

and other marine mammals. The result is that fall whaling crews must move further out to sea, thereby increasing both the danger and the costs of the hunt. There is also considerable anxiety over the contamination of wild foods and the environment from drilling cuts, mudflows, and production water wastes and petroleum discharges. Many of the residents in the smaller villages question the long-term consequences of altering freshwater habitats by draining lakes to build ice roads; the interference of oil well structures, fences, and pipeline on caribou crossings and the behavior of other land mammals; or the ability of local residents to access marine and land mammals.

The social, cultural, and economic impact of energy development is a second area of interest and apprehension. There are the direct benefits of economic growth that many look forward to, such as more employment opportunities, more discretionary income, and improved public services. There are also negative trends associated with industrialization, such as general anomie, excessive alcohol and drug use, abusive and self-destructive behavior, higher accident rates, loss of territory, restrictions on land use, loss of language and subsistence skills, dissolution of family relations, decline in community rituals and festivities, and the dilution of cultural values such as sharing, reciprocity, respect for others, and consensual decision making.

There is another, more intangible, worry about what some social scientists call an "opportunity-threat impact" or fears about what might happen to the health and well-being of one's family and community. The implications of economic and social change in the Arctic are not fully understood. Some welcome the transformation of the community and the availability of freshwater, sewers, and better housing. According to others, Iñupiat peoples have "over adapted" to the new industrial economy, which can threaten the long-term survival of cultural traditions and a distinctive way of life.

Whether the changes that accompany economic development are positive or destructive depends heavily on the regulatory regimes and mitigation measures that are in place, a final area of contention. Here, complaints have been voiced about the pressure on the NSB to deal with the accidents and the damages tied to development for which it is not responsible. This puts added stress on the capacity of the NSB to serve the needs of residents and is particularly troublesome in a time of

declining revenues and personnel layoffs.

The MMS proposes to collect the information in this study (1) to describe participation in bowhead whale hunting and its importance to and relationship with other traditional activities in three Iñupiat communities on Alaska's North Slope and one control community of similar size in the western part of the State; (2) to describe and analyze community assessments of the effects of oil and gas development and modernization on participation in traditional activities, especially bowhead whale hunting; (3) to describe and analyze community assessments of desired future conditions for whale hunting and related traditional activities; and (4) to describe how oil and gas development and other forces of modernization influence these desired future conditions for whaling and other traditional activities. The information collected will be used in regional EAs and EISs and will be used to make decisions on future oil and gas lease sales in the Beaufort Sea, currently scheduled for 2005 and 2007.

*Survey Instruments:* An integral aspect of the research effort is the development and administration of three survey instruments that will collect information about the North Slope communities of Barrow, Kaktovik, and Nuiqsut and the "control community" of Savoonga on St. Lawrence Island in the Bering Straits. The survey data are divided into five broad categories: demographic and economic characteristics; quantitative and qualitative summaries of participation in bowhead whaling and other subsistence activities; an assessment of residents' perceptions of the potential threats and benefits of OCS development to subsistence and other traditional activities, especially bowhead whaling; changes in the quality of life in each community, measured in both economic and cultural terms; and the way residents view the likely future of their communities.

The information under this proposed collection will be obtained through personal interviews with three distinct groups: whaling captains, adult-headed households and elders, and high school juniors and seniors. A separate survey, based on previous studies, has been developed for each of these groups.

The Whaling Captain Survey focuses on the patterns of participation in whale hunting activities and the possible impact of OCS development on these patterns. Demographic questions about age, length of time in the community, education, gender, shareholder status in village and regional corporations, and

family relations will reveal, in part, a captain's experience, understanding, and perspectives on social change and resource development. The Household Survey focuses on the effects of offshore oil industry activities on individual residents, households, and groups in each community. Population characteristics such as age, number, and relationships of people in the household and level of education are related to changes in employment, income, and economic opportunity. Gender, ethnic background, length of residency, and corporate membership can also result in divergent views about subsistence, development, language, and many other factors. The Student Survey focuses on perceptions about the effects of OCS oil and gas activities, documents student attitudes about Iñupiat traditions, and tracks changes in student behaviors that help assess inter-generational continuities. Responses may vary depending on age, ethnicity, and gender.

It is assumed in all three surveys that Native ancestry is predictably tied to participation in subsistence and other traditional cultural activities. Since only coastal Alaskan Natives can legally hunt bowhead whales and other marine mammals, the survey will include only Native residents. Variation in participation in subsistence and other traditional activities among groups, as well as over time, will be a key analytical focus.

*Interview Methods:* The interviews for each survey will be done face to face in a setting that is most comfortable for the respondent. This personal method is more expensive and time consuming for the researchers, but these drawbacks are outweighed by improvements in the quality of information obtained and the rapport established between the surveyor and the person interviewed. Telephone interviews have not been successful on the North Slope.

Households in Barrow, Kaktovik, Nuiqsut, and Savoonga (control village) will be randomly chosen for interviews. To achieve the desired statistical confidence level, smaller communities are sampled at a higher rate than are larger ones. Respondents will be paid for taking part in the survey.

*Frequency:* One-time survey.

*Estimated Number and Description of Respondents:* Approximately 614 respondents from Alaska's North Slope communities and a control group in western Alaska.

*Estimated Reporting and Recordkeeping "Hour" Burden:* All three surveys together are estimated to involve about 474 total burden hours, as described in the following chart.