

NOAA Data Management Planning Procedural Directive (DMP-PD)

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Environmental Data Management Conference

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Outline

- ▶ Overview of the PD
- ▶ Resources, Tools, and Support
- ▶ Challenges to PMs, Data Managers, Management

DMP-PD TOC

- ▶ Purpose
- ▶ What is a Data Management Plan?
- ▶ Overview of Data Management Plan?
- ▶ Who Needs to Write a Plan?
- ▶ When Should a Plan Be Developed?
- ▶ Review and Approval of the Plan
- ▶ Writing the Plan – The Steps
- ▶ Sources, Dependencies, and Interfaces
- ▶ Where Can I get Help?
- ▶ Implementation of this Procedural Directive
- ▶ Roles and Responsibilities
- ▶ The Data Management Plan Repository

- ▶ Appendix A. Data Management Plan Template
- ▶ Appendix B. Glossary of Terms
- ▶ Appendix C. Questions and Answers

Purpose of the PD

- ▶ Elaborates on NAO 212–15 requirements for DMPs
- ▶ Provides guidance for writing plans
 - EDMC's Best First Effort
 - Will be revised in one year based on input

Directives:

- ▶ Project Managers shall write data management plans before starting to acquire data
- ▶ Plans shall address questions in Template
- ▶ Plans shall be stored in the NOAA DMP repository

DMP–PD Spirit

- ▶ EDMC's first cut at guidance
- ▶ 2012 will be a year of learning
- ▶ We are all in this together, let's help each other!

What is a Data Management Plan?

A document that specifies key attributes of the lifecycle of environmental data in the form of answers to the questions in the NOAA Data Management Plan Template.

DMPs should be flexible and hierarchical

- Flexible so that they may be changed easily
- Hierarchical to inherit content of higher order plans

Template

1. General Description of Data to be Managed
2. Points of Contact
3. Data Stewardship
4. Data Documentation
5. Data Sharing
6. Initial Data Storage and Protection
7. Long-Term Archiving and Preservation

The Data Management Plan Repository

- ▶ A safe, managed, one-stop-shop space for all DMPs
- ▶ Resource for examples of Plans
- ▶ Resides on GEO-IDE wiki at
 - ▶ https://geo-ide.noaa.gov/wiki/index.php?title=Category:Data_Management_Plans
- ▶ Managed by TPIO

Writing the Plan – The Steps

1. Write the Plan
2. Vet the Plan as appropriate
3. Obtain approval
4. Submit the Plan to the DMP Repository
 - Email it to the DMA (Jeff)
5. Manage the Plan

Resources, Tools and Support

- ▶ **Resources**
 - ▶ **DMP repository**
 - ▶ **DM wiki**
 - ▶ Links to many resources
 - ▶ Q&As
 - ▶ Issue Identification and tracking
 - ▶ **Best Practices, etc., on the web**
 - ▶ Academia, Government, Private sector
 - ▶ U.S. et al.
- ▶ **Tools**
 - ▶ **DMP Tool**
 - ▶ **NMFS Tool**
 - ▶ **NCDDC's Tool**
- ▶ **Support**
 - ▶ **NOAA Data Management Architect**
 - ▶ **EDMC LO Reps**

Resources/Useful Links

▶ NOAA

- [Data Management Planning `Procedural Directive \(DMP-PD\)](#)
- https://geo-ide.noaa.gov/wiki/index.php?title=Data_Management_Planning_PD
- [DMP template](#),
- http://r20.rs6.net/tn.jsp?e=001frVK_HK9xSOYpmCV1U2AdkWiHMPDLznEWLkmOONLviO1ETevwXVF1IEuQkh-FMcCZWACH_xzWlghnTd2gsCmn8Cd4PizpwhEvUodRFDqvNvZCf35T9TE96mP66E-cxuxGUbHWaXgW-c35muw09aIC0DAS3AzrZF_FzAkMQv04dwCjeDEhq-WkDHcu8YVv7w6
- [NOAA DMP Repository](#).
- http://r20.rs6.net/tn.jsp?e=001frVK_HK9xSOYpmCV1U2AdkWiHMPDLznEWLkmOONLviO1ETevwXVF1IEuQkh-FMcCZWACH_xzWlghnTd2gsCmn8Cd4PizpwhEvUodRFDqvNvZCf35T9TE94fX1T5i0NuZNx8wwEc-gPc4EYZLlvLsGwwj8buGE0zusA-swCoqEWjwYwdB8njJygwWCPZrupYG

▶ Academia/NSF

- University of California's [California Curation Center](#) (UC3).
 - Webinar entitled, "[Data Management Plans: Tips, Tricks and Tools](#)",
 - [Recording](#)
 - [DMP Tool Blog](#)
- [Data One](#)
 - [DMP Tool](#) Go to [DMP Tool home page](#) and click [Get Started](#).
 - [Primer on Data Management](#),
 - [Best Practices](#),
 - [data management training activities](#).

Other Resources

- ▶ [The Information Management Foundation \(TIMAF\)](#) promotes the book, [Information Management Best Practices](#), by Bob Bioko of the University of Washington Information School.
- ▶ The [National Academies, Board on Research Data and Information \(BRDI\) website](#) is worth watching.
- ▶ [Harnessing the Power of Digital Data: Taking the Next Step – Scientific Data Management \(SDM\) for Government Agencies: Report from the Workshop to Improve SDM](#)". The report is from the [Scientific Data Management Workshop](#)
- ▶ [Guide to Social Science Data Preparation and Archiving – Best Practice Throughout the Data Life Cycle](#), by the Inter-university Consortium for Political and Social Research (ICPSR) may be of interest to our social scientists.

Challenge: Data Project managers

- Just Do it!
- Just Do it (Right as a meaningful exercise)
 - Understand why it's important – not just a bureaucratic exercise
 - It is for science, it is for you, it is for the world!!
- Become part of the community
 - Ask questions – If you have a questions others do to
 - Log questions/suggest answers

Data Management Managers (EDMC, EDMC reps, NOAA DMA)

- Provide Leadership,
 - clear consistent guidance
- Provide the foundation for community
 - Wiki
- Provide support
 - Tools
 - Access to Resources
- Answer Q's and Log answers
- Issue identification
 - Changes to PD
 - Changes to template
- Carrots and Sticks
 - Establish and manage Metrics for success

NOAA Management

- ▶ **Underscore DM and DMP as a priority**
 - Include in guidance and governance documents and tools
 - Part of Strategic Planning Process
 - Include in Objectives, CPA, Activities etc.
 - Guidance memoranda
 - **Create DM as a critical performance element**

Thanks!

Implementation of PD

	Phase	Tasks	Outputs
1	Establish and Socialize the Directive	<ul style="list-style-type: none"> • Vet and refine the guidance. • Develop NOAA-wide DMP (if appropriate). • Convert existing plans into the format specified by the directive, and plans to new format • Populate repository. • Establish measurements of success 	<ul style="list-style-type: none"> • NOAA's Data Management process socialized • DMP Repository and SOPs • DMP Wiki and SOPs • Metrics • NOAA-wide DMP (if appropriate)
2	Develop plans for major observing systems and new initiatives	<ul style="list-style-type: none"> • Identify projects for this phase • Develop the plans. • Establish process for NOSC and IT Review Board's review of new initiatives. 	<ul style="list-style-type: none"> • DMPs for major observing systems • LO-wide DMPs (if appropriate) • Review processes
3	Fully Mature the NOAA DM Planning Process	<ul style="list-style-type: none"> • Develop Plans for all projects that produce environmental data. • Establish Performance plan element for staff involved in environmental data management. 	<ul style="list-style-type: none"> • DMPs for all NOAA projects that generate environmental data • SOPs for an ongoing sustainable NOAA DMP process. • Data planning performance elements • Fully sustainable DM Planning process

Sources, Dependencies and Interfaces

- ▶ **NAO 212–15 Procedural Directives**
 - What to Archive PD
 - Data Documentation PD
 - Future PDs
- ▶ **PRA Requests**
- ▶ **NOAA's IT Security Plans**

Roles and Responsibilities

Role	Responsibilities
EDMC	Develop and refine this directive. Develop NOAA DMO (if appropriate)
EDMC LO Reps	Support LO implementation Develop LO DMP (if appropriate)
Data Management Architect	Supporting the NOAA-wide implementation of this directive
PMs	Develop, maintain, and follow data management plans
PMs' Management	Review and approve data management plans Develop program-wide DMPs (if appropriate)

Who Needs to Write a Plan?

- ▶ PMs of all NOAA projects that produce environmental data
- ▶ Scale and complexity of the plan varies with scale, complexity, and significance of the data

Review and Approval of Plans

Plans	Reviewer(s)
New Observing Systems	NOSC, CIO Council
New or Enhanced IT investments	IT Review Board
NOAA DMP (if appropriate)	EDMC, NOSC
LO DMPs (if appropriate)	LO mgt.
Program/Project DMPs	PI supervisors

Implementation

- ▶ Establish repository
- ▶ Establish initial workflow guidance
- ▶ LOs
- ▶ Learn by Example
 - Populate Repository with examples of existing plans
 - Analyze plans for best practices
- ▶ Provide guidance, Q&As, Tools, community on the wiki