Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:
NOAA Point Shapefile - 100m2 Fish Density of Flower Garden Banks National Marine Sanctuary, United States, R/V Manta, Technical Dive Cruise, 2012, WGS84

1.2. Summary description of the data:
The design of this field mission is three fold: (1) to spatially characterize the distribution, abundance and size of both reef fishes and macro invertebrates within and around the waters of the Flower Gardens National Marine Sanctuary, (2) to relate this information to in-situ data collected on associated habitat parameters and (3) to use hydroacoustics technologies for a comprehensive assessment of East and West Bank. This information collected will be used to evaluate the utility of an experimental fishing closure on one of the most pristine reefs under US jurisdiction in the tropical Western Atlantic. Data collected during this mission (pre-closure) will provide baseline information necessary to evaluate closure efficacy and assess whether the closure should become permanent.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2012-10-22 to 2012-11-03

1.5. Actual or planned geographic coverage of the data:
W: -93.828529, E: -93.594742, N: 27.979643, S: 27.848211

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:
1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)
   2.1. Name:
       NCCOS Scientific Data Coordinator
   2.2. Title:
       Metadata Contact
   2.3. Affiliation or facility:
   2.4. E-mail address:
       NCCOS.data@noaa.gov
   2.5. Phone number:

3. Responsible Party for Data Management
   Program Managers, or their designee, shall be responsible for assuring the proper management of
   the data produced by their Program. Please indicate the responsible party below.
   3.1. Name:
       NCCOS Scientific Data Coordinator
   3.2. Title:
       Data Steward

4. Resources
   Programs must identify resources within their own budget for managing the data they produce.
   4.1. Have resources for management of these data been identified?
   4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"): 

5. Data Lineage and Quality
   NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality,
   objectivity, utility, and integrity of information which it disseminates.
   5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
       (describe or provide URL of description):
       Process Steps:
Acoustic data was collected aboard the R/V Manta using ES120-7C splitbeam transducer. The Kongsberg ES120-7C transducer was pole mounted aboard the R/V Manta. Kongsberg ES transceivers and Simard ES60 software was used in the data acquisition.

Echoview 5.2 was used in this step of the data processing. The EK60 .raw file format was edited for erroneous ping returns and acoustic noise. Fish were track using a tracking algorithm and the fish tracks were export in a .csv format.

An acoustic processing script(V6.4) was used to calculate the density and size of fish through out the water column. Then projected(WGS84) in 100 square meter resolution ESRI shapefile.

Arc Catalog was used to merge the daily shapefiles into one cruise shapefile. Metadata was added using arc catalog.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:
- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive
8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://www.fisheries.noaa.gov/inport/item/39215

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NOAA Data Documentation
Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-
Data_Documentation_v1.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

7.3. Data access methods or services offered:
Contact Chris Taylor @ chris.taylor@noaa.gov;
7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection
The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
National Centers for Coastal Ocean Science - Silver Spring, MD

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions
Line and Staff Offices may extend this template by inserting additional questions in this section.