



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

Regulatory Division (1145)
CEPOA-RD
Post Office Box 6898
JBER, Alaska 99506-0898

PUBLIC NOTICE DATE: February 27, 2013
EXPIRATION DATE: March 29, 2013
REFERENCE NUMBER: POA-1966-43
WATERWAY: Kizhuyak Bay

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact **Heather Boyer** at (907) 753-2877, toll free from within Alaska at (800) 478-2712, by fax at (907) 753-5567, or by email at **Heather.L.Boyer@usace.army.mil** if further information is desired concerning this notice.

APPLICANT: City of Port Lions, Kathryn Adkins, Post Office Box 110, Port Lions, Alaska 99550, (907) 454-2332

AGENT: Solstice Alaska Consulting, Inc., Robin Reich, 2607 Fairbanks Street, Suite B, Anchorage, Alaska 99501, (907) 929-5960

LOCATION: The project site is located within Sections 4 and 5, T. 27 S., R. 22 W., Seward Meridian; USGS Quad Map NAME X-X; Latitude 57.8604° N., Longitude 152.8600° W.; at the end of Kizhuyak Drive, in Port Lions, Alaska.

PURPOSE: The applicant's stated purpose is to construct a new City Dock in Port Lions to support the existing ferry, barge, and other marine transportation services in Port Lions.

PROPOSED WORK: The applicant proposes to place 113,200 cubic yards (CY) of clean shot rock, 6,200 CY of underlayer rock, and 3,800 CY of riprap into 3.5 acres of tidelands for the construction of a new municipal and ferry terminal dock. Detailed project information and drawings are provided in the enclosed plan (sheets 1-23), dated December 2012.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the United States from activities involving discharges of dredged or fill material.

a. Avoidance: The applicant considered other construction designs that did not involve the placement of fill or required less fill. The applicant determined that these alternatives would not meet the purpose and need or would not be practicable due to cost and/or maintenance issues. Therefore, the placement of fill into waters of the United States could not be avoided. A detailed discussion of these alternatives is provided on attached sheets 3-5 of 24, dated December 2012.

b. Minimization: The applicant has proposed a variety of minimization measures and is detailed in the enclosed plan sheets 12-15 of 24, dated December 2012.

c. Compensatory Mitigation: The applicant has proposed to provide compensatory mitigation in the form of an in-lieu fee payment to The Conservation Fund at a 3:1 ratio.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRS constitutes the extent of cultural resource investigations by the District Commander at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: The project area is within the known or historic range of the southwest distinct population segment of northern sea otter (*Enhydra lutris kenyoni*), humpback whale (*Megaptera novaeangliae*), fin whale (*Balaenoptera physalus*), the western distinct population segment of Steller sea lion (*Eumetopias jubatus*) and the potential for members of the eastern distinct population of Steller sea lion to occur near the project area. The project is also within designated critical habitat for the northern sea otter and Steller sea lion.

We have determined the described activity may affect the threatened and endangered species and designated critical habitat listed above. We will initiate the appropriate consultation procedures under section 7 of the Endangered Species Act with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal

agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The project area is within the known range of squid, yellowfin sole, arrowtooth flounder, rock sole, flathead sole, sculpin, pacific cod, skate, walleye Pollock, chum salmon, pink salmon, Coho salmon, Chinook salmon, and sockeye salmon.

We are currently gathering information regarding these species and have yet to make a determination of effect. Should we find that the described activity may affect the species listed above, we will follow the appropriate course of action under Section 305(b)(2) of the Magnuson-Stevens Act. Any comments the National Marine Fisheries Service may have concerning essential fish habitat will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Perform work in or affecting navigable waters of the United States - Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).

(X) Discharge dredged or fill material into waters of the United States - Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
401 Certification Program
Non-Point Source Water Pollution Control Program

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WQM/401 CERTIFICATION
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501-2617
PHONE: (907) 269-7564/FAX: (907) 334-2415

NOTICE OF APPLICATION
FOR
STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. POA-1966-43, Kizhuyak Bay, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project, with respect to Water Quality Certification, may submit written comments to the address above by the expiration date of the Corps of Engineer's Public Notice.

City of Port Lions
City Dock and Ferry Terminal Replacement Project, Port Lions, Alaska
Project Description
December 2012

Overview

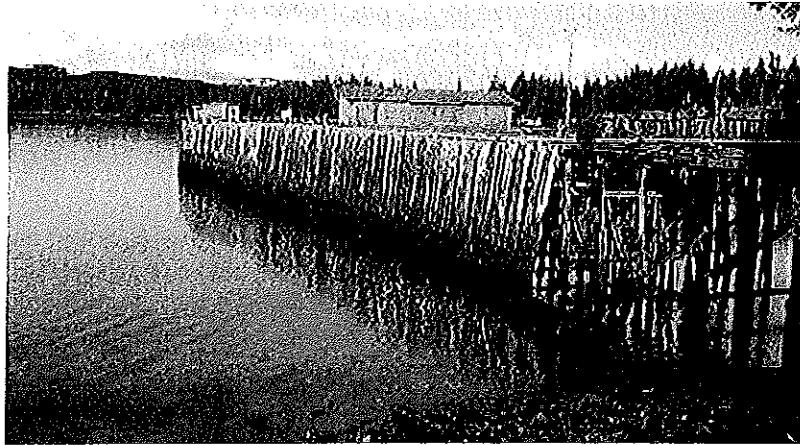
The City of Port Lions (City) in association with the Native Village of Port Lions, identified replacing the existing City Dock and Ferry Terminal as their number one priority for the community. Thus, with funding from the State of Alaska, the City proposes to construct a new municipal and ferry terminal dock to replace the existing dock serving the community. Once the new dock is constructed the existing dock would be removed. Port Lions is located on the northern coast of Kodiak Island, about thirty air miles northwest of the City of Kodiak and 260 air miles southwest of Anchorage (T027S, R022W, S04, Seward Meridian; USGS Quad Kodiak D-3, Figure 1). The new dock would be located approximately 30 meters (100 feet) south of the existing dock in Port Wakefield of Kizhuyak Bay.

Purpose and Need

The purpose of this project is to construct a new City Dock in Port Lions. A new dock is needed to support the existing ferry, barge, and other marine transportation services in Port Lions.

Port Lions is a remote coastal community on Kodiak Island with no road connection to the City of Kodiak or the mainland. The existing City dock provides transportation that is vital to the life of the community. The dock makes it possible to transport equipment and goods to and from Port Lions. The dock connects residents to the mainland via the Alaska Marine Highway System (AMHS) and provides a landing for fuel barges, commercial fishers, oil spill response vessels, and other vessels including those of the U.S. Coast Guard and the Alaska State Troopers. The community of Port Lions relies on the City Dock for cost effective delivery of cargo and fuel and for lower-cost passenger transport.

The existing City Dock was constructed with creosote treated timber piles in 1968. Age-related dilapidation and damage have left the dock in a deteriorated sub-standard state: the dock is in poor condition with inadequate lateral stabilization with a significantly reduced weight capacity. According to the October 2009 *City Dock and Ferry Terminal Repairs Technical Report*, prepared by the U.S. Army Corps of Engineers (USACE) with funding from The Denali Commission, the dock is in such a degraded condition that repairing the existing dock is not a viable option and replacement is necessary (USACE 2009). [Photographs 1 and 2 provide close-up and aerial views of the existing dock.]



Photograph 1. Existing Port Lions City dock
(Photo credit: Solstice, April 9, 2012)



Photograph 2. Aerial View of existing Port Lions City dock
(Photo credit: TerraSond, May 13, 2011)

The existing dock, due to its degraded and unsafe condition, no longer meets the current or future needs of the community. In order to continue using the existing dock the City has been required to reduce the weight limits that are allowed on the structure. The original weight capacity of the dock was 50,000 pounds but that capacity has been downgraded to 17,000 pounds in recent years and vehicle traffic is now limited to two at a time (USACE 2009; ADOT&PF 2011). These weight restrictions have resulted in negative impacts to dock users, including cargo vessels and fishers.

Barge service from Seattle was discontinued in 2005 due to changes within the shipping company. Residents now rely on a State ferry, beach landing craft, or plane for cargo deliveries: services that are less cost effective than larger barge service. Due to the weight restrictions on the City dock, large or heavy loads must be delivered to the small boat harbor or the barge landing ramp via beach landing craft.

Currently, fuel is delivered by tug-assisted barges to the existing dock. This method is the most cost-effective for the community because the fuel lines are located at the dock. The progressively

deteriorating condition of the dock could make it unusable for fuel barges within the foreseeable future; wherein alternate means of fuel deliveries would significantly increase the cost of fuel (USACE 2009). Further, most boaters in the community receive fuel at the dock and these users would have to incur additional expenses to purchase fuel elsewhere. This would also negatively impact tourism, an important industry for Port Lions, since tourists arrive aboard the State ferry and private vessels, which rely on the fuel facilities at the dock.

Currently, the AMHS's 300-foot *M/V Tustumena* provides ferry service to Port Lions, docking in the community two to three times per week year round. The *M/V Tustumena* was built in 1964 and is reaching the end of its usable life. Correspondingly, the existing dock cannot accommodate the newer and larger *M/V Kennicott*, which was built in 1998, because the water depth at the dock and the dock configuration are not sufficient to meet the safety docking requirements of this vessel. Thus, the new dock is intended and designed to accommodate the AMHS's approximately 400 foot long *M/V Kennicott*, which currently serves southwest Alaska communities.

If the new dock is not constructed prior to the retirement or overhaul of the *M/V Tustumena*, Port Lions could lose State ferry service which provides a critical passenger service to Kodiak, the mainland, and other transportation systems in Alaska; and, is an important cargo link for the community. At this time the AMHS states that it is unlikely that the *M/V Kennicott* would dock in Port Lions, however, currently they have no plans of relinquishing ferry service to Port Lions (USACE 2009).

Therefore, the new City Dock project would increase the safety, efficiency and reliability of marine transport while improving the community's infrastructure and quality of life.

Alternatives Analysis

A No Action Alternative and six potential build alternatives were considered for this project, as summarized below.

No-Action Alternative

The City considered a no-action alternative. Under this alternative the existing dock, which is in very poor condition, has significantly reduced weight capacity, and is beyond the stage of repair, would continue to serve the community. According to the USACE's October 2009 City Dock and Ferry Terminal Repairs Technical Report, within the next 50 years, the existing City Dock will become unable to accommodate users. The no-action alternative would continue to jeopardize the safety and efficiency of marine transport in the community.

This alternative was dismissed because it does not meet the project's purpose and need for supporting the existing and future ferry, barge, and other marine transportation services in Port Lions.

Repair the Existing Pile-Supported Dock

The City considered repairing the existing Dock. According to the 2009 USACE Technical Report, it is not feasible to repair the existing dock. The Corps report states that the existing dock is beyond repair due to the extent of damage and age-related degradation that has occurred.

This alternative was dismissed because it did not meet the project's purpose and need for supporting the existing and future ferry, barge, and other marine transportation services in Port Lions.

Construct a Concrete Launch Ramp

The City considered constructing a concrete launch ramp sited at the existing launch ramp (2009 USACE Technical Report). This alternative would accommodate barges and other vessels wishing to launch from shore. In 2009 the project cost for this alternative was estimated to be \$540,000.

This alternative was dismissed because it does not make any provisions for continued ferry service into Port Lions, and the launch ramp would not accommodate fuel barge deliveries. Fuel barges would be required to utilize beach landing craft to bring fuel to shore.

Construct a Pile and Concrete Deck Trestle

The City considered constructing a ferry trestle with mooring points and a fuel line (2009 USACE Technical Report). In 2009 the project cost for this alternative was estimated to be \$6,400,000.

This alternative was dismissed because it does not make provisions for heavy cargo service.

Construct a New Pipe Pile Supported Dock

The City considered constructing a steel pipe pile and concrete multipurpose dock with mooring and breasting dolphins, and an access trestle (2009 USACE Technical Report). This alternative would provide for continued ferry service from the M/V Tustumena, facilities for cargo loading and offloading, and continued fuel barge service. In 2009 the project cost for this alternative was estimated to be \$8,800,000.

This alternative was dismissed because of its shorter lifespan (50-60 years) than the preferred solid fill dock alternative (explained below). This alternative was also dismissed because of the costs of maintenance and upkeep that are common to pile supported docks but not needed with a solid fill alternative. The City wants to construct a community facility that will last well into the future without costing the community valuable resources. The pile supported dock is not reasonable considering that it would require maintenance and because it would have to be reconstructed in approximately 50 years.

Construct a Minimal Solid Fill Sheetpile Dock

The City considered construction of a minimal solid fill dock with a 530 foot long by 24 foot wide gravel causeway (2012 PND Design Study Report). The face of the dock would be positioned over the -25 foot mean lower low water (MLLW) contour at the mudline. This alternative provides adequate dock face width and mooring capability for the M/V Tustumena, which was requested by the AMHS. However, dredging would be required in the future to continue to accommodate the M/V Tustumena. Continued dredging would be costly and disruptive to the marine environment. This alternative would not accommodate the M/V Kennicott or other similar draft vessels, which are larger than the M/V Tustumena. In 2009 the project cost for this alternative was estimated to be \$10,867,000.

This alternative was dismissed because it would require maintenance dredging in the future in order to serve the M/V Tustumena, which would be costly to the City and would have long term expense and environmental impacts. In addition this alternative would not accommodate mooring of the M/V Kennicott or other similar draft vessels.

Construct a Solid Fill Sheet Pile Dock (Preferred Alternative)

The City is proposing to construct a new approximately 3.75 acre solid gravel fill sheet pile dock with a gravel and armor/rip rap embanked causeway, (February 2012 PND Design Study Report, August 2012

PND 50% Design Submittal). The dock would have an approximately 65 meter (215 foot) long fender face with a catwalk extending to breasting and mooring dolphins to accommodate the M/V Kennicott (Figure 2).

This solid fill dock was selected as the preferred alternative due to its longevity and sustainability. This solid fill design will minimize requirements for maintenance and repair, and is an optimal long term structure for meeting the Project's purpose and need. This solid fill dock would not require repairs, or construction of a replacement dock, in the foreseeable future. The sustainability and longevity of the dock will minimize disruption to the marine environment. Solid fill docks are oftentimes significantly more expensive than pile-supported docks due to the purchase and transportation of large amounts of material; however, Koniag, Inc. has committed to providing project materials at a competitive rate making this alternative feasible.

Preferred Alternative Details

The face of the dock would be positioned over the -9 meter (-30 foot) MLLW contour at the mudline in order to accommodate vessels similar in size to the M/V Kennicott and 30 meter by 120 meter (100 foot by 400 foot) barges at low tide. The new dock is located approximately 100-feet south of the existing dock along the same dock face alignment as requested by the AMHS and other users. The location of the new dock would eliminate any requirement for dredging and allow the existing dock to remain in service until the new dock is constructed. Erosion protection measures have been incorporated into the design including construction of an armor rock slope, with a median size of 5 tons, at the exposed southern end of the dock to protect the dock from exposure to waves from the northeast.

An approximately 190 meter long by 7.5 meter wide (620 foot by 24 foot) gravel causeway would provide access to the dock. To provide erosion protection from waves and currents along the causeway an armor rock slope with a median size of 5 tons would be constructed. A riprap slope would be constructed on the lee side of the causeway to provide erosion protection from waves and currents.

This project would provide fuel, water, and electrical services to the end of the dock. The fuel piping system, which would provide both gasoline and diesel, would consist of an above ground welded steel piping, a fueling dispenser, a dockside fuel barge connection, and a connection to the existing aboveground piping system. The fuel pipe would be protected from corrosion by a cathodic protection system. A water service connection would be extended from the existing water distribution system to a dock fire hydrant and the water building. The electrical system would consist of a distribution conduit and cables from the existing transformer to a new dock transformer servicing distribution panels for: 3 down shielded high mast lights at the dock, approximately 12 to 18 meters (40 to 60 feet) in height; 7 lights along the causeway, approximately 6 to 9 (20 to 30 feet) in height; and water and fuel dispensing facilities. Electric lines would not be aboveground.

The existing timber dock and guide/fender piles would be removed after construction of the new dock is complete.

Project costs are estimated to be approximately \$16,500,000, which includes the cost of mobilization/demobilization, rock materials, sheetpile, utilities, mooring and breasting dolphins, engineering, and removal of the existing dock.

The City of Port Lion plans to construct the new dock in two phases. At first the City will construct the gravel causeway and sheet pile dock. Next the City will construct the mooring and breasting dolphins and remove the existing dock.

Construction Methods and Equipment

The project would involve in-water construction, including the placement of fill and sheet pile driving for the new dock, and removal of piles at the existing dock. This project would not require dredging of native material, or blasting. If necessary, a City-owned, previously disturbed upland stockpile area will be used for contractor lay-down and staging of equipment and materials (Photograph 3). A barge would offload equipment and materials on the beach adjacent to this staging area (Figure 4). No improvements would be made to the beach. A City-owned, pre-existing concrete pad adjacent to the dock access road may be used as a temporary facility staging area (Photograph 4 and Figure 4).



Photograph 3. City owned, previously developed, upland staging area for equipment and materials.
(Photo credit: City of Port Lions, September 2012)

Placement of Fill

Approximately 107,419 cubic meters (140,500 cubic yards) of clean fill would be placed to construct the causeway and dock. Material would be transported to the project site by two 75 meter by 20 meter (250 foot by 70 foot) flat deck material barges. On site the contractor will have a third spud barge equipped with an excavator with a hydraulic clamshell used to place the material. Only one material barge would be at the project site at a time. While one material barge is placing fill, the other material barge would be in transit, allowing for a continuous supply of material to the project site. To minimize construction time, cost, and impacts, material would not be stockpiled; it is the intent that material would be directly placed from the material barge. Clean shot rock fill and armor rock for the causeway would be placed first, followed by clean fill for the dock.

Placement of Sheet Pile

Twenty meter (70 foot) long sheet piles would be driven at the -9 meter (-30 foot) MLLW contour, to support the face of the dock. Because partial fill at the face of the dock would be unsupported at the time of sheet pile placement, some of the fill would slough. The sheet pile wall would be driven approximately 6-9 meters (20-30 feet) deep, first through approximately 4 meters (15 feet) of sloughed fill material, and then through approximately 1-4 meters (5-15 feet) of native material, and finally into bedrock. Once the sheet pile wall is in place, the sloughed fill material would be recovered from the seabed with a crane and clam bucket to be used as dock fill material inside the sheet pile. All sheet pile installation would occur either from the dock or from a 50 meter by 10 meter (160 foot by 60 foot) barge equipped with a crane, a vibratory hammer, and an impact hammer. Construction of the sheet pile wall is expected to take approximately two months of ten-hour work days. Sheet pile driving would occur approximately seven and a half hours a day during that time, with no more than one and a half hours of consecutive pile driving at a time. Between periods of pile driving, sheet piles would be staged. Piles would be driven with a vibratory hammer. In the event of an isolated obstruction, an impact hammer would be used to complete pile driving. Engineers have estimated the total duration of impact pile driving would be less than 5 hours for the project.

Placement of Dolphins

Once the sheet pile dock is in place the fender piles and a mooring and breasting dolphin will be placed. The fender piles and mooring and breasting dolphin will be lifted with a 225 ton floating crane from a barge. An 0.06 meter (2 foot) diameter rock drill bit will be inserted through the fender pile, mooring pile, and dolphin pile so that they can be drilled with a percussion drill approximately 3.05 meters (10 feet) deep into bedrock. The drill will use air to chip away at the overburden and bedrock, and this material will be extracted through the top of the pile and back into the water. The rock cuttings will quickly settle back to the sea floor and will not generate a large turbidity plume.

Removal of Existing Dock

After construction of the new dock, the existing timber dock and guide/fender piles would be removed. The existing dock is supported by approximately 250 wooden piles. All pile removal would occur 50 meter by 10 meter (160 foot by 60 foot) barge equipped with a crane and vibratory extractor. The contractor would at first attempt a dead pull of each pile. If the pile does not come loose with the dead pull a vibratory extractor would be used to vibrate the pile for up to a minute before it would be pulled onto the barge. The piles would be transported to Washington for disposal. Removal of the existing dock is expected to take approximately eight work days, with up to a total of five hours of vibratory extraction.

Operations

The new dock will replace the existing dock as of a hub of marine transport for people and goods to and from Port Lions. The dock would accommodate the AMHS for regularly scheduled passenger service. Currently the AMHS services Port Lions twice a week between April and September. The dock will also provide a landing for cargo vessels, fuel barges, commercial fishermen, oil spill response vessels, and other vessels including the U.S. Coast Guard and the Alaska State Troopers.

The project area has been used for vessel docking since the existing dock was constructed in 1968. This project may cause a slight increase in vessel traffic in the project area because the new dock will be able to accommodate larger vessels than the existing dock and will be structurally sound so that it can be

used for storage and other marine needs that the existing dock, in its weight restricted capacity, is no longer able to serve.

Fueling

Boats currently fuel at the existing dock. The new dock would include similar fueling facilities. Fueling operations would follow U.S. Coast Guard standards and procedures. Fuel spill response equipment currently available at the existing dock would remain available at the new dock.

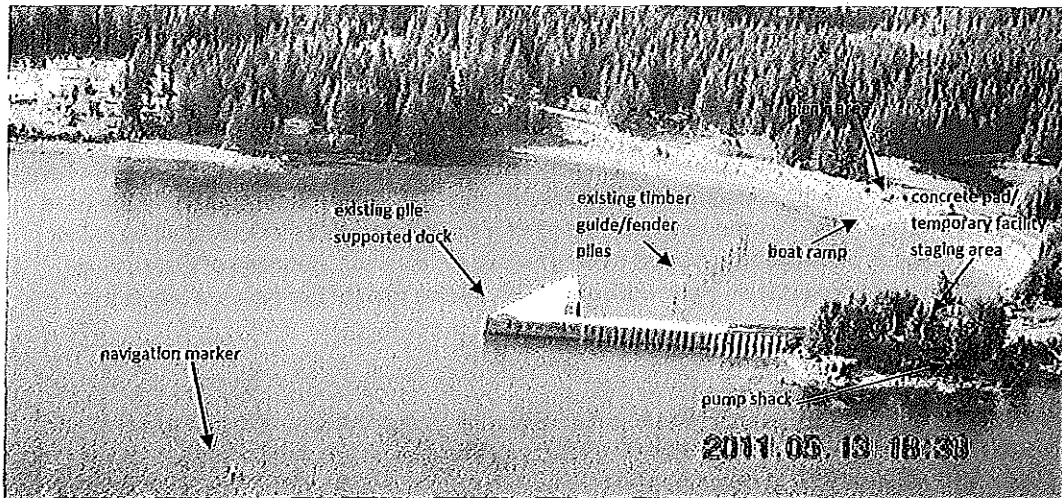
Timelines

Construction funding for this project was received from the State of Alaska in 2012, and construction is expected to take two summer seasons beginning in the spring of 2013 and ending in the fall of 2014. All in-water construction will be conducted between April 30 and November 1 to avoid impacts to overwintering Steller's eiders.

Project Impacts

Cultural Resources

The Area of Potential Affect (APE) of the project consists of the marine waters of Kizhuyak Bay, the existing pile-supported dock (Photograph 4), which will be removed once construction of the new dock is complete, the short roadway to the dock (Photographs 5 and 6), and the project staging areas. The temporary facility staging area would be located on the City-owned existing concrete pad, previously used by a cannery (Photograph 4 and Figure 4). The material and equipment staging area would be located on City-owned, previously disturbed, uplands (Photograph 3 and Figure 4).



Photograph 4. Aerial View of existing Port Lions City dock. (photo credit: TerraSond, May 13, 2011)



Photograph 5. View of existing dock access.
(Photo credit: Solstice, April 9, 2012)



Photograph 6. Vicinity of roadway to dock.
(Photo credit: Solstice, April 9, 2012)

Outside of the APE there is a lighted navigation marker located south of the project area, crab pots, a dilapidated pump house shack located along the dock access road, and public picnic structures located along the beach of Port Wakefield near the public launch ramp (Photograph 4). These structures will not be impacted by the project.

Intertidal, geotechnical, aerial, sonar, and seismic surveys have all been used to study the project area. These studies have included visual foot survey, high oblique aerial photography, sonar, and seismic of study the project area. Other than the existing City dock, these surveys have not revealed any other structures above or below water within the project APE.

A literature review of records on file at the Alaska Heritage Resources Survey (AHRs) database was conducted to identify potential historic properties in the area of potential effect of the project. The literature review revealed that much of the project area was previously studied by Pipkin in 2007 for bulk fuel facility upgrades in Port Lions. Based on this review there are no recorded sites within the APE. Five listed sites are located near the APE. The closest site to the project, KOD-051: Peregrebni Point 2 is 700 feet northwest of the project.

On September 17, 2012 Solstice discussed this project with Mark Rollins of the Alaska Department of Natural Resources Office of History and Archaeology. Mr. Rollins stated, given the information provided, that it was unlikely that the project would impact cultural or historic sites. He requested additional photographs of the project area and more information to make a final determination as to whether the project would affect cultural or historic sites. Photographs of the staging area were provided.

This project would avoid all known cultural and historic resources in the project area. The majority of the project would be built below mean lower low water; therefore, there is low potential for encountering unknown cultural and historic resources during construction. If cultural and historic properties are encountered, construction would stop and the State Historic Preservation Officer (SHPO) would be contacted immediately.

Tidelands Ownership

The City owns the tidelands under the existing ferry dock (ADL 32640); however, the new dock would not occur completely within the existing tidelands lease. The City has an application pending with the

Alaska Department of Natural Resources to expand the existing tidelands lease. Once construction is complete an approved as-built survey would be received, and the State would convey the property to the City. The transaction would be recorded at the State Recorder's Office.

Waters of the U.S.

Approximately 3.5 acres of Kizhuyak Bay (considered a navigable waters under Federal jurisdiction) would be filled by this project (Table 1). Fill would include clean shot rock (113,200 cubic yards), underlayer rock (6,200 cubic yards), and riprap (3,800 cubic yards). In addition, approximately 30 piles would be placed below MHW.

Table 1. Port Lions Dock areas of Impact

Potential Project Impacts	Area
Above High Tide Line (10.7 feet MLLW; Uplands)	0.25 acres
Below HTL (Section 404)	3.50 acres
Below MHW (Section 404 and Section 10)	3.50 acres
Total project impacts	3.75 acres

Removal of the existing dock would temporarily impact to navigable waters but would result in the creation of additional navigable waters once the dock is removed. The City will seek a Department of Army permit from the USACE for the placement of fill.

Water Quality

A Certificate of Reasonable Assurance will be obtained for the placement of fill during construction. The City will be required to submit a Department of the Army permit application to the USACE, and the Corps "Public Notice of Application for Permit" will serve as the Alaska Department of Environmental Conservation application for Certificate of Reasonable Assurance.

Endangered Species and Marine Mammals

Endangered Species Act (ESA) listed species that may occur in the project area include and the southwest distinct population segment of northern sea otter (*Enhydra lutris kenyoni*), humpback whales (*Megaptera novaeangliae*), fin whales (*Balaenoptera physalus*), the western distinct population segment of Steller sea lions (*Eumetopias jubatus*), and the eastern distinct population segment of Steller sea lions.

The project area contains critical habitat for the northern sea otter and Steller sea lions. In 2009, 5,900 square miles of nearshore marine waters, including all of the Kodiak Archipelago, were designated as Northern sea otter critical habitat. The essential elements of Northern sea otter critical habitat are shallow, rocky areas; nearshore waters; kelp forests; and sufficient prey (USFWS 2012).

In 1993 Critical habitat was defined for Steller sea lions as a 20 nautical mile buffer around all major haul-outs and rookeries, as well as associated terrestrial, air and aquatic zones, and three large offshore foraging areas (50 CFR 226.202). The closest Steller sea lion haul-out to Port Lions is a small haul-out located on the Port Lions side of Whale Pass. The haul-out is located within approximately 2 miles of the City dock and is used by approximately 30 sea lions in winter months (Wynne 2012).

The ESA listed Alaska breeding population of Steller's eider and two candidate species; the Kittlitz's murrelet (*Brachyramphus brevirostris*) and yellow-billed loon (*Gavia adamsii*), may occur within the project area.

According to the August 16, 2012 letter from National Oceanic and Atmospheric Administration (NOAA) Fisheries, ESA-listed Pacific salmon stocks are not be expected in the project area.

The ESA provides protection to threatened and endangered species. The Marine Mammal Protection Act (MMPA) provides protection to all marine mammals. Species listed as endangered or threatened under the ESA are, by default, also considered "depleted" under the MMPA. Permits and authorizations are required under the ESA and the MMPA to conduct activities that may result in the "taking" of a protected species. Take is defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any conduct". Take is defined by the MMPA as "to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal."

A Biological Assessment has been prepared for the USFWS on the anticipated potential impacts of the project on listed on USFWS managed ESA species (Steller's eider [*Polysticta stelleri*], and the southwest distinct population segment of northern sea otter) and USFWS designated critical habitat in the project area (for the southwest distinct population segment of northern sea otter). Because of the avoidance and minimization measures outlined in the Biological Assessment, and listed below, the project will avoid take of marine mammals and is not likely to adversely affect any marine mammals or critical habitat. Noise associated with in-water sheet pile driving at the new dock face and pile extraction of the existing dock would be localized and short-term, (no more than seven and a half hours a day for approximately two months and no more than five hours, respectively). In addition, measures would be implemented to avoid sea otters' and other marine mammals' exposure to noise associated with in-water pile driving. Minimal modifications to sea otter and Steller sea lion critical habitat are anticipated in the footprint of the dock; however, this area of modification is negligible in terms of the overall impact to the critical habitats.

Essential Fish Habitat

The following species may occur in the project area during at least one phase of their lifestage: squid, yellowfin sole, arrowtooth flounder, rock sole, flathead sole, sculpin, pacific cod, skate, walleye pollock, chum salmon, pink salmon, coho salmon, chinook salmon, and sockeye salmon (NMFS 2012). There are no anadromous fish streams near the project area (ADF&G 2012).

Several of these species are found in areas of specific, preferred substrate including sand, mud and gravel. A geophysical study of the area was conducted by TerraSond Limited in 2011 and determined the geology of the site consists mostly of sand with some shell hash and exposed bedrock. Based on the EFH listing and the geology of the site it is expected the above listed species could be present at the site (NOAA Fisheries 2012). Because of the conservation measures listed below, the project is not likely to impact EFH.

Avoidance, Minimization, and Mitigation Measures

Cultural Resources

This project would avoid all known cultural and historic resources in the project area. The majority of the project would be built below mean lower low water; therefore, there is low potential for encountering unknown cultural and historic resources during construction. If cultural and historic properties are encountered, construction would stop and the State Historic Preservation Officer (SHPO) would be contacted immediately.

Waters of the U.S. Mitigation Statements

Avoidance of impacts to waters of the U.S., including wetlands:

The purpose of this project is to construct a new ferry dock in Port Lions to replace the existing City dock that is in disrepair. To meet the project purpose and need of supporting the existing ferry, barge, and other marine transportation services in Port Lions, the project must fill approximately 3.50 acres of waters of the U.S.

Minimization of unavoidable impacts to waters of the U.S., including wetlands:

To minimize impacts to waters of the U.S. the project uses the most compact design possible, while meeting the objectives for the new dock. Catwalk extending to mooring and breasting dolphins north of the dock's face will service 400 foot long vessels thus minimizing the size of the dock face at 65 meter (215 foot). Unlike some of the dismissed alternatives, this alternative will not require dredging to construct or maintain.

Compensation for unavoidable impacts to waters of the U.S., including wetlands:

Compensatory mitigation is proposed. The City of Port Lions will provide compensatory mitigation at a 3:1 ratio to The Conservation Fund. Based on the amount of fill (3.50 acres) and the compensatory mitigation ratio, the total in-lieu fee for the project would be \$230,000. Please see the attached letter from The Conservation Fund for more information.

A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

Marine Mammals and Birds

The following measures will be implemented to avoid any impacts to ESA-listed species:

- No clearing will take place between April 15 and July 15 in areas where there are trees present or between May 1 and July 15 where there are shrubs to protect migratory birds.
- All in-water work will be conducted between April 30 and November 1 to avoid impacts to overwintering Steller's eiders.
- Plans for avoiding, minimizing, and responding to releases of sediments, contaminants, fuels, oil, and other pollutants will be developed and implemented.
- USCG fueling requirement and spill response procedures will continue to be implemented.
- A Spill Prevention, Control, and Countermeasure Plan will be implemented to reduce the possibility and impact of a spill.
- Spill response equipment will be kept on-site.

- Potential for contamination from fuel spills will be minimized by using double-wall containment tanks equipped with additional external spill containment for fueling operations, overfill warning devices, and positive shutoff overfill prevention valves.
- The project will avoid installing overhead structures such as transmission lines.
- Overhead structures will be co-located on existing utility poles.
- New transmission lines will be installed underground.
- Lights on the dock will be shielded to focus the beams downward to minimize the amount of light transmitted toward the horizon and reduce the likelihood of attracting birds and chance of collision with overhead structures.
- The USFWS's recommended draft protocols for avoiding harm to sea otters from noise during pile driving will be implemented. See below.

USFWS Observer Protocols for Impact and Vibratory Pile Driving

USFWS's Observer Protocols for Impact and Vibratory Pile Driving will be adopted during project construction (USFWS 2012b). Based on USFWS guidelines for the type of piles used in the project, harm could occur if sea otters are within 300 meters (985 feet) of sheet pile vibratory driving or old pile extraction or within 500 meters (1,640 feet) of impact driving. The following measures will be used to avoid harm or injury to sea otters:

Ramp-up procedures

Ramp-up or soft-start procedures will be applied to all pile driving activities. These procedures help to warn the animals and provide a chance for animals to leave the area prior to working at full capacity. For impact pile driving, contractors will be required to provide an initial set of three strikes from the hammer at 40% energy, followed by a 30-second waiting period, then two subsequent three-strike sets at the reduced energy. For vibratory pile driving, sound should be initiated for fifteen seconds at reduced energy followed by a 30-second waiting period. This procedure would be repeated two additional times.

Monitoring the "hazard area"

1. All observers must be capable of spotting and identifying sea otters and recording applicable data during all types of weather in which pile driving will be conducted.
2. Observers will be given the authority to halt project activities if a sea otter is present and to provide clearance for work to resume after the animal leaves on its own.
3. Observers will have no other duties during the observation period in order to ensure that watching for protected species remains the observer's main focus.
4. Observers will watch for sea otters within the hazard area for 30 minutes prior to pile driving. Observations will continue for the full duration of pile driving activities.
5. If one or more sea otters occur within the noise impact area before or at any time during pile driving, the observer will report the presence of the animal and work will cease or be postponed until the sea otter leaves the hazard area of its own accord.
6. If a sea otter is seen within the hazard area during the 30-minute observation period prior to start-up, the observation period need not start over once the animal moves out of the hazard area, but work may not commence until the animal is outside the area.
7. A lead observer should be responsible for implementing the protocols. The lead observer may select and train additional observers, but should remain accountable for their performance.
8. Observers must be trained in the monitoring methods to include the following topics:
 - Types of construction activities that require monitoring

- Observation methods and equipment
 - Observation locations
 - Distance estimation
 - Data to record (parameters) and field forms
 - Species identification
9. Tools, such as a laser range finder or buoys placed at known distances away from the shoreline will be used to aid the observer in estimating distances.
 10. Observers will use some or all of the following standard equipment:
 - High power spotting scope and/or reticle binoculars, (e.g. 10 x 50 Bushnell or equivalent)
 - Range finder, (e.g. Leica LRF 1200 or equivalent)
 - GPS and compass with identified/established targets
 11. Observation stations will be established to maximize visibility of the hazard areas.
 12. Observation stations may be established aboard moored vessels and stationary skiffs.
 13. Use of a particular station may depend upon weather conditions. If the observable range from any one vantage point is limited due to weather or construction activity, the observer will use an established station that has a better vantage point for monitoring.
 14. If visibility is poor due to weather or low light, noise-generating activities will not commence until viewing conditions make it possible to clear the entire hazard area.
 15. During periods of low visibility, work will commence if additional observers are added in multiple stations to provide complete visual coverage of the entire hazard area.
 16. Observers will record basic metrics such as start and end times, date, GPS location of the observation station, name of observers, type of work occurring, numbers and locations of observed sea otters, environmental conditions (air temperature, wind speed and direction, sea state, swell height, tide stage, visibility, percent cloud cover, and precipitation), documentation of work shut downs or postponements due to presence of sea otters, and if so, for how long.
 17. Other data that may be recorded includes: records of sea otter movements (direction and distance of travel), and the times during which the movements occur, categorical assessment of sea otter behaviors during the observation period. For example, whether sea otters are resting, feeding, grooming, engaging in social interactions, or travelling from one place to another. Behavioral changes during the observation period will be recorded with comments on whether these behaviors appear to be associated with the work being conducted, and if so, what indications lead to that conclusion.
 18. All observation records will be made available to the USFWS upon request.
 19. A summary report will be provided to the USFWS upon request annually or after completion of a project lasting less than one year.

If warranted by new information, and observer protocols are revised by the USFWS, the revised protocols will be incorporated into construction monitoring for this project (USFWS 2012b).

EFH/Fisheries

The following measures will be implemented to avoid and minimize impacts to EFH:

- 1) The project has been designed so that no dredging will take place. Dredging is described by the NOAA Fisheries as being associated with adverse impacts such as turbidity effects, release of oxygen consuming substances, noise disturbance, contaminant release, and other disturbances affecting

aquatic life. As such it is recommended by the NMFS that dredging be avoided when possible. This project will not utilize dredging.

- 2) **This project will utilize a vibratory hammer as much as possible to decrease intense sound pressure waves.** To minimize injury to fish as a result of intense sound pressure levels the sheet piles will be driven with a vibratory hammer. In the event of an obstruction an impact hammer would be used to complete pile driving. This use of an impact hammer is expected to take five hours or less during all of construction. Vibratory hammers produce sounds of lower intensity and fish do not habituate to the sound and exhibit an avoidance response keeping them at a safer distance.
- 3) **The project has minimized the areal extent of any fill in EFH and is proposing to mitigate for all non-avoidable adverse impacts as appropriate.** To minimize impacts to EFH and waters of the U.S., the Dock Replacement Project uses the most compact design possible, while meeting the vessel demands in the area. In addition, the project would use sheet piles to contain the fill footprint. For unavoidable impacts, the City proposes to provide compensatory mitigation at a 3:1 ratio to The Conservation Fund.
- 4) **This project considers alternatives to the placement of fill into areas that support EFH species.** Other alternatives were seriously considered, but dismissed, because they did not meet the Project's purpose and need or were not suitable to the preferred alternative. (See detailed Alternatives Analysis section of this document.)

References

- Alaska Department of Transportation and Public Facilities (ADOT&PF). 2011. *2011 Shore Facilities Condition Survey Report: Port Lions*. As viewed in July 2012 at http://dot.alaska.gov/project_info/docs/2011_Shore_Cond_Rep-224-236.pdf
- Allen, B.M., and R.P. Angliss 2011. Alaska marine mammal stock assessments, 2010. U.S. Department of Commerce, NOAA Technical Memorandum. NMFS-AFSC-223, 292 p.
- National Oceanic and Atmospheric Administration (NOAA) Fisheries. 2012. Habitat Conservation/Protection National Marine Fisheries Service. *Essential Fish Habitat Mapper*. As viewed July 2012 at: <http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html>
- NOAA Fisheries. 2012. NOAA Fisheries Office of Protected Resources. *Steller Sea Lion*. As viewed July 2012 at: <http://www.nmfs.noaa.gov/pr/species/mammals/pinnipeds/stellersealion.htm>
- NOAA Fisheries. 2012. File Number POA-1966-43, Kizhuyak Bay. *Species List letter re: City of Port Lions City Dock Construction*. Letter from James Balsiger, NMFS Alaska Region to Kate Arduser, Solstice Alaska Consulting, Inc.
- NOAA Fisheries. 2011. *Impacts to Essential Fish Habitat from Non-fishing Activities in Alaska*. Prepared by National Marine Fisheries Service, Alaska Region.
- Pipkin, Mark E. 2007. Archaeological Monitoring for the Port Lions Bulk Fuel Upgrade Project, Kodiak Island, Alaska. Prepared for CRW Engineering Group.
- PND Engineers, Inc. (PND). February 2012. *Design Study Report: Port Lions City Dock and Ferry Terminal Improvements*.
- PND. 2012. *Port Lions Ferry Terminal Limited Geotechnical Investigation*.
- TerraSond. 2011. *Port Lions City Dock Engineering and Design Survey*. Project Summary Report prepared for the Native Village of Port Lions.
- U.S. Army Corps of Engineers (USACE), October 2009. *City Dock and Ferry Terminal Repairs Technical Report – Port Lions, Alaska*.
- U.S. Fish and Wildlife Service (USFWS). May 2012. Endangered Species. *Threatened and Endangered Species Northern Sea Otter (Southwest Alaska Distinct Population Segment)*. As viewed July 2012 at: http://alaska.fws.gov/fisheries/endangered/pdf/Nseaotter_factsheet_v2.pdf
- USFWS. 2012. Consultation Number 2012-0129. *Species List letter re: Kodiak Port Lions City Dock and Ferry Terminal replacement*. Letter from Kim Klein, USFWS to Kate Arduser, Solstice Alaska Consulting, Inc.

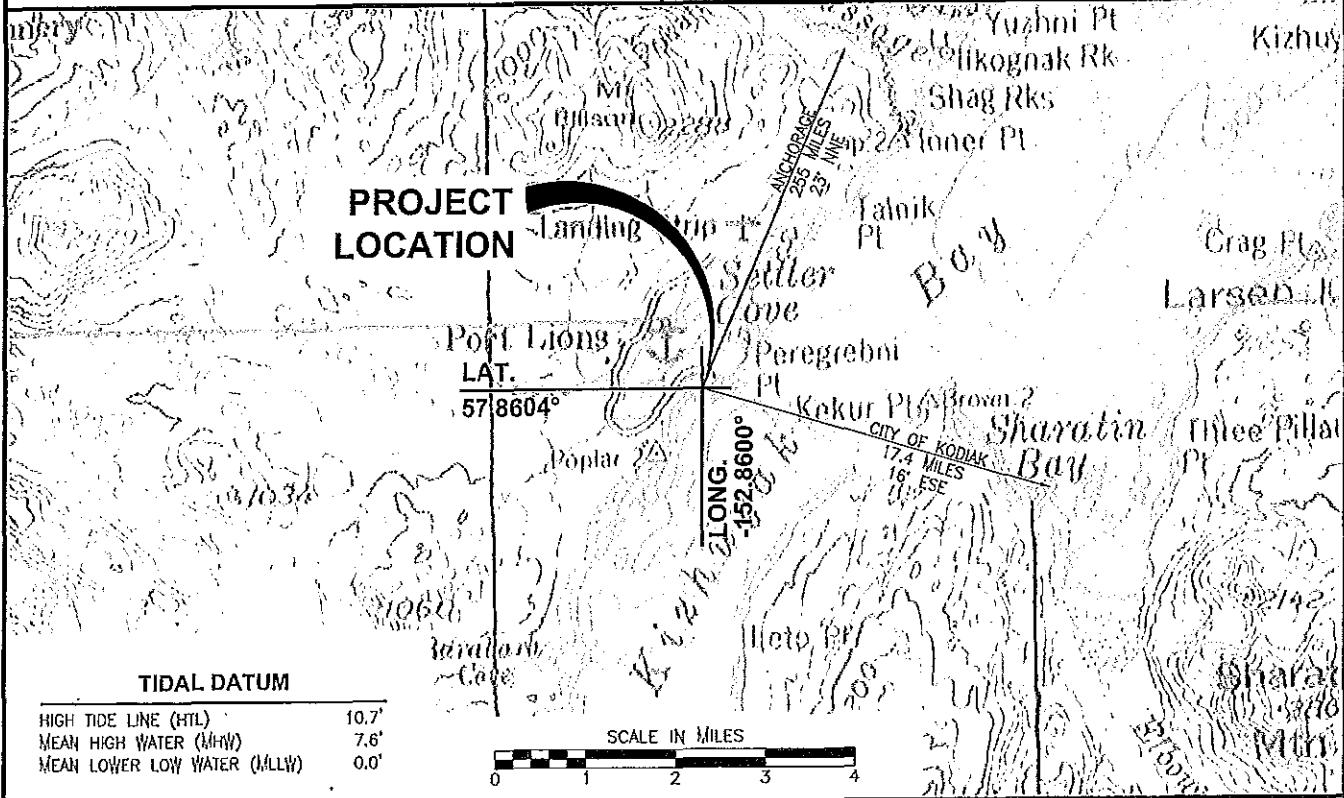
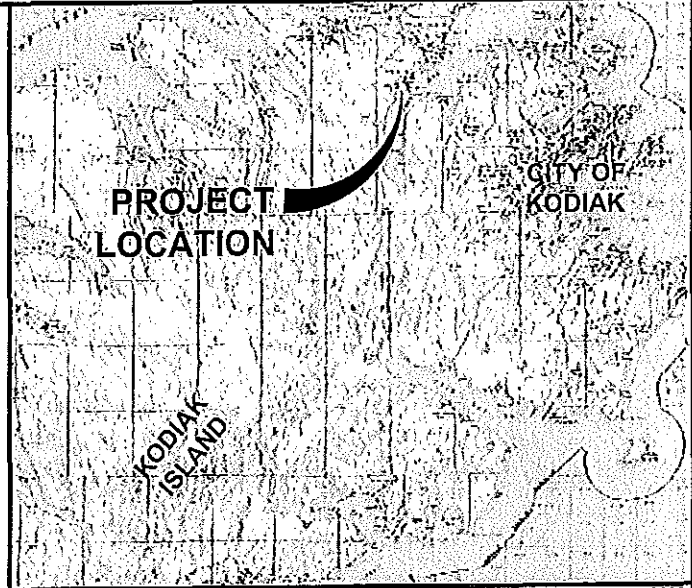
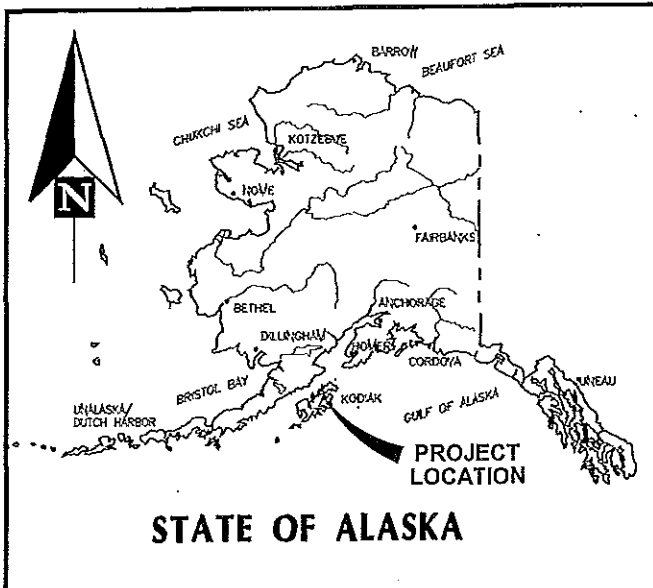
USFWS. 2011. *Anchorage Fish and Wildlife Field Office - Section 7 Consultation Guide Grid Block 16*. As viewed July 2012 at:

http://alaska.fws.gov/fisheries/fieldoffice/anchorage/endangered/pdf/Consult_Grid_Block_16.pdf

USFWS. 2011. *Endangered, Threatened, Proposed, Candidate, and Delisted Species in Alaska (Updated April 21, 2011)*. As viewed July 2012 at:

http://alaska.fws.gov/fisheries/endangered/pdf/consultation_guide/4_Species_List.pdf

Wynne, Kate 2012. Personal communication between Kate Arduser (Planner, Solstice Alaska Consulting) and Kate Wynne (University of Alaska Professor and Marine Mammal Specialist based in Kodiak, Alaska) on July 2, 2012 regarding marine mammals near Port Lions, Alaska.



PROPOSED ACTIVITY:
 REPLACE EXISTING TIMBER DOCK WITH BULKHEAD DOCK AND CAUSEWAY

DATUM: 0.0' MLLW

PROJECT LOCATION:
 SEC. 4 & 5, T27S, R22W, S.M.
 LAT.: 57.8604' LONG.: -152.8600'

VICINITY MAP AND PROJECT LOCATION

CITY OF PORT LIONS
 P.O. BOX 110
 PORT LIONS, ALASKA 99550



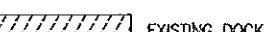

PORT LIONS REPLACEMENT DOCK
POA-XXXX-XXX

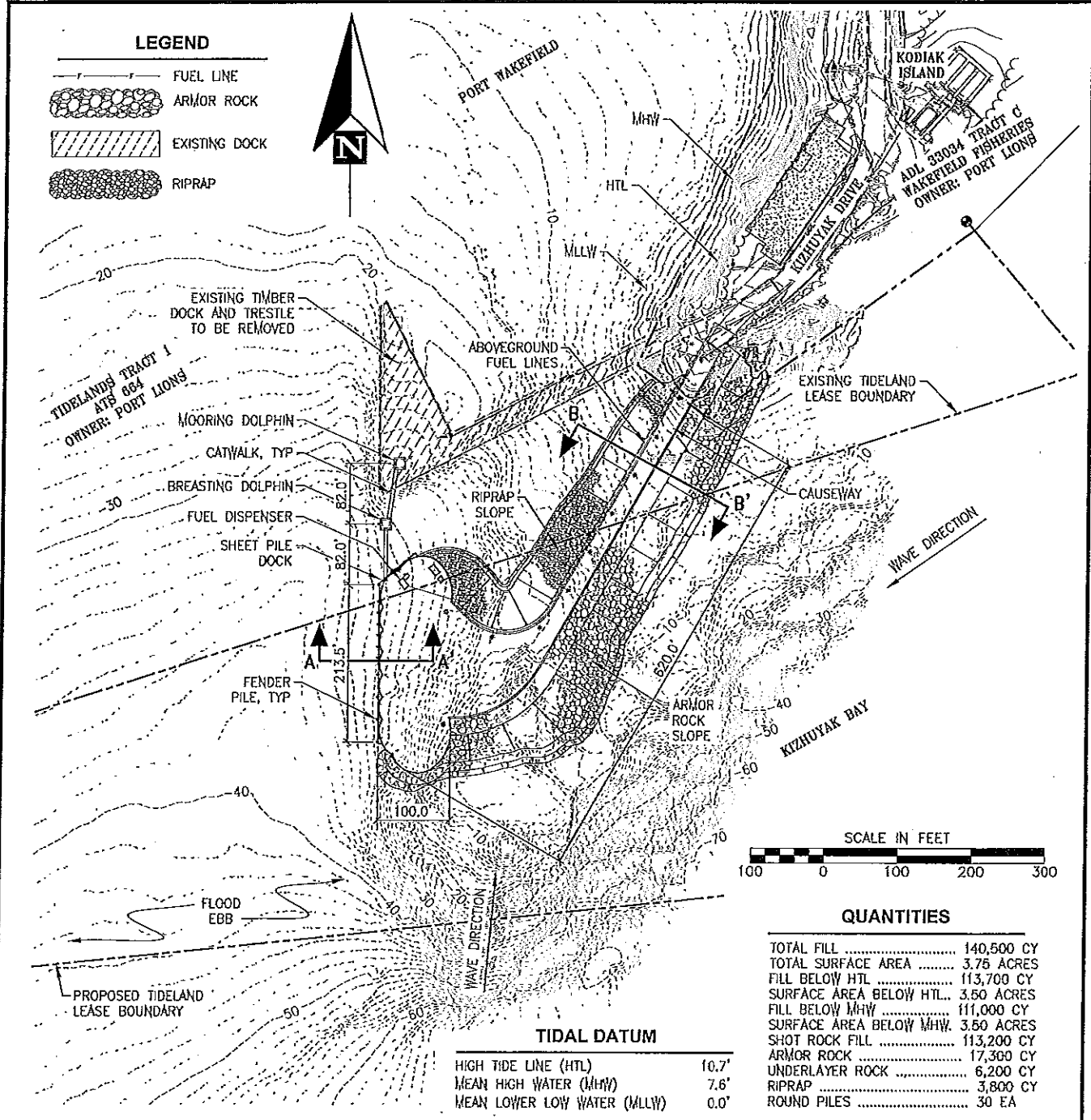
ON: KODIAK ISLAND, AK
AT: PORT WAKEFIELD

4/20/11 11:20 Port Lions Ferry Terminal E Drawing/Permitting/01 Location.dwg, 01, 11/9/2012 9:51:17 AM, James, 1:1

City of Port Lions
 POA-2012-920
 Kizhuyak Bay
 December, 2012
 Sheet 18 of 23

LEGEND

-  FUEL LINE
-  ARMOR ROCK
-  EXISTING DOCK
-  RIPRAP



TIDAL DATUM

HIGH TIDE LINE (HTL)	10.7'
MEAN HIGH WATER (MHW)	7.6'
MEAN LOWER LOW WATER (MLLW)	0.0'

QUANTITIES

TOTAL FILL	140,500 CY
TOTAL SURFACE AREA	3.75 ACRES
FILL BELOW HTL	113,700 CY
SURFACE AREA BELOW HTL	3.50 ACRES
FILL BELOW MHW	111,000 CY
SURFACE AREA BELOW MHW	3.50 ACRES
SHOT ROCK FILL	113,200 CY
ARMOR ROCK	17,300 CY
UNDERLAYER ROCK	6,200 CY
RIPRAP	3,800 CY
ROUND PILES	30 EA

PROPOSED ACTIVITY:
 REPLACE EXISTING TIMBER DOCK WITH BULKHEAD DOCK AND CAUSEWAY

SITE PLAN

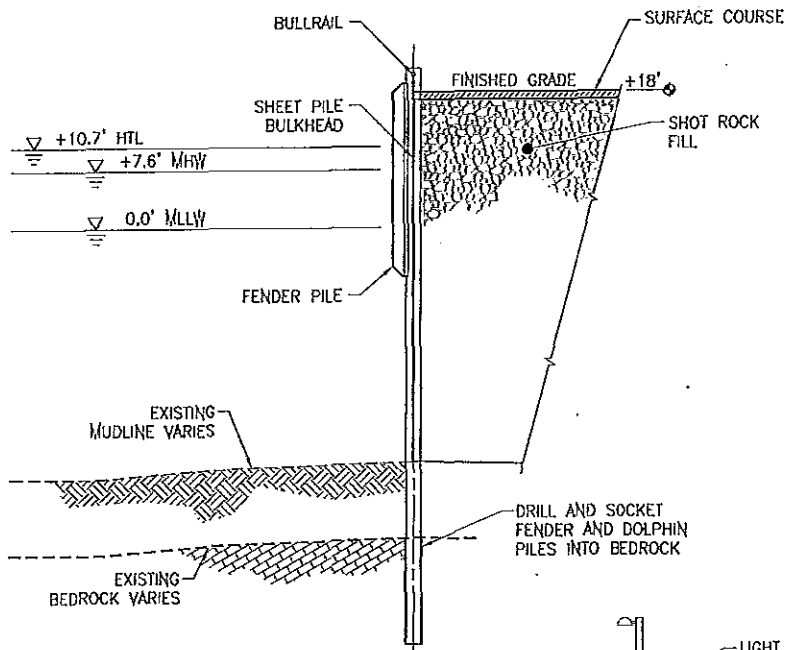
CITY OF PORT LIONS
 P.O. BOX 110
 PORT LIONS, ALASKA 99550

**PORT LIONS
 REPLACEMENT DOCK
 POA-XXXX-XXX**

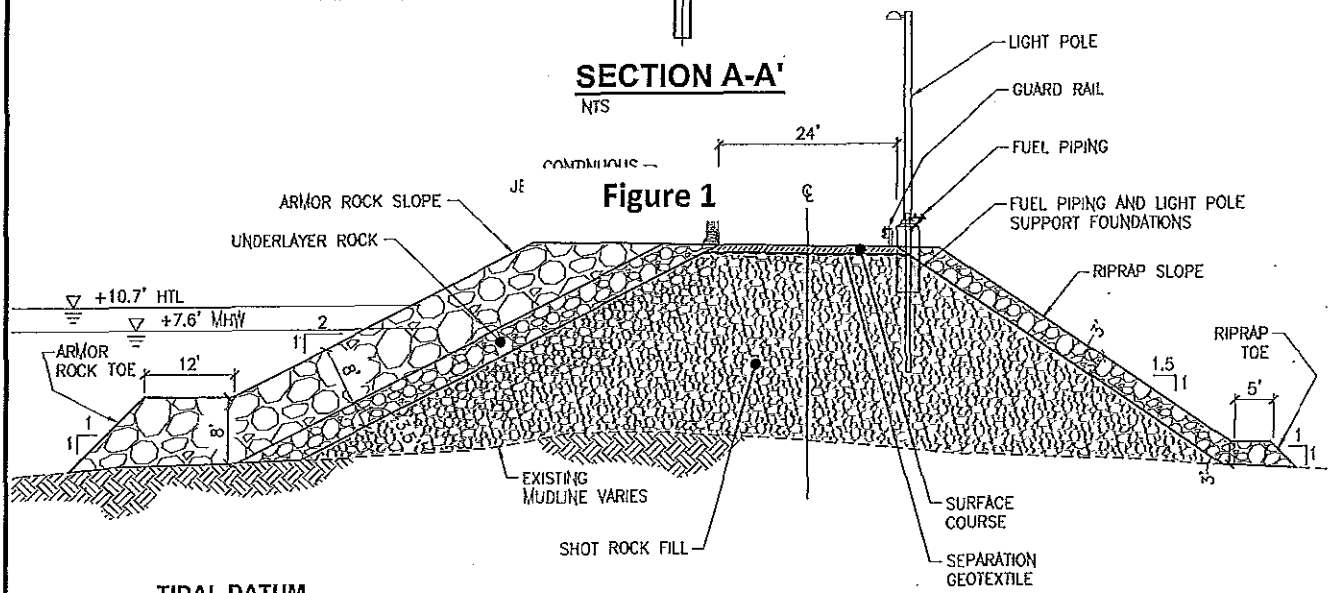
ON: KODIAK ISLAND, AK
 AT: PORT WAKEFIELD

DATUM: 0.0' MLLW
 PROJECT LOCATION:
 SEC. 4 & 5, T27S, R22W, S.M.
 LAT.: 57.8604' LONG.: -152.8600'

City of Port Lions
 POA-2012-920
 Kizhuyak Bay
 December, 2012
 Sheet 19 of 23



SECTION A-A'
NTS



SECTION B-B'
NTS

MATERIAL PLACEMENT
SHOT ROCK FILL - PUSHED INTO PLACE
ARMOR/RIPRAP - SELECTIVELY PLACED

TIDAL DATUM

HIGH TIDE LINE (HTL)	10.7'
MEAN HIGH WATER (MHW)	7.6'
MEAN LOWER LOW WATER (MLLW)	0.0'

PROPOSED ACTIVITY:
REPLACE EXISTING TIMBER DOCK WITH BULKHEAD DOCK AND CAUSEWAY

DATUM: 0.0' MLLW

PROJECT LOCATION:
SEC. 4 & 5, T27S, R22W, S.M.
LAT.: 57.8604' LONG.: -152.8600'

TYPICAL SECTIONS

CITY OF PORT LIONS
P.O. BOX 110
PORT LIONS, ALASKA 99550

PORT LIONS REPLACEMENT DOCK POA-XXXX-XXX

ON: KODIAK ISLAND, AK
AT: PORT WAKEFIELD

City of Port Lions
POA-2012-920
Kizhuyak Bay
December, 2012
Sheet 20 of 23

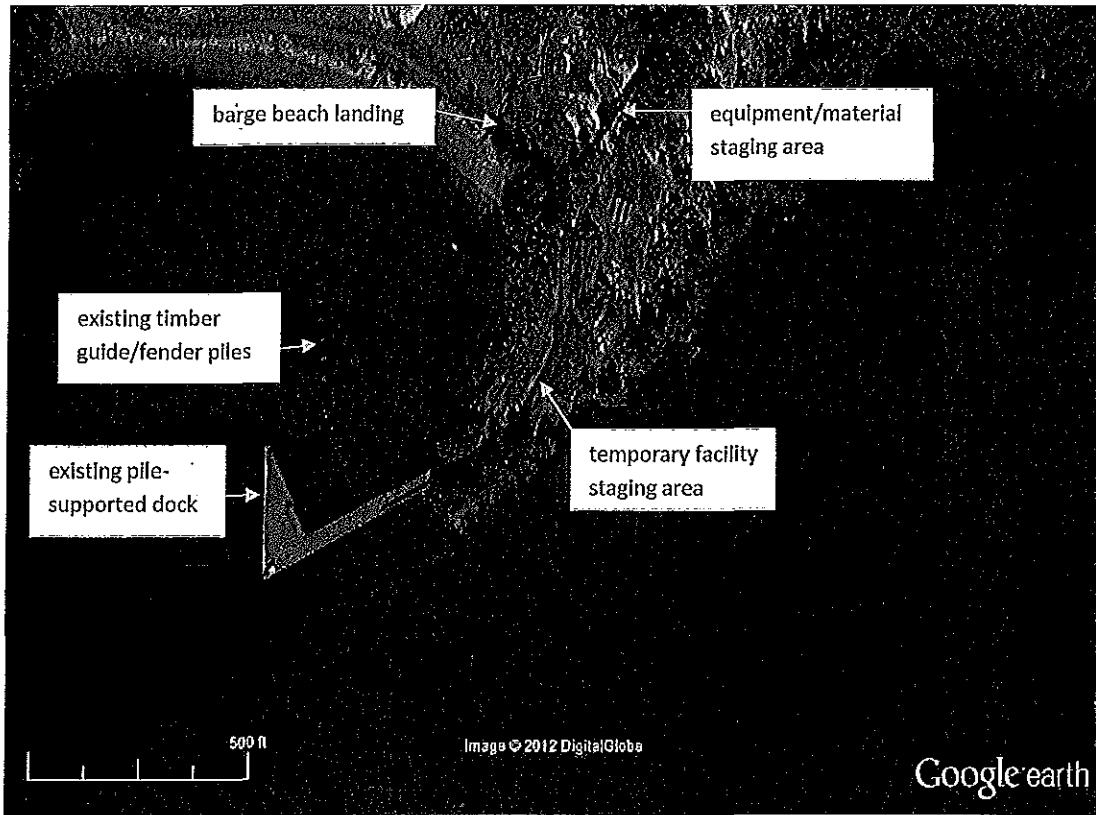


Figure 4. Project Staging Areas

THE CONSERVATION FUND

BRAD A MEIKLEJOHN
ALASKA REPRESENTATIVE
2727 HILAND ROAD
EAGLE RIVER, ALASKA 99577
(907) 694-9060
BRADMEIKLEJOHN@AOL.COM

October 11, 2012

Robin Reich
Solstice Alaska Consulting, Inc.
2607 Fairbanks Street, Suite B
Anchorage, AK 99503

RE: Compensatory Mitigation for Port Lions Dock, Port Lions, Alaska

Dear Ms. Reich,

This letter is in response to your request for an estimate of the appropriate in-lieu fee compensatory mitigation associated with the replacement of the dock in Port Lions, Alaska. Based on your correspondence, the project will impact 3.5 acres of wetlands.

The new rule on compensatory mitigation, published in April 2008 by the Environmental Protection Agency and the U.S. Army Corps of Engineers, provides the legal framework for mitigating wetland losses for all regions of the country, including Alaska. The guiding principle of "no net loss" of the nation's water resources is reiterated and reinforced in the new mitigation rule.

The Conservation Fund has a Memorandum of Agreement with the Alaska District of the U.S. Army Corps of Engineers to receive in-lieu fee compensatory mitigation. As provided by that agreement, The Conservation Fund uses the mitigation fees to purchase and protect high-priority wetlands. However, preserving some wetlands does not mitigate the loss of others and does not fulfill the "no net loss" mandate. As a result, the 2008 rule requires that mitigation ratios higher than 1:1 be used where preservation is used as mitigation.

Based on your characterization of the wetlands I will assume that the required mitigation ratio for this project will be 3:1. Therefore, the compensatory mitigation for this project must be sufficient to preserve 10.5 acres of wetlands.

In calculating an estimate of the appropriate in-lieu fee, we consider the following:

1. The mitigation ratio.
2. The costs to purchase land, including but not limited to the purchase price, appraisals, surveys, title research, legal expenses and closing costs.
3. The costs to own and manage land in perpetuity, including but not limited to physical and legal defense, property taxes, stewardship fees and management expenses.

City of Port Lions
POA-2012-920
Kizhuyak Bay
December, 2012
Sheet 22 of 23

For this project, the land cost is calculated at a rate of \$20,000 per acre, resulting in a total land cost for 10.5 acres of \$210,000. Transaction and stewardship costs are estimated at \$21,000. Thus, the total in-lieu fee for this project is \$231,000.

This is an estimate and is subject to revision. The actual required compensatory mitigation will be based on the acreage and mitigation ratio described in the permit issued for this project by the U.S. Army Corps of Engineers.

Please provide me with a copy of the permit issued by the U.S. Army Corps of Engineers for this project prior to making payment. We retain the right to revise this estimate based on information contained in the permit.

Payment can be made by sending a check to:

The Conservation Fund
2727 Hiland Road
Eagle River, Alaska 99577

Please include the permit number and the name and contact information for the individual at the Corps of Engineers who is handling the permit. We will notify the permittee and the Corps once payment is received.

Please contact me at (907) 694-9060 if I can be of further assistance.

Sincerely,



Brad Meiklejohn
Alaska Representative