

**YUKON FLATS NATIONAL WILDLIFE REFUGE
EVALUATION OF THE EFFECTS ON SUBSISTENCE USES AND NEEDS
(ANILCA SECTION 810 EVALUATION)**

The U.S. Fish and Wildlife Service, acting for the Secretary of Interior, is required by Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) to evaluate the effects on subsistence uses and needs in determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands on national wildlife refuges in Alaska. The evaluation of effects of this proposed action/use on subsistence uses and needs is documented below. If this evaluation concludes with a finding that the proposed action would result in significant restriction to subsistence uses and needs, and we wish to proceed, we must initiate further procedural requirements of Section 810.

PROPOSED ACTION/USE:

The purpose of the proposed use is to collect geophysical data to support the analysis of oil and gas potential on private lands owned by Doyon Limited, Inc. (Doyon) and Dinyee Corporation (Dinyee). Seismic programs are conducted along transects over sedimentary basins with favorable structure for oil and gas reserves. It is important to gather the data along a continuous line for accurate results and the Refuge lands lie between the areas of interest. Access is requested to allow continuity for accurate data collection. All data will be provided to the Service to be used as needed. Doyon will contract CGG VERITAS Land, Inc., to conduct the seismic work during the winter (March to April) of 2010.

The majority (72 percent) of the project will be conducted on Doyon- and Dinyee-owned lands. However, small portions of Refuge lands are adjacent to or surrounded by Doyon and Dinyee lands that are being evaluated for oil and gas potential. Lines will form a grid pattern across the area of interest, and extend outside the boundaries of Doyon and Dinyee lands in three instances; each line will not extend into Refuge lands more than approximately 5 miles. Three lines also will cross Refuge lands surrounded by Doyon/Dinyee lands and will not exceed approximately 6 miles each. Total length of transect lines on Refuge lands are not to exceed 27 linear miles. A base camp will be established on Dinyee and/or Doyon lands. No equipment, fuel storage, or recording equipment shelters will be on Refuge lands.

The drilling equipment will be transported to the base camp/staging area by helicopter or airplane. Bags of geophones and cables will be prepared at the base and transported by slings to the survey lines using helicopter. Drills and compressors also will be transported to drilling sites along the survey line by helicopter sling. The survey crew will travel the survey line by snowmachine if sufficient snow cover exists (6 inches), if not, then by snowshoes. The survey crews will use roving RTK (GPS) units equipped with telemetry radio and 12 channel GPS cards to move along pre-chained lines and collect data from each receiver and shot point location. All drilling will be accomplished with six helicopter portable drills. The six drills will be run on a 14-hour shift per day and average 10 holes per day. Two kg of geoprime with seis smart cap detonation will be used as explosive devices. The smart cap system brings a new level of safety

to drilling and recording operations by allowing the hole to be detonated only with a designated blaster. Historic places have been identified and will be avoided during survey activities.

EVALUATION:

1. Subsistence Resources, Uses and Needs in the Affected Area:

Subsistence activities can occur year-round. Rural residents rely upon customary and traditional use of natural resources in the Refuge. Moose, caribou, black bear, brown bear, sheep, wolf, lynx, wolverine, grouse, and ptarmigan are hunted across the Refuge generally from late summer through late winter or early spring. Moose are the most significant source of protein among big game. Subsistence and commercial trapping also occur on the Refuge and can be an important source of supplemental income to some residents. Species trapped include wolf, wolverine, marten, lynx, muskrat, beaver, fox, and otter. Waterfowl are primarily hunted in the spring and early summer, but also can be hunted again in the late summer to early fall. Fish are the most important subsistence resource to villagers in and around the Refuge, comprising up to 90 percent of the total subsistence harvest by weight. The Yukon River and its tributaries are the primary source of fish within the Refuge. Local residents use a variety of fish species to meet their subsistence needs, but salmon are the most important fish resource to residents of Yukon River villages. Although some species of fish are available throughout the year, most fishing takes place during the summer months. Other activities include seasonal wood gathering and berry picking (Yukon Flats NWR Annual Narrative, 2002).

2. Concerns Expressed by Potentially Affected Subsistence Users and/or the State:

The applicant, Doyon Limited, Inc., has conducted outreach within Stevens Village, the closest community to the proposed activity. The Stevens Village community and Tribal Council (Council) confirmed their support of the project by passing Resolution 09-33 dated November 9, 2009. The Service has contacted the Council and confirmed its support for the project.

3. Effects of Proposed Action or Use on Subsistence Uses and Needs:

Subsistence activities occur throughout the year on Village, Doyon and Refuge lands. Activities such as trapping and winter moose hunts may be affected by the increased activity of people including snowmachine and helicopter use to support the proposed activity. If seismic activities are conducted into late April, early migrating species such as raptors, mallards, and northern pintails may be minimally impacted. Resolution 09-33 passed by the Council ensures the Council and Village are supportive of the proposed activity as long as it “is undertaken in such a way as to protect its traditional lands, waterways, wildlife and residents and with appropriate consultation with the Council of Stevens Village.”

4. Availability of Other Lands for the Purposes Sought to be Achieved:

The majority (72 percent) of the project will be conducted on Doyon and Dinyee owned lands. However, small portions of Refuge lands are adjacent to Doyon and Dinyee lands that are being evaluated for oil and gas potential. Transect lines crossing Refuge lands are not to exceed 27 linear miles. The concurrence of this activity would allow Doyon Limited, Inc. to conduct a thorough seismic assessment of their lands and those of Dinyee Corporation.

5. Other Alternatives Which Would Reduce or Eliminate Use of Public Lands Needed for Subsistence Purposes:

One alternative considered was to limit seismic work to inholdings (inclusive of village selected lands) and restrict use of Refuge lands on the exterior boundaries of the proposed project area. This alternative was rejected by the proponent because it would not maximize seismic findings.

FINDING:

Based on review and evaluation of information indicated above and in the supporting references below, I have determined that the proposed action will not result in a significant restriction of subsistence uses.

AGENCY DECISION:

A finding of no significant restriction in subsistence uses completes the Section 810 requirements. The proposed action may be authorized.

SIGNATURE:

Refuge Manager

Date

SUPPORTING REFERENCES:

Stevens Village Council Resolution 09-33, November 9, 2009.

Sumida, V.A. 1988. Land and resource use patterns in Stevens Village, Alaska. Tech. Pap. No. 129, Alaska Dept. of Fish & Game, Subsistence Div.

Yukon Flats NWR Annual Narrative, 2002. Unpublished.