Minnesota Department of Natural Resources; Minnesota's Lake Superior Coastal Program

Data Management Plan Guidance for Coastal Program Grant Funded Projects

Revised May 2026

A data management and sharing plan (DMP) is a document that describes how you will gather, maintain, store, protect, and use data in your Coastal Program grant funded project. A DMP is the blueprint for managing this data throughout its life cycle.

The DMP is a living document and may evolve over time. However, you must develop a plan if selected for funding. The DNR will include this initial plan in the grant contract agreement.

Definitions

Data – recorded information, regardless of form or the media on which the data is recorded.

Data Asset – collection of data elements or data sets that may be grouped together.

Environmental Data – Data that includes, but is not limited to: 1) recorded and derived observations; 2) measurements of the physical, chemical, biological, geological, and geophysical properties and conditions of the oceans, atmosphere, space environment, sun, and solid earth; 3) correlative data, such as socio-economic data; 4) model outputs using or predicting data; and 5) related documentation and metadata (from NAO 212-15A).

Administrative Data – Administrative data is derived from the operation or management of an organization or institution, and is collected for the purposes of registration, transaction, and record keeping and often associated with the delivery of a service. Administrative data differs from experimental, scientific, and observational data in that it is found (rather than systematically made) data and is not primarily collected for environmental research purposes. As such, it can be large, complex, and not necessarily collected in an organized manner that allows for linkages to other information or data. Through the curation, enhancement, documentation, and accessibility of administrative data,

NOAA can better understand how it achieves its mission and serves society. This is especially important for the research and observational components of NOAA whose value in decision making and societal impacts is found elsewhere in the agency. Applications of administrative data allow for research in service delivery, user engagement, program management, social science, and economic valuation. Administrative data can include personally identifiable information or other sensitive, controlled unclassified information. Public data collection is also subject to the Paperwork Reduction Act. Data collection and warehousing will follow Federal and NOAA policies where applicable.

Information – Any communication or representation of knowledge such as facts, data, or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms.

Data Lifecycle – The stages through which information passes – typically characterized as a creation or collection, processing, dissemination, use, storage, and disposition – to include destruction and deletion.

NOAA Data Sharing Directive

You must make data collected or created publicly visible and accessible in a timely manner (within two years), free of charge or at no more than the cost of reproduction, except where limited by law, regulation, policy, or security requirements. The data must be available in at least one machine-readable format, preferably a widely used or open-standard format, and must be accompanied by machine-readable documentation (metadata), based on widely-used or international standards.

You must include funding acknowledgement in the metadata.

Geospatial Data

Geospatial data and information must include compliant metadata: Minnesota Geographic Metadata Guidelines or the North American Profile of the ISO (International Organization for Standardization) 19115. The metadata must include the endorsements for both publications and environmental data described in the grant contract agreement. Metadata Resources.

Note that NOAA requires the ISO standard; we will work with you to migrate from Federal Geographic Data Commission (FGDC) if necessary.

Instructions

NOAA requires grantees, including pass-through grantees, to use their Data Management and Sharing Plan Review Form. The Coastal Program developed an accessible form fillable word version of the NOAA form. Answer the questions to the best of your ability.

Resources

- Data Management Plans USGS
- Creating a Data Management Plan University of Minnesota

Questions

If you have any questions, please contact Clinton Little, 218-834-1446.

Language in Grant Contract Agreement

Additional Program Requirements: Data Sharing Directive

a) *Data Sharing.* The Grantee must make environmental data collected or created under this Grant Contract Agreement publicly visible and accessible in a timely manner, free of charge or at minimal cost that is no more than the cost of distribution to the user, except where limited by law, regulation, policy, or national security requirements. The Grantee must make data available in a form that would permit further analysis or reuse: data must be encoded in a machine-readable format, preferably using existing open format standards; data must be sufficiently documented, preferably using open metadata standards, to enable users to independently read and understand the data. The location (internet address) of the data should be included in the final report. Pursuant to NOAA Information Quality Guidelines, data should undergo quality control (QC) and a description of the QC process and results should be referenced in the metadata. Failure to perform quality control does not constitute an excuse not to share data. NOAA will consider data without QC "experimental products" and the Grantee must disseminate said data accompanied by explicit limitations on their quality or by an indicated degree of uncertainty.

b) *Timelines.* Data accessibility must occur no later than publication of a peer-reviewed article based on the data, or two years after the data are collected and verified, or two years after the original end date of the grant (not including any extensions or follow-on funding), whichever is soonest, unless a delay has been authorized by the NOAA funding program.

c) *Disclaimer.* Data produced under this award and made available to the public must be accompanied by the following statement: "These data and related items of information have not been formally disseminated by NOAA, and do not represent any agency determination, view, or policy."

d) *Failure to Share Data.* Failing or delaying to make data accessible in accordance with the Data Management and Sharing Plan (which will be attached and incorporated in the grant contract agreement), unless authorized, may lead to enforcement actions, and will be considered when making future award decisions. Grantees are responsible for ensuring these conditions are also met by subrecipients and subcontractors.

e) *Funding Acknowledgement.* Federal funding sources shall be identified in all scholarly publications. An Acknowledgements section shall be included in the body of the publication stating the relevant Grant Programs and Award Numbers. In addition, funding sources shall be reported during the publication submission process using the Open Funder Registry mechanism if supported by the Publisher.

f) *Manuscript Submission.* The final pre-publication manuscripts of scholarly publications produced shall be submitted to the NOAA Institutional Repository after acceptance, and no later than upon

publication, of the paper by a journal. NOAA will produce a publicly-visible catalog entry directing users to the published version of the article. After an embargo period of one year after publication, NOAA shall make the manuscript itself publicly visible, free of charge, while continuing to direct users to the published version of record.

g) *Citation.* Publications based on data, and new products derived from source data, must cite the data used according to the conventions of the Publisher, using unambiguous labels such as Digital Object Identifiers (DOIs). All data and derived products that are used to support the conclusions of a peer-reviewed publication must be made available in a form that permits verification and reproducibility of the results.

Additional Clauses if Applicable

Additional Program Requirements: *Unoccupied Aircraft Systems.*

If this project involves Unoccupied Aircraft Systems (UAS or drone technology), the Grantee is responsible for coordinating with the State regarding any applicable policies and standards. The Grantee must comply with applicable federal/state/local laws for Unoccupied Aircraft Systems and must have appropriate permits in hand prior to conducting drone operations.

Additional Program Requirements: *Geospatial Data.*

Geospatial data and information must include compliant metadata: Minnesota Geographic Metadata Guidelines or the North American Profile of the ISO (International Organization for Standardization) 19115. The metadata must include the endorsements for both publications and data; Metadata Resources.