miles southeast of Ambler and 20-25 miles from the Selawik refuge’s nearest boundary. In the upper Kobuk area, the refuge lies on the far side of the Kobuk River from the local communities of Ambler, Shungnak, and Kobuk (Map 3).

Shungnak respondents were unanimous in their view that motorized surface transportation (excluding snowmachines) has never been used by Shungnak residents on lands that are now part of Selawik refuge. Shungnak is far from the refuge, and sizeable stretches of the intervening terrain consist of lakes, ponds, sloughs, streams, and wetlands not conducive to off-road vehicles.

As elsewhere in northwest Alaska, Honda ATVs were the first off-road vehicles widely adopted in the upper Kobuk. Three-wheelers first arrived in the late 1970s, followed shortly after by four-wheelers in the 1980s. These ATVs were used mainly around the village, and occasionally for hunting and berry picking in upland areas north of Shungnak. One Shungnak resident said, “No one has ever gone across the river [towards the refuge] with four-wheelers. No one drives them on the tundra. We don’t want to ruin the tundra with tracks like that.” Another remarked, “There are too many lakes on the tundra south of the river. You can’t get across the creeks. We go towards [Selawik] Hot Springs, but only in winter with snowmachines.”

The use of off-road vehicles in upland areas behind Shungnak is typically along rough roads bulldozed in the 1960s and earlier for mining exploration and development. (These rough roads are locally called “Cat trails” in reference to the Caterpillar bulldozers that bladed them.) One resident said, “Sometimes people take four-wheelers towards the mountains. They follow the old ‘Cat trails.’ That’s what they go on.” Another explained, “There is a

‘Cat trail’ from Bornite [Mine] to Onion Portage [below Ambler], and from Kobuk to Bornite. It depends on the terrain whether people use off-road vehicles.” None of these areas are on or near refuge lands. Another Shungnak resident said, “No one wants to take a four-wheeler out of town. It’s too rough. It costs too much to get it here to want to take it out in rough places like that. You might break it.” In 2013, two Shungnak residents owned Argos, one of which was purchased in 2009. This owner used his Argo to hunt and pick berries towards the mountains behind Shungnak, though he said he does not do this often. One respondent once took an Argo on the trail to the village of Kobuk. Then he floated down the Kobuk River back to Shungnak. “The current is too fast to go upriver with an Argo,” he said.

None of the respondents knew of any other off-road vehicles in use in Shungnak before the arrival of three-wheelers. In addition, none had ever seen an airboat in Shungnak.

In summary, Shungnak residents have no history of using motorized surface transportation (other than snowmachines) on refuge lands. Beginning in the 1970s, they used three-wheelers (and later four-wheelers and Argos) in the village and on “Cat trails” in upland areas north of the village, but none of these are on or near refuge lands. Shungnak has no history of airboat use.

Selawik

The community of Selawik is located in an extensive system of wetlands and waterways on the Selawik River delta (Fig. 6). It is centrally located within the Selawik refuge, but surrounded by Alaska Native corporation lands in its immediate vicinity (Map 4).

With numerous river channels, sloughs, and lakes, the terrain around Selawik is not favorable for motorized surface transportation other than boats and snowmachines (Fig. 7). The community itself has a network of boardwalks rather than roads due to the wetland environment (Fig. 8). None of the Selawik respondents knew of any instances of off-road or tracked vehicle use in the Selawik area beyond the community, or of these types of vehicles being loaded into boats to use elsewhere in the river drainage. One respondent said, “We’re swamp people here. It’s much too wet. We don’t have the right terrain. Not like in Kiana or elsewhere.” Another respondent observed, “I don’t know of three-wheelers ever being used here for subsistence. They were just used around the village. You can hardly go anywhere here with a four-wheeler. You need ground like the Kobuk River.” The oldest respondents in Selawik said they first purchased ATVs in the 1980s.



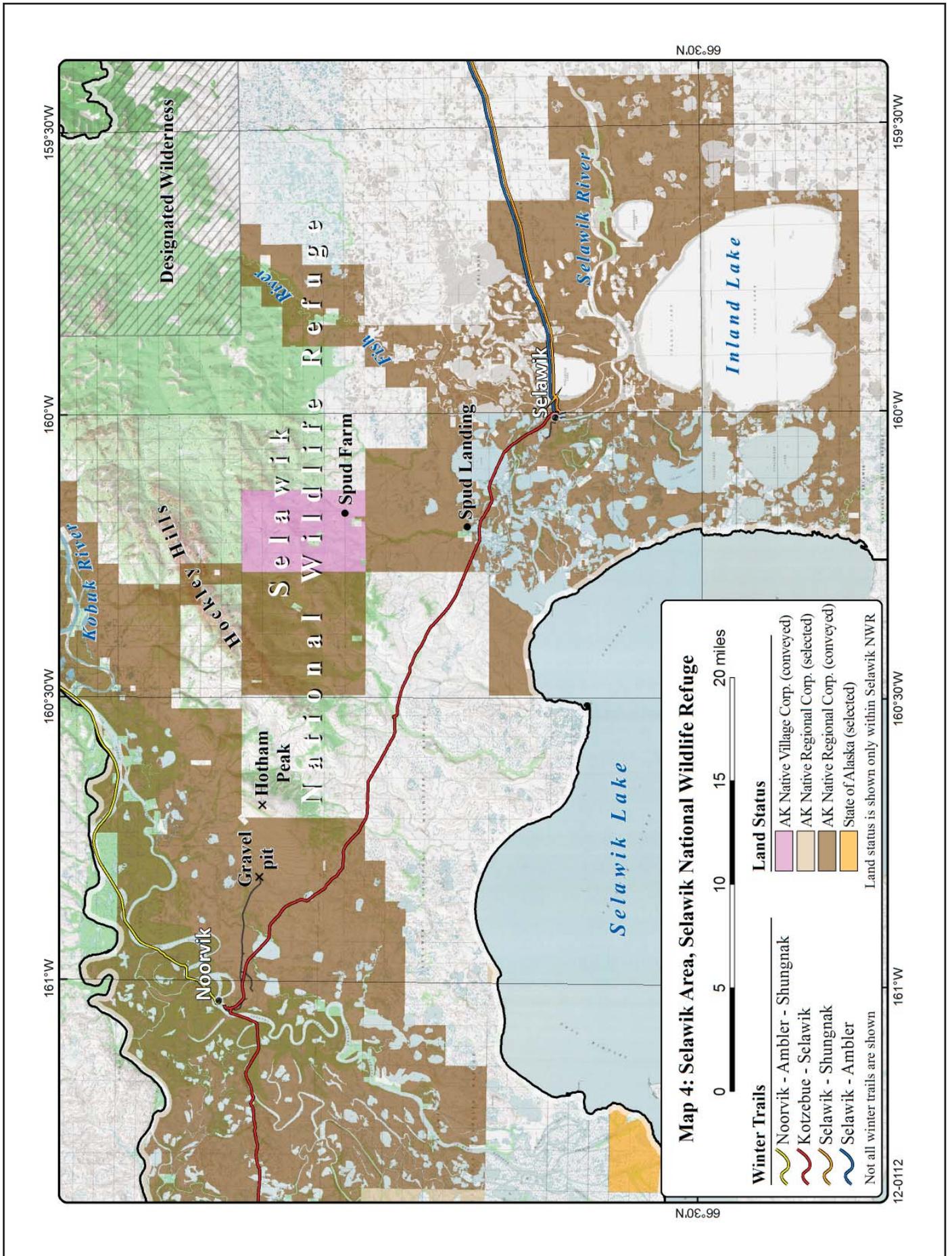
USFWS/S. Hillebrand

Figure 6. The community of Selawik lines two channels of the Selawik River with bridges (one visible here) linking the separate sections.

Several respondents mentioned a large tracked vehicle that belonged to a community agricultural project—known as “Spud Farm”—that was built on private lands in the uplands north of Selawik in the early 1980s (Map 4). Clearing of land began in 1981 and an airstrip was constructed at the site the following year. A tracked vehicle was used to haul people and freight to and from the airstrip and around the facilities. One respondent said the tracked vehicle was occasionally used by staff to hunt in the hills near Spud Farm in the 1980s. This vehicle, which reportedly could seat six, was also used to haul staff from the boat landing west of Selawik to the farm, a distance of roughly six miles. This trail is visible in the tundra during summer and is located on Alaska Native corporation lands. It did not exist prior to the 1980 passage of ANILCA. By the early 1990s, Spud Farm was abandoned due to financial constraints. The facilities have since been used for a variety of endeavors, most recently by Maniilaq Association as a residential recovery camp.

Since the 1980s, four-wheelers have been used in Selawik on the frozen river ice in early winter to check fishing nets before sufficient snow allows for snowmachine travel. “But people don’t go far,” one Selawik resident said. One respondent said that four-wheelers have been used occasionally on the Noorvik (winter) trail after freeze-up.

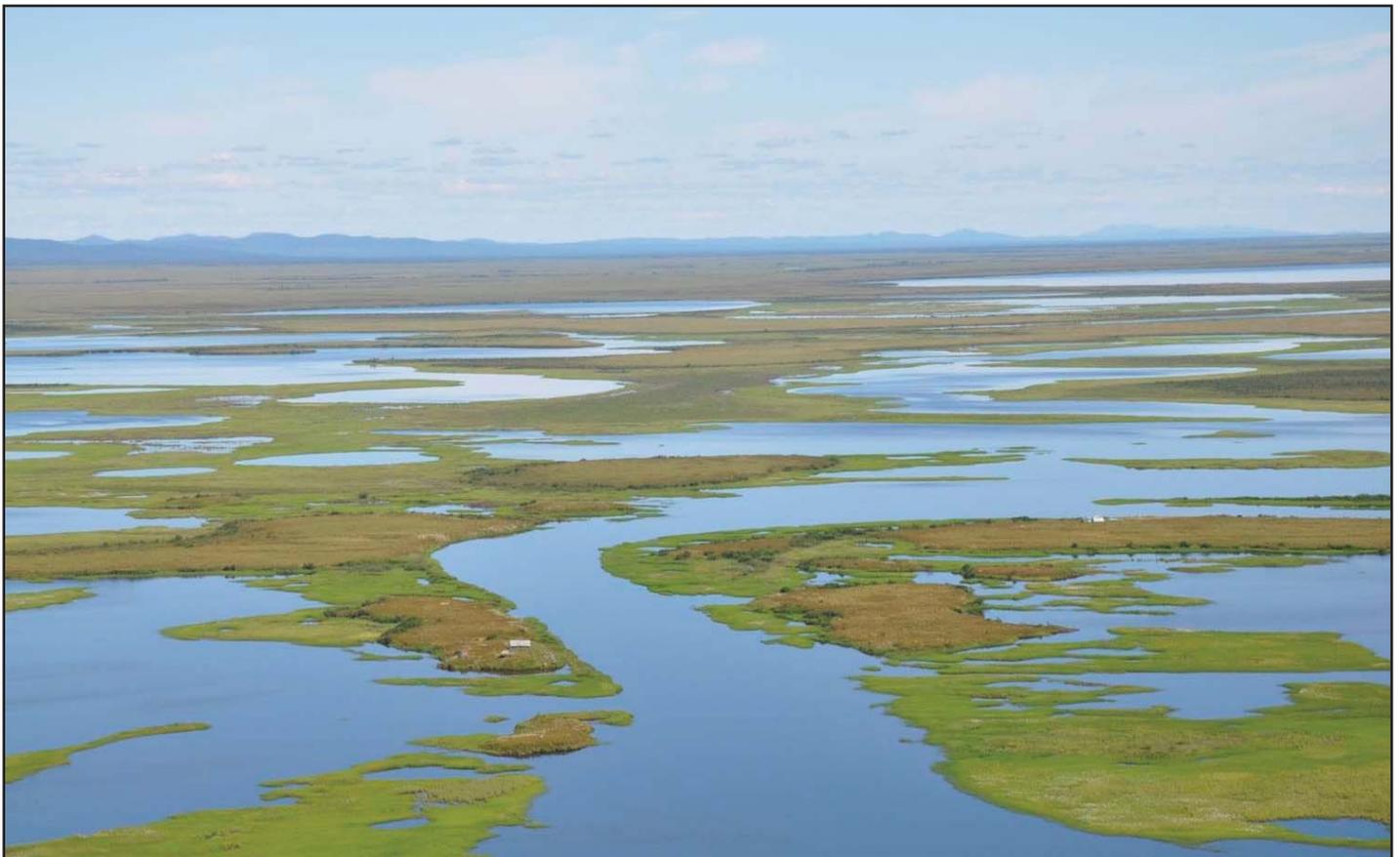
Respondents recalled one airboat in Selawik in the 1970s. “It was small and green and had a Volkswagen engine,” one resident said. The owner used the airboat as a taxi service to take people and mail back and forth across the river channels during freeze-up and break-up



before bridges were built in the community. “It was loud,” another respondent described. “You could hear it wherever you went. It sounded like a small plane trying to take off. He didn’t use it every day. He sometimes used it to go fishing.” This respondent said he once went with the owner in the airboat far up Fish River, then drifted back down.

Respondents also mentioned a bulldozer at a mining claim at Shovel Creek in the Purcell Mountains, about two miles outside the refuge boundary in its eastern section (Map 3). The bulldozer dated back to the 1950s or 1960s, and Selawik residents believed it was brought there for gold mining from the Huslia side of the mountains. No one knew of any use of this vehicle on refuge lands or for subsistence or traditional activities.

In summary, the river channels, sloughs, and wetland terrain around Selawik are not conducive to motorized surface transportation other than boats and snowmachines. Beginning in the 1980s, off-road vehicles were occasionally used on private lands to access an agricultural project north of Selawik. Selawik respondents were unanimous in their view that the community had no history of using off-road or tracked vehicles beyond the village on lands that are now part of Selawik refuge.



USFWS/S. Hillebrand

Figure 7. The delta environment surrounding Selawik is a maze of waterways not suitable for motorized surface travel except in winter by snowmachines.



USFWS/S. Georgette

Figure 8. ATVs are the contemporary vehicle of choice on Selawik's many boardwalks. Roads are difficult to build in the community due to wetlands and river channels.

Conclusions

This research found very little evidence of motorized surface travel on refuge lands. Certainly it was not a generally occurring use on refuge lands at the time of ANILCA (1980). Some communities, in particular Kiana, had a long history of off-road vehicle use on rough roads bladed by bulldozers for mining in the mid-20th century, but these were in upland areas north of the Kobuk River and not on or near refuge lands.

Various types of tractors, bulldozers, and other off-road or amphibious vehicles have been on the commercial market for years, and these occasionally found their way into northwest Alaska villages prior to 1980. However, with a few exceptions, these were used for commercial purposes such as mining or hauling freight or passengers by village stores or clinics. Most people in northwest Alaska simply did not have the resources or the need for these types of vehicles.

The first three-wheeled all-terrain vehicle (ATV), designed for recreational use, was introduced in 1970 by Honda. In the early 1980s, Honda and other manufacturers began producing utility models of

three-wheeled ATVs, which became increasingly popular in rural Alaska. Safety concerns ended the production of these “three-wheelers” in 1987, replacing them with the more stable “four-wheelers” that are ubiquitous in northwest Alaska villages today.

Key respondents recalled three-wheelers first appearing in villages in the late 1970s and becoming increasingly common, along with four-wheelers, in the 1980s. These vehicles eased life in the village because for the first time people had a widely available and affordable mechanical means to move goods, equipment, and people on land in summer months, especially between their homes and their boats. One respondent said that before ATVs people transported goods and gear in the village by wheelbarrows, or simply by hand. Some villages had a truck or two.

Respondents widely remarked that three-wheelers were poorly suited to tundra or other rough terrain, thus restricting their use almost solely to within villages and along the limited local road networks. Four-wheelers were more stable and better suited to rough terrain, but still required open upland areas, trails, or short distances to be practical beyond the edges of a community.

Respondents further noted that boats were a far easier and more efficient means than off-road vehicles for getting people to where they wanted to go. Family camps and subsistence harvest areas during the summer and fall are focused on the region's waterways, making boats the transportation of choice. This was as true in the 1970s and before as it is today.

Off-road vehicle use on lands outside the villages became more common after the arrival of four-wheelers in the 1980s. In Shungnak and Ambler, people used four-wheelers or other off-road vehicles to access the hills behind town for fall hunting and berry picking, following old “Cat trails” or other routes. Ambler residents at times traveled on their four-wheelers along the Kiana trail as far as Onion Portage. In Noorvik, local residents took four-wheelers along the road to a gravel pit after this was constructed in the 1990s. From there they traveled at times beyond the road's end to upland areas on Hotham Peak for fall hunting and berry picking. After freeze-up, Noorvik, Kiana, and Selawik residents used four-wheelers on the river ice for fishing and traveling before there was enough snow for snowmachines. In all these instances, the terrain was suitable for off-road vehicles and other transportation options were less appealing or not possible. With a few exceptions, the activities described here did not take place on refuge lands.

None of the respondents had any information on the use of off-road or tracked vehicles that pre-dated ANILCA (1980) on lands that are now part of the refuge. One reason for this is that refuge lands

near communities are largely a maze of waterways and wetlands more suitable to a boat than to an off-road vehicle. This is especially true around Selawik.

In more recent years, Noorvik and Ambler residents on rare occasions have used four-wheelers or amphibious vehicles (such as an Argo) on refuge lands near Hotham Peak and south of Ambler. These residents were not aware that these were refuge, not Alaska Native corporation, lands.

Finally, several respondents expressed concern about the damage to the land caused by frequent ATV use in tundra or wetland areas. They did not want to see that kind of damage in the vicinity of their communities, and have refrained from driving off existing roads for this reason.

Airboats have never been common in northwest Alaska, but Selawik, Noorvik, and Kiana have had locally-owned airboats in their communities from time to time. These were not used extensively and typically did not remain operational for long, falling into disrepair or sinking.

In conclusion, this research uncovered no evidence of generally occurring motorized surface transportation (excluding boats and snowmachines) on refuge lands at the time of ANILCA (1980).

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Appendix A: List of Key Respondents

The individuals interviewed for this study are listed below by community. Several of these individuals have passed away since we interviewed them. We are deeply grateful for the knowledge and experience they shared with us before their passing.

One of the interviews for the Ambler area took place in Kotzebue in January 2013.

The respondents listed below ranged in age from 40s to 80s with an overall estimated breakdown as follows:

<u>Age</u>	<u>Percent of Respondents</u>
40s	11%
50s	28%
60s	21%
70s	26%
80s	14%

Noorvik, April 16-17, 2013:

Lee Ballot, Sr.
Charlie Nazuruk
Irvin Newlin
Thomas Pungalik
Ike Sampson
Glenn Skin
Lonnie Tebbitts
Frank and Bertha Wells
Bill Zibell

Kiana, April 17-18, 2013:

Thomas Jackson
Vera Morris
Ruth Sandvik
Lee Staheli, Jr.
Raymond Stoney
Christina Westlake

Selawik, June 25-26, 2013:

Frank Berry, Jr.
Daniel and Mildred Foster
Greg Hanshaw
Joe McCoy
Ralph and Emma Ramoth

Shungnak, July 16-17, 2013:

Mildred Black
Sally Custer
Henry Douglas
Vera Douglas
Wynona Jones
Billy Lee
Neal and Margaret Sheldon
Gary Ticket
Josephine Woods
Raymond Woods

Ambler, July 17-18, 2013:

Jane Cleveland
Dave Griepentrog
Seth Kantner (interviewed in Kotzebue, 1/29/2013)
Roy and Mary Jane Ramoth
Nellie Sheldon
Don and Mary Williams
Alvin Williams

Appendix B: Interview Guide

History of Motorized Access Study
Selawik National Wildlife Refuge
Interview Guide
April 2013



The U.S. Fish and Wildlife Service, in cooperation with the State of Alaska and Northwest Arctic Borough, is documenting travel routes on the Selawik National Wildlife Refuge. We are mainly interested in the use of motorized vehicles (not counting motorboats or snowmachines) that took place before 1980 on what are now Refuge lands (the Selawik River valley, Waring Mountains, and parts of the Kobuk delta). Motorized vehicles include such things as Hondas, 3-wheelers, 4-wheelers, tracked vehicles, dirt bikes, Argos, Rhinos, bulldozers, airboats, or anything similar. We are mainly interested in the use of these vehicles for subsistence activities or travel between villages. We are doing this project because the Alaska National Interest Lands Conservation Act of 1980 protects the continued use of these vehicles for subsistence where it was occurring at that time.

1. Could you talk about the time when motorized vehicles (other than motorboats and snowmachines) first came into use in this area?
 - When did this happen?
 - What were these vehicles used for?
 - Where and how far did people go? For what purpose?
 - Who had the first motorized vehicles?
 - How did you typically use a motorized vehicle before the early 1980s? Where did you go and for what purposes?
 - Do you know of any motorized vehicle use outside the village on the Kobuk River delta, Selawik River area, Waring Mountains, or other Selawik Refuge areas? (for example, were they used at Spud Farm, camps, mining claims, ice roads, military practices, etc.)
 - How has motorized vehicle use changed since the Selawik Refuge was established in 1980?
 - Can you point out any trails, routes, or areas on these maps that are used by motorized vehicles?
 - Can you point out any trails, routes, or areas used by motorized vehicles before 1980 that are no longer used today?

2. Do you know of anyone other than local residents (such as miners, hunting guides, scientists, reindeer herders, etc.) who have used motorized vehicles on lands that are now the Selawik Refuge?

3. Do you have suggestions for other people I should talk to? Or other villages I should visit?

Appendix C: Examples of Motorized Vehicles

Examples of Motorized Vehicles (Excluding Boats and Snowmachines) Access Study, Selawik National Wildlife Refuge

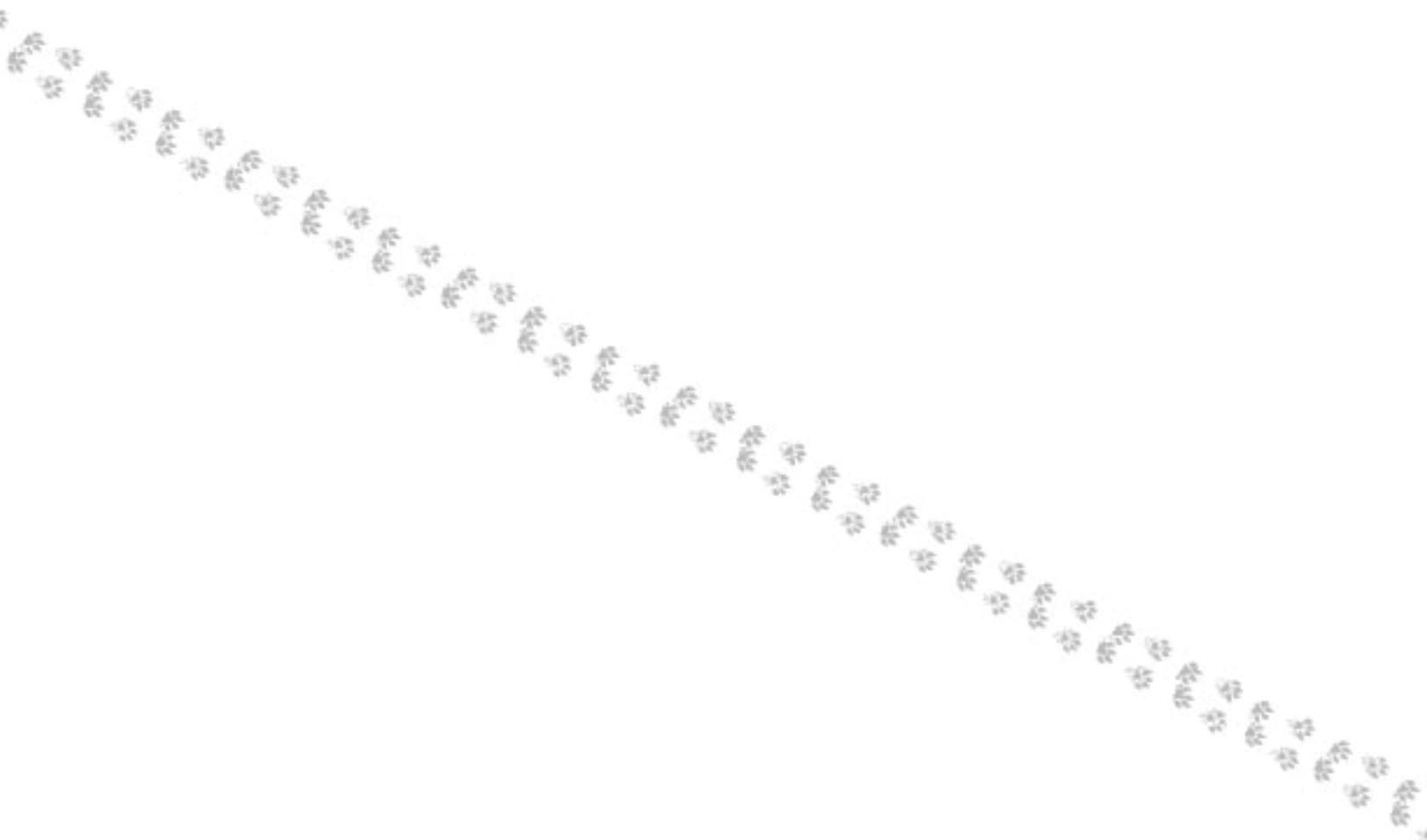
April 2013

Images were selected for variety and used as visual prompts during interviews; not all are USFWS or public domain images.











U.S. Department of the Interior

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