

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:

Coastal Bend Texas Benthic Habitat Mapping Reprocessed DOQQ Aerial Imagery

1.2. Summary description of the data:

In 2006 and 2007 the NOAA Office for Coastal Management purchased services to reprocess existing digital multi-spectral imagery (ADS-40) and create digital benthic habitat data from this imagery for selected Texas coastal bend bays. The Center worked cooperatively with the Texas Parks and Wildlife Department (TPWD) and the Texas A and M University Center for Coastal Studies to develop benthic habitat data, primarily Submerged Aquatic Vegetation (SAV) for several coastal bays. This data will support the state's recently adopted Seagrass Monitoring Program which calls for regional mapping of SAV for status and trends assessment. The Center, Texas A and M, and TPWD have coordinated on the requirements of this project.

Original contact information:

Contact Name: Harold Rempel

Contact Org: Fugro EarthData, Inc.

Title: Director of Program Management

Phone: 301-948-8550

Email: hrempel@earthdata.com

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:

2007-08-23

1.5. Actual or planned geographic coverage of the data:

W: -97.743558, E: -96.710731, N: 28.25679, S: 26.93903

1.6. Type(s) of data:

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

Image (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:

- 2007-08-09 00:00:00 - The digital orthophotography was developed from imagery acquired at a resolution of 0.9 meters as part of the 2004 overflight of the State of Texas developed for the USDA National Agricultural Imagery Program (NAIP). In order to achieve a horizontal accuracy of 5 meters, CE90 it was necessary to reprocess the imagery incorporating new GPS field control. It should be noted that the imagery was not tide coordinated so tidal variation may exist between sorties. The imagery was acquired between November 3, 2004 and November 7, 2004. Imagery was flown with Leica ADS40 digital sensors to capture 0.9m raw data. Raw data was then downloaded using Leica GPro software into 12 bit TIFF format. The raw TIFF imagery was then georeferenced and reprojected using GPS/INS 200Hz exterior orientation information (x/y/z/o/p/k) to allow stereo viewable imagery. This stereo viewable imagery was processed with the GPro/LPS automatic point matching algorithm to determine common match points every 2000 pixels across the imagery strip and 333 pixels along strip. This pattern included dual rows of line ties to the adjacent line of imagery. The resulting point data was imported into Leica ORIMA and used to perform a full bundle adjustment of the imagery point data. Any blunders were removed, and weak areas were manually supplemented to ensure good coverage of points. TerraSurv, Inc. of Pittsburgh, PA was contracted by EarthData International of Frederick, MD to perform a geodetic control survey in support of mapping an area along the southeasterly coast of Texas between Port Lavaca and Brownsville. Thirty-eight photo identifiable locations were surveyed to provide ground control and quality assurance checks for the mapping. Twenty of the stations were used for mapping control and eighteen of the stations were used for quality checks. The horizontal datum was the North American Datum of 1983, CORS adjustment (NAD 1983 CORS). The vertical datum was the North American Vertical Datum of 1988 (NAVD 1988). These control points were incorporated into the ORIMA bundle adjustment to ensure absolute accuracy requirements were met. The 18 quality check points coordinates were solved for in the bundle adjustment and compared to the surveyed results. The output from this bundle adjustment process was revised exterior orientation data for the sensor with any GPS/INS, datum, and sensor calibration errors modeled and compensated for. Using this revised EO data orthorectified image strips were created using the USGS NED DEM. The 10m NED DEM was used where available and 30m DEM was used elsewhere. The orthorectified image strips were processed with a internally developed routine that compensates for the bi-directional reflectance function that is caused by the sun's position relative to the image area. This compensated imagery was then

imported into Inpho's OrthoVista 4.0 package which was used for the final radiometric balance, mosaic, and DOQQ sheet creation. These final DOQQ sheets contained a 300m minimum buffer. The sheets for the project area were then resampled to 2m and mosaicked. For habitat classification, the mosaicked imagery was divided into six processing one set of six mosaics for true color and one set of six mosaics for color-IR. Image segmentation was performed using on the blue, green, red, and near-infrared bands for each of the six processing areas. (Citation: REPORT OF GPS SURVEY TEXAS COASTAL AREA MAPPING)

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/48423>

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:**

<https://coast.noaa.gov/dataviewer/#/imagery/search/where:id=128/details/128>

<https://coast.noaa.gov/dataviewer/#/imagery/search/where:id=130/details/130>

https://coastalimagery.blob.core.windows.net/digitalcoast/CoastalTX_CIR_2004_128/index.html

https://coastalimagery.blob.core.windows.net/digitalcoast/CoastalTX_RGB_2004_130/index.html

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.