

USGS Data Management Training Modules:

Planning for Data Management Part II

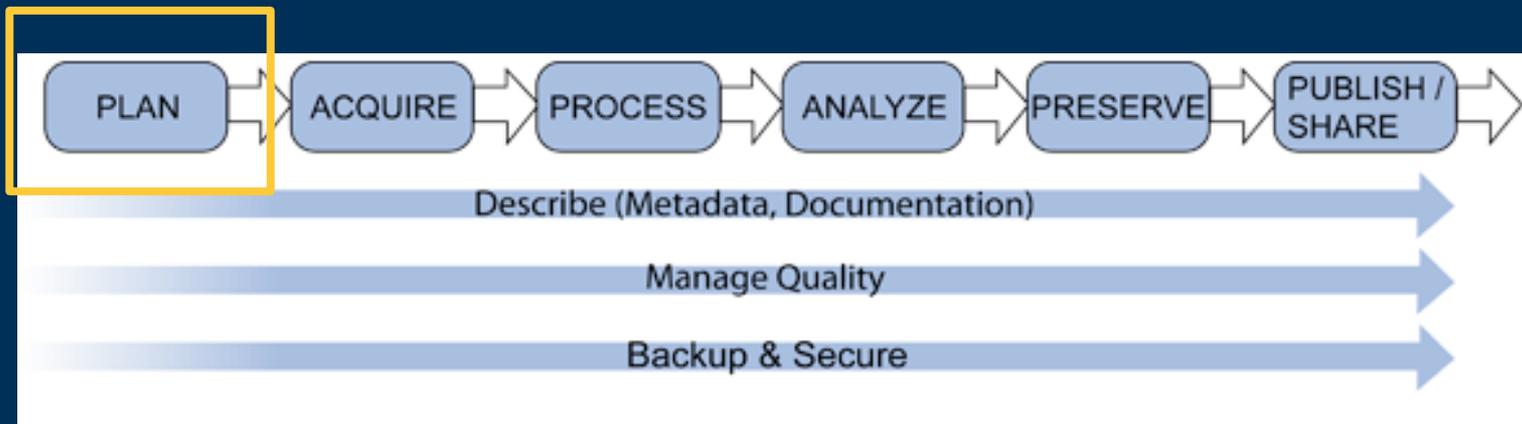
Using the DMPTool to Create Data Management Plans

Learning Objectives

- **By the end of this course you should know:**
 - The difference between data management plans and project plans
 - How to use the DMPTool to create a data management plan
 - The basic information that should go into a data management plan

Data Lifecycle

- Reference point – This module will cover aspects of the “PLAN” stage of the data lifecycle.



Data Management Plans vs. Project Plans

Data Management Plans

- Data Sources
- Data Acquisition
- Standards
- Data Processing
- Data Analysis Steps
- Metadata / Documentation
- Long-term Storage & Backups
- Preservation & Archiving Data
- Data Sharing, Access, Release
- Persistent Identifier Acquisition

- Project Purpose
- General Data Management

Project Plans

- Explanation of significance
- Methodology
- Project Budget
- Project Management
- Project Staffing/Roles
- Acquisition of equipment, tools, and software
- Project Timeline
- Project Deliverables

Benefits of Data Management Plans

- Saves time
- Protects your data investment
 - Ensures that you and others will be able to understand and use data in the future
- Increases research efficiency
 - Prevents duplication of effort
- Satisfies funding agency requirements
- Meets USGS Fundamental Science Practices requirements

How Do I Create a DMP?



From Flickr by Ryan Hyde



Start Early

Review Guidelines

Gather Project Information



Use a Helpful Tool



Justify your Choices



From Flickr by Ksayer1



DMPTool: Homepage & Creating Account

Home: DMPTool

← → ↻ <https://dmptool.org> ☆ ☰

DMPTool

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Data Management Planning Tool

Create, review, and share data management plans that meet institutional and funder requirements.

[Get Started](#)

PUBLIC DMPS	DMPTOOL NEWS	DMPTOOL HELP
<p>List of sample data management plans provided by DMPTool users.</p> <ul style="list-style-type: none">▸ CAREER: Parietal Cortex and the Transformation of Spatial Cognition into Action▸ : Biosignature Suites: Using Connections between Microbes and Minerals to understand Biogenic Carbonates▸ A unified approach to preserving cultural	<p>Latest information about data management and the DMPTool.</p> <p>News is currently unavailable</p>	<p>Overview of how to use the tool, plus resources and guidance on data management.</p> <ul style="list-style-type: none">▸ Frequently Asked Questions▸ Create a DMP▸ Administer the DMPTool▸ Data management guidance▸ Community resources

DMPTool: My Dashboard

The screenshot shows a web browser window with the URL <https://dmptool.org/dashboard>. The page features a green header with the DMPTool logo and a welcome message: "Welcome! John Doe". A navigation menu includes links for Home, My Dashboard, DMP Requirements, Public DMPs, News, Help, Contact Us, About, and a Log Out button. Below the header, the user's name "U.S. Geological Survey" is displayed, along with a "Contact" button. A secondary navigation bar contains "My Dashboard", "My DMPs", "Create New DMP", and "My Profile". The main content area is titled "OVERVIEW" and contains a table with two columns: "My DMPs" and "My DMPs under Review (where applicable)".

My DMPs	My DMPs under Review (where applicable)
4 plans I own	No DMPs are under review.
1 plans I co-own	

Below the table is a green button labeled "Create New DMP". At the bottom of the page, there is a footer with the DMPTool logo, copyright information ("DMPTOOL is a service of the University of California Curator Center of the California Digital Library. Copyright © 2010-2014 The Regents of the University of California."), and links for Privacy Policy, Accessibility Policy, Terms of Use, Contact Us, and About. Social media icons for Facebook, Twitter, and RSS are also present.

DMPTool: Creating a DMP Using a Template

The screenshot shows a web browser window with the URL https://dmptool.org/plan_template_information. The page features a green header with the DMPTool logo and a user greeting "Welcome! John Doe". A navigation menu includes "Home", "My Dashboard", "DMP Requirements", "Public DMPs", "News", "Help", "Contact Us", "About", and "Log Out". The main content area displays "U.S. Geological Survey" and a "Contact" button. Below this is a breadcrumb trail: "My Dashboard | My DMPs | Create New DMP | My Profile". A prominent "CREATE NEW DMP" button is visible. The page is divided into two columns. The left column, titled "Start with a DMP Template", instructs users to "select a funder or institutional template" and includes a "Select Template >>" button. The right column, titled "Copy an Existing DMP", explains that existing DMPs are either publicly shared, shared within an institution, or previously created by the user. It prompts users to "Select an existing DMP below and add text to the template." Below this text is a table with the following data:

	Name	Owner
<input type="radio"/>	A unified approach to preserving cultural software objects and their development histories	DMP dmpcurator
<input type="radio"/>	Atmospheric CO2 Concentrations, Mauna Loa Observatory, Hawaii, 2011-2013	DMP dmpcurator
<input type="radio"/>	Daymet Follow-On: Surface Weather Data with Uncertainty Quantification for Terrestrial Ecosystem Process Models	DMP dmpcurator
<input type="radio"/>	Multimedia Text Annotation for Students	DMP dmpcurator

DMPTool: Creating a DMP by Copying an Existing Plan

The screenshot shows the DMPTool dashboard interface. At the top, there is a navigation bar with links for Home, My Dashboard, DMP Requirements, Public DMPs, News, Help, Contact Us, and About. A 'Log Out' button is also present. Below the navigation bar, the user is identified as 'John Doe' and the current organization is 'U.S. Geological Survey'. A 'Contact' button is visible. The main content area includes a sub-navigation bar with 'My Dashboard', 'My DMPs', 'Create New DMP', and 'My Profile'. The 'OVERVIEW' section contains a table with the following data:

My DMPs	My DMPs under Review (where applicable)
6 plans I own	No DMPs are under review.
1 plans I co-own	

Below the table is a 'Create New DMP' button. At the bottom of the dashboard, there is a footer with the DMPTOOL logo, a copyright notice for the University of California, and links for Privacy Policy, Accessibility Policy, Terms of Use, Contact Us, and About. Social media icons for Facebook, Twitter, and RSS are also present.

U.S. Geological Survey DMP Guidance

Project and Contact Information

- What is the project name? Include any identifiers related to the project.
- What is the name of the Center/Program and Branch that oversees the project?
- Who is the main point of contact for the project and its data? If there are collaborating/funding agencies and organizations, who are they and who are the main points of contact?
- What are the project start and expected end dates?
- Project description summary and why the data are being collected. Are there any web links with more information related to the project.

U.S. Geological Survey DMP Guidance

Plan and Acquire

- How will the data be acquired?
- What is the estimated volume of the data collected, transformed, and/or generated? (e.g. megabyte (MB), GB, TB, or PB.)
- Will the data be static or dynamic?
- Are the appropriate hardware, software, and staff resources part of the budget for data management activities?

U.S. Geological Survey DMP Guidance

Describe and Manage Quality

- How many new datasets will be created?
- What are the data types and formats, in which the data will be maintained?
- Briefly describe the data processing steps or provide the scientific workflow and identify any software or technology needs where applicable.
- What procedures will be used for ensuring data quality (QA/QC)?
- How will the metadata for each dataset be created?
- Which metadata standard will be used to describe each dataset?

U.S. Geological Survey DMP Guidance

Backup/Secure and Preserve

- Where will the data be stored in the short-term?
- What will be the approach for routine backup of the data?
- Describe any potential access restrictions and any practices to ensure access will be restricted.
- What will be the final format of the data product and will there be any software needs?
- Where will the data and metadata be preserved in the long-term and by which sponsoring Program? Who will be the point of contact?
- Will there be costs associated with long-term storage and how will they be funded?

U.S. Geological Survey DMP Guidance

Publish and Share

- How will the data itself be shared and made available to the public?
Are there data release policies that need to be followed?
- Will there be access or use restrictions on the data? How can someone overcome these restrictions?
- Identify any anticipated publications or electronic outlets resulting from the data.
- Where will your metadata be stored to provide an access point for discovery by users and harvest by catalogs such as the USGS Science Data Catalog?
- How and where will you obtain a persistent identifier for the data?

Summary/Recap

- Data Management Plans are different than Project Plans and include data-specific information on acquisition and work flow as well as metadata standards and sharing.
- The DMPTool is an easy-to-use tool that can help you create your data management plans.
- The USGS as well as other funding agencies and organizations have templates within the DMPTool to guide you through the DMP process and enable you to tailor your DMP to your project needs.

Post Course Assessment

- Question 1
 - Possible Answers

Additional Resources

- [USGS Data Management Website – Data Management Plans](#)

Suggested Citation

- Langseth, M.L., Henkel, H.S., Hutchison, V.B., Thibodeaux, C.J., Zolly, L., 2015, USGS Data management training modules—planning for data management part II—using the DMPTool to create data management plans: U.S. Geological Survey, <http://dx.doi.org/10.5066/F7RJ4GGJ>.

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