

### 1. DATA ACCEPTANCE STANDARDS

The following describes the data acceptance standards for data included in the NYDOS Office of Planning and Development Geographic Information Gateway (Gateway) including data relevance, data format, and data quality.

#### 1.1. DATA RELEVANCE

The data displayed within and accessible through the Gateway should provide information that is directly relevant to New York's communities, economy, and/or environment. Data should have a spatial coverage that overlaps with all or a portion of New York State (including inland and offshore areas). Data that do not spatially overlap with New York State lands or waters will not be considered.

#### 1.2. DATA QUALITY

The data displayed within and accessible through the Gateway should be authoritative data and, where possible, originating from a source organization or agency that is accepted as the experts for the given dataset (e.g., state agencies, federal agencies, academic institutions, etc.). Data generated through crowdsourcing, citizen science, or some other public participation process will also be accepted; however, these data will only be made available on the Gateway after NYDOS Office of Planning and Development staff review the data for relevancy, consistency, and accuracy.

The datasets included in the Gateway should be the best available in terms of quality, resolution, development methodology, or other factor. As newer, higher resolution or quality datasets become available over time, lower quality datasets will be replaced by the new best available datasets. To determine the 'best available' dataset the following criteria will be considered:

- Authoritative Dataset (e.g., the originator is accepted as the expert for the dataset)
- Spatial Extent (e.g., does the dataset cover all or a portion of New York State?)
- Spatial Resolution (e.g., 30 meter raster pixels vs. 60 meter raster pixels)
- Collection Methodology (e.g., screen digitized from map or Trimble GPS)
- Accuracy (e.g., the data is only accurate to  $\pm 10$  meters )
- Certainty/Confidence for Modeled Data (e.g., the 95% confidence interval is +/- 2 $\sigma$ )

An exception to dataset replacement is for temporal datasets. Temporal datasets are defined as data collected during different time intervals using comparable sampling methods in order to characterize change over time (e.g., seasonal and/or annual patterns). Examples of temporal datasets include: recreational fishing during different seasons and years; the National Land Cover Dataset, which is produced every 5 years; seasonal patterns of marine mammal migration; and, change in sea surface temperatures across multiple decades. Temporal datasets are archived on the Gateway, allowing users to download all available temporal instances of a dataset through the download/search page. Temporal datasets are also viewable in the Gateway's map viewer, where dynamic slider bars and drop-down menus facilitate the rapid visualization of change over time.

#### 1.3. DATA FORMAT

Most authoritative data is available via web mapping services (WMS) or web feature services (WFS). WMS are datasets that return an image of the dataset along with feature attributes and allow for access to the most current version of the dataset from the data originator. WFS services, in addition, allow users to access and download the

features within a geospatial dataset. Other usable native data formats include Esri Shapefiles or Geodatabases, MapInfo TAB files, or Google KML files. Open source geospatial data formats will be reviewed on a case by case basis.

Where possible, WMS datasets will be included in the Gateway allowing for viewing of the most current version of the dataset. Because the Gateway is based on Esri's GeoPortal technology, ArcGIS Server map services and feature services are the preferred format. Where organizations do not have published WMS datasets, NYDOS will form partnerships with authoritative data organizations to encourage the publication of WMS datasets for use within the Gateway.

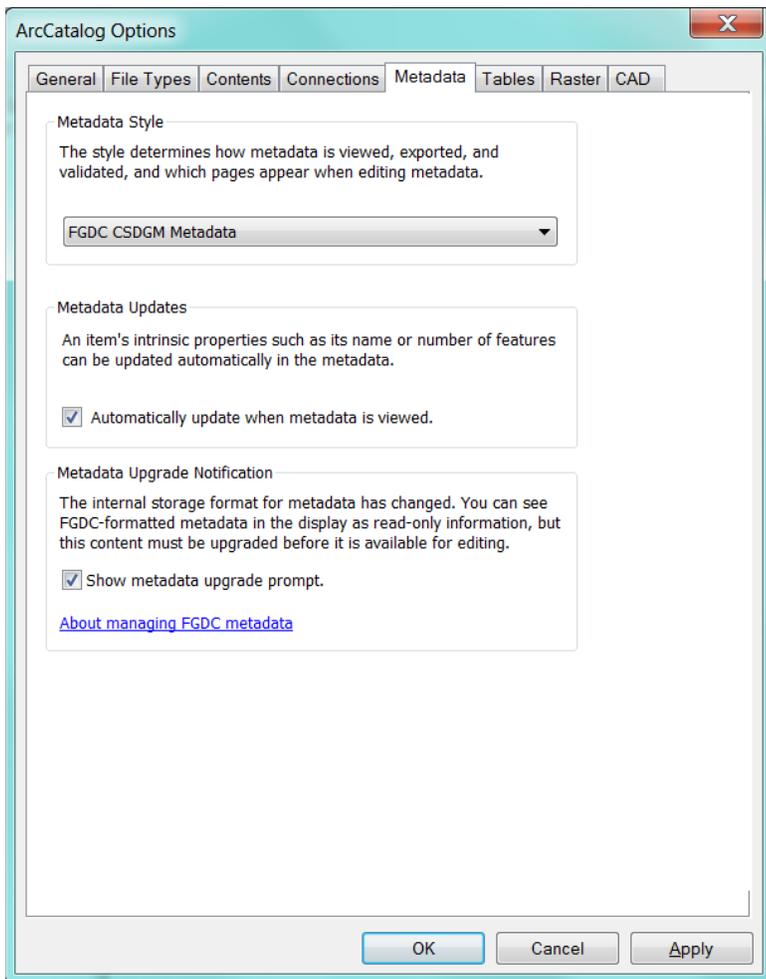
## 2. METADATA STANDARDS

The current US Federal Metadata standard is the 'Content Standard for Digital Geospatial Metadata (CSDGM), Vers.2 developed by the Federal Geographic Data Committee (FGDC) and is often referred to as the 'FGDC Metadata Standard.' While this is the current standard, other internationally accepted standards have emerged and the FGDC has endorsed the International Standards Organization (ISO) 19115 standard and recommends that federal agencies transition to the ISO standard as they are able to. They suggest that a transition to the ISO standard will occur over the next few years. In particular, they promote the North American Standard of the ISO 19115 which includes expanded domains to provide more consistency with the FGDC standard. For more information on metadata standards, visit: <http://www.fgdc.gov/metadata/geospatial-metadata-standards>

***The Gateway accepts two metadata standards: the FGDC and ISO 19115.*** Other metadata formats will not be accepted.

### 2.1. CREATING COMPLIANT METADATA IN ARCCATALOG

Esri's ArcCatalog has metadata authoring tools to develop compliant metadata. The resulting metadata files will be validated prior to upload to the Geographic Information Gateway site. To specify the FGDC or the ISO North American Standard, in ArcCatalog, go to the Customize menu → ArcCatalog Options → Metadata tab (Figure 1). Using the dropdown, the user selects the metadata standard to view and then begins to develop metadata within ArcCatalog.



**Figure 1.** ArcCatalog interface for selecting metadata standard.

## 2.2. METADATA GUIDANCE

When creating FGDC or ISO 19115 compliant data, this section provides additional guidance to ensure that the quality and level of information contained in each dataset’s metadata is standardized. All metadata published on the Gateway must follow the below guidelines.

- **Title**

Titles concisely convey the meaning and utility of a dataset to Gateway users. When applicable, titles are paired with modifiers that describe the dataset’s spatial extent, unit of measure, and temporal extent. The following format should be used when titling datasets: “Title – spatial extent, unit of measure, temporal extent.”

*Example: Bottlenose Dolphins - NY Bight, Sightings, 2013*

- **Tags/Keywords**

Tags/keywords are words and/or acronyms that are commonly used to describe the content, spatial extent, temporal extent, origination (i.e., entity responsible for creating the dataset), relevance, and utility of each dataset.

*Example: New York Department of State, NYSDOS, Gotham Whale, 2011, bottlenose, dolphin, marine mammals, biological, species distributions, habitat, oceans, atlantic ocean, new york state, new york bight, offshore, offshore resources, offshore renewable energy, planning, marine spatial planning, coastal and marine spatial planning, citizen science*

- **Summary/Purpose**

The Summary/Purpose provides detailed information about the methods used to collect, process, and analyze the data. This section ensures the user fully understands what the data represent, and in turn, appropriate uses for the data. Hyperlinks can be embedded in the text to direct the user to more information.

*Example: Data were collected during whale watching cruises onboard the MV American Princess from Memorial Day to Labor Day in 2012. The coordinates for each sighting were collected when the animal (or group of animals) was first sighted.*

- **Description/Abstract**

The Description/Abstract provides the user with a brief, but informative, description of the dataset. This section is visible when the dataset title is expanded (small blue triangle) on the map viewer or download page.

*Example: This dataset represents Bottlenose dolphin sightings in the Western New York Bight. These data were collected during the 2011 whale watching season aboard the MV American Princess.*

- **Credit**

This section provides the contact information (name, organization, phone number, and email at a minimum) for the individual or organization responsible for creating the dataset. If different individuals and/or organizations are responsible for creating, processing, analyzing, maintaining, and/or managing the distribution of the dataset, the respective roles and contact information for each individual/organization should be included.

*Example: Chris Smith, NY Whale Watchers, [chris@nywhalewatchers.com](mailto:chris@nywhalewatchers.com), 718-555-1234, [www.nywhalewatchers.com](http://www.nywhalewatchers.com)*

- **Use Limitations**

The Use Limitations clearly define general and legal constraints associated with the dataset.

*Example: This dataset and related graphics are being provided to the public free of charge and for informational purposes only. They are not legal documents and are not intended to be used as such. This dataset was not prepared for, nor is it to be used for or relied upon for legal, engineering, navigation, or surveying purposes. The data are not better than the original sources from which they were derived. It is the responsibility of the data user to use the data appropriately and within the limitations of geospatial data in general, and these data in particular. Use of these data, where metadata reveals the source of the data, requires proper citation to the data source as provided. The New York Department of State is not responsible for improper or incorrect use of the data described and/or contained on this web site.*

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- **Dates**

Dates document when the dataset was created, published, and if appropriate, revised/updated.

*Example: Created on January 1, 2013; published online on March 1, 2013; revised on March 1, 2015*

- **Description of Attribute Table Fields**

Each field in the dataset's attribute table is defined and the definition is sourced in the metadata. If the field name is not easily recognizable by the lay person, an alias is also provided.

*Example: The field name in the attribute table is: "PBE"*

- *Alias: Part B Eligible*
- *Definition: Census Tracts that are "Part B Eligible" have a poverty rate that is at least double the rate for the county in which the tract is located.*
- *Definition Source: NYS Empire State Development*