

**APPENDIX H**  
**USFWS LETTER OF CONCURRENCE**



## Smith, Holly E.

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**From:** Thogerson, Collette <collette\_thogerson@fws.gov>  
**Sent:** Wednesday, January 14, 2015 10:35 AM  
**To:** Smith, Holly E.  
**Subject:** Re: NSF NJ survey

Hi Holly,

Thank you for your patience. I apologize for the delayed response. I will update our admin record to reflect the new dates. Please add this email to your admin record to reflect that the Service is acknowledging this date change and we do not feel the date change change's the effect of the action on the species. Our concurrence on this action remains the same. Should any further changes occur that might change the impacts on the species that we did not consider, please let us know. This concurrence is based the power down and avoidance procedures discussed in the concurrence letter that will occur when and if you see a listed species in the action area. We appreciate your continued collaboration and coordination on this project. Please let me know if you have any further questions.

Kind regards,  
Collette

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Collette Thogerson, Ph.D.  
National Section 7 Coordinator  
Branch of Consultations & Habitat Conservation Plans  
Ecological Services  
U.S. Fish and Wildlife Service Headquarters  
MS: ES  
5275 Leesburg Pike  
Falls Church, VA 22041-3803  
PHONE: 703/358-2103  
[collette\\_thogerson@fws.gov](mailto:collette_thogerson@fws.gov)

On Mon, Oct 27, 2014 at 9:44 AM, Smith, Holly E. <[hesmith@nsf.gov](mailto:hesmith@nsf.gov)> wrote:

Collette – We had to postpone the seismic survey off the coast of New Jersey that we planned for 2014 due to mechanical issues with the vessel. Attached is the letter of concurrence from USFWS for that survey. We would like to reschedule the survey for a 30 day period in June/July/August 2015. Even though the action has essentially not changed, NMFS has informed us that a new IHA is required for the activity, so we are preparing documentation for that process, including a Draft Amended Environmental Assessment. One difference, however, between 2014 and 2015, would be that rather than two source levels considered, only the smaller source will be considered (700 cu. in. source vs 1400 cu. in.). This is a result of 2014 activities which verified that the 700 cu. in. source was sufficient for data collection.

We were wondering what steps we might need to take for USFWS for ESA Section 7 compliance. Should we re-initiate consultation or start over, or does the letter of concurrence still apply? I understand we may need to provide you some more details, feel free to let me know if you'd like to discuss this further, or what else we can provide you to assist with a decision.

Thanks for your assistance,

Holly



## United States Department of the Interior

FISH AND WILDLIFE SERVICE

Washington, D.C. 20240

In Reply Refer To:  
FWS/AES/DER/BCH/056843  
FWS 2014-I-0002

MAR 05 2014

Holly Smith  
National Science Foundation  
Division of Ocean Sciences  
4201 Wilson Blvd., Suite 25  
Arlington, VA 22230

Subject: Informal Consultation on the High-Energy, 3-D Marine Geophysical Survey in the Atlantic Ocean off the Coast of New Jersey

Dear Ms. Smith:

This letter is in response to your February 3, 2014, email requesting the U.S. Fish and Wildlife Service's (Service) concurrence that the proposed high-energy, 3-D marine geophysical survey in the Atlantic Ocean off the coast of New Jersey is not likely to adversely affect the endangered roseate tern (*Sterna dougallii*) and the threatened piping plover (*Charadrius melodus*), pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 -1544), as amended (ESA). This consultation is based on the draft Environmental Assessment entitled a Marine Geophysical Survey by the R/V *Marcus G. Langseth* in the Atlantic Ocean off New Jersey, June – July 2014.

Lamont-Doherty Earth Observatory (L-DEO), with funding from the U.S. National Science Foundation (NSF) plans to conduct high-energy, 3-D geophysical surveys in the northwest Atlantic Ocean approximately 25-85 kilometers from the coast of New Jersey, outside of U.S. waters and within the U.S. Exclusive Economic Zone (located between approximately 39.3 and 39.7°N and approximately 73.2 and 78.8°W). The seismic survey will take place from June through July, 2014, and will take place in water depths between 30 to 75 meters.

The goal of the proposed research is to collect and analyze data on the arrangement of sediments deposited during times of changing global sea level from roughly 60 million years ago to present. The procedures to be used for the surveys would be similar to those used during previous seismic surveys by L-DEO and would use conventional seismic methodology. The surveys would involve one source vessel, the R/V *Langseth*. The *Langseth* would deploy a small towed subarray of 4 or 8 airguns with a total discharge volume of approximately 700 to 1400 cubic

Ms. Holly Smith

inches. The receiving system would consist of four 3000 meter hydrophone streamer. As the airguns are towed along the survey lines, the hydrophone streamer would receive the returning acoustic signals and transfer the data to the on-board processing system.

A total of approximately 4,900 kilometers of 3-D survey lines, including turns, would be shot and some additional seismic operations associated with airgun testing and repeat coverage will occur. In addition to the operations of the airgun array, a multibeam echosounder, a subbottom profiler, and an acoustic Doppler current profiler will be operated from the *Langseth* continuously throughout the survey. All planned geophysical data acquisition activities would be conducted by L-DEO with on-board assistance by the scientists who have proposed the study. The vessel would be self-contained and the crew would live aboard the vessel with some personnel transfer on or off the *Langseth* by a small vessel.

Although unlikely to be encountered, the roseate tern and the piping plover could occur at or near the project site. The roseate tern breeds on islands along the northeast coast of the U.S. from New York to Maine and north into Canada, and historically as far south as Virginia. During the breeding season, roseate terns forage over shallow coastal waters, especially in water depths less than 5 meters, sometimes near the colony and at other times at distances of over 30 kilometers away. They usually forage over shallow bays, tidal inlets and channels, tide rips, and sandbars. Because of its distribution during the breeding season, the roseate tern likely would not be encountered at the proposed survey site.

The piping plover breeds on coastal beaches from Newfoundland to North Carolina during March-August. Its marine nesting habitat consists of sandy beaches, sandflats, and barrier islands. Feeding areas include intertidal portions of ocean beaches, mudflats, sandflats, and shorelines of coastal ponds, lagoons, or salt marshes. Because it is strictly coastal, the piping plover likely would not be encountered at the proposed survey site.

In the rare event one of these species is in the vicinity of the survey area, there is the potential that the bird might be affected slightly by seismic sound from the proposed study. The impact would not be expected to be significant to the individual bird or their population because the majority of observed sound levels are below the water surface. Additionally, the proposed action includes precautionary measures of powering or shutting down the airguns if a listed bird is seen diving in the area.

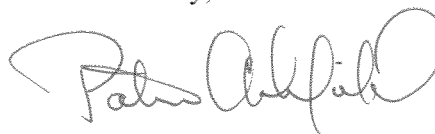
Based upon the unlikely chance a bird of either species will be in the action area as well as the precautionary measures in place, we do not anticipate any adverse impacts to the listed roseate tern or piping plover. Thus, we concur that the activities covered under the NSF's proposed high-energy, 3-D marine geophysical survey "may affect" but "are not likely to adversely affect" the roseate tern or piping plover. Coordination with National Marine Fisheries Service on listed species under their jurisdiction is still required.

We are pleased that NSF, L-DEO and its contractors are committed to applying proactive protective measures in order to minimize effects on marine animals. We appreciate the

Ms. Holly Smith

collaboration your staff has provided. If you have any question please contact Dr. Collette Thogerson of my office at (703) 358-2103.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrice Ashfield". The signature is fluid and cursive, with a large initial "P" and "A".

Patrice Ashfield  
Chief, Branch of Consultation and Habitat  
Conservation Plans, Ecological Services

NATIONAL SCIENCE FOUNDATION  
4201 WILSON BOULEVARD  
ARLINGTON, VIRGINIA 22230

February 3, 2014

Rick Sayers  
Chief, Division of Environmental Review  
U.S. Fish & Wildlife Service-- Ecological Services  
4401 N. Fairfax Dr., Rm 420  
Arlington, VA 22203

RE: NSF Marine Geophysical Survey in the Atlantic Ocean off the Coast of New Jersey  
OCE# 1260237 (PI: Mountain)

Dear Mr. Sayers:

The National Science Foundation (NSF) has proposed a marine geophysical survey on the research vessel Marcus G. *Langseth* (R/V *Langseth*), June-July 2014, in the Atlantic Ocean, within the Exclusive Economic Zones of the United States and outside state waters. The R/V *Langseth* would deploy an airgun array of either 700 in<sup>3</sup> or 1400 in<sup>3</sup> total discharge volume in water depths ranging from 30 to 75 meters. The receiving system for the returning acoustic signals would consist of four 3000 meter hydrophone streamers.

We have attached a copy of our Draft Environmental Assessment (Draft EA) pursuant to the National Environmental Policy Act prepared on our behalf by LGL, Ltd for the survey (file: Mountain 2014 Draft EA 2013 Dec 17.pdf). The Draft EA tiers to the NSF Programmatic Environmental Impact Statement/Overseas Environmental Impact Statement for Marine Seismic Research Funded by the National Science Foundation or Conducted by the U.S. Geological Survey (NSF-USGS PEIS: <http://www.nsf.gov/geo/oce/envcomp/index.jsp>) and is consistent with the findings and conclusions of that document. Figure 1 of the Draft EA illustrates the survey area, and the specific location of the proposed survey site and tracklines. Although unlikely to be encountered, the *endangered* roseate tern and *threatened* piping plover have been identified as species that could occur at or near the proposed survey site.

The Draft EA notes the following information regarding the roseate tern and piping plover (see attached Draft EA, page 26-27):

**Piping Plover (*Charadrius melodus*):** The Atlantic Coast Population of the piping plover is listed as *Threatened* under the U.S. ESA, and the species is listed as *Near Threatened* on the IUCN Red List of Threatened Species (IUCN 2013). It breeds on coastal beaches from Newfoundland to North Carolina during March–August and it winters along the Atlantic Coast from North Carolina south, along the Gulf Coast, and in the Caribbean (USFWS 1996). Its marine nesting habitat consists of sandy beaches, sandflats, and barrier islands (Birdlife International 2013). Feeding areas include intertidal portions of ocean beaches, mudflats, sandflats, and shorelines of coastal ponds, lagoons, or salt marshes (USFWS 1996). Wintering plovers are generally found on barrier islands, along sandy peninsulas, and near coastal inlets (USFWS 1996).



Because it is strictly coastal, the piping plover likely would not be encountered at the proposed survey site.

**Roseate Tern (*Sterna dougallii*):** The Northeast Population of the roseate tern is listed as *Endangered* under the U.S. ESA, and the species is listed as *Near Threatened* on the IUCN Red List of Threatened Species (IUCN 2013). It breeds on islands along the northeast coast of the U.S from New York to Maine and north into Canada, and historically as far south as Virginia (USFWS 1998, 2010). It is thought to migrate beginning in mid-September through the eastern Caribbean and along the north coast of South America, and to winter mainly on the east coast of Brazil (USFWS 2010). During the breeding season, roseate terns forage over shallow coastal waters, especially in water depths <5 m, sometimes near the colony and at other times at distances of over 30 km. They usually forage over shallow bays, tidal inlets and channels, tide rips, and sandbars (USFWS 2010).

Because of its distribution during the breeding season, the roseate tern likely would not be encountered at the proposed survey site.

In the rare event a roseate tern or piping plover is observed during the survey, the bird might be affected slightly by seismic sound from the proposed study, but the impacts would not be expected to be significant to the individual bird or their populations (see attached Draft EA, pages 41 and Section 3.5.4 of the NSF-USGS PEIS). Mitigation measures proposed for the survey would reduce risks to species within the survey area. In the rare event that either sea bird species were observed diving within the Exclusion Zone (EZ), the seismic airguns would be powered down (so that the bird remained outside of the EZ) or shutdown, as appropriate.

This letter requests concurrence that the proposed marine geophysical survey is not likely to adversely affect species or critical habitat under U.S. Fish & Wildlife Service (FWS) jurisdiction pursuant to Section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531- 1544), as amended (ESA), and that no consultation with FWS is required. For discussions regarding this proposed survey, including any discussions regarding special mitigation protocols that may be needed to ensure that the project can proceed without negative impacts on listed species, please contact me or Holly Smith (hesmith@nsf.gov).

We have initiated formal Section 7 consultation with National Marine Fisheries Service under the ESA, and the ship operator of the R/V *Langseth* is seeking an Incidental Harassment Authorization under the Marine Mammal Protection Act (MMPA) for the survey.

Sincerely,



Bauke (Bob) Houtman  
Section Head, Integrative Programs Section

*Attachment:*

Draft Environmental Assessment (file: Mountain 2014 Draft EA 2013 Dec 17.pdf)

