

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE NORTHEAST REGION 55 Great Republic Drive Gloucester, MA 01930-2276

JUN 18 2014

Mr. Bauke (Bob) Houtman, Integrated Programs Sections Head Division of Ocean Sciences National Science Foundation 4201 Wilson, Blvd, Room 725 Arlington, VA 22230

ATTN: Ms. Holly Smith

Dear Mr. Houteman:

Columbia's Lamont-Doherty Earth Observatory (LDEO), with funding from the National Science Foundation (NSF), proposes to conduct a high energy, 3-D seismic survey using the R/V *Marcus G Langseth* offshore of the Atlantic coast of New Jersey in June and July 2014 to study the arrangement of sediments deposited during times of changing global sea level from roughly 60 million years ago to the present. The R/V *Langseth* would deploy an air gun array of either 700 in<sup>2</sup> or 1400 in<sup>2</sup> in total discharge volume in water depths ranging from 30 to 745 meters. The receiving system for the returning acoustic signals would consist of four 3000 meter hydrophone streamers. No anchoring of the vessel or placement of equipment on the sea floor would be anticipated during the survey.

We have reviewed the draft Environmental Assessment (DEA) of the Marine Geophysical Survey by the R/V *Langseth* in the Atlantic Ocean off New Jersey and the accompanying Determination of No Adverse Effect on Essential Fish Habitat prepared by the National Science Foundation (NSF). The DEA dated December 2013 is tiered off a 2011 Final Programmatic Environmental Impact Statement (FPEIS)/Overseas Environmental Impact Statement (OEIS) for Marine Seismic Research.

In accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA), essential fish habitat (EFH) has been identified and described in the Exclusive Economic Zone portions of the study area by the New England, Mid-Atlantic, and South Atlantic Fishery Management Councils and us. The MSA specifies consultation with us is required for federal actions which may adversely affect EFH. As the federal action agency for this matter, the NSF has determined that the seismic study is expected to have insignificant impacts on fish, EFH and Habitat Areas of Particular Concern.

The EFH Final Rule defines an adverse effect on EFH as "any impact which reduces the quality and/or quantity of essential fish habitat." The rule further states:

Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such



modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. (50 CFR 600.810)

We have reviewed the analysis and proposed mitigation measures contained in the DEA prepared for this action, as well as FPEIS/OEIS. Upon considering the design and nature of this survey, it appears that some level of adverse effect to EFH may occur. However, because much of the research available to date on the adverse effects of seismic survey methods on aquatic resources has been focused on marine mammals and there is little information available on the effects of these activities on fish and benthic organisms, we have no specific EFH conservation recommendations to provide pursuant to Section 305(b) (2) of the Magnuson-Stevens Act at this time. Further EFH consultation on this matter by the NSF is not necessary unless future modifications to the survey are proposed and such actions may result in adverse impacts to EFH.

Additional research and monitoring is needed to gain a better understanding of the potential effects these activities may have on EFH, federally managed species, their prey and other NOAA trust resources, and should be a component of future NSF funded seismic survey activities. This will aid in the development of site and project specific EFH conservation recommendations for future projects as appropriate.

Be advised that separate correspondence will be provided by our Office of Protected Resources regarding their evaluation of the Incidental Harassment Authorization request and the Section 7 of the Endangered Species Act consultation for this action. For additional information on the status of these evaluations please contact Jeannine Cody at (301) 427-8401 or jeannine.cody@noaa.gov.

If you have any questions or need additional information, please do not hesitate to contact Karen Greene at 732 872-3023 or <u>karen.greene@noaa.gov</u>.

Sincerely,

Louis A. Chiarella Assistant Regional Administrator Habitat Conservation Division

cc:

F/SER, David.Dale@noaa.gov F/GAR, Karen.Greene@noaa.gov F/HC, Terra.Lederhouse@noaa.gov F/PR, Jeanne Cody@noaa.gov