



# *Data Management*



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# Managing Data

- Data Formats
- Organization
- Tools
  
- Adding point data



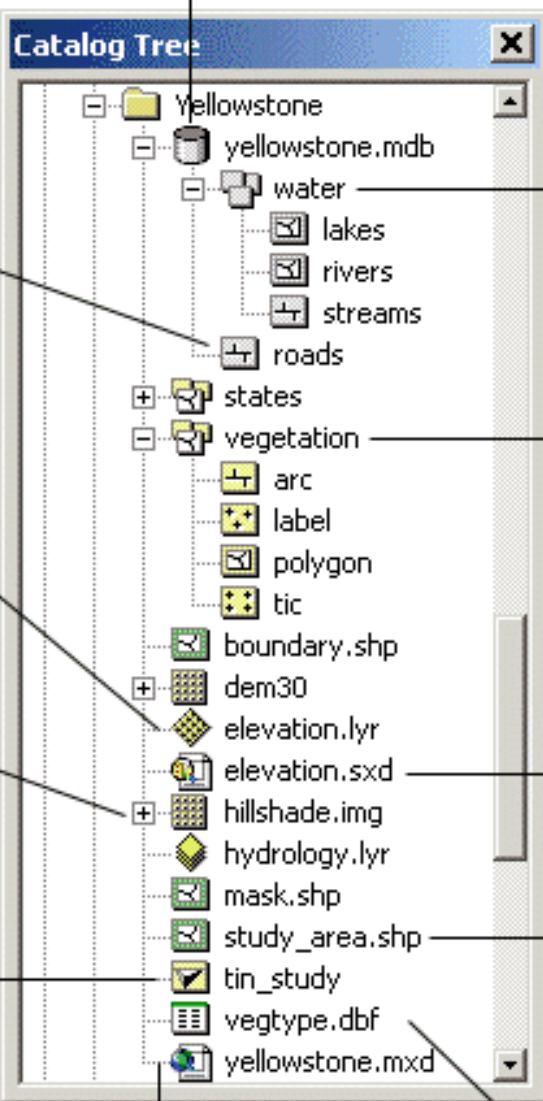


# Data Formats

- ESRI/ArcGIS native formats
  - Shapefiles, coverages, GRIDs, and related subfiles (sbx, prj, tic, etc.)
- Other formats
  - Data (excel, dbf, csv, etc.)
  - Image (jpg, tif, etc)



A geodatabase

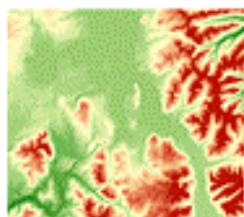


A single geodatabase feature class

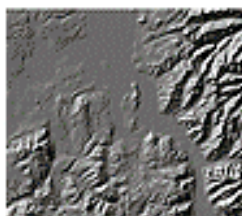


A geodatabase feature dataset containing three feature classes

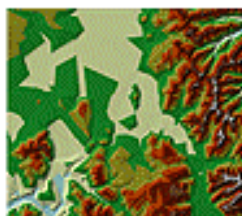
An ArcGIS layer file (.lyr file)



A raster image (.img file)



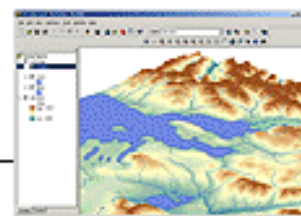
A TIN dataset



A coverage dataset



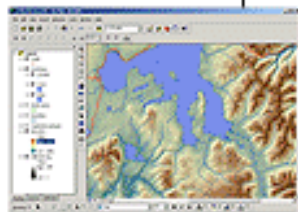
An ArcScene document (.sxd file)



A shapefile feature class



An ArcMap document (.mxd)



A table stored as a .dbf file

NAME	TYPE	VALUE
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10



# Organization

- ArcCatalog
  - Folder and File browsing without replicated prefixes
  - Data management
    - Delete and move spatial and non-spatial files with all associated files (sbx, dbf, prj, etc.)
    - Create folders and connections
  - Data preview
    - Spatial, table, metadata
  - Some data editing
    - Coordinate systems
- ArcGIS databases
  - GeoDatabases can contain all ArcGIS formats
    - Personal, File, and DBMS



# Spatial Tools and Processes

- Many GIS processes create new files
- Default settings in processes create default file names
  - Locations as well
- Working simultaneously with ArcCatalog, ArcMap, and ArcToolbox supports efficient data management





# From my experience...

- Root folder for GIS data
  - I call mine “GISdata”
- Avoid spaces in data names and paths
- Keep attribute names short
  - Keep a record of your changes to data and a codebook file for attributes





# Data and Layout views

- Using multiple layers
  - What you see in the data view for a layer is what you will “map” in the layout view
  - You work with ONE layer at a time in the data view but can display or “map” multiple layers in the layout view
    - Locator maps, small multiples, inset maps, etc.

