

Environmental Studies Program: Ongoing Study

Study Area(s): Western GOM, Central GOM, Eastern GOM

Administered By: GOM OCS Region

Title: Seismic Survey Mitigation Measures and Protected Species Observer Reports (GM-16-01)

BOEM Information Need(s) to be Addressed: BOEM has responsibilities through the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA) to reduce and avoid impacts and to consider and adopt mitigation. This study evaluates current mitigation measure effectiveness related to noise impacts on protected species associated with BOEM permitted or authorized seismic survey activities. This study utilizes and analyzes information gathered during seismic survey activities to better understand potential impacts to marine mammals and sea turtles from noise generated during those activities. The study will consider the effectiveness of mitigations measures and based on study results may recommend changes to mitigation measures applied during seismic survey activities, potentially modifying protections for marine mammals or sea turtles. Development of this information will support NEPA document preparation and ESA and MMPA consultation activities.

Total BOEM Cost: \$279,275

Period of Performance: FY 2017–2018

Conducting Organization(s): CSA Ocean Sciences, Inc.

Principal Investigator(s): Mary Jo Barkaszi (MBarkaszi@conshelf.com)

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Description:

Background: This study is both a follow up to and an expansion of the previous OCS study BOEM 2012-015 Seismic Survey Mitigation Measures and Marine Mammal Observer Reports. The study will summarize and synthesize information collected between 2009 and 2015 to comply with NTL 2007-G02 or Joint NTL 2012-G02 Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program. The study will also evaluate compliance outlined in the NTLs and/or for permits that have additional requirements associated with Civil Action NO. 2:10-cv-01882. In addition, the results from the previous OCS study will be compared to those from the current information (2009-2015). For marine mammals and sea turtles, there is incomplete or unavailable information about how these protected species are impacted by anthropogenic sounds. This study will evaluate and analyze behavioral responses reported during seismic survey mitigation monitoring to improve BOEM's understanding of anthropogenic sound impacts on these protected species.

Objectives: The study will evaluate the effectiveness of the required mitigation measures for BOEM authorized or permitted seismic survey activities. The study will also evaluate compliance levels of NTLs mitigations and/or for permits that have additional requirements

associated with Civil Action NO. 2:10-cv-01882 which will support BOEM's sister agency BSEE's compliance and enforcement operations. The study results will be used to support recommendations for modifications to mitigation measures, increase BOEM's understanding of anthropogenic sound impacts on protected species, support NEPA document preparation, and support ESA and MMPA consultation activities.

Methods: The study will utilize information gathered between 2009 and 2015 during the course of seismic survey activities to comply with NTL 2007-G02 or Joint NTL 2012-G02 Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program and Civil Action NO. 2:10-cv-01882. The information will be evaluated using statistical analysis to determine mitigation compliance, describe and assess species observation records in relation to source activity and identify variables that may influence results. In addition, the results of the prior OCS study BOEM 2012-015 Seismic Survey Mitigation Measures and Marine Mammal Observer Reports will be compared with the results of the analyses of the information gathered between 2009 and 2015.

Current Status: The task order for this study was awarded on December 22, 2016. The transfer of data to the contractor was completed on January 13, 2017. The contractor completed data management and analysis, and delivered the draft Synthesis Report to BOEM in December 2017. Currently the draft Synthesis Report is under review by BOEM. Remaining tasks include revision and update of the draft report, completion of the final report and preparation of a journal manuscript.

Final Report Due: June 22, 2018

Publications Completed: None

Affiliated WWW Sites: For most studies, this will be the URL of its page on the new ESPIS, like <https://marinecadastre.gov/espis/#/search/study/100158>

Revised Date: February 15, 2018