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:
   Benthic Habitats of Estero Bay Area, Florida 1999 Substrate

   1.2. Summary description of the data:
   Data produced for the Florida Fish and Wildlife Conservation Commission's Florida Marine Research Institute (FMRI) in partnership with the South Florida Water Management District (SFWMD). This data set consists of digital data describing the seagrass, unvegetated bottom, open water, algal beds, oysters, and apparent shoreline for the Southwest Florida Seagrass project area,which consists of Pine Island Sound, Matlacha Pass, San Carlos Bay, the lower Caloosahatchee River, and Estero Bay, in 1999. The data set includes an ArcInfo coverage that was digitized from 1:24000 scale natural color aerial photographs that were photogrammetrically georeferenced utilizing GPS ground control points. Data was stereoscopically photointerpreted and digitized using a Zeiss P3 analytical stereoplotter. The seagrass beds and additional categories were classified according to the FDOT Florida Land Use, Cover and Forms Classification System (FLUCCS). Minimum mapping unit (mmu) for all classes was 0.25 acres. A Photointerpretation Key was developed to aid in the classification of collected data. Ground truthing was performed during the photointerpretation phase to ensure classification accuracy and consistency of PI. Digital files were created in Microstation design file format (.dgn). 1999 SWIM Seagrass data was translated from ARC/Info to . dgn format and was referenced as collateral tie information during the compilation process. These data were collected under a cooperative mapping program between the U.S. Geological Survey (USGS), the National Oceanic and Atmospheric Administration Office for Coastal Management (NOAA\OCM), and the Apalachicola National Estuarine Research Reserve (NERR). The primary objectives of this program were to collect marine geophysical data to develop a suite of seafloor maps to better define the extent of oyster habitats, the overall seafloor geology of the bay and provide updated information for management of this resource. In addition to their value for management of the bay's oyster resources, the maps also provide a geologic framework for scientific research and the public.

   Original contact information:

Contact Org: NOAA Office for Coastal Management

Phone: 843-740-1202

Email: coastal.info@noaa.gov

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:
1999-12-09 to 1999-12-26

1.5. Actual or planned geographic coverage of the data:
W: -82.37394, E: -81.794711, N: 26.705917, S: 26.247008

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

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):
Process Steps:

- 1999-12-01 00:00:00 - Aerial photography data collection. Conventional color film was flown under conditions conducive to mapping submerged habitats. This includes consideration of tidal stage, sun glint, cloud cover, water clarity, and phenology of submersed vegetation. The photography was reviewed for suitability and accepted as the primary data source for the benthic mapping.
- 2000-05-01 00:00:00 - Photointerpretation: From 20000201 to 20000501 data was stereoscopically photointerpreted and digitized from 1:24000 scale natural color aerial photography using a Zeiss P3 analytical stereoplotter. The seagrass beds and additional categories were classified according to the FDOT Florida Land Use, Cover and Forms Classification System (FLUCCS). Minimum mapping unit (mmu) for all classes was 0.25 acres. Ground truthing was performed during the photointerpretation phase to ensure classification accuracy and consistency of PI. Digital files were created in Microstation design file format (.dgn).
- 2000-05-01 00:00:00 - ARC/INFO validation: Microstation .dgn files were imported to ARC/Info to perform automated validation routines. Quality control checks for digital data consisted of unlabeled, multi-labeled and contiguous polygon errors as well as dangles and sliver polygons. Polygon topology was created and label errors and node errors were run in ARC/Info. Coverage characteristics were adhered to, as specified by the contract (tolerances, projection definition, PAT items etc.).
- 2001-11-05 00:00:00 - Field validation from 20011031-20011105 of final products. Following completion of the final benthic habitat map, staff from the NOAA Office

for Coastal Management, FMRI, and the Southwest Florida Water Management District conducted a field thematic validation trip to the area to test the accuracy of the map product. A set of random points were generated for field evaluation in ERDAS Imagine. The vector coverage was converted into a classified raster based on thematic polygon values. Fifty stratified random points were generated from each class (continuous SAV, patchy SAV, Oyster, and bare bottom). These points were used to guide the field team. However conditions in the field including 20+ mph winds and extremely shallow water depths prevented the team from visiting the majority of the randomly selected points. Only ten percent of the field points (15 of 166) were from the random point set. Field methods used to validate the 1999 benthic coverage consisted of navigating to the random points using a live GPS link through a field PC. The field party segmented the study area into three zones based on water bodies and access. The zones were: Matlacha Sound, Pine Island Sound, and Estero Bay. The team navigated into these sounds, observing sites along one side and then left the area observing sites on the opposite side. Wind direction and exposure also influenced this process. In addition to navigating to pre-selected points whenever possible, the team would add points. An effort was made to add these points in areas where many polygons were located together. This was done to maximize the number of polygons that could be visited and also address the most complex areas. Upon arriving at a point, or polygon in the case of an added point, the team would deploy the Towed Underwater Video camera and cross into the polygon in a transect fashion. This transect was started such that some video observation of the area outside the polygon boundary could be made. As the transect was traveled, several observations were made along track to confirm the presence or absence of a given habitat. Once a determination could be made about the accuracy of the polygon in that area, the transect was stopped. Agreement between map observations and field observations exceeded 70%. Part of the difference between the two observations was the time elapsed between the time of the aerial photography and the seasonality differences between the two dates.
- 2012-03-28 00:00:00 - Original AGRA Baymont FLUCCS classes were cross-walked into the Florida System for Classifying Habitats in Estuarine and Marine Environments (SCHEME). All surficial geology classes translated smoothly into SCHEME. No information or data records were lost during this process. Geoform attributes not captured in the SCHEME hierarchy have been added as modifiers (ex. tidal inlet).
- 2015-01-01 00:00:00 - The data were converted from a single ESRI polygon shapefile classified according to the System for Classifying Habitats in Estuarine and Marine Environments (SCHEME) to the Coastal and Marine Ecological Classification Standard (CMECS) 2012 format (which can be found at https://coast. noaa.gov/digitalcoast/tools/cmecs-crosswalk) which produces separate geoform, substrate, and substrate feature layers from the original input benthic habitat dataset. This substrate feature layer contains CMECS substrate component attributes where an "Equal" or "Nearly Equal" SCHEME value was present in the original data. Polygons for which no substrate information was present have been

removed. No other changes to the original polygon boundaries or any other alterations of the original SCHEME data were made during this process.

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:
- 1.7. 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
- 7.3. Data access methods or services offered
- 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/47889

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:
NOAA Office for Coastal Management (NOAA/OCM)

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

7.2.2. URL of data access service, if known:
> ftp://ftp.coast.noaa.gov/pub/benthic/Benthic_Cover_Data/FL_EsteroBay.zip

7.3. Data access methods or services offered:

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.