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:
   2016 USACE St Clair River, MI South 1X1 Average

1.2. Summary description of the data:
   This dataset consists of locations below the surface of the water where the depth of water is precisely known relative to some reference.

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

1.4. Actual or planned temporal coverage of the data:

1.5. Actual or planned geographic coverage of the data:
   W: -82.719661, E: -82.509139, N: 42.646458, S: 42.511131

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:
   NOAA Office for Coastal Management (NOAA/OCM)
2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
coastal.info@noaa.gov

2.5. Phone number:
(843) 740-1202

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:

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):

   Lineage Statement:
   Data were created by USACE and sent to OCM for distribution in the Digital Coast Data Access Viewer.

   Process Steps:
   - Multibeam echo sounding data was obtained by USACE on the R/V T. Walker.
     Information of note not otherwise captured in this metadata includes:
     Data_Transformation_Method: Point to Point Software  Tidal_Epoch: Unknown
     Geoid_Model: Geoid 2012a  Positioning_System: Real Time Kinematic (RTK)  System:
Multi Beam Echosounder  Transducer_Beam_Angle: 1.5 Degrees (Multi-beam)  Multi-beam_Swath_Width: 60m  Bin_Size: 1m x 1m  Shot_Selection_Method: Average  Shot_Positioning_Method: Point Positioning  Tide_Applied: Yes  Tide_Gauge_Location: NOAA St Clair Shores, MI Station ID: 9034052  Controlling_Benchmarks:     NGS BM PID DJ5157 (STAMPED 77707 2006);     TBM @ ALGONAC HARBOUR CLUB MARINA  Tide_Gauge_Application_Method: Direct  Squat_Applied: No  Heave_Applied: Yes  Heave_Application_Method: Real Time Kinematic (RTK)  Pitch_Roll_Applied: Yes  - NOAA OCM received the data in ASCII xyz format, Michigan State Plane South (2113) projection, NAD83 horizontal datum, IGLD85 vertical datum in meters. The NAD83 realization was assumed to be 2011. Data were converted to LAS format using LAStools txt2las. Data were converted to geographic coordinates using LAStools las2las and then transformed vertically to NAD83(2011) ellipsoid heights using NOAA VDatum. Files were then compressed to LAZ format using laszip. During the transform to ellipsoid heights, some data were lost because they fell outside the domain of the NAVD88 to IGLD85 conversion grids.

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:
  - 1.3. Is this a one-time data collection, or an ongoing series of measurements?
  - 1.4. Actual or planned temporal coverage of the data
  - 1.6. Type(s) of data
  - 1.7. Data collection method(s)
  - 3.1. Responsible Party for Data Management
  - 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.

7.4. 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/51880

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:
Office for Coastal Management (OCM)

7.2.1. If data hosting service is needed, please indicate:
7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=8442
https://coast.noaa.gov/htdata/lidar2_z/geoid12b/data/8442

7.3. Data access methods or services offered:
Data is available online for custom downloads

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):
Office for Coastal Management - Charleston, SC

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.