MEMORANDUM

STATE OF ALASKA
Department of Natural Resources
Division of Coastal and Ocean Management

TO: Erin Allee
Natural Resource Manager I

DATE: January 30, 2009

TELEPHONE: 465-8797

FROM: Randy Bates
Director

SUBJECT: DFG Important Habitat Designation Request – Taku River (Tulsequah Mine Barging Project), AK 0810-08J

As the lead agency for the Alaska Coastal Management Program (ACMP), the Division of Coastal and Ocean Management within the Department of Natural Resources retains the departmental authority to designate certain areas (i.e., important habitat, subsistence use areas, natural hazard areas) within the context of an ACMP consistency review.

In a memorandum addressed to you, dated December 17, 2008, the Alaska Department of Fish and Game, Division of Habitat (DFG) requested that DNR designate the Taku River as "important habitat" for purposes of the Taku River, Tulsequah Mine Barging Project. On January 8, 2009, DCOM requested additional information from DFG regarding their request. On January 15, 2009 DCOM received DFG's response to the request for additional information.

DCOM has evaluated the DFG's request to designate the Taku River as important habitat against the requirements of 11 AAC 112.300(c)(1)(B) and hereby grants the DFG request for the important habitat designation for this consistency review as follows:

> The entire mainstem of the Taku River below the ordinary high water mark, including the east channel around Canyon Island.

The DFG request for designating the Taku River as an important habitat area includes an analysis asserting that the proposed barging project may have a direct and significant impact on coastal water. That analysis is included in the January 15, 2009 DFG memo to DCOM, with relevant parts included below:

> *"Coastal water" is defined at 11 AAC 112.990(5) and "means those waters, adjacent to the shorelines, that contain a measurable quantity or percentage of sea water, including sounds, bays, lagoons, ponds, estuaries and tidally influenced waters." In 1995, Sandwell Inc. conducted a hydrographic survey of the Taku River and verified that the upper extent of tidal influence is near Taku Lodge, about 16 miles upstream of the river mouth. However, we do not know if the tidal influence at Taku Lodge contains a measurable quantity of sea water, or if the influence is freshwater backed-up as a result of the advancing tide.*
>
> *Redfern's proposed barging activity may result in direct and significant impacts to aquatic species and their habitats in "coastal water," as defined by your regulation. Because of this concern, ADF&G submitted an*

extensive request for additional information (RFAI) to determine if there could be adverse impacts on fish and fish habitat. The Alaska Departments of Environmental Conservation and Natural Resources also submitted RFAIs to determine potential impacts caused by the proposed barging activity, including potential impacts to coastal waters. Direct and significant impacts to aquatic species in coastal water in the Taku River could affect commercial and recreational fisheries that occur in the Taku Inlet marine environment.

In the non-aquatic season, Redfern proposes to transport the ACB using tow vehicles along frozen gravel bars and ice, crossing up to 16 open water leads in the mainstem of the Taku River. In the aquatic season, Redfern proposes to transport the ACB in the east channel around Canyon Island using a combination of shallow-draft tugs and tow vehicles. In both operating seasons, the proposed barging activity could pose direct and significant risks to fish and fish habitat in the river by causing scouring of the riverbed substrate, disruption to salmonid rearing and spawning habitat, and disruption to spawning substrates used by eulachon. Changes to habitat affecting fish populations could affect seals, bears, and other species for which fish are an important resource. Changes to open lead formations may pose direct risks to moose during winter months when their survival is already compromised due to limited food availability and vulnerability to predation.

Potential impacts from the proposed barging activity in both operating seasons could pose risks to fish and fish habitat within coastal water. Additionally, potential impacts that could occur upstream of coastal water could impact fish and fish habitats downstream in coastal water.

As required under 11 AAC 112.300(c)(1)(B)(i), the department (i.e., DNR) has reviewed the information provided by DFG, has reviewed the coastal zone boundary information relevant to the Taku River, and has concluded that the use of the habitat has or is likely to have a direct and significant impact on coastal waters. DNR's decision is based on the general relationship between uses of the habitat and the direct and significant impact of those uses on coastal waters, as well as the founding principles on which the coastal zone boundaries were originally established in 1979. First, as contained in DFG's memoranda, the Taku River is a significant spawning, rearing, and overwintering area for anadromous fishes as well as habitat for other species. Any use of the habitat that would limit or displace the anadromous fishes or other species may have a net adverse effect. Second, the entirety of the Taku River is included within the coastal zone boundaries of both the State and the City and Borough of Juneau. Those coastal zone boundaries were established to "...extend inland and seaward to the extent necessary to manage a use or an activity that has or is likely to have a direct and significant impact on coastal water." [11 AAC 114.220(c)]. **It is important to note that DNR's decision is not based on a definitive assertion of potential impacts from the proposed activity – in fact, neither DNR nor DFG have established a definitive impact.**

As required under 11 AAC 112.300(c)(1)(B)(ii), the DFG request for designating the Taku River as an important habitat area includes scientific evidence (as defined at 11 AAC 114.990) showing the Taku River to be biologically and significantly productive. That evidence and analysis were included with the December 17, 2008 memorandum requesting the designation, and was supplemented in the January 15, 2009 memorandum. The summary of the relevant parts and scientific evidence are included below, as characterized in DFG's January 15 memorandum:

The Taku River (Stream No. 111-32-10320) supports all five species of salmon (chinook, chum, coho, pink and sockeye), Dolly Varden char, cutthroat trout, steelhead trout, and eulachon. The literature citations we previously provided include specific information on fish life histories in the Taku River. Generally, adult salmon and char migrate upriver to spawn early-summer through fall, and trout migrate upriver to spawn in spring. Salmon and

char eggs deposited in the streambed hatch in winter and newly emerged alevins reside in gravel substrate until spring. Trout eggs hatch in summer, and alevins emerge from gravel substrate in late-summer. Pink and chum salmon fry outmigrate to sea soon after emerging from the gravel in spring. Chinook, coho and sockeye salmon, char and trout rear in freshwater for 0-3 years, depending on species, before outmigrating to sea during the spring and summer months. Eulachon broadcast spawn in the lower river during spring, eggs hatch 3-4 weeks later, and larvae drift to the estuary to rear.

The Taku River also provides important habitat for many wildlife species. Harbor seals use the river and estuary during spring and summer to feed on fish, and often haulout on exposed sand and gravel bars in the river. Harbor seals also haulout on river ice during winter and spring. The river corridor provides habitat and foraging opportunities for moose and wolves year-round, while brown bear use the area extensively during the spring, summer, and fall months. In addition, many avian species use the river for foraging and nesting during the spring and summer.

DCOM notes there is no regulatory requirement in which requests to designate areas during the course of an ACMP consistency review be "connected" to potential impacts of the proposed activity on such areas. Rather, DCOM's role in evaluating the proposed designated area is to determine if DFG has addressed the regulatory requirements and presented the material necessary to justify the designation for purposes of the consistency review. In this instance, DFG has done so.

However, once a designation is made, in order for consistency review comments referencing the Habitats statewide standard to be considered during the consistency evaluation portion of this review, such comments will need to clearly and definitively draw a connection between the project and the anticipated impacts of the activity on the designated areas.

It is important to note that with this designation, the habitats subject to the designation "... must be managed to avoid, minimize, or mitigate significant adverse impacts to the special productivity of the habitat." [11 AAC 112.300(b)(9)(B)]. This ACMP enforceable policy supplements the existing applicable ACMP enforceable policies and agency authorities (i.e., AS 16 and AS 38).

11 AAC 110.215(a)(1)(C) specifies that a consistency review packet for a proposed activity must include an evaluation of how the proposed activity is consistent with the enforceable policies of the ACMP. With this designation, and as part of the response to the request for additional information issued on December 31, 2008, the applicant must demonstrate how the proposed activity is consistent with the statewide Habitat standard at 11 AAC.112.300(b)(9)(B). I recommend that you communicate with the applicant on this issue, and in light of this memorandum granting the DFG certain designated areas, provide the opportunity for the applicant to amend or supplement its consistency evaluation, as appropriate.

If you or the review participants for this project have any questions about the designated area, the process used to evaluate the approvability of the designated area, or anything else as it relates to this consistency review, please do not hesitate to contact me.