

POTENTIAL CMI STUDIES, MMS ALASKA ENVIRONMENTAL STUDIES PROGRAM

Region: Alaska

Planning Areas: Beaufort Sea

Title: Subsistence use and knowledge of Beaufort Salmon Populations

Period of Performance: Phase I One Year. Phase II Two Years

Description:

Background

The National Marine Fisheries Service has defined the entire OCS of the Beaufort Sea as Essential Fish Habitat (EFH) for the five Alaskan salmon species (king, sockeye, coho, chum & pink). As a result, proposed oil and gas developments in the Beaufort OCS require consultation between MMS and NMFS over the effects of such developments on essential salmon habitat.

Although salmon EFH has been designated, salmon are rare in the Beaufort Sea. During the summer, adult pink and chum salmon are present in the Colville River, and its tributaries, and caught in small subsistence fisheries by Native Alaskans living in the area. Previous studies have not demonstrated significant numbers of adults of other species. Immature life stages and successful spawning have not been found in the Beaufort Sea area.

However, local residents have testified in MMS hearings that more and more salmon are being caught in the subsistence fisheries. Additionally, salmon populations on the North Slope could expand if the recent trend of mild winters continues. There are no recent estimates on the extent of subsistence use of salmon. Additional information about the status of salmon populations along the Beaufort Sea Coastline is needed so analysts can prepare quality, project-specific, EFH consultations, as well as, the anticipated programmatic EFH consultation supporting the Alaska Region's next 5-year development plan.

Objectives

1. Locate and document the principle areas used by salmon near OCS developments in the Beaufort Sea.
2. Determine whether local streams or lakes are used for spawning by Alaskan salmon.
3. Determine whether local salmon populations are viable by documenting the presence of juvenile life stages in streams, lakes or along the coastline.

Methods This study has two phases, with the second phase being contingent upon recommendations resulting from analysis conducted in the first phase.

In the first phase, the investigator will:

1. Conduct a brief literature review.

2. Assemble relevant traditional knowledge (TK) by reviewing existing archives and holding conversations with knowledgeable Natives. Prepare a synthesis report encompassing literature and TK and recommendation as to whether Phase II, field research, is needed and if so, recommend methodology to be used to conduct field investigations necessary to fill data gaps.

In phase two, the investigator will:

1. Conduct fieldwork, as recommended using methodology and study designs developed in phase one.
2. Prepare a report updating information about salmon in the Beaufort Sea.

Date Information Required: Information is needed as soon as possible for input in EFH consultations for NEPA documentation for proposed Beaufort Sea Lease Sales and for analysis of possible Development and Production Plans.

Phase I will result in a synthesis report of available data that will be available in year 1.
Phase II will result in a report of field research that will be available in year 2 of Phase II.