

## **Chapter 4**

### **Identification of Critical Habitat or Essential Physical and Biological Features for this Species**

As defined in the Endangered Species Act (ESA), critical habitat includes geographic areas and features essential to the conservation of the species, which may require special management consideration or protection. This includes specific areas outside of the area presently occupied where such areas are essential to the conservation of the species. Therefore, in order to identify critical habitat or essential physical elements for the Cook Inlet stock of beluga whales, the Service must be able to identify their geographic range and features important to conservation. The 2007 proposed rule (19857) concludes “*the present range of the Cook Inlet beluga is limited to Cook Inlet waters north of a line from Cape Douglas to Cape Elizabeth.*” However, published literature documents beluga sightings throughout the Gulf of Alaska. The literature also addresses speculation of why the more recent sightings are primarily in upper and middle Cook Inlet. Previous tagging studies in Cook Inlet were very limited and the resulting movements may be limited because beluga whales tend to move in family units. With no current tagging studies and no studies across several family units, the information acquired on the geographic range of the Cook Inlet stock of beluga whales is of limited value in assessing which areas should be considered for critical habitat designation.

In our upcoming discussions with the National Marine Fisheries Service (Service), we will urge that a final conservation plan include additional research on whale movements. For example, we will propose additional tagging of the Bristol Bay stock of beluga whales that may occasionally disperse into the Gulf of Alaska based on current genetics analysis of the Cook Inlet whales. (See Chapters 1 and 3) We will also urge that acoustics research be carefully designed with multidisciplinary experts to identify beluga whale, orca, prey, and other species movements throughout the Inlet.

As described for the development of a final conservation plan (Chapter 3), the State of Alaska (State) urges that the Service establish a multidisciplinary team to convene a series of workshops whose goals are to identify studies that can address specific objectives for the acquisition of need information on the beluga whales and the essential features of their habitat. As written in the draft conservation plan, the Service places a heavy influence on the upper part of Cook Inlet without explaining why other areas are not important. It may be possible that belugas are affected by factors in the lower part of the Inlet, or even in the Gulf of Alaska, particularly in winter when they are feeding in deeper waters for resident fish and shellfish. Other federal agencies have considerable information on federal fisheries research and monitoring in the lower Inlet and outer waters that should be added to the data base. We recommend that the proposed habitat “GIS” coverage be expanded to include bathymetric information, hydrology, prey distribution, and geologic information for the whole inlet.

An evaluation of habitat must also consider that the geology and hydrology of Cook Inlet is dynamic. For example, the 1964 earth quake caused the Chickaloon Bay and other parts of Turnagain arm to rapidly subside but some areas appear to be slowly returning to its pre-quake

levels. The delta created by the sediments from the Susitna River is ever-changing in its form and water channels. These are all factors that could affect the physical habitat of the Cook Inlet stock of beluga whales. Many agencies and institutions have considerable data which need to be evaluated in addition to prey abundance, movements, and other factors. We conclude that the Service has not fully evaluated available scientific and commercial data and urge that a comprehensive and coordinated effort be implemented before any determinations of critical habitat are made. In Chapter 5, we also provide substantial information as requested in the 2007 proposed rule (19861) on the economic attributes within the Cook Inlet region that could be impacted by critical habitat designation. As part of that evaluation, pursuant to section 4(b)(2) of the ESA, we urge the Secretary of Commerce to consider the economic impacts of such a designation in Cook Inlet and exclude areas, which provide significant economic benefit to the State and region, from designation of critical habitat because there is no scientific information that such exclusion will result in extinction of the species.