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 for Dry Tortugas, United States, Project NF-08-06-SACS, 2008, WGS84

1.2. Summary description of the data:

The research mission was conducted in the Dry Tortugas, FL by National Ocean Service scientists from the Center for Coastal Habitat and Fisheries Research (CCFHR) during 2008 aboard the NOAA Ship Nancy Foster. The overall objective of CCFHR's research in the Tortugas is to examine the effects of implementation of the Tortugas North Ecological Reserve (TNER). The establishment of the TNER, a no-take reserve, in 2001 provided the opportunity to examine the response of the fish and benthic communities to the creation of a refuge for exploited reef fishes. Historically, exploitation of reef fishes in the Tortugas has focused on large predatory reef fishes, primarily snappers and groupers and, to a lesser extent, grunts. Trends in populations of these targeted species are expected to vary relative to geographic variation in fishing mortality (F). Increasing trends in targeted species abundance are expected in the TNER where all fishing was prohibited in 2001. Within adjacent areas managed as the Exclusive Economic Zone (EEZ), where both federally sanctioned commercial and recreational fisheries are permitted, exploited populations are expected to be depressed relative to those in the TNER. Within the Dry Tortugas National Park (DTNP) where fishing effort is limited to recreational hook and line fishing, trends in exploited species are expected to be intermediate to those observed in the TNER and EEZ. Cascading effects due to change in abundance of exploited species is expected to indirectly impact corals and other sessile benthic communities. Sampling to detect reserve implementation effects was conducted at the ecotone between the reef habitat of the banks and the surrounding soft-bottom shelf where the structure and composition of communities should provide sensitive indicators of a reserve effect. Energy flow across reef-sand boundaries is critical to ree f communities. Energy and nutrients are imported to the reef by nocturnally foraging ree f fish that feed in sand, algae, and seagrass flats adjacent to the reef. The majority of th e TNER (approximately 70%) consists of soft-bottom shelf habitat, and previous work o n the west Florida shelf suggests that benthic primary production is the major energ y source supporting fish biomass. In addition to providing ecologically sensitive samplin

g locations, the interface between bank and shelf provided a distinct landscape featur e suited to a comparative analysis of management impact. Observations were made usin g 1) a stratified-random survey design for scuba divers visual observations, 2) a systemati c survey of fish and fauna using scientific splitbeam echosounders (fisheries sonar) to ma p fish densities and biomass on the shelf, coral and softbottom habitats.

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:
2008-07-25 to 2008-08-04

1.5. Actual or planned geographic coverage of the data:
W: -83.113441, E: -82.92173, N: 24.880377, S: 24.583962

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:
- 2008-01-01 00:00:00 - Acoustic data was collected aboard the NOAA Ship Nancy Foster using ES120-7C splitbeam transducer. The Kongsberg ES120-7C tansducer was deployed using a moon pool. Kongsberg ES transceiver and Simard ES60 software was used in the data acquisition. Data was collected during all shifts of multibea m survey.
- 2010-01-01 00:00:00 - Echoview 4 was used in this step of the data processing. The .raw file formate was edited for erroneous ping returns and acoustic noise. Fish wer e track using a tracking algorithm and the fish tracks were export in a .csv formate.
- 2010-01-01 00:00:00 - Microsoft Office Excel 2007 was used to calculate the density and size of fish through out the water column. Divided fish into 100 meter square area and created a new workbook with the calculated fish sizes and densities.
- 2010-01-01 00:00:00 - Arc Catalog was used to convert the .xlsx file formate to shapefiles. Set the geographic coordinate system to WGS 84. Then merged the all th e .shp file into one .shp file with all the trip data.

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 facility
- 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/38751

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.