Appendix D: Environmental Data Gap Analysis

SHOTGUN COVE ROAD EXTENSION DATA GAP ANALYSIS

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1.0 Background

1.1 Introduction

The City of Whittier has proposed the Shotgun Cove Road Extension to extend the existing Shotgun Cove Road for approximately 2.5 miles from the current terminus of Shotgun Cove Road (near Second Salmon Run), to the U.S. Department of Agriculture Forest Service (Forest Service) land at Trinity Point. The road design is proposed to be approximately 30 feet (ft) wide with a maximum grade of 10 percent, designed for 30 miles per hour traffic. Currently, a low road option and a high road option have been proposed.

1.2 Data Gathering

In order to identify environmental and social resources relevant to the proposed project before a National Environmental Policy Act (NEPA) review and approval from the Federal Highway Administration (FHWA), Western Federal Lands (WFL), the Shotgun Cove Road Extension project team gathered existing data, reports, and information and prepared a Preliminary Environmental Research document. The document was distributed to agencies on March 15, 2018. A public open house was held on April 11, 2018 to gather input on the environment, the project, and its potential impacts. On April 24, 2018, a pre-NEPA agency scoping meeting was held in Anchorage, and the project team met with the Alaska Department of Fish and Game (ADF&G) on April 26, 2018. Comments and information gathered through preliminary environmental research and the aforementioned pre-NEPA scoping meetings have been incorporated into this data gap analysis.

This data gap analysis includes a summary of resources that should be considered during the NEPA documentation phase of the Shotgun Cove Road Extension Project; it summarizes existing data and information gathered from agencies and the public; and it presents recommendations for additional data and consultation needs based on environmental regulations and agency representative comments.

2.0 Resources and Issues

2.1 Historic Properties, Archeological and Cultural Resources

Applicable Regulations: Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their activities on historic properties. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the Agency Official and other interested parties. To implement this regulation, federal agencies must make reasonable and good faith efforts to identify any cultural resources within a project area that may be affected by their undertakings and identify and evaluate eligibility of these resources for listing on the National Register of Historic Places.

Contact: Alaska Department of Natural Resources (ADNR), Office of History and Archaeology, Judith Bittner, State Historic Preservation Officer (SHPO), judy.bittner@alaska.gov, 907-269-8715.

Existing information: There are no known Alaska Heritage Resources Survey (AHRS) sites in the project area. A preliminary historic and cultural resources desktop study was completed on February 19, 2018, and according to the AHRS, the Leschi Shipwreck (SEW-01614) is located northeast of the proposed project on the eastern side of Shotgun Cove (CRC 2018), and it would not be impacted by this project.

There have been no previous cultural resource surveys in the project area. However, it is understood that Prince William Sound has been important historically for indigenous peoples and Whittier saw development during World War II. In addition, in 2002 and 2003, archaeologists surveyed an adjacent 2.59-mile Shotgun Cove Road corridor (from the Eastern Avenue and Blackstone Road intersection to



the end of Shotgun Cove Road) and identified a cluster of drowned and living culturally modified trees at Second Salmon Run cove (CRC 2018).

During the April 24, 2018 pre-NEPA agency scoping meeting for this project, the SHPO representative stated that SHPO generally recommends a field survey in order to document cultural and historic resources (SolsticeAK 2018). The SHPO also noted that the project vicinity has potential for petroglyphs and shipwrecks on its coastline (SolsticeAK 2018).

Recommendation: A field survey led by an accredited cultural and historic resources professional should be completed. The field survey could entail accessing the project area by walking the road alignment options on foot and/or accessing some areas via boat, documenting cultural historical resources, and preparing a report that summarizes survey results. If surveys are conducted along the shoreline where the State has ownership, an ADNR, Office of History and Archeology Alaska Cultural Resource Permit would be needed. Following field survey results, a NHPA Section 106 consultation with SHPO should be conducted.

2.2 Right-of-Way

Applicable Regulations: According to the State of Alaska Submerged Lands Act, lands that are located between the mean high tide and three miles offshore are owned by the State. The Alaska National Interest Lands Conservation Act (ANILCA) enforces special protection to national parks, national wildlife refuges, national monuments, wild and scenic rivers, recreational areas, national forests, and conservation areas. The ANILCA Implementation Program coordinates Alaska state agency development, regulation, policy review, and implementation. In addition, access to the Chugach National Forest land, specifically, is authorized through Special Use and Special Recreation Use permits depending on the type of land access that is needed.

Contacts: In addition to the City of Whittier, there are three property owners near the project area, and ADNR, Office of Project Management and Permitting (OPMP) oversees ANILCA implementation.

- ADNR, Division of Mining, Land, and Water (MLW), Samantha Carroll, Easement Unit Manager, samantha.carroll@alaska.gov, 907-269-8548.
- Chugach Alaska Corporation, David Phillips, Land and Resources Manager, dphillips@chugach.com, 907-563-8866.
- Forest Service, Chugach National Forest/Glacier Ranger District, Tim Charnon, Glacier District Ranger, tcharnon@fs.fed.us, 907-783-3242.
- ADNR, OPMP, Susan Magee, State ANILCA Program Coordinator, susan.magee@alaska.gov, 907-269-7529.

Existing information: The proposed project is located within City of Whittier-owned land. This land was transferred from the State of Alaska to the City by deed. A primary purpose of the proposed project is to access the adjacent Forest Service-owned land (north and east of the project area). Additional adjacent land owners include the Chugach Native Inc. (west of the project area), and the State of Alaska owns adjacent tidelands and retains a 50-foot (ft.) public use easement buffer along the coast (north of the project area).

Recommendation: No authorizations should be needed because the road options are within City-owned land. The City should refrain from accessing Forest Service land during project construction; if Forest Service land access is needed, the project should consult with the Chugach National Forest Service to obtain necessary access authorizations and to participate in the ANILCA process.



2.3 Wetlands and Waters of the U.S.

Applicable Regulations: Executive Order (EO) 11990 minimizes the destruction, loss, or degradation of wetlands and preserves the natural and beneficial values of wetlands. Section 404 of the Clean Water Act (CWA) establishes a regulation program to discharge dredge or fill material into waters of the U.S. including wetlands and requires a permit to do so, unless the activity is exempt from Section 404.

Contact: U.S. Army Corps of Engineers (USACE), Alaska District, Roberta Budnik, roberta.k.budnik@usace.army.mil, 907-753-2785.

Existing information: It is unlikely that the proposed project could completely avoid the placement of fill within wetlands. According to a January 24, 2018 review of the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), there are approximately 150 acres of freshwater forested/shrub wetland (PF04/EM1B) and approximately six acres of freshwater emergent wetlands (PEM1B) within the study area (USFWS 2018c). A 2011 field-based effort of the area also identifies freshwater forested/shrub and freshwater emergent wetlands in the project area (Stantec 2011).

During the April 24, 2018 Shotgun Cove Road Extension pre-NEPA agency scoping meeting, a USACE representative stated that USACE could provide a Preliminary Jurisdictional Determination (PJD) based on existing NWI and supplemental information including the abovementioned field survey (SolsticeAK 2018). A PJD is not appealable, and to obtain a formally appealable Approved Jurisdictional Determination (AJD), it was stated that USACE generally requires fieldwork. A wetlands permit would be needed for the road. Understanding that FHWA would be the lead agency on the environmental document, USACE would likely adopt FHWA's decision during USACE's permitting process (SolsticeAK 2018).

The USACE permitted the existing Shotgun Cove Road under permit #POA-2003-764-4. The USACE stated that the proposed project will likely be authorized by modifying this permit (SolsticeAK 2018).

Recommendation: Additional research, including a review of wetland delineation efforts completed by Stantec in 2011, should be conducted. Because a PJD remains valid for five years, the City of Whittier should submit a request during the middle of the environmental documentation process to lessen the likelihood of needing to repeat the process. Consultation with USACE should be completed, and a PJD should be requested from USACE. The environmental document should include information on wetland impacts and how impacts have been minimized and mitigated. Once the environmental document is completed, a modification to permit POA-2003-764-4 should be sought.

2.4 Floodplain and Regulatory Floodway

Applicable Regulations: EO 11988 requires federal agency avoidance of occupancy and modification of floodplains wherever there is a practicable alternative. Section 2(a) of the EO requires an eight-step process for agencies to carry out as part of the decision-making process for projects that have potential impacts to or within a floodplain.

Contact: Alaska Department of Commerce, Community and Economic Development (ADCCED), Division of Community and Regional Affairs, Floodplain Management, Taunnie Boothby, Certified Floodplain Manager, Taunnie.Boothby@alaska.gov, 907-269-4583.

Existing Information: An October 3, 2017 review of the Federal Emergency Management Agency Flood Map Service Center revealed that a flood hazard study has not been completed for the City of Whittier



or the project area (FEMA 2018), and there are no Flood Insurance Rate Maps or critical facilities maps available for the area (City of Whittier 2008).

Whittier is prone to storm surge, rainfall, snowmelt, and glacier melt flooding (City of Whittier 2008); however, the proposed low and high road alignment options both have components of the roadway at a minimum elevation of approximately 80 ft. from marine waters, which is likely outside the floodplain.

Recommendation: The project should consult with the ADCCED Floodplain Manager to obtain concurrence that there are no floodplains or potential for flooding within the project area. The consultation should include a summary of the proposed project's potential area of impact, elevation, area, and mapped streams. Consultation results should be documented in the environmental document.

2.5 Water Quality

Applicable Regulations: Section 404 of the CWA establishes the basic structure for regulating pollutant discharges into waters of the U.S., gives the Environmental Protection Agency authority to implement pollution control, set surface water contaminant water quality standards, makes discharging point source pollution into navigable waters unlawful, unless permitted, funds sewage treatment, and addresses nonpoint source pollution. The Safe Drinking Water Act (SDWA) protects public drinking water, sets standards for drinking water quality, and implements technical and financial programs to ensure drinking water safety.

Contact: The Alaska Department of Environmental Conservation (ADEC) is responsible for implementation of the CWA and SDWA in Alaska.

 ADEC, Division of Water, Andrew Sayers-Fay, Division Director, andrew.sayers-fay@alaska.gov, 907-269-6281.

Existing information: The project area is located approximately 2.3 miles northeast of the City of Whittier's drinking water source that originates from three groundwater wells located near 100 West Whittier Road, and the proposed project would not impact this area. According to a January 25, 2018 review of the ADEC Alaska Water Quality Map, there are no impaired waterbodies in or near the project area (ADEC 2018). There are approximately fifteen existing streams and drainages that have potential to intersect the proposed low and/or high road options. As detailed in the Wetlands section of this data gap analysis, there are approximately 156 acres of wetlands that were mapped within the study area and proposed project's general area (USFWS 2018c).

Recommendation: All drainages should be surveyed and mapped. Because the project could result in discharges to streams, drainages, and wetlands in the area, consultation with ADEC should be conducted to discuss potential water quality impacts from road construction activities to adjacent or crossed streams and wetlands. A Section 404 Water Quality Certification should be sought prior to construction.

2.6 Threatened and Endangered Species

Applicable Regulations: The Endangered Species Act (ESA) mandates conservation of listed threatened and endangered (T&E) species and their critical habitat. Section 7 of the ESA requires interagency cooperation and consultation to ensure that an action authorized, funded, or carried out is not likely to jeopardize the continued existence of any T&E species or result in the destruction or adverse modification of their habitat.



Contact: USFWS, Anchorage Fish and Wildlife Conservation Office, Jennifer Spegon, Ecological Services Biologist, jennifer_j_spegon@fws.gov, 907-271-2768. (Note the NMFS has jurisdiction over most ESA-listed marine species; however, because this project doesn't impact the marine environment, consultation with them is likely unnecessary.)

Existing information: A February 14, 2018 USFWS Information for Planning and Consultation (IPaC) report generated for the project indicates that there are no T&E species within the project area (USFWS 2018a). Through project email correspondence on March 20, 2018 and May 23, 2018, USFWS indicated that the agency had reviewed the proposed project preliminary environmental research and pre-NEPA agency scoping meeting summary; noted that the IPaC had been consulted and incorporated into project planning; and had no further comments (USFWS 2018e; USFWS 2018f).

Recommendation: An informal consultation with USFWS should be conducted to obtain written concurrence regarding the lack of T&E species and their critical habitat in the project area. Results of the consultation should be included in the environmental document.

2.7 State Refuges, National Wildlife Refuges, Critical Habitat Areas and Sanctuaries

Applicable Regulations: Under Alaska Statute Title 16, State of Alaska legislature designated 32 state game refuges, critical habitat areas, and wildlife sanctuaries in the state. ANILCA created or expanded conservation units in Alaska including National Parks and National Wildlife Refuges, and Alaska's State ANILCA Program Coordinator is positioned at ADNR.

Contacts: This section's contacts include ADF&G's Division of Habitat and ADNR's State ANILCA Program Coordinator.

- ADF&G, Division of Habitat, Megan Marie, megan.marie@alaska.gov, 907-267-2446.
- ADNR, OPMP, Susan Magee, State ANILCA Program Coordinator, susan.magee@alaska.gov, 907-269-7529.

Existing information: A February 15, 2018 search of the USFWS Critical Habitat mapper, USFWS Land Status within the National Wildlife Refuges of Alaska mapper, and ADF&G Land Designation Maps determined that there are no refuges, sanctuaries, or critical habitat in the proposed project's vicinity (USFWS 2018; USFWS 2018b; ADF&G 2018). The USFWS IPaC report prepared for the project also showed no critical habitats or refuges within or near the project area (USFWS 2018a). As described above, through March and May 2018 email correspondence, USFWS had reviewed proposed project materials to date, noted that USFWS resources had been documented, and indicated that the agency had no further comments (USFWS 2018e; USFWS 2018f).

Recommendation: No impacts to refuges, critical habitat, or sanctuaries are anticipated. No further work on is needed other than to document this resource as a non-issue in the environmental document.

2.8 Essential Fish Habitat and Fish Streams

Applicable Regulations: The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) governs U.S. marine fisheries management and requires federal agencies to consult with National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) on actions or proposed actions that may adversely affect Essential Fish Habitat (EFH). Federal agencies comply by submitting an EFH Assessment, detailing the proposed federal action's effects on EFH, to NMFS. If EFH may be adversely affected, NMFS makes conservation recommendations to avoid, minimize, mitigate, or otherwise offset these effects to federal and state agencies. Alaska's Anadromous Fish Act (AS



16.05.871- .901) requires notification to and approval from ADF&G before impacting anadromous fish waterbodies or streams. The Fishway Act (AS 16.05.841), requires notification to and authorization from ADF&G for activities within a stream if they impede passage of resident or anadromous fish.

Contacts: NMFS enforces the MSFCA, and ADF&G enforces the Anadromous Fish Act.

- NMFS, Alaska Region, Habitat Conservation Division, Matthew Eagleton, Supervisory Fishery Biologist, matthew.eagleton@noaa.gov, 907-271-6354.
- ADF&G, Division of Habitat, William Frost, Habitat Biologist, william.frost@alaska.gov, 907-267-2813.

Existing information: The NMFS EFH mapper and the ADF&G's Fish Resource Monitor were consulted to identify EFH in the project area.

A January 2018 review of the NMFS EFH mapping tool indicated that marine waters in the project vicinity are EFH (NOAA 2018). Seine dives were completed by NMFS in Passage Canal, which is a minimum of approximately 250 to 350 ft. northwest of the proposed road options, and eelgrass beds were identified during these dives, primarily in the Shotgun Cove area (SolsticeAK 2018). Passage Canal supports a variety of fish, but the proposed project would avoid impacts to marine waters.

An October 3, 2017 review of the Fish Resource Monitor, ADF&G's mapping tool for The Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes, identified five anadromous fish streams, which are EFH, in close proximity to the project area and one anadromous fish stream, Trinity Creek, that will likely intersect the project (Table 1) (ADF&G 2017). However, ADF&G stated that Trinity Creek may have been mapped in an incorrect location, and there may be additional unmapped streams containing anadromous fish species within the project area (ADF&G 2018a).

Stream Name	AWC Code	Location	Anadromous Species and Use
No Name	224-10-14418	1.3 miles southwest of Emerald Cove trailhead, flowing into Passage Canal at 60.7771, -148.6618	Coho salmon (spawning)
Cove Creek and Cove Creek tributary	224-10-14420 and 224-10-14420-2010 (tributary)	1.3 miles southwest of Emerald Cove trailhead, flowing into Passage Canal at 60.7775, -148.6603	Pink salmon (present), coho salmon (spawning, present)
Second Salmon Run Creek	224-10-14424	0.3 miles southwest of Emerald Cove trailhead, flowing into Passage Canal at 60.7861, -148.6317	Chum salmon (spawning), pink salmon (spawning)
Trinity Creek	224-10-14430	0.5 miles southwest of Trinity Point, flowing into Emerald Bay at 60.8019, -148.5774	Pink salmon (spawning)
Clean Creek	224-10-14440	1.2 miles southeast of Trinity Point, flowing into Shotgun Cove at 60.7901, -148.5665	Chum salmon (present), pink salmon (present)
Barge Creek	224-10-14450	1.6 southeast of Trinity Point, flowing into Shotgun Cove at 60.7839, -148.5677	Chum salmon (present), pink salmon (present)
Shotgun Creek	224-10-14460	1.9 miles southeast of Trinity Point, flowing into Shotgun Cove at 60,7795, -148,5713	Chum salmon (present), pink salmon (present)

Table 1 – Anadromous Fish Streams Within or in Proximity to the Project Area

Recommendation: ADF&G, Division of Habitat indicated that additional information regarding the potential for anadromous fish waterbodies in the project area is needed. ADF&G will conduct fieldwork and sampling to determine the presence of fish in drainages crossed by the project options, and this fieldwork should be supported by the project by providing needed information to the agency, including, e.g., road option coordinates. The project should consult with ADF&G regarding the Anadromous Fish Act and with ADF&G. If anadromous streams are found in the project area, prepare an EFH Assessment



and consult with NMFS under the MSFCMA. The project should obtain a Fish Habitat permit from ADF&G prior to work involving anadromous or resident fish streams.

2.9 Wildlife, Migratory Birds, and Eagles' Nest

Applicable Regulations: The Marine Mammal Protection Act (MMPA) protects marine mammals within U.S. waters and prohibits take of marine mammals. The Migratory Bird Treaty Act (MBTA) protects migratory birds and makes it illegal to for anyone without a permit to take, possess, import, export, transport, sell, purchase, or barter migratory birds, their parts, nests, or eggs. The Bald and Golden Eagle Protection Act prohibits the take of Bald Eagles including their nests without a permit.

Contact: USFWS and NMFS share jurisdiction for MMPA enforcement, and USFWS is the acting agency for MBTA and Bald and Golden Eagle Protection Act enforcement.

- NMFS, Alaska Region, Protected Species Division, Greg Balogh, Anchorage Office Supervisor, greg.balogh@noaa.gov, 907-271-3023.
- USFWS, Anchorage Fish & Wildlife Field Office, Jennifer Spegon, Ecological Services Biologist, jennifer j spegon@fws.gov, 907-271-2768.

Existing information: The proposed project would develop a road in an area that supports birds, fish, and wildlife and could increase human and wildlife interactions. Black bears, coyotes, and mountain goats are predominant large land animals near Whittier, and moose and wolves are occasionally seen (City of Whitter 2012; ADF&G 2017a). Common small mammals that are present include snowshoe hares, porcupines, beavers, river otters, mink, marmots, squirrels, and weasels (City of Whittier 2012; ADF&G 2017a). The proposed project would avoid impacts to the adjacent Passage Canal marine environment. Birds frequent the Whittier area including geese, ducks, cranes, Bald Eagles, ptarmigan, and hummingbirds (City of Whittier 2012), and suitable nesting habitat, such as mature trees, exists in and adjacent to the proposed project corridor.

The USFWS IPaC report for this project identifies 42 migratory bird species (Table 2) that may be present within the project area (USFWS 2018a). According to a May 21, 2018 review of the Wetland Ecosystems Services Protocol for Southeast Alaska mapper, there are no Bald Eagle nests within the project area (USFWS et al. 2018). There is one nest located approximately 2,087 ft. west of the project area at latitude 60.7764, longitude -148.6935, and other nests are more than 20,000 ft. away from the project area (Table 3).

Table 2 – Migratory Bird Species with Range in Project Area

Species	Breeds	Importance
Aleutian Tern (Sterna aleutica)	May 1 –	Bird of Conservation Concern (BCC) throughout its range in the continental USA
	August 31	and Alaska.
Arctic Tern (Sterna paradisaea)	May 20 –	Not a BCC in this area but warrants attention because of the Eagle Act or for
	August 15	potential susceptibilities in offshore areas from development or activities.
Bald Eagle (Haliaeetus	January 1 –	Not a BCC in this area but warrants attention because of the Eagle Act or for
leucocephalus)	Sept. 30	potential susceptibilities in offshore areas from development or activities.
Black Oystercatcher	April 15 –	BCC throughout its range in the continental USA and Alaska.
(Haematopus bachmani)	October 31	
Black Scoter (Melanitta nigra)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
		potential susceptibilities in offshore areas from development or activities.
Black Turnstone (Arenaria	Elsewhere	BCC throughout its range in the continental USA and Alaska.
melanocephala)		
Black-footed Albatross	Elsewhere	BCC throughout its range in the continental USA and Alaska.
(Phoebastria nigripes)		



Species	Breeds	Importance
Black-legged Kittiwake (Rissa	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
tridactyla)		potential susceptibilities in offshore areas from development or activities.
Bonaparte's Gull	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
(Chroicocephalus philadelphia)		potential susceptibilities in offshore areas from development or activities.
Common Eider (Somateria	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
mollissima)		potential susceptibilities in offshore areas from development or activities.
Common Loon (Gavia immer)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
		potential susceptibilities in offshore areas from development or activities.
Common Murre (<i>Uria aalge</i>)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
		potential susceptibilities in offshore areas from development or activities.
Double-crested Cormorant	April 20 –	Not a BCC in this area but warrants attention because of the Eagle Act or for
(Phalacrocorax auratus)	August 31	potential susceptibilities in offshore areas from development or activities.
Golden Eagle (Aquila chrysaetos)	January 1 –	Not a BCC in this area but warrants attention because of the Eagle Act or for
	August 31	potential susceptibilities in offshore areas from development or activities.
Great Shearwater (Puffinus gravis)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
		potential susceptibilities in offshore areas from development or activities.
Herring Gull (Larus argentatus)	April 20 –	Not a BCC in this area but warrants attention because of the Eagle Act or for
	August 31	potential susceptibilities in offshore areas from development or activities.
Kittlitz's Murrelet	May 15 –	BCC throughout its range in the continental USA and Alaska.
(Brachyramphus brevirostris)	August 31	
Laysan Albatross (<i>Phoebastria</i>	Elsewhere	BCC throughout its range in the continental USA and Alaska.
immutabilis)		
Lesser Yellowlegs (<i>Tringa</i>	Elsewhere	BCC throughout its range in the continental USA and Alaska.
flavepipes)		
Long-tailed Duck (<i>Clangula</i>	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
hyemalis)		potential susceptibilities in offshore areas from development or activities.
Manx Shearwater (<i>Puffinus</i>	April 15 –	Not a BCC in this area but warrants attention because of the Eagle Act or for
puffinus)	October 31	potential susceptibilities in offshore areas from development or activities.
Marbled Godwit (Mimosa fedoa)	Elsewhere	BCC throughout its range in the continental USA and Alaska.
Northern Fulmar (Fulmarus	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
glacialis)		potential susceptibilities in offshore areas from development or activities.
Olive-sided Flycatcher (Contopus	May 20 –	BCC throughout its range in the continental USA and Alaska.
cooperi)	August 31	
Parasitic Jaeger (Stercorarius	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
parasiticus)		potential susceptibilities in offshore areas from development or activities.
Pink-footed Shearwater	Elsewhere	BCC throughout its range in the continental USA and Alaska.
(Puffinus creatopus)		
Pomarine Jaeger (Stercorarius	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
pomarinus)		potential susceptibilities in offshore areas from development or activities.
Red Phalarope (<i>Phalaropus</i>	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
fulicarius)		potential susceptibilities in offshore areas from development or activities.
Red-breasted Merganser	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
(Mergus serrator)		potential susceptibilities in offshore areas from development or activities.
Red-faced Cormorant	April 15 –	BCC throughout its range in the continental USA and Alaska
(Phalacrocorax urile)	July 31	DOO!
Red-legged Kittiwake (Rissa	Elsewhere	BCC throughout its range in the continental USA and Alaska.
brevirostris)		N. 2001 III
Red-necked Phalarope	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for
(Phalaropus lobatus)	Fl '	potential susceptibilities in offshore areas from development or activities.
Red-throated Loon (<i>Gavia</i>	Elsewhere	BCC throughout its range in the continental USA and Alaska.
stellata)	A	DCC throughout the search of the state of th
Rufous Hummingbird	April 15 –	BCC throughout its range in the continental USA and Alaska.
(Selasphorus rufus)	July 15	
Semipalmated Sandpiper	Elsewhere	BCC throughout its range in the continental USA and Alaska.
(Calidris pusilla)		



Species	Breeds	Importance
Short-billed Dowitcher (Limnodromus griseus)	Elsewhere	BCC throughout its range in the continental USA and Alaska.
South Polar Skua (Stercorarius maccormicki)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from development or activities.
Surf Scoter (Melanitta perspicillata)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from development or activities.
Thick-billed Murre (<i>Uria lomvia</i>)	May 20 – July 31	Not a BCC in this area but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from development or activities.
Whimbrel (Numenius phaeopus)	Elsewhere	BCC throughout its range in the continental USA and Alaska.
White-winged Scoter (<i>Melanitta</i> fusca)	Elsewhere	Not a BCC in this area but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from development or activities.
Yellow-billed Loon (<i>Gavia</i> adamsii)	Elsewhere	BCC throughout its range in the continental USA and Alaska.

Table 3 – Documented Eagle Nests in Proximity to the Project Area

Nest Object ID Documented Survey Date		Approximate Distance from Project Area	
2056	07/22/05	11,341 ft. west	
32508	04/27/09	21,420 ft. southeast (Across Blackstone Bay)	
32158	04/08/05	21,610 ft. southeast (Across Blackstone Bay)	
32504	04/27/09	28,700 ft. south (on Willard Island)	

Through a March 20, 2018 email correspondence, USFWS concurred that the proposed project's preliminary environmental research was reviewed and included IPaC information and vegetation clearing timing windows; USFWS indicated that the agency had no additional comments at that time (USFWS 2018e). A May 23, 2018 email from USFWS reiterated that the agency had no further comments after reviewing the pre-NEPA agency scoping meeting summary (USFWS 2018f).

Recommendation: Although not requested by agencies, it may be warranted to determine Bald Eagle nests in the proposed project area. During other fieldwork activities, if Bald Eagle nests are discovered, the nest locations should be documented by recording their latitudes and longitudes. The locations should be provided to USFWS and cited in the environmental document. Additional consultation with USFWS should be conducted if it is needed, as determined through correspondence with USFWS.

2.10 Invasive Species

Applicable Regulations: EO 13112 calls for the prevention, control, and minimization of invasive species impacts. It restricts introduction of exotic species into the natural ecosystems of U.S. lands and waters; encourages States, local governments, and private citizens to prevent exotic species introduction; restricts exotic species importation and introduction into natural U.S. ecosystems; and restricts the use of Federal funds, programs, or authorities to export native species for introduction into ecosystems outside the U.S. where they do not occur naturally.

Contacts: ADF&G is responsible for invasive fisheries, wildlife, and habitats management, and ADNR is responsible for invasive terrestrial and freshwater plants.

- ADF&G, Invasive Species Program, Tammy Davis, Coordinator, tammy.davis@alaska.gov, 907-465-6183
- ADNR, Agriculture Plant Materials Center, Daniel Coleman, Natural Resource Specialist III, daniel.coleman@alaska.gov, 907-745-8721

Existing information: A January 24, 2018 search of the Alaska Exotic Plants Information Clearinghouse showed that there is one invasive plant species present within the project area (UAA 2018). The alsike



clover (*Trifolium hybridum L.*) was identified at latitude 60.777, longitude -148.662 and infests an area of 0.0117 acres. During the April 24, 2018 Shotgun Cove Road Extension pre-NEPA agency scoping meeting, it was noted by the Chugach National Forest and City of Whittier representatives that European black slugs (*Arion ater*) have been observed in the project area's vicinity, and an adjacent area was treated for noxious weeds (SolsticeAK 2018).

Recommendation: No additional analysis or actions should be required. The presence of invasive species in the project area should be documented in the environmental document.

2.11 Section 4(f)/6(f) Resources

Applicable Regulations: The U.S. Department of Transportation Act established the federal Cabinet department of the U.S. concerned with transportation, and Section 4(f) of the Transportation Act prohibits agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and water fowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative and the action includes all possible minimization of harm to the property. The Land and Water Conservation Fund Act (LWCF) established a program to assist in preserving, developing, and assuring outdoor recreation resources. Under Section 6(f) of the LWCF, property acquired or developed with LWCF grant money that is converted to a non-recreational purpose, must coordinate with the Department of Interior to address other requirements.

Contact: FHWA, WFL, Stephen Morrow, Environmental Protection Specialist, stephen.morrow@dot.gov, 360-619-7811.

Existing information: A potential 4(f) property (Shotgun Cove/Emerald Cove Trail) is located within the project area, and the trailhead is located at the southwest end of the proposed roadway (ADF&G 2017a). Shotgun Cove/Emerald Cove Trail is located on land owned by the City of Whittier and runs parallel to the coastline to Shotgun Cove. The trail was built and is maintained by ADNR, Division of Parks and Outdoor Recreation. The road options would parallel Shotgun Cove/Emerald Cove Trail, and depending on the road option that is chosen, the road would intersect the trail between one and six times.

A January and February 2018 review of the USFWS National Wild and Scenic Rivers System, ADNR, Division of Parks & Outdoor Recreation, and National Park Service (NPS) websites indicated that no additional 4(f) properties, parks, wildlife management areas, or refuges exist within the project area (USFWS 2018d; ADNR-DPOR 2018; NPS 2018).

No 6(f) properties are within the project area.

Recommendation: A 4(f) assessment should be prepared. The assessment should describe the trails; detail 4(f) applicability; describe the 4(f) properties' use (perhaps by permanent incorporation and constructive use) by the road project; and avoidance and minimization measures that would be incorporated into the project.

2.12 Hazardous Materials, Pollution Prevention, Solid Waste, and Material Disposal Sites Applicable Regulations: A number of federal and state laws apply. The Resource Conservation and Recovery Act governs the management and disposal of solid and hazardous wastes. The Toxic Substance Control Act governs the removal and disposal of a few specific substances, and soil, water, or other



substances that have been contaminated with these substances. ADEC solid waste regulations (18 AAC 60) govern the accumulation, storage, and disposal of solid wastes.

Contact: ADEC, Division of Spill Prevention and Response, Contaminated Sites Program, John Halverson, Program Manager, john.halverson@alaska.gov, 907-269-7545.

Existing information: A January 24, 2017 search of the ADEC Contaminated Sites Database determined that there are no contaminated sites within the project area (ADEC 2018a), and the proposed project would avoid impacting the nearest contaminated sites, one informational and one active ADEC contaminated site located almost two miles from the project area (Table 4).

Site	File No.	Hazard ID	Status	Location	Description
Buckner	2114.57.003	4151	Active	1.8 miles southwest of	Surface soil contamination (cleaned up
Building				the Shotgun Cove	lead and asbestos, current Diesel Range
				trailhead at 60.774722,	Organics). Groundwater contamination
				-148.675000	(cleaned up arsenic, barium, cadmium).
Block 11,	2114.57.001	4149	Informational	1.6 miles southwest of	Contaminated brownfield (former
Lots 1, 2, 3				the Shotgun Cove	stockpile area, incinerator and impound
(Whittier)				trailhead at 60.777222,	yard, and waste oil tank site).
				-148.670833	

Table 4 – ADEC Contaminated Sites

Recommendation: No impacts to contaminated sites are expected. Other than to summarize the known sites in the environmental document, no additional analysis or actions should be required.

2.13 Wild and Scenic Rivers

Applicable Regulations: Administered by a council with representatives from the Bureau of Land Management, NPS, USFWS, and Forest Service, the Wild and Scenic Rivers Act intends to preserve rivers with outstanding natural, cultural, and recreational values in a free-flowing condition.

Contact: NPS, Alaska Region, Paul Schrooten, Transportation Manager, paul_schrooten@nps.gov, 907-644-3388.

Existing information: A January 25, 2018 review of the National Wild and Scenic Rivers System indicated that there are no wild and scenic rivers within the project area (USFWS 2018d).

Recommendation: No impacts to wild and scenic rivers are expected from the proposed project. Other than to summarize the known sites in the environmental document, no further analysis or actions should be required.

2.14 Air Quality

Applicable Regulations: The Clean Air Act controls air pollution at the national level. In Alaska, ADEC is responsible for managing non-point and mobile sources of air pollution, managing stationary out-of-stack air pollution discharges through a permit and compliance program, and monitoring field air to measure progress and understand problems.

Contact: ADEC, Division of Air Quality, Denise Koch, Division Director, denise.koch@alaska.gov, 907-465-5105.



Existing information: The proposed project is not in a nonattainment zone and does not currently or potentially have degraded air quality (City of Whittier 1994; ADEC 2018b; EPA 2017).

Recommendation: No impacts are anticipated. Other than to summarize the known sites in the environmental document, no further air quality analysis or actions should be required.

2.15 Social and Economic Issues

Applicable Regulations: EO 12898 directs federal agencies to identify and address disproportionate adverse impacts of federal actions to environmental and human health for minority and low-income populations. EO 13175 reaffirms the Federal government commitment to tribal sovereignty, self-determination, and self-government through requiring consultation and coordination with Indian tribes and tribal governments regarding issues that impact their communities.

Contacts: FHWA is the lead agency overseeing the environmental process for the proposed project and is responsible for environmental justice impacts as addressed by EO 12898. The Native Villages of Chenega and Tatitlek are federally-recognized tribes near the proposed project.

- FHWA, WFL, Stephen Morrow, Environmental Protection Specialist, stephen.morrow@dot.gov, 360-619-7811.
- Native Village of Chenega, Larry Evanoff, Chairman, brian.pillars@chenegafuture.com, 907-569-5688.
- Native Village of Tatitlek, David Totemoff, President, davidtotemoff@rocketmail.com, 907-325-2311.
- Native Village of Eyak, Kerin Kramer, Executive Director, kerin@eyak-nsn.gov, 907-424-7738.

Existing information: About 208 people live in Whittier (U.S. Census Bureau 2017). Minority populations make up about 35% of Whittier's demographics, and approximately 12% of the population lives below the poverty level. There are no federally-recognized tribes in Whittier. The geographically-closest tribes to the project area are the Native Village of Tatitlek (located about 60 miles west of Whittier), the Native Village of Chenega (located 42 miles southwest of Whittier in Chenega Bay), and the Native Village of Eyak (located about 100 miles west of Whittier in Cordova).

Recommendation: To meet the intent of EO 12898, the project should consult with FHWA, WFL regarding environmental justice populations to ensure that they are not disproportionately impacted by the project. Government-to-government consultation with tribes (Native Villages of Chenega, Tatitlek, and Eyak) should be conducted to meet the intent of EO 13175.

2.16 Noise

Applicable Regulations: The 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise regulation requires the investigation of traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location. If the highway agency identifies impacts, it must consider and incorporate all feasible and reasonable noise abatement into the project design.

Contact: FHWA, WFL, Stephen Morrow, Environmental Protection Specialist, stephen.morrow@dot.gov, 360-619-7811.

Existing information: The proposed project is approximately two miles from sensitive sound receptors, including Whittier residences. The project area is located on undisturbed, natural land.



Recommendation: Correspondence with the FHWA, WFL should be conducted to determine whether a noise impact assessment would be needed.

2.17 Navigable Waters

Applicable Regulations: Section 10 of the Rivers and Harbors Appropriation Act requires approval prior to work in, over, or under navigable waters of the U.S., or waters which affect the course, location, condition or capacity of such waters. State ownership of navigable water beds is an attribute of state sovereignty, and Alaska Statute (AS 38.04.062) maintains that ADNR manages Alaska navigable waters. Determining title navigability is dependent upon waterbody use resulting from physical characteristics and transportation methods.

Contact: ADNR-MLW, Southcentral Regional Land Office, Samantha Carroll, Easement Unit Manager, samantha.carroll@alaska.gov, 907-269-8548.

Existing information: According to a review of the ADNR Navigable Waters mapper on May 18, 2018, there are no navigable waters within the project area (ADNR-MLW 2018). The three nearest navigable waters are located approximately 250 ft. (at its nearest point), five miles, and seven miles from the project area (ADNR-MLW 2018; Table 3).

Table 3 – Navigable Waters

Recommendation: Impacts to navigable waters are not anticipated. Other than to summarize the known waterbodies in the environmental document, no additional analysis or action should be required.

2.18 Land Use and Transportation Plans

Applicable Regulations: The applicable local plans include the City of Whittier 2012 Comprehensive Plan Update and the Prince William Sound Economic Development District (PWSEDD) Prince William Sound 2011-2016 Comprehensive Economic Development Strategy.

Contacts: The City of Whittier manages implementation of its Comprehensive Plan Update, and the PWSEDD manages implementation of its Economic Development Strategy.

- City of Whittier, Annie Reeves, City Manager, asstmanager@whittieralaska.gov, 907-336-1490.
- PWSEDD, Wanetta Ayers, Interim Executive Director, pwsedd@gmail.com, 907-222-2440.

Existing information: The proposed project is consistent with the City of Whittier's 2012 Comprehensive Plan Update that identified construction of the Shotgun Cove Road Extension as the Chapter Nine: Community Goals, Policies and Actions first top priority (City of Whittier 2012). The project also supports the Comprehensive Plan goals regarding Whittier transportation facilities (Goal 1); expanded and improved facilities to meet Whittier's needs (Goal 2); land use and community growth (Goal 4); recreational opportunities (Goal 5); natural beauty capitalization (Goal 6); and economic opportunities (Goal 7). The project is also consistent with the economic and transportation goals of PWSEDD's Prince



William Sound 2011-2016 Comprehensive Economic Development Strategy (PWSEDD 2011). The project is not listed in the 2018-2021 Alaska Statewide Transportation Improvement Program.

Recommendation: Other than to summarize consistency with existing plans in the environmental document, no further analysis or actions should be required.

2.19 Indirect and Cumulative Impacts

Applicable Regulations: NEPA outlines general principles for considering cumulative and indirect effects to assist federal agencies with analyzing these effects during the NEPA process. The FHWA, WFL is the lead agency overseeing the environmental document for the proposed project.

Contact: FHWA, WFL, Stephen Morrow, Environmental Protection Specialist, stephen.morrow@dot.gov, 360-619-7811.

Existing Information: At the April 24, 2018 pre-NEPA agency scoping meeting, the City of Whittier discussed potential for future development, all of which was indicative of expressed and not planned development. The City of Whittier noted that it would like to eventually extend the roadway to Shotgun Cove, though it would not happen in the near-term (ten years or more) (SolsticeAK 2018). The City noted that the Forest Service is interested in creating a facility on its land at Trinity Point, the Alaska Marine Highway System ferry is interested in a possible relocation, there is interest in residential development, and there is interest in a Whittier airport relocation. Initially, these impacts may be minimized because the proposed project's initial approach would consist of the Shotgun Cove Road Extension serving as a summer road without year-round snow removal and maintenance (SolsticeAK 2018).

Recommendation: During the NEPA documentation phase, indirect and cumulative development impacts to all resources, and especially to applicable resource categories, (e.g., wetlands, water quality, EFH and fish streams, wildlife and migratory birds, air quality, social and economic issues, noise), should be documented and analyzed within the environmental document.

3.0 Conclusions

3.1 Recommendations for Analysis and Authorizations

The following additional information should be obtained and necessary analyses should be conducted, and the following permits and authorizations are anticipated (Table 4) for the proposed Shotgun Cove Road Extension project.

All information learned from surveys and additional research, consultations, permits and authorizations obtained should be summarized in the environmental document.

Issue	Recommended Survey/ Additional Information	Recommended Consultation	Recommended Permit/ Authorization
Historic Properties, Archeological and Cultural Resources	Complete a cultural and historic resources field survey.	Consult with SHPO under NHPA Section 106.	If needed, obtain an ADNR Alaska Cultural Resource Permit for the survey. Other authorizations N/A; document Section 106 consultation in the environmental document.

Table 4 – Recommendations Summary



Issue	Recommended Survey/ Additional Information	Recommended Consultation	Recommended Permit/ Authorization
Right-of-Way	N/A; summarize in the environmental document.	If Forest Service land access is needed, consult with Chugach National Forest for authorizations and to participate in the ANILCA process.	N/A; unless Forest Service land access is needed, then obtain necessary authorizations.
Wetlands and Waters of the U.S.	Conduct additional office- level wetland research.	Consult with USACE, Alaska District.	Obtain a USACE PJD. If fill is to be placed in waters of the U.S., modify permit POA- 2003-764-4
Floodplain and Regulatory Floodway	N/A; summarize in the environmental document.	Consult with ADCCED, Floodplain Manager for concurrence that there are no floodplains or potential flooding within the project area.	N/A
Water Quality	Survey and map drainages.	Consult with ADEC, Division of Water to obtain information regarding water quality impacts.	Obtain an ADEC Section 401 Water Quality Certification.
T&E Species	N/A; summarize in the environmental document.	Informally consult with USFWS, Anchorage Fish and Wildlife Conservation Office under ESA Section 7 to document and obtain concurrence of no listed species or critical habitat in the project area.	N/A
State Refuges, National Wildlife Refuges, Critical Habitat Areas and Sanctuaries	N/A; summarize in the environmental document.	N/A	N/A
EFH and Fish Streams	Support ADF&G's drainages and streams fish survey.	Consult with ADF&G, Division of Habitat regarding the Anadromous Fish Act and with ADF&G and NMFS regarding the MSFCMA.	Obtain an ADF&G Fish Habitat permit.
Wildlife, Migratory Birds, and Eagles' Nests	Document Bald Eagle Nests during other fieldwork efforts.	If warranted through direct USFWS correspondence, consult with USFWS, Anchorage Fish and Wildlife Conservation Office.	N/A.
Invasive Species	N/A; summarize in the environmental document.	N/A	N/A.
Section 4(f)/ 6(f) Resources	Prepare a Section 4(f) assessment.	Consult FHWA, WFL regarding potential impacts to Section 4(f) resources and Section 4(f) assessment. Consult with 4(f) property owners, including the City of Whittler.	N/A.
Hazardous Materials, etc.	N/A; summarize in the environmental document.	N/A	N/A
Wild and Scenic Rivers	N/A; summarize in the environmental document.	N/A	N/A
Air Quality	N/A; summarize in the environmental document.	N/A	N/A
Social and Economic Issues	N/A; summarize in the environmental document.	Consult FHWA, WFL regarding potential impacts to environmental justice populations. Consult with the Native Villages of Chenega, Tatitlek, and Eyak.	N/A
Noise	FHWA may determine that a noise assessment is needed.	Consult FHWA, WFL to determine whether a noise impact assessment would be needed.	N/A
Navigable Waters	N/A; summarize in the environmental document.	N/A	N/A



Issue	Recommended Survey/ Additional Information	Recommended Consultation	Recommended Permit/ Authorization
Land Use and Transportation Plans	N/A; summarize in the environmental document.	N/A	N/A
Indirect and Cumulative Impacts	N/A; summarize in the environmental document.	N/A	N/A

3.2 NEPA Documentation

All details obtained through additional information and analyses, consultations, and permits and authorizations, as described within this document and in the data gap analysis summary, should be documented in the proposed project's environmental document.

The environmental document type for the Shotgun Cove Road Extension will be determined during the environmental process and will be informed by the recommendations presented in this document, consultations with agencies, and the NEPA documentation phase. In 2003, an EA was completed for a similar and adjacent project consisting of the current extent of Shotgun Cove Road ending at Second Salmon Run. The proposed project should require a NEPA review and approval, which is likely to be an EA and Finding of No Significant Impact.



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