UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NOAA Marine and Aviation Operations
Marine Operations Center
439 W. York Street
Norfolk, VA 23510-1114

MEMORANDUM FOR: Lieutenant Commander Nicholas Chrobak, NOAA
Commanding Officer, NOAA Ship *Nancy Foster*

FROM: Captain Anita L. Lopez, NOAA
Commanding Officer, NOAA Marine Operations Center-Atlantic

SUBJECT: Project Instruction for NF-13-02
Mapping Essential Fish Habitat in the US Caribbean to Inform MPA Management

Attached is the final Project Instruction for NF-13-02, US Caribbean Mapping for MPA, which is scheduled aboard NOAA Ship *Nancy Foster* during the period of 5 March – 30 March, 2013. Acknowledge receipt of these instructions via e-mail to **OpsMgr.MOA@noaa.gov** at Marine Operations Center-Atlantic.

Attachment

cc:
MOA1

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE
CENTER FOR COASTAL MONITORING AND ASSESSMENT
1305 East West Highway N/SCI1, 9th Floor
Silver Spring, MD 20910

FINAL Project Instructions

Date Submitted: January 29, 2013

Platform: NOAA Ship *Nancy Foster*

Project Number: NF-13-2 USVI (OMAO)

Project Title: Mapping Essential Fish habitat in the US Caribbean to Inform MPA Management

Project Dates: March 05, 2013 to March 30, 2013

Prepared by: _____ Dated: 1/29/13
Timothy A. Battista
Chief Scientist
Center for Coastal Monitoring and Assessment

Approved by: Teresa McTigue for MM Dated: 1/30/2013
Dr. Mark E. Monaco
Director
Center for Coastal Monitoring and Assessment

Approved by: _____ Dated: 01/31/13
Dr. W. Russell Callender
FOR Director
National Centers for Coastal Ocean Science

Approved by: _____ CAPT/NOAA Dated: 19 FEB 13
Captain Anita L. Lopez, NOAA
Commanding Officer
Marine Operations Center - Atlantic

I. Overview

A. Brief Summary and Project Period

The Center for Coastal Monitoring and Assessment (CCMA) will be conducting the tenth year of an ongoing scientific research mission onboard NOAA Ship *Nancy Foster* funded by NOAA's Coral Reef Conservation Program. The purpose of the cruise will be to collect swath bathymetry and acoustical backscatter, as well as fishery acoustics data in the Northeast Reserve Marine Protected Area, Puerto Rico.

B. Service Level Agreements

Of the 30 DAS scheduled for this project, 0 DAS are funded by the program and 30 DAS are funded by OMAO. This project is estimated to exhibit a Medium Operational Tempo.

C. Operating Area

Northeast Reserve, Puerto Rico. See Figure 1.

D. Summary of Objectives

Scientists will collect high resolution multibeam and acoustic fisheries data in mid-water depths approximately 30 to 1000 meters so as to continue to characterize seafloor habitats within all U.S. States, Territories, and Commonwealths. The objective of this project is to collect a multibeam bathymetry dataset with 100% seafloor ensonification, along with multibeam backscatter suitable for seafloor characterization. Fishery acoustics data will be collected to characterize broad-scale fish abundance, biomass, and utilization patterns, as well as to locate and document fish spawning aggregations. Multibeam data will be collected to conform to IHO Order 1 (<100m) and Order 2 (>100m) accuracy standards. The strategies developed for each survey area will take into account the minimum depths, general bathymetry, and time allotment. The delineation and identification of seafloor habitats will be assisted by the use of a moderate-depth Remotely Operated Vehicle (ROV). The vehicle has video and frame camera capability to depths of 300 meters and will be used for point sampling within areas mapped during this mission.

E. Participating Institutions

NOAA (NCCOS, OCS, CRCP), University of North Carolina at Wilmington-NURC, Solmar Hydro, and students from various academic institutions.

F. Personnel/Science Party: name, title, gender, affiliation, and nationality

Name (Last, First)	Title	Date Aboard	Date Disembark	Gender	Affiliation	Nationality
Battista, Tim	Oceanographer	3/5/13	3/17/13	Male	NOAA	U.S.
Horn, Lance	ROV Operator	3/5/13	3/30/13	Male	Contractor	U.S.
Kagesten, Gustav	Physical Sci.	3/5/13	3/30/13	Male	Contractor	Sweden
Argento, Adam	Physical Sci.	3/5/13	3/30/13	Male	NOAA	U.S.
Stecher, Mike	Hydrographer	3/5/13	3/30/13	Male	Contractor	U.S.
Taylor, Chris	Fishery Sci	3/5/13	3/17/13	Male	NOAA	U.S.
Taylor, Glen	ROV Operator	3/5/13	3/30/13	Male	Contractor	U.S.
Pickard, Alexandria	Research Asst	3/5/13	3/17/13	Female	Academic	U.S.
Sautter, Will	Physical Sci.	3/5/13	3/30/13	Male	Contractor	U.S.
Sanchez, Krystina	Geologist	3/5/13	3/17/13	Female	UPR	U.S.
Costa, Bryan	Physical Sci.	3/18/13	3/30/13	Male	Contractor	U.S.
Ebert, Eric	Fishery Sci	3/18/13	3/30/13	Male	Contractor	U.S.
Kracker, Laura	Geographer	3/18/13	3/30/13	Female	NOAA	U.S.

G. Administrative

1. Points of Contacts: Chief Scientist (3/5-3/17/13): Tim Battista, 1305 East West Hwy, Silver Spring, MD 20910. 301-713-3028 x171, tim.battista@noaa.gov; Chief Scientist (3/18-3/30/13): Bryan Costa, 1305 East West Hwy, Silver Spring, MD 20910. 301-713-3028 x146, bryan.costa@noaa.gov

2. Diplomatic Clearances

   This project involves Marine Scientific Research in waters under the jurisdiction of the United States. No diplomatic clearances are required.

3. Licenses and Permits

   No licenses or permits are required.

II. Operations

A. Project Itinerary

Actual survey and ground truthing locations will be made available to the Operations Officer during the daily operations meeting. Fisheries acoustics via the Simrad EK60 Suite will occur during all shifts (MBES Survey and Ground Truthing).

B. Staging and Destaging

ROV gear will have been loaded on the vessel in Charleston before departing for Puerto Rico (11FEB2013). ROV equipment will need to be retrieved from the hold on March 4 AM in San Juan. Destaging will occur March 31 AM in San Juan. Upon transit/ return to San Juan, ROV equipment will loaded in the hold for storage until it is retrieved by UNCW in Charleston, SC

(09APR2013). Fishery acoustics calibration will occur in water depths >15m at a slow drift or at anchor; and will be conducted opportunistically depending on local conditions.

C. Operations to be Conducted

4 March (Monday): NOAA Ship *Nancy Foster* berthed in San Juan, PR
Survey NF: Science survey team readies system for install and completes acquisition line planning.
GT: Ground Truthing (GT) install team configures remaining camera gear and conducts USBL, POS/MV, GPS integration with Hypack; and installs hydrophone pole.
All: Remaining science party arrives. Team meeting 1800.

5 March (Tuesday):
MBES and Transit: (1000-1630). Ship transit from San Juan to Northeast Reserve East (NRE). Six and a half hour transit (39 nm) with MBES of shelf to be collected during transit (transit speed 6 knots).
Survey NF: (1630-2400). Conduct MBES patch test. Begin MBES and Fishery Acoustic (FA) survey of NRW.

6 March (Wednesday):
Survey NF: (2400-0800). Conduct MBES and FA of NRE.
GT: (0800-1600). Conduct ground truthing of nearshore insular shelf with ROV.
Survey NF: (1600-2400). Conduct MBES and FA of NRE.

7 March (Thursday):
Survey NF: (2400-0800). Conduct MBES and FA of NRE.
GT: (0800-1600). Conduct ground truthing of NRE with ROV.
Survey NF: (1600-2400). Conduct MBES and FA of NRE.

8 March (Friday):
Survey NF: (2400-0800). Conduct MBES and FA of NRE.
GT: (0800-1600). Conduct ground truthing of NRE with ROV.
Survey NF: (1600-2400). Conduct MBES and FA of NRE.

9 March (Saturday) to 14 March (Thursday):
Survey NF: (2400-0800). Conduct MBES and FA of NRW.
GT: (0800-1600). Conduct ground truthing of NRW with ROV.
Survey NF: (1600-2400). Conduct MBES and FA of NRW.

15 March (Friday):
Survey NF: (2400-1100). Conduct MBES and FA of NRW.
MBES and Transit: (1100-1500). Ship transit from NRW to San Juan. Four hour transit (24 nm) with MBES of shelf to be collected during transit (transit speed 6 knots).

16 March (Saturday) In-Port Ship Rest Day
Education Day: (0900-1200). Get Reef Smart! Kids Day run by science party and a brief ship tour (30 visitors).

17 March (Sunday) to 18 March (Monday) In-Port Ship Rest Day
No Science Activities

19 March (Tuesday):
MBES and Transit: (1000-1400). Ship transit from San Juan to NRW. Four hour transit (24 nm) with MBES of shelf to be collected during transit (transit speed 6 knots).
Survey NF: (1400-2400). Conduct MBES and FA of NRW.

20 March (Wednesday) to 29 March (Friday):
Survey NF: (2400-0800). Conduct MBES and FA of NRW.
GT: (0800-1600). Conduct ground truthing of NRW with ROV.
Survey NF: (1600-2400). Conduct MBES and FA of NRW.

30 March (Saturday):
Fish Acoustics: (2400-1100). Conduct Fish Acoustics of Grand Reserve Area. ROV on standby.
MBES and Transit: (1100-1500). Ship transit from NRW to San Juan. Four hour transit (24 nm) with MBES of shelf to be collected during transit (transit speed 6 knots).

31 March (Sunday):
Demobe: (0800-1200). Scientists demob gear and prepare for ship storage. Scientist disembark next AM.

D. Dive Plan

All dives are to be conducted in accordance with the requirements and regulations of the NOAA Diving Program (http://www.ndc.noaa.gov/dr.html) and require the approval of the ship's Commanding Officer.

No diving is anticipated for this mission.

E. Applicable Restrictions

Conditions which preclude normal operations:

Equipment failure: Mitigation - at sea repair, switch to alternate multibeam or operations.

Poor weather: Mitigation – switch to more protected area or suspend operations.

Safety concerns: Mitigation – discuss as safety briefing or with ships command.

III. Equipment

A. Equipment and Capabilities provided by the ship (itemized)

1) Hand held radios for communication between bridge and deck.
2) CTD's 100m and 1000 m depth rating.
3) EM 1002 and Reson Seabat 7125 Multibeam, and Kongberg Split-beam EK-60.
4) Dynamic Positioning System.

B. Equipment and Capabilities provided by the scientists (itemized)

1) Underwater video + camera equipment + tow bodies (Phantom 2 ROV)
2) USBL Underwater tracking system and hydrophone pole
3) Five high end laptops.
4) CARIS, ArcGIS, Hypack/Hysweep, FMGT

IV. Hazardous Materials

A. Policy and Compliance

The Chief Scientist is responsible for complying with FEC 07 Hazardous Materials and Hazardous Waste Management Requirements for Visiting Scientific Parties (or the OMAO procedure that supersedes it). By Federal regulations and NOAA Marine and Aviation Operations policy, the ship may not sail without a complete inventory of all hazardous materials by name and the anticipated quantity brought aboard, MSDS and appropriate neutralizing agents, buffers, or absorbents in amounts adequate to address spills of a size equal to the amount of chemical brought aboard, and a chemical hygiene plan. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

Per FEC 07, the scientific party will include with their project instructions and provide to the CO of the respective ship 60 to 90 days before departure:

- A list of hazardous materials by name and anticipated quantity
- Include a chemical spill plan that addresses all of the chemicals the program is bringing aboard. This shall include:
    - Procedures on how the spilled chemicals will be contained and cleaned up.
    - A complete inventory (including volumes/amounts) of the chemical spill supplies and equipment brought aboard by the program. This must be sufficient to clean and neutralize all of the chemicals brought aboard by the program.
    - A list of the trained personnel that will be accompanying the project and the training they've completed.

Upon embarkation and prior to loading hazardous materials aboard the vessel, the scientific party will provide to the CO or their designee:

- An inventory list showing actual amount of hazardous material brought aboard
- An MSDS for each material
- Confirmation that neutralizing agents and spill equipment were brought aboard sufficient to contain and cleanup all of the hazardous material brought aboard by the program.

Upon departure from the ship, scientific parties will provide the CO or their designee an inventory of hazardous material indicating all materials have been used or removed from the vessel. The CO's designee will maintain a log to track scientific party hazardous materials. MSDS will be made available to the ship's complement, in compliance with Hazard Communication Laws.

Scientific parties are expected to manage and respond to spills of scientific hazardous materials. Overboard discharge of scientific chemicals is not permitted during projects aboard NOAA ships.

No HAZMAT will be used or brought on the vessel.

B. Radioactive Isotopes

The Chief Scientist is responsible for complying with OMAO 0701-10 Radioactive Material aboard NOAA Ships. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

At least three months in advance of a domestic project and eight months in advance of a foreign project start date, the Chief Scientist shall submit required documentation to MOC-CO, including:

1. NOAA Form 57-07-02, Request to Use Radioactive Material aboard a NOAA Ship
2. Draft Project Instructions
3. Nuclear Regulatory Commission (NRC) Materials License (NRC Form 374) or a state license for each state the ship will operate in with RAM on board the ship.
4. Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction, or Offshore Waters (NRC Form 241), if only state license(s) are submitted).
5. MSDS
6. Experiment or usage protocols, including spill cleanup procedures.

Scientific parties will follow responsibilities as outlined in the procedure, including requirements for storage and use, routine wipe tests, signage, and material disposal as outline in OMAO 0701-10.

All radioisotope work will be conducted by NRC or State licensed investigators only, and copies of these licenses shall be provided per OMAO 0701-10 at least three months prior to the start date of domestic projects and eight months in advance of foreign project start dates.

C. Inventory (itemized) of Radioactive Materials

No Radioactive Materials will be used or brought on the vessel.

V. Additional Projects

A. Supplementary (“Piggyback”) Projects

We are exploring the possibility of deploying simulated marine debris targets to assist in NOAA’s Marine Debris assessment efforts on the west coast. The approach would be to deploy targets similar in size and material to those objects typically found such as fish totes, derelict vessels, and plastic 55 gallon drums. These objects will be tethered and deployed for sufficient duration until and satellite imagery acquisition can be conducted (~24 hrs). Deployment will occur due north of San Juan approach, outside the shipping channel, and just beyond the shelf edge (~ 2km from shore). We are currently coordinating with USCG San Juan Sector and NOAA’s Marine Debris program for their assistance in this effort. We are anticipating the testing will occur between 3/3-

3/4/2013 using USCG vessel support. We may request use of one of the Nancy Foster trash bins to simulate a fish tote target.

C. NOAA Fleet Ancillary Projects

No NOAA Fleet Ancillary Projects are planned for this mission.

VI. Disposition of Data and Reports

A. Data Responsibilities

We request that the Ship's data storage be made available during the cruise to store all digital data (~ 3 TB). The science party will transfer that data from the Ship storage to scientist drives during the mid-cruise in-port and at the end of the cruise. The scientists will be responsible for providing data archives to NGDC and AHB as part of R2R within 12 months of the completion of the cruise. In order for this to be accomplished five scientist Government computers will need network access to the ship's data storage device so that can be moved from the acquisition computer to storage, and subsequently accessed by other Government computers tasked with data post-processing. The Chief Scientist will be provided a Full Local Administrative account for each of these computers to assist the Ship's ET in adding them to the Ship's network.

B. Pre and Post Project Meeting

Prior to departure, the Chief Scientist will conduct a meeting of the scientific party to train them in sample collection and inform them of project objectives. Some vessel protocols, e.g., meals, watches, etiquette, etc. will be presented by the ship's Operations Officer.

Post-Project Meeting: Upon completion of the project, a meeting will normally be held at 0830 (unless prior alternate arrangements are made) and attended by the ship's officers, the Chief Scientist and members of the scientific party to review the project. Concerns regarding safety, efficiency, and suggestions for improvements for future projects should be discussed.

C. Ship Operation Evaluation Report

Within seven days of the completion of the project, a Ship Operation Evaluation form is to be completed by the Chief Scientist. The preferred method of transmittal of this form is via email to omao.customer.satisfaction@noaa.gov. If email is not an option, a hard copy may be forwarded to:

Director, NOAA Marine and Aviation Operations
NOAA Office of Marine and Aviation Operations
8403 Colesville Road, Suite 500
Silver Spring, MD 20910

VII. Miscellaneous

A. Meals and Berthing

The ship will provide meals for the scientists listed above. Meals will be served 3 times daily beginning one hour before scheduled departure, extending throughout the project, and ending two hours after the termination of the project. Since the watch schedule is split between day and night, the night watch may often miss daytime meals and will require adequate food and beverages (for example a variety of sandwich items, cheeses, fruit, milk, juices) during what are not typically meal hours. Special dietary requirements for scientific participants will be made available to the ship's command at least seven days prior to the survey.

Berthing requirements, including number and gender of the scientific party, will be provided to the ship by the Chief Scientist. The Chief Scientist and Commanding Officer will work together on a detailed berthing plan to accommodate the gender mix of the scientific party taking into consideration the current make-up of the ship's complement. The Chief Scientist is responsible for ensuring the scientific berthing spaces are left in the condition in which they were received; for stripping bedding and linen return; and for the return of any room keys which were issued. The Chief Scientist is also responsible for the cleanliness of the laboratory spaces and the storage areas utilized by the scientific party, both during the project and at its conclusion prior to departing the ship.

All NOAA scientists will have proper travel orders when assigned to any NOAA ship. The Chief Scientist will ensure that all non NOAA or non Federal scientists aboard also have proper orders. It is the responsibility of the Chief Scientist to ensure that the entire scientific party has a mechanism in place to provide lodging and food and to be reimbursed for these costs in the event that the ship becomes uninhabitable and/or the galley is closed during any part of the scheduled project.

All persons boarding NOAA vessels give implied consent to comply with all safety and security policies and regulations which are administered by the Commanding Officer. All spaces and equipment on the vessel are subject to inspection or search at any time. All personnel must comply with OMAO's Drug and Alcohol Policy dated May 7, 1999 which forbids the possession and/or use of illegal drugs and alcohol aboard NOAA Vessels.

B. Medical Forms and Emergency Contacts

The NOAA Health Services Questionnaire (NHSQ, Revised: 02 JAN 2012) must be completed in advance by each participating scientist. The NHSQ can be obtained from the Chief Scientist or the NOAA website http://www.corporateservices.noaa.gov/~noaaforms/eforms/nf57-10-01.pdf. The completed form should be sent to the Regional Director of Health Services at Marine Operations Center. The participant can mail, fax, or scan the form into an email using the contact information below. The NHSQ should reach the Health Services Office no later than 4 weeks prior to the project to allow time for the participant to obtain and submit additional information that health services might require before clearance to sail can be granted. Please contact MOC Health Services with any questions regarding eligibility or completion of the NHSQ. Be sure to

include proof of tuberculosis (TB) testing, sign and date the form, and indicate the ship or ships the participant will be sailing on. The participant will receive an email notice when medically cleared to sail if a legible email address is provided on the NHSQ.

Contact information:

Regional Director of Health Services
Marine Operations Center – Atlantic
439 W. York Street
Norfolk, VA 23510
Telephone 757-441-6320
Fax 757-441-3760
E-mail MOA.Health.Services@noaa.gov

Prior to departure, the Chief Scientist must provide an electronic listing of emergency contacts to the Executive Officer for all members of the scientific party, with the following information: contact name, address, relationship to member, and telephone number.

C. Shipboard Safety

Wearing open-toed footwear or shoes that do not completely enclose the foot (such as sandals or clogs) outside of private berthing areas is not permitted. The ship does not provide steel-toed boots. Hard hats are also required when working with suspended loads. Work vests are required when working near open railings and during small boat launch and recovery operations. Hard hats and work vests will be provided by the ship when required.

D. Communications

A progress report on operations prepared by the Chief Scientist may be relayed to the program office. Sometimes it is necessary for the Chief Scientist to communicate with another vessel, aircraft, or shore facility. Through various means of communications, the ship can usually accommodate the Chief Scientist. Special radio voice communications requirements should be listed in the project instructions. The ship's primary means of communication with the Marine Operations Center is via e-mail and the Very Small Aperture Terminal (VSAT) link. Standard VSAT bandwidth at 128kbs is shared by all vessels staff and the science team at no charge. Increased bandwidth in 30 day increments is available on the VSAT systems at increased cost to the scientific party. If increased bandwidth is being considered, program accounting is required it and must be arranged at least 30 days in advance.

E. IT Security

Any computer that will be hooked into the ship's network must comply with the *NMAO Fleet IT Security Policy* 1.1 (November 4, 2005) prior to establishing a direct connection to the NOAA WAN. Requirements include, but are not limited to:

(1) Installation of the latest virus definition (.DAT) file on all systems and performance of a virus scan on each system.

(2) Installation of the latest critical operating system security patches.
(3) No external public Internet Service Provider (ISP) connections.

Completion of these requirements prior to boarding the ship is required.

Non-NOAA personnel using the ship's computers or connecting their own computers to the ship's network must complete NOAA's IT Security Awareness Course within 3 days of embarking.

F. Foreign National Guests Access to OMAO Facilities and Platforms

All foreign national access to the vessel shall be in accordance with NAO 207-12 and RADM De Bow's March 16, 2006 memo (http://deemedexports.noaa.gov). National Marine Fisheries Service personnel will use the Foreign National Registration System (FRNS) to submit requests for access to NOAA facilities and ships. The Departmental Sponsor/NOAA (DSN) is responsible for obtaining clearances and export licenses and for providing escorts required by the NAO. DSNs should consult with their designated NMFS Deemed Exports point of contact to assist with the process.

The following are basic requirements. Full compliance with NAO 207-12 is required.

Responsibilities of the Chief Scientist:

1. Provide the Commanding Officer with the e-mail generated by the FRNS granting approval for the foreign national guest's visit. This e-mail will identify the guest's DSN and will serve as evidence that the requirements of NAO 207-12 have been complied with.
2. Escorts – The Chief Scientist is responsible to provide escorts to comply with NAO 207-12 Section 5.10, or as required by the vessel's DOC/OSY Regional Security Officer.
3. Ensure all non-foreign national members of the scientific party receive the briefing on Espionage Indicators (NAO 207-12 Appendix A) at least annually or as required by the servicing Regional Security Officer.
4. Export Control - Ensure that approved controls are in place for any technologies that are subject to Export Administration Regulations (EAR).

The Commanding Officer and the Chief Scientist will work together to implement any access controls necessary to ensure no unlicensed export occurs of any controlled technology onboard regardless of ownership.

Responsibilities of the Commanding Officer:

1. Ensure only those foreign nationals with DOC/OSY clearance are granted access.
2. Deny access to OMAO platforms and facilities by foreign nationals from countries controlled for anti-terrorism (AT) reasons and individuals from Cuba or Iran without written NMAO approval and compliance with export and sanction regulations.
3. Ensure foreign national access is permitted only if unlicensed deemed export is not likely to occur.
4. Ensure receipt from the Chief Scientist or the DSN of the FRNS e-mail granting approval for the foreign national guest's visit.

5. Ensure Foreign Port Officials, e.g., Pilots, immigration officials, receive escorted access in accordance with maritime custom to facilitate the vessel's visit to foreign ports.
6. Export Control - 8 weeks in advance of the project, provide the Chief Scientist with a current inventory of OMAO controlled technology onboard the vessel and a copy of the vessel Technology Access Control Plan (TACP). Also notify the Chief Scientist of any OMAO-sponsored foreign nationals that will be onboard while program equipment is aboard so that the Chief Scientist can take steps to prevent unlicensed export of Program controlled technology. The Commanding Officer and the Chief Scientist will work together to implement any access controls necessary to ensure no unlicensed export occurs of any controlled technology onboard regardless of ownership.
7. Ensure all OMAO personnel onboard receive the briefing on Espionage Indicators (NAO 207-12 Appendix A) at least annually or as required by the servicing Regional Security Officer.

Responsibilities of the Foreign National Sponsor:

1. Export Control - The foreign national's sponsor is responsible for obtaining any required export licenses and complying with any conditions of those licenses prior to the foreign national being provided access to the controlled technology onboard regardless of the technology's ownership.
2. The DSN of the foreign national shall assign an on-board Program individual, who will be responsible for the foreign national while on board. The identified individual must be a U.S. citizen, NOAA (or DOC) employee. According to DOC/OSY, this requirement cannot be altered.
3. Ensure completion and submission of Appendix C (Certification of Conditions and Responsibilities for a Foreign National

Appendices

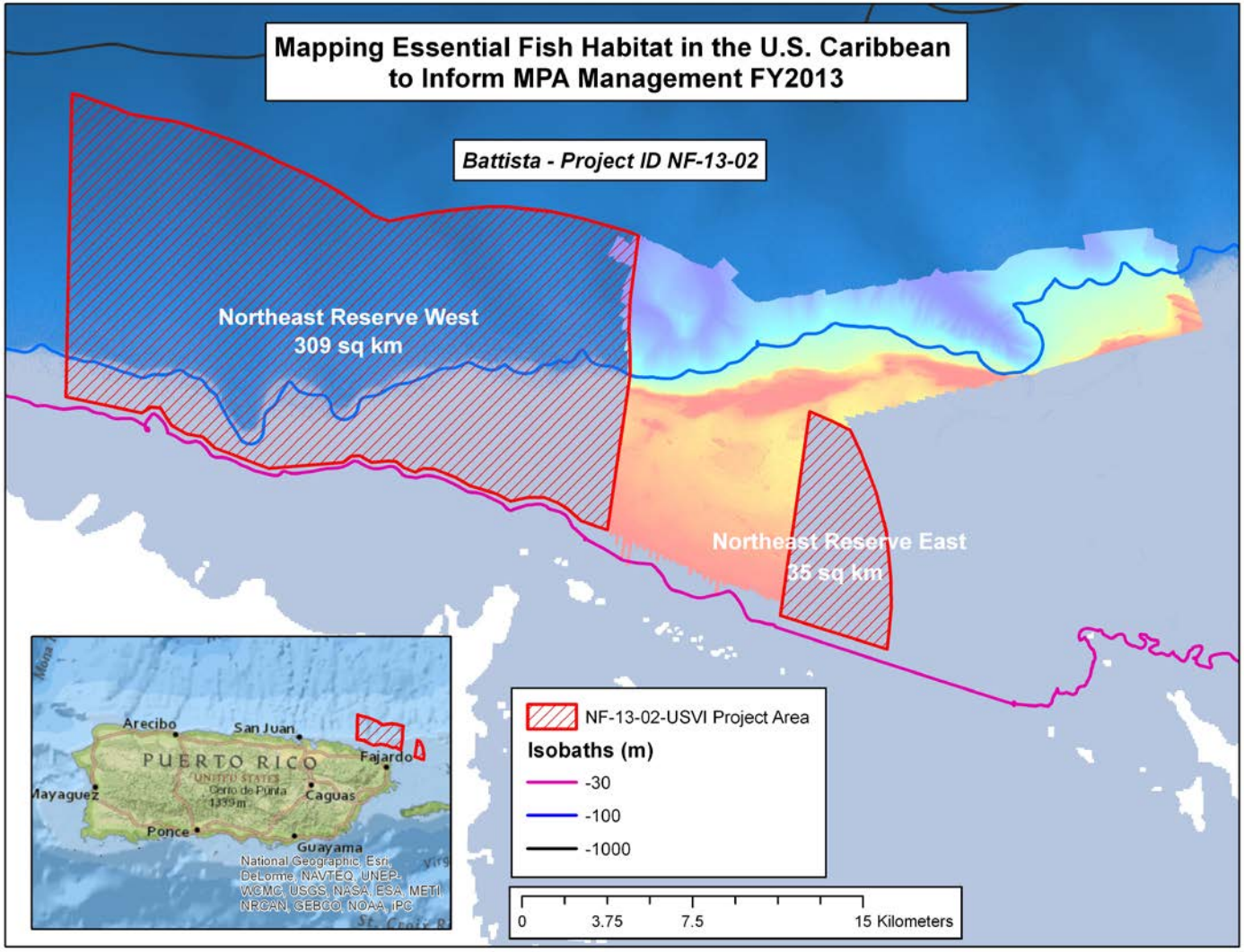

Figure 1: NF-13-02 Project Area