

# ***Northeast National Petroleum Reserve-Alaska Reconnaissance-Level Airborne Contaminants Study***

**DE-IA26-01BC15236**

## **Program**

This project was funded as one of the National Petroleum Reserve-Alaska (NPR-A) Research and Monitoring Team studies in 2001.

## **Project Goal**

The goal of this project is to conduct a reconnaissance-level inventory of watershed characteristics and baseline heavy metal and petroleum product contamination levels in the surface waters and sediments within four watersheds in the Northeast NPR-A.

## **Performer**

*Bureau of Land Management  
Fairbanks, AK*

## **Project Results**

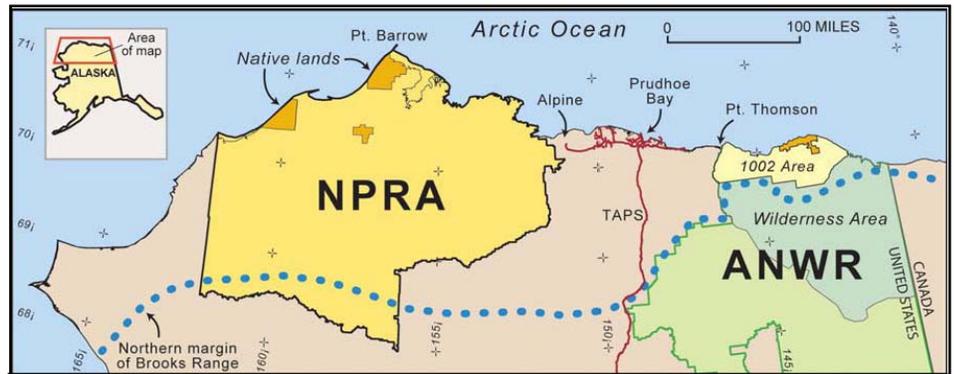
The major achievements of the project include the collection of initial stream flow data and regimes in the Judy and Fish creeks and Ublutuoch and Kalikpik river drainages in the Northeast NPR-A. Three years of watershed characterization studies have been conducted to set a baseline for stream flows. Initial environmental sampling for heavy metals and petroleum hydrocarbons in each of the streams was conducted in the summer of 2004.

## **Benefits**

This project will set a baseline for existence of airborne-related contaminants residing in the surface waters and sediments in four watersheds within the Northeast NPR-A. This information will be useful for monitoring acute and cumulative impacts resulting from oil and gas development and can be used to track impacts related to cross-continent transport and deposition of heavy metals.

## **Background**

This project was requested by the National Petroleum Reserve-Alaska Research and Monitoring team in 2001. This project may be used as a base for future monitoring studies focusing on biological contaminant



Location of the National Petroleum Reserve-Alaska.

transport to subsistence-harvest foods such as mammals, fish, and/or berries.

## **Project Summary**

This study is conducting a limited airborne contaminants impact monitoring program for the first oil development activities within the Northeast NPR-A. This study will be used as a scientific basis to verify projected impacts from development to help further minimize impacts in four of the watersheds where activities are projected to occur. Conducting contaminants studies within NPR-A will result in a greater understanding of the current conditions of the land and provide for the protection of environmental quality and sustainable utilization of natural resources, including their use by local indigenous population in Alaska's Arctic.

## **Current Status (August 2005)**

The project is in its fourth summer of data collection. The study is being redesigned to utilize spring snow sampling (heavy metals) studies being conducted by Dr. Matthew Sturm, Cold Regions Research and Engineering Laboratories. The project will be extended to January 1, 2007, to enable compilation of 2006 snow data.