

## **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 support NEPA analysis and documentation for Beaufort Sea Lease Sales and DPPs.

**Total Cost:** \$647,661

**Period of Performance:** FY 2012-2019

**Conducting Organization:** CESU-University of Texas at Austin

**BOEM Contact:** [Catherine Coon](#)

### **Description:**

**Background:** The ANIMIDA project started monitoring of the Boulder Patch in 2000. This and multiple other research projects on the Boulder Patch by BOEM, the 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 2015, Hilcorp Alaska LLC submitted a DPP to BOEM proposing construction of a gravel island and production facility at Liberty. In addition, there is potential for exploration activity at active leases in the vicinity of 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 bed surveys and monitoring will be conducted using 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/>  
[https://seagrant.uaf.edu/news/02ASJ/10.04.02boulder\\_patch.html](https://seagrant.uaf.edu/news/02ASJ/10.04.02boulder_patch.html)  
[http://www.academia.edu/16095724/An Arctic Kelp Community in the Alaskan Beaufort Sea](http://www.academia.edu/16095724/An_Arctic_Kelp_Community_in_the_Alaskan_Beaufort_Sea)

**Revised Date:** August 2016

**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](http://www.data.boem.gov/homepg/data_center/other/espis/espisfront.asp)