



FL Water Resource Metadata Standards and IDM System Design

Overview

by

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FL Water Resource Metadata Standards and IDM System Design

Definitions:

- Metadata Element – a specific piece of information describing a result value characterized by a
 - Name
 - Description
 - Default Value; Required or Not
 - Specified Value List or Examples
- Metadata Standard – formalized collection of metadata elements used to report data for a given purpose, e.g. FL STORET for impaired waters assessment
- Integrated Data Management (IDM) System – Web-based system for storage and retrieval of data



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Legislature



Florida Oceans and Coastal Council



Integrated Data Management and Dissemination (IDM)



Establish Metadata Standards for Mandate



Money!



FDEP



Florida Water Resources Monitoring Council



Dozens of organizations in 2004 to 10 in 2006



Develop a list of water resource metadata standards for organizations to adopt.



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FDEP Water Resources Monitoring Council

Started work on a contract to conduct a state-wide survey of metadata standard and metadata element usage among data generators and users



Soon realized that metadata elements are specific to scientific disciplines



Organized workshops with small groups (~20 people) of discipline-specific experts mostly representing the ten organizations in the Council but private consultants also invited





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Metadata Disciplines:

Common (project and location information)

Aerial Remote Sensing

Oceans Observing

Laboratory Analytical

Geospatial

Groundwater

Biological Measurements

Field Measurements





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Example Metadata Elements:

Common Element

Name: Project Start Date

Description: Start date/time of project

Default Value: No Default Value; Value is Required

Value List/Example(s): MM/DD/YYYY hh:mm TZn

Laboratory Analytical Element

Name: Data Validation Method

Description: The protocol used to validate the data

Default Value: No Default Value

Value List/Example(s): EPA Level 1



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IDM System Design: Web-based system for storage and retrieval of data

- Multiple User Types in addition to Public User to enforce security
- Ability to perform simple searches using a wizard and advanced searches using free text fields and a GIS interface with maps and tables
- Depending on User Type, ability to save and share searches or simply use standard searches





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IDM System Design: Web-based system for storage and retrieval of data

- Ability to create reports and save the output to a local machine in PDF or HTML format
- Ability to download data to a local file system in formats such as XLS, PDF, TXT, CSV, or XML
- For applicable User Types, ability to upload new or revised data to the system either manually or by batch



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IDM System Design: Web-based system for storage and retrieval of data

- For applicable User Types, provide a Metadata Subscription Service to notify users when updates to particular metadata have been made
- Allow all users to complete online forms to comment on the metadata and allow for rebuttal





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The End!!!

