



**The Baseline Studies Program: a
collaboration between an Arctic
stakeholder community
and energy development interests**

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Background – North Slope

- The Inupiat people of the North Slope of Alaska have lived in this environment for thousands of years
 - Highly dependent upon harvest of traditional foods
 - Possess a large amount of traditional knowledge
 - Also a large body of academic, industry and government science
 - People of the NS are keenly interested in science and have a history of participation



Background – North Slope

- Significant concerns about recent offshore Oil and Gas exploration
 - View that there were many unanswered questions
 - Frustration about issuance of permits and impact assessments without adequate input.
 - Limited incorporation of Traditional Knowledge in western science



Background - Shell

- Desire to drill exploration wells in offshore Alaska
- Need to understand environment to be able to
 - Operate safely
 - Obtain and comply with permits
 - Meet stakeholder expectations
- Committed to sound science basis for moving forward
- Need to reduce legal challenges to permits and operations
 - Establish a common understanding with key stakeholders



Background – Subsistence concerns

- Fear and experience that industry activity may make bowheads and other animals more difficult to hunt
- Contamination from discharges and potential spills may taint their food source
- Impacts of sound and contamination on the food chain may lead to decline in subsistence resources
- Climate change impacts may result in fewer subsistence resources and difficulty hunting



The Solution

- In 2010 Shell and the North Slope Borough entered into an agreement to conduct a collaborative “Baseline Studies Program”
- Similar agreement with the Northwest Arctic Borough in 2013
- Funded by Shell
- Operated by the North Slope Borough Department of Wildlife
- To answer questions and concerns relevant to the people of the communities with respect to oil and gas
- To improve the understanding of the changing Arctic
- Assess the efficacy of mitigation measures
- To establish existing baseline conditions and nature/trajectory of change



The structure

- Research priorities and direction are guided by a Steering Committee
 - Village representative from each coastal village
 - Two scientists from the North Slope Borough
 - Two scientists from Shell
 - Four independent scientists selected by the Borough from recommendations by Shell
- Budget proposed by the Borough and approved by Shell
- Projects proposed by the Borough and approved by Shell with and opportunity for comment and improvement

Examples of projects to date

- Physical oceanography
 - Drifter buoy studies to investigate currents
 - Traditional knowledge investigation of ice and current
- Marine Mammals
 - Ice seal satellite tagging
 - Bowhead whale sense of smell evaluation
 - Bowhead and beluga hearing assessment
- Terrestrial
 - Caribou aerial survey
 - Terrestrial predator (wolf & wolverine) assessment
- Forage fish ecological assessment

