

# H. Data Standards List

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*Refer to the Data Standards List spreadsheet (separate Microsoft Excel file).*

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## General Standards Information That Apply to Spatial Data Content or Exchange

### Introduction

The compiled list of general spatial data standards is intended to provide information describing the existing spatial data standards relative to both data content and data exchange that may need to be employed in an environmental or historic preservation review following a disaster. Organized around those standards created under the Federal Geographic Data Committee (FGDC), FGDC endorsed standards and finally Federal Agency or specific resources, the compiled list provides a general description of each standard which may apply in this type of review process. Intended to provide reference, it is not anticipated that all of the various standards identified here would apply to each geographic data set involved in a review process, or that any may apply. It is simply provided to indicate the already existing standards which may relate to a specific data type, data exchange, or Federal Agency associated with a review process. It may be helpful to have such a reference when defining the data format for data requested from Federal Agencies, Tribes, states, and other entities in a review process. Environmental and historic preservation review project managers may request data be delivered to them in these existing standards to encourage data coordination, consolidation, and comparability, in an effort to accelerate reviews in general and reduce redundancy in data creation.

### Standards Organizations

- **American National Standards Institute (ANSI):**  
The Institute oversees the creation, promulgation and use of thousands guidelines that directly impact businesses in nearly every sector: from construction equipment to and livestock production and energy distribution. ANSI is also actively engaged in accrediting programs that assess conformance to standards. Standards related to spatial data are incorporated into FGDC standards and often endorsed by the FGDC to provide additional connections for sharing data. These standards are voluntary to comply with.
- **Federal Geographic Data Committee (FGDC):**  
The FGDC is an interagency committee that promotes the coordinated development, use, sharing, and dissemination of geospatial data on a national basis. This nationwide data publishing effort is known as the National Spatial Data Infrastructure (NSDI). The NSDI is a physical, organizational, and virtual network designed to enable the

development and sharing of this nation's digital geographic information resources. Established through OMB Circular A-16, the FGDC identifies specific Federal Agencies responsible for various national data themes, under the NSDI. These include biological (U.S. Geological Survey), climate (National Oceanic and Atmospheric Administration, Natural Resources Conservation Service, U.S. Department of Agriculture), cultural resources (National Park Service), buildings/facilities (General Services Administration), flood hazards (Federal Emergency Management Agency), and vegetation (U.S. Forest Service) among others. Through these Lead Agencies and an established standard creation process, the FGDC advances spatial data standards to assist in developing data content and facilitating data sharing. These standards apply to Federal Agencies only and must be complied with for Federal Agencies exchanging data.

- International Organization for Standardization (ISO): ISO develops voluntary International Standards. International Standards give state of the art specifications for products, services, and good practice, helping to make industry more efficient and effective. Developed through global consensus, they help to break down barriers to international trade. Standards related to spatial data are incorporated into FGDC standards and often endorsed by the FGDC to provide an international connection for sharing data. These standards are voluntary to comply with.

## Purpose

The purpose of the compiled list of general spatial data standards is to show the many data standards and activities already undertaken and that should be used in an environmental or historic preservation review situation when applicable or appropriate. Some standards relate to specific cultural or natural resources, or individual Federal Agencies who may be involved in a review following a disaster. These standards should be considered when data is exchanged or shared in any disaster situation to facilitate faster reviews and more efficient data exchange.

## How to Use the Data Standards List

These instructions were designed to match the Data Standards List spreadsheet attached separately. The Data Standards List is a compilation of existing digital data standards for natural and cultural resources and general standards for Geographic Information Systems (GIS) data. The Data Standards List is a tool for parties to utilize when developing data sharing agreements. For more information on developing data sharing agreements, please see Data Sharing Agreement Content at [UFR Webpage](#).

The Data Standards List takes into account the work of the FGDC, which leads the national effort to standardize digital spatial data. The Data Standards List is divided into the following categories:

- *FGDC Standards*: Digital spatial data standards created through the FGDC.
- *FGDC Endorsed Standards*: International digital spatial data standards endorsed by FGDC.

- *Other Federal Standard Activities:* Other Federal government efforts to coordinate and promote the use of data standards associated with the FGDC.
- *Federal Agency or Resource Specific Standards:* FGDC or international digital spatial data standards recognized as important, in the process of creation or attempted but discontinued.
- *FGDC Discontinued Standards Projects:* Data standards that did not result in FGDC endorsement, or were discontinued by the data standard endorser.
- *FGDC-In Development Standards Projects and Resource Specific Existing Standards:* Data standards that are currently in development through the FGDC or data standards that are specific to a resource and in development through an individual Federal Agency.
- *Agency Specific Standards Projects and Resource Specific Existing Standards:* Digital Spatial data standards that are specific to an Agency or specific to a cultural or natural resource type.

Utilize the above lists to determine which data standard or standards you should rely upon or use to exchange data during EHP reviews. Data standards within the list are further described by the following criteria:

- *Standard:* Lists the official FGDC, ISO, or ANSI Standard Document Number.
- *Standard Title:* Lists the formal title of the data standard.
- *Description:* Describes the purpose of the data standard and how it is applied.
- *Comments:* If appropriate, a comment is provided to assist in the use, description, or further explanation of a data standard.
- *Document Link:* Provides the link to access more detailed data standard descriptions and contents. This link is either a website or a document.

The Data Standards Lists are sorted alphabetically by title within each of the various categories. Utilize the criteria to locate and determine if any data standards apply to your EHP review needs.