

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:

National Status and Trends: Bioeffects Assessment Program, St Lucie Estuary Summary Database (2001-2004)

1.2. Summary description of the data:

The foundation of this study was based on a sediment quality triad (SQT) approach with a probabilistic sampling design, which characterized the estuary in terms of chemical contamination in sediment, sediment toxicity (MicroTox, amphipod assays; sea urchin assay; and P450 HRGS) and benthic infauna community structure. Where possible, published guidelines were used to compare observed values with sediment quality guidelines for chemical contaminants for example Threshold Effects Level (TEL) and Probable Effects Level (PEL) values of MacDonald (1994, MacDonald et al. 1996). Concurrent and subsequent investigations were conducted to further elucidation of cause-effect relationships and are reported as ancillary studies in this report or sited elsewhere. These additional investigations included 1) assessment of chemical contaminant burdens in fish tissue; Comet assay; acetyl cholinesterase activity in fish and shrimp; endocrine disruption in fish; characterization of contaminants in the nepheloid layer and sediment traps; survey for emerging contaminants of concern (alkyl phenols, polybrominated diphenylethers, perfluoro compounds and pesticides) in sediment and water; assessment of oyster biomarkers to describe the nature and severity of the copper problem. Finally, a thematic website and data portal was developed to manage and disseminate nation-wide data on contamination, toxicity, benthic faunal distribution, and fish histopathology (St. Lucie Estuary data were used as a prototype). This is an ongoing effort to provide ready access to data. The web site address is: <http://ccma.nos.noaa.gov/about/coast/nsandt/>

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:

2001 to 2004

1.5. Actual or planned geographic coverage of the data:

W: -80.33607, E: -80.0851, N: 27.4654, S: 26.93617

1.6. Type(s) of data:

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

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:

NCCOS Scientific Data Coordinator

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

NCCOS.data@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:

NCCOS Scientific Data Coordinator

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:

- 2004-01-01 00:00:00 - DATA ACQUISITION / FIELD SAMPLING Sediment sampling procedures are available for download (<http://ccma.nos.noaa.gov/about/coast/nsandt/>) and closely followed EPA's National Coastal Assessment, Field Operations Manual and Quality Assurance Project Plan (U.S. EPA, 2001a, 2001b). DATA PREPARATION AND SAMPLE PROCESSING Fields are arranged as follows: Sample Type; Container; Field Holding; Lab Storage; Max Holding SEDIMENT organic contaminants; I-Chem glass jars; Wet ice (4C); Freezer (-20C); 1 year Inorganic contaminants; I-Chem glass jars; Wet ice (4C); Freezer (-20C); 1 year Total organic Carbon; I-Chem glass jars; Wet ice (4C); Freezer (-20C); 1 year Grain size; Whirl paks; Wet ice (4C); Refrigerated (4C); 1 year NEPHELOID Organic contaminants I-Chem glass jars Wet ice (4C) Freezer (-20C) 1 year SUSPENDED PARTICULATES Organic contaminants; I-Chem glass jars; Wet ice (4C); Freezer (-20C); 1 year SURFACE WATER Organic contaminants; I-Chem glass jars; Wet ice (4C); Refrigerated (4C); 7 days FISH and OYSTER TISSUE organic contaminants; Al foil and Ziploc; Wet ice (4C); Freezer (-20C); 1 year Inorganic contaminants; Al foil and Ziploc; Wet ice (4C); Freezer (-20C); 1 year BENTHOS Taxonomy; Plastic jars; 10% buffered formalin; Transfer to 70% ethanol; Indefinitely Process Date Range is 2001 - 2004

- 2004-01-01 00:00:00 - NAME OF NEW OR MODIFIED VALUES Chemicals with similar physical and chemical properties were summed and reported as "Totals" in addition to their individual measured concentrations. The components of these totals are as follows: Total DDT = sum of concentrations of ortho and para forms of parent and metabolites 2,4'DDE; 4,4'DDE; 2,4'DDD; 4,4'DDD; 2,4'DDT and 4,4'DDT. Total Chlordane = sum of concentrations of four compounds alpha-chlordane, trans-nonachlor, heptachlor, heptachlorepoxyde. Total Dieldrin = sum of concentrations of two compounds aldrin and dieldrin. Total Butyl tin = sum of concentrations of parent compound and metabolites monobutyltin, dibutyltin, tributyltin, tetrabutyltin [concentrations are in terms of tin]. Total PCB = twice the sum of the concentrations of eighteen congeners: PCB8, PCB18, PCB28, PCB44, PCB52, PCB66, PCB101, PCB105, PCB118, PCB128, PCB138, PCB153, PCB170, PCB180, PCB187, PCB195, PCB206, and PCB209. Total low molecular weight PAHs = sum of concentrations of twelve 2- and 3-ring PAH compounds, naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, biphenyl, 2,6-dimethylnaphthalene, acenaphthene, acenaphthylene, 1,6,7-trimehtylnaphthalene, fluorine,

phenanthrene, 1-methylphenanthrene, and anthracene. Total high molecular weight PAHs = sum of concentrations of twelve 4-and more-ring PAH compounds, fluoranthene, pyrene, benz[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[e]pyrene, benzo[a]pyrene, perylene, dibenzanthracene, indeno[1,2,3-cd]pyrene, and benzo[ah]perylene. Total PAH = low molecular weight PAHs plus high molecular weight PAHs (sum of 24 PAH compound concentrations). Several numerical indices were chosen for analysis and interpretation of the macroinfaunal data. Infaunal abundance is reported as the total number of individuals per station and the total number of individuals per square meter (= density). Taxa richness is reported as the mean number of taxa represented in a given site location. Taxa diversity, which is often related to the ecological stability and environmental "quality" of the benthos, was estimated by the Shannon-Weaver Index (Pielou, 1966). In order to quantify and compare the equitability in the fauna to the taxa diversity for a given area, Pielou's Index J' (Pielou, 1966) was calculated as $J' = H'/\ln S$, where $\ln S = H'_{\max}$, or the maximum possible diversity, when all taxa are represented by the same number of individuals; thus, $J' = H' / H'_{\max}$. Process Date Range is 2001 - 2004

- 2004-01-01 00:00:00 - REFERENCES: MacDonald, D.D., 1994. Approach to the Assessment of Sediment Quality in Florida Coastal Waters. Volume 1 - Development and Evaluation of the Sediment Quality Assessment Guidelines. Report prepared for Florida Department of Environmental Protection, Tallahassee, FL. MacDonald, D. D., R.S. Carr, F.D. Calder, E.R. Long, and C.G. Ingersoll. 1996. Development and evaluation of sediment quality guidelines from Florida coastal waters. *Ecotoxicology*, 5: 253-278. U.S. EPA. 2001a. National Coastal Assessment: Field Operations Manual. U. S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA 620/R-01/003. pp72. U.S. EPA. 2001b. Environmental Monitoring and Assessment Program (EMAP): National Coastal Assessment Quality Assurance Project Plan 2001-2004. United States Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/002. Hydrolab Corp. 2002. Hydrolab Quanta Operating Manual February 2002 (Revision C). Hydrolab Corporation, Austin, Texas. Process Date Range is 2001 - 2004

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:

- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 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
- 7.2. Name of organization of facility providing data access
 - 7.2.1. If data hosting service is needed, please indicate
- 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/39191>

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:

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

7.2.2. URL of data access service, if known:

<https://products.coastalscience.noaa.gov/collections/ltmonitoring/nsandt/default.aspx>

<https://products.coastalscience.noaa.gov/collections/ltmonitoring/nsandt/default.aspx>

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):

National Centers for Coastal Ocean Science - Silver Spring, MD

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.