Questions to Consider When Creating Metadata

I. Standards

Format

1. In what format will data be generated, maintained, and made available?

2. Why are these formats appropriate?

3. Are the data in unusual format?

4. How will they be converted or made accessible for future users?

5. Will multiple file formats be generated? If so, how will related files in different formats be linked?

   Sample text: The associated data types will be captured using X survey software and analyzed using X data analytics tools.

   Sample text: Research data will be stored using X file formats. Related files in different formats will be linked by file naming conventions, e.g., ...

Metadata

1. What standards are in place in your discipline for describing data?

   Sample text: Metadata will be generated to describe the data produced in X format and will be stored alongside the data. X metadata standards will be applied during the creation of the metadata.

   Sample text: Discovery metadata for all datasets will be included and recorded as "headers" in each Excel spreadsheet used to store the acquired data.

Data Organization

1. What best practices are out there in your field regarding data collection and organization?

2. How will you implement data management during the active phase of your grant?

3. Have you consulted with a librarian or archivist on organizing your data and files for the project?

4. How will you manage transfers and synchronization of data between different machines?

5. How will you keep track of the different versions of your data files and documents?

   Sample text: Data will conform to best practices and standards from the X community.

   Sample text: An on-line Field Catalog will be functional during the field project to support real-time planning. The real-time Field Catalog will contain data of three basic types: operational data, images from experimental real-time numerical weather prediction models, and field reports.

Quality Assurance

1. What are the procedures for ensuring data quality?

   Sample text: Internal calibration (for geophysical data), instrument calibrations, duplicate samples and field blanks (for hydro-chemical data) will be recorded and tested against collected/recorded data to ensure their validity. Qualitative descriptions (lithological data) will be validated through comparative descriptions of collected materials.

Responsibility

1. Will responsibilities be assigned to someone who is generating or managing the data?

   Sample text: Day-to-day quality assessment will be the responsibility of the Lab Director who in turn is overseen by the Project Director.