How Mature Is Your Data?
CoMET and the DSMQ: An Enterprise Metadata Management Solution

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Introduction

The NOAA National Centers for Environmental Information (NCEI) developed a Data Stewardship Maturity Questionnaire (DSMQ) in support of the NOAA OneStop project as an intuitive way to quickly and systematically assess stewardship maturity of individual digital environmental datasets. Built on the NOAA/CICS–NC Data Stewardship Maturity Matrix (DSMM), the DSMQ presents data managers and domain subject matter experts with a mechanism for assessing the stewardship aspects of their datasets in a streamlined and user-friendly manner, and does not require a deep understanding of the nuances of the DSMM in order for the user to complete the assessment. The resultant quantitative assessments of dataset stewardship maturity are beneficial in managing organizational data holdings and associated information. They can be used to help demonstrate compliance with the U.S. Open Government Data Act, which requires that unrestricted government data be public, accessible, and interoperable. The DSMQ is integrated with the NCEI Collection Metadata Enterprise Tool (CoMET). CoMET allows users to create, edit, manage, and publish ISO metadata. CoMET is one app within the suite of metadata applications developed within Collection Manager. Collection Manager is NCEI's compilation of metadata management tools and will interface with the larger NCEI effort to establish an enterprise data services system. This poster presents recent developments and upcoming milestones for CoMET and the DSMQ, and provides information about training opportunities.

Data Stewardship Maturity Questionnaire Look and Ease of Use – With the advent of the DSMQ, this new streamlined interface takes advantage of professional user experience testing and implements a user-centered design. Assessment ratings are displayed in real time so users are always aware of their progress. Once complete, users will have the option of outputting an official report.

The Problem – At the onset of the OneStop project, metadata specialists and subject matter experts used many disparate tools to create and manage metadata and perform DSMM assessments. This caused inconsistencies in metadata best practice implementation and made metadata management complicated.

Data Stewardship Maturity Reports — Once the DSMQ is complete, reports will be automatically generated based on the questionnaire inputs. These reports will be part of a new NOAA Technical Information Series established specifically for these types of assessment reports. Each report will be assigned a Digital Object Identifier and preserved in the NOAA Central Library Institutional Repository to comply with the NOAA Public Access to Research Results plan of 2013. Reports are ADA Section 508 compliant to conform with federal laws.
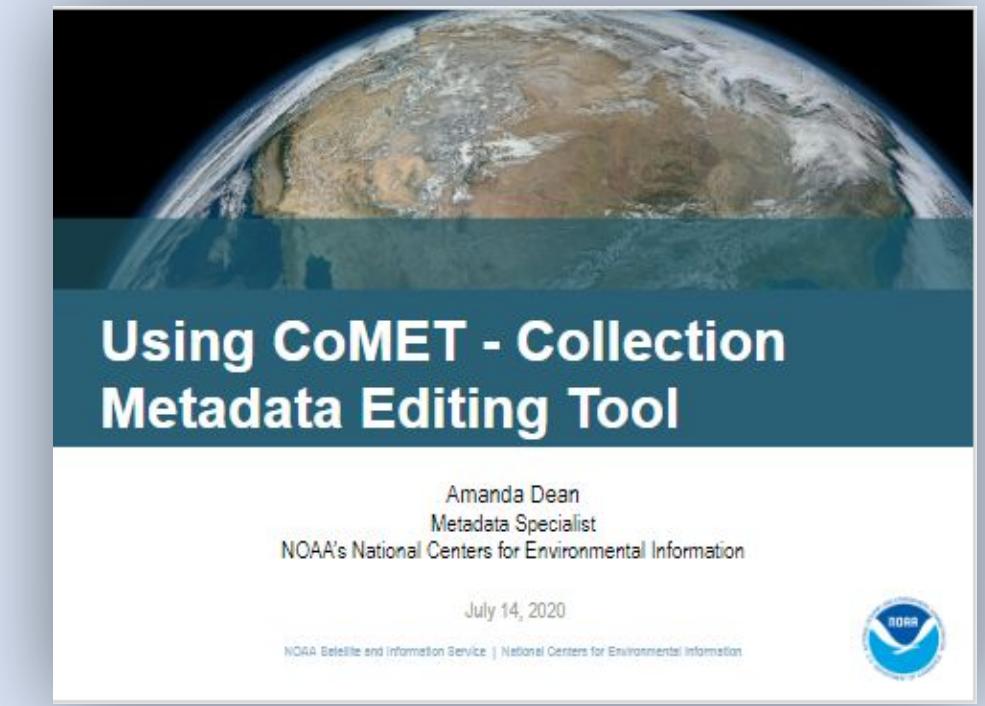

Upcoming Milestones and Training

Upcoming milestones for CoMET and DSMQ include:
- a report that is automatically generated following a DSMQ assessment
- making CoMET tools externally accessible
- a newly combined CoMET/DSMQ user manual featuring the latest updates

Want to learn more? Attend a CoMET workshop! Sessions are planned for **Summer ESIP**, the **NOAA Enterprise Working Group**, and **NCEI Metadata Working Group**.

Training will focus on how to use CoMET and the DSMQ to ensure that records meet NOAA metadata best practices so that participants' collection metadata are OneStop ready.

The Technology Behind CoMET Today

To ensure that all metadata meet NOAA metadata standard practices, a single collection manager system is used. This system allows users to import, edit, store, export, assess, validate, and publish their collection metadata. CoMET—part of the Collection Manager system—is NOAA's digital tool for creating, editing, and managing ISO metadata. CoMET users can utilize the DSMQ that is housed within it to provide greater transparency and discoverability of their datasets. The new questionnaire is based on the CoMET software platform, which provides a convenient user interface. Users can create new forms, delete, edit, change, and save them. For more information about CoMET, contact Anna Milan, anna.milan@noaa.gov.

CONTACT INFORMATION: For CoMET training, contact Amanda Dean, amanda.dean@noaa.gov. For DSMM specific questions, contact Ge Peng, ge.peng@noaa.gov.