

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:

Humboldt Bay, California Benthic Habitats 2009 Biotic

1.2. Summary description of the data:

Humboldt Bay is the largest estuary in California north of San Francisco Bay and represents a significant resource for the

north coast region. Beginning in 2007 the Office for Coastal Management began collaborating with the California SeaGrant program and

other local partners to support an ecosystem-based management (EBM) project for Humboldt Bay. One element of this project was to

develop subtidal habitat goals for the long-term management of the bay and provide a framework for conservation and management across

the land-sea interface. The imagery collection and benthic habitat delineation for Humboldt Bay were essential to the development of

subtidal goals and implementation of EBM for the region. Together, these efforts will provide important and replicable data and an

information framework for ecosystem-based coastal and marine conservation planning and implementation. 12 Bit 4 Band imagery was

collected in June,2009 within 1 hour of either side of a minus one (-1) foot tide with low turbidity,low wind,low sun angle and no cloud cover. The horizontal spatial accuracy of the imagery is within +/- 3 meters CE95 of position on the ground and was captured at a spatial resolution (pixel size) of 0.54m x 0.54m. The imagery was tiled and named according to the existing USGS digital ortho quarter quad boundaries (ex. Arcata_South_NE.tif). A small buffer (~100 m) was produced with each tile to prevent gaps in coverage. Habitat features were interpreted and digitized on screen in an ARCGIS Geodatabase 9.3 resulting in accurate and efficient 3D extraction of the data. Habitats were delineated with a high level of detail with the minimum mapping unit (MMU) being 0.01 hectares(approx.10m x 10m).

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:

2009-06-27

1.5. Actual or planned geographic coverage of the data:

W: -124.391793, E: -124.003949, N: 40.964791, S: 40.539057

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:

- 2010-06-09 00:00:00 - The imagery was flown on 6/27/2010 between 9:35 and 10:24 A.M. by HJW geospatial Pacific Aerial Surveys The horizontal spatial accuracy of the imagery is within +/- 3 meters CE95 of position on the ground. The radiometric resolution of the 4 band image composites is 12-bit. The imagery was processed to remove atmospheric effects such as haze and to highlight the spectral response of submerged areas. The imagery has a minimal exposure variation between adjacent flight lines. The 4 band imagery is tiled and named according to the existing USGS digital ortho quarter quad boundaries (ex. Arcata_South_NE.tif). A small buffer (~100 m) was produced with each tile to prevent gaps in coverage. The tiles are in GeoTIFF format. An index shape file indicating the image file name, location in the final file structure and the USGS tile name is included to enable users to easily identify the location of an individual tile. The 4 band image sets was delivered within a "Unmanaged Raster Catalog" created within the ESRI Geodatabase structure to serve as an easy method for users to access the images The imagery was captured at a spatial resolution (pixel size) of 0.54m x 0.54m and was delivered in a Universal Transverse Mercator - Zone 10 projection using the NAD1983 datum.
- 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://iocm>).

noaa.gov/cmecs). This was accomplished using the CMECS Crosswalk Tool (<https://coast.noaa.gov/digitalcoast/tools/cmecs-crosswalk>) which produces separate geofom, biotic, and biotic feature layers from the original input benthic habitat dataset. This biotic feature layer contains CMECS biotic component attributes where an "Equal" or "Nearly Equal" SCHEME value was present in the original data. Polygons for which no biotic 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/47852>

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/CA_HumboldtBay.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.