

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:**

Satellite Tagged Net Locations NWHI 2018 - 2021

1.2. Summary description of the data:

This pilot study follows the movements of 6 derelict fishing nets over time to study how far derelict nets can travel within an atoll, and how long they remain stationary. Six floating derelict fishing nets were located and tagged with satellite buoys in Pearl and Hermes Atoll in the Northwestern Hawaiian Islands during a marine debris removal mission in 2018. Locations of the 6 nets were transmitted every four hours from 09-30-2018 until the buoys broke free or stopped transmitting due to technical reasons. Last known stationary locations were surveyed on a return mission in September of 2021, and 4 of the 6 nets were relocated.

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:

2018-09-30 to 2021-09-14

1.5. Actual or planned geographic coverage of the data:

W: -175.800617, E: -175.7264, N: 27.943283, S: 27.891964

Geographic extent of tagged derelict fishing nets

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

Table (digital)

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.)

Instrument: GPS (Global Positioning System)

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:**

Brooke Olenski

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:**2.4. E-mail address:**

brooke.olenski@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:

Kaylyn S McCoy

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?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

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 downloaded using ELB 3010 Manager software. Locations were imported into csv file, symbols in coordinates were replaced in excel, then the files were loaded into the software program R. In R, date and time were separated and formatted to have consistent formats, and coordinates were converted to decimal degrees. Several points of bogus transmissions were removed, and all files were combined into one (raw data is one file for each buoy for each month).

Process Steps:

- Download data Open ELB3010 Manager Software OLD SOFTWARE VERSION: Right click on the map and minimize to bring the dashboard into view Open buoy log (T:\MarineDebris\MD Operations\NWHI\2018\Data\Spatial\Satlink\Positions) to see which ones are still active. Find the last timestamp for each buoy Example: stored time column: 21/11/18 16:45:15 In ELB manager, click on the red checkmark icon with the “I” on it. A window will open to show the last positions. Show Last 400 should be sufficient. Next to the filter name button, select the buoys one at a time, click Update (in the top right corner) and select the records since the last download. Record the latest date/time stamp in the log sheet. Once they are highlighted, right click and select Export... Navigate to the Positions/workspace folder and create a folder with today’s date. Save the file with the default name, but add an underscore and the last 2 digits in the buoy ID number (ex: Export1812102007_00) NEW SOFTWARE VERSION: In ELB manager, the three buoys should show up in a list on the left half of the screen. Right click and select ‘Export’ from the menu. In the pop up window, apply the filter ‘Last days’ and select something reasonable according to the last download in the buoy log. Save the file with the default name here: T:\MarineDebris\MD Operations\NWHI\2018\Data\Spatial\Satlink\Positions\workspace\raw_data Click Export to file, Accept, and close the window. Repeat for each buoy.
- Convert text files to csv Individual values are separated by semicolons, not commas, like excel is expecting. Change that in notepad. Open notepad, and open each csv file (to locate, navigate to folder and select ‘all files’ for type. Create a new first line and type: sep=; Save file, open next file, and do the same thing
- Convert coordinates from degrees decimal minutes to decimal degrees and exclude extra information Navigate to the raw data folder and open the csv files in excel and convert symbols to readable characters for R (may help to sort files by date modified) Highlight the latitude and longitude columns and select the ‘find and replace’ tool - replace ‘°’ with ‘/’ - replace “ ’ with ‘/’ (make sure to include a space after ') - replace ‘;’ with ‘.’ Save file here: T:\MarineDebris\MD Operations\NWHI\2018\Data\Spatial\Satlink\Positions\workspace\excel_replace_values_clean_data\2021 Save with default name, and add ‘_replace’ to the end of the file name For R script: Navigate here: T:\MarineDebris\MD Operations\NWHI\2018\Data\Spatial\Satlink\Positions\R code and open 1_format_lat_long_date_time_from_raw R code converts coordinates to decimal degrees and converts date and time into a readable format for calculating summaries. All raw files are combined into one csv file.

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):

Locations were mapped in ArcGIS 10.6.1 software to estimate accuracy

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?

Yes

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

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/63206>

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?

Yes

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:

NOAA National Centers for Environmental Information (NCEI)

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

7.2.2. URL of data access service, if known:

<https://accession.nodc.noaa.gov/0229980>

7.3. Data access methods or services offered:

Data can be accessed online via the NOAA National Centers for Environmental Information (NCEI) Ocean Archive.

7.4. Approximate delay between data collection and dissemination:

Unknown

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)

NCEI_MD

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):

Pacific Islands Fisheries Science Center - Honolulu, HI

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

Unknown

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

NOAA IRC and NOAA Fisheries ITS resources and assets.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.