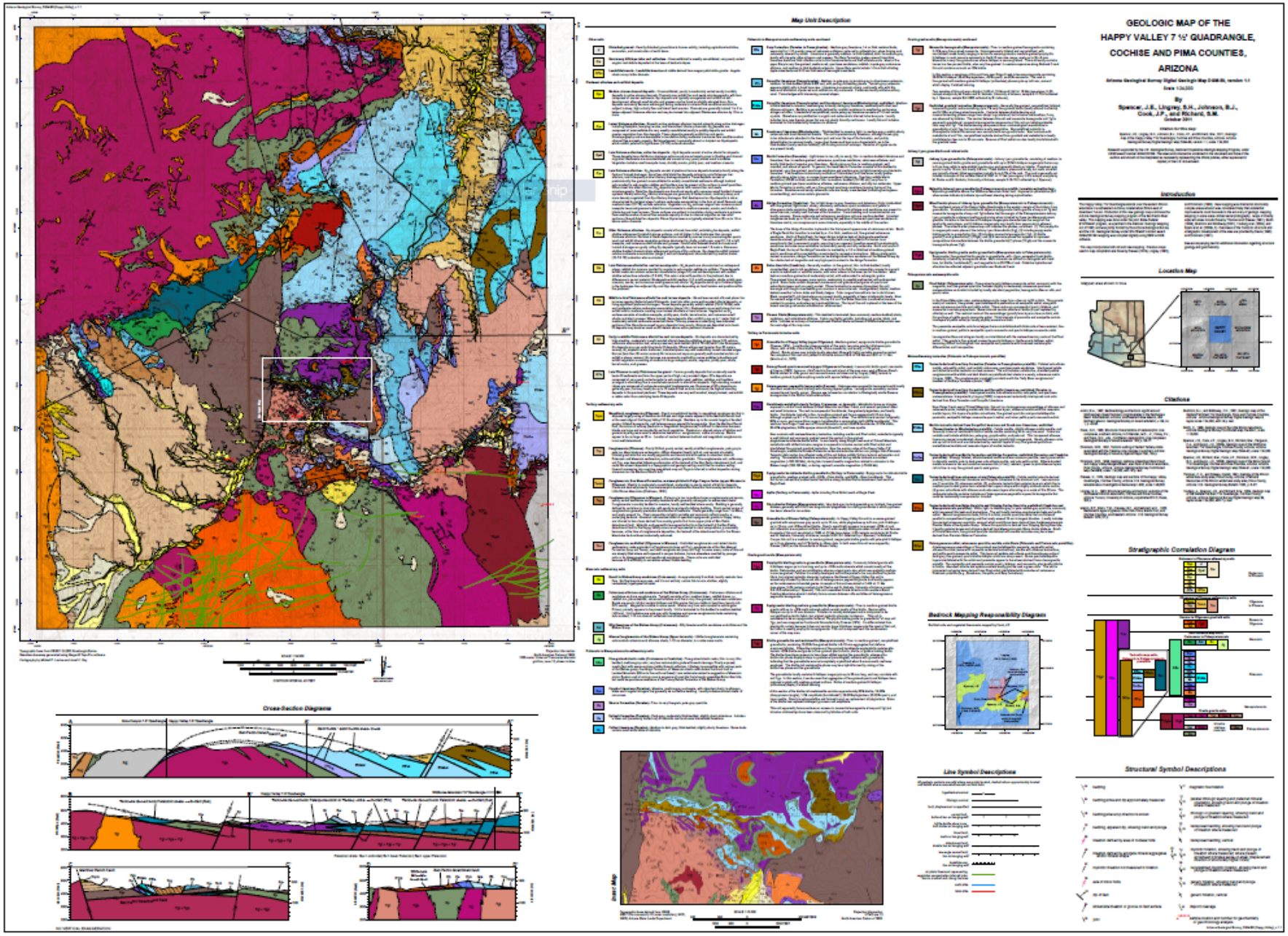
The following was presented at DMT'13
(June 2-5, 2013, Golden, CO).

The contents are provisional and will be
superseded by a paper in the
DMT'13 Proceedings.

See also earlier Proceedings (1997-2012)
http://ngmdb.usgs.gov/info/dmt/

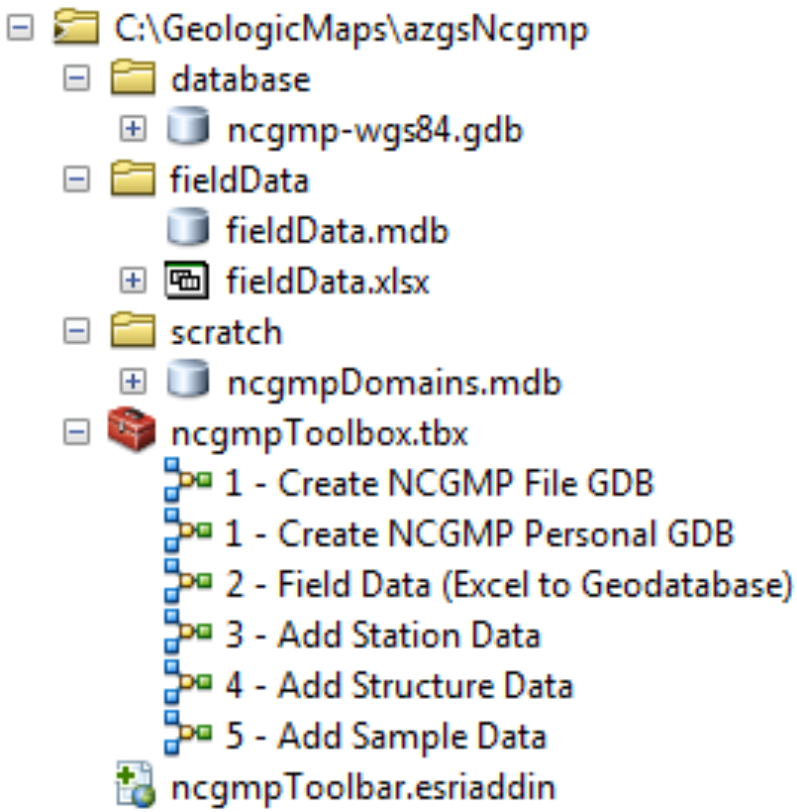
Streamlining geologic map production and archiving with NCGMP Tools

Presented by:
Janel Day
Arizona Geological Survey


GEOLOGIC MAP OF THE
HAPPY VALLEY 7 ½' QUADRANGLE,
COCHISE AND PIMA COUNTIES,
ARIZONA
Map Unit Description
Introduction
Location Map
Citations
Stratigraphic Correlation Diagram
Bedrock Mapping Responsibility Diagram
Cross-Section Diagrams
Line Symbol Descriptions
Structural Symbol Descriptions
Index Map

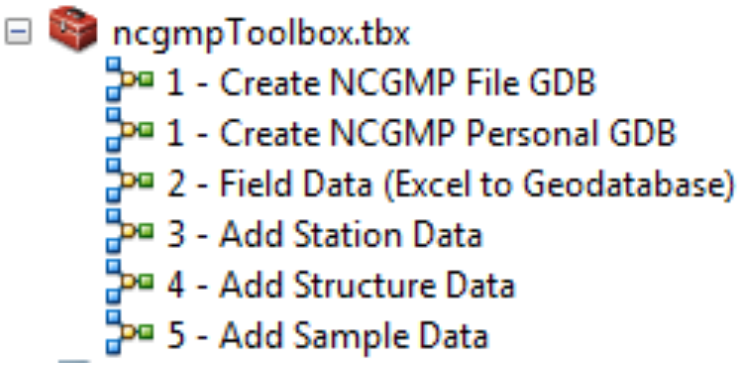
What we are developing. . .

- Tools that streamline the geologic mapping production and archival process:
  - Toolbox
  - AddIn
  - Documentation

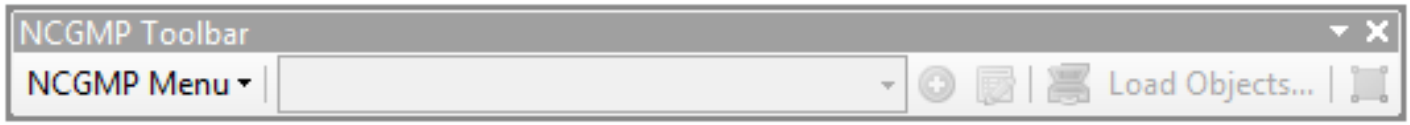


In the toolbox. . .

- You'll find tools to:
  - Create NCMGP formatted database (azgs style)
  - Import field data into NCGMP point feature classes (stations, orientation data points, samples)

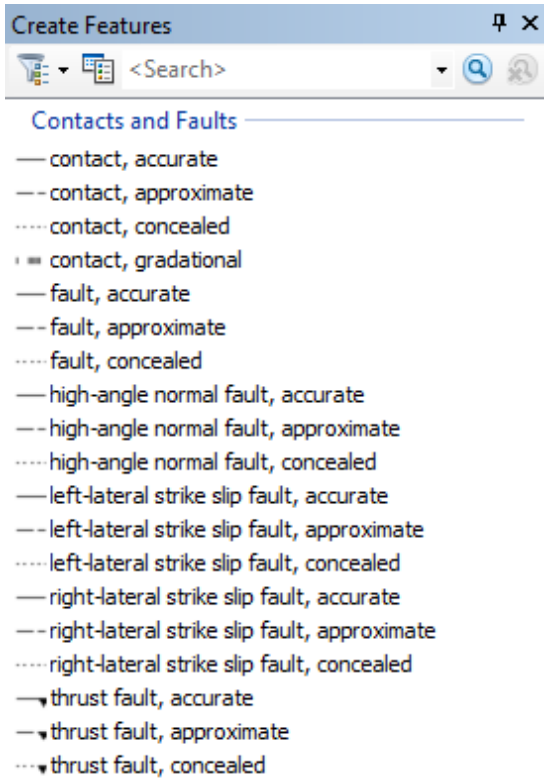


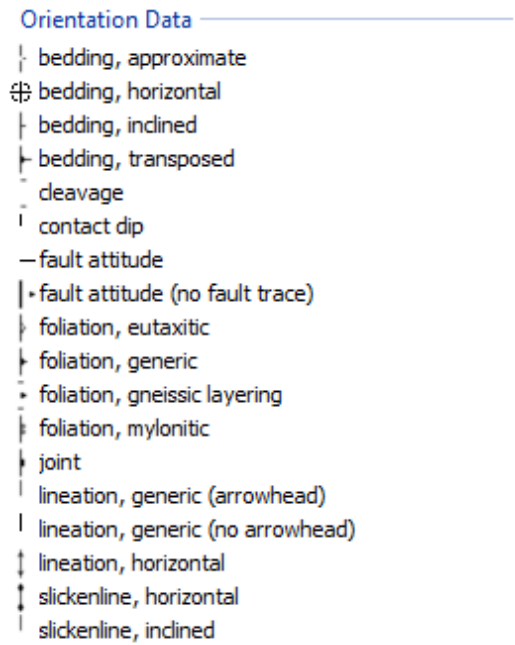
Esri AddIn



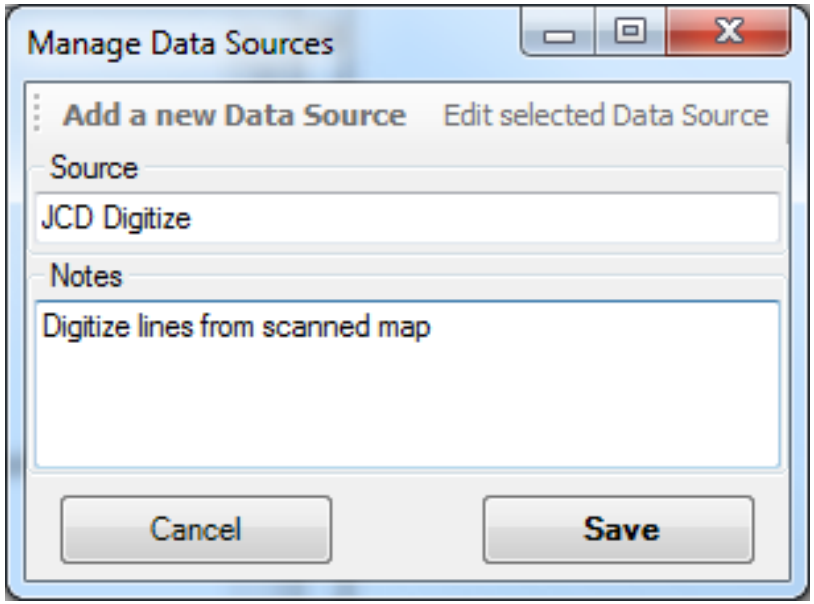
- Key Features:
  - 'Default' contact, fault and orientation data templates
  - Manage data sources/feature level metadata
  - Digitize structure data from scanned maps tool
  - Manage map unit legend data, hierarchy and symbology
  - Produce map unit legend in ArcMap layout view

Default Templates

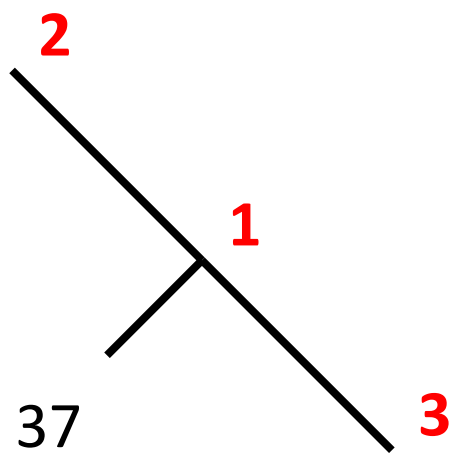


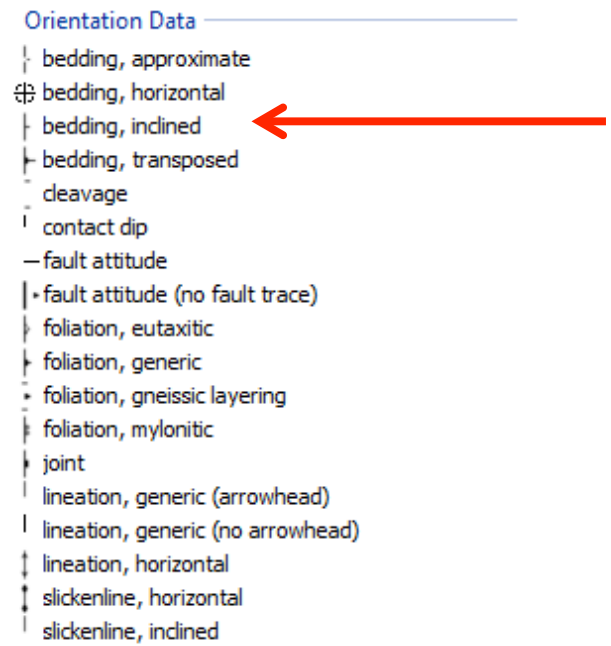


Feature Level Metadata

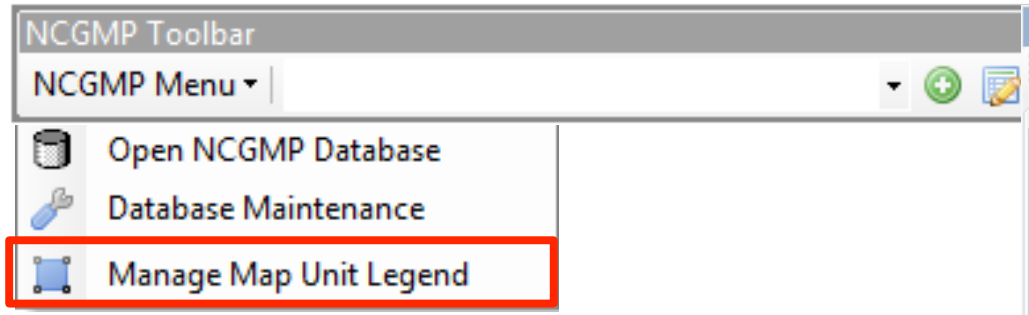


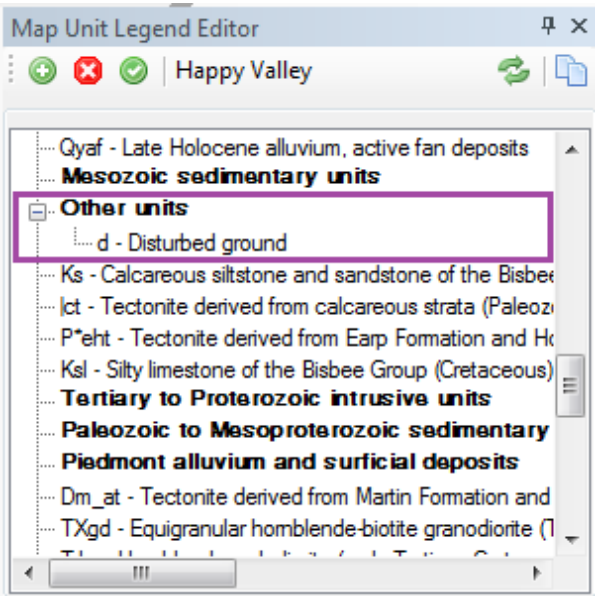
Digitize structure data

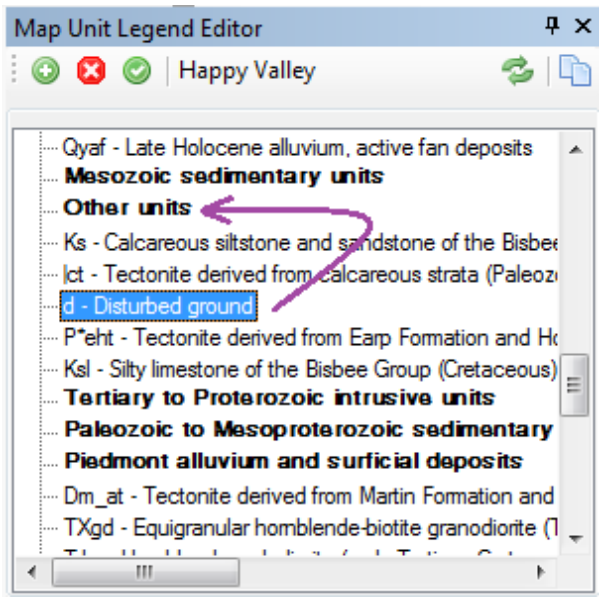


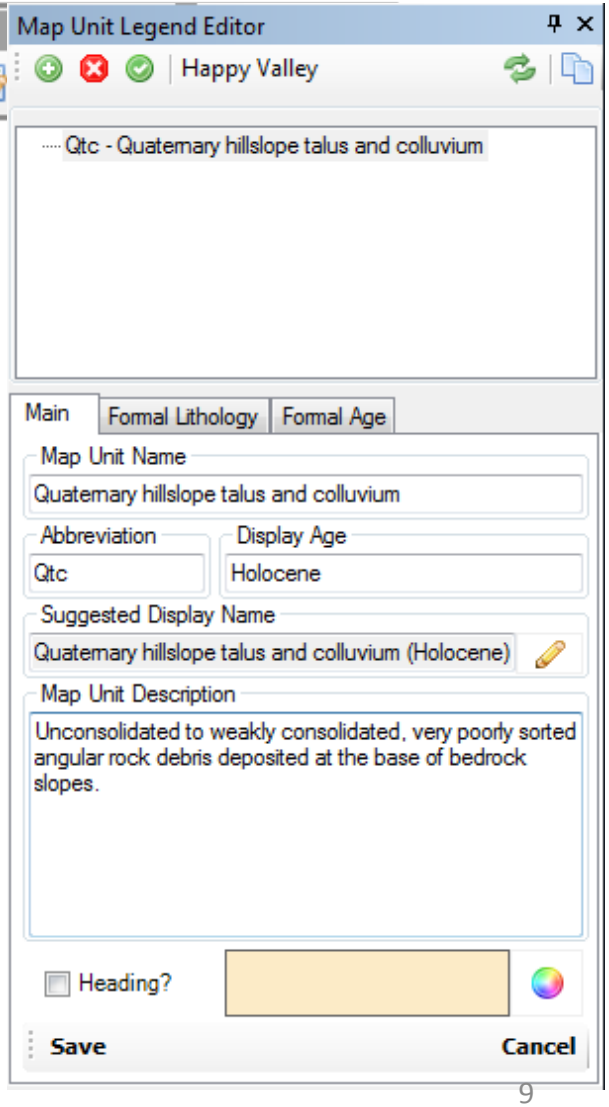


Manage map unit legend

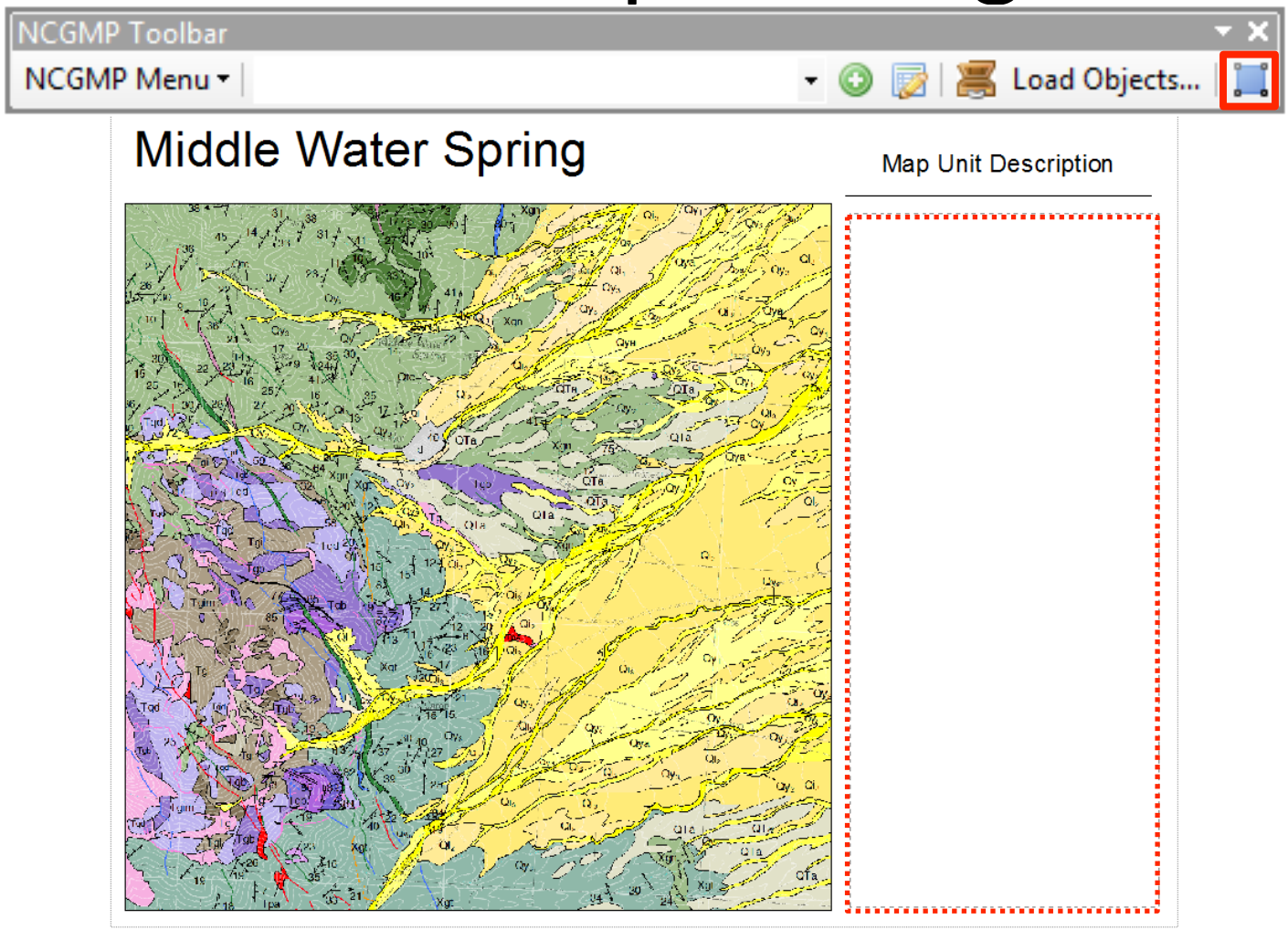


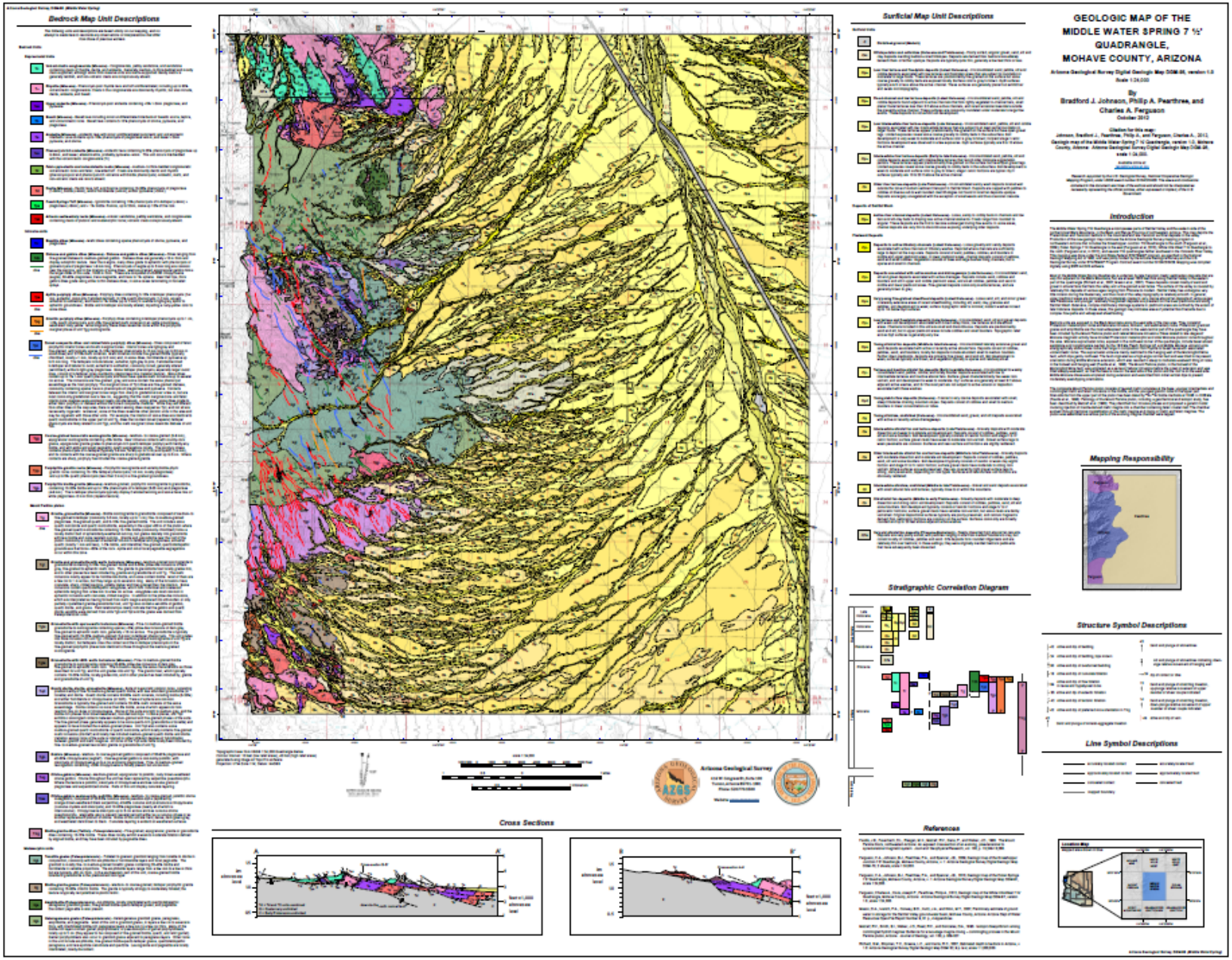






Produce map unit legend




Bedrock Map Unit Descriptions
Surficial Map Unit Descriptions
GEOLOGIC MAP OF THE
MIDDLE WATER SPRING 7 ½'
QUADRANGLE,
MOHAVE COUNTY, ARIZONA
By
Bradford J. Johnson, Philip A. Pearthree, and
Charles A. Ferguson
October 2012
Introduction
Mapping Responsibility
Stratigraphic Correlation Diagram
Structure Symbol Descriptions
Line Symbol Descriptions
Cross Sections
References
Arizona Geological Survey

Documentation

- Documented workflow for:
  - Creating NCGMP database
  - Importing field data into geodatabase
  - Compiling geologic maps in Arc
    - Digitizing
    - Attribution
  - Creating map layout

Final words

- OFR to be released later this summer
- Tools work against AZGS NCGMP database
- More collaboration among colleagues for further development would be nice

Questions?