

Fact Sheet: Data Management Plans

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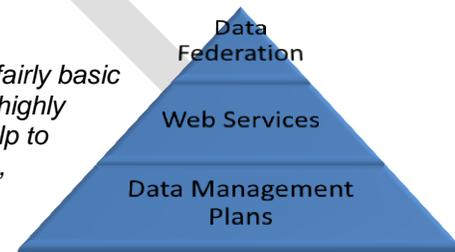


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Laying the Foundation for Strong Metadata by Mandating Data Management Plans

In September 2015, the Delta Stewardship Council's white paper [Enhancing the Vision for Managing California's Environmental Information](#) offered a broadly shared vision for the advancement of environmental data sharing. Associated with the paper's recommendations are key concepts that we hope to explain further in a series of "fact sheets." These brief documents each address a different mechanism within a broader data-sharing strategy: [Data Management Plans](#), [Web Services](#), and [Data Federation](#).

We invite you to review each of these fact sheets, recognizing the range of subjects from fairly basic in sophistication ([Data Management Plans](#)) to moderately complicated ([Web Services](#)) to highly complex and coordinated ([Data Federation](#)). Working together, these technologies can help to modernize public data distribution. But a shared understanding of the underlying concepts, and of their respective value, is vital.



What is a Data Management Plan?

- A Data Management Plan ([DMP](#)) is a document designed to capture essential information from researchers and other data providers that ensures proper accommodation for their data management needs.
- It is meant to be brief (3 pages max), easy to complete, and constructed based on established templates.

What are some benefits of Data Management Plans?

- DMPs are developed as a first step of a project to identify the nature/format/subject-matter of data being collected, the repository to which it will be submitted and any gaps between these that must be addressed.
- They establish a common understanding of the data for long-term maintenance beyond the point of initial submission and processing.
- Consistent use of DMPs helps to promote strong metadata about managed datasets.
- DMPs instill a culture of data sharing since both the researchers and the repository are considering the appropriate data distribution mandates.

Are Data Management Plans being used? What are some examples?

- DMPs are often used at the federal level, where data sharing is strongly mandated, and at the academic level, where they have devoted much thinking to data-sharing challenges.
- There are numerous examples of active and archived DMPs including:
 - [NOAA's Environmental Data Management Committee](#)
 - [North Carolina State University](#)
- The [California Digital Library](#) provides a DMP Tool that affords useful templates.



What are some guiding principles to follow when creating my organization's DMP?

- A DMP is a living document: Although submitted early in the project development cycle, the DMP should be revised in accordance with changing conditions and research needs.
- Consider data-sharing requirements for the agency, research project, or initiative.
- Account for data retention requirements (preservation or disposal).
- Account for all legal or funding mandates that the DMP might be required to fulfill.
- Agencies must carefully codify the required elements for a qualifying DMP.
- Using the template, researchers/data providers must:
 - Consider the roles and responsibilities carefully, in both the project period and for ongoing stewardship of the data.
 - Identify sources of support or funding required for ongoing stewardship.
 - Carefully document the metadata scheme.
 - Describe the research project or program associated with the data collection.

What are the recommended next steps for DMP implementation across California's Resource Agencies?

- The Steering Committee can help public agencies to collaborate on common DMP development strategies
- Alternatively, individual agencies can develop their own templates with specified data elements.
- The Steering Committee can devise incentives for the use of DMPs – e.g., new funding may be contingent on the filing of approved DMPs.
- Implementation will reveal gaps between the promise for data retention and the actual delivery of durable data repositories. These gaps must be addressed.
- The Monitoring Council's Data Management Workgroup can facilitate the development of a straw-man DMP for the target agencies.

Where can I learn more?

- We invite you to visit the DMWG Collaboration Site: <http://sfei.li/dmwg>
- Look under Workgroup Notes for more information on this and related topics.

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