

Part 2 - Documenting and Sharing Spatial Data

Spatial data cataloging and documentation

1:45 – 2:00

Spatial Metadata Functions

Discovery and Access

- Who, what, where, when
- For discovery purposes

Use

- Detailed information about the data's lineage, attributes, methods used to create it, limitations, and intended uses
-
- FGDC Content Standard for Spatial Metadata

Why It's So Important

- Protects your most valuable asset from loss
- Answers questions about how to access and use the data
- Helps prevent misinterpretation of the data

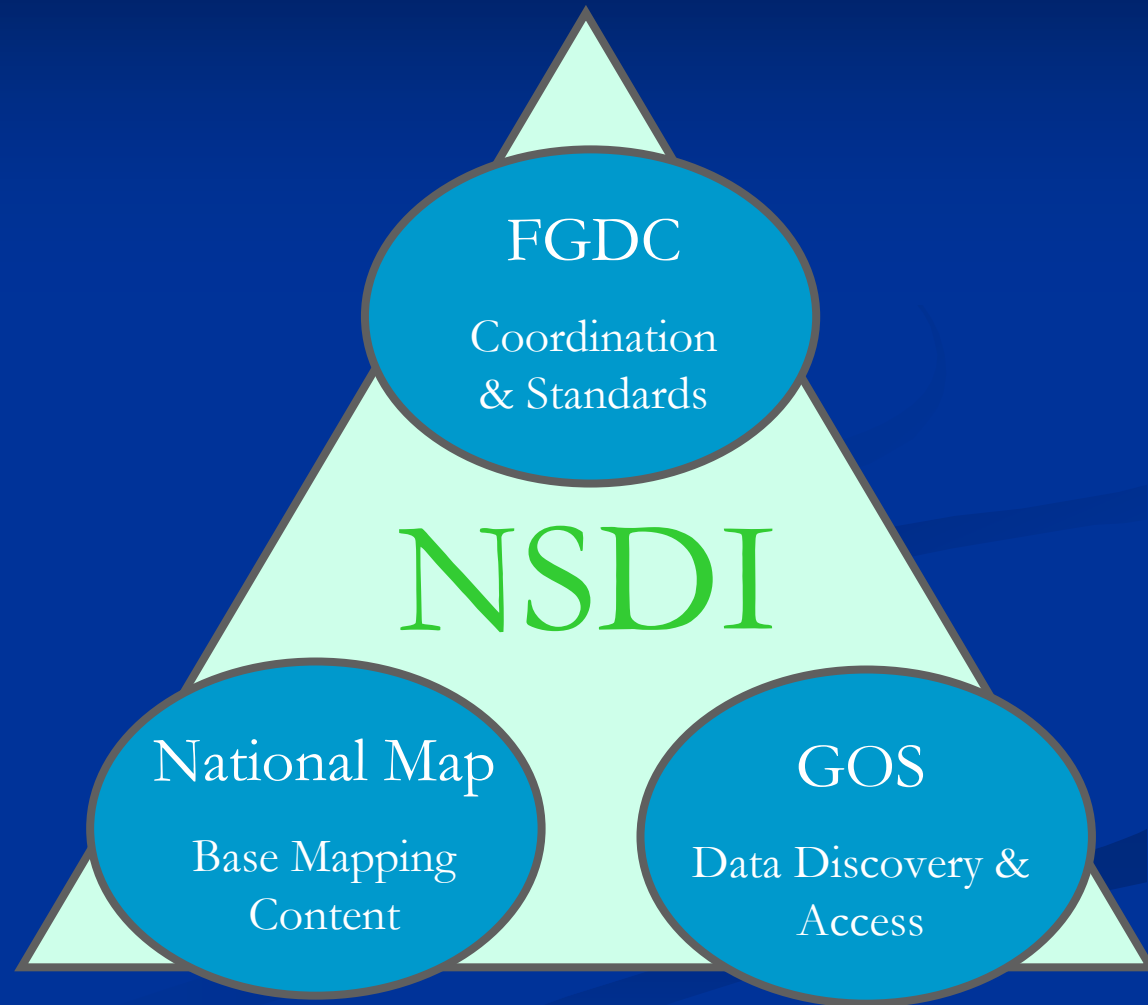
Why It's So Important

- Helps your GIS shop run efficiently
- Allows for environmental organizations to serve their mission more competently, help each other better
- Limits liability by clarifying origin and limitations of data
- Saves time and money

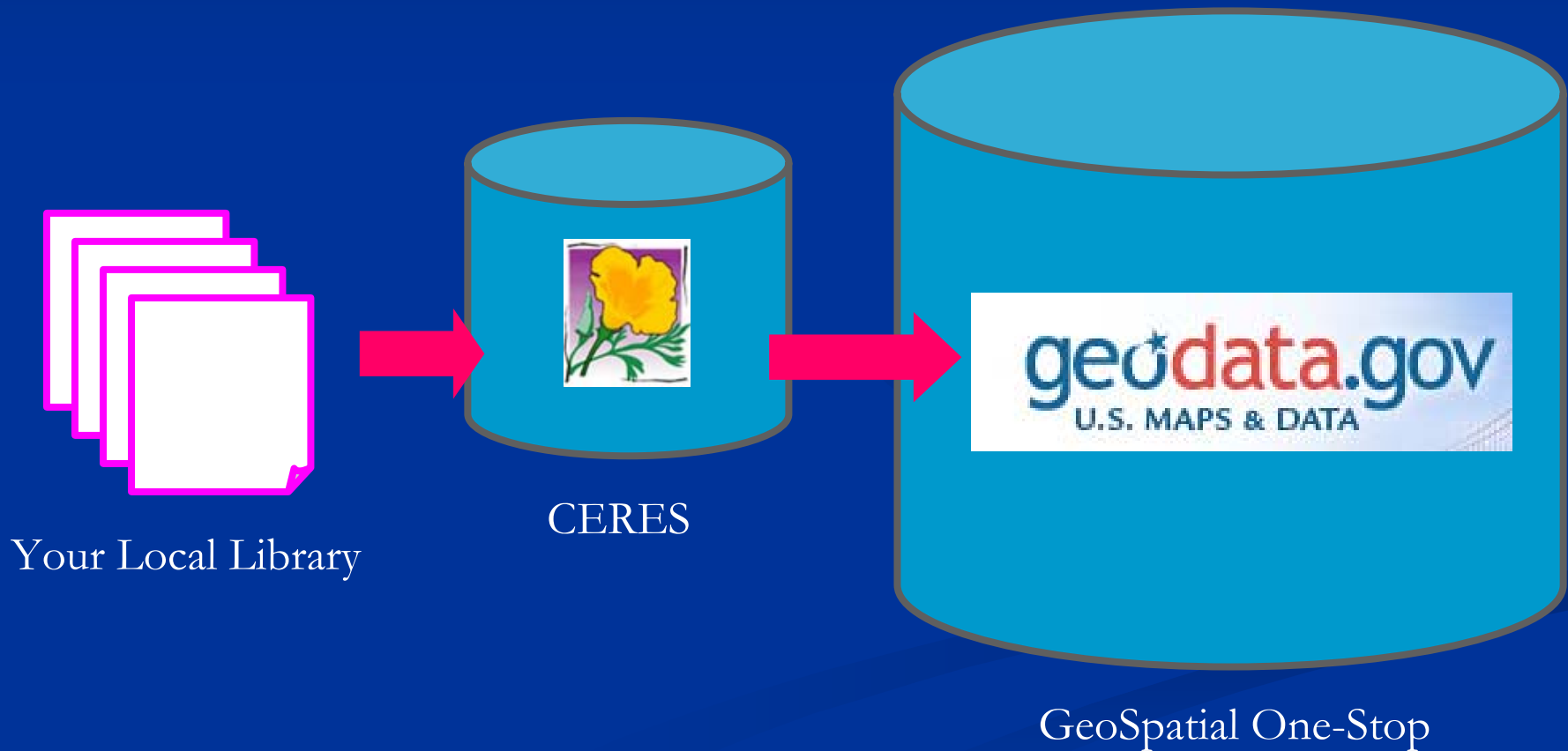
See also FGDC's "[Business Case for Metadata](#)"

The NSDI Initiative

- The three components of the National Spatial Data Infrastructure



One Record Does It All



ArcCatalog Tour

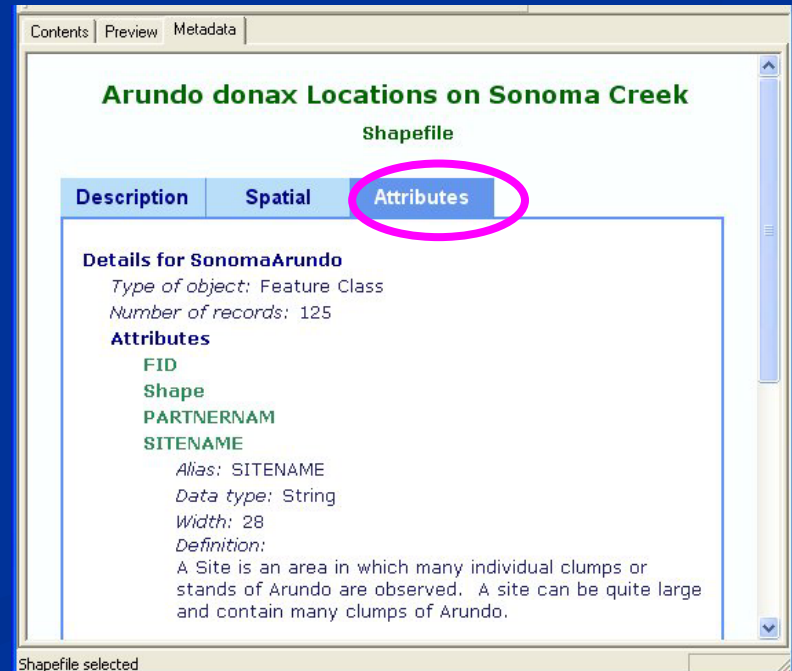
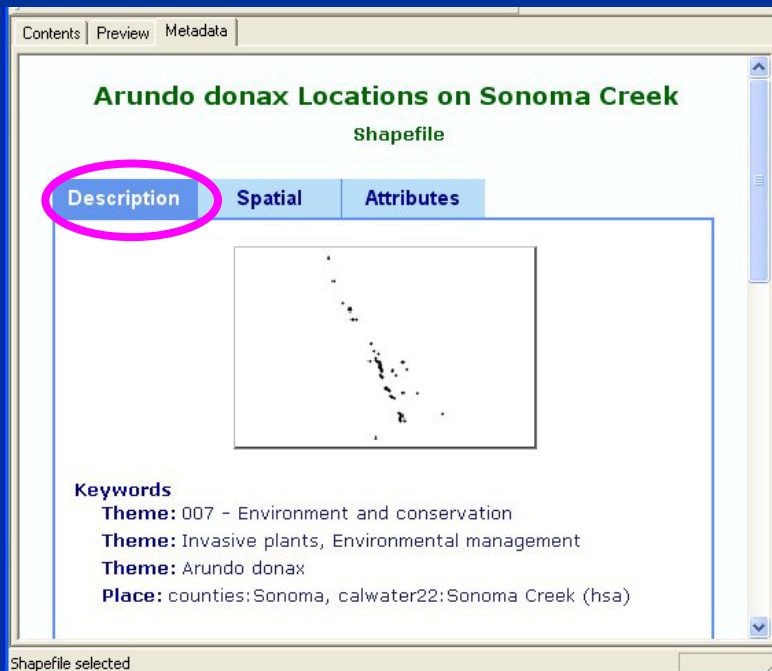
2:00 – 2:30

Key Metadata Concepts

- Documentation
- Properties
- Metadata style sheets and editors

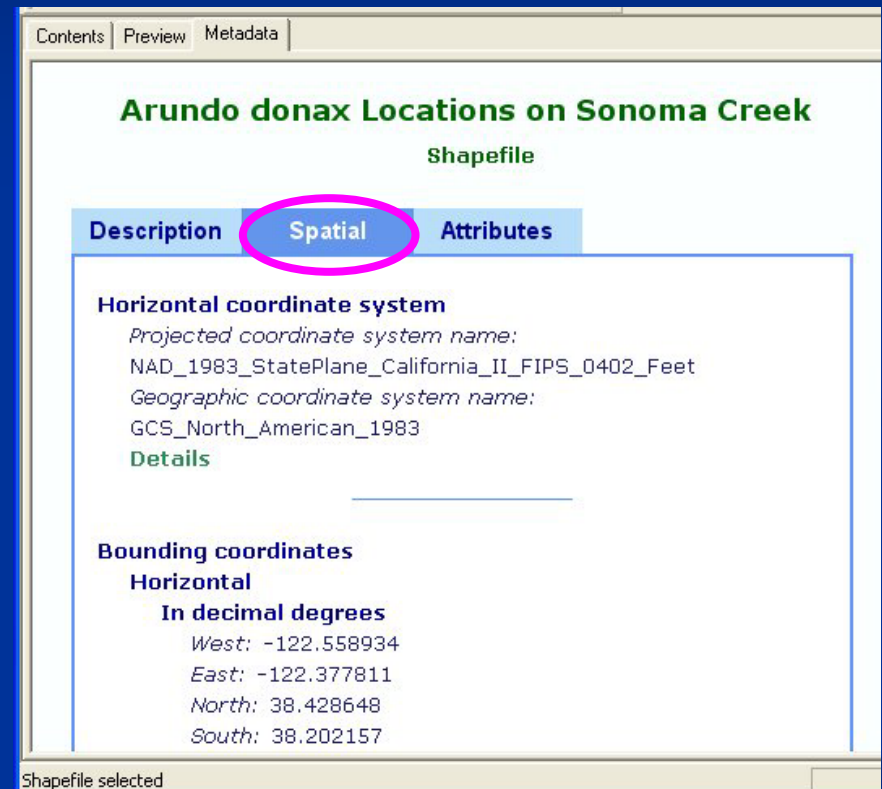
Documentation

- Information manually added in FGDC Editor.
- Title, abstract, keywords, attribute descriptions, etc.



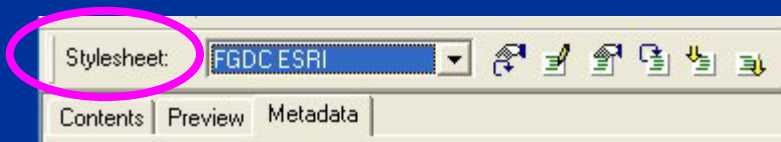
Metadata Properties

- Inherent in the data
 - Coordinate system information
 - Bounding coordinates
 - Object type
- Created by ArcCatalog automatically
- Updated automatically

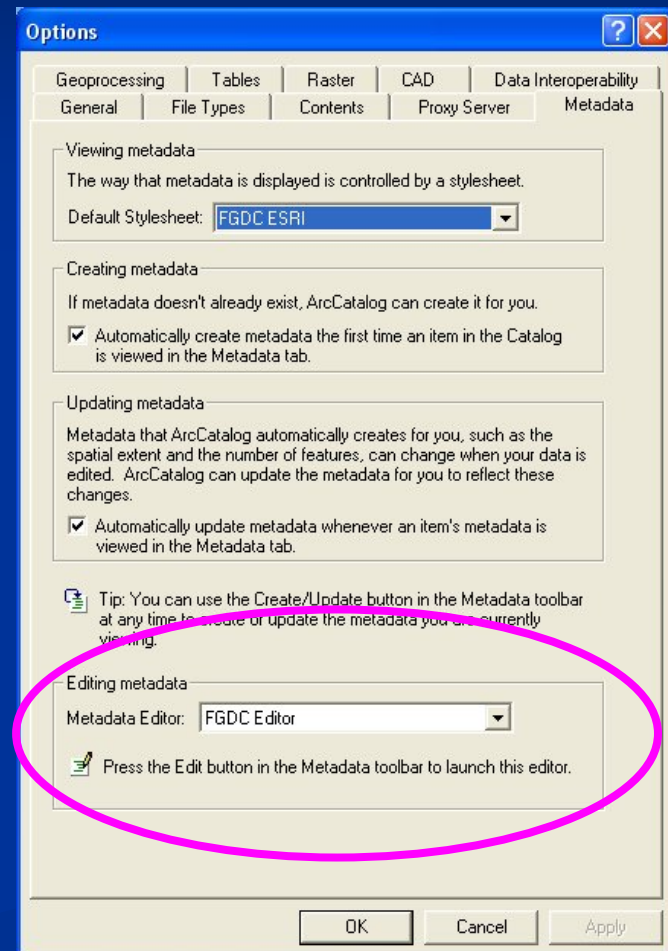


Stylesheets and Editors

- Stylesheets display metadata elements



- Editor shows only those which can be edited.



Open ArcCatalog for the Tour

1. Make connection to Spatial Data folder on desktop
2. Select FGDC ESRI stylesheet
3. Select Arundo shapefile in Catalog Tree
4. Click Metadata Tab on right
 - Description tab (documentation)
 - Spatial (properties)
 - Attributes (mostly properties)
5. Open metadata editor
6. Use in context help

Setting Up a Workflow

Tools Menu

- Options | Metadata: Select FGDC Editor, and turn off automatic updates
- Options | File Types: Add XML as new file type

Making the Metadata

2:30 – 3:30

Metadata Templates

- Expedite repeated data entry
- Contain documentation and exclude properties
- Turn off automatic updates when making templates

Making a Template

1. Make a new shapefile (any name, accept defaults, select a coordinate system)
2. Export its metadata to new XML file, called MyOrg_MyName.XML (refresh view)
3. Open XML with metadata editor
4. Add data that will often be repeated (contact info, distribution info, access constraints, etc.
5. Turn automatic update back on.

Using the Template

1. Navigate to a *Arundo* shapefile, with existing metadata
2. Turn automatic updates back on
3. Import your template metadata, what happened? you will overwrite any existing documentation, so importing metadata from template is first step after you create a GIS data set.
4. Navigate to “Railroad Stations”, import again.
5. Complete rest of metadata

Completing the Documentation

- Two rows of tabs in FGDC editor
- Delete local references to location of data if you want
- Entity Attribute – chance to explain fieldnames!
- Use help-in-context tool; required fields in red!
- Check out metadata examples for tips.

Thesaurus Name

Keyword

- ISO 19115 Topic Categories
 - Environment and Conservation

- CERES Theme
 - Natural environment

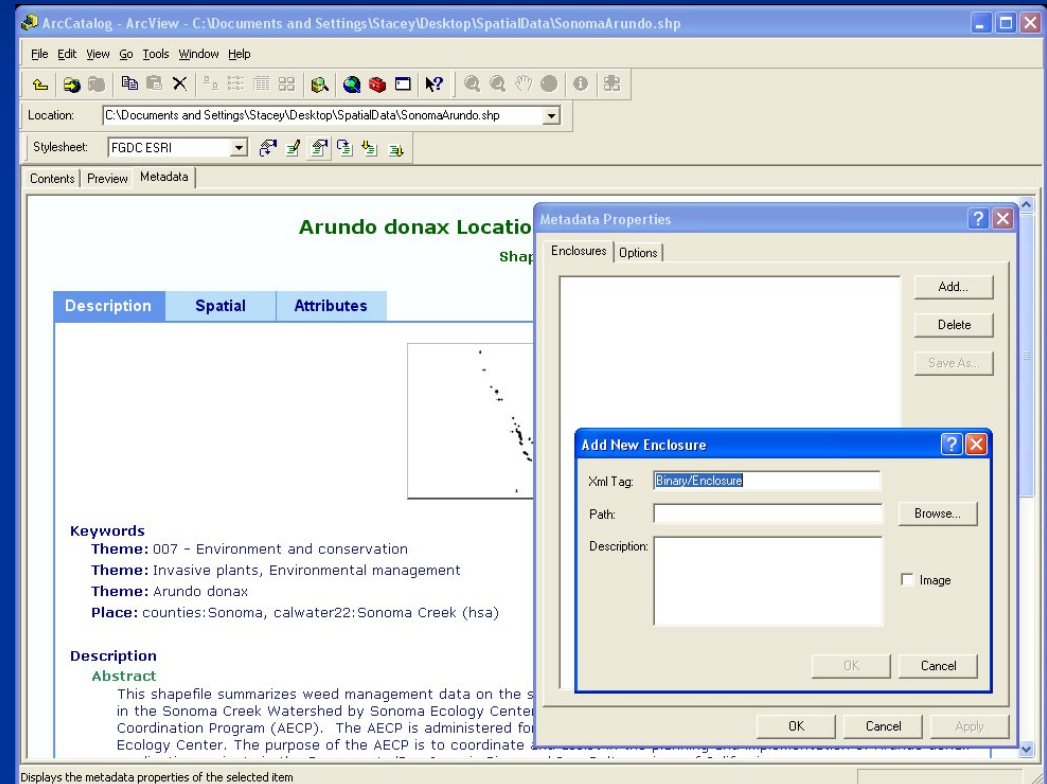
- NONE
 - Environment

Place Keywords

- CERES Geofinder
- GNIS
- Free text

Enclosures

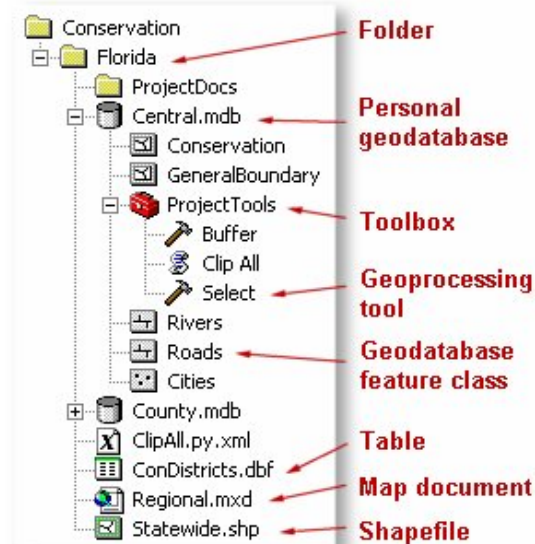
- External files with more metadata
- Actual copy is made of enclosed file
- You can open enclosed file with double-click



ArcCatalog Search Tool Demo

Metadata for Non-Spatial data

- Supporting non-spatial data (mxd, tables, folders, tools, scripts, text files, VB code, models)
- Do you want to create metadata for these? Make some metadata



This example shows some of the items in a GIS project folder that should have metadata. Note that some of the items, such as the folder, are not spatial datasets.

Break!

3:30 – 3:45



Sharing Your Spatial Metadata

Upload to CERES

- Export as FGDC XML to a meaningful name
- Login to CERES Test Library (pswd=test)
- Upload and edit

Sharing Your Project Descriptions (from EndNote)

■ Text

is translated to

■ XML

Reference Type: Report
Record Number: 117
Author: Bobbitt, Mike; Cornwall, Caitlin; Hunter, Rich
Year: 2000
Title: Sequeira/Red Hill Property, Baseline Documentation
City: Sonoma, CA
Institution: Sonoma Ecology Center, Preservation and Policy Program
Pages: 13 pages, 8 exhibits, 3 attachments
Type: Report
Short Title: Sequeira/Red Hill Property, Baseline Documentation
Call Number: S:\SEC_LIBRARY\SEC_Products\Preservation_and_Policy\OSD_Properties
Keywords: CERES Theme: Conservation easements
CERES Theme: Environmental Policy
Notes: CERES Location: counties:Sonoma; CERES Location: calwater22:Sonoma Creek
Research Notes: Prepared for Sonoma County Agricultural Preservation and Open Space

Reference Type: Report
Record Number: 1
Author: Branciforte, Ryan
Year: 2004
Title: Adjacent Property Ownership Map (Exhibit 6)
Series Title: In: Cornwall et al. (2004) Wilroth Property, Baseline Documentation
City: Sonoma, CA
Institution: Sonoma Ecology Center, Preservation and Policy Program
Type: Map plate
Short Title: Adjacent Property Ownership Map (Exhibit 6)
Call Number: S:\SEC_LIBRARY\SEC_Products\Preservation_and_Policy\OSD_Properties
Keywords: CERES Theme: Conservation easements
CERES Theme: Environmental Policy
Notes: CERES Location: counties:Sonoma; CERES Location: calwater22:Middle Russian
Research Notes: Prepared for Sonoma County Agricultural Preservation and Open Space

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  <fax>707-996-0713</fax>
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- <primarycontact>
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- <secondarycontact>
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Presenting Your Catalog(s) on Your Website

- Example: Sonoma Ecology Center's Catalog

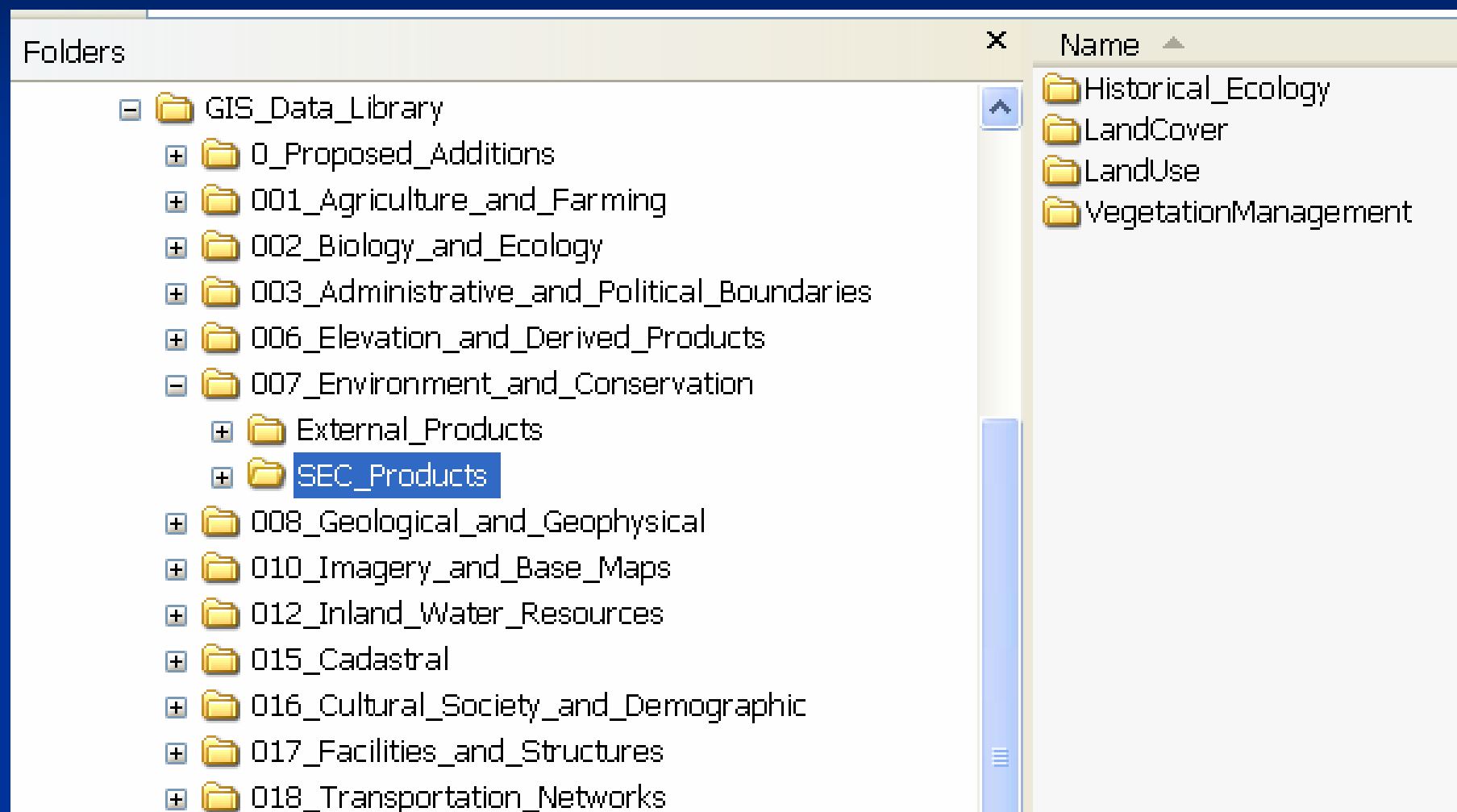
How to share your data

- Distribution Information Section in CEIC
 - Post for download
 - Provide instructions for ordering
- Shared Space for Distribution

North Bay Commons Data Archive


















Keeping Local and Public Libraries in Sync

Data Organization: GIS Data Library

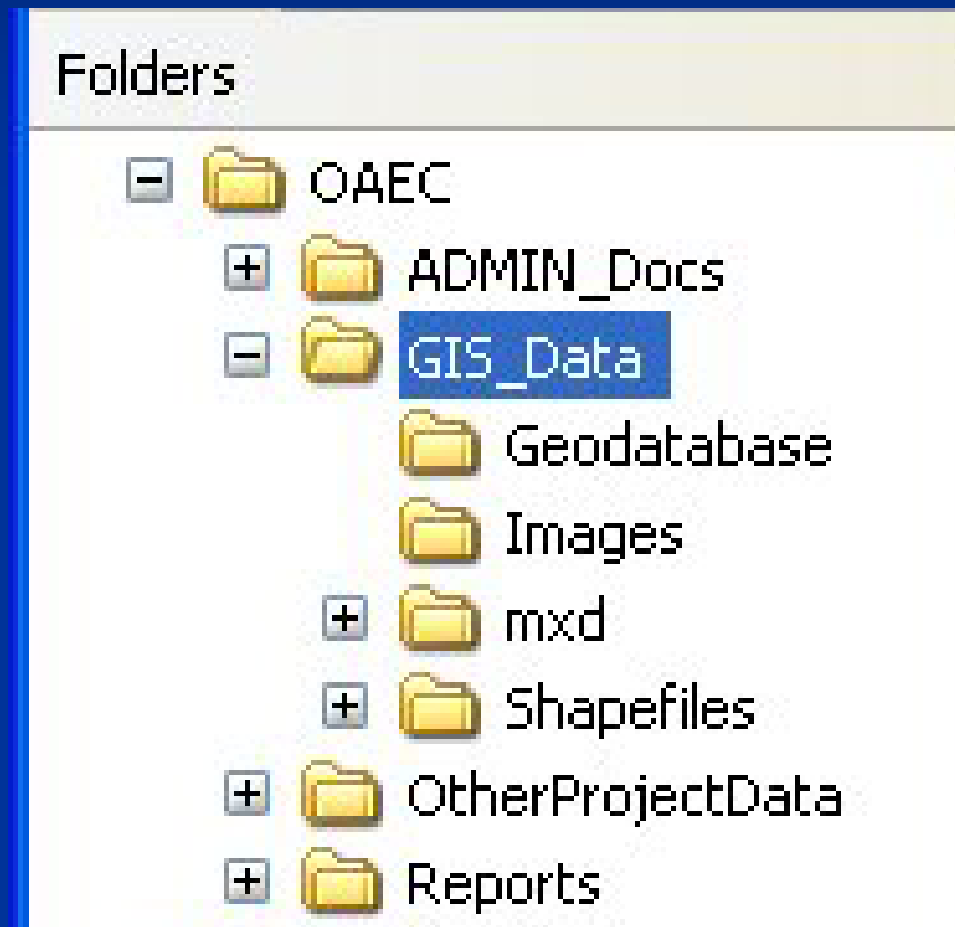


Data Organization: Non-spatial Data Library

Folders

- [-]  working on 'kenwood' (S:)
 - [+]  .TemporaryItems
 - [+]  Network Trash Folder
 - [+]  Projects
 - [-]  SEC_LIBRARY
 - [+]  0_In_Process
 - [+]  External_Materials
 - [-]  SEC_Products
 - [+]  Education
 - [-]  GIS
 - [-]  Projects
 -  AnnadelStatePark
 -  BeniciaBayTrail
 - [-]  OAEC_SchoolReachMaps
 - [+]  Data
 - [+]  Maps
 - [+]  Text

Organizing Project Workspace



Training Others in Your Organization

- Announcements
- Brown-bags
- Readme files
- Setting access permissions
- File Structures we have tried:

Resources for Learning

- [ESRI](#) Virtual Campus
- ArcGIS Desktop Help
- [ArcGIS](#) Desktop Help Online
- [FGDC](#) website
- [GOS](#) (Geospatial One-Stop) website

Questions and answers

4:00 – 4:30