

The Standards Database Explorer

Who



As one of the cornerstones of the U.S. Geological Survey's (USGS) National Geospatial Program, The National Map is a collaborative effort among the USGS and other Federal, State, and local partners to improve and deliver topographic information for the Nation. It has many uses ranging from recreation to scientific analysis to emergency response. The National Map is easily accessible for display on the Web, as products and services, and as downloadable data. The geographic information available from The National Map includes orthoimagery (aerial photographs), elevation, geographic names, hydrography, boundaries, transportation, structures, and land cover. Other types of geographic information can be added within the viewer or brought in with The National Map data into a Geographic Information System to create specific types of maps or map views. The National Map is a significant contribution to the National Spatial Data Infrastructure (NSDI) and currently is being transformed to better serve the geospatial community by providing high quality, integrated geospatial data and improved products and services including new generation digital topographic maps.

<http://nationalmap.gov>

Why

The current process for publication of standards at the USGS is duplicative for certain cases where multiple datasets have the equivalent requirements. Published documents are also a more difficult medium for end users that wish to easily access a particular type of specification information and for multiple datasets. A consolidated specification repository with online discovery features allows for continuous updates to specifications, eliminates duplication across datasets, provides faster and easier maintenance, enables tools for navigating through and querying the information in the database, and allows for report generation.

Consolidated specification repository

Eliminates duplication

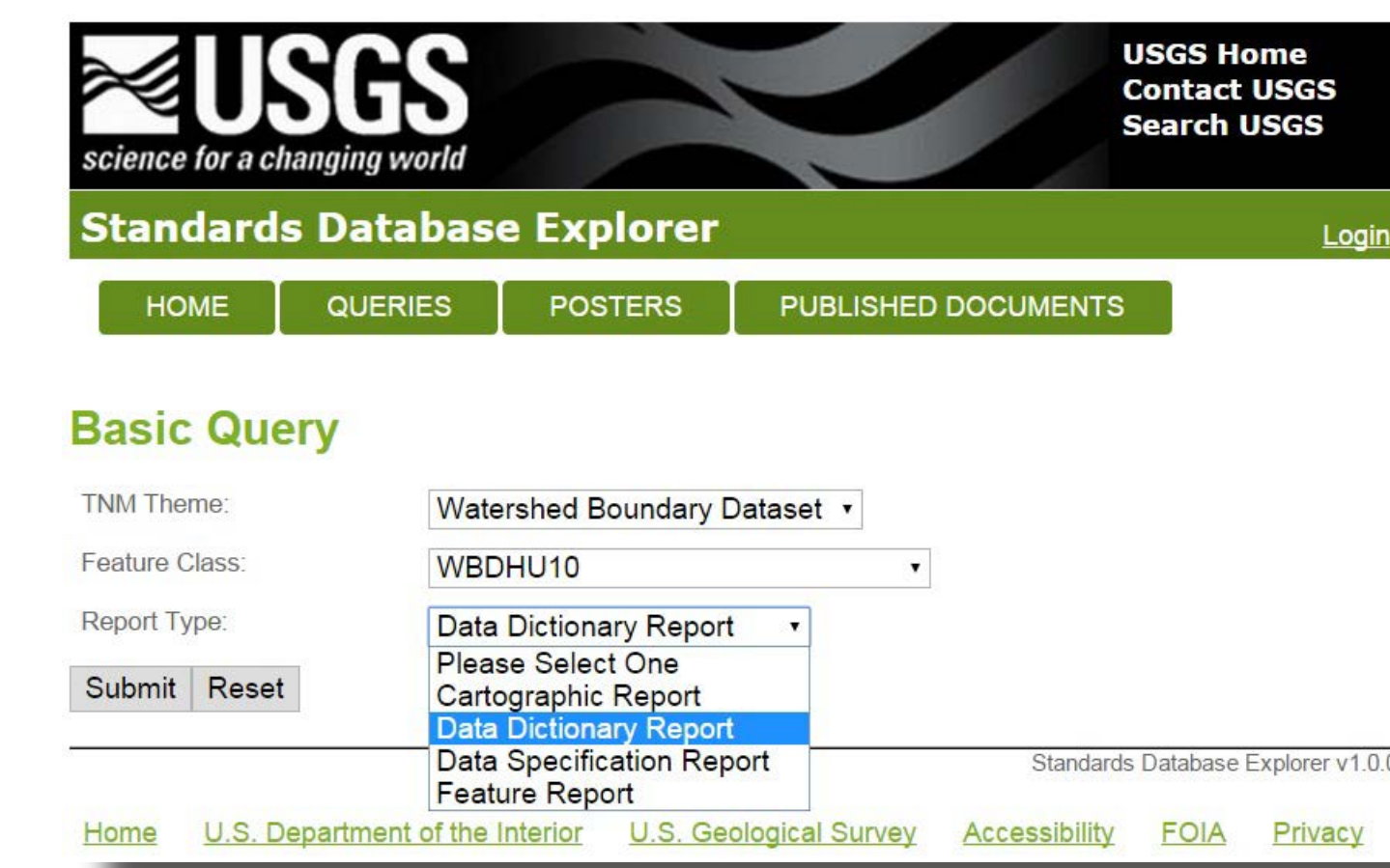
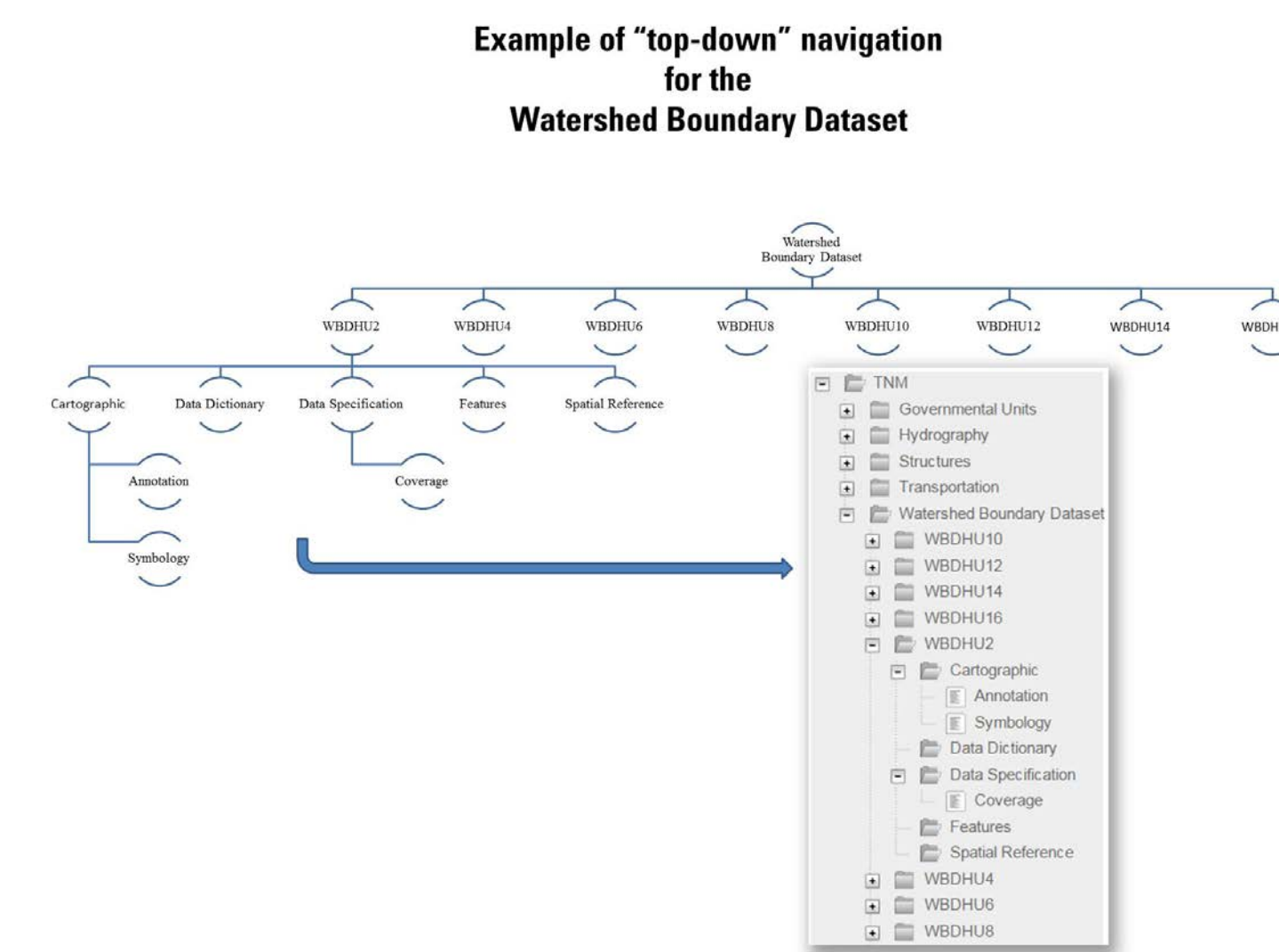
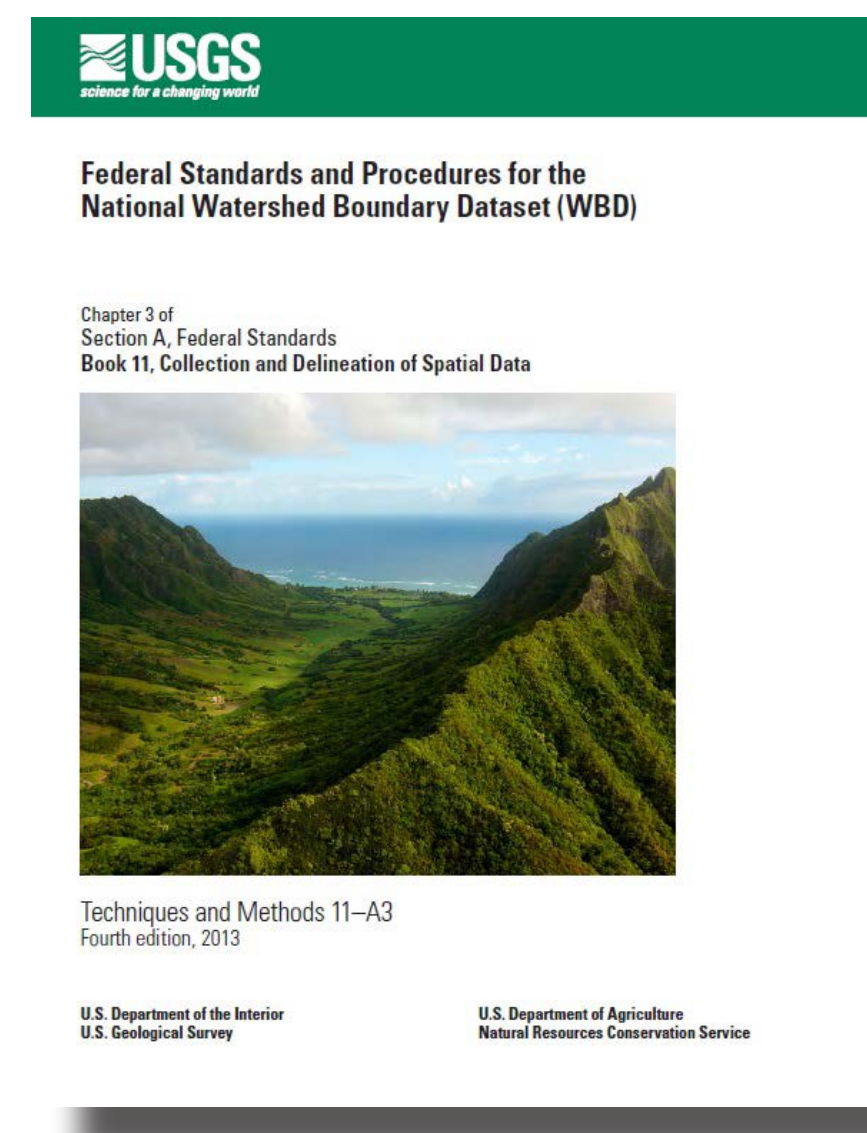
Easy-to-use online discovery tools

Efficient for USGS and customers

May be integrated with data maintenance tools and external specification catalogs

What

A prototype set of database and web-based tools being developed to capture, maintain and deliver standards and specifications information for The National Map datasets.



Watershed Boundary Dataset - Data Dictionary Report

WBDHU10

Name	Definition	Type
TNMID	TNMID (short for The National Map Identification) is a unique 40-character field that identifies each element in the database exclusively.	String
SourceFeatureID	A long, unique code that identifies the parent of the feature if the feature is the result of a split or merge, and it is automatically generated and assigned.	String
MetaSourceID	A unique identifier that links the element to the metadata tables. This ID is generated and assigned automatically by the database and remains with the object permanently.	String
SourceDataDesc	SourceDataDesc is a space provided for a brief description of the type of base data used to update or change the current WBD. The WBD In-State Steward completes this field as part of the metadata form.	String
SourceOriginator	SourceOriginator is the description of the agency that created the base data used to improve the WBD. The WBD In-State Steward completes this field as part of the metadata form.	String
LoadDate	LoadDate represents the date when the data were loaded into the official USGS WBD ArcSDE database. The field is the effective date for all feature edits, and it is automatically generated.	Date
GNIS_ID	GNIS_ID is a preassigned numeric field that uses a unique number to relate the name of the hydrologic unit to the GNIS names database. This field is automatically generated in the database.	Long Integer
AreaAcres	AreaAcres is common to all polygon feature classes and is calculated at the 12-digit hydrologic unit from the intrinsic area value maintained by the GIS software; therefore, acreage values may vary from user calculations, depending on the projection of the data. North American Albers Equal Area Conic, North American Datum 1983 is the required projection to use for calculation.	Double
AreaSqKm	AreaSqKm is calculated at the 12-digit hydrologic unit from the intrinsic area value maintained by the GIS software; therefore, the square kilometer values may vary from user calculations, depending on the projection of the data. North American Albers Equal Area Conic, North American Datum 1983 is the default projection.	Double
States	The States or outlying area attribute identifies the State(s) or outlying areas that the hydrologic unit falls within or touches. The U.S. Census Bureau 1:100,000-scale State layer will be used to establish State boundaries in the derivation process.	String
HUC10	The HUC10 field is a unique 10-digit hydrologic unit code.	String
Name	Watershed name refers to the GNIS name for the geographic area in which the hydrologic unit is located.	String
HUType	The 10-digit hydrologic unit type attribute is the single-letter abbreviation for Watershed type from the list of official names.	String
HUIMod	The 10-digit hydrologic unit modification attribute is a two-character, uppercase abbreviation(s) for either (1) the type of modification to natural overland flow that alters the natural delineation of a 10-digit hydrologic unit or (2) the special conditions GF-groundwater flow, GL-glacier, IF-ice field, KA-karst, and NC-noncontributing area.	String

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When

The USGS anticipates releasing an operational Standards Database Explorer to the public in 2016.

How

The USGS is developing the Standards Database Explorer prototype using Spring Roo for the web interface and a PostgreSQL database management system for the specification content. Within the Explorer, specifications are accessible via a top-down navigation panel and by report generation. Reports are viewable on screen and are downloadable in various formats. The project team is evaluating capabilities for integrating the Standards Database Explorer with The National Map Viewer to enable map-based queries using map data visualization and download tools (<http://viewer.nationalmap.gov/viewer/>). The team is also exploring Application Program Interfaces (APIs) for easy integration with other USGS tools. Implementation plans include establishing a process for detailed peer reviews of specification content and the creation of an Explorer maintenance process that will be used with development, staging, and deployment environments.

