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1.0  PURPOSE AND NEED

1.1  Introduction

In the *Omnibus Public Land Management Act of 2009* (Public Law 111-11, Title VI, Subtitle E) (Act), Congress authorized the Secretary of the Interior to exchange lands within the Izembek National Wildlife Refuge for lands owned by the State of Alaska and the King Cove Corporation for the purpose of constructing a single lane gravel road between the communities of King Cove and Cold Bay, Alaska if it is in the public interest. In the Act, Congress directed the Secretary of the Interior to prepare an Environmental Impact Statement (EIS) in accordance with the terms of the Act and the *National Environmental Policy Act of 1969* (NEPA), as amended (42 USC 4321 et. seq.), and its implementing regulations (40 CFR Parts 1500-1508). Congress specified that the EIS must analyze the land exchange, potential road construction and operation, and a specific road corridor through the Izembek National Wildlife Refuge and the Izembek Wilderness that is to be identified in consultation with the State of Alaska, the City of King Cove, and the Agdaagux Tribe of King Cove (Section 6402(b)(2)). Upon completion of the EIS, the Act requires the Secretary of Interior to determine whether the proposed land exchange and road is in the public interest. Title VI, Subtitle E of the Act is included in Appendix A of this document.

If determined to be in the public interest, the land exchange would enable construction and operation of a single lane gravel road between the communities of King Cove and Cold Bay, Alaska, that would provide King Cove residents road access to the Cold Bay Airport. Congress responded to continuing concerns about reliable access for health and safety purposes on the part of the King Cove Corporation, the City of King Cove, the Aleutians East Borough, and the Agdaagux Tribe of King Cove.

The U.S. Fish and Wildlife Service (Service) is the lead federal agency for the EIS. Cooperating agencies are:

Federal

- U.S. Army Corps of Engineers, Alaska District (Corps)
- Federal Highway Administration/Western Federal Lands

Tribal

- Agdaagux Tribe of King Cove
- Native Village of Belkofski

State

- State of Alaska

Borough

- Aleutians East Borough

Local/Other

- City of King Cove
- King Cove Corporation

The Service invited the Alaska Migratory Bird Co-Management Council to participate as a cooperating agency, as the council was identified in the Act as a potential cooperating agency. The Environmental Protection Agency (EPA) and the National Marine Fisheries Service were also invited to participate as cooperators. These entities declined a formal role; however, the Alaska Migratory Bird Co-Management Council and the EPA have been participating in the review process as time permits.
Prior legislation and an EIS also focused on providing access between the communities of King Cove and Cold Bay. The *King Cove Health and Safety Act* (Section 353) of the *Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999* (Public Law 105-227) provided appropriations of $37.5 million for the Aleutians East Borough to construct a marine-road link between the communities of King Cove and Cold Bay ($20 million). This law also provided appropriation for improvements to the King Cove Airport ($15 million) and King Cove Clinic ($2.5 million). The Corps completed the King Cove Access Project EIS (2003 EIS) (USACE 2003) and issued a Record of Decision addressing the marine-road link. The early steps in implementing the Record of Decision included the requirement that the King Cove Corporation donate wildlife habitat on islands in the mouth of Kinzarof Lagoon to the Service for addition to the Izembek National Wildlife Refuge as compensation for wetlands that would be lost with construction of the road. The road was constructed to Lenard Harbor, where hovercraft support facilities were installed. A hovercraft was purchased and began operating in 2007. Hovercraft transit service was provided by the Aleutians East Borough until November 2010. Throughout this process, King Cove residents have continued to advocate for a road as the safest and most reliable transportation system for health and safety reasons. Refer to the 2003 EIS for a complete description of actions considered in 2003.

Details regarding the existing condition of transportation, public health, and other resources are provided in Chapter 3.

### 1.2 Proposed Action

The proposed action is the exchange of land between the federal government, the State of Alaska, and the King Cove Corporation for the purpose of constructing and operating a single lane gravel road between the communities of King Cove and Cold Bay, Alaska. As provided in the Act, the road “shall be used primarily for health and safety purposes, (including access to and from the Cold Bay Airport) and only for noncommercial purposes.” The use of taxis, commercial vans for public transportation, and shared rides is exempted from the prohibition on commercial uses of the road.

Congress identified the federal and non-federal lands involved in the exchange and provided guidance regarding the administration of the exchanged lands (Sections 6401 and 6404 of the Act) (Figure 1-1). Legal descriptions of lands proposed for exchange are included in Appendix B.

- Approximately 206 acres of federal land (surface and subsurface estate) of the Izembek National Wildlife Refuge would be conveyed to the State under the land exchange. The final acreage to be exchanged would be determined by the width and location of the road corridor including safety turnouts as determined in each of the road alternatives considered. The boundary of the Izembek Wilderness would be modified to exclude the road corridor. (The specific lands to be exchanged for the road corridor were not identified in the Act; 2 road corridor alternatives are evaluated in this EIS.)

- Approximately 1,600 acres (surface and subsurface estate) within the Alaska Maritime National Wildlife Refuge on Sitkinak Island, including land withdrawn for use by the U.S. Coast Guard (Coast Guard) and approximately 170 acres of refuge-managed land would be transferred to the State.
Figure 1-1 Project Area Map
• Approximately 43,093 acres of land owned by the State of Alaska, adjacent to the North Creek and Pavlof Units of the Alaska Peninsula National Wildlife Refuge, would be conveyed to the United States (U.S.) and added to the Alaska Peninsula National Wildlife Refuge as wilderness. This includes the subsurface estate, but does not include submerged lands including tidelands, lakes, rivers, and streams to be retained by the State of Alaska.

• Approximately 13,300 acres of land owned by King Cove Corporation (surface estate but excluding tidelands and submerged land of rivers, streams, and lakes determined navigable for purposes of title through federal judicial or administrative procedures), located near Mortensens Lagoon and the mouth of Kinzarof Lagoon, would be conveyed to the U.S. and added to the Izembek National Wildlife Refuge. The Kinzarof Lagoon parcel would also be added to Izembek Wilderness. As a part of the exchange, the King Cove Corporation would also relinquish its selection of 5,430 acres in Izembek Wilderness on the east side of Cold Bay made under the terms of the Alaska Native Claims Settlement Act (ANCSA).

The Act directed that the exchange could not be finalized before the parcel of state land located in Kinzarof Lagoon had been designated as part of the State of Alaska Izembek State Game Refuge. The Alaska Legislature passed and the Governor signed the Izembek State Game Refuge Land Exchange Bill into law (HB 210 Chapter 119 SLA 10) satisfying this requirement (see Section 1.6.3.1 of this EIS).

The proposed road corridor would connect the road terminus at the Northeast Hovercraft Terminal (approved in the 2003 EIS), which is approximately 22 miles north of the City of King Cove, with the existing Cold Bay road system approximately 5 miles north of the City of Cold Bay, joining Outer Marker Road in the vicinity of Blinn Lake. Two road corridor alternatives are evaluated in this EIS and are described in more detail in Chapter 2. Both were developed in consultation with the State, the City of King Cove, and the Agdaagux Tribe of King Cove as required by Section 6402 (b)(2) of the Act. Figure 1-1 provides a general overview. Figures 2-2 and 2-3 illustrate specific alternatives for the road corridor.

The proposed road corridor would be approximately 19.4 to 21.6 miles long and 100 feet wide. The proposed routes would cross Izembek National Wildlife Refuge (including Izembek Wilderness) and lands owned by the King Cove Corporation. The Service would execute an administrative boundary adjustment in the vicinity of Blinn Lake; an area that is currently designated as Alaska Peninsula National Wildlife Refuge, but administered by Izembek National Wildlife Refuge, would become part of Izembek National Wildlife Refuge. As directed in Section 6402 (f), both of the proposed road corridors evaluated in this EIS were designed to minimize adverse impacts to refuge resources, require the transfer of the minimum acreage of federal land, and to the maximum extent practicable, incorporate existing roads into the corridor.

The proposed road would be single lane (i.e., 13 feet wide), gravel surfaced with appropriate safety turnouts (11 feet wide), and a chain barrier or bollard barrier on each side. The average road footprint width would be 41.4 to 47.6 feet for the central and southern alignments, respectively. These features meet design requirements established by the Act in Section 6043(a). If the Secretary of the Interior finds that a land exchange is in the public interest, an enforceable mitigation plan for road design and construction as required in Section 6043(e) will be developed.
as a part of the land exchange process, building upon mitigation measures identified as part of this EIS, with provisions to avoid wildlife and fish impacts and to mitigate wetlands loss.

Should the land exchange be found in the public interest but a construction permit is not authorized, or upon expiration of congressional legislative authority, the land exchange would be void, and federal and non-federal lands would remain in, or would be returned to, the ownership status prior to the exchange (Section 6406 of the Act). In general, the Act’s legislative authority expires 7 years from the date of the Act, unless a construction permit has been issued. Upon issuance of a construction permit, legislative authority would be extended for 5 additional years.

1.3 Purpose

The purpose of the proposed land exchange, as provided in the Act, is to transfer to the State of Alaska all right, title, and interest to a road corridor that would allow the construction, operation, and maintenance of a single lane gravel road between the communities of King Cove and Cold Bay, Alaska. The proposed road is to be used primarily to address health and safety issues, including reliable access to and from the Cold Bay Airport, and only for noncommercial purposes.

If the Secretary of the Interior finds that a land exchange and construction of the proposed road is in the public interest, then the applicant (not currently defined, but likely to be the State of Alaska) would submit an application to the Corps which would then determine compliance with the Clean Water Act Section 404 (b) (1) Guidelines.

In carrying out its compliance responsibilities, the Corps must define the basic and overall project purpose. The basic purpose is used to determine if a given project is water dependent and requires access or proximity to, or siting within, a special aquatic site to fulfill its basic purpose. The overall purpose is an independent assessment of the project purpose by the Corps to accommodate a range of alternatives for consideration and to determine the least environmentally damaging practicable alternative. The basic project purpose is to provide a transportation system between the City of King Cove and the Cold Bay Airport. The overall project purpose is to construct a long term, safe, and reliable year round transportation system between the cities of King Cove and Cold Bay.

Objectives to be achieved by the proposed action include:

- Providing a safe, reliable, affordable transportation system between the City of King Cove and the airport in Cold Bay, Alaska;
- Addressing health and safety issues for King Cove residents, including timely emergency medical evacuations when needed and improved access to health care services not available in King Cove through access to the Cold Bay Airport;
- Balancing the needs of the communities, the national wildlife refuges (including wilderness), and ecosystem functions in the area;
- Transferring the minimum federal acreage necessary for the proposed road corridor;
- Developing an environmentally sensitive project design to minimize impact to wildlife, fish, plants, and their habitats, subsistence uses, wilderness character, and wetlands; and
- Selecting a road corridor that makes use of existing trails and roads to the maximum extent practicable.
1.4 Need

The need for the proposed action is broader than the focused purpose specified in the Act. The project needs arise from the underlying issues related to transportation to and from the community of King Cove. Three needs are identified:

- Health and Safety
- Quality of Life
- Affordable Transportation

Each need is described in this section. The project purpose and need was used to shape the range of alternatives evaluated in Chapter 2.

1.4.1 Health and Safety: Reliable and Safe Transportation for Medical Care, including Emergencies and Evacuations

The State of Alaska, City of King Cove, King Cove Corporation, Agdaagux Tribe of King Cove, and Aleutians East Borough have identified the need for a road connecting the City of King Cove to the Cold Bay Airport, as the only safe, reliable, and affordable means for year round access to medical services not available in King Cove, including infrequent, but time-sensitive medical emergency evacuations. Residents of the City of King Cove believe a road is necessary due to the limitations of medical care available in the region.

The King Cove Clinic provides primary outpatient and limited emergency care. The facility and services were improved through the King Cove Health and Safety Act of 1999. However, the clinic does not have full time physicians on staff. Physician’s assistants, nurse practitioners, and health aides, supplemented by itinerant physicians and telemedicine connections, provide the majority of health care services at the clinic. Other communities, including False Pass and Nelson Lagoon, and fishermen operating in the area, occasionally transfer medical emergency cases to the King Cove Clinic because of the level of medical service available. These patients arrive at the clinic via air and sea.

For cases requiring emergency care exceeding that available at the King Cove Clinic, medical evacuations from the King Cove community arrive first at the Cold Bay Airport via aircraft, hovercraft, and marine vessels, depending upon weather conditions and availability of transport modes. Helicopters are not always available, as they must be mobilized from as far away as St. Paul Island, where Coast Guard Search and Rescue helicopters are stationed. During the winter commercial fishing season, Coast Guard helicopters are temporarily stationed at Cold Bay to monitor commercial fishing and to provide emergency medical evacuations from commercial fishing vessels in the Bering Sea and Pacific Ocean. At the airport, assistance is provided by the Anna Livingston Memorial Clinic. The clinic does not have full time physicians on staff and has less medical staff available than the King Cove Clinic. Evacuated patients are then transported to medical facilities offering more advanced care in Anchorage, Alaska, Seattle, Washington, or elsewhere. (For additional information on medical facilities and evacuations, refer to Section 3.3.4). Other options for emergency medical evacuation services are not available.

The Cold Bay Airport has one of the longest civilian paved runways in Alaska at 10,415 feet and has the only crosswind runway in the vicinity of King Cove and Cold Bay. It has fully operational instrument approach capabilities. The King Cove Airport has a 3,500-foot gravel runway equipped with medium intensity runway lighting, runway end identifier lights, and an
automated surface weather observation system. The runway has a non-precision instrument approach procedure, which is limited to approaching only from the east. By federal regulations, the instrument approach procedure for King Cove Airport is not authorized at night and the final 5.2 mile leg should be flown visually (FAA 2010). The State of Alaska recommends daytime-only use of the runway due to topographic obstructions on the approaches and unpredictable winds (Walker 2010). While not recommended by the State of Alaska or federal regulations, the airport is operational for night flights with the lighting systems previously mentioned.

The flight between the airports is approximately 20 minutes in duration. However, the residents of the City of King Cove have only limited access to the Cold Bay Airport by chartered or scheduled aircraft due to unsuitable flying weather, lack of a crosswind runway, and the mountainous terrain at the King Cove Airport. (For additional information on airport conditions, refer to Section 3.3.3.)

A hovercraft began operating in 2007 when service was established as a result of the 2003 EIS and Record of Decision (USACE 2003). The hovercraft service was established to improve access to the Cold Bay Airport for health and safety needs, and other general transportation purposes. The hovercraft was operated by the Aleutians East Borough, but operations did not attain the frequency of service proposed in the 2003 EIS nor the projected revenues. Higher than anticipated costs, including the costs of retaining sufficient available trained captains and crew, a low operational threshold for freezing temperatures (icing), wind speed, and wave height were factors in the suspension of hovercraft service in November 2010. To date, operations have not resumed. Upon completion of the permitted road and Northeast Hovercraft Terminal, the Aleutians East Borough may attempt to reinstitute hovercraft service between the new Northeast Hovercraft Terminal and Cross Wind Cove Terminal. The estimated completion date of the permitted road and terminal facility is in the latter part of 2012.

When weather and other factors restrict use of aircraft or the hovercraft, private fishing vessels have been used to transport passengers, including medical emergencies, to the Cold Bay Dock. Severe weather can prevent safe operations or access by fishing vessels because the community of Cold Bay does not have a boat harbor. Boat access is limited to the Cold Bay Dock, where passengers either have to climb a steel ladder, or are lifted to the deck of the dock via a winch system used to load/unload cargo from fishing boats.

Residents of the City of King Cove emphasize that access to the Cold Bay Airport is essential. Safe and reliable transportation to advanced medical care, including emergency medical care, is not available. They state that the proposed land exchange and construction of a road to the airport in Cold Bay will establish a safe and reliable land connection between the communities and provide access to advanced and emergency medical care. Refer to Appendix C, Scoping Report, for further discussion on the concerns of the King Cove residents.
1.4.2 Quality of Life

Residents of the City of King Cove state that improved access to the Cold Bay Airport would enhance their quality of life by providing reliable access the Cold Bay Airport, and from there to Anchorage and Seattle for health care services, including emergency medical evacuations when needed. King Cove residents have stated that a road would eliminate most of the issues about the unreliability of the current transportation modes in accessing the Cold Bay Airport. Road access would provide peace of mind, particularly during extended periods of inclement weather that prevent marine and air travel. In addition, access to the Cold Bay Airport would provide the students, school board, borough assembly members, and medical service providers residing in King Cove with enhanced opportunities to travel out of their community. Residents would be able to meet with government officials in Anchorage and Juneau more reliably and to visit extended families living in other communities.

1.4.3 Affordable Transportation

Affordable, reliable, and practical transportation is not available for the residents of the City of King Cove to access the Cold Bay Airport. Air transportation is limited by weather, availability of aircraft, and the topographic constraints of the King Cove Airport. Similar to other rural communities in Alaska, flights to and from the King Cove Airport are sometimes delayed or cancelled due to weather. Cost can be an issue for King Cove residents, not all of whom can afford air fares for a family flying back and forth between the communities of King Cove and Cold Bay, or the associated lodging costs when a continuing flight out of Cold Bay is missed or when weather prevents getting back to King Cove from Cold Bay on a return trip.

The hovercraft service has proven more expensive and more difficult to keep in service than originally expected. Ridership and associated revenues have been lower and operations and maintenance costs higher than projected. Keeping the minimum number of trained crew required for operations, including backup when crewmembers are sick, has been difficult and has resulted in cancellation of scheduled service. Operating thresholds include wave heights not exceeding 6 feet and wind speeds not exceeding 30 miles per hour. In addition, freezing temperatures cause operational challenges (icing), which sometimes inhibit hovercraft service. More details on the operations of the hovercraft are found in Section 3.3.3.

The State of Alaska, City of King Cove, Agdaagux Tribe, King Cove Corporation, and Aleutians East Borough believe that a cost-efficient, reliable surface transportation system, specifically a road, is needed between the City of King Cove and Cold Bay Airport. The transportation system must be affordable for local families, and be constructed, operated, and maintained at a cost that can be borne by local or state government. The transportation must be practical in the context of the Cold Bay and King Cove area, so that it can be operated and maintained without undue requirements for specially trained personnel or specialized equipment, and can provide safe, reliable, affordable transportation with the least amount of interruption by weather conditions.

1.5 Scope of Analysis and Decisions to be Made

The proposed land exchange for the purpose of construction of a road primarily for health and safety is a federal action requiring NEPA compliance and compliance with the provisions of the Act (Appendix A). This EIS may provide the technical and scientific basis for federal regulatory determinations and permit decisions (e.g., Service, Federal Highway Administration, Corps, and
EPA). The State and King Cove Corporation also have authorities and responsibilities and these parties may elect to draw upon this EIS in reaching their decisions.

The topical scope of this analysis includes the identification of a reasonable range of alternatives with sufficient technical detail to support analysis of impacts to the physical, biological, and social environments, along with the identification of appropriate mitigation and monitoring measures. The geographic scope of the analysis is referred to as the project area, and includes the lands proposed for exchange and the adjacent state and federal refuges associated with the exchanged lands. Recognizing that some migratory resources may be affected, the analysis extends geographically to take into account such impacts on particular resources. More detail on the geographic scope of analysis is found in Chapter 3.

The remainder of this section describes the responsibilities and decisions required of the Service, particularly as related to the land exchange affecting the national wildlife refuges, and of the Corps, especially in regard to the discharge of fill material into waters of the U.S. as part of the construction of a selected road alignment or facilities.

The Service is responsible for administration of 3 national wildlife refuges addressed in this EIS: the Izembek National Wildlife Refuge, Alaska Peninsula National Wildlife Refuge, and Alaska Maritime National Wildlife Refuge. As detailed in Section 1.6, this includes compliance with the Alaska National Interest Lands Conservation Act (ANILCA), the National Wildlife Refuge Administration Act of 1966, as amended [16 USC 669(e)(3)], the Wilderness Act of 1964 (16 USC 1131-1136), adherence to other federal laws, regulations, and polices, and implementation of refuge comprehensive conservation plans (see Section 1.6.2.2). As required under NEPA, the Service must evaluate, disclose, and mitigate adverse impacts to wildlife, habitat, wilderness, and other values of these refuges, while also balancing the needs of adjacent communities to achieve the purposes specified in the Act. In addition, the Service must evaluate whether the proposed action would significantly restrict subsistence uses in accordance with ANILCA Section 810.

For those lands proposed for transfer to or from one of the refuges, the EIS must address the quality and value of habitat and the function and value of wetlands as part of the evaluation of impacts to the physical, biological, and social environment, including wilderness character. The Act calls for a mitigation plan to avoid wildlife impacts, by identifying critical periods when the refuge is used by wildlife, including migratory birds, and by adopting strategies to “alter, limit, or halt construction activities during identified high risk periods” (Section 6403 of the Act).

The Corps has regulatory jurisdiction over waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act (Section 404) and Section 10 of the Rivers and Harbors Act of 1899. Section 404 requires that any individual or entity that proposes to discharge dredged and/or fill material into waters of the U.S., including wetlands, must obtain a permit prior to conducting the work. Section 10 of the Rivers and Harbors Act of 1899 requires that a Corps permit be obtained for structures or work in or affecting navigable waters of the U.S. (33 USC 403).

Although the proposed land exchange is not under Corps jurisdiction, selection of several of the alternatives considered (except hovercraft alternatives) would require a new permit from the Corps under the Clean Water Act due to potential discharge of fill material into waters of the U.S. The EIS must address the total proposed project, alternatives, environmental impacts, and mitigation measures. As required in Section 6403 of the Act, the EIS will include a mitigation
plan addressing wetland loss. The Corps’ role as a cooperating agency is to ensure the EIS process considers the Corps’ requirements under NEPA and the Section 404 (b)(1) Guidelines. The State of Alaska is a party in the proposed land exchange. State permitting decisions associated with the proposed road require review of activities that could impact state game refuges or habitat for anadromous fish such as salmon. This region is within the Bristol Bay Area Plan for State Lands (ADNR 2005), which recognized multiple uses, and the terms of which will help inform the analyses of impacts and mitigation to be carried out by the State of Alaska. The Izembek State Game Refuge Management Plan (ADF&G 2010i) also provides guidance for state lands in the vicinity. The State of Alaska (Department of Transportation and Public Facilities) would likely be responsible for construction, operation, and maintenance of the proposed road.

The King Cove Corporation, an Alaska Native village corporation formed under the Alaska Native Claims Settlement Act (ANCSA), is a party involved in the proposed land exchange. King Cove Corporation owns and manages its surface estate lands. For King Cove Corporation lands located within the Izembek National Wildlife Refuge, the subsurface estate is owned by the U.S. ANCSA Section 12 (a) (1) states that when a village corporation selects land within a national wildlife refuge, the regional corporation may select the subsurface estate from other lands within the region that were not refuge lands upon the date ANCSA (1971) was passed. However, where Alaska Native village corporation selections were made on lands that subsequently became part of a refuge created under ANILCA in 1980, such as the Alaska Peninsula National Wildlife Refuge, including the King Cove Corporation lands west of Mortensens Lagoon, the surface and subsurface estates were conveyed to the village and regional corporations respectively. The proposed land exchange would include King Cove Corporation surface estate lands in the Izembek National Wildlife Refuge and Alaska Peninsula National Wildlife Refuge. Lands where The Aleut Corporation holds the subsurface estate, as in the Mortensens Lagoon parcel, the subsurface estate would not be exchanged. Thus, the land exchange does not affect The Aleut Corporation land holdings, and The Aleut Corporation is not a party to the proposed land exchange. Aleut Corporation interests in other lands may be involved in components of the road construction, such as the Lenard Harbor material site.

The Service is the lead agency responsible for preparing the draft and final EIS documents. After completion of the Final EIS, the Service will issue a Record of Decision with a recommendation to the Secretary of Interior regarding the proposed exchange of lands. The EIS must consider the Service’s mission and other mandates, including refuge purposes to provide opportunities for subsistence uses by local residents. The Corps will also prepare a Record of Decision that addresses the agency’s authorities and responsibilities. In their Records of Decision, the agencies will articulate the technical, scientific, and policy basis for agency decisions.

Upon completion of the EIS and the Service’s Record of Decision, the Secretary of the Interior will determine if the proposed land exchange is in the public interest, as required in the Act. Final Department of the Interior action rests with the Secretary of the Interior, who considers the EIS and other factors to issue a public interest determination. The Secretary must balance the various and compelling local and national-level public interests.
Several consequential actions could stem from the Secretary of the Interior’s determination. For example, should the Secretary determine that the proposed land exchange and the proposed road is in the public interest, then the alignment and design of the road would be refined and the federal and state agencies and King Cove Corporation would execute the land conveyances.

If the Secretary of the Interior finds that a land exchange and construction of a road between the City of King Cove and Cold Bay Airport is in the public interest, the Corps would be responsible to determine compliance with the Section 404 (b)(1) Guidelines for any subsequent permit application for the discharge of fill for construction of a road. A permit decision could not be made until after the Secretary of the Interior’s determination has been rendered. Should a permit application be submitted as a result of the Secretary of Interior’s decision, the Corps would evaluate the proposal and determine if the proposed action is the least environmentally damaging practicable alternative, as required by Section 404.

The construction of a road within a selected transportation corridor would require federal and state reviews and permit decisions.

1.6 Project Relationship to Laws, Regulations, Policies, and Required Permits

The following sections outline the principal requirements of applicable laws and key management plans for the proposed action. Following completion of the EIS, the Record of Decision, and the public interest determination by the Secretary of the Interior, a positive conclusion would result in the Service, State of Alaska, and the King Cove Corporation completing the land exchange. The State of Alaska would proceed to permit applications, reviews, and decisions on the proposed road project. Federal, state, and local laws, regulations, and policies require specific reviews and authorizations.

1.6.1 Federal Laws, Regulations, and Policies

The summary of pertinent federal laws, regulations and policies begins with the congressional mandate of the Act, followed by laws that define the responsibilities of the lead agency for the EIS, the Service. Next, the framework laws for the Corps (a cooperating agency) are described. The subsequent sections focus on the major land laws, the species conservation laws, and other federal laws.

1.6.1.1 Omnibus Public Land Management Act of 2009 (Act) (Public Law 111-11, Title VI, Subtitle E)

The Omnibus Public Land Management Act of 2009 (Act) authorized the Secretary of the Interior to enter into a land exchange with the State of Alaska and King Cove Corporation upon a finding that it is in the public interest. Under the exchange, the U. S. would convey a corridor of land through Izembek National Wildlife Refuge to construct a single lane gravel road connecting the communities of Cold Bay and King Cove in exchange for conveyance of land from the State of Alaska and the King Cove Corporation for inclusion in Izembek and Alaska Peninsula National Wildlife Refuges. The Act further required the Secretary to prepare an EIS under the National Environmental Policy Act of 1969, as amended (42 USC 4321 et seq.) and its regulations (40 CFR Parts 1500-1508) to evaluate the impacts of the proposed land exchange and the construction, operation, and maintenance of the road between King Cove and Cold Bay,
CHAPTER 1  PURPOSE AND NEED

Alaska. Requirements mandated by Congress are discussed in Sections 1.1 and 1.2 (see also Appendix A).


The *Alaska National Interest Lands Conservation Act* (ANILCA) added 106 million acres to federal conservation units in Alaska, including the National Wildlife Refuge System. Various sections of ANILCA are applicable to this EIS, including Title III, which established and identified the purposes of the 3 national wildlife refuges affected by the proposed land exchange and road; Title VII, which designated part of the Izembek National Wildlife Refuge as wilderness; and Title VIII which requires an analysis of impacts to subsistence from federal land management actions.

ANILCA redesignated the previously established Izembek National Wildlife Range as the Izembek National Wildlife Refuge and established the Alaska Peninsula and Alaska Maritime National Wildlife Refuges. ANILCA defined the purposes for these 3 wildlife refuges in Sections 302(1)(B) for Alaska Peninsula National Wildlife Refuge, 303(1)(B) for Alaska Maritime National Wildlife Refuge, and 303(3)(B) for the Izembek National Wildlife Refuge. For all 3 refuges, the purposes for which they were established include the following:

(i) To conserve fish and wildlife populations and habitats in their natural diversity...

(ii) to fulfill the international treaty obligations of the U.S. with respect to fish and wildlife and their habitats;

(iii) to provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents; and

(iv) to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the refuge.

In addition, the Alaska Maritime National Wildlife Refuge was to provide, in a manner consistent with subparagraphs (i) and (ii), a program of national and international scientific research on marine resources.

Conservation of certain groups of fish and wildlife populations and their habitats was emphasized in subparagraph (i), but these groups varied among the 3 refuges. Refuge purposes were “to conserve fish and wildlife populations and habitats in their natural diversity, diversity including, but not limited to” the following:

(i)  Izembek National Wildlife Refuge Unit: waterfowl, shorebirds and other migratory birds, brown bears and salmonoids [sic]

(ii)  Alaska Maritime National Wildlife Refuge: marine mammals, marine birds and other migratory birds, the marine resources upon which they rely, bears, caribou and other mammals

(iii)  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.

In Title VII, Congress designated approximately 300,000 acres of Izembek National Wildlife Refuge as wilderness (Section 702). It is managed in accordance with the Wilderness Act of 1964 (16 USC 1131-1136), except where ANILCA expressly provided otherwise. Additional ANILCA guidance on wilderness management (Section 1315) and other ANILCA provisions affect management and use of wilderness lands.

Title VIII of ANILCA defines subsistence as customary and traditional uses of wild renewable resources by rural Alaska residents (Section 803), establishes a subsistence priority on federal public lands and waters (Section 804), and provides for a system of regional advisory councils to insure the participation of rural residents in subsistence management (Section 805). Section 810 of ANILCA requires analysis of impacts to subsistence from federal land use decisions. Section 811 ensures reasonable access to subsistence resources on federal public lands, including the use of snowmobiles, motorboats, and other means of surface transportation traditionally employed for subsistence purposes, subject to reasonable regulations.

Title XI of ANILCA provides that, subject to reasonable regulations, the use of snowmobiles, motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities within conservation system units is permitted, including refuges and wilderness areas.

Title XIII of ANILCA includes several additional elements for wilderness management in Alaska, including provisions allowing continued use of existing cabins, subject to some restrictions; new public use new cabins as necessary for the protection of public health and safety (Section 1315); and the continuance of existing uses and future establishment and use of temporary facilities directly related to the taking of fish and wildlife, subject to reasonable regulations (Section 1316).

1.6.1.3 National Wildlife Refuge System Administration Act of 1966, as amended (16 USC 668dd-668ee)

The National Wildlife Refuge System Administration Act, as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57), established a unified mission for the National Wildlife Refuge System and a compatibility standard for assessing proposed uses within a refuge. While the refuge system is dedicated to the conservation of fish, wildlife, and plant resources and their habitats, other uses may occur if they are determined to be compatible. A compatible use is a use that, in the sound professional judgment of the Director of the Service, will not materially interfere with or detract from the fulfillment of the mission of the National Wildlife Refuge System or the purposes of the refuge. As a result of the specific provisions of the Act requiring the Secretary of the Interior to make a public interest determination regarding the proposed land exchange, a compatibility determination will not be made.

1.6.1.4 Wilderness Act (1964) (16 USC 1131 - 1136)

The Wilderness Act of 1964 established a national system of wilderness areas, with the following purposes:

- Secure for the American people of present and future generations an enduring resource of wilderness;
Preserve the wilderness character of areas within the National Wilderness Preservation System;

Administer the National Wilderness Preservation System for the use and enjoyment of the American people in a way that will leave these areas unimpaired for future use and enjoyment as wilderness;

Gather and disseminate information regarding the use and enjoyment of wilderness areas; and

Wilderness areas are to be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

As noted above, ANILCA established the Izembek Wilderness and provided additional guidance for management of wilderness areas in Alaska, including access for subsistence and other traditional uses, cabins, and temporary shelters associated with hunting (including trapping) and fishing.

1.6.1.5 Convention on Wetlands of International Importance of 1971 (Ramsar Convention)

The Ramsar Convention is an international convention (or intergovernmental treaty) adopted in the Iranian city of Ramsar in 1971. It provides a framework for national and international cooperation for the “conservation and wise use” of wetlands and their resources. Countries that have adopted the convention have committed to “designate suitable wetlands for the List of Wetlands of International Importance and ensure their effective management” and to “cooperate internationally concerning transboundary wetlands, shared wetland systems, shared species, and development projects that may affect wetlands.” The Ramsar Convention entered into force in 1975, and the U.S. joined the convention in 1987, as the 41st member state. The Izembek National Wildlife Refuge was included on the Ramsar list in 1987, when it became one of the first sites designated by the U.S. as a Wetland of International Importance (Section 3.2.2.2).

1.6.1.6 Clean Water Act (1972)

Section 404 of the Clean Water Act requires that a Corps permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including jurisdictional wetlands (33 USC 1344). The Corps defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The Corps evaluates proposed actions for compliance with the Section 404(b)(1) Guidelines, which were developed by the EPA in conjunction with the Secretary of the Army.

If the Secretary of the Interior finds that a land exchange and construction of a road between the communities of King Cove and Cold Bay, Alaska, is in the public interest, the Corps would be responsible to determine compliance with the Section 404 (b) (1) Guidelines for any subsequent permit application for the discharge of fill for construction of a road. Only the least environmentally damaging practicable alternative can be permitted and it is the permit applicant’s responsibility to provide the information required to make this determination. A state water quality certification would also be required in accordance with Section 401 of the Clean Water Act.
Construction will also require compliance with the National Pollutant Discharge Elimination System (NPDES), administered by the Alaska Department of Environmental Conservation as the Alaska Pollutant Discharge Elimination System. Under the Alaska Construction General Permit, a Storm Water Pollution Prevention Plan is required.

1.6.1.7 Rivers and Harbors Act (1890, 1899)

Section 10 of the Rivers and Harbors Act of 1899 requires that a Corps permit be obtained for structures or work in or affecting navigable waters of the U.S. (33 USC 403), which includes excavation or deposition of material in navigable waters, or other actions that could affect the course, location, condition, or capacity of these waters. Section 10 waters are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified by the Corps, Alaska District. The Corps permitting process meets the requirements of both Section 404 and the Rivers and Harbors Act.

1.6.1.8 Alaska Native Claims Settlement Act (ANCSA) (1971)

Alaska Native regional and village corporations own lands in the project area under the provisions of the Alaska Native Claims Settlement Act of 1971 (ANCSA; 43 USC 1601 et seq.). The King Cove Corporation is an Alaska Native village corporation, formed pursuant to Section 8 of ANCSA. Under Sections 11 and 12, King Cove Corporation is entitled to the selection and conveyance of federal lands (surface estate only) within and adjacent to the Izembek National Wildlife Refuge.

Under Section 22(g) of ANCSA, the King Cove Corporation lands within the Izembek National Wildlife Refuge are subject to the laws and regulations governing use and development of the refuge because the lands were selected within an existing National Wildlife Refuge as of the date of ANCSA. Section 22(g) gives the federal government the first right of refusal to purchase the lands if they are ever offered for sale and requires that use and development of these King Cove Corporation lands may not impose impacts on the adjacent Izembek National Wildlife Refuge lands that affect the ability of the refuge to meet its purposes. The subsurface estate of the King Cove Corporation lands within the Izembek National Wildlife Refuge remains vested in the federal government. In contrast, lands owned by King Cove Corporation (surface estate) and Aleut Corporation (subsurface estate) within the boundaries of the Alaska Peninsula National Wildlife Refuge are not subject to the provisions of Section 22(g) because the refuge was established in 1980 under ANILCA and did not exist at the time of ANCSA.

1.6.1.9 Endangered Species Act (1973)

The Endangered Species Act of 1973 was enacted to conserve species that have been found to be at risk of extinction in all or a substantial portion of their ranges, and to conserve the ecosystems and habitats upon which they rely. The Service and the National Marine Fisheries Service have regulatory authority of implementing the Endangered Species Act. In general, the Service is responsible for managing the terrestrial animal and plant species listed as endangered and threatened, and generally coordinates related issues for terrestrial and freshwater species, while the National Marine Fisheries Service is responsible for most marine mammals and anadromous fish species. Some marine mammals, including the northern sea otter, are managed by the Service.
As described in Section 3.2.6, 3 species listed as threatened or endangered occur on the Izembek, Alaska Peninsula, and Alaska Maritime National Wildlife Refuge lands affected by the proposed land exchange and road. These include the Alaska breeding populations of Steller’s Eider (Polysticta stelleri), the southwest Alaska distinct population segment of northern sea otter (Enhydra lutris kenyoni), and the western distinct population segment of Steller sea lion (Eumetopias jubatus). Candidate species for listing, the Yellow-billed Loon (Gavia adamsii), and the Kittlitz's Murrelet (Brachyramphus brevirostris) occur, but only rarely in the area. The National Marine Fisheries Service is responsible for managing the Steller sea lion and the Service is responsible for managing the other listed and candidate species in the project area.

Once a species is placed on the Endangered Species Act list, it becomes eligible for increased protective measures. Critical habitat is designated. Critical habitat is the geographical area, which may require special management protection, that provides the physical or biological features essential to the conservation of the listed species. A plan is developed by either the Service or National Marine Fisheries Service identifying actions that will aid in the recovery and eventual delisting of the listed species. When developments or land management actions are proposed, any listed plant or animal species in that location must be considered. The law protects listed species in regard to takings, and adverse effects on habitats. However, the agencies may review and as appropriate provide permits for activities that result in takings. For listed species, the agency prepares a recovery plan to identify conservation measures that could help improve the abundance of the species.

Section 7 of the Endangered Species Act requires all federal agencies to use their authorities to conduct conservation programs and to consult with the Service or National Marine Fisheries Service regarding potential effects of their actions on any species listed under the Endangered Species Act. Federal actions may not jeopardize the continued existence of the listed entity or adversely modify critical habitat within the proposed land exchange and road area.

1.6.1.10 Marine Mammal Protection Act (1972)

The Service and the National Marine Fisheries Service have regulatory authority for implementing the Marine Mammal Protection Act, which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. The law provides exceptions for authorized scientific research and subsistence uses by Alaska Natives. Actions that have potential to take marine mammals must be reviewed and approved by the regulating agencies. For further discussion see Section 3.2.6.

1.6.1.11 Migratory Bird Treaty Act (1918)

The Migratory Bird Treaty Act of 1918 implements several international conventions to protect migratory birds. Following treaty amendments in 1997, regulations for subsistence bird harvests were established under the purview of the Alaska Migratory Bird Co-Management Council, operating under authority of the Migratory Bird Treaty Act (1918), as amended. Under the Migratory Bird Treaty Act, takings are prohibited unless expressly authorized or exempted. Losses from habitat impacts are also considered takings under the definition of taking.
1.6.1.12 Clean Air Act (1970)

The Clean Air Act of 1970, with amendments in 1990, addresses standards for many categories of air pollutants, and defines how the EPA implements its regulatory authority for air quality (42 USC 85). The requirements of this law encompass many pollution sources, provide health-based standards, and identify cleanup methods to reduce common air pollutants. For example, visibility protection regulations are designed to reduce emissions that cause haze in national parks and wilderness areas. The potential construction and operation of a road will introduce activities related to motor vehicles and mobile equipment that are associated with particle pollution and ground-level ozone. Both of these forms of air pollution, and others, have known health effects and would be subject to further evaluation under federal and state implemented air quality management programs. Implementation of the Clean Air Act has been delegated to the State of Alaska and the Alaska Department of Environmental Conservation would issue any permits associated with this project.

1.6.1.13 Historic Preservation Laws

The National Historic Preservation Act of 1966 (as amended), the Archaeological Resources Act of 1979, and the Antiquities Act of 1906 guide the management of cultural resources. Under Section 106 of the National Historic Preservation Act (36 CFR Part 800), federal agencies are required to consider the effect of their actions on historic properties listed on, or eligible for, the National Register of Historic Places. The National Historic Preservation Act allows sites of traditional religious and cultural significance to Native Americans or Alaska Natives to be considered eligible for the National Register. Section 106 requires a process of consultation with the Advisory Council on Historic Preservation, State Historic Preservation Officer, Indian tribes, local governments, and other interested parties to identify historic properties and determine the effects of the action on those resources. If historic properties will be adversely affected by a project, the agency must, again in consultation, resolve the effects through appropriate mitigation.

1.6.1.14 Executive Orders

Federal agencies must consider several Executive Orders in the evaluation of the proposed action. The following Executive Orders apply to the proposed action evaluated in this EIS.

- Executive Orders 11988 and 11990 direct federal agencies to avoid impacts associated with modification, occupation, or destruction of floodplains and wetlands, and to avoid support of development in floodplains and wetlands if there is a practicable alternative.
- Executive Order 12898 directs federal agencies to assess whether their actions have disproportionately high and adverse human health or environmental effects on minority and low income populations.
- Executive Order 13007 directs federal agencies to accommodate access and ceremonial use of sacred sites, avoid adversely affecting the physical integrity of Indian sacred sites, and maintain the confidentiality of sacred sites.
- Executive Order 13045 directs federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children.
• Executive Order 13112 directs federal agencies to prevent the introduction or spread of invasive (non-native) species, and to minimize economic, ecological, and human health impacts from invasive species.

• Executive Order 13175 directs federal agencies to consult and collaborate with Tribal governments in the development of policies that may affect tribes.

• Executive Order 13186 directs federal agencies to take actions to promote the conservation of migratory bird populations and their habitats.

• Executive Order 13514 directs federal agencies to increase energy efficiency; the goal of the order is to “establish an integrated strategy towards sustainability in the Federal Government and to make reduction of greenhouse gas emissions a priority for Federal agencies.”

1.6.2 Federal Management Plans

Connecting the communities of Cold Bay and King Cove by road has been addressed in several previous management plans and associated EIS documents. In addition, numerous plans provide guidance for management of the area. Key documents are identified in this section. Land use planning documents are also discussed in Section 3.3.3.


ANILCA Section 1203 required a study and report on the land ownership and resource uses of federal land within the Bristol Bay Cooperative Region. The U.S. Department of the Interior **Bristol Bay Regional Management Plan and Final Environmental Impact Statement** (Service 1985c) was finished, although the Record of Decision was not completed. The plan evaluated a 32-mile gravel road connecting the communities of King Cove and Cold Bay (p. 8-14 of the plan). The right-of-way was estimated at 200 feet, with the road constructed under state secondary highway standards. The road would have required an estimated footprint of 805 acres, including 30 acres of borrow pits, and would have crossed approximately 7 miles of congressionally designated wilderness within the boundaries of the Izembek National Wildlife Refuge.

1.6.2.2 **Comprehensive Conservation Plans**

National Wildlife Refuge comprehensive conservation plans provide broad policy guidance based on existing laws, regulations, and Service policy, and establish the long-term direction, goals, and objectives for management of a refuge, as required under Section 304(g) of ANILCA. The Izembek National Wildlife Refuge, Unimak Island of the Alaska Maritime National Wildlife Refuge, and the Pavlof and North Creek Units of the Alaska Peninsula National Wildlife Refuge are managed by the Service staff in Cold Bay, Alaska. Three comprehensive conservation plans prepared by the Service apply to the management of these areas. The key elements of the 3 plans, as they affect the review of the proposed land exchange and road, are briefly discussed in this section.

Public Land Order 2216 established the Izembek National Wildlife Refuge in 1960. ANILCA redesignated the range a National Wildlife Refuge in 1980 and also designated the Izembek Wilderness within the refuge. ANILCA Section 304(g) gives specific directions that “the special values of the refuge, as well as archeological, cultural, ecological, geological, historical, paleontological, scenic, or wilderness value of the refuge” shall be described. The 1985 comprehensive conservation plan identified 8 special values of Izembek National Wildlife Refuge (Service 1985a). Those that relate to the proposed land exchange and road include:

- The wilderness area covers about 95 percent of the refuge, and includes many of the special values of the refuge. Pristine streams, extensive wetlands, steep mountains, tundra, and sand dunes in the wilderness area provide high scenic, wildlife and scientific values. The area also provides outstanding opportunities for solitude and primitive recreation.

- Left Hand and Right Hand valleys are also noted for their scenic qualities, and are key important habitat for caribou, brown bear, and other fish and wildlife.

- The Kinzarof Lagoon wetlands complex provides key habitat for waterfowl and other fish and wildlife.

- Izembek, Kinzarof, Big, Middle and Little lagoons are of special importance for the waterfowl they support; up to 300,000 geese, 150,000 ducks, and 120,000 to 150,000 brant (nearly all of the brant in the Pacific flyway) use Izembek Lagoon in the fall migration. The eelgrass bed in Izembek Lagoon is one of the largest in the world.

- Finally, the diversity of refuge resources and uses, including landforms, habitats, fish and wildlife, and subsistence and recreational uses, is noteworthy in Alaska.

This listing of special values includes references to the Izembek, Kinzarof, and other lagoons, generally in the context of how these lagoons are important habitat for the waterfowl, fish, and wildlife resources of the refuge. The tidal and submerged lands (below mean high tide) and waters in the lagoons, are owned by the State of Alaska. Izembek Lagoon is managed under the Izembek State Game Refuge, discussed in Section 1.6.3.2. Other lagoons are managed under the Bristol Bay Area Plan for State Lands (ADNR 2005).

The 1985 comprehensive conservation plan presented some concerns about a potential road that would connect the communities of King Cove and Cold Bay. These included:

- traversing “key nesting and molting habitat for tundra swans, and in a caribou migration corridor;”

- “swans could be displaced to less desirable and less protective habitats, thus increasing mortality and lowering overall productivity;”

- “access into key brown bear habitat in the relatively remote, undisturbed Joshua Green River drainage and in the Right and Left Hand valleys;”

- “disturb[ance] to waterfowl populations at critical times;”
• “increased silt loads of streams flowing into the [Kinzarof] lagoon, which in turn could affect eelgrass growth;”

• Potential “impacts on the integrity and productivity of the southern Alaska Peninsula caribou herd;”

• long term effects on subsistence for the area’s residents; and

• noise, visual impacts, and motorized access in the wilderness area.


The Alaska Peninsula National Wildlife Refuge was established by ANILCA in 1980. The 2006 revised comprehensive conservation plan and EIS for the Alaska Peninsula National Wildlife Refuge did not directly analyze the potential of a road between the communities of Cold Bay and King Cove. The plan did refer to the applicable section in the U.S. Department of the Interior’s Bristol Bay Regional Management Plan (noted above). It also, in a section on threats to ecosystems, referred to the road corridors identified in the Southwest Alaska Regional Transportation Plan (discussed below). An appendix outlined the State of Alaska’s perspectives on roads and transportation in the region.

The 1985 comprehensive conservation plan described specific lands to be considered as additions to the National Wilderness Preservation System (Service 1985b). This included approximately 1,300 acres on the slopes of Mt. Dutton, adjoining the southern boundary of the Izembek Wilderness. These lands also adjoin the northern boundary of King Cove Corporation and Aleut Corporation lands in the Delta Creek Valley. The Record of Decision for the revised comprehensive conservation plan and EIS noted that as a result of a 2004 Memorandum from the Director of the Service, no additional wilderness review was conducted and the wilderness recommendations of the initial plan still stood (Service 2006c).


The Alaska Maritime National Wildlife Refuge was established by ANILCA in 1980, consolidating 11 pre-existing refuges and adding 1.9 million acres of new land, to encompass the majority of Alaska’s seabird habitat within a single refuge. Sitkinak Island is part of the Trinity Islands located off the southern tip of Kodiak Island; it is included within the Gulf of Alaska Unit of the refuge. Sitkinak Island is largely in State ownership, with the exception of 2 parcels that remain in federal ownership because they were withdrawn for use by the Coast Guard pursuant to Public Land Orders 664 and 2887. These parcels are proposed for exchange for transfer from the Service to the State of Alaska. More details concerning the Sitkinak Island parcels are found in Section 3.3.3.2.

1.6.2.3 Land Protection Plan

The Land Protection Plan for Izembek National Wildlife Refuge Complex (1998) was developed by the Service to “identify and conserve high quality habitat found on privately owned lands within the refuge boundary. The plan is intended to guide the refuge’s land protection activities
and provide a framework for refuge and private landowner cooperation.” The plan identifies potential methods for resource protection, including federal laws, cooperative agreements, leases, easements, donations, land exchanges, and land acquisitions. Priorities for resource protection are identified. The plan states, “The proposal to construct a road across both refuge and King Cove Corporation lands is currently the greatest known potential threat to wildlife and wilderness values within the Izembek Complex.” The parcels owned by King Cove Corporation on the west side of Cold Bay and those bordering Kinzarof Lagoon are identified as high priorities for acquisition.

1.6.3 State and Local Laws, Regulations, and Management Plans

Connecting the communities of Cold Bay and King Cove by road has been addressed in several previous management plans. In addition, numerous plans provide guidance for management of the area. Key state laws, regulations, and documents are identified in this section. (Additional details on these and other land use planning documents are also discussed in Section 3.3.3.)

1.6.3.1 Izembek State Game Refuge Land Exchange Law

On August 19, 2010, Alaska Governor Parnell signed into law the Izembek State Game Refuge Land Exchange Law, which will add state land and water within and adjacent to Kinzarof Lagoon to the Izembek State Game Refuge should the Secretary of the Interior find the proposed land exchange to be in the public interest. The added parcel in Kinzarof Lagoon would be managed consistent with the goals and policies in the Izembek State Game Refuge Management Plan. If the land exchange does not go forward, then the Kinzarof Lagoon parcel is not added to the Izembek State Game Refuge (AS 16.20.030 conditional amendment of (a)(14)).

1.6.3.2 Izembek State Game Refuge Management Plan. April 2010.

The Izembek State Game Refuge Management Plan (ADF&G 2010) provides guidance for the Izembek State Game Refuge, which was established in 1972 (AS 16.20.030). The Izembek State Game Refuge largely coincides with the boundary of the Izembek National Wildlife Refuge, with an extension that reaches as much as 3 miles seaward to the north of the Kudiakof Islands (Figure 1-2). The Izembek State Game Refuge Management Plan focuses on the Izembek Lagoon tidelands and submerged lands for which the State holds jurisdiction, the eelgrass beds, and the “waterfowl and shorebirds that feed in the Izembek Lagoon eelgrass beds during spring and fall migrations” (ADF&G 2010). The plan is intended to provide consistent long-range guidance for the Alaska Department of Fish & Game decisions on management activities for the Izembek State Game Refuge. The plan specifically identifies the potential for a road through the refuge:

Construction of a road through the State Game Refuge to connect King Cove to Cold Bay may be authorized under terms and conditions of a Special Area Permit, pursuant to current statutory and regulatory authority, or as amended by future state legislation.
Figure 1-2  Izembek State Game Refuge Boundary
Implementation of the *Izembek State Game Refuge Management Plan* relies on coordination between the Alaska Department of Fish and Game and the Service, under the terms of the 1986 Supplement to a Master Memorandum of Understanding between the agencies (Service 1986b). This sets the general policy guidelines within which the agencies agree to cooperate on national wildlife refuges. The memorandum provides general guidelines for consultation and coordination, but it does not provide specific guidance regarding the proposed land exchange and road project.

1.6.3.3 *Southwest Transportation Plan*. September 2004. Alaska Department of Transportation and Public Facilities.

The Alaska Department of Transportation and Public Facilities evaluated the King Cove and Cold Bay area in this regional transportation plan. The plan addressed road, aviation, harbor, and marine freight transportation needs, and in some locations, recommended critical road links between port facilities and communities. Among the King Cove transportation elements, the plan:

…recognizes the need for a viable and practical surface (overland and/or marine) transportation link between the communities of King Cove and Cold Bay, and endorses the findings of the King Cove – Cold Bay Facilities Concept Report and Assessment of Transportation Need (ADOT&PF 2002). It supports further efforts by both communities to refine and implement a near term, workable transportation solution.

1.6.3.4 *Bristol Bay Area Plan for State Lands*. 2005. Alaska Department of Natural Resources.

The project area is within the *Bristol Bay Area Plan for State Lands* (ADNR 2005), which identified the management intent, land use designations and management guidelines for state lands within the planning area. This plan recognized multiple uses and designated the highest priority for fish and wildlife harvest, habitat protection, and recreation. The plan recognized the proposed road corridor connecting the communities of King Cove and Cold Bay, derived from the 2004 *Southwest Alaska Regional Transportation Plan*. Goals for the corridor designation included supporting area-wide transportation needs, minimizing costs, minimizing adverse effects, promoting efficiency, and ensuring public safety.

1.6.3.5 *Alaska Statutes, Title 16, Chapter 20: Conservation and Protection of Alaska Fish and Game*. Alaska Department of Fish and Game.

The Alaska Department of Fish and Game is responsible for the sustainability of all fish and wildlife in the State of Alaska, regardless of land ownership or designation, and has the authority, jurisdiction, and responsibility to manage, control, and regulate fish and wildlife populations – including for subsistence purposes – unless specifically preempted by federal law. The state’s subsistence laws require that fish and wildlife harvest regulations provide for noncommercial, customary, and traditional uses. All Alaskans are eligible to hunt and fish under state subsistence regulations.
1.6.4 Responsibility for Obtaining Permits

Should the land exchange be approved or another alternative selected, the project applicant (not currently defined, but likely to be the State of Alaska) will be responsible for obtaining all applicable federal, state, and local permits for construction of a transit mode. Applicable laws and regulations are discussed in Section 1.6. Alternatives 1 and 4 would not require additional permits, as the actions were authorized in the 2003 EIS and permits were obtained. Alternatives 2, 3, and 5 would likely require major permits, approvals, and consultations as listed below; additional minor permits and authorizations could also be required.

**Major Federal Permits and Authorizations**

- Corps Section 404 and Section 10 of the *Rivers and Harbors Act of 1899* permit for fill in wetlands and other waters of the U.S. and for dredge, fill, and placement of structures below mean high water.
- Service Special Use Permit for the sale of federally owned subsurface material under King Cove Corporation surface estate within the Izembek National Wildlife Refuge.
- Service Section 7 Consultation under the *Endangered Species Act*.
- National Oceanographic and Atmospheric Administration Fisheries Section 7 Consultation under the *Endangered Species Act*.
- National Oceanographic and Atmospheric Administration Fisheries Essential Fish Habitat Consultation.
- Coast Guard Bridge Permit, issued under Section 9 of the *Rivers and Harbors Act of 1899*, for structures over navigable waters of the U.S. (Alternative 2 and 3 only)

**Major State Permits and Authorizations**

- Alaska Department of Environmental Conservation Section 401 Water Quality Certification (Certificate of Reasonable Assurance); generally processed as part of the Section 404/ *Rivers and Harbors Act of 1899* Section 10 Corps permit.
- Alaska Department of Environmental Conservation Construction General Permit for Storm Water Discharges and Storm Water Pollution Prevention Plan.
- Alaska Department of Fish and Game Title 16 Fish Habitat Permit, for activities or structures below ordinary high water in designated anadromous fish streams, and fish passage requirements in all streams that support anadromous or resident fish (Alternative 2 and 3 only).
- Alaska Department of Fish and Game 5 AAC 95 Special Area Permit, for structures or habitat altering activities, or activities which may disturb fish or wildlife in the Izembek State Game Refuge, other than lawful hunting, trapping, fishing, viewing, and photography.
- Alaska Department of Environmental Conservation Spill Prevention, Containment, and Contingency Plan for handling and storage of petroleum products.
• Alaska Department of Natural Resources, Office of Land and Water Resources permit for Temporary Water Use during construction.

• Alaska Department of Natural Resources authorization for right of way or tideland leases for intertidal and subtidal areas affected by the project footprint.

• Alaska Department of Natural Resources, State Historic Preservation Office Section 106 concurrence for the National Historic Preservation Act.

Major Local Permits and Authorizations

• King Cove Corporation permits and approvals, as required, for right of way, activities, structures, material sites, or landing and staging areas on King Cove Corporation land.

1.7 Related Studies

This section highlights the importance of the 2003 King Cove Access Project EIS. Sections 1.6.2 and 1.6.3 also outline important federal and state plans and studies applicable to the proposed project. Additional land use planning documents are also discussed in Section 3.3.3.


A long term, year round transportation system was proposed between the City of King Cove and the Cold Bay Airport. The Preferred Alternative was a road from King Cove to a hovercraft landing site on the northeastern shore of Cold Bay, 2 hovercraft terminals, and a hovercraft. The Northeast Hovercraft Terminal site minimized the distance of open water travel across Cold Bay for the hovercraft. This project was approved and the hovercraft has been operating on a limited basis since 2007 from a temporary landing site constructed at Lenard Harbor (which was Alternative 3 in the 2003 EIS). The road from Lenard Harbor to the Northeast Hovercraft Terminal received an allocation of $26 million for construction and is expected to be completed by the end of 2012.

In Alternative 6 of the 2003 EIS, a road corridor was described that extended past the proposed hovercraft terminal site, crossed the refuge, and terminated at the Cold Bay Airport. This alternative was in conflict with the provisions of the Wilderness Act and the King Cove Health and Safety Act and was not considered for implementation. The alternative was provided in the EIS for comparison purposes only at the request of the Agdaagux Tribe, King Cove Corporation, City of King Cove, and the Aleutians East Borough.

1.8 Indian Trust Responsibility and Government to Government Relationships

A unique relationship exists between the U.S. government and Tribal governments. Executive Orders 13084 (1998) and 13175 (2000), regarding consultation and coordination with tribal governments, strengthened the government to government relationship for federally recognized Tribes. Presidential memoranda on government to government relationships have affirmed this intent to support and respect Tribal sovereignty and self-determination for Tribal governments (1994, 2004, and 2009). In addition, Department of the Interior coordination is governed by Part
512 of the Departmental Manual Chapter 2 (512 DM 2) (USDOI 1995) and the recently adopted Department of the Interior Policy on Consultation with Indian Tribes (USDOI 2011a). The Office of Management and Budget also issued a memorandum (OMB 2010) for the heads of executive departments and agencies, and independent regulatory agencies regarding implementation of Executive Order 13175.

The Agdaagux Tribe of King Cove was designated as a cooperator for the development of this EIS in the Act. The Service formally invited the Agdaagux Tribe of King Cove to be a cooperator and they subsequently signed a Memorandum of Agreement in June 2010. In addition, the Service invited the Native Village of Belkofski to participate in the EIS process as a cooperator. The Native Village of Belkofski accepted the invitation and signed the Memorandum of Understanding on February 3, 2011. Government to government coordination is ongoing throughout the project, with the Service as the lead federal agency.

1.9 Summary of Scoping

Scoping is a formal process intended to reach out to all interested parties early in the development of an EIS to identify areas of concern associated with the proposed activity, as required by NEPA. Scoping is the process of actively acquiring input from the public and other interested federal, state, Tribal, and local agencies. Information gained during scoping assists the lead and cooperating agencies in identifying potential environmental issues, alternatives, and mitigation measures associated with the proposed project. The process provides a mechanism for refining the scope of issues so the EIS can focus analyses on areas of high interest and concern.

Public participation during the scoping process is vital to a sound EIS. By providing opportunities for people potentially affected by the project to express their views and concerns, scoping ensures that all substantive issues are fully addressed during the EIS process.

The Service published a Notice of Intent in the Federal Register on August 6, 2009, to announce the preparation of this EIS. A project newsletter was sent by the Service in January 2010 to the project mailing list that explained the NEPA and EIS process and how to participate in the project. A Revised Notice was published on February 24, 2010, to announce the public scoping meetings, inviting suggestions on the scope of issues to be addressed in the EIS along with dates, times, and locations of upcoming public meetings.

Seven public scoping meetings were conducted in March and April 2010 in the following locations:

- Anchorage – March 4, 2010
- Washington, DC – March 11, 2010
- Sand Point – April 26, 2010
- Cold Bay – April 27, 2010
- Nelson Lagoon – April 28, 2010
- False Pass – April 28, 2010
- King Cove – April 29, 2010

The scoping meeting format and the information presented was the same at each public meeting. During the open house session, attendees had the opportunity to view maps that displayed project information and were able to ask questions of the project team. During the presentation portion
of the meeting, the Service provided an introduction to the Act; an overview of the NEPA process; the cooperating agencies and the EIS schedule; a description of the proposed lands to be exchanged; and background on resources and values of the Izembek National Wildlife Refuge and Izembek Wilderness.

Public testimony was taken followed by an opportunity for informal discussion. A court reporter recorded public testimony at the meetings in Anchorage, Alaska, and Washington, DC. The Service took notes of public testimony during the meetings in Cold Bay, False Pass, King Cove, Nelson Lagoon, and Sand Point, Alaska. Comment forms were available at all public meetings so that attendees could submit written comments during the meeting or mail them in at a later date. Written public comments were also accepted at all public meetings.

Scoping comments were received verbally and in writing through discussion, testimony, fax, and electronic media. The scoping period ended April 30, 2010. However, all comments received through May 21, 2010 were summarized in the Scoping Report. The EIS planning team used these comments to refine the proposed alternatives for the Draft EIS.

During the scoping period, the Service received 31,569 submissions. There were 116 unique submissions and 31,453 form letters. These submissions generated 652 substantive comments, which were then grouped into 149 Statements of Concern, which were developed to summarize scoping comments. The Statements of Concern are summary statements capturing a single substantive point that may have been expressed in a number of individual comments. A summary of the Statements of Concern are presented in Table 1.9-1; a full summary of the scoping process is found in the Scoping Report posted on the project website (http://izembek.fws.gov/eis.htm) and included as Appendix C of this EIS.

<table>
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<tr>
<th>Issues by Group</th>
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| Process: NEPA, Permits, this EIS, Consultation and Coordination | Regulatory: A variety of issues including the formation of the Izembek National Wildlife Refuge; Alaska Native Claims Settlement Act; Direction from Omnibus Public Land Management Act of 2009; wilderness designation; wilderness requirements; compliance with NEPA, Endangered Species Act, and other legislation. 
Public Involvement: Stakeholder engagement and identification included the desire for local residents to participate in the process by having the opportunity to review and provide comments during the EIS process. |
<p>| Purpose and Need                | Concern was expressed that there is not a need for the proposed land exchange and road as the issue of transportation for medical emergencies has been solved by use of the hovercraft. Others were concerned that the hovercraft has not solved the issue of safe and reliable transportation and that a road is the only solution. There is need for a clear and concise purpose and need statement as required by NEPA and NEPA compliance. |
| Proposed Action, Alternatives, and Mitigation Measures | Some expressed support of the proposed land exchange and road, while others supported a no action alternative. Alternatives identified included continued use of the hovercraft operation; subsidizing the hovercraft, construction of a small boat harbor in Cold Bay to facilitate hovercraft use; improvements to the dock at Cold Bay to support hovercraft operations; selecting the least environmentally damaging practicable alternative; use of a helicopter for medical evacuations; and construction of a hospital at King Cove. Other concerns were associated with road construction, operations, traffic volumes, and long-term costs of various proposed alternatives. A variety of mitigation measures were suggested such as design considerations and enforceable measures to avoid or minimize impacts of road construction. |</p>
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| **Affected Environment and Environmental Consequences:** | **General:** Concerns about impacts to the biological environment from the construction and long-term impacts of a road and potential impacts to fish, wildlife, waterfowl; fragmentation and loss of habitat; impacts from construction of stream crossings and effects on habitat including eel grass; impacts from vehicle and wildlife collisions; effects of increased access on wildlife; long-term impact evaluation and issues that should be evaluated in a cumulative impacts analysis. Evaluation of the fill required for road construction and associated direct and indirect impacts to ecological values was recommended for analysis.  
**Fish:** Salmon habitat and essential fish habitat including impacts to spawning and passage as a result of proposed road construction.  
**Threatened and Endangered Species:** The need to address the potential impact to threatened and endangered terrestrial and marine species and their habitat according to the *Endangered Species Act* and the *Marine Mammal Protection Act*. The EIS should consider particular impacts to Steller's Eiders.  
**Vegetation:** How road dust could impact adjacent vegetation and habitats (such as eel grass beds) and the existing gravel road network from Cold Bay to the shores of Izembek Lagoon.  
**Wetlands and Aquatic Communities:** How the EIS should evaluate effects on wetlands and aquatic communities from the proposed road and the existing gravel road access from Cold Bay. Concern was expressed that this evaluation needs to be in sufficient detail that the Corps will be able to make its required findings under a Section 404 application and compliance with other statutes and guidance.  
**Wildlife:** Several expressed concerns for the various impacts to wildlife that could occur as a result of the proposed land exchange and road construction. Species that were addressed include: brown bear, caribou, waterfowl, migratory birds (including black brant, emperor geese, and dunlin) and marine species. Concern was also expressed regarding the impacts to wildlife from the introduction of invasive species.  
**Physical Resources:** The need to conduct analysis of the current and projected impacts to the region from climate change and how these impacts could be compounded by the development of a road; cumulative impacts of the land exchange and proposed road in the context of proposed oil and gas development in and around lands and waters of the Izembek National Wildlife Refuge and Izembek Lagoon; regional extent and international extent of impacts to the physical resources of the region; and impacts of road construction, sediment run-off, watershed impacts and pollution.  
**Climate & Air Quality:** Provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards, and criteria pollutant non-attainment areas in the road corridor and surrounding areas; and disclosure of greenhouse gases emitted by the project be included in the EIS.  
**Environmental Contaminants & Ecological Risk Assessment:** Concern for how pollutants from the proposed road could impact the surrounding ecosystem. The EIS should address potential direct, indirect and cumulative impacts of hazardous materials from construction of the project, analyze risks involving possible accidental releases of hazardous materials, and describe mitigation and emergency response measures.  
**Hydrology:** The EIS should describe all water bodies and stream crossing and potential impacts (including specific pollutants) to surface, subsurface, and ground water in the project area.  
**Socioeconomic Resources:** A cost benefit analysis should be conducted; discuss issues with road maintenance; benefits to the local communities from a road; potential impacts of the land transfer; and concerns expressed regarding road siting, location, safety, and maintenance.  
**Archeological/Cultural Resources:** Impacts to historic properties and cultural resources should be considered in an orderly and systematic manner, in full consultation with all concerned parties.  
**Environmental Justice:** The EIS should disclose what efforts were taken to ensure effective public participation and to meet environmental justice requirements consistent with Executive Order 12898.  
**Health and Safety:** The challenges were described facing the community for traveling in and out of King Cove during inclement weather. One concern is in support of the road for health and safety reasons, while another concern was expressed that the road would not create a safer or more efficient transport and impacts associated with the road could lead to littering, abandoned vehicles, violation of traffic laws; including speeding and drunk driving. |
### Summary of Statements of Concern

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<tr>
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<tbody>
<tr>
<td><strong>Health Impact Assessment:</strong></td>
<td>Concern expressed about the impact of a road on access to drugs and patterns of drug and alcohol use.</td>
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<tr>
<td><strong>Land Use, Public Use, Recreation, Visual Resources:</strong></td>
<td>Concern about impacts on recreational activities; increase in legal and non-legal access; compatibility of alternatives with land management objectives; impacts to scenic, wildlife, visual, opportunities for solitude and primitive recreation; and existing trail usage.</td>
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<tr>
<td><strong>Public Revenue and Fiscal Considerations:</strong></td>
<td>Concern expressed that the current EIS process is a waste of taxpayer money and that millions of dollars have already been provided to alleviate the problem of safe transportation. Concern was expressed as to who would provide funds for year-round maintenance and operation costs of the road. Another concern describes how the proposed road would be good for the economy and quality of life through jobs (e.g., snow removal) and commerce (e.g., access to gravel, shipping fresh product between communities). Concern was expressed that the EIS needs to address financial connections between the oil industry seeking leases in Bristol Bay and proponents of the road across the peninsula.</td>
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<tr>
<td><strong>Road Design, Bridges, Transportation, Planning and Transportation Systems (air, water, and road):</strong></td>
<td>Expressed concern regarding the width of the road corridor and how the existing road that runs north of Cold Bay through Izembek National Wildlife Refuge would be affected by the exchange and how it would be connected.</td>
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<tr>
<td><strong>Subsistence:</strong></td>
<td>The EIS should evaluate effects of the land exchange and construction of the proposed road on subsistence in relation to impacts from subsistence use, access, and management. The benefits of the road to the communities of Cold Bay and King Cove need to be evaluated against the impacts to natural resources and the subsistence culture of Alaska and the rest of the west coast of Alaska. The EIS should gather and analyze traditional knowledge on subsistence use patterns and disclose historical information compiled on subsistence off-road vehicle use within the Izembek National Wildlife Refuge.</td>
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<tr>
<td><strong>Wilderness:</strong></td>
<td>Concerns about impacts that the proposed land exchange and proposed road could have on the wildlife and wilderness values of the Izembek National Wildlife Refuge and impacts to tourism from loss of wilderness. Concern was expressed that declassification of wilderness will have an effect on wilderness across the nation. A comparative evaluation of wilderness and lands proposed for exchange was recommended.</td>
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<tr>
<td><strong>General</strong></td>
<td><strong>Data and Available Information:</strong> Concern that highlights studies, reports, and sources of information recommended for review by the Service.</td>
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Issues and concerns with this project are grouped into distinct impact topics to aid in analyzing environmental consequences. This allows for a comparison of alternatives based on the most relevant information. The impact topics were identified on the basis of public comment, federal laws, regulations, policies, and knowledge of potentially affected resources. Key issues were identified that focused on certain aspects of the physical, biological, and social environments. Wetlands and aquatic communities, wildlife, and threatened and endangered species were of particular concern in the biological environment. Wilderness, access, and health and safety were of particular concern in the social environment.

To focus the EIS, the Service and cooperating agencies selected specific impact topics for further analysis and eliminated others from evaluation. The issues selected for analysis or dismissed were based on review of scoping comments and review of the proposed land exchange and road alternatives. These issues are evaluated in detail in Chapter 4, Environmental Consequences.
1.9.1 Issues Selected for Analysis

1.9.1.1 Physical Environment

Air Quality
The proposed land exchange and new roadway have the potential for adding human-caused air quality impacts (vehicles and temporary construction-related emission sources, such as combustion equipment and fugitive dust) to a corridor within the Izembek National Wildlife Refuge. Emissions from implementation of the proposed action could contribute to greenhouse gases.

Geology and Soils
Construction activities could alter topography and landforms. Surface soils could be disturbed. Sand and gravel requirements for construction could cause a measurable change in the available supply of sand and gravel. Erosion and sedimentation could affect surface water bodies. Surface and subsurface soil conditions and hazards could impact project construction unless properly mitigated. Slope stability hazards in upland areas need to be identified prior to construction. The potential impacts of material extraction would need to be investigated to ensure that selected extraction areas do not trigger erosion that impacts water quality in the coastal environment.

Hazardous Materials
Hazardous material sites have been identified on Sitkinak Island lands that are included in the proposed land exchange for transfer from the Service to the State. (Refer to Appendix B for additional information regarding a potential phasing of conveyance of a portion of the Sitkinak Island parcel, pending contaminated site remediation.) Accidental releases of pollutants could occur during road construction. In addition, pollutants from road operations could impact the surrounding ecosystem.

Hydrology and Hydrologic Processes
The presence of surface water and shallow groundwater in the vicinity of the proposed road corridors could impact hydrologic resources during construction and operation/maintenance activities. Construction of the proposed action would require gravel pads, access, water withdrawals, and permitted discharges. Materials such as gravel, sand, and rock would likely be required for project construction. Potential impacts to surface water and hydrologic processes, particularly stream and river crossings, need to be determined.

Noise
Project-related noise emissions on the area surrounding the proposed action or alternatives could be evident to noise-sensitive land uses adjacent to the project area, including recreation areas, wilderness and/or wildlife habitats. Natural sounds and noise receptors in the vicinity of the project area could be temporarily impacted by construction and operation/maintenance activities.
1.9.1.2 Biological Environment

Wetlands and Aquatic Communities

Executive Order 11990, Protection of Wetlands, requires all federal agencies to minimize the destruction, loss, or degradation of wetlands; and preserve and enhance the natural beneficial values of wetlands in conducting the agency’s responsibilities. The proposed project would occur in and affect wetlands and streams; construction of the proposed road would require fill of wetlands and the placement of fill, culverts, and associated structures in streams. The proposed action could cause fragmentation of wetlands, introduction of increased levels of disturbance from human activities, introduction of exotic or invasive species, and impacts to wetlands designated as Wetlands of International Importance under the Ramsar Convention, including eelgrass beds.

Floodplains

Executive Order 11988, Floodplain Management, requires all federal agencies to take action to reduce the risk of flood loss, to restore and preserve the natural beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. The proposed alternatives could introduce facilities into floodplains.

Vegetation

Vegetation clearing could be required along the proposed road corridor for construction. Road dust could impact adjacent vegetation and habitats (such as tundra vegetation and eelgrass beds). Impacts to vegetation could include introduction of exotic or invasive species.

Fish and Essential Fish Habitat

Stream crossings for the proposed action activities adjacent to streams have the potential to impact fish and fish habitat, including essential fish habitat, by diverting water and blocking fish passage, altering fish behavior through noise and visual disturbance, and destroying or displacing eggs, fry, and prey in the streambeds during construction. Salmon spawning and passage could be impacted by installation of bridges and culverts. In addition, road construction could potentially increase sediment loads in streams, alter stream banks, cause erosion in adjacent areas, and introduce pollution to fish habitat from accidental spills.

Wildlife

The proposed action would traverse a range of habitat types important to birds and terrestrial and marine mammal species. Construction impacts of the proposed action may include loss of habitat, long-term alteration of habitat, obstruction of migratory patterns, and disturbance from construction and operation/maintenance activities. Other potential impacts could include disturbance from increased human uses, such as recreational use and changes in hunting and trapping pressure due to changes in access. There is concern about the long term viability of wildlife populations in the area, especially for black brant, emperor geese, tundra swans, dunlin, and caribou.
Threatened and Endangered Species

The *Endangered Species Act* requires an analysis of impacts on all federally listed threatened and endangered species, and species of special concern listed by the State of Alaska. The *Endangered Species Act* listed species that occur in the proposed project area include Steller’s Eiders, Steller sea lions, and northern sea otters. Construction plans for the proposed project would be analyzed to determine whether these activities could disturb these species or their prey species.

1.9.1.3 Social Environment

Cultural Resources

Consideration of effects to historic properties is required under the *National Historic Preservation Act of 1966* and NEPA. Historic Properties are defined as “any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in, the National Register of Historic Places.” Historic properties must meet National Register criteria. Cultural resources could be impacted during the construction phase of the proposed action.

Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The proposed project must be assessed for potential environmental justice impacts.

Human Health and Public Safety

Human health and public safety concerns include the existing condition with barriers to health care access, and potential changes to health and safety issues due to implementation of the proposed action.

Land Ownership and Use

The proposed land exchange involves state and federal lands and private land owned by the King Cove Corporation. The proposed action would change ownerships and uses of lands within the project area, and may affect other land uses in the vicinity.

Public Use

Wildlife viewing, fishing, and sport hunting for waterfowl accounts for the majority of public use occurring on the lands proposed for exchange. Impacts to these activities from the proposed action could be affected by changes in access during project construction and operations.

Socioeconomics

The proposed action could alter aspects of the socioeconomic environment on a local scale. Population, demographics, employment and income, housing, and public infrastructure are among the factors that could be affected.
**Subsistence**

Subsistence resources could be affected due to habitat loss, or disturbance and disruption of movement patterns of certain fish and terrestrial mammals. Impacts to subsistence uses could include disruption of subsistence hunting and fishing during construction, the presence of the proposed road affecting terrestrial mammal movement, increasing competition for subsistence resources through improved access on the road, and increased access for subsistence harvesters to subsistence resources. An ANILCA Section 810(a) Evaluation and Finding will be required to determine if the proposed action would result in a significant restriction of subsistence uses.

**Transportation**

Construction of the proposed action would involve transportation of gravel, materials, equipment, and personnel involved in the construction. Potential impacts from operations of the proposed action also include potential for improved access to regional transportation and health care services, human and natural factors for transportation hazards, vehicle accidents, littering, and other traffic or roadway violations.

**Visual Resources**

The proposed road and gravel extraction sites could affect visual resources and scenery in the project area or vicinity. Potential impacts to scenic resources could occur from vegetation clearing during road construction, construction of water body crossing structures, gravel mining, and increased activity in areas that are considered visually sensitive. Decreases in the quality of visual landscape could occur during and after the proposed road construction.

**Wilderness**

Some of the proposed lands for exchange are currently within a congressionally designated wilderness area. A road corridor through Izembek National Wildlife Refuge could contribute to an increase in off-road vehicle traffic and loss of opportunities for solitude within the Izembek Wilderness. Impacts to changes in wilderness values, characteristics, and designation will be evaluated.

**1.9.2 Issues Dismissed**

NEPA regulations emphasize the importance of adjusting the scope of each EIS to the details of the project and its setting, and focusing on the specific potential impacts of the proposed action. The following issues were considered but dismissed from detailed analysis and are therefore not addressed further in this EIS.

**Water Supply and Conservation, Municipal, and Private Water Supplies**

Discussion of these factors was determined to be unnecessary for analysis because the project does not involve withdrawals from municipal or private water supplies.

**Effects on Limits of the Territorial Sea**

Discussion of this factor was determined to be unnecessary for analysis because the proposed action is not located near territorial seas.
**Food and Fiber Production**
Discussion of this factor was determined to be unnecessary for analysis because the project does not affect agricultural lands.

**Prime and Unique Farmland**
Council on Environmental Quality regulations (1508.27 [b] [3]) require the analysis of impacts to unique characteristics of a geographic area, such as prime farmland. Prime farmland is land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management. According to current land use activities and physical and chemical soil characteristics criteria, prime farmland does not exist in the vicinity of the project area.