

## **USGS Data Management Instructional Memoranda Overview**

The open data policies of Office of Science and Technology and Policy (OSTP) and Office of Management and Budget (OMB), initiated in 2013, state that every federally funded scholarly publication must be made freely available to the public and the data on which the conclusions are based must be released. In response to these policies (which will be fully enforceable on October 2016), the USGS has released a series of Instructional Memos (IM) from the Office of Science Quality and Integrity in collaboration with Core Science Systems.

### **IM OSQI 2015-01 - Fundamental Science Practices: Scientific Data Management Foundation Policy**

- USGS scientific data shall be managed throughout the data lifecycle.
- When approved, the data must be released to the public in a machine-readable form under the authority of USGS Fundamental Science Practices (FSP) requirements.
- A detailed data management plan (DMP) is required as part of every research project.

### **IM OSQI 2015-02 - Metadata for Scientific Data, Software, and Other Information Products**

- Metadata must accompany all USGS scientific data, software, and other information products approved for release and must be formally reviewed and documented in USGS's Information Product Data System (IPDS).
- Metadata records for data must comply with FGDC-approved standards: FGDC Content Standard for Digital Geospatial Metadata (CSDGM) or the International Organization for Standardization (ISO) suite of standards.
- USGS information products, created in coordination with the Science Publishing Network (SPN), must include metadata that meets Library of Congress citation standards.

### **IM OSQI 2015-03 - Review and Approval of Scientific Data for Release**

- Data intended for public release are subject to review, approval, and release requirements of FSP, and the approval must be documented in IPDS.
- Two written reviews are required before approval and release: one data review and one metadata review, and must be documented in IPDS.
- Data approved for release must be assigned a digital object identifier (DOI) and include a recommended citation.

### **IM OSQI 2015-04 - Preservation Requirements for Digital Scientific Data**

- The USGS must preserve scientific data and information developed or funded by the Bureau in accordance with Federal Open Data and Open Access policies and existing National Archives and Records Administration (NARA) requirements.
- The USGS will retain an official authoritative copy of all permanent scientific data that is released. However, distribution copies may be provided to appropriate third parties.
- When scientific data are produced in cooperation with non-USGS entities, the documented agreement between parties must clearly state who owns that data.

#### **References:**

Fundamental Science Practices Policies - <http://www.usgs.gov/fsp/policies.asp>  
Fundamental Science Practices FAQs - <http://www.usgs.gov/fsp/faqs.asp>  
USGS Data Management Website - <http://www.usgs.gov/datamanagement/>