Department of the Interior (DOI) Fiscal Year 2020 Agency Report

1. Please provide a summary of your agency's activities undertaken to carry out the provisions of OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities" and the National Technology Transfer and Advance Act (NTTAA). The summary should contain a link to the agency's standards-specific website(s) where information about your agency's standards and conformity assessment related activities are available.

Standards are a critical component to the successful execution of regulatory functions associated with our four primary missions of resource protection, resource management, recreation, and serving communities. We evaluate, adopt and apply standards across a wide array of disciplines to include scientific research, engineering, safety, contract administration, information technology, data management, law enforcement, and facilities management. As of the time of this report, not all data have been submitted, however below are several examples of how standards have contributed to mission success at the DOI.

The DOI and its bureaus and offices continued to participate in the InterNational Committee on Information Technology Standards Technical Committee L1 (INCITS L1), Geographic Information Systems, which is the means by which segments of the geospatial community participate in American National Standards Institute (ANSI) and International Organization for Standardization (ISO) geospatial standardization activities. INCITS L1 serves as the U.S. Technical Advisory Group to ISO Technical Committee 211, Geographic information/Geomatics. DOI also continues to be an active participant in the Open Geospatial Consortium (OGC), an international industry consortium of over 460 companies, government agencies and universities participating in a consensus process to develop publicly available interface standards.

The Bureau of Reclamation participates in voluntary consensus standards (VCS) development, and develops standards while in consideration of existing VCS and other industry standards. Water management, design and construction, hydro/power facilities measurement, power distribution, and dam safety risk analysis are among many areas of developmental participation. Reclamation's structure and facilities design, and developed technical references utilize voluntary consensus standards, most of which were developed with Reclamation's participation. Links to these standards can be found here:

Technical Service Center Manuals and Standards
https://www.usbr.gov/tsc/techreferences/mands/mands.html
Consequence Estimating Methodology
https://www.usbr.gov/ssle/damsafety/documents/RCEMMethodology2015.pdf

The North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) enforce standards necessary to maintain the reliability of the interconnected electric power grid which includes BOR facilities. BOR participates in the NERC and WECC committees and standard drafting teams to provide subject matter expertise and guide the development of the technical aspects of the NERC or WECC standards. BOR is required to maintain compliance with the standards; however, there

are times when compliance with the standards is not congruent with the mandates placed on BOR. Participation in the development of the standards allows BOR to provide direct influence at the crucial times in the development of the standards to align the drafted requirements with the mandates thereby ensuring BOR's ability to maintain compliance and the reliability of BOR facilities. Many of BOR's standards used in the hydro-power sector can be found here: Facility Rating Methodology and Standards https://www.usbr.gov/power/reliability/Facility%20Rating%20Methodology%20Rev1.1with%20BOR%20cover.pdf
Hydro-power Facilities Instructions, Standards and Techniques (FIST) Manuals https://www.usbr.gov/power/data/fist_pub.html

The U.S. Fish and Wildlife Service (FWS) utilizes a variety of Voluntary Consensus Standards (VCS) in managing a wide array of management and resource data and information in support of its mission. The standards are embedded in multiple software, hardware, services, and systems. The FWS's policy on data standards is described in the FWS Manual Chapter 274 FW 2: Establishing Service Data Standards (http://www.fws.gov/policy/274fw2.html). It follows the Department of Interior Information Resource Management policy (http://elips.doi.gov/ELIPS/DocView.aspx?id=1208), the OMB Circular A-130: Management of Federal Information Resources (https://www.federalregister.gov/documents/2016/07/28/2016-17872/revision-of-omb-circular-no-a-130-managinginformation-as-a-strategic-resource), and OMB Circular A-119: Federal Participation in the Development and Use of Voluntary Consensus Standards and Conformity Assessment Activities. The FWS data standards are found here:
http://www.fws.gov/stand/. Of particular note, is the VCS for the Classification of Wetlands and Deep water Habitats of the United States. The Service's definition and classification system provides standardization of concepts and terms used to describe the biological limit of wetland types found in the United States, and is used nationwide by many Federal, State, and local agencies as part of the management of their wetland resources.

The Federal Geographic Data Committee (FGDC) endorsed the Wetlands Mapping Standard in July 2009. The purpose of this standard is to support accurate mapping and classification of wetlands, while ensuring mechanisms for their revisions and update as directed under OMB Circular A-16, Revised. It is designed to direct the current and future digital mapping of wetlands. This mapping standard will be used for all wetland mapping nationally including Federal Agencies, States, Tribes, especially if that mapping data will be uploaded into NWI/The National Map as a data layer. Specifically, if Federal funding is involved, then use of the proposed Standard is required. For all other efforts, use of the standard is strongly encouraged. More information about the Wetlands Mapping Standard is available – at the following link:
https://www.fgdc.gov/standards/projects/FGDC-standards-projects/wetlands-mapping.

The FWS has adopted the Dublin Core Metadata Element Set (endorsed by the International Standards Organization) to describe the FWS collection of digital photos, videos, and other media that are currently stored in the FWS National Conservation Training Center (NCTC). This enhancement will reduce data anomalies and improve interoperability for data exchanges between NCTC and other systems.

The Office of Surface Mining (OSM) has defined geospatial standards for coal mining boundaries (surface and underground) that have been adopted as international standards by the American Society for Testing and Materials (ASTM). These standards have improved miner and public safety, reduced the cost of regulatory compliance, and map generation, and improved the electronic permitting process by reducing the time required to review regulatory permit requests. The incorporation of consensus Government geospatial standards (approved by the Federal Geographic Data Committee FGDC) has resulted in improving the quality and reducing the cost of geospatial products produced by the U.S. Geological Survey (USGS). The adoption of geospatial standards has enabled the Bureau of Ocean Energy Management (BOEM) and Bureau of Safety and Environmental Management (BSEE) to integrate multiple geospatial layers within a single digital map viewer. This improved marine spatial planning efforts by permitting the standardization of previously incompatible geospatial data across federal, state, and local government uses, which improved the ability to identify the best location for renewable energy projects.

For the Bureau of Land Management (BLM) most of its data can be linked to a location and so it is critical we are consistent with geospatial metadata standards as set forth by the FGDC and the International Organization for Standards (ISO). The Department of the Interior uses Motorola R56 Standards and Guidelines for Communications Sites to ensure the design, construction, operation and maintenance, and inspection of all departmental radio communications sites meet minimum standards resulting in consistent safety and maintenance practices across the Department.

The National Park Service (NPS) was a leading partner in the development and recent FGDC endorsed Federal Trails Data Standards (FTDS) that provides for common descriptive data attributes among the many agencies that manage and administer national trails. The FTDS is available on the FGDC website at the following link:
https://www.fgdc.gov/standards/projects/trail-data-standard/trail-data-standards. In addition, the NPS has implemented an internal Geospatial Information System (GIS) Data Layer Standards Process that allows NPS programs to efficiently develop and publish data content and exchange standards for sharing among programs and for developing consistent NPS-wide data sets. The internal NPS processes augment consensus standards developed by the FGDC and other programs and agencies to accommodate NPS-specific requirements. Use of both internal and external consensus standards allows the NPS to reduce costs for data and improve sharing among NPS parks and programs as well as other agencies and the public. The National Park Service has adopted the NPS Bibliographic Metadata Exchange Standard, which consists of a proposed NPS enterprise core bibliographic element set based on qualified Dublin Core (DC). The purpose of establishing an enterprise level core bibliographic metadata element set, NPS Bibliographic Metadata Element Set (NPS-BMES), and application profile, NPS Bibliographic Metadata Application Profile (NPSBibMAP), is to facilitate efficient exchange, harvesting (via 'exposure' of metadata in xml format), aggregation, and federated searching (promoting wide discovery) of NPS managed bibliographic data. The NPS-BMES is based on a subset of the 'qualified' level of the Dublin Core Metadata Element Set (DCMES) standard, while the NPS-BibMAP is based on the Dublin Core Library Application Profile (DC-Lib). To support the mission for the Bureau of Indian Affairs in establishing a secure environment to maintain a stable "baseline" for protecting the Information Technology (IT) assets that enhance the quality of life and promote economic opportunities for the American Indians, Indian tribes, and Alaska Natives, NIST standards are used to accomplish our mission.

Security and Privacy standards are used to lower risks to an acceptable level, and to demonstrates due diligence towards safeguarding Indian Affair's sensitive information and information systems.

2. Please list the government-unique standards (GUS) your agency began using in lieu of voluntary consensus standards during FY 2020. Please note that GUS which are still in effect from previous years should continue to be listed, thus the total number in your agency's report will include all GUS currently in use (previous years and new as of this FY): 0