

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:

Fertilization compatibility of spawning corals

1.2. Summary description of the data:

This data set includes experimental results of fertilization assays to characterize genetic compatibility between individual parental genotypes. Targeted species include *Acropora palmata* and *Orbicella faveolata*. Microsatellite multi-locus genotypes for the *O.faveolata* parental population are included.

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:

2014 to 2015-12

1.5. Actual or planned geographic coverage of the data:

W: -80.3747222222, E: -80.25738888889, N: 25.14519444444, S: 25.00911111111
Atlantic Ocean, U.S. South

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: N/A

Platform: N/A

Physical Collection / Fishing Gear: N/A

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:**

Dana E Williams

2.2. Title:

Metadata Contact

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

dana.williams@noaa.gov

2.5. Phone number:

305-767-3262

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:

Dana E Williams

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?

No

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

0

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:

- Pairwise fertilization assays performed by combining proportional amounts gamete bundles (containing both eggs and sperm) from 2 parental colonies in

replicated glass vials

- Three replicates listed for each cross Samples fixed in formalin-based fixative after ~ 6 hr and scored under a microscope at a later time % fertilization = # cleaving embryos/(#cleaving embryos + # unfertilized eggs)
- Also includes the multi-locus genotypes identifying individuals in the the parental population for *O.faveolata* Multilocus genotypes based on microsatellite markers as described in Baums IB, Hughes CR, and Hellberg M. 2005. Mendelian microsatellite loci for the Caribbean hard coral *Acropora palmata*. Marine Ecology Progress Series 288:115-127. Severance EG, Szmant AM A, Karl S (2004) Microsatellite loci isolated from the Caribbean coral, *Montastraea annularis*. Mol Ecol Notes 4:74-76 as modified by: Foster NL, Baums IB, Mumby PJ (2007) Sexual vs. asexual reproduction in an ecosystem engineer: the massive coral *Montastraea annularis*. J Anim Ecol 76:384-391
- Multilocus genotypes for *A.palmata* available under NCEI Accession Number 0142175 (Citation: Williams, Dana E.; Miller, Margaret W. (2016). Elkhorn coral demographic monitoring from 2004-03-30 to 2015-10-09 (NCEI Accession 0142175))
- Data are recorded directly into a lab notebook and then entered into Excel spreadsheets.

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):

This project/data set involves a set of experiments. Data is checked for consistency after being entered into Excel.

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/30704>

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:

National Centers for Environmental Information - Silver Spring, Maryland (NCEI-MD)

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

No

7.2.2. URL of data access service, if known:

<http://accession.nodc.noaa.gov/0160349>

7.3. Data access methods or services offered:

Access from supplied url

7.4. Approximate delay between data collection and dissemination:

365

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

N/A

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_MS

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 Environmental Information - Silver Spring, Maryland - Silver Spring, MD

NCEI Archive

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

365

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

The data resides on a secure government network requiring multi-factor authentication for network access.

9. Additional Line Office or Staff Office Questions

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