# National Science Foundation Geosciences Directorate Division of Ocean Sciences Arlington, Virginia

# FINDING OF NO SIGNIFICANT IMPACT (FONSI) PURSUANT TO THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA), 42 U.S.C. 4321, et seq. and DECISION DOCUMENT

Marine Geophysical Survey in the Atlantic Ocean off New Jersey, Summer 2015

#### **OCE 1260237**

Principal Investigator/Institution: Gregory Mountain, Rutgers University

Project Title: Collaborative Research: Community-Based 3D Imaging That Ties Clinoform

Geometry to Facies Successions and Neogene Sea-Level Change

## **COLLABORATIVE PROPOSAL:**

OCE 1259135

**Principal Investigators/Institution:** Craig Fulthorpe, James Austin, Mladen Nedimovic, University of Texas at Austin

A Final Amended Environmental Assessment (Final Amended EA) was prepared for the proposed rescheduling of a collaborative research project funded by the National Science Foundation (NSF) entitled, "Community-Based 3D Imaging That Ties Clinoform Geometry to Facies Successions and Neogene Sea-Level Change" (Proposed Action). Dr. Mountain of Rutgers University is the scientific lead for the proposed project, making Rutgers the lead institution. Drs. Fulthorpe, Austin, and Nedimovic of University of Texas at Austin (UT) are collaborators on the Proposed Action with Dr. Mountain; therefore, UT is a collaborating institution.

The Proposed Action includes a marine geophysical survey (or "seismic survey") to be conducted on board the Research Vessel *Marcus G. Langseth* (R/V *Langseth*) in the Atlantic Ocean off of New Jersey. The collaborative research project originally commenced in 2014 after all federal authorizations and approvals were issued. Due to mechanical issues with the ship, however, the 2014 survey was unable to be completed within the effective time period of the Incidental Harassment Authorization (IHA) and Biological Opinion/Incidental Take Statement (ITS) issued by the National Marine Fisheries Service (NMFS) and was ultimately postponed. NSF then proposed to reschedule the survey for the same timeframe in 2015. The purpose and scope of the proposed rescheduled 2015 activity has remained the same as that proposed in 2014, however, only the smaller of two possible acoustic sources (700in<sup>3</sup>) would be used in 2015.

The Final Amended EA entitled, "Environmental Assessment of a Marine Geophysical Survey by the R/V *Marcus G. Langseth* in the Atlantic Ocean off New Jersey, Summer 2015" (Report #

TA8349-3) (Attachment 1), was prepared by LGL Limited environmental research associates (LGL) on behalf of NSF and analyzed the potential impacts on the human and natural environment associated with the proposed rescheduling of the marine geophysical survey. The Final Amended EA tiers to the 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 (June 2011) and the Record of Decision (June 2012) (jointly referred to as PEIS) and the, "Final Environmental Assessment of a Marine Geophysical Survey by the R/V Marcus G. Langseth in the Atlantic Ocean off New Jersey, July-Mid August 2014" (2014 Final EA) which was prepared for the 2014 survey. The Final Amended EA also incorporates by reference the analyses and conclusions set forth in the Final EAs, IHAs, the ITSs issued by NMFS for both the 2014 survey and the proposed rescheduled 2015 survey, and the responses from the Regional Coordinator for Essential Fish Habitat (EFH). The conclusions from the Final Amended EA were consistent with the conclusions of the PEIS and 2014 Final EA and were used to inform the Division of Ocean Sciences (OCE) management of potential environmental impacts of the survey. OCE has reviewed and concurs with the Final The Final Amended EA is incorporated into this Finding of No Amended EA findings. Significant Impact (FONSI) and Decision Document by reference as if fully set forth herein.

## **Project Objectives and Context**

The purpose of the Proposed Action is to collect data across existing Integrated Ocean Drilling Program (IODP) Expedition 313 drill sites on the inner-middle shelf of the New Jersey continental margin to reveal the arrangement of sediments deposited during times of changing global sea level from roughly 60 million years ago to present (Attachment 1, Chapter 1 and Appendix B). Features such as river valleys cut into coastal plain sediments, now buried under a kilometer (km) of younger sediment and flooded by today's ocean, cannot be identified and traced with existing two-dimensional (2-D) seismic data, despite their existence being clearly indicated in sediment cores recovered during IODP Expedition 313. These and other erosional and depositional features would, under the Proposed Action, be imaged using three-dimensional (3-D) seismic data, enabling follow-on studies to identify the magnitude, time, and impact of major changes in sea level.

As was true of the 2014 survey, the Proposed Action would be a collaborative research effort, supporting scientists and graduate students.

## **Summary of Proposed Action and Alternatives**

The procedures of the Proposed Action would be similar to those used during previous seismic surveys and would use conventional seismic methodology. The survey location is in the Atlantic Ocean off the coast of New Jersey, within the Exclusive Economic Zone of the United States (U.S.) and outside of state waters (Attachment 1, Figure 1). The survey would consist of approximately (~) 4900 km of transect lines (including turns) in water depths of ~20 meter (m) to 75 m deep. The survey would involve the R/V *Langseth* which is owned by NSF and operated on our behalf through a Cooperative Agreement entered in 2012 by Columbia University's Lamont-Doherty Earth Observatory (L-DEO). The R/V *Langseth* would operate as the source vessel which is proposed to deploy an array of four airguns with a total discharge volume of ~700 in<sup>3</sup>. The receiving system is proposed to consist of hydrophone streamers and a Geometrics P-cable system. As the airgun array is towed along the survey lines, the hydrophone streamers would receive the returning acoustic signals and transfer the data to the on-board

processing system. In addition to the operations of the airgun array, a multibeam echosounder (MBES) and sub-bottom profiler (SBP) are proposed to be operated from the R/V Langseth continuously throughout the cruise, but not during transit to the survey site. The survey is proposed to be a ~35 day survey, taking place during the period allowable under the IHA, June 1, 2015 to August 31, 2015. Seismic operations would be carried out for ~30 days, with the balance of the cruise occupied in transit (~2 days), equipment set-up and retrieval (~3 days), and contingency (~2 days). Some deviation in the length of the survey may be required, depending on logistics and weather; however, seismic operations would only occur during the timeframe allowable under the IHA.

One alternative to the Proposed Action would be to conduct the survey at an alternative time. Constraints for vessel operations and availability of equipment (including the vessel) and personnel would need to be considered for alternative cruise times. Additionally, weather constraints would inhibit vessel operations during certain times of year, such as winter. Avoiding critical time periods for sensitive species, such as the North Atlantic right whale migration period, is another factor for consideration in survey timing. Limitations on scheduling the vessel include the additional research studies planned on the vessel for 2015 and beyond. Other activities planned within the region also would need to be considered if the survey were scheduled for an alternative time.

Another alternative to conducting the Proposed Action would be the "No Action" alternative (i.e. do not request that an IHA be issued, and do not allow the proposed rescheduled research operations to be conducted). The "No Action" alternative would result in no disturbance to marine species attributable to the Proposed Action, but geological data of considerable scientific value and relevance increasing our understanding of sea level rise and the project objectives as described above would not be met. In addition, the professional and academic careers of the researchers and students who proposed to conduct the research would be negatively impacted should the Proposed Action and the collection of data not go forward.

## Summary of environmental consequences

The Final Amended EA includes analysis on the affected environment (Chapter III) and the potential effects of the Proposed Action on the environment (Chapter IV). Potential impacts of the Proposed Action on the environment would be primarily a result of the operation of the airgun array. The potential effects of sounds from airguns on marine species, mammals, and sea turtles of particular concern, are described in detail in Attachment 1 (Chapter IV and PEIS Chapters 3 & 4) and might include one or more of the following: tolerance, masking of natural sounds, behavioral disturbance, and at least in theory, temporary or permanent hearing impairment, or non-auditory physical or physiological effects. It is unlikely that the Proposed Action would result in any cases of temporary or especially permanent hearing impairment, or any significant non-auditory physical or physiological effects. Some behavioral disturbance is expected, if animals are in the general area during seismic operations, but this would be localized, short-term, and involve limited numbers of animals. The potential effects from the other proposed acoustic sources were also considered, however, they would not be likely to have a significant effect on the environment (Attachment 1, Chapter IV; and PEIS Sections 3.4.7, 3.6.7, and 3.7.7).

The Proposed Action includes an extensive monitoring and mitigation program to further minimize potential impacts on the environment. Mitigation efforts include pre-cruise planning activities and operational activities (Attachment 1, Chapters II and IV; and PEIS 2.4.1.1). Preincluded consideration energy mitigation activities of optimization/minimization; survey timing (i.e., environmental conditions: seasonal presence of animals and weather; and, scientific personnel and equipment availability); and calculation of mitigation zones. The operational mitigation program would further minimize potential impacts to marine species that may be present during the conduct of the proposed research to a level of insignificance. As detailed in Attachment 1 (Chapters II and IV), the IHA (Attachment 1, Appendix D), and ITS (Section 10.4) issued by NMFS on May 7, 2015 for the Proposed Action, operational monitoring and mitigation measures would include: ramp ups; a minimum of one, but typically two dedicated observers maintaining a visual watch during all daytime airgun operations; two observers for 30 minutes before and during ramp-ups during the day and at night; passive acoustic monitoring (PAM) during the day and night to complement visual monitoring (unless the system and back-up systems are damaged during operations); and, power downs (or, if necessary, shut downs) when marine mammals, sea turtles, and endangered and threatened seabirds are detected in or are about to enter designated exclusion zones. Per the IHA and ITS, additional mitigation measures would include a one-minute shot interval for the 40-in<sup>3</sup> mitigation airgun, and power downs for groups (6 or more) of large whales. The fact that the small airgun array, as a result of its design, directs the majority of the energy downward, and less energy laterally, would also be an inherent mitigation measure.

With the planned monitoring and mitigation measures, unavoidable impacts to marine species that could be encountered would be expected to be minimal, and limited to short-term, localized changes in behavior and distribution near the seismic vessel. At most, effects on marine mammals may be interpreted as falling within the federal Marine Mammal Protection Act (MMPA) definition of "Level B Harassment" for those species managed by NMFS. No long-term or significant effects would be expected on individual marine mammals, sea turtles, seabirds, fish or the populations to which they belong or on their habitats.

The Final Amended EA also evaluated potential socioeconomic impacts of the Proposed Action. Because of the location of the Proposed Action and distance from shore, human activities in the area around the survey vessel would be limited to SCUBA diving, commercial and recreational fishing activities and other vessel traffic. Because of the nature and location of the Proposed Action, no impacts would be expected on marine-related local businesses such as coastal restaurants, hotels, and bait and tackle shops or to marine mammal tour boat activities. Fishing, SCUBA diving, vessel traffic, and potential impacts are described in further detail in the Final Amended EA, Chapter III and IV.

Recreational and commercial fisheries activities would not be precluded in the survey area. No fisheries activities except vessels in transit were observed in the survey area during the ~13 days that the R/V *Langseth* was there in July 2014. No fish kills or injuries were observed during 2014 survey activities. Similar past research seismic surveys in the proposed rescheduled 2015 survey area (2002, 1998, 1996, 1990) did not result in noticeable effects on commercial or recreational fish catches, based on a review of multi-year NMFS fish catch data in the months when seismic surveys were undertaken. Based on a review of National Automated Identification System (AIS) data, the number of fishing vessels equipped with AIS in June and July 2013 and

2014 was 21–27 per month, with only 4–6 of those vessels spending more than a few hours in the proposed survey area. L-DEO would coordinate with local SCUBA diving organizations and shops to avoid space-use conflicts. L-DEO would also issue Notices to Mariners to coordinate and provide updates on operations in the area. In June and July 2013 and 2014, there was only one AIS-identified dive boat passing through the survey area. No dive vessels were observed in the survey area during the ~13 days that the R/V *Langseth* was there in July 2014. It would be unlikely that the Proposed Action would have any impact on marine mammal tour boat activities due to the distance from the proposed survey site to the typical locations for those types of activities. Given the short duration of the survey and the temporary nature of potential environmental impacts, impacts to the local economy, such as to fisheries, SCUBA diving industry, and marine mammal tour boats would not be anticipated.

A survey at an alternative time would result in few net benefits. Marine mammals and sea turtles are expected to be found throughout the proposed survey area and throughout the time during which the Proposed Action would occur. Some marine mammal species are expected to occur in the area year-round, so altering the timing of the Proposed Action likely would result in no net benefits for those species. Some migratory species are expected to be farther north at the proposed rescheduled time of the survey, such as the North Atlantic right whale, so the proposed survey timing is beneficial for those species. Weather (i.e., operational safety of crew and vessel when deploying seismic gear) and availability of vessel, equipment, and personnel are also factors that need to be considered when scheduling the activity. Some of the deadliest recorded storms in New Jersey have occurred during September/October. One of the most deadly storms in recent history was Hurricane Sandy, which occurred during the October/November timeframe of 2012, and resulted in 73 deaths and cost billions of dollars in assistance. Furthermore, the scientific personnel (lead Principal Investigator (PI) and collaborating PIs) and R/V Langseth would likely not be available in September/October, and, therefore, the purpose and need of the proposed activities could not be met. There is also a timeliness factor involved with the Proposed Action; the professional and academic careers of the researchers and students involved with the Proposed Action are affected by the timing of data collection and there is a desire to have the scientific results incorporated into the broader scientific community in the near term.

The "No Action" alternative would remove the potential of the limited direct and indirect environmental consequences as described. However, it would preclude important scientific research from going forward that has distinct potential to address important environmental concerns related to sea level change in nearshore environments. The "No Action" alternative would result in a lost opportunity to obtain important scientific data and knowledge relevant to the geosciences and to society in general. The collaboration, involving PIs and students, would be lost along with the collection of new data, interpretation of these data, and introduction of new results into the greater scientific community and applicability of this data to other similar settings. Loss of NSF support often represents a significant negative impact to the academic infrastructure, including the professional and academic careers of the researchers, students, ship technicians and crew who are part of the U.S. Academic Research Fleet. The "No Action" alternative would not meet the purpose and need of the Proposed Action, but was carried through for analysis as required under Council on Environmental Quality regulations (40 C.F.R. 1502.14[d]).

NSF posted a Draft Environmental Assessment (Draft EA) on the NSF website for a 37 day public comment period on December 19, 2014. As the Draft Amended EA included information regarding marine mammals and threatened and endangered species in the proposed survey area, it was used for consultations with other regulatory agencies. NSF typically holds a 30 day public comment period on Draft EAs, however, because the public comment period for the Proposed Action overlapped several holidays, the period was extended an additional seven days. During the public comment period, NSF received a 30 day extension request from nine entities and individuals. The extension request was based on the main assertion that the document included the addition of 126 new published data and scientific literature sources. NSF compared the sources cited in the 2014 Final EA for the project issued on July 1, 2014, with the Draft Amended EA. The 2014 Final EA, which was issued nearly six months before the NSF Draft Amended EA, contained all but six of the sources identified in "Section VI. Literature Cited". Three of those sources were actually referenced in the 2014 Final EA document but were inadvertently omitted from the "Section VI. Literature Cited". Of the remaining three additional sources, one was the 2014 Final EA for the, "Seismic Reflection Scientific Research Surveys During 2014 and 2015 in Support of Mapping the US Atlantic Seaboard Extended Continental Margin and Investigating Tsunami Hazards" issued on August 21, 2014. Despite the addition of only a few sources of published data and scientific literature referenced in the Draft Amended EA, NSF decided to extend the public comment period by an additional 15 days above and beyond the 37 days it was planned to be open for comment. At the close of the comment period, eight comments from individuals and entities (one of which represented multiple organizations and individuals) on the Proposed Action were received by NSF (Attachment 1, Appendix F). NSF also reviewed and considered public comments received by the National Oceanic and Atmospheric Administration's (NOAA's) NMFS during a 30 day public comment period for the IHA process. After consideration of public comments received during both public comment periods and discussions during MMPA and Endangered Species Act (ESA) consultations with NMFS, refinements to the information in the Final Amended EA were made. The new information included in the Final Amended EA, however, did not alter the overall conclusions of the Draft Amended EA and remained consistent with the PEIS and the 2014 Final EA. In sum, after full consideration of the Draft Amended EA, the comments received on the Draft Amended EA, and the conclusions reached in the 2014 Final EA, the PEIS, the 2014 and 2015 IHAs, the 2014 and 2015 ITSs, the 2014 and 2015 responses from the Regional Coordinator for EFH, the 2014 and 2015 concurrences from U.S. Fish and Wildlife Service (USFWS) and the entire environmental compliance record, NSF issued its Final Amended EA concluding that implementation of the Proposed Action would not result in significant impacts.

# Public Involvement and Coordination with Other Agencies and Processes

Endangered Species Act (ESA)

NSF engaged in formal consultation with NMFS and informal consultation with USFWS, pursuant to Section 7 of the ESA. NSF received confirmation on 14 January 2015 from USFWS that the proposed rescheduling of the survey from 2014 to 2015 would not change the effect of the Proposed Action on the species and their concurrence on the Proposed Action remained the same as in 2014 (Attachment 1, Appendix H). NMFS issued a Biological Opinion and an

Incidental Take Statement for the Proposed Action on May 7, 2015, and consultation was concluded (Attachment 1, Appendix C).

## Marine Mammal Protection Act (MMPA)

On December 23, 2015, L-DEO submitted, on behalf of NSF, L-DEO, and Rutgers University to NMFS an IHA application pursuant to the MMPA. Following a 30 day public comment period, NMFS issued an IHA on May 7, 2015 (Attachment 1, Appendix D).

## NMFS Marine Mammal Stranding Program

Although marine mammal strandings were not expected as a result of the Proposed Action, NMFS informed the Greater Atlantic Stranding Network coordinators and the Coordinator for the Marine Mammal Health and Stranding Program (MMHSRP) on 8 January 2015 that an IHA application for the Proposed Action had been received. Per the IHA, should any marine mammal strandings occur during the survey, NMFS and the NMFS Greater Atlantic Regional Fisheries Office Marine Mammal Response Coordinator would be contacted.

## Magnuson-Stevens Act - Essential Fish Habitat (EFH)

The Magnuson-Stevens Act requires that a federal action agency consult with NMFS for actions that "may adversely affect" Essential Fish Habitat (EFH). On December 22, 2014, NSF contacted the EFH Regional Coordinator of the NOAA Greater Atlantic Regional Fisheries Office regarding consultation for the proposed activity. The EFH Regional Coordinator concluded that the Proposed Action may have an adverse effect on EFH, however, no specific EFH conservation recommendations were provided (Attachment 1, Appendix I). NOAA recommended additional research and monitoring to gain a better understanding of the potential effects that seismic surveys may have on EFH, federal managed species, their prey, and other NOAA trust resources for future NSF activities, however, this was not a consultation requirement and consultation was concluded.

NSF has nevertheless provided federal funding for the, "Fourth International Conference on Effects of Noise on Aquatic Life" (AN2016), which is a follow-on from international meetings held in Nyborg, Denmark (2007), Cork, Ireland (2010), and Budapest, Hungary (2013; <a href="https://www.an2013.org">www.an2013.org</a>), all of which NSF also provided funding. The major goal of AN2016 will be to define the current state of knowledge on the impact of underwater noise and, in particular, explore the progress made in this field in the three years since the previous conference. The meeting will bring together researchers, regulators/policy makers, and industry with an interest in different animal groups, including marine mammals, turtles, fish and invertebrates. NSF also regularly participates in interagency committees and working groups related to anthropogenic sound in the marine environment, such as the Subcommittee on Ocean Science and Technology Interagency Task Force on Ocean Noise and Marine Life.

#### Coastal Zone Management Act (CZMA)

New Jersey: On October 8, 2014, NSF contacted the New Jersey Department of Environmental Protection (NJDEP) about NSF's interest in rescheduling the 2014 survey for a 30 day period within the same timeframe (June/July/August) in 2015, and a teleconference to discuss details further was arranged for October 15, 2014. On October 15, 2014, NSF and NJDEP held a teleconference about the Proposed Action. Although NSF reviewed New Jersey's (NJ's) Coastal

Management Program (CMP) Federal Consistency Listings (http://www.state.nj.us/dep/cmp/2008\_fc\_listing.pdf) and determined the activity to be unlisted, NSF asked NJDEP if they had interest in reviewing the Proposed Action under the Coastal Zone Management Act, and NJDEP confirmed their interest in conducting a consistency review. By providing early notice about the Proposed Action, NSF intended to allow for the maximum time available to discuss it with NJDEP and resolve any differences prior to submitting a Consistency Determination (CD) and/or during the 90 day consultation period following submission of a CD. At that time, per 15 C.F.R. Part 930.34(d), NSF also requested that NJDEP provide a list of relevant enforceable policies for the Proposed Action. Despite repeated requests, NJDEP did not, however, provide a list of relevant enforceable policies to NSF.

NSF submitted to NJDEP a CD on December 22, 2014 for the Proposed Action with the Draft Amended EA appended as Attachment 1 (Appendix K). On February 23, 2015, NSF received a letter from NJDEP dated February 11, 2014, requesting a 15 day extension pursuant to 15 C.F.R. 930,41(b) of the CZMA regulations. On March 6, 2015, NJDEP provided a consistency review to NSF. NJDEP found the NSF Proposed Action to be "inconsistent" with three enforceable policies of NJ's CMP. Per 15 C.F.R. 930.43, NSF encouraged NJDEP to work with NSF to resolve differences before the close of the 90 day consultation period, however, attempts were unsuccessful. NSF worked with NOAA's Office for Coastal Management (OCM) to resolve differences with NJDEP through informal mediation. Mediation efforts are ongoing and NSF remains hopeful that an agreement will ultimately be reached. Separately from the mediation efforts, NSF concluded in its Final Federal Consistency Determination for the Marine Geophysical Survey by the R/V Marcus G. Langseth in the Atlantic Ocean off New Jersey, Summer 2015 (Final Determination) (Attachment 1, Appendix J) that, following review of NJDEP's consistency review and the entire environmental compliance record, the Proposed Action is consistent to the maximum extent practicable with the enforceable policies of NJ's CMP.

New York: On 1 August 2014, New York Department of State (NYDOS) submitted a letter to NSF expressing interest in the 2014 survey, stating that the survey area was within their off shore planning area of interest and requested review of any current or future proposed action for federal consistency. Per the requirements of the CZMA, NSF reviewed the New York CMP Federal Consistency Listings and determined that the Proposed Action was unlisted. Because of the substantial distance of the survey site from New York state waters, no effects would be expected on New York coastal uses or resources. Although under the CZMA unlisted review requests are required to go through OCM, in light of NYDOS' 1 August 2014 letter expressing particular interest in seismic surveys, NSF contacted NYDOS on 30 October 2014, to confirm the State's interest in reviewing the unlisted Proposed Action. On 9 January 2015, NYDOS confirmed interest in reviewing the Proposed Action. Per 15 C.F.R. 930.34, NSF, both in October 2014 and in subsequent contacts, requested that NYDOS identify relevant enforceable policies applicable to the Proposed Action, but none were identified.

On 16 January 2015, NSF submitted to NYDOS, "NSF Coastal Zone Management Act (CZMA) Consistency Determination" (CD), with the Draft Amended EA appended as Attachment 1 (Appendix K). On 13 March 2015, NYDOS requested a 15 day extension of time to review the CD and NSF acknowledged NYDOS's request the same day. NYDOS provided its response to

NSF's CD on 31 March 2015, which concurred with NSF's CD that the Proposed Action was consistent with the enforceable policies of New York's federally approved CMP. NYDOS included, however, several recommendations to modify the Proposed Action to reduce the likelihood of reasonably foreseeable effects on New York's coastal resources and uses: (1) the Proposed Action should avoid overlap to the maximum extent practicable with New York's commercial fishing use; and (2) the Proposed Action should be confined to operations during the Fall months to reduce the likelihood of reasonably foreseeable effects on fish stocks commercially important to New York. NYDOS's concurrence with NSF's CD, however, was not conditional on NSF adhering to these recommendations. NSF addressed NYDOS' recommendations in the Final Amended EA.

#### **Conclusion and Decision**

NSF has reviewed and concurs with the conclusions of the Final Amended EA (Attachment 1) that implementation of the Proposed Action will not have a significant impact on the environment. Consequently, implementation of the Proposed Action will not have a significant direct, indirect or cumulative impact on the environment within the meaning of the National Environmental Policy Act (NEPA). Because no significant environmental impacts will result from implementing the Proposed Action, an environmental impact statement is not required and will not be prepared. Therefore, no further study under NEPA is required.

As described above, NSF's compliance with the Marine Mammal Protection Act, Endangered Species Act, and Essential Fish Habitat under the Magnuson-Stevens Act has been completed. NSF has also complied with the Coastal Zone Management Act, submitting Consistency Determinations to the states of New York and New Jersey. The state of New York found the Proposed Action to be consistent with the enforceable policies of its federally approved CMP. The state of New Jersey found the Proposed Action to be inconsistent with three enforceable policies of its federally approved CMP. For the reasons identified in the Final Determination (Attachment 1, Appendix J), however, NSF has determined the Proposed Action to be consistent to the maximum extent practicable with the enforceable policies of New Jersey's federally approved Coastal Management Plan. As such, NSF has decided to authorize the Proposed Action to proceed over the State of New Jersey's objections.

Accordingly, on behalf of NSF, I authorize the issuance of a Finding of No Significant Impact for the Proposed Activity, the marine seismic survey proposed to be conducted on board the Research Vessel *Marcus G. Langseth* in the Atlantic Ocean off New Jersey, during the effective time period of the IHA and hereby approve the Proposed Action to commence.

Bauke (Bob) Houtman

Integrative Programs Section Head

Division of Ocean Sciences

Date

Attachment 1: Final Amended Environmental Assessment of a Marine Geophysical Survey by the R/V *Marcus G. Langseth* in the Atlantic Ocean off New Jersey, Summer 2015