**National Estuarine Research Reserve System Science Collaborative**

**Data Sharing Plan Requirements and Outline**

The National Oceanic and Atmospheric Administration (NOAA) requires that environmental data collected and/or created under NOAA grants and cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy, or security requirements*.*

***Data*** are defined as recorded and derived observations and measurements of the physical, chemical, biological, geological, and geophysical properties and conditions of the oceans, atmosphere, space environment, sun, and solid earth, as well as correlative data to include social and socio-economic data, related documentation, and metadata. This also includes social and socio-economic data collections such as individual surveys or other personal information that are subject to data collectors’ Institutional Review Board (IRB) review and approval. Media, including voice, video or other recordings and photographs, may be included.

***Sharing data***is defined as making data visible, accessible, and independently understandable to users in a timely manner at minimal cost to users, except where limited by law, regulation, policy or by security requirements.

# Data Sharing Plan

All NERRS Science Collaborative proposals must address data management requirements in Appendix G of the proposal in one of two ways:

1. For projects that propose the collection of new data: A Data Sharing Plan (DSP) of two to five pages is required for all proposals that collect or create new data. See the remainder of this document, including the attached outline, for guidance on developing a DSP.
2. For projects that do not propose the collection of new data: A statement that “no detailed data sharing plan is needed”, accompanied by a clear justification as to why, e.g., no new data are being collected.

A typical DSP should include descriptions of the types of data collected during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; policies addressing data stewardship and preservation; procedures for providing access, sharing, and security; and prior experience in publishing such data. The DSP must be made publicly available at time of award and, thereafter, will be posted with the published data. Failing to share environmental data in accordance with the submitted DSP may lead to disallowed costs and may impact future funding decisions by the NERRS Science Collaborative.

NERRS Science Collaborative research proposals that collect new data must have a DSP that includes descriptions of the following components:

1. Methods and protocols for data collection, as described in the project narrative (you may reference or link to these)
2. Data quality control / quality assurance procedures
3. Data access
4. Data archival
5. Metadata

It is expected that methods and protocols for data collection, QA/QC, and metadata development will be described within the DSP. The NOAA recommended metadata standards is the ISO 19115 Metadata Standard for Geographic Data. Plans for data access and archival should include how data will be made accessible and how data will be archived. Examples of DSP are available at the [NOAA Environmental Data Management Wiki](https://geo-ide.noaa.gov/wiki/index.php?title=Main_Page) under the Data Management Plan Repository.

Proposals must include appropriate budgets to support required data management activities. It is anticipated that for projects proposing significant new data collection efforts, appropriate personnel time should be committed for data QA/QC and metadata development. For budget allocation guidance, it is anticipated that 10% to 15% of the overall budget should go to support data management activities.

The NERRS [Centralized Data Management Office](https://cdmo.baruch.sc.edu/) (CDMO) is the coordinating entity for Science Collaborative data management activities and will provide guidance during proposal development and technical support for funded projects.

You can also direct questions to [nerrs-info@umich.edu](mailto:nerrs-info@umich.edu).

**NERRS Science Collaborative Data Sharing Plan Outline**

***A Data Sharing Plan (DSP) of two to five pages is required for all proposals that collect new data. Please use this outline, including headers, to develop your DSP.***

1. **Points of Contact –** Identify the person(s) responsible for implementing the project’s data sharing plan. Give the name, title, location, e-mail address, phone number and mailing address, for the individual(s) responsible for data collection and maintenance on this project.
2. **General Description of Data to be Managed**
   1. Provide a summary description of the data to be generated.
   2. What will the temporal and geographic coverage of the data be?
   3. What data types will you be creating or capturing?
   4. How will you capture or create the data?
   5. Will the data contain personally identifiable information or any information for which the distribution may be restricted by law or national security?
3. **Data Quality Control / Quality Assurance Procedures**
   1. What quality control and quality assurance procedures will be employed?
   2. What is the overall life cycle of the data from collection or acquisition to making them available to the intended end user?
4. **Data Documentation / Metadata –** What standards will be used to represent data and metadata elements in this data collection?
5. **Data Access and Sharing**
   1. How will the data be made available to the public? What is the expected date of first availability? Is this a one-time data collection, or an ongoing series of measurements? Will there be a Principal Investigator hold or other delay between data collection and publication, and if so for how long?
   2. If the data are not to be made available to the public, explain why and under what authority distribution may be restricted.
   3. Will users be subject to any access conditions or restrictions, such as submission of non-disclosure statements, special authorization, or acceptance of a licensing agreement?
   4. What data access protocols will be used to enable data sharing? The use of open-standard, interoperable, non-proprietary web services are highly recommended.
6. **Data Archival**
   1. Where and how will the data be stored initially (i.e., prior to being sent to a long-term archive facility)?
   2. How will the data be protected from accidental or malicious modification or deletion? Discuss data back-up, disaster recovery/contingency planning, and off-site storage relevant to the data collection.
   3. If there will be limitations to data access, how will these data be protected from unauthorized access? How will access permissions be managed? What process will be followed in the event of unauthorized access?
   4. How will the data be archived for long-term preservation?