Data Management Plan (DMP) Guide

Purpose and Importance

A DMP helps you think through how your data will be collected, organized, stored, shared, and preserved.

Improves Team Coordination
Documents roles, responsibilities, file structures, and workflows so everyone is aligned.

Promotes Reproducibility
It's a living document that helps others (and future you!) understand and reproduce your work.

Fulfills Funder Requirements
Most funders (NSF, NIH, DOE) require a DMP for proposals.

Protects Your Data
Identifies storage, backups, privacy, and security needs before problems arise.

Makes Sharing & Publishing Easier
Prepares data for deposit in repositories and supports journal/open data policies.

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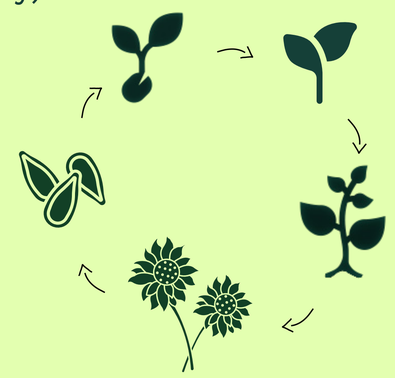
Elements of DMP

The DMP is created in the first step of the data life cycle, but it can be iterated throughout the project. Here is a list of what makes up a DMP.



Data Types: What data you'll produce (formats, scale, sensitivity).

Documentation & Metadata: How data will be described and organized (standards used).

Privacy, Ethics & Rights: How you'll protect confidentiality, security, and IP.

Access & Sharing: Where, when, and how others can reuse your data.

Storage, Backup & Preservation: How data is stored during the project and archived long-term.

Roles & Responsibilities: Who is responsible for each part of data management.

How to Build

A set of resources and tools to help you get your DMP started.

DMP Tool

DMP Examples

USGS Best Practices

USGS DMP Checklist

NSF DMP Guidance

Be sure to check your university's library or research office—many offer their own data management plan tools, templates, and one-on-one support.

Data Types & Homes

Different data requires different care

Data Management by Type

This list isn't comprehensive of all data types, but these need special handling.

Human subject

Qualitative

Indigenous

There are generalist repositories for storing your data, but ideally you use a domain-specific repository that better fits your project, such as these:

HydroShare | EDI | PANGAEA

EarthChem | SEANOE | Geochron