

Statement of
Myron P. Naneng
Chair of Sea Lion Village Corporation Board
before the
Federal Lands Subcommittee of the House Committee on Natural Resources
Hearing on Four Bills, including **H.R. 218**, "*King Cove Road Land Exchange Act*," to provide
for the exchange of Federal land and non-Federal land in the State of Alaska for the construction
of a road between King Cove and Cold Bay.
April 5th, 2017
Washington, DC

Good Morning Chairman McClintock, Ranking Member Hanabusa and members of the subcommittee. I am Myron P. Naneng, Sr, from Hooper Bay, a village in western Alaska. I serve as the Chair/President of the board of my Alaska Native Claims Settlement Act (ANCSA) Village Corporation, Sea Lion Village Corporation, and am a board member of my ANCSA Regional Corporation, Calista Corporation. Between the years of 1990 and 2016, I was the President of the Association of Village Council Presidents, the recognized tribal organization and non-profit Alaska Native regional corporation for the 56 member indigenous Native villages within Western Alaska. Between 1995 and 2016 I was the Chair of AVCP's Waterfowl Conservation Committee. I appreciate the opportunity to testify before the Subcommittee today, April 5th, 2017, regarding the proposed land exchange of Federal and non-Federal land in the State of Alaska for the construction of a road between King Cove and Cold Bay.

While I can sympathize with the desires of King Cove regarding their transportation worries around health and safety, because many villages in Alaska and in my region have similar difficulties and hardships, I am concerned about the proposed land exchange for a number of reasons. These reasons include: 1) impacts to subsistence resources; 2) the transfer of Federal lands out of Federal hands and management for the purpose of building a road; 3) de-designating Federal wilderness lands that protect subsistence species and their habitat, which could happen anywhere if allowed at Izembek National Wildlife Refuge; 4) State management of important subsistence species habitat; and 5) community equity issues regarding the proposal.

I am a subsistence harvester, have provided subsistence resources for my family for most of my life and represent subsistence users from my village in the Yukon-Kuskokwim Delta. The western Alaska, Y-K Delta region encompasses an area close to the size of the state of Oregon. The people of the Y-K Delta are primary stakeholders of waterfowl resources, and our customary and traditional subsistence uses of birds have long sustained us culturally and for food. I, my Village Corporation, other ANCSA Corporations and communities and, formerly under my leadership, the Association of Village Council Presidents (AVCP), have been involved since the early 1980's in the conservation of Pacific Brant, Emperor, Cackling and White Fronted goose habitat. In 1998, AVCP's Waterfowl Conservation Committee passed a resolution opposing the

proposed Izembek road, and the Committee unanimously reaffirmed that resolution twice at their spring meetings in 2013 and 2015.

The primary interest of the people of the Y-K Delta has been the critical habitat for Brant and Emperor geese populations. Virtually the entire populations of both Brant and Emperor geese depend on the Izembek Lagoons Complex – the designated wilderness area of the Izembek Refuge - for staging and feeding before and after their long and depleting spring and fall migrations. Emperor geese are listed as threatened under the Endangered Species Act and, after decades of habitat destruction between the 1960's to the 1980's along the Pacific Flyway resulted in significant population decreases for Brant. Our people made a commitment to sacrifice years of subsistence hunting and egg gathering in an effort to allow Brant to recover to the level the population is today.

We have worked cooperatively with the U.S. Fish and Wildlife Service, the Alaska Department of Fish and Game and many other state game agencies within the Pacific Flyway – California, Oregon and Washington - to develop and pursue recovery efforts through the 1984 Hooper Bay Agreement, now entitled the Yukon-Kuskokwim-Delta Goose Management Plan. After these many years of effort and sacrifice, it would be a significant step backward to build a road right through some of the most important and sensitive habitat for Brant and Emperor geese that would result in significant impacts to these populations.

We have also restricted our egg gathering and harvesting of Arctic nesting geese since the early 1980's. We have since added threatened Spectacled and Common Eiders, which have also have been decreasing. Spectacled eiders are listed Threatened under the Endangered Species Act, and Common eiders are close to being eligible for listing under the Endangered Species Act. Reintroduction of eiders is also being considered.

The subsistence way of life in western Alaska comes with many challenges. To feed our families, we hunt, fish and gather food from our natural surroundings, so taking care of our resources and land is the only way to ensure our future. That is why the people in the Y-K Delta have been involved in these conservation programs since 1984 for Cackling, White Fronted, Brant and Emperor Geese. For example, my Village Corporation has been working with the US Department of Agriculture, Natural Resources Conservation Service (NRCS), and the US Fish and Wildlife Service to implement a conservation plan. Our people have been making a concerted effort to protect nesting habitat north of Hooper Bay, in Kokechik Bay, where there is a Brant nesting colony. In 2003, the Brant were down to 400 nesting pairs. In 2004, we implemented a conservation plan to protect nesting habitat, and the nesting pairs grew to over 1,400. A primary component of our conservation plan has been to restrict All-Terrain Vehicle (ATV) use in nesting habitat. This has been very successful. Also, because of some of our coordinated conservation successes, this year for the first time in decades we will be able to participate in a small harvest of Emperor geese.

ATV use can be very damaging to waterfowl nesting habitat and feeding grounds, as we have learned in the Y-K Delta. One of the expected impacts from the proposed road through Izembek's designated wilderness area is increased ATV traffic on refuge lands. This will almost certainly be the case, given the increased ATV use already documented since road construction occurred at the northern end of the 17 mile road that extends from King Cove to the northeast corner of Cold Bay near the wilderness boundary. The US Fish and Wildlife Service included documentation of ATV trails fanning away from the northern end of the 17 mile road in their Izembek National Wildlife Refuge Land Exchange/Road Corridor Final Environmental Impact Statement (FEIS, February, 2013) that analyzed the land exchange and road proposal as outlined in the 2009 Omnibus Public Lands Act.¹ I have included copies of the analysis and discussion from the EIS² regarding already occurring and projected increased ATV use in the Attachment A of this testimony. After all of the years and many sacrifices made to conserve waterfowl species and habitat, the people of the Y-K Delta do not want and cannot afford the inevitable resulting degradation to sensitive waterfowl habitat. This is especially true since Y-K Delta residents seem to be on the bottom of the totem pole under State of Alaska Fisheries management for salmon fishing as well, which is not the case for commercial fisherman. We have restrictions now on our Sockeye, Chum and Chinook salmon fishing, and there is now discussion and a proposal before the State Board of Fisheries introducing a permitting system for subsistence fishing in the Y-K Delta and coastal areas. Further degradation of waterfowl habitat and resources will compound the problems we are already facing regarding our subsistence fishing, and the cumulative effects of these issues are really impacting our people.

The Fish and Wildlife Service's 2013 FEIS indicates that the proposed road would have "major effects" on Brant, Emperor geese and Tundra swans³. It also indicates that increased human access, hunting pressure, and disturbance would cause displacement from feeding and/or nesting areas. Also, the Fish and Wildlife Service's Comprehensive Conservation Plan (CCP, 1985) for Izembek National Wildlife Refuge acknowledges that building a road through Izembek, "... would likely result in significant adverse impacts to caribou, waterfowl, and furbearer populations," which, in turn, "... could result in major, long-term impacts to subsistence."⁴ The US Army Corps of Engineers also concluded in the agency's 2003-2004 EIS analysis of transportation alternatives for King Cove, after passage of the 1998 King Cove Health and Safety Act, that the road alternative, "... would not qualify as an environmentally preferred alternative."⁵ Especially given that there are other transportation alternatives that would not impact migratory waterfowl, I and the people I represent cannot support the proposed land

¹ Public Law 111-11.

² Izembek National Wildlife Refuge Land Exchange/Road Corridor Final Environmental Impact Statement, February, 2013, Chapter 4, p. 4-202 – 4-210.

³ Ibid, Chapter 2, p. 2-64.

⁴ US Fish and Wildlife Service, Comprehensive Conservation Plan, 1985, p. 121.

⁵ King Cove Access Project Draft Environmental Impact Statement, July 2003, 2.7.1, p.153.

exchange and road because of the impacts it would have to important subsistence species that we depend on.

Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) sets a priority for subsistence uses of fish and wildlife on federal lands in Alaska. The federal government has a legal obligation to protect our subsistence resources and way of life. Were Congress to move forward with the proposed land exchange and road project, they would not be fulfilling this obligation to our people. Also, this decision would ignore the goals and efforts of our people, and undermine the years of work that we and others have contributed in order to restore Brant and Emperor Goose populations. By rejecting the proposed land exchange and road, Secretary Jewell and the U.S. Department of the Interior fulfilled their legal obligation to protect subsistence and supported years of waterfowl restoration work.

H.R.218 proposes to exchange approximately 206 acres of Federal, protected wetlands for two state townships, amounting to about 43,000 acres, the majority of which are not wetlands and do not provide the vital habitat that Brant and Emperor geese need and use in the Izembek Wetlands Complex. These state townships will not compensate for the loss of critical goose habitat. Because of this my Village Corporation and many other subsistence users in western Alaska are unable to support this land exchange. We strongly urge members of this Subcommittee to oppose this land exchange and road proposal.

Izembek Refuge's wetlands and designated wilderness area is in federal ownership and management. Our people's rights to access and take of subsistence resources are much better protected by the federal government than they are by the State of Alaska, due to Alaska's constitution, lawsuits and a history of undermining subsistence rights by the State. We are very concerned that with this proposal vital goose habitat will be transferred out of Federal ownership and into State hands in order to build a road. We cannot count on the State of Alaska to prioritize or fully consider subsistence needs, and the road will harm important subsistence resources that my people depend on.

Izembek was granted federal refuge and wilderness status based on its incredible habitat value. If Federal designated wilderness lands that protect subsistence habitat can be de-designated at Izembek Refuge, they can be de-designated anywhere. I am concerned about the precedent de-designating wilderness for the purpose of putting a road down the middle of it would set. Forcing a road through the refuge not only could devastate species like Brant and Emperor geese that subsistence users depend on and have gone to great lengths to conserve, but also jeopardizes wildlife refuge and wilderness protections on public lands across Alaska and the country. This is especially concerning because waterfowl use habitat across the Flyways and there are other refuges and wilderness areas in Alaska and throughout the U.S. that support critical subsistence resources, and they are important to Alaskans and to many people across the country. For example, it is my understanding that this subcommittee has received letters from over seventy Friends of Wildlife Refuges groups from around the country, including from Alaska and other

states that members of this Subcommittee represent, such as four Friends groups in Massachusetts, three in Virginia, two in Maryland and two in Hawaii.

Transportation is a difficulty of village life, and it is a challenge shared by rural villages across Alaska. All of us contend with weather delays, expensive travel and long trips to the city for medical care. King Cove and many villages in western Alaska are not exceptions. But it is not realistic to build roads to all of the Alaska communities facing difficult and sometimes dangerous travel to reach medical care. It is especially not feasible at this time given Alaska's very significant budget shortfalls at this time. The State already is struggling to maintain the roads and infrastructure that it already has, and does not have the funds to do so. Given the roughly \$3 billion annual shortfall the State of Alaska is facing, the State has no business considering this road proposal.

King Cove has already received over \$40 million dollars from the federal treasury to help resolve their transportation issues. They built a 17 mile road and bought a \$9 million hovercraft which worked to deliver med-evacuation patients, which they have moth-balled at this time. There are many other Alaska villages that have never received this level of transportation funding, and there are equity issues surrounding this proposal. As our nation struggles with health care coverage right now, one could view this proposal as an extraordinary health-care subsidy or expenditure by the federal government per capita for the people of King Cove - population 923 according to the 2013 U.S. Census – much more than most other communities and Americans would receive.

Conclusion:

When our people are working together, there can be positive results, such as the increase in numbers of Brant and Emperor geese that we have experienced. But, the effort to put a road through Izembek, one of the feeding habitats for the geese, seems to be completely opposite of the effort that we are trying to make.

With hard work and open minds, King Cove can find alternative, effective transportation to Cold Bay, and Izembek will continue to provide the necessary resources that help feed and sustain all the villages of western Alaska. This is especially true during this time of taking severe conservation measures on the Yukon and Kuskokwim Rivers to reverse the declining Chinook salmon species, which our people in the YK Delta have relied on as one of our major subsistence food sources.

parcels are evaluated within the limits of available information under other resource topics, including terrestrial and aquatic plant communities, wetlands, birds, land mammals, threatened and endangered species, subsistence, and wilderness.

Alternative 2 would result in changed land use and land management conditions for all exchange parcels. The exchange would facilitate construction of a single lane road within the Izembek National Wildlife Refuge including the Izembek Wilderness, consolidate all lands on Sitkinak Island under state ownership, place large areas of King Cove Corporation and state lands into federal ownership, and relinquish the King Cove Corporation selection within the Izembek Wilderness that would otherwise become privately owned. King Cove Corporation would select an alternate land selection within the Alaska Peninsula National Wildlife Refuge.

When considered in relation to total acreage, the changes in ownership under the land exchange would be of low magnitude for the federal and state governments, since a relatively small total acreage is affected. For the King Cove Corporation, the change may be rated high in magnitude, since the exchange represents a reduction of 10.8 percent of the corporation's total land holding.

In addition, the Service would execute a boundary adjustment between the Izembek National Wildlife Refuge and the Alaska Peninsula National Wildlife Refuge in the vicinity of Blinn Lake, so that the isolated parcel of Alaska Peninsula National Wildlife Refuge that contains the Federal Aviation Administration withdrawal and the area that lies to the north of the Cold Bay Airport would become part of the Izembek National Wildlife Refuge.

The direct and indirect impacts of this alternative on land use and management for the Izembek National Wildlife Refuge would be high in magnitude because the construction of a road through the Izembek National Wildlife Refuge would introduce a transportation use with a different character amidst surrounding lands managed for wilderness and resource protection purposes. The impact to management from the addition of 41,887 acres from the State to the Alaska Peninsula National Wildlife Refuge would consolidate management in the North Creek and Pavlov units, while the addition of the Mortensens Lagoon parcel would add 8,092 acres to the Alaska Peninsula National Wildlife Refuge south of the community of Cold Bay. For the State of Alaska, the management requirements for the road corridor would represent a high magnitude change, while the additional of acreage on Sitkinak Island would consolidate management. The additional responsibilities for management of Kinzarof Lagoon submerged lands and tidelands as part of Izembek State Game Refuge would represent a low magnitude change. For the King Cove Corporation, the exchange would remove the Kinzarof Lagoon and Mortensens Lagoon parcels from corporate management, and create a new management responsibility for the new selection site west of the corporation's land holding at Old Man's Lagoon, on the west side of Cold Bay.

Effects on Land Use

Road construction and the resulting opening of new areas on the Izembek National Wildlife Refuge and Izembek Wilderness to access by all-terrain vehicle users (legal or illegal) would be the primary impacts of Alternative 2. The effects analysis for the proposed road was conducted assuming mitigation was implemented. It was assumed one of the two barrier options (bollards only or bollards with chain) would be installed to keep vehicles in the road corridor. However, it was also assumed that the barrier would be breached from time to time and that there was the potential for impacts prior to installation of the barriers during the construction period based

upon what happened during and since construction of the King Cove Access Project. Aerial surveys done in 2007 and 2008 document an increase in the number of new all-terrain vehicle routes in the refuge since construction of the Northeast Terminal (Sowl 2008c, Siekaniec 2012). Therefore, the analysis of potential effects from all-terrain vehicles presented in the EIS reflects those anticipated impacts if Alternative 2 or 3 were implemented.

To assess the change in land use caused by this increased access by motorized vehicles, the Service analyzed the Izembek isthmus for existing roads and trails (Figure 4.3-2), and unauthorized all-terrain vehicle routes that have been developed between 2005 and 2008 (Figure 4.3-3). The Service then assessed potential all-terrain vehicle travel corridors that could originate from the southern alignment proposed for Alternative 2. Probable all-terrain vehicle routes under Alternative 2 were modeled and mapped based on the following criteria and widely accepted path selection and route preference in human navigation which assumes a goal of minimizing resources (i.e., shortest route, quickest route, or using the least amount of energy resources):

1. Popular destinations modeled are subsistence hunting sites, cabin sites, and recreational hunting locations within Izembek Wilderness.
2. Starting points from the road were selected to minimize the distance to the selected destination.
3. Travel corridors were identified to follow relatively uniform elevations and to provide the most direct route over the tundra.
4. Travel corridors were selected to avoid wetlands as much as possible.
5. Connectivity to and from the road to existing all-terrain vehicle routes.

In addition, to assess the likelihood of increased all-terrain vehicle use, two assumptions were made.

1. Current use patterns of all-terrain vehicles in and around the communities of King Cove and Cold Bay would continue.
2. Identified use trends developed since the completion of the hovercraft landing pad at the Northeast Terminal in 2006 would continue. A documented effect of the construction of the hovercraft landing pad are new all-terrain vehicle routes originating from the Northeast Terminal and traveling into the Izembek Wilderness.

Figure 4.3-4 combines these criteria and assumptions to model potential travel corridors. The result is a web of possible all-terrain vehicle corridors. These corridors are only one representation of potential routes that may develop over time. The model illustrates dozens of routes could potentially radiate from the proposed road across the Izembek isthmus. Predicted changes in land use depicted are further described by parcel, under the new land ownership pattern proposed by Alternative 2.

Figure 4.5-2 Existing Roads and Trails

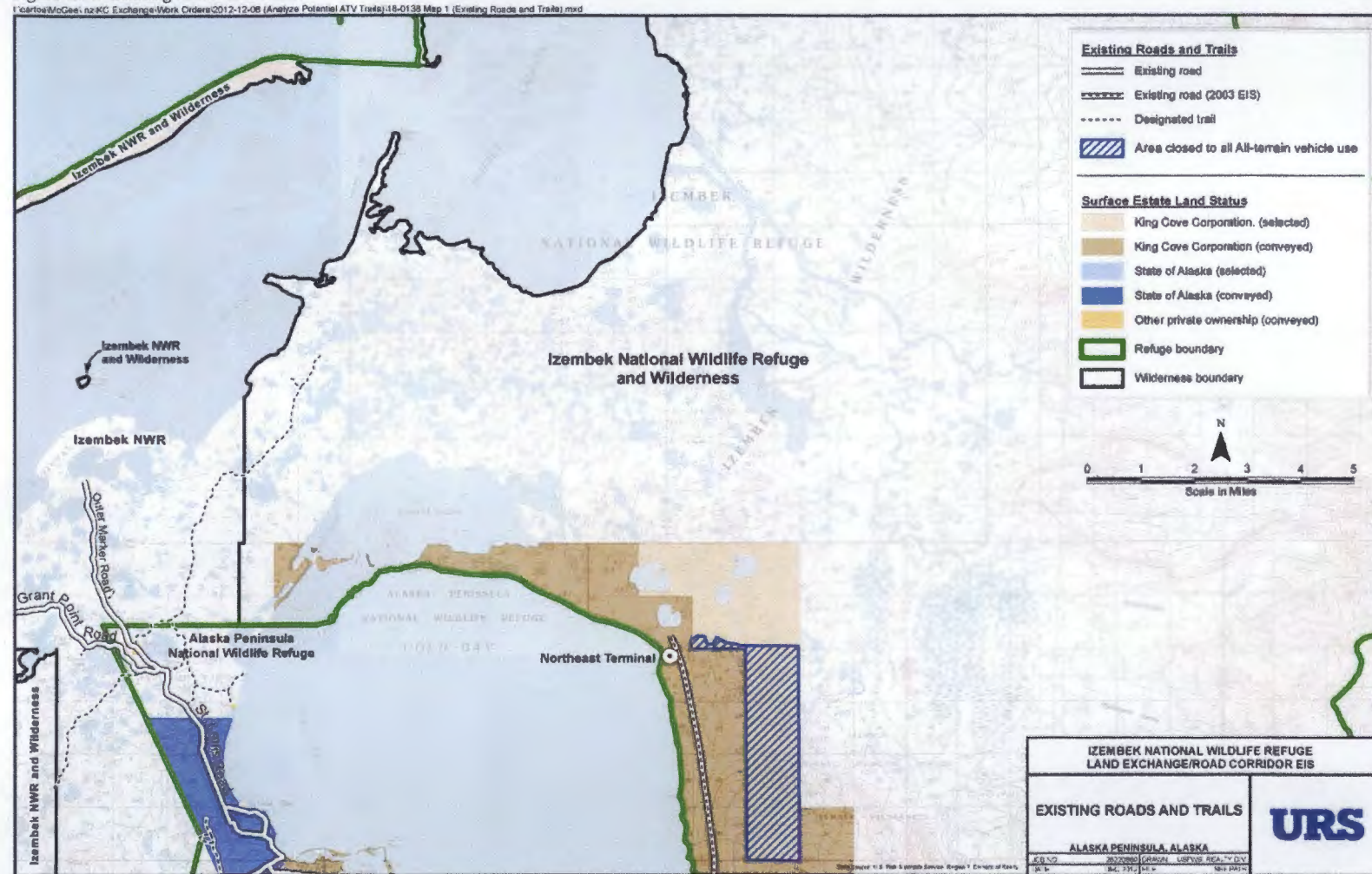


Figure 4.3-3 Evidence of Unauthorized All-Terrain Vehicle Use Between 2005 and 2008.

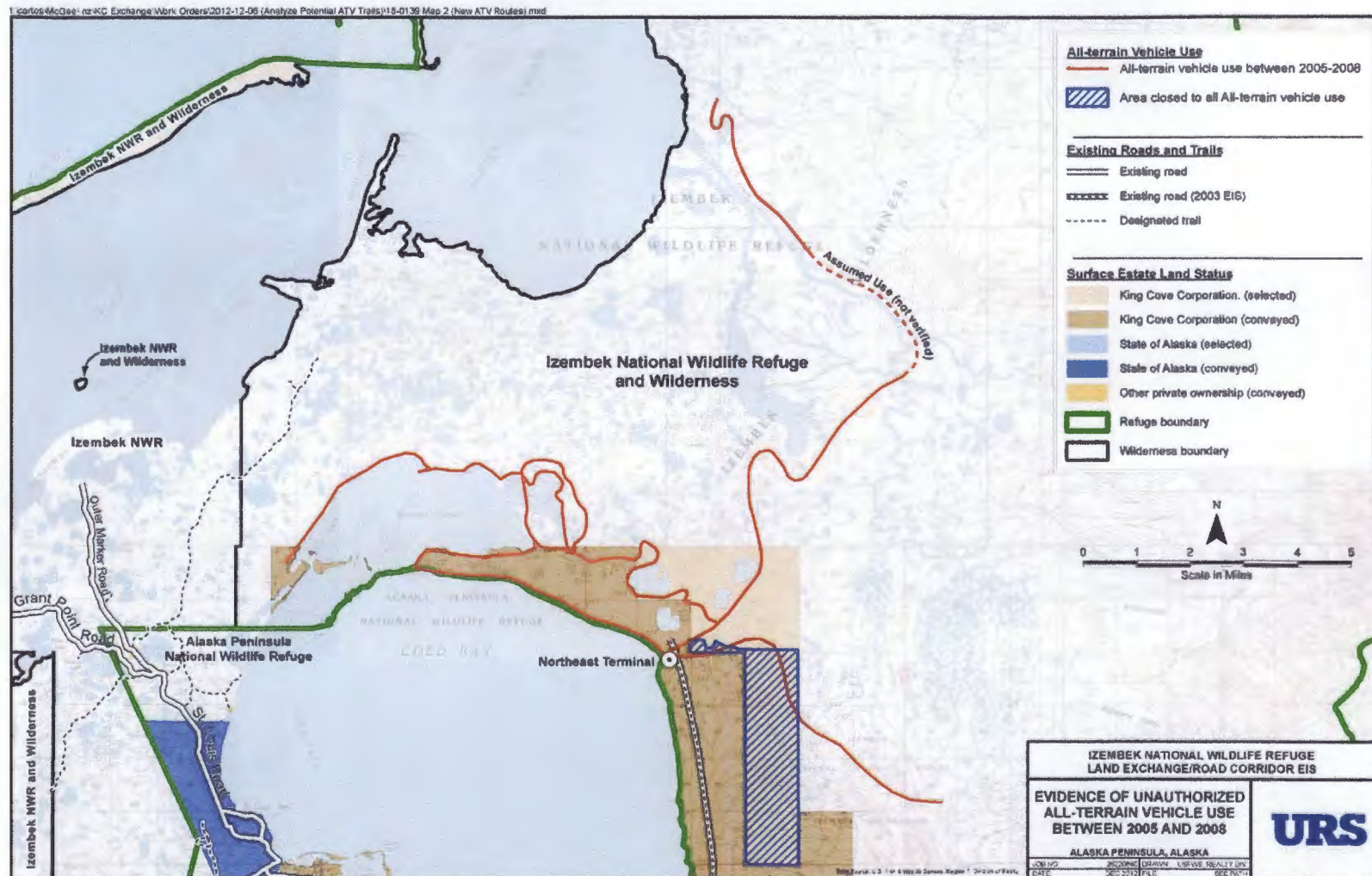
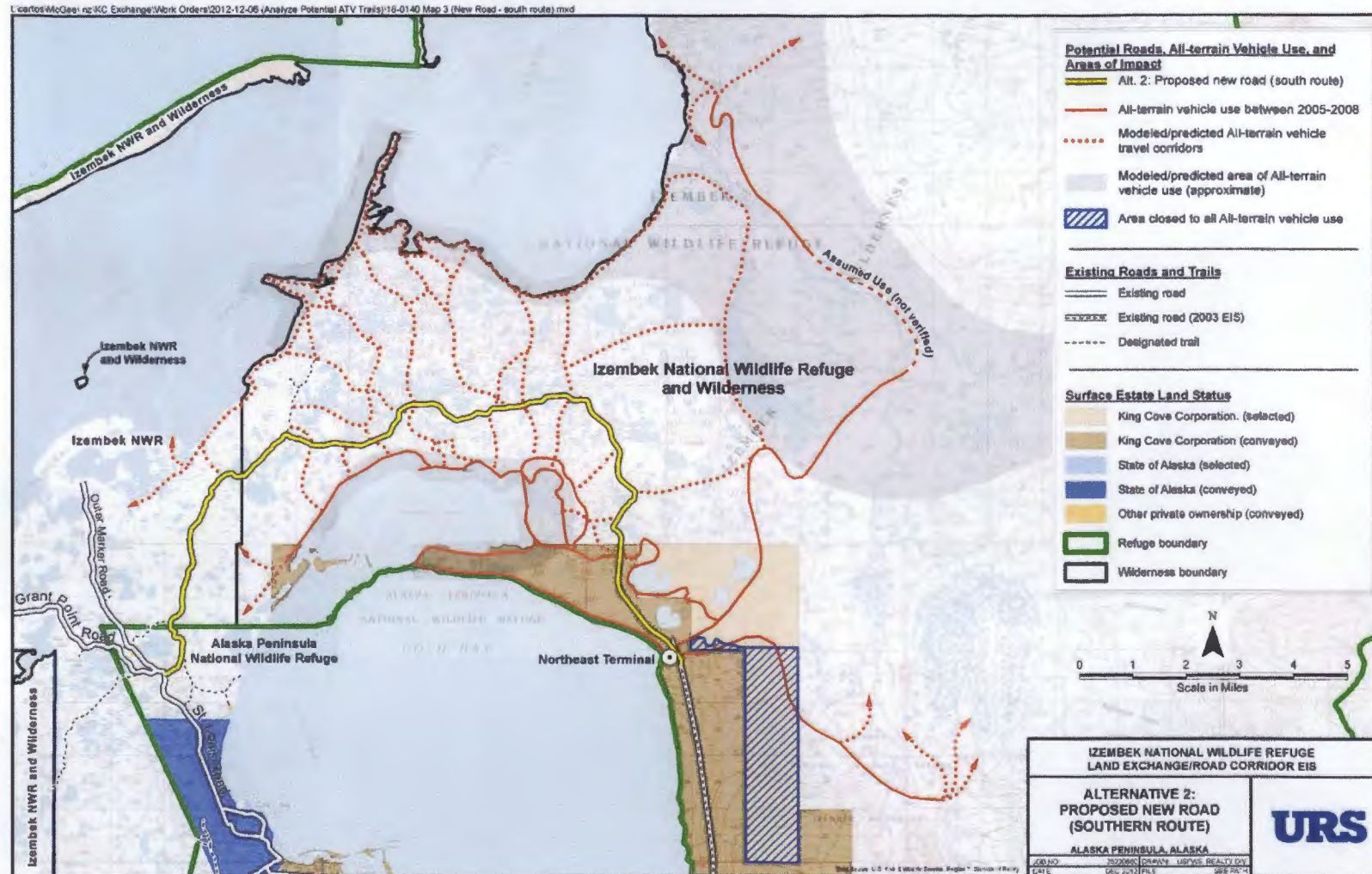


Figure 4.3-4 Alternative 2: Proposed New Road (Southern Route) and Predicted All Terrain Vehicle Use



Changes in Land Use for Izembek National Wildlife Refuge and Alaska Peninsula National Wildlife Refuge

Three parcels would be transferred to the U.S. to be managed as part of Izembek National Wildlife Refuge and Alaska Peninsula National Wildlife Refuge: Kinzarof Lagoon, Mortensens Lagoon, and the State Parcel. The King Cove Corporation selected land would be retained by the Service and an alternate selection would be made within the Alaska Peninsula National Wildlife Refuge.

The Kinzarof Lagoon and Mortensens Lagoon parcels would become open to public access and use under federal management. Uses on the Kinzarof Lagoon parcel would be restricted to those compatible with wilderness management objectives for Izembek Wilderness and uses compatible with the provisions of ANCSA 22(g). Uses on the Mortensens Lagoon parcel would not be subject to the provisions of ANCSA 22(g). Refer to Section 4.3.3.6 for additional discussion on effects to public use from implementation of Alternative 2.

Current use of the State Parcel is light because access is limited to small airplanes and boats along the coast. Some increase of all-terrain vehicle use is expected over time under Alternative 2 as routes taking off from the road extend past the isthmus to the State Parcel. Under Alternative 2, the State Parcel would be designated wilderness and subject to federal subsistence regulations. Public use is expected to remain light due to the remote location of the parcel.

The new road corridor would pass through adjacent areas currently designated as wilderness, where vehicle travel is generally prohibited, with exceptions as described in Section 1.6.1.2. Uses in the road corridor would differ substantially from the surrounding land use in an area where no improved or maintained roads currently exist and only limited vehicle use is authorized. The road would also bisect the isthmus of the Izembek National Wildlife Refuge with a continuous manmade feature.

Low vegetation, limited topographical relief, and easy access to fish and wildlife resources make the isthmus an attractive location for all-terrain vehicle use once road access is available. The popularity of all-terrain vehicles in the communities of King Cove and Cold Bay and current analysis indicate that if the road is constructed, all-terrain vehicle use in the Izembek Wilderness would increase. From the proposed corridor, nearly the entire wilderness area is within a 20-mile range of most all-terrain vehicles.

Improved access, favorable topography, and shrub vegetation coupled with a harsh climate and slow rates of recovery for soils and vegetation predispose that all-terrain vehicle use would increase quickly and cause erosion which can degrade habitats. The road corridor proposed under this alternative would serve as a starting point for all-terrain vehicle access by subsistence and recreational users from the communities of King Cove and Cold Bay. Based on documented use trends, it is estimated that all-terrain vehicle use would increase with improved road access (illegal and legal) and would be difficult to manage and control.

Damage caused by all-terrain vehicles can be seen as distinct scars in the landscape from great distances. Aerial photography shows scarring of the landscape from all-terrain vehicle use, and as use progresses, these all-terrain vehicle routes have widened, developed rutting, mud holes, parallel tracks, and detour routes to avoid wet areas. Upon completion of the hovercraft landing pad in 2005-2006, easy access from the water, and a developed staging area led to marked increase in all-terrain vehicle use in the refuge by 2007 (Siekaniiec 2012). Following the

pioneering of the future road to the midpoint between the Northeast Terminal and Lenard Harbor, there was noticeably increased all-terrain vehicle use in the refuge by 2011 (Sowl 2008c). Additionally, the road corridor is highly sensitive to disturbance due to the abundance of fish and wildlife which attracts both recreational hunting and subsistence harvest, international importance for several migratory bird species, being the primary route of caribou migration, and its proximity to extremely high bird concentrations on the isthmus.

Under Alternative 2, a web of trails is modeled to grow across the 4-mile wide isthmus providing access to beaches on the Bering Sea/Izembek Lagoon and Pacific Ocean/Kinzarof Lagoon coasts, connecting routes and high points throughout the isthmus and into the Joshua Green watershed and other focal points within the refuge. Under the current situation, these areas are not easily accessible by all-terrain vehicles. Habitat fragmentation and damage would likely occur due to the increase in transecting all-terrain vehicle routes that would develop from the road. Additionally, the southern road alignment would pass through the highest concentration of bird populations on the isthmus, and could be expected to substantially increase wildlife harvest due to ease of access. Increased use could degrade habitats, disturb and displace fish and wildlife populations.

Construction of a road through the isthmus and connecting the communities of King Cove and Cold Bay, as proposed under Alternative 2, would not only connect the two communities, but would likely increase off-road access to refuge lands and fish and wildlife populations along the road corridor.

Changes in Land Use for Parcels Conveyed to the State of Alaska

Road Corridor. Alternative 2 is the proposed southern route for the road corridor, along the south side of the isthmus near Kinzarof Lagoon (see Section 2.4.2). The road would provide continuous, and unprecedented, year-round access adjacent to and into the Izembek Wilderness.

Sitkinak Island. Use of the island is limited because of the expense of access and is not expected to increase in the near future under Alternative 2. The former sites used by the Coast Guard would be managed by the State of Alaska under the *Kodiak Area Plan* for general use, wildlife habitat, or grazing operations. The current plan also includes an option for land disposal for settlement.

Changes in Land Use for Parcels Conveyed to King Cove Corporation

Alternate Land Selection in Alaska Peninsula National Wildlife Refuge. Under Alternative 2, King Cove Corporation would select lands identified for deficiency selections for under-selected ANCSA Corporations. These deficiency lands are west of Cold Bay and are currently managed as part of the Alaska Peninsula National Wildlife Refuge. Once conveyed to King Cove Corporation, this parcel would no longer be managed under refuge regulations and all-terrain vehicle use could be allowed.

Summary

Taking changes in land ownership and land management together, the magnitude of impact would be high for the Service, having a low impact on ownership but a high impact on management, due to the predicted management implications for all-terrain vehicle impacts. For the State, the magnitude would be medium, with low magnitude on land ownership, but a high

magnitude change in management responsibilities for the new road corridor. For the King Cove Corporation, the magnitude would be high, due to a larger change in ownership, and a low magnitude change in management. Impacts would be of permanent duration since the change in ownership and management would be permanent. The impacts would have a regional extent since the land exchange would involve changes in ownership and management on large areas of land in multiple locations. The impacts would occur in a unique context since the road would be constructed within the Izembek Wilderness and the parcel fills a unique role in the integrity of the wilderness. The exchange parcels would be designated a wilderness in the Alaska Peninsula National Wildlife Refuge.

The summary impact of Alternative 2 on land use and management would be considered major. See Sections 4.3.3.6 and 4.3.3.10 for impact summaries of Alternative 2 related to Public Use and Wilderness.

Mitigation Measures

No mitigation measures are proposed for Alternative 2, other than the terms of the land exchange outlined in the Act. In exchange for 201 acres of refuge land and 1,619 acres of federal land on Sitkinak Island, the federal government would receive 41,887 acres of state land and 10,696 acres of King Cove Corporation land. In addition, King Cove Corporation would relinquish its selection of 5,430 acres within the Izembek Wilderness and exercise the same selection right within the Alaska Peninsula National Wildlife Refuge. Under Alternative 2, the federal government would receive more acreage in the exchange than it would convey. Much of the land conveyed to the Service would be designated as wilderness.

Although the road design would include physical barriers and management controls to reduce unauthorized use, these are not assumed to be 100 percent effective. In addition, commercial traffic use of the road would be restricted. Revisions of the Izembek and/or Alaska Peninsula National Wildlife Refuge comprehensive conservation plans would update management guidelines associated with lands acquired in the exchange and adjacent lands.

Cumulative Effects

Relevant past actions would include the entitlement and selection of King Cove Corporation land under ANCSA and the enactment of ANILCA that redesignated the Izembek National Wildlife Refuge and designated the Izembek Wilderness. No other present or reasonably foreseeable future land exchanges or other activities would induce more extensive changes to ownership patterns or altered land management practices.

Past actions that affect land management include all-terrain vehicle use because the road to the Northeast Terminal reaches near the boundary of the Izembek National Wildlife Refuge. Based on history of previous all-terrain vehicle use in the area, it may be assumed that new all-terrain vehicle routes would originate from that point. Eventually, an all-terrain vehicle route could reach the State Parcel from this location. Unauthorized all-terrain vehicle access to the refuge would continue to be a management challenge and could potentially increase under Alternative 2.

While no new personnel are anticipated to be hired to monitor impacts or provide law enforcement, additional demands on these resources are anticipated. Given the nature and implications of the ownership change under Alternative 2, the incremental contribution to

cumulative effects related to land ownership is considered major (indeterminate). Due to potential increases in unauthorized all-terrain vehicle use, Alternative 2 could also have a major adverse contribution to cumulative effects on land management.

Effects to Refuge Purposes

To assess the combined impacts of a land exchange upon a national wildlife refuge and determine if the land exchange is generally beneficial for the refuge, the exchange must result in a configuration of refuge lands that improves the ability of the Service to meet the purposes of the refuge and the mission of the National Wildlife Refuge System over the existing ownership pattern. Although the Act allows the Secretary of the Interior to conduct a land exchange for a road corridor across Izembek National Wildlife Refuge, the legislation also states that prior to making a decision the Secretary of the Interior must analyze the impacts of the proposed land exchange and the potential construction of the road.

This section will examine the primary purposes of the Izembek and Alaska Peninsula National Wildlife Refuges as mandated in ANILCA, the Wilderness Act, and assess whether these purposes are achieved under the land configuration resulting from Alternative 2. To do this, the EIS summarizes potential impacts of the proposed land exchange and road construction that specifically influence the Service's ability to achieve each of the ANILCA refuge purposes. (The pre-ANILCA purposes of the Izembek National Wildlife Refuge and the mission of the National Wildlife Refuge System are effectively covered by the ANILCA purposes and will not be analyzed separately.)

Refuge Purpose (i): to conserve fish and wildlife populations and habitats in their natural diversity, including, but not limited to; the following: ...;

[Izembek National Wildlife Refuge Unit:] *"waterfowl, shorebirds and other migratory birds, brown bears and salmonoids" [sic]*

[Alaska Peninsula National Wildlife Refuge:] *brown bears, the Alaska Peninsula caribou herd, moose, sea otters and other marine mammals, shorebirds and other migratory birds, raptors, including bald eagles and peregrine falcons, and salmonoids [sic] and other fish.*

Under Alternative 2, the road would pass through the narrow isthmus of the refuge which serves as a land bridge and large mammal corridor connecting the eastern portion of the refuge to the western end of the Alaska Peninsula. For birds, the isthmus is also a corridor, but to be flown over in a north-south fashion at low elevation to connect the eelgrass beds of Izembek Lagoon on the Bering Sea to the eelgrass of Kinzarof Lagoon on the Pacific Ocean. Year-round and increased human access radiating off the road corridor via all-terrain vehicles or pedestrian traffic coupled with the physical damage caused by all-terrain vehicle use on wet soils would have profound effects on wildlife use and habitats of the narrow and mostly undeveloped isthmus of the refuge and on the ability of the refuge to meet the first purpose of ANILCA.

Waterfowl corridor and vulnerability to harvest. Black Brant, Emperor Geese and other waterfowl flying between Izembek and Kinzarof lagoons would be much more accessible to harvest because of easy access off the road either by hunters on foot or all-terrain vehicle-supported (legal or not). Subsistence hunters from King Cove and Cold Bay and recreational waterfowl hunters from Cold Bay would have much easier access to preferred waterfowl habitats