

### 3.5 RECREATION

For the purposes of this section, the region around the project site is defined as the area from Lake Clark National Park and Preserve south to Katmai National Park and Preserve and from the Nushagak River east to the western Kenai Peninsula. Refer to Figure 3.2-1 for generalized land status. The region around the project area is, for the most part, remote and undeveloped. These lands and waters support a wide variety of dispersed recreation activities including sport and trophy hunting, hiking, camping, and snowmachining. Due to the economic importance of fishing in this region, recreational and commercial fishing are discussed in a separate section. See Section 3.6, Commercial and Recreational Fishing, for more information. See Section 3.9, Subsistence, for information on subsistence hunting and fishing and refer to Figure 3.2-1 for area locations.

#### 3.5.1 Recreation Management

##### 3.5.1.1 Federal Lands

##### National Park Service

The following section provides information on the management of the three National Park Service (NPS) units in the regional recreation area of the project. Commercial use of all three units is subject to commercial use authorizations (CUAs), which authorize appropriate commercial services to park visitors (NPS 2018a). CUAs may not exceed 2 years per term and provide for incidental use of the park by commercial service operators where services originate and terminate outside of the park boundary (NPS 2018a). Concession contracts are commonly issued for 10 years and are issued on a competitive basis. Commercial services are authorized under the National Parks Omnibus Management Act of 1998, Public Law 105-391 (NPS 2018a).

**Comment [A1]:** The NPS recommends that this section address recreational values not just activities. These include places for solitude, silence, unconfined recreation, undeveloped land, and dark skies..

**Comment [A2]:** NPS units should include the purpose statement from their respective Foundation Statement summarized from their founding legislation (much like the BLM reference).

##### Lake Clark National Park and Preserve

Lake Clark National Park and Preserve is about 15 miles northeast of the mine site. ~~The park and preserve lies underneath the primary aviation route between Anchorage and the mine site that would be used to transport employees, and includes the private community of Port Alsworth and with its boundaries which could become a site of origin for helicopters and fixed wing aircraft working for the mine or providing employee transport to and from Anchorage. The park and preserve and~~ is not accessible by road.

~~The park's 2009 Foundation Statement identifies. The purpose of Lake Clark National Park and Preserve is to protect a region of dynamic geologic and ecological processes that create scenic mountain landscapes, unaltered watersheds supporting Bristol Bay red salmon, and habitats for wilderness dependent populations of fish and wildlife, vital to 10,000 years of human history (NPS 2009). The park covers the eastern two-thirds of the park unit and the preserve is a north-to-south strip of land adjacent to the western side of the national park. Most of the park is designated Wilderness and it is the sixth largest park unit in the nation. The preserve is primarily land determined suitable for wilderness designation and is included in lands proposed to Congress for wilderness designation; as such, it is managed to maintain its wilderness eligibility. Within the general park/preserve boundary, there are private inholdings (privately owned or selected by Alaska Native Claims Settlement Act [ANCSA] village or regional corporations) around the southwest third of Lake Clark, including the community of Port~~

**Comment [A3]:** Please see Lake Clark National Park and Preserve Foundation Statement, provided with comments.

Alsworth [on Lake Clark, land](#) around Lower Tazimina Lake and near the Cook Inlet coast (Kevin Waring and Associates 2011b).

Lake Clark National Park and Preserve is managed according to the 1984 General Management Plan for the park and a 2014 amendment to this plan. The 1984 General Management Plan contains a management concept for visitor access, recreation, and use within the park unit, including development, access, commercial use, visitor use, visitor information, and interpretive materials (NPS 1984). The 2014 amendment expanded visitor activities and interpretive services. The amendment included designating some existing cabins for public use, designating an informal water route on Lake Clark, providing a few improved visitor facilities, and providing limited new commercial services (NPS 2014).

The most current Superintendent's Compendium includes the designations, closures, permit requirements, and other restrictions that have been adopted under the superintendent's discretionary authority (NPS 2017a).

[The park's 2010 Long Range Interpretive Plan describes desired visitor recreational experiences to include opportunities to hike, explore and camp in a trail-less wilderness with no signs of human impact, experience solitude in a pristine unchanged natural landscape of extraordinary scenic quality and character, fish for all species that inhabit the park, discover the subsistence lifestyle, circumnavigate Lake Clark via kayak, see the watershed of Bristol Bay protected in perpetuity including clean water and clean shorelines, see salmon spawning, hunt for moose, spruce hens and other species, pick berries, collect drinking water, hear natural sounds, experience the remote natural landscape encompassing the cultural heritage and history of the region, and other descriptions of undeveloped recreational opportunities \(NPS 2010\).](#)

[The Park and Preserve includes three National Wild Rivers including the Chilikadrotna River and the Mulchatna Rivers on the far West side of the Park and Preserve and the Tlikakila River through Lake Clark Pass in the Park.](#)

[The Kijik National Historic Landmark/Archeological District is located on the North shore of Lake Clark and is an ancestral village site for the people of Nondalton Village including hundreds of archeological sites from Alaska longest year-round occupied village site. Planning work is ongoing to identified desired public experiences at this site.](#)

[The Richard L. Proenneke Historic Site is located on Upper Twin Lake within designated wilderness. It offers visitors the opportunity to experience wilderness and the history of Alaska's log cabin building era and view of wilderness through a resident's experience.](#)

There are approximately 90 visitor service providers (CUA holders and concessioners) in this NPS unit for the following activities: air taxi, water taxi, backpacking/overnight camping, boating trips, bear viewing, group camping, hiking/walking tours, big game transport, incidental hunt transport, kayak tours, mountaineering, paddleboarding, photography, sport fishing, sport hunting, skiing, and snowshoeing (NPS 2018a).

### ***Katmai National Park and Preserve***

The Katmai National Park and Preserve boundary is located approximately 7 miles south of the transportation corridor at its nearest point. This NPS unit is primarily national park, with the

preserve located adjacent to the western part of the northern boundary of the park. Most of the park is designated Wilderness and it is the fifth largest park unit in the nation. There are also over 20,000 acres of privately owned lands in the unit (Kevin Waring and Associates 2011b).

The purpose of Katmai National Park and Preserve is to protect, study, and interpret active volcanism surrounding the Valley of Ten Thousand Smokes, extensive coastal resources, habitats supporting a high concentration of salmon and brown bears, and an ongoing story of humans integrated with a dynamic subarctic ecosystem. (NPS, 2009). Katmai National Park and Preserve is managed under a variety of management plans. The 1986 General Management Plan discusses management of park access and circulation, visitor use and services, and potential development in the park unit (NPS 1986). The 2009 Long Range Interpretive Plan describes desired visitor experiences, existing interpretive resources, and includes recommendations to achieve the desired future interpretive program as well as implementation priorities (NPS 2009a). The 2014-2018 Strategic Plan includes 5 year goals and strategies for management of three NPS units (NPS 2013). Similar to Lake Clark National Park and Preserve, the most current Superintendent's Compendium lists the designations, restrictions, closures, and permit requirements adopted under the superintendent's discretionary authority. The 2017 Compendium for Katmai National Park and Preserve also covers the Aniakchak National Monument and Preserve and Alagnak Wild River (NPS 2017b).

**Comment [A4]:** Please see Katmai National Park and Preserve Foundation Statement provided with comments

There are approximately 125 visitor service providers (CUA holders and concessioners) in this NPS unit for the following activities: air taxi, backpacking/overnight camping, boating trips, bear viewing, charter boat service, group camping, hiking/walking tours, big game transport, incidental hunt transport, kayak tours, lodging and food service, photography, sport fishing, and sport hunting (NPS 2018a).

### ***Alagnak Wild River***

The Alagnak River is designated a Wild River in the Wild and Scenic Rivers System and consists of 67 miles of river corridor that is mostly (93 percent) federally owned, with some privately owned Native allotments and other private inholdings within the river corridor. The Wild River begins downstream of Kukaklek Lake and flows westward, though the last 12 miles of the Alagnak River are outside the designated corridor. The river was designated a Wild River in 1980, and there is no road access to it (Kevin Waring and Associates 2011b). It would be approximately 50 miles south of the transportation corridor at its nearest point.

There are several management plans that discuss recreation in the Alagnak Wild River. The 1983 Management Plan contains management objectives for visitor use and interpretation including access, accommodating hunting, and encouraging activities compatible with the natural environment (NPS 1983). The 2009 Long Range Interpretive Plan and 2014-2018 Strategic Plan described above under Katmai National Park and Preserve also apply to the Alagnak Wild River (NPS 2009a, NPS 2013).

There are approximately 20 visitor service providers (CUA holders and concessioners) in this NPS unit for the following activities: air taxi, backpacking/overnight camping, boating trips, bear viewing, group camping, hiking/walking tours, photography, and sport fishing (NPS 2018a).

### **US Fish and Wildlife Service**

#### ***Alaska Maritime National Wildlife Refuge***

The Alaska Maritime National Wildlife Refuge (NWR) includes 3.4 million acres (USFWS 2013a) from Forrester Island in southeastern Alaska, to the tip of the Aleutian chain, and almost to

Utqiagvik on the Arctic Ocean (USFWS 2011a). In the project area, several islands in Cook Inlet are in this NWR; the nearest point would be approximately 15 miles from Amakdedori Port.

The Alaska Maritime NWR is managed by a comprehensive plan (USFWS 1988). The five purposes of the refuge (i.e., conservation, treaty obligations, subsistence use, scientific research, and water quality/quantity) protect the wildlife resources that attract recreational visitors. As stated in the Land Protection Plan for the NWR, "the Alaska Maritime Refuge is managed to conserve native fish and wildlife populations and their habitats, while providing opportunities for subsistence, compatible types of recreation, and research" (USFWS 2011a). Some uses of the NWR, including commercial guides and outfitters, transporters such as water and air taxis and charters, cabins, and long-term tent camps require a special use permit from the US Fish and Wildlife Service (USFWS). General public use of the NWR for hunting, wildlife viewing, photography, interpretation/environmental education, hiking, and camping do not require a special use permit (USFWS 2014a).

### **Bureau of Land Management**

Bureau of Land Management (BLM) lands in the region are under the management of the Anchorage Field Office and are part of the Iliamna East planning block under the Bay Resource Management Plan (RMP) (BLM 2008a, BLM 2008b). Only one BLM tract in the Iliamna East area is unencumbered; the remainder of the BLM parcels are selected by the state, ANCSA corporations, or both (BLM 2008b). The BLM manages these parcels until they are conveyed and is required to seek and consider comments from the relevant Native corporation for any authorization to use Native-selected lands (Kevin Waring and Associates 2011b). RMP recommendations for management of ANCSA-selected lands would be implemented by BLM only if the land selections were relinquished to the federal government. The small unencumbered tract is located west of Lake Clark, 25 miles northeast of the mine site (Kevin Waring and Associates 2011b).

Pertinent recreation management direction in the RMP includes:

- management of all unencumbered and selected lands (until they are conveyed) as semi-primitive motorized;
- opportunities for commercial recreation would be provided consistent with area objectives for recreation management;
- lands would be managed for dispersed recreational use and no facilities would be developed; and
- camping associated with commercial activities would be prohibited without BLM's written authorization, though short-term camping not associated with commercial activities would be allowed for less than 14 days in one location (BLM 2008a).

#### **3.5.1.2 State Lands**

A variety of general uses are allowed on state lands without a permit from the Division of Mining, Land and Water. Such uses include hiking, backpacking, skiing, horseback riding, using a vehicle (below a certain weight depending on the type of vehicle), landing an aircraft, using watercraft, hunting, fishing, trapping, harvesting plants, recreational gold panning, hard-rock mineral prospecting or mining, and non-commercial camping (ADNR 2011).

### **Alaska Department of Fish and Game**

#### ***McNeil River State Game Refuge and Sanctuary***

**Comment [A5]:** This section should reference the primary recreational activities at McNeil River including bearviewing, camping, and photography.

The McNeil River State Game Sanctuary and Refuge is located immediately north and east of Katmai National Park and Preserve, south of Iliamna Lake, and inland of Kamishak Bay. The refuge portion is located north of McNeil Falls and camp, adjacent to Katmai National Preserve, while the sanctuary portion includes visitor facilities for brown bear viewing at McNeil Falls and camp, adjacent to Katmai National Park and Preserve. The boundary of the refuge portion would be within 1 mile of the transportation corridor.

The 2008 Management Plan for the McNeil River State Game Refuge and Sanctuary includes statutory goals for the sanctuary and refuge, as well as policies regarding recreational topics such as access, information and education, recreation activities, camping, structures, boat storage, and trails (ADFG 2008a). Under Alaska Statute (AS) 16.20.162, access permits are required for entry into the McNeil River State Game Sanctuary. Permits are required for bear viewing, special access to the sanctuary (e.g., for scientific, educational and media purposes), transporters, and activities in the sanctuary other than viewing bears (non-viewing permits) (ADFG 2018e).

### **Alaska Department of Natural Resources**

#### ***Bristol Bay Area Plan***

The Bristol Bay Area Plan covers state lands just inland of Cook Inlet west to Bristol Bay. The plan includes chapters on the goals and management guidelines for public recreation and tourism as well as public access. The project area is in regions 6, 8, 9 and 10 of the plan area. In Region 6, the project area (specifically the mine site and a portion of the transportation corridor) would be in units 23 and 24. Both of these units are designated Minerals, a designation that is given to areas associated with significant resources that may experience mineral exploration or development. Permanent facilities related to commercial recreation are prohibited in Unit 23 (ADNR 2013a).

In Region 9, the transportation corridor would be in units 7 and 7A. Unit 7 is designated General Use and is to be managed for a variety of uses, including dispersed recreation. General Use areas are not intended for intensive forms of development other than occasional use at specific sites, usually associated with mining, oil and gas exploration, or recreation. Unit 7A is designated as Habitat for protection of moose wintering habitat. The plan notes that development is not appropriate in this unit, other than utility, communication, road/bridge, or other public service-related development (ADNR 2013a).

In Region 10, the transportation corridor would be in units 1 and 2. Unit 1 is designated General Use and is to be managed for a variety of uses including public recreation and tourism. Unit 2 is designated Minerals and Habitat. The plan specifically notes that the “general resource management intent for the Pebble Copper area is to consider mineral exploration and development, while ensuring the protection of important habitat areas.” Specifically, Upper Talarik Creek, in both units 1 and 2, is to be protected for its recreation, habitat, and water resource values. Permanent, commercial recreation-related facilities are prohibited in Unit 2. The plan also notes that impacts to dispersed recreation along Talarik Creek should be avoided in Unit 2 (ADNR 2013a).

The Nushagak River and the Mulchatna River headwaters and lands that provide the waters for these rivers (e.g., Koktuli River) include the mine site lands, and are managed by the Alaska Department of Natural Resources under the Nushagak and Mulchatna Rivers Recreation Management Plan (ADNR 2005). More information is provided in Section 3.2, Land Ownership, Management, and Use.

### **Lower Talarik Creek Special Use Area**

The Lower Talarik Creek Special Use Area was established in 1999 and in this area the state has limited commercial recreation activities to day use only with registration. From August through October, camping for personal non-commercial use in this area is allowed for no more than 5 days, only in a designated area adjacent to the Alaska Department of Fish and Game (ADF&G) cabin (ADNR 2013a).

### **Kenai Area Plan**

The Kenai Area Plan covers state lands on the Kenai Peninsula and the west side of Cook Inlet. The plan documents the land management intent for the applicable lands and includes chapters on the goals and management guidelines for public recreation and tourism as well as trails and access. The project area is in regions 7 and Region 12 of the plan area. In Region 12, the project area is in Unit 592, which is designated Habitat and will remain in state ownership. There is no discussion of recreational use of this area. The project would also pass near Augustine Island. The island itself is under an Interagency Land Management Assignment to the University of Alaska for research and is managed for scientific and education purposes. The plan states that any authorized recreational uses of the island should minimize impacts on research opportunities and natural processes on the island. Immediately south of the island, state lands are in Unit 522A. The plan designates this unit as Public Recreation and Tourism and notes that these areas attract recreationists that range throughout the area and may have a high potential for dispersed recreation because of desirable recreation conditions (ADNR 2001).

On the Kenai Peninsula, there are two state park-managed recreation areas. One is a 60-acre state recreation site (Stariski) located five miles north of Anchor Point, and the other is the larger Anchor River State Recreation Area, at the mouth of the Anchor River. Both sites are accessible via the Sterling Highway.

#### **3.5.1.3 Private Land**

Land owned by Native corporations and Native allotments are considered to be private property and therefore are not open for public recreational use. Permission and/or permits for access and seasonal recreational use of these lands must be obtained from the landowner.

### **3.5.2 Regional Recreation**

The region around the project site is primarily accessed via small aircraft-generally inaccessible by road, except for the Kenai Peninsula area near the east end of the gas pipeline which is accessible via road. There is a limited road system that connects Iliamna with Newhalen and supports sport fishing activities and lodges. The few developed public recreation facilities that are present in the area are generally accessed via air or water.

#### **3.5.2.1 Recreation Opportunities**

The following subsections describe the main recreation opportunities and activities that occur in the region surrounding the project.

#### **Sport Fishing**

Sport fishing is the primary major recreational activity that occurs in the EIS analysis area. Rivers like the Nushagak, Mulchatna, Newhalen, Gibraltar, Kvichak, and Upper Talarik Creek, as well as Iliamna Lake, Lake Clark, and all surrounding aircraft accessible lakes support recreational fishing for species of salmon, rainbow trout, and other freshwater fish. Sport fishing use is increasing in the area; much public use is guided, with operators flying their clients to a

**Comment [A6]:** This section should include Lake Clark and all surrounding lakes



place for the day from nearby lodges or base use out of camps established nearby. Sport fishing is managed by the ADF&G through a permit system, using numerous tools like effort, catch, harvest information, and abundance. Near Iliamna, sport fishing has decreased in the past decades along the Newhalen River. For more information on sport fishing, as well as recreational lodges and guiding operations in the area, see Section 3.6, Commercial and Recreational Fisheries.

### **Sport Hunting and Trapping**

Hunting, primarily for moose, caribou, and bear, is a major recreation activity in the region (Kevin Waring and Associates 2011b). Much of the region is open to hunting, except Lake Clark National Park, Katmai National Park, and McNeil River State Game Sanctuary. However, hunting and trapping are allowed in the Lake Clark National Preserve, Katmai National Preserve, and McNeil River State Game Refuge (ADFG 2018e, NPS 2017g, NPS 2018a). Hunting and trapping are also allowed in the Alagnak Wild River and on certain islands in the Alaska Maritime NWR (NPS 2016a, USFWS 2014a). BLM lands are open to hunting, as are state-owned lands unless otherwise restricted by the ADF&G, which manages hunting in Alaska. Hunting on private property, including on village corporation lands and Native allotments, requires landowner permission.

The NPS and State of Alaska cooperatively manage wildlife resources in the three regional NPS units (Lake Clark, Katmai, Alagnak Wild River), and hunters in these units must follow current state and federal hunting regulations and must have all required licenses and permits (NPS 2018a, NPS 2017g, NPS 2016a). The Lake Clark National Preserve is divided into three authorized hunting guide areas and there are currently two concessioners authorized to guide sport hunters in these areas [and Alaska residents may hunt without a guide](#) (NPS 2017g). There are also two concessioners authorized to guide sport hunters at Katmai National Preserve (NPS 2018a). The McNeil River State Game Refuge is open to hunting and trapping of species except brown bears (ADFG 2018e).

As noted in the BLM Bay Proposed RMP/Final EIS, "the BLM-managed portion of the upper Iliamna Lake region has world class recreational values, primary sport fishing and hunting". Commercial guides under permit with the BLM frequent this area (BLM 2007).

The region is in Game Management Units (GMUs) 9 (most of the region) and 15C (Kenai Peninsula). The project area is specifically in GMUs 9B and 15C. The species hunted in GMU 9 include brown/grizzly bear, caribou, Dall sheep, moose, wolf, and wolverine. Species hunted in GMU 15 include black bear, brown/grizzly bear, caribou, Dall sheep, moose, mountain goat, wolf, and wolverine. In these two GMUs, non-resident sport hunters need a licensed hunting guide or hunt with an Alaska resident who is a close relative for brown bear, mountain goat, and Dall sheep.

Hunting seasons for the species available in these two GMUs vary. Table 3.5-1 lists the hunting seasons for each species by GMU.

**Table 3.5-1: General Hunting Season for Game Management Units 9B and 15C**

Species	General Hunting Season*	
	GMU 9B	GMU 15C
Black bear	No closed season	No closed season
Brown/Grizzly bear	May 10 to 25 in even years and October 7 to 21 in odd years	September 1 to May 31

**Comment [A7]:** The Koktuli River drainage is in GMU17, specifically 17B. The sport hunting regulatory information should be added in this section.

**Table 3.5-1: General Hunting Season for Game Management Units 9B and 15C**

Species	General Hunting Season*	
	GMU 9B	GMU 15C
Caribou	August 1 to March 31	No open season
Mountain goat	N/A	August 10 to October 15 and November 1 to 14
Moose	Resident: September 1 to September 20 Nonresident: September 5 to September 15	August 25 to September 30
Dall sheep	August 10 to September 20	August 1 to August 5, August 10 to September 20
Wolf	August 10 to June 30	August 10 to April 30
Wolverine	September 1 to March 31	September 1 to March 31

Source: ADF&G 2017

\*These are general seasons; specific seasons by sex/age/location are not presented here. The dates listed in the table change periodically based on Board of Game decisions.

N/A = not available

### **Water-Related Recreation (Boating)**

Various forms of boating, including canoeing, kayaking, rafting, and power boating, are popular in most recreation areas in the region. River kayaking and rafting opportunities abound in Lake Clark and Katmai national parks. The three Wild Rivers in Lake Clark National Park and Preserve (Chilikadrotna, Mulchatna, and Tlikakila rivers) are popular for rafting (NPS 2016e). The 80-mile Savonoski Loop out of Brooks Camp is a popular canoeing and kayaking route in Katmai National Park and Preserve (NPS 2018a). This park also has several popular rafting waterways. Both whitewater and non-whitewater river boating opportunities are available in both park units.

On Alagnak Wild River, whitewater and non-whitewater boating opportunities are also available. Trips often begin at Nonvianuk or Kukaklek Lakes with several take-outs available along the lower 30 miles of river (NPS 2015a).

Boating occurs on the Mulchatna River all the way to its confluence with the Nushagak River. The Koktuli River is also floated to its confluence with the Mulchatna River, both by individuals and as guided float trips.

River-based boating opportunities vary based on season, amount of rainfall, and temperatures. Generally, river levels are lowest in early spring and increase throughout spring and early summer as spring rains fall and snow melt occurs, with river levels generally peaking in July and then declining into the fall (NPS 2015a).

Due to lack of road access to the region, and because many visitors travel to the area by small plane, boating equipment that can be brought to the region by visitors is limited. Guided trips are available through approved concessioners and CUA operators in the national parks, and via other companies in and around the region.

Lake boating opportunities occur during the ice free season, and are available on several lakes in both Lake Clark and Katmai national parks and preserves. Motorboating opportunities are available at Lake Clark and Crescent Lake in Lake Clark National Park and Preserve, and Naknek Lake in Katmai National Park and Preserve (NPS 2017h, NPS 2018a). All three lakes are popular destinations for visitors. In 2017, there were 10 companies authorized to provide



boating trips in Lake Clark National Park and Preserve, three companies authorized for kayak tours, one company authorized for paddleboarding, and one company authorized as a water taxi (NPS 2018a). The Lake Camp area at Naknek Lake in Katmai National Park and Preserve is accessible via the road from King Salmon and contains a boat ramp, parking area, picnic area, and restrooms (NPS 2018a). In Katmai National Park and Preserve in 2017, there were 11 companies authorized to provide boating trips, six companies to provide charter boat services, and three companies authorized to provide kayak tours (NPS 2018a).

McNeil State Game Refuge is open to boating (ADFG 2018e).

Powerboating, canoeing, and kayaking opportunities are available in Cook Inlet, and particularly along the inlet edges such as along the Lake Clark National Park and Preserve boundary where there are also bear viewing opportunities.

Boating opportunities are also available at Iliamna Lake, Alaska's largest body of freshwater (Van Lanen 2012), though most use of the lake is for sport fishing. Access is available from Iliamna and Newhalen.

Kayaking and boating opportunities are also available on the east side of Cook Inlet near the terminus of the gas pipeline at the Anchor River State Recreation Area. Tractor-assisted boat launching is available at this location. Such activities primarily occur during the summer months.

### **Wildlife and Nature Viewing**

The region surrounding the project area offers highly valued opportunities for wildlife and nature viewing. The most popular wildlife viewing activity in the region is brown bear viewing, both inland and along Cook Inlet, with the best opportunities provided at food-rich locations, such as major salmon rivers and the Cook Inlet shoreline. Bear viewing is especially popular at Lake Clark and Katmai national parks, and McNeil State Game Refuge and Sanctuary. Popular locations for bear viewing at Lake Clark National Park and Preserve include Chinitna Bay, Crescent Lake, Silver Salmon Creek, Shelter Creek, and Tuxedni Bay (NPS 2017c). Katmai has many food-rich areas where bears tend to congregate, such as Brooks Camp, in the preserve, and along the Cook Inlet coast. Bears can be found in the Katmai backcountry, and can also be found feeding on sedges, clams, and salmon (NPS 2018a).

McNeil State Game Refuge and Sanctuary was designated a wildlife sanctuary in 1967 to protect the world's largest concentration of wild brown bears. McNeil River Falls are located about a mile from the mouth of McNeil River; the falls slow the movement of salmon heading upstream to spawning grounds, causing salmon to congregate. Large numbers of brown bears can be seen at McNeil State Game Refuge and Sanctuary in early July through mid-August (ADFG 2018b).

Notable bird watching opportunities are also available at most recreation areas in the region. Raptors, waterfowl, seabirds, shorebirds, songbirds, and upland birds can be found throughout the region. For instance, 187 species of birds have been documented at Lake Clark National Park and Preserve (NPS 2017d) and millions of sea birds, endemics, and birds from Asia can be found in the Alaska Maritime NWR (USFWS 2016a).

Though bear viewing opportunities are world-class within the region, opportunities for viewing other wildlife species are also available at all of the recreation areas within the region. For instance at McNeil State Game Refuge and Sanctuary, harbor seals, moose, caribou, wolves, wolverines, red foxes, and arctic ground squirrels can also be seen (ADFG 2018b). There are also wildlife viewing opportunities at Iliamna Lake, which contains a population of freshwater seals (Van Lanen 2012, ADNR 2013a).

Other nature- and wildlife-related opportunities available in the region include nature photography, beach combing, clam digging, and berrypicking (LPB 2018). Often these activities are combined with activities such as bear viewing, sightseeing, backpacking, hiking, and camping during the summer and fall.

### **Flightseeing/Sightseeing**

Due to the lack of road access in the region and the heavy use of small planes and floatplanes for transportation, there are many opportunities for flightseeing in the region. Flightseeing (i.e., sightseeing by plane) is an effective way to see the broader landscapes of the region and even see wildlife and bird species, particularly in the two national park units. Flightseeing occurs primarily during the summer months from June through September. There were 32 and 39 authorized air taxi CUA holders in 2017 that offered flightseeing opportunities in Lake Clark and Katmai national parks, respectively, with most operators originating out of Anchorage, Homer, King Salmon, Kodiak, and Soldotna (NPS 2018a). Many air taxis also provide flightseeing tours (NPS 2016c).

### **Camping/Backpacking/Hiking**

Due to the relative lack of developed facilities or trails and large expanses of wilderness, backcountry recreation activities such as camping, backpacking, and wilderness hiking are popular in the two national park units. There are also developed camping opportunities at both national parks. Between the two parks, there are very few developed trail opportunities, with less than 5 miles of trail in Katmai National Park, and 6.8 miles of trail in Lake Clark National Park (NPS 2016b, NPS Undated LC). In 2017, there were 29 authorized CUA holders that provided guided hiking or overnight backpacking services in Katmai National Park, and 22 in Lake Clark National Park (NPS 2018c, NPS 2018d).

Primitive camping opportunities are also provided in the Alagnak Wild River (NPS 2015a). Developed, though low impact, camping and hiking opportunities are available in the McNeil State Game Refuge and Sanctuary (ADFG 2018c).

Camping is allowed on most of the Alaska Maritime NWR, though no developed campgrounds exist in the NWR (USFWS 2014a). Camping related to commercial activities is prohibited on BLM lands without written authorization from the BLM. Short-term camping (i.e., less than 14 days in one location) not associated with commercial use is allowed. On state land, access, travel, improvements and structures, and other miscellaneous uses are generally allowed and managed by the Division of Mining, Land, and Water. Camping is also available on the east side of the Cook Inlet near the terminus of the gas pipeline at the Stariski State Recreational Site and Anchor River State Recreation Area, which also offers hiking opportunities.

Due to harsh winter weather conditions in the region, camping, backpacking, and hiking activities generally occur during the summer months, from June through September.

### **Other Opportunities**

Biking on ice using fat tire bikes is a new winter use in Lake Clark National Park and Preserve. There is currently no restriction on bike use in the park (NPS 2016d). Other winter activities [in the region](#) include cross-country skiing, snowshoeing, trekking, ~~and~~ riding snowmachines [birding, and starlight sky and aurora viewing](#). There is recreational use of Roadhouse Mountain to the northeast of Iliamna, as well as some all-terrain vehicle (ATV) use on trails around the Iliamna area, which are used for transportation, subsistence, and recreation.

### 3.5.2.2 Recreation Facilities

#### **Commercial Lodges**

Commercial lodges are the main form of lodging in the region due to the lack of consistent visitation to support hotels and motels. In 2012, there were 38 lodges in the area with active business licenses (Kevin Waring and Associates 2015d). There are clusters of commercial lodges at Port Alsworth, King Salmon, Naknek, Iliamna/Newhalen, Homer, Pedro Bay, and Kokhanok, as well as along the Kvichak, Mulchatna, and Alagnak rivers (ADNR 2013). There are also commercial lodges scattered around the region on private inholdings in Lake Clark and Katmai national parks (NPS 2017f, NPS 2015a). Commercial lodges often also provide guide services for hunting, fishing, and other recreation activities on private property, Native corporation land, and/or public lands. Therefore, commercial lodges provide a home base for many recreationists, as well as a starting point for trips onto public lands. See Section 3.6, Commercial and Recreational Fisheries, for more details on the commercial lodges present in the region.

#### **Public Recreation Facilities**

Public recreation facilities in the region include lodges, campgrounds, cabins, a primitive camping area, trails, and visitor centers. The only public lodge facilities within the region are located at Katmai National Park. There are two lodges in the park, Brooks Lodge and Grosvenor Lodge, both operated by a concessioner. In addition to a lodge, Brooks Camp includes a campground for 60 people, a visitor center, ranger station, and an auditorium with daily ranger-led programs. Facilities at Brooks Camp are available from June 1 to September 18. There is also a six-person public use cabin, Fures Cabin, on the Bay of Islands on Naknek Lake in Katmai National Park that is available from June 1 to September 17. There are 5 miles of trail in the national park and one scenic overlook. The Lake Camp area at Naknek Lake in Katmai National Park and Preserve contains a boat ramp, parking area, picnic area, and restrooms (NPS 2018a).

Developed facilities at Lake Clark National Park include a cabin and primitive camping area. The Priest Rock Public Use Cabin is a historic log cabin for six people on the north shore of Lake Clark and is accessible by float plane or boat (NPS 2017i). The Hope Creek Primitive Camping Area is located at Upper Twin Lake near the Proenneke Historic Site and does not provide any services (NPS 2017f). The maintained trails in the park are the Tanalian Trails that begin in Port Alsworth and continue to Tanalian Falls or Tanalian Mountain (NPS 2017e).

McNeil Camp at McNeil State Game Sanctuary provides 14 camp sites, a public use cook cabin for food storage and cooking, restrooms, a wash house, and staff facilities (ADFG 2018c).

The two state park units on the Kenai Peninsula near the terminus of the gas pipeline both include camping and picnicking facilities. There are 13 camp sites and some picnic sites at Stariski State Recreational Site, and 186 campsites total in five separate campgrounds at Anchor River State Recreation Area, along with 20 picnic sites and a boat launch.

There are no developed facilities in the Alagnak Wild River, but the US Fish and Wildlife Service has a visitor center nearby in King Salmon. The Alaska Maritime NWR does not include any recreation facilities in the region other than a visitor center in Homer (USFWS 2014a). There are no developed facilities on BLM lands (unencumbered or selected).

### 3.5.2.3 Recreation Access

#### **Overland Access**

Road access to or in the public recreation areas in the region is limited to outside of and in Katmai National Park, in the vicinity of Iliamna/Newhalen, and from the Sterling Highway between Soldotna and Homer on the east side of the region. There are unpaved and paved roads between the town of Naknek (located west of the park) and Lake Camp on Naknek Lake in the park. These roads allow access from nearby towns to the boat ramp facility in the park on Naknek Lake. There is also an unpaved road from Brooks Camp to the Valley of Ten Thousand Smokes viewpoint at the Three Forks Overlook (NPS Undated 1). Daily bus tours are provided by the concessioner from Brooks Camp to the overlook when the camp is open (June 1 to September 18)(NPS 2018a).

On the east side of the region, the Sterling Highway provides road access to the Stariski State Recreational Site and Anchor River State Recreation Area on the Kenai Peninsula.

Locally in the project area, skiffs, ATVs, and trucks are the primary modes of local surface transportation around Iliamna Lake (ADNR 2013).

#### **Water-Based Access**

Inland of Cook Inlet, water-based access to public recreation areas occurs on major rivers and lakes. Small boats can travel up the Naknek River to Lake Camp in Katmai National Park and boats can travel the Alagnak Wild River as well (Kevin Waring and Associates 2011b; NPS 2015a). Lake Clark and Naknek Lake provide water-based access to portions of Lake Clark and Katmai national parks, respectively. Water-based access can also be provided at Iliamna, [Newhalen](#), [Pedro Bay](#), [Kokhonak](#), [Igiugik](#) and Nondalton. In and along the shoreline of Cook Inlet, water-based access is essential to reaching public recreation destinations such as the eastern portions of Lake Clark and Katmai national parks and the Alaska Maritime NWR. Commercial boat operators need to be authorized to operate in the three NPS units and Alaska Maritime NWR (NPS 2018a, USFWS 2014a).

#### **Air-based Access**

Air-based travel via small plane is the main form of access to recreation areas in the region, primarily from Anchorage, Homer, Iliamna, King Salmon, Port Alsworth, Kodiak, Dillingham, and Soldotna. Airport facilities located near the project area include Iliamna, Igiugik, Levelock, Big Mountain, Koggiung, Kvichak-Diamond J, Kokhanok, and Pedro Bay (ADNR 2013a). Only certain air-based operators are allowed to operate in the three NPS units, McNeil State Game Refuge and Sanctuary, and Alaska Maritime NWR (NPS 2018a, USFWS 2014a, ADFG 2018f). Different operators can land on different surfaces depending on the landing gear of the plane (e.g., floats/amphibious gear, wheels, skis/wheeled skis) and therefore have various seasons and conditions in which they can operate.

### 3.5.2.4 Recreation Settings

Apart from a few developed sites previously described, the regional public recreation areas generally provide a primitive, remote recreation setting where solitude is common and there are no lights or sounds from human development. In popular areas (primarily popular bear viewing locations), the few developed sites such as Lake Camp and Brooks Camp, and areas closer to villages/towns, the recreation setting may include views of limited human development and other visitors, though the setting is still primarily remote and primitive.

### 3.5.2.5 Regional Recreational Use and Users

Given the lack of easy access and limited, dispersed development in the region, overall recreational use is estimated to be relatively low for all public recreation areas in the region compared to other parts of the state. The Bristol Bay Area Plan notes that southwest Alaska shows among the lowest level of tourism compared to other areas of the state in general, with only 17 percent of visitors to Alaska traveling to southwest Alaska, and only three percent traveling to southwest Alaska as their sole destination, with the majority of these visits to Katmai National Park and Wood-Tikchik State Park (ADNR 2013a). However, there are areas in the region that receive moderate to high use relative to the region and regions experience significant increases in visitation in recent years. Some of these areas tend to be the more accessible locations with public recreational use facilities such as the national parks and the McNeil State Game Sanctuary, or areas on the Kenai Peninsula that are accessible by road others are accessible on by small aircraft.

Between 2008 and 2017, Katmai National Park and Preserve averaged 36,825 visitors per year through its commercial services program in 2017 the park reported 37,818 in total visitation. During the same period, Lake Clark National Park and Preserve averaged 13,402 visitors per year through its commercial services program. Visitor use at Lake Clark National Park and Preserve has been increasing over the last 10 years to almost 17,000 visitor use days, with the number of visitor use days increasing dramatically for bear viewing, sport fishing, and photography, while participation in other activities has stayed fairly constant though Lake Clark itself has seen a 200% increase in commercial visitation between 2012 and 2017. This does not include recreational use by visitors not using commercial services such as local residents boating, fishing, skiing, or otherwise using Lake Clark and the surrounding land-and-an. In 2017 Lake Clark reported 22,755 in total visitation (NPS 2018d) Over the same time period, commercial visitor use at Katmai National Park and Preserve has generally fluctuated between 25,000 and 30,000 visitor use days (NPS 2018c). According to monthly visitation data, peak use of these two areas is from June to September. This is when the majority of annual use occurs, especially at Katmai National Park and Preserve, with 97 to 100 percent of the park's visitation occurring during these months. In the last 6 years, about 80 percent or more of visitation to Lake Clark National Park and Preserve has been during the peak season (June to September). The Long Range Interpretive Plan for Katmai National Park and Preserve notes that most of the park's visitors participate in two primary activities: bear viewing and sport fishing; there are virtually no drop-in visitors due to the effort needed to reach the park (NPS 2009a).

The number of bear-viewing visitors at McNeil River Camp was an average of 178 people per year between 2008 and 2017. The number of bear-viewing visitors at McNeil River Camp is capped at 257 visitors per year. In 2017, there were 1,092 user days (i.e., the participation in a recreational activity at a given resource during a 24-hour period by one person) associated with the bear-viewing program at McNeil River Camp in McNeil State Game Refuge and Sanctuary, and another 513 user days reported by guides or the public using the Kamishak River and Chenik Creek areas of the refuge and sanctuary, primarily for fishing and bear viewing (ADFG 2018a). The annual visitation to the Kamishak River and Chenik Lake areas likely varies due to the number of commercial transporter permits issued and used at each of these areas each year. There are no visitation estimates available for the Alagnak Wild River, Alaska Maritime NWR, BLM lands, or state lands/park sites.

Overall, due to the remoteness and lack of easy access and lodging facilities, it is expensive to visit the recreation areas in the region. As stated in the Alaska Maritime NWR Land Protection Plan, "recreational use is limited by the difficult logistics and expense of visiting remote islands. However, it is possible that the demand for visitor services will increase in the future as

**Comment [A8]:** Visitor averages over a decade do not usefully describe visitor use when visitation is dramatically trending. Accurate descriptions of visitor trends are needed in this section.

**Comment [A9]:** This data does not include recreational visits by anyone not traveling with a commercial operator. We believe that much of the recreational use of Lake Clark itself is not reflected in this data.

**Comment [A10]:** [https://irma.nps.gov/Stats/SRSRReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=LACL](https://irma.nps.gov/Stats/SRSRReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=LACL)

**Comment [A11]:** [https://irma.nps.gov/Stats/SRSRReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=LACL](https://irma.nps.gov/Stats/SRSRReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=LACL)

adventure travel becomes increasingly popular” (USFWS 2011). This may be true for other areas as well.

### **3.5.2.6 Recreational Use at Project Components**

#### **Mine Site**

Recreational use at the mine site consists of some sport hunting and fishing, as well as occasional snowmachine use. Flights taking recreationists to various destinations in the region and the state may also pass over the mine site. Though there is no existing estimate of recreational use at the mine site, given the remoteness of the mine site and relative closeness of Lake Clark National Park and Preserve and other more well-known and accessible fishing and hunting destinations, recreational use at the mine site is likely low.

#### **Alternative 1 Transportation Corridor**

Within the transportation corridor there is recreational use of Roadhouse Mountain to the northeast of Iliamna, as well as use of some ATV trails around the Iliamna area for transportation, subsistence, and recreation. There are no visible ATV trails along the access road corridor nearing the mine site or along the access road nearing Amakdedori Port.

There are also recreational use opportunities (primarily fishing) of extremely high quality in the general transportation corridor area, particularly along the Newhalen River and Upper Talarik Creek by the north access road, and in the Gibraltar River and Gibraltar Lake portions of the south access road corridor, which some local lodges advertise as offering guided fishing, hunting, and sightseeing trip options (Haugen, Bush and Rice 2003). Recreational sport hunting and snowmachine use may occur occasionally within the road corridors.

At Iliamna Lake, both motorized and non-motorized boating take place (AELO 2018), both as an activity in itself and as a means of accessing other recreation opportunities, primarily fishing, which is the main recreation opportunity at Iliamna Lake. Snowmachine use occurs on the lake in the winter; however, most of this use is likely for transportation and subsistence and minimally for recreation.

Due to its current inaccessibility and location of nearby high quality recreation opportunities, recreational use of the north and south mine access road corridors, the Kokhanok Airport spur road, and the Iliamna spur road is likely low though there is no existing recreational use estimate for the transportation corridor.

#### **Amakdedori Port**

The Amakdedori Port site is located on state lands designated for habitat use by the Kenai Area Plan (ADNR 2001). The Kenai Area Plan does not discuss recreational use, although there may be recreational boating, overflights, hunting, fishing and incidental wildlife viewing near the port site. There is no existing estimate of recreational use at the port site, though there is some boating use on the Cook Inlet. Due to the large size of the inlet and other nearby locations with known fishing, hunting, and wildlife viewing opportunities, there is likely little to no use of the port site itself for recreation.

#### **Alternative 1 Natural Gas Pipeline Corridor**

Existing recreational use along the pipeline alignment in Cook Inlet and on the Kenai Peninsula consists of boating on Cook Inlet and recreational use at the state park sites on the Kenai Peninsula. Boating on Cook Inlet is both an activity in itself and a means of accessing other



recreation opportunities such as fishing, wildlife viewing, birdwatching, and beachcombing, as well as access to the recreation areas on the west side of the Cook Inlet like the Lake Clark and Katmai national parks and preserves. The Stariski State Recreational Site, located near the proposed compressor station, offers camping, picnicking, and hiking opportunities. The Anchor River State Recreation Area offers boating, camping, picnicking, and hiking opportunities. There is no existing estimate of recreational use for the Cook Inlet or either state park unit site.

### **Alternatives 2 and 3 Transportation Corridor**

As stated above, there are also recreational use opportunities along the Newhalen River and at Iliamna Lake, as well as on Iliamna River. Fishing is the primary recreational opportunity in these areas, including guided sport fishing opportunities from lodges in the northern Iliamna Lake area, particularly around Pedro Bay. One lodge in the northern lake area offers guided kayaking trips on Iliamna Lake (AELO 2018). Recreational sport hunting use may also occur in the transportation corridor. There is no existing estimate of recreational use, including Iliamna Lake, though given the presence of ledges and communities around northern Iliamna Lake, there is likely more recreational use in the Alternative 2 and 3 transportation corridors than the Alternative 1 transportation corridor.

### **Diamond Point Port**

The Diamond Point Port site would be located at the junction of Iliamna Bay and Cottonwood Bay. There is known commercial fishing use of this area (ADNR 2001) and likely recreational fishing opportunities as well. There are also opportunities for wildlife viewing in Iliamna Bay as there are large colonies of seabirds at the mouth of the bay as well as brown bears, moose, and shorebirds in the area (ADNR 2001). Therefore, there may also be opportunities for hunting. There is no existing estimate of recreational use at the port site, though given the known fishing and hunting use of Iliamna Bay and Ursus Cove, there may be more recreational opportunities at the Diamond Point Port site than the Amakdedori Port site.

Though there may be opportunities for recreational boating in the bays, there is one concentrated boat traffic effort in Iliamna Bay every year. In early June, around 60 boats make the trek from Homer to Bristol Bay via Iliamna Lake and the Kvichak River. The boats cross the Cook Inlet and head to Williamsport to be transported on the road from Williamsport to Pile Bay (Dischner 2015b). The boats that make this trek are primarily commercial fishing boats, but may include some recreational fishing boats. The boats also make the return trip from Bristol Bay back to Homer at the end of the summer (Dischner 2015a).

### **Alternatives 2 and 3 Natural Gas Pipeline Corridor**

Under Alternatives 2 and 3, the natural gas pipeline would come into Ursus Cove and then cross land north to reach Cottonwood Bay and the Diamond Point Port site. Ursus Cove is a known bear hunting location (H&H Alaskan Outfitters 2018) and both Ursus Cove and Cottonwood Bay are known commercial fishing locations (ADNR 2001). Both Ursus Cove and Cottonwood Bay may also be used for other hunting activities, recreational fishing, and wildlife viewing given the large seabird colonies at the mouth of Iliamna Bay as well as the presence of moose and shorebirds around Iliamna Bay (ADNR 2001). There is no existing estimate of recreational use in Ursus Cove or Iliamna Bay.



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