

BOEM ENVIRONMENTAL STUDIES PROGRAM: Ongoing Studies

Region: Alaska

Planning Area(s): Beaufort Sea

Title: ANIMIDA III: Boulder Patch and Other Kelp Communities in the Development Area (AK-11-14a)

BOEM Information Need(s) to be Addressed: The Arctic Nearshore Impact Monitoring in Development Area (ANIMIDA) and continuation of ANIMIDA (cANIMIDA) have monitored the Boulder Patch Area of Special Biological Concern in the Beaufort Sea OCS, with last Boulder Patch survey in 2007. There is a continuing, ongoing need for this monitoring in the development area within the Beaufort Sea during the performance period of the study, which will coincide with continued production from Northstar, development and production from Liberty, and Camden Bay delineation and potential development. The information will be used for NEPA analysis and documentation for Beaufort Sea Lease Sales and DPPs. This study addresses aspects of USGS Recommendations 3.04, 3.07, 4.01 and 5.24.

Total Cost: \$606,000

Period of Performance: FY 2012-2018

Conducting Organization: University of Texas at Austin

BOEM Contact: [Catherine Coon](#)

Description:

Background: The ANIMIDA started monitoring of the Boulder Patch in 2000. These and multiple other research projects on the Boulder Patch by BOEM, National Science Foundation, and industry have allowed one of very few long-term monitoring records in the Arctic to be cobbled together, stretching from the late 1970's through the current decade.

The Liberty prospect adjoins the Boulder Patch. In 2008, the MMS approved a development plan for the Liberty prospect that would use directional drilling from an enlarged Satellite Drilling Island (SDI) at the east end of the Endicott Causeway. Shell has also submitted an exploration plan to MMS that would delineate existing oil discoveries in the Sivulliq and Torpedo prospects in Camden Bay, an area with known but poorly mapped kelp beds. Ongoing industry activities necessitate ongoing monitoring projects.

Objectives:

- Evaluate the potential impact from additional activities at the Liberty prospect on the Boulder Patch kelp community.
- Monitor the impact to the Boulder Patch community from increased summer turbidity and other oceanographic changes occurring with climate change.
- Estimate the importance of and extent of Camden Bay kelp patches.

Methods: The Boulder Patch/Kelp patch surveys and monitoring will be conducted from small vessel support in the "open" water season. Kelp production will be measured using established

or comparable techniques. Oceanographic measurements shall include ambient light intensity and total suspended solids using established or comparable techniques. Data will be combined with the existing long-term dataset. The extent of Kelp in Camden Bay will be surveyed and GIS maps constructed of kelp and implied (boulder and or hard bottom) kelp beds in the study area.

Current Status: Ongoing

Final Report Due: December 2018

Publications Completed: None

Affiliated WWW Sites: <http://www.boem.gov/akstudies/>

Revised Date: July 2012

ESPIS: Environmental Studies Program Information System

All *completed* ESP studies can be found

here: http://www.data.boem.gov/homepg/data_center/other/espis/espisfront.asp