

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, Benthic Surveillance Project DNA-Xenobiotic Adducts Data, 1991, National Centers for Coastal Ocean Science

1.2. Summary description of the data:

In order to determine the current status of and to detect any long-term trends in the environmental quality of U.S. nearshore waters, NOAA initiated the National Status and Trends program in 1984 with its National Benthic Surveillance Project. The primary objective of the Benthic Surveillance Project was to quantify concentrations of a suite of organic and inorganic contaminants in the livers of fish and surficial sediments from selected sites in the coastal and estuarine waters of the United States. In addition, the levels of certain indicators of the biological effects of these contaminants were measured. Incidences of visible lesions, including fin erosion, have been noted and histopathological examinations of various tissues have been carried out. Originally histopathological examinations determined the prevalence of any identifiable disease conditions in samples of liver, kidney, and gill tissue. In addition, the Benthic Surveillance Project tested fish livers from 30 locations in 1991 to identify the concentrations of DNA xenobiotic adducts. DNA xenobiotic adducts are a bioindicator of exposure to genotoxic compounds. Measurement of biological markers such as DNA xenobiotic adducts have been used to improve the evaluation of contaminant exposure and responses in indigenous fish, and thus reinforce the connection between exposure to toxic chemicals and the observed injuries.

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:

1991

1.5. Actual or planned geographic coverage of the data:

W: -166.5, E: -67.3, N: 70.5, S: 25.6

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.)

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:

- 1991-01-01 00:00:00 - The primary collection apparatus was Otter trawls. Occasionally, fish were taken with hook and line, or with seine nets. These alternate collection methods were necessary because larger fish, such as older Atlantic croaker, were able to avoid an Otter trawl, or were found in untrawlable habitats such as shallow water, along marsh edges, and over oyster reefs. Fish liver tissue samples were analyzed for DNA-xenobiotic adducts in liver via Phosphorus 32-postlabeling assay to indicate genotoxic exposure. The analysis of DNA adducts by Phosphorus 32-postlabeling is a multistep process involving a series of biochemical reactions. First, DNA is hydrolyzed enzymatically to 3'monophosphates. The digest is then enriched in xenobiotic-modified mononucleotides by the selective removal of normal nucleotides. Following the enrichment step the adducted DNA is enzymatically labeled at the 5'-hydroxyl position with [Phosphorus 32] phosphate to form [5'-Phosphorus 32] deoxyribonucleoside 3',5'-bisphosphates. Separation of the Phosphorus 32-labeled adducts is usually accomplished by two-dimensional, thin-layer chromatography (TLC) on polyethyleneimine (PEI)-modified cellulose sheets. Autoradiography or storage phosphor imaging (Reichert et al., 1992) is then used to locate the radiolabeled adducts on the chromatogram (Reichert and French, 1994). The analytical instruments were calibrated by standard laboratory procedures including: constructing calibration curves, running blank and spiked quality control samples and analyzing standard reference materials.

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)
- 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/39258>

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.