

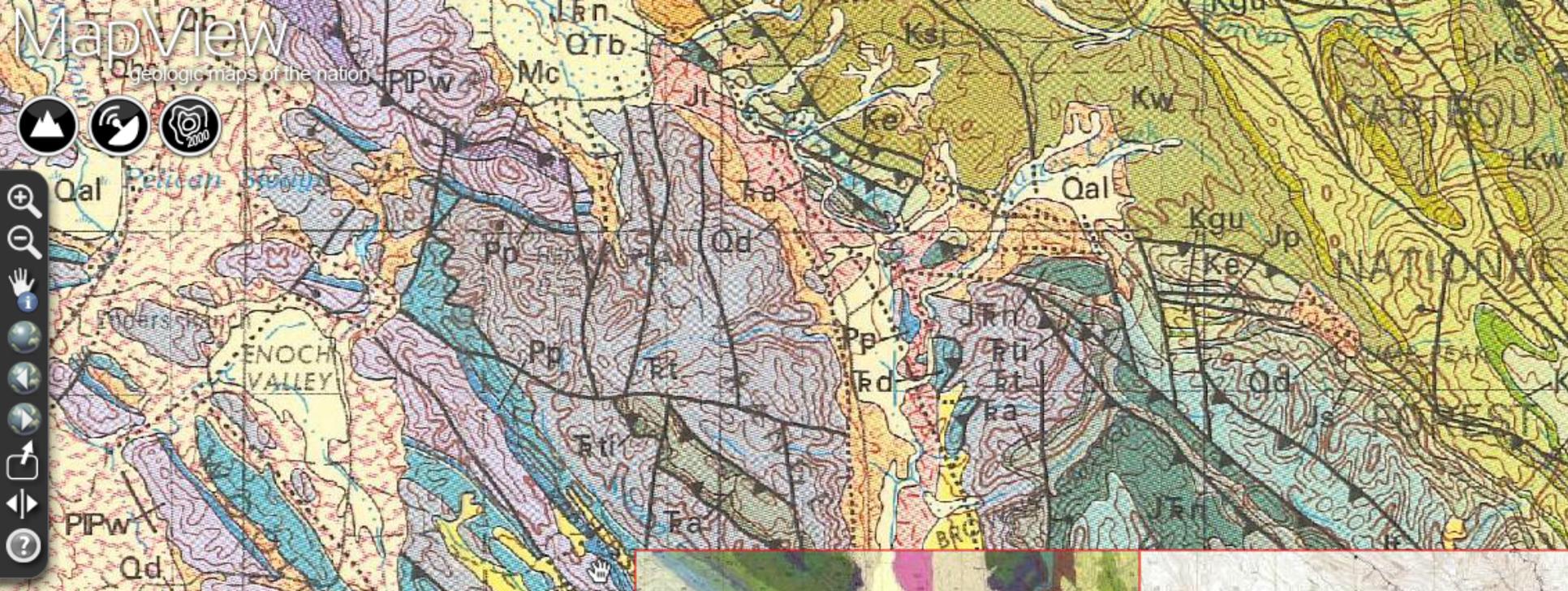
# DIGITAL MAPPING TECHNIQUES 2013

The following was presented at DMT'13  
(June 2-5, 2013 - Colorado Geological Survey and Colorado School of Mines  
Golden, CO)

The contents of this document are provisional

See Presentations and Proceedings  
from the DMT Meetings (1997-2013)

<http://ngmdb.usgs.gov/info/dmt/>



# An End-User's Perspective on Geologic Data Consumption

Digital Mapping Techniques - 2013

June 4th, 2013

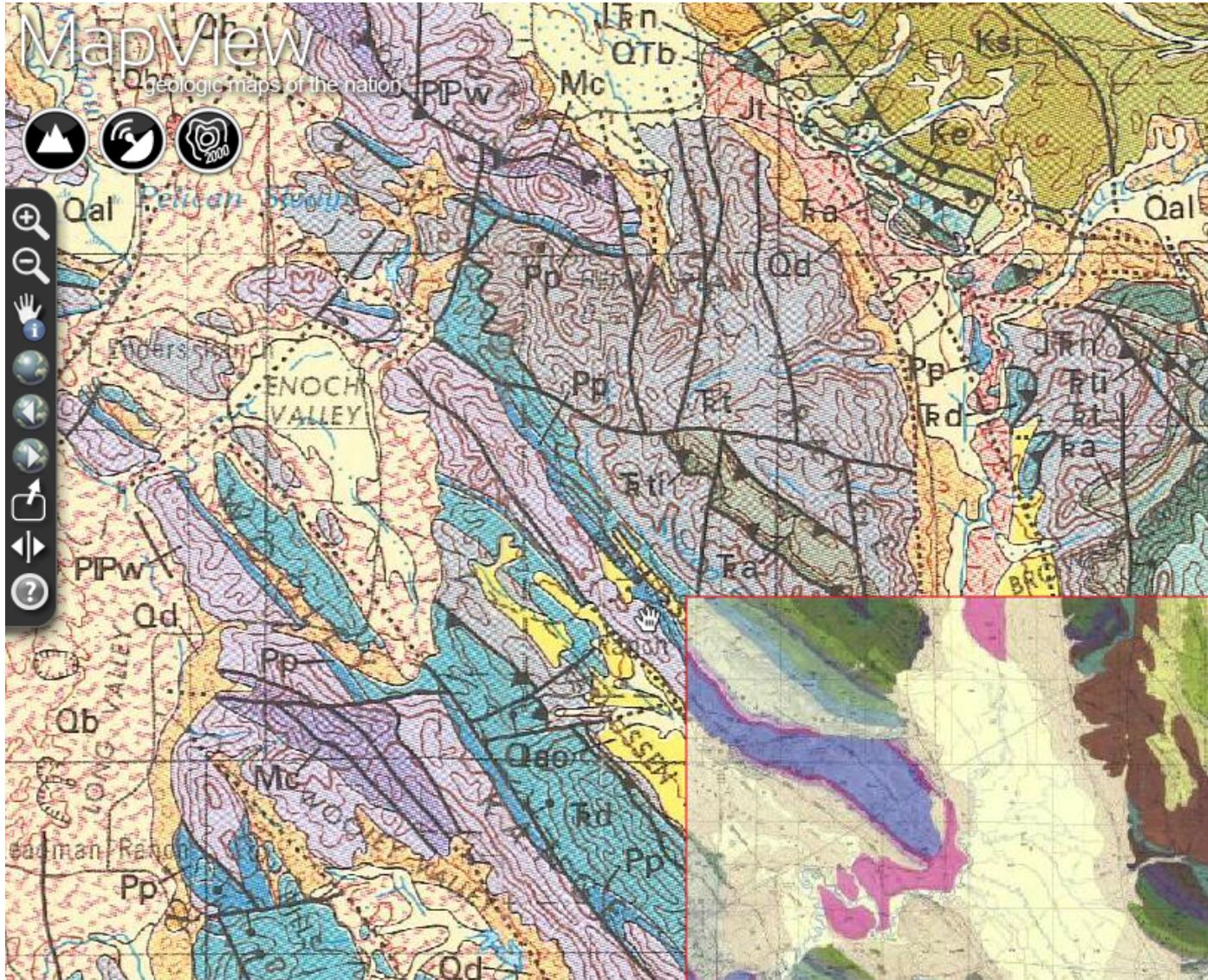
# Background (why am I here?)

- GIS Specialist at Wisconsin Geological and Natural History Survey 2000-2003
- Attended DMT 2001, 2002, and 2003
- Consulting hydrogeologist 2003 onward
- Still a user and consumer of geologic and hydrogeologic data from the USGS and state geological surveys!

# Case Study

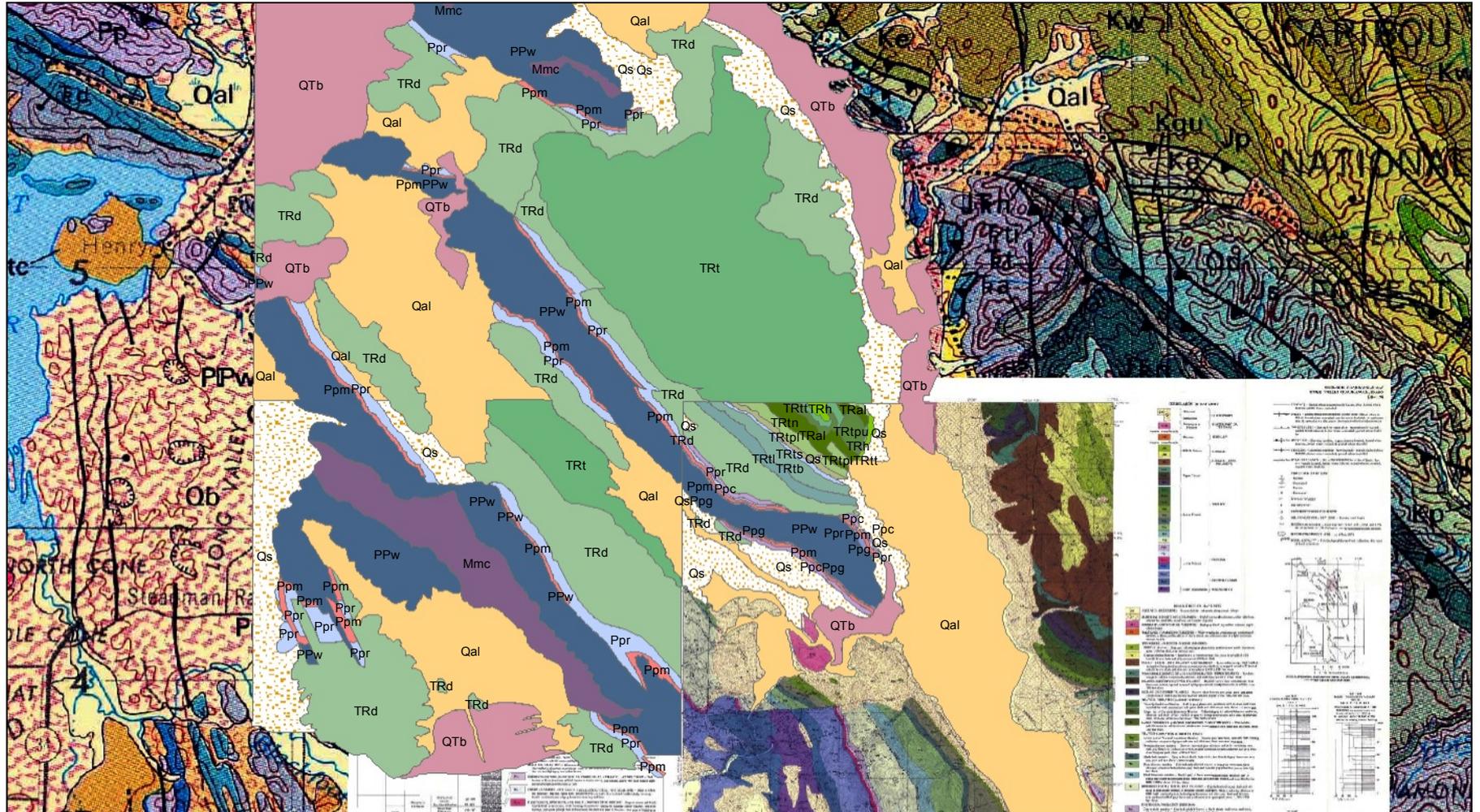
- Mine permitting in the western U.S.
- Near-surface mining of material at core of anticline
- Need to build groundwater flow model of the anticline
  - Conceptual model
  - Numerical model
- Build 3D geologic model of the anticline
  - Use existing geologic mapping of contacts and strike & dip measurements to generate structure contours
  - Use structure contours with some drilling at proposed site to build 3D model in EVS

# To the NGMDB...and MapView....

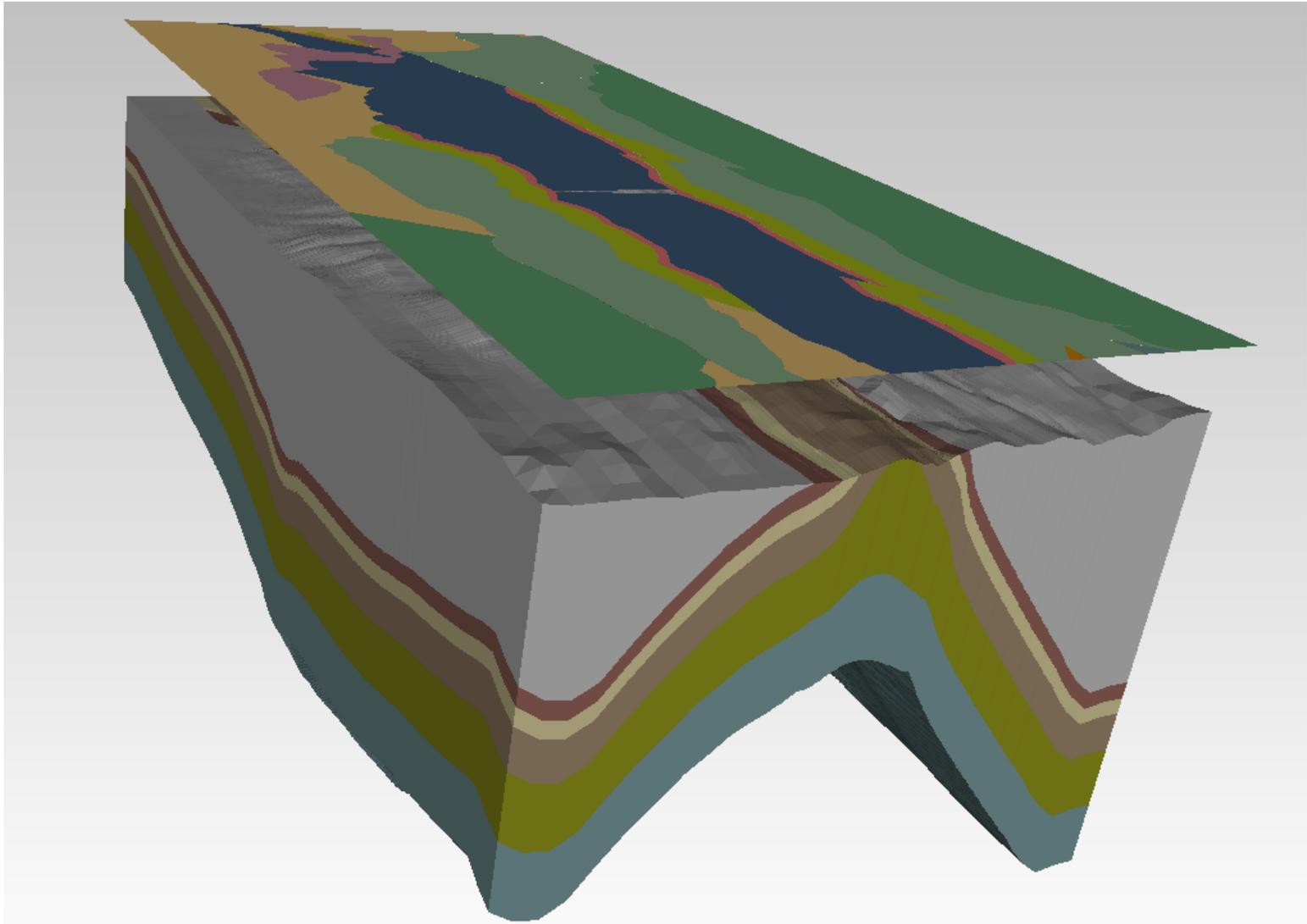




# Digitizing....



# Geologic Block and MODFLOW Models....



# What do end users want?

- We want it all – all the data!
- When do we want it – NOW!
  - Time can be the most important cost
    - Download from the web, not USPS/FedEx
    - Product descriptions before we download
    - Location search to find data, preferably by web mapping interface
  - Monetary cost often secondary (but non- negligible); method of payment has a time element, too

# How do we want it?

- Definitely prefer vector formats (likely only available for newer products)
- Georeferenced rasters (map collars clipped)
- Ungeoreferenced rasters
- PDFs of maps

# Getting the word out

- Within your own offices and institutions
- To other related agencies (through existing coordinating committees and working groups)
- The broader geological community

Conferences	Publications
GSA	GSA Today
AGU	Eos (AGU)
NGWA Groundwater Summit	Ground Water/GWMR
AAPG	AAPG Explorer