Data Management Plan FAQs

This document is for Questions and Answers about NOAA’s new data management plan requirements. It will be updated as new information becomes available.

Questions and Answers from the NOAA FAQ are in black.

Questions and Answers provided by the Sea Grant network are in blue.

Question: What is this new requirement?

Answer: The NOAA Directive on Data Management. It is available at this website:

It applies to data whose generation was funded by NOAA and says,

Environmental data will be visible, accessible and independently understandable to users, except where 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.

Question: What is meant by “environmental data”?

Answer: Environmental data are 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, such as socioeconomic data, related documentation, and metadata. Media, including voice recordings and photographs, may be included.

Question: Are socioeconomic studies in coastal communities included in the requirement? Two examples might illustrate:

1. survey work to determine willingness to pay for improvements to beach access
2. fisheries work that looks at the economic impact of a new vs. old harvest technique in different coastal zones (may include collection of harvest location basic oceanographic data)

Answer: Both examples might be covered by the requirement. The NOAA directive specifically says that social science data should be included if it is “correlative” with other environmental data.
Question: What is meant by “sharing”?

Answer: Sharing data refers to making data visible, accessible, and independently understandable to users in a timely manner at minimal cost, except where limited by law, regulation, policy or by security requirements. NOAA facilities that archive data and make the data openly available should be considered for the disposition of the data.

Question: What is considered “timely” data sharing?

Answer: This will depend on the program awarding the grant or cooperative agreement, and the nature of the research project conducted. It is typically no later than two (2) years after the data are collected or created.

Question: What is meant by “independently understandable”?

Answer: The data must be accompanied with documentation, metadata and, if needed, tools to read the data that allow a user to interpret the data properly. If there are concerns with understandability, they can be reported to NOAA, who will do an independent check.

Question: Who will determine if my data are visible, accessible and independently understandable?

Answer: The person generating the data will have first responsibility for determining this. Common data quality standards in your scientific discipline may help you decide if the data are understandable. Ultimately, others who use your data will know whether they are visible, accessible and understandable to them. If there are concerns with data access or understandability, they can be reported to NOAA, who will do an independent check.

Question: What are examples of law, regulation, policies or security requirements that may limit my ability to share data?

Answer: Policies applicable to protection of personally identifiable information, critical infrastructure information or proprietary trade information as well as regulations related to export control may impact your ability to share data, among other items.

Question: How must data be shared?

Answer: This depends on the nature of the project and the data, and will be proposed by the investigator himself. Data sharing can be accomplished through:

- *Data Archive*: place where data are acquired, manipulated, documented, and distributed. NOAA facilities that archive data and make the data openly available should be considered.

- *Data Enclave*: controlled, secure environment in which eligible researchers can perform analyses using data resources
• **Publishing:** articles in scientific publications

• **Researcher's Efforts:** investigator responds directly to data requests (e.g., posting data on a website)

**Question:** I’m a busy investigator. I don’t have time to process requests for my data. What should I do?

Answer: In addition to publishing small datasets, there are several alternatives to responding to each separate request to share data (e.g., putting data in an archive or restricted access facility, and setting up a website for data access). Archives and data enclaves provide technical assistance for users with questions or problems and may spare busy investigators time.

**Question:** Can I get additional funding to share my data?

Answer: Unless otherwise noted in the federal funding announcement, funding to address data sharing must be requested as part of the proposal to collect/create data. The data sharing plans and related funds requested should consider the anticipated benefit of the data, the likely number of interested users of the data and the priorities of the program as outlined in the solicitation.

**Question:** I am the PI of a large Sea Grant program funded by an omnibus grant which in turn manages a number of individual research projects. Must every individual project have its own data sharing plan, or can I develop a program-wide data sharing plan?

Answer: As the omnibus grant recipient, you have a responsibility to see that data sharing plans are followed for all research projects under your program. This may be done with a single Program-wide data sharing plan, individual plans for individual projects, or something in between, as long as all the relevant data generated is covered under some data sharing plan.

**HELP MANAGING DATA**

**Question:** What data management services or resources are available?

Answer: There is information available at the NOAA Environmental Data Management Committee website reachable from [www.nosc.noaa.gov](http://www.nosc.noaa.gov). In general considering data sharing requirements prior to finalizing the methods for collecting/creating/storing the data will save time and effort later on. Unless otherwise noted in the federal funding announcement there is no specific data sharing plan template required.

Answer: Several data centers are available for consideration. Many Sea Grant Programs are already involved in research projects funded by EPA, NSF or elsewhere that already have specified centers to which the data generated must be submitted.
Some of these data centers are below. Their websites often have general data management guidance, as well as instructions on using their services:

✔ NOAA-supported Data Centers. This document
(http://www.nosc.noaa.gov/EDMC/documents/NOAA_Procedure_document_final_12-16-1.pdf) provides guidance for data managers who want to submit their data to a NOAA Data Center.

✔ In particular, NOAA NODC is what some universities consider “the place” to store all environmental data generated by NOAA grants. Website: http://www.nodc.noaa.gov/General/NODC-Submit/submit-guide.html#polguide

✔ The NSF-supported BCODMO (biological oceanography-chemical oceanography data management office). Website: http://bcodmo.org/

✔ The NSF-supported CUAHSI (Consortium of Universities for the Advancement of Hydrologic Science, Inc.). This is a 501(c)(3) research organization of more than 130 U.S. universities (including some SG universities) who have an ongoing effort to provide a repository for hydrologic data produced by members (or others, I believe). I'm told they hope to become "the Google of hydrological data." Website: http://www.cuahsi.org/

**Question:** The NOAA [or other federal] Program I apply to already requires an extensive Data Management Plan. Do I still need to do a Data Sharing Plan?

**Answer:** Not necessarily—the one you did for the other Program could suffice, if you plan to follow that plan when managing your data.

**Question:** I am not collecting any data/information. What should I do?

**Answer:** A statement indicating you are not collecting any data/information will be appropriate for your data sharing plan.

**Question:** I have another question. Who can I ask?

**Answer:** Please email question to Ingrid.Guch@noaa.gov. She will either answer it or forward to someone who can.

**MORE LINKS**

Here are links to some of the original NOAA documents setting out the data management policy:


NOAA “procedural directives”, including the one on grants data sharing requirements. https://www.nosc.noaa.gov/EDMC/PD.all.php
Here are a couple of more FAQs from agencies that have been doing data management plans for a while. Their rules are different from ours of course (NIH is much more concerned with protecting personal medical information for example), but they might touch on an issue you’re interested in that isn’t covered in our own FAQ. If you see something there and can’t figure out how it would translate to NOAA requirements, ask Dorn or just write it into this document, and we’ll try to figure it out.
