Geologic Setting: Regional Bedrock Geology

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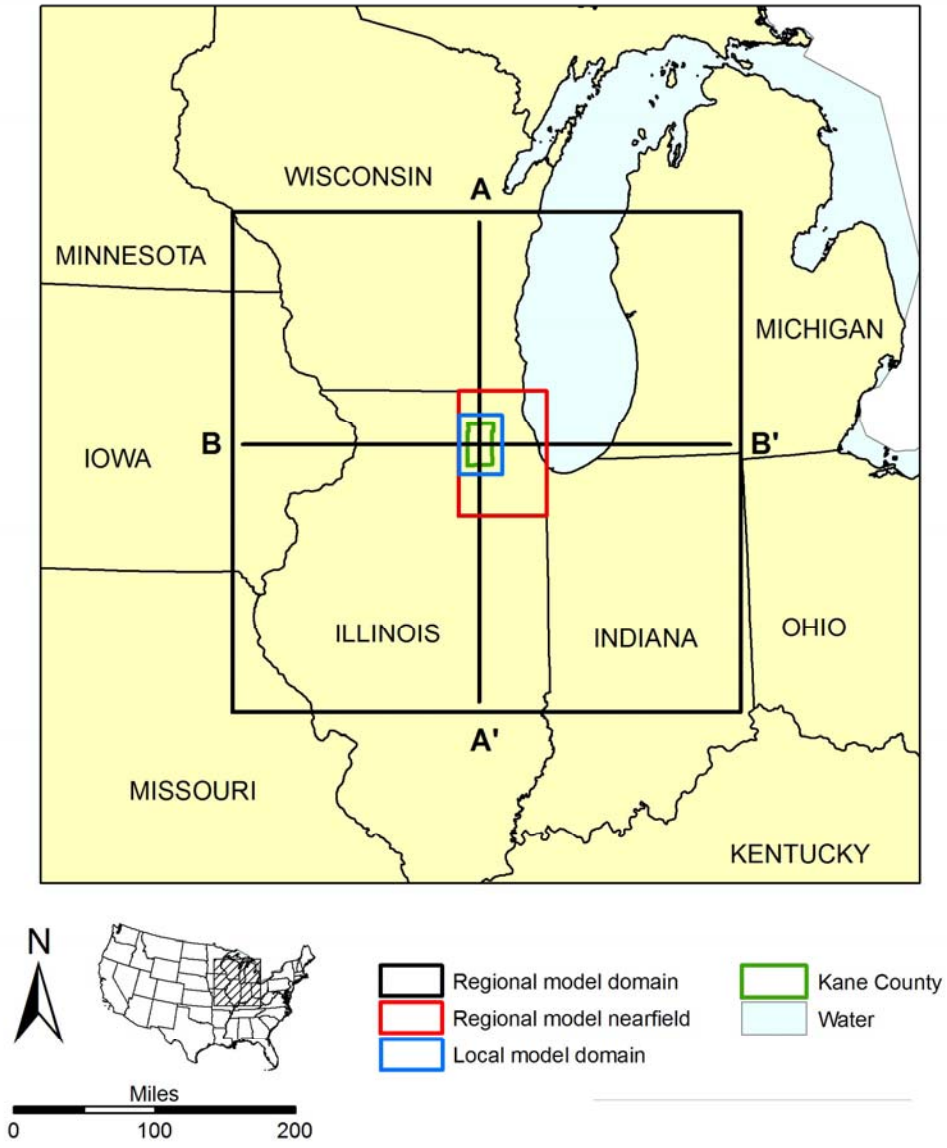
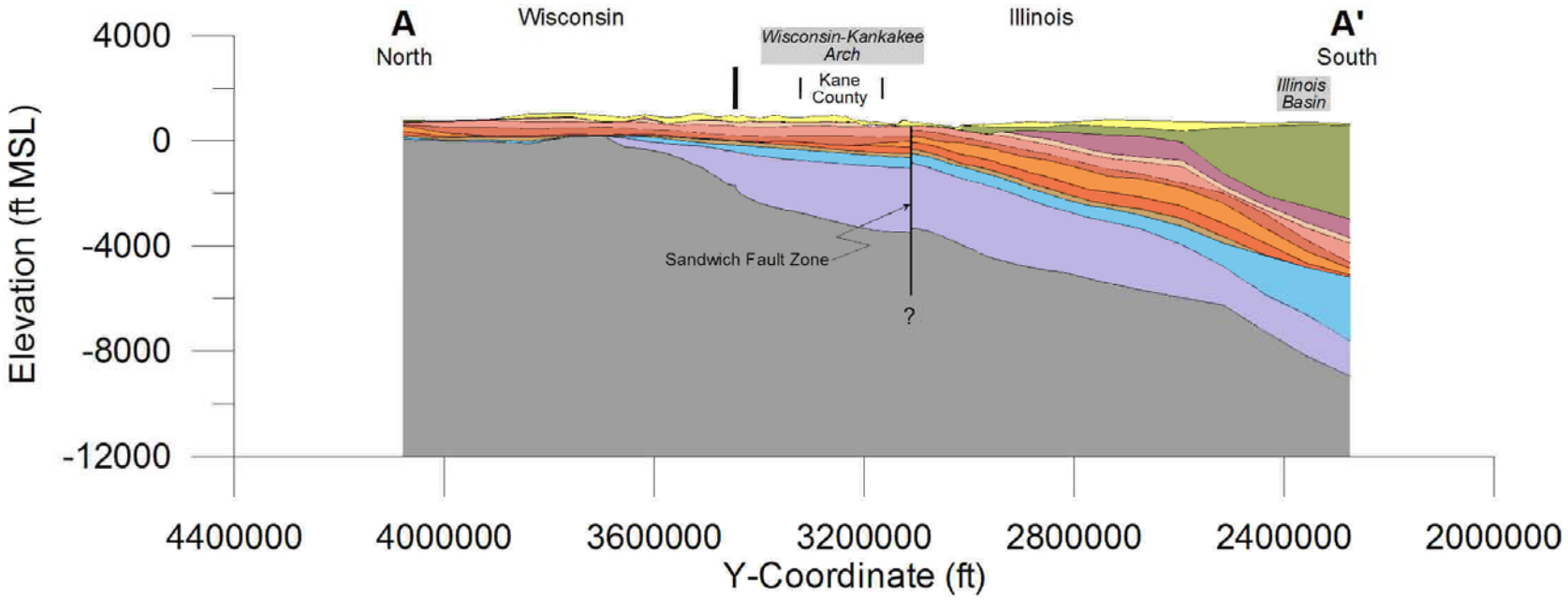
Regional Influences on Groundwater



North-South Cross Section



- Quaternary Unit
- Upper Bedrock Unit
- Silurian-Devonian Carbonate Unit
- Maquoketa Unit
- Galena-Platteville Unit
- Ancell Unit
- Prairie du Chien-Eminence Unit
- Potosi-Franconia Unit
- Ironton-Galesville Unit
- Eau Claire Unit
- Mt. Simon Unit
- Crystalline Precambrian Basement

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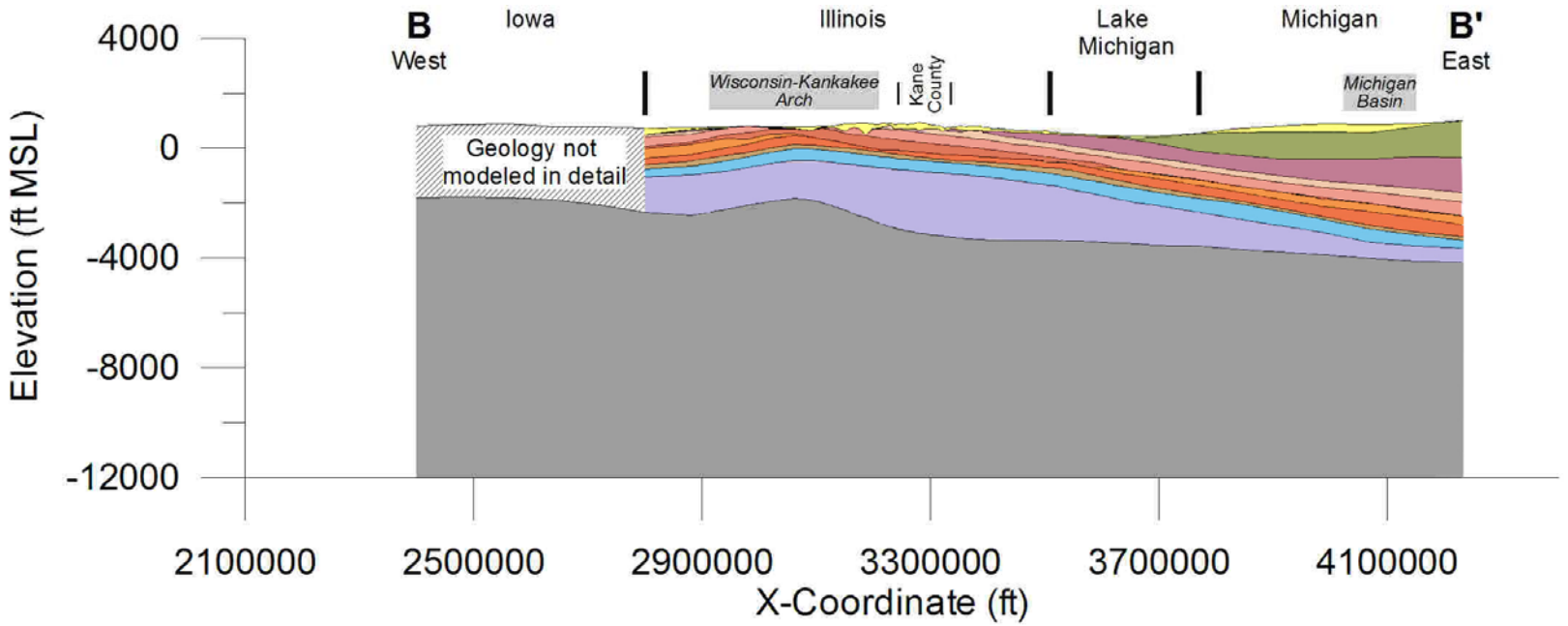
West-East Cross Section



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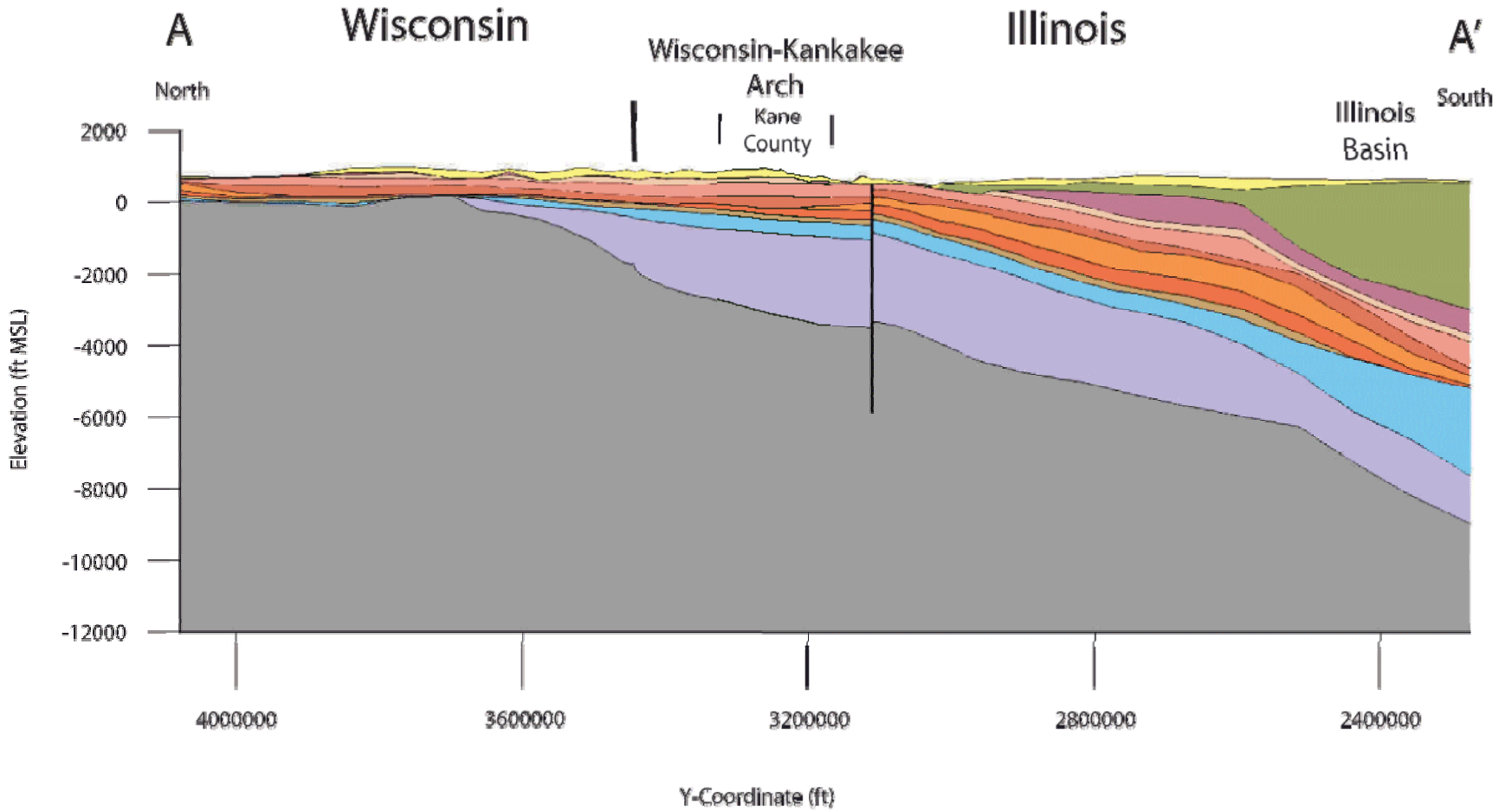
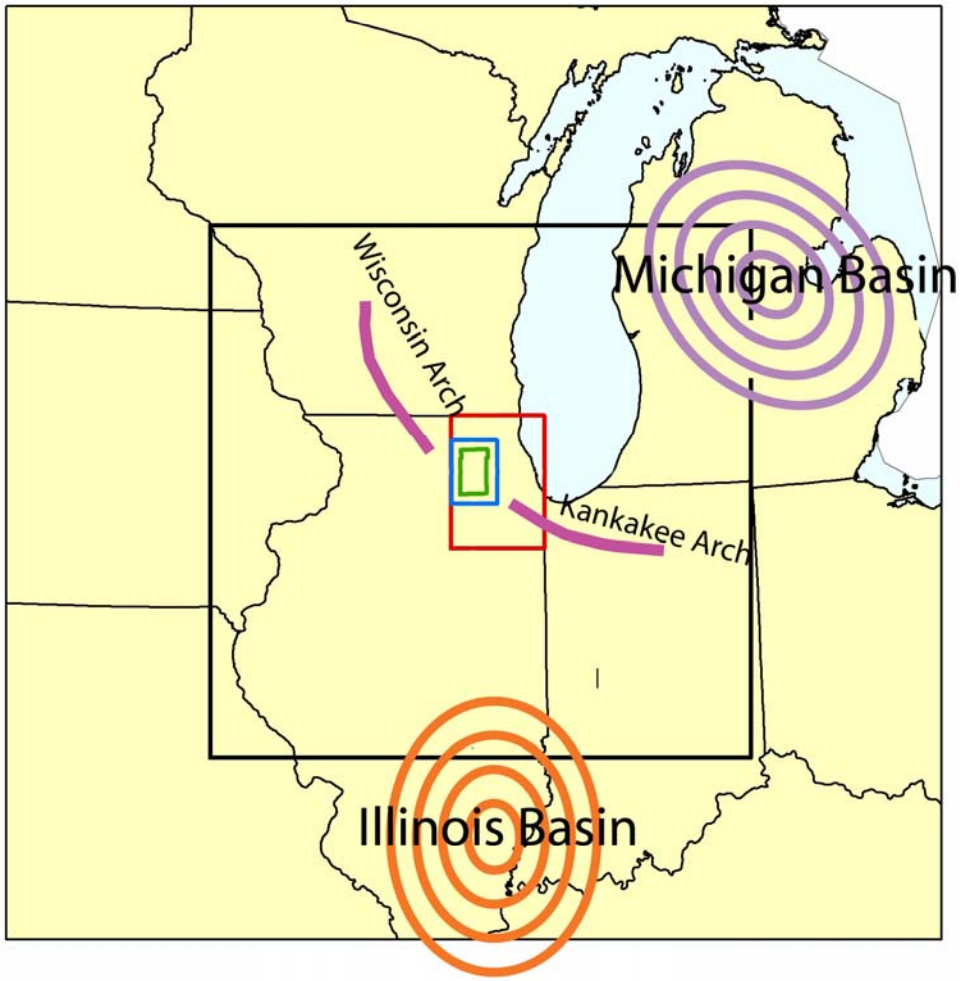
Precambrian (“Basement”) Rock



Geologic Setting

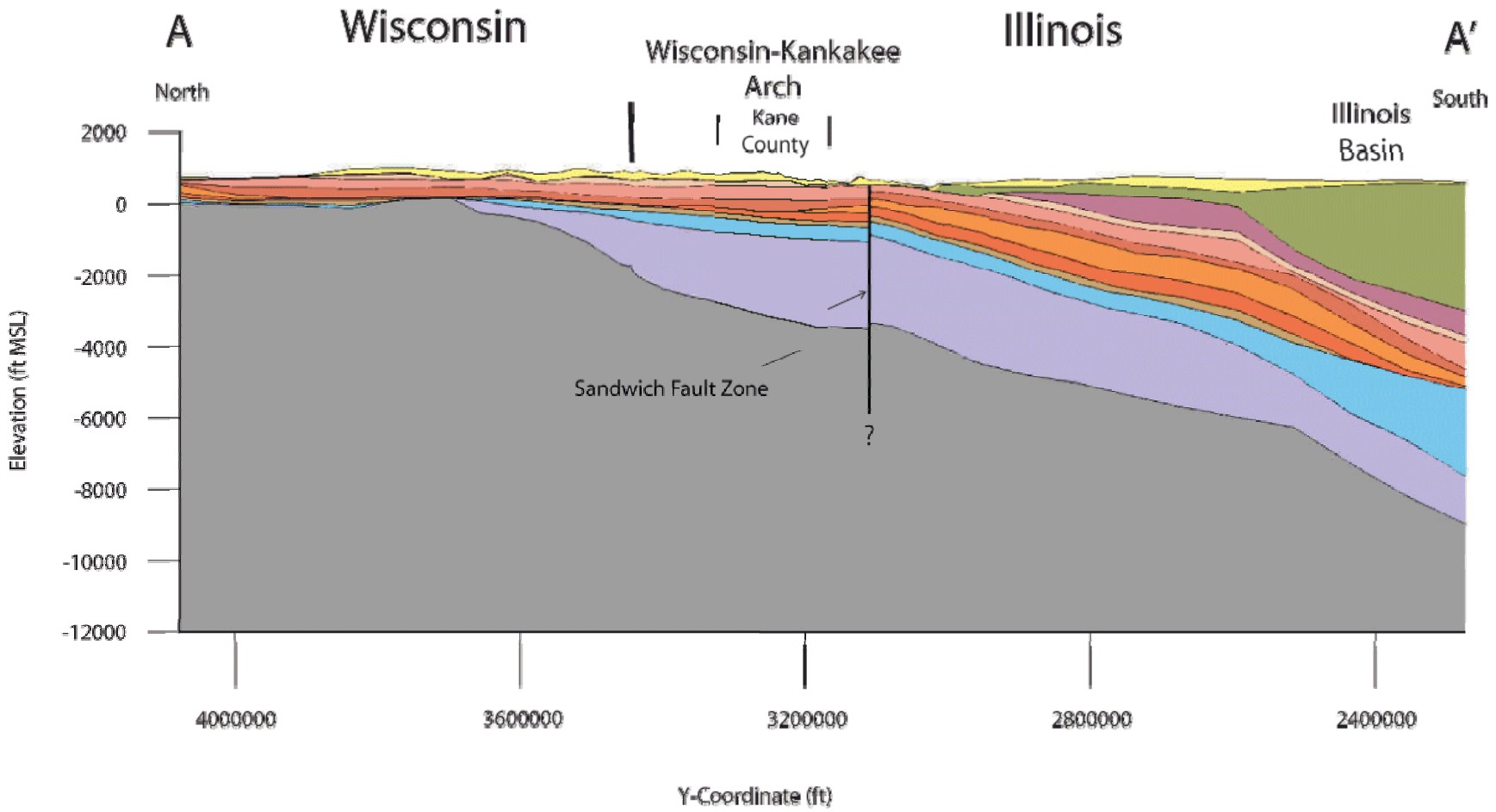
Geologic Structure

Geologic Structure

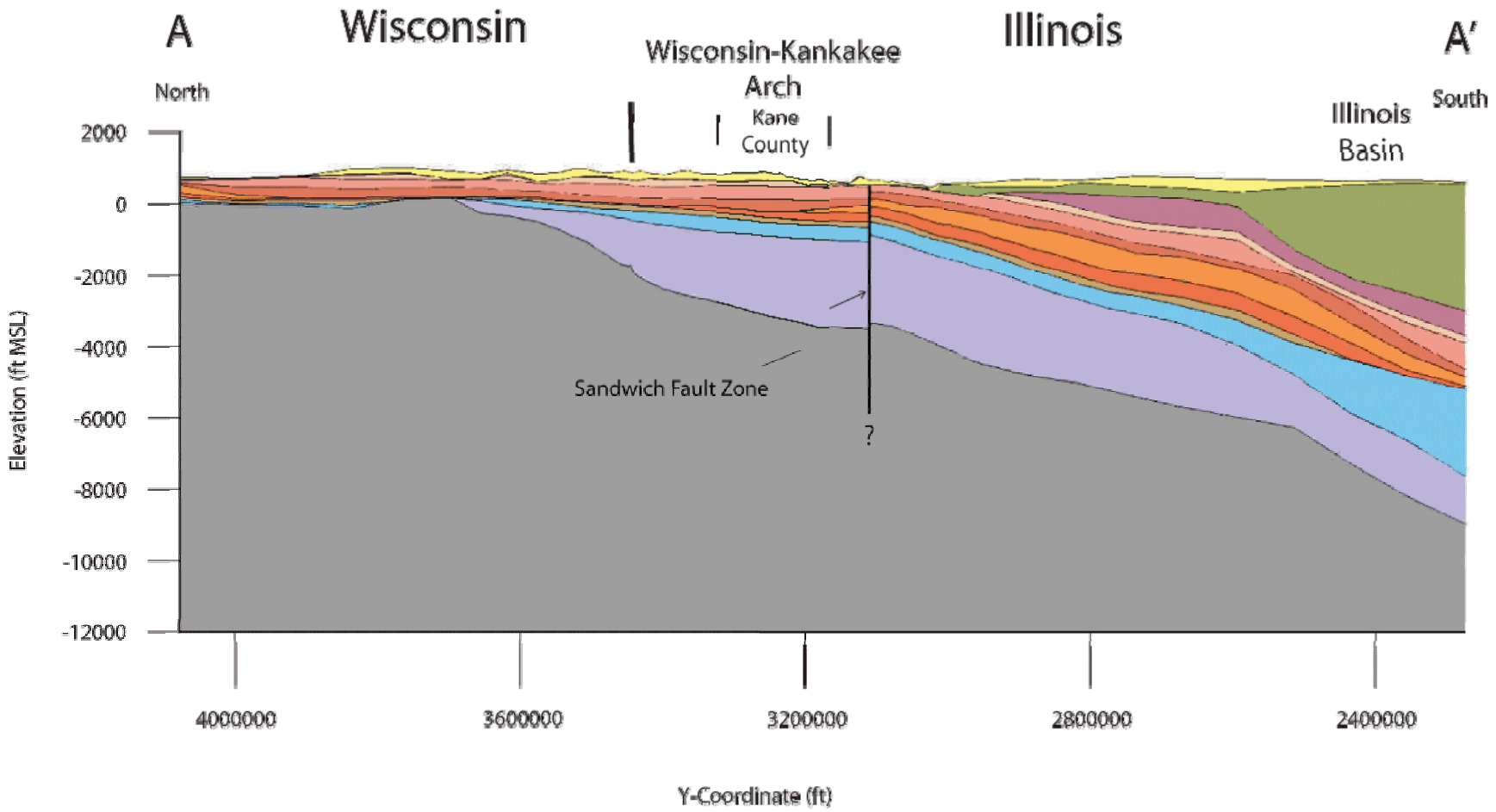


Geologic Structure

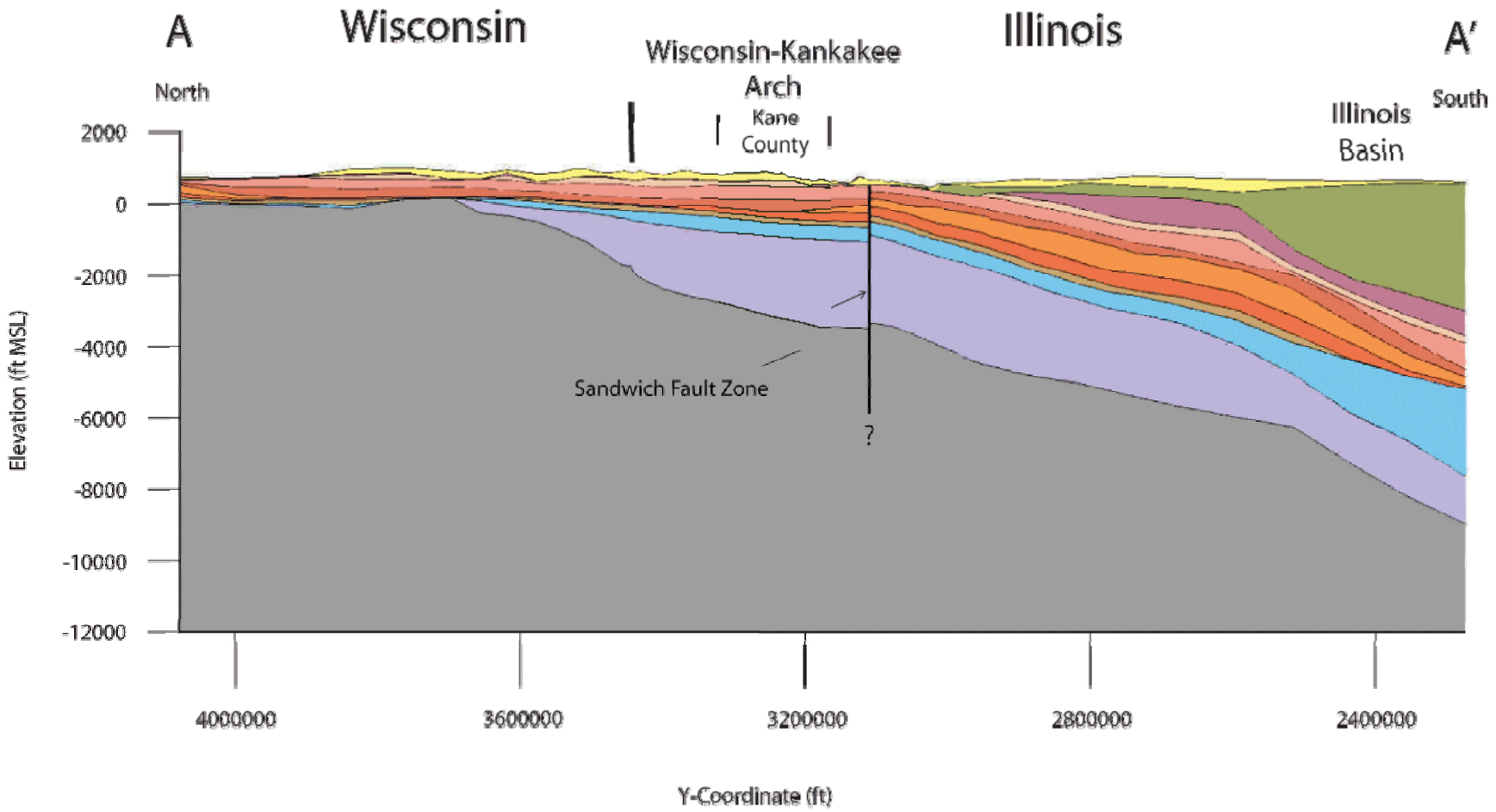
Mt. Simon Aquifer



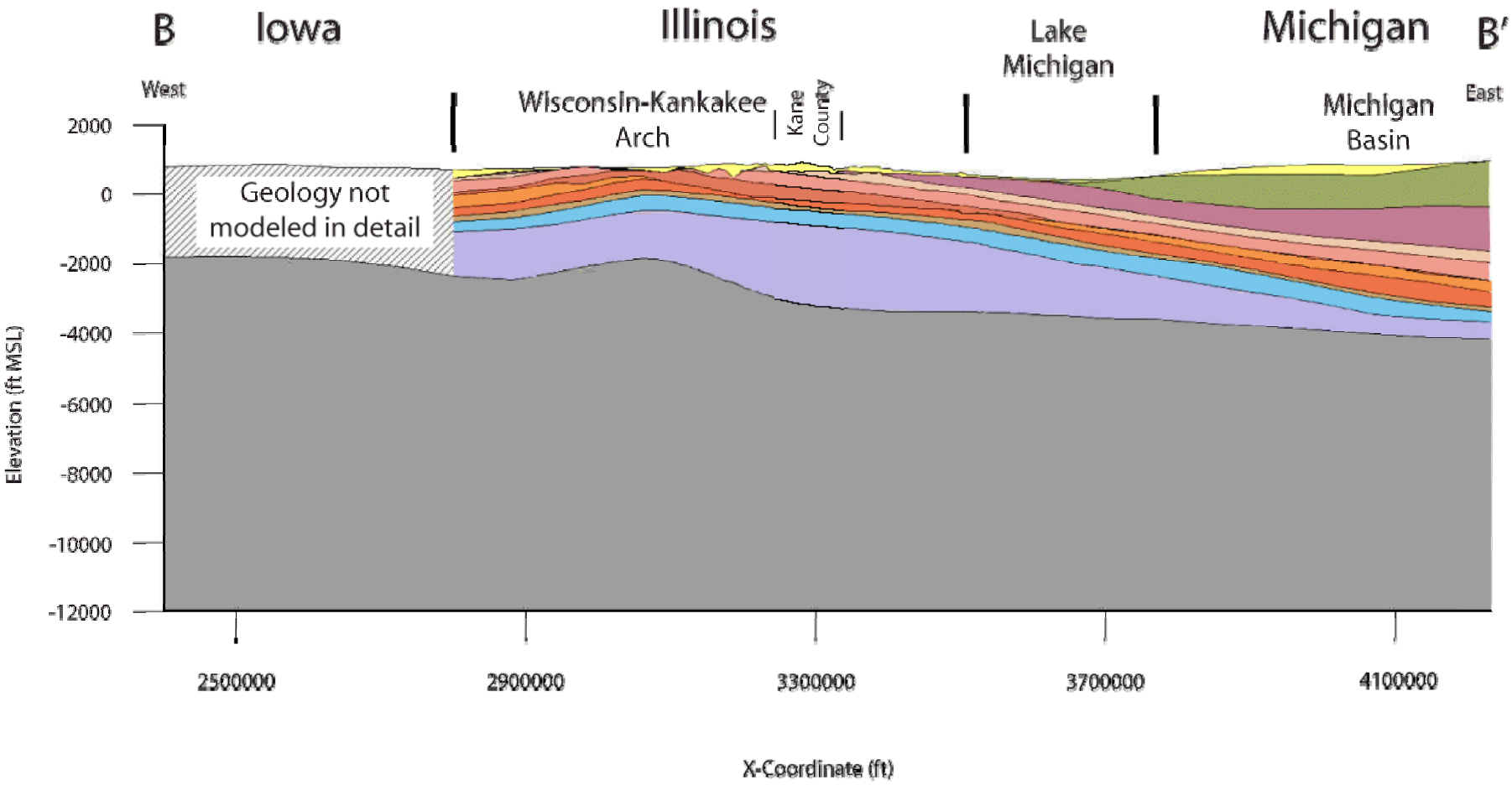
Ironton-Galesville Aquifer



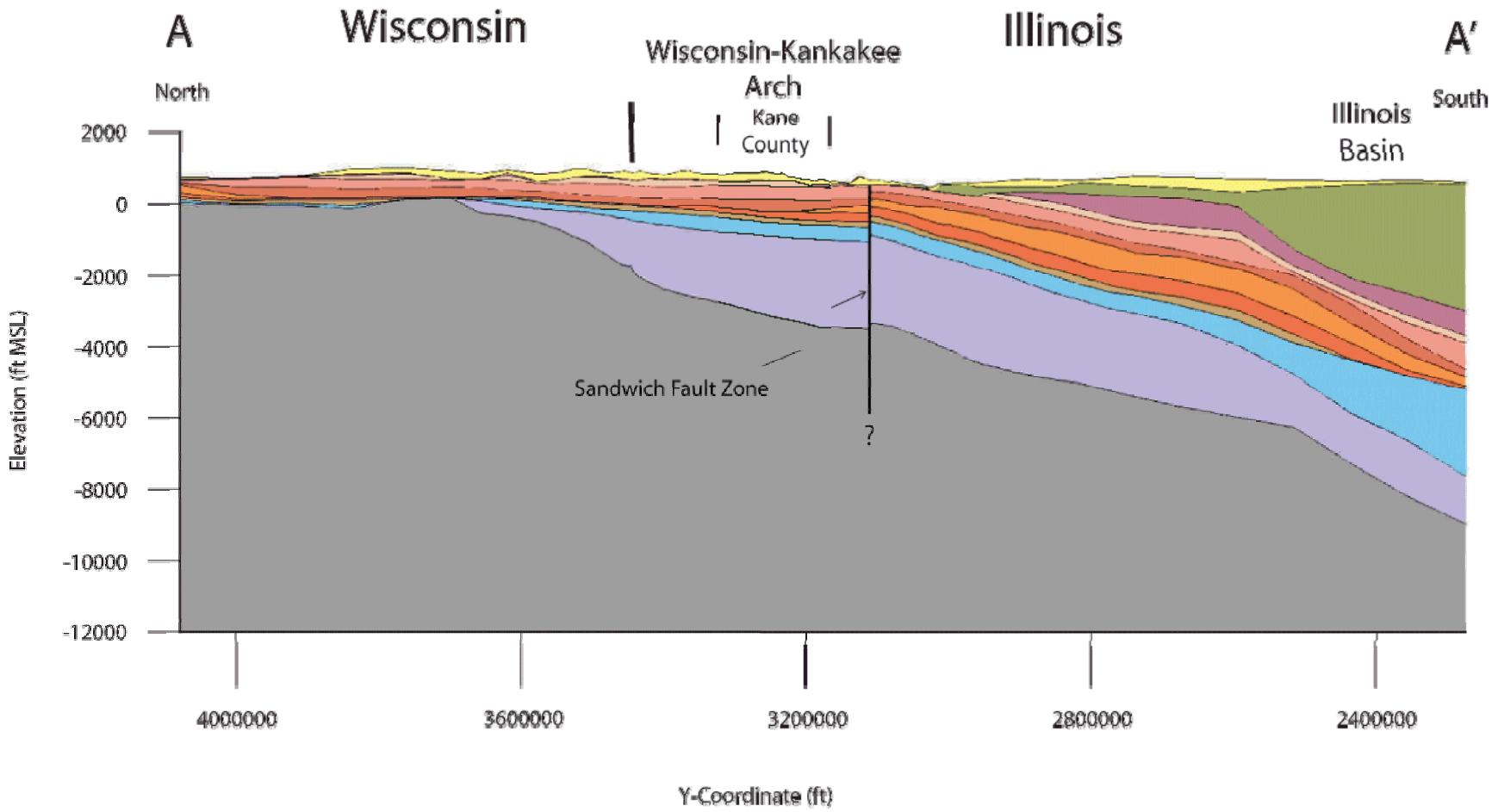
Ancell Aquifer



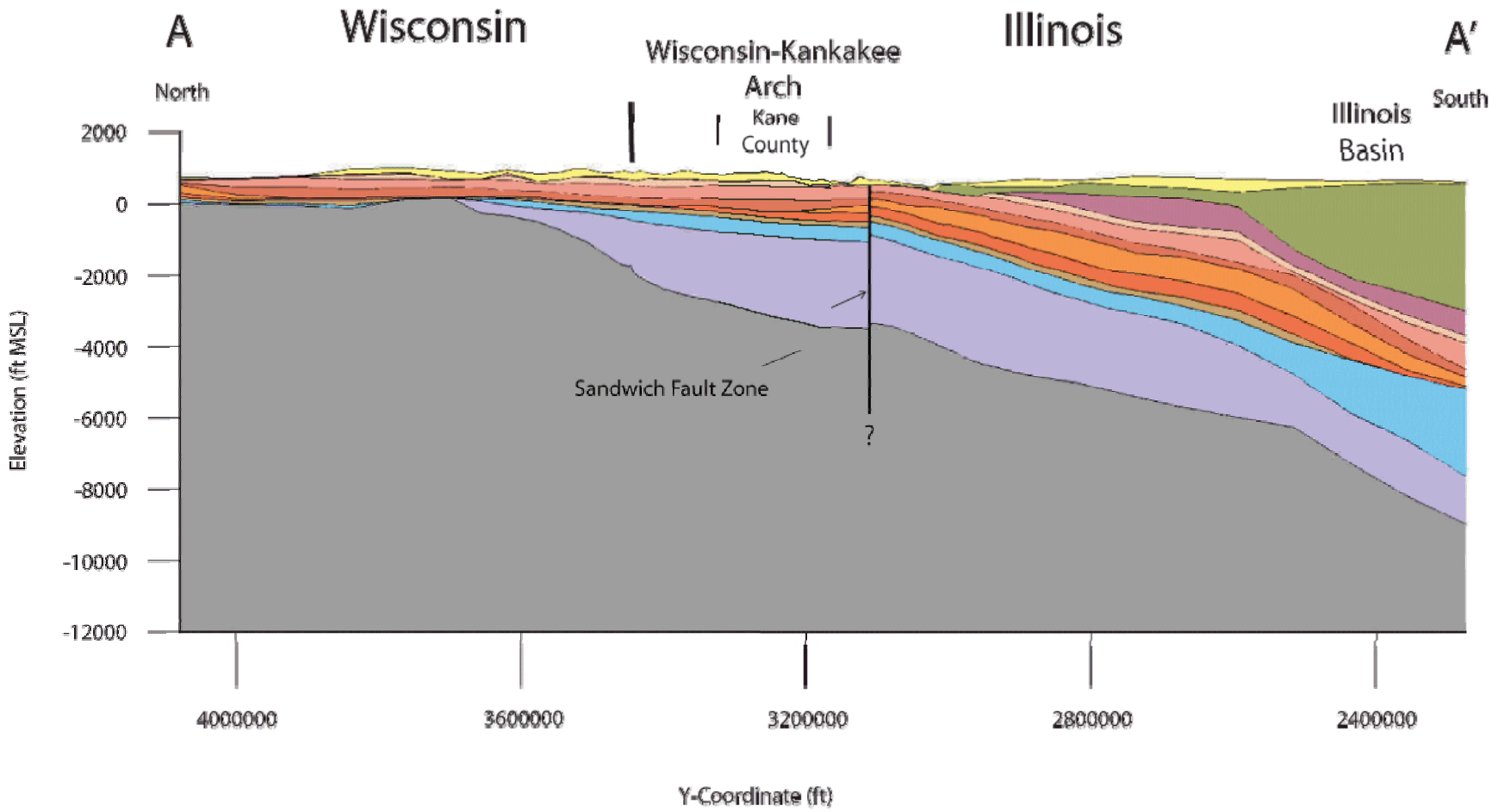
Deep Bedrock Aquifers



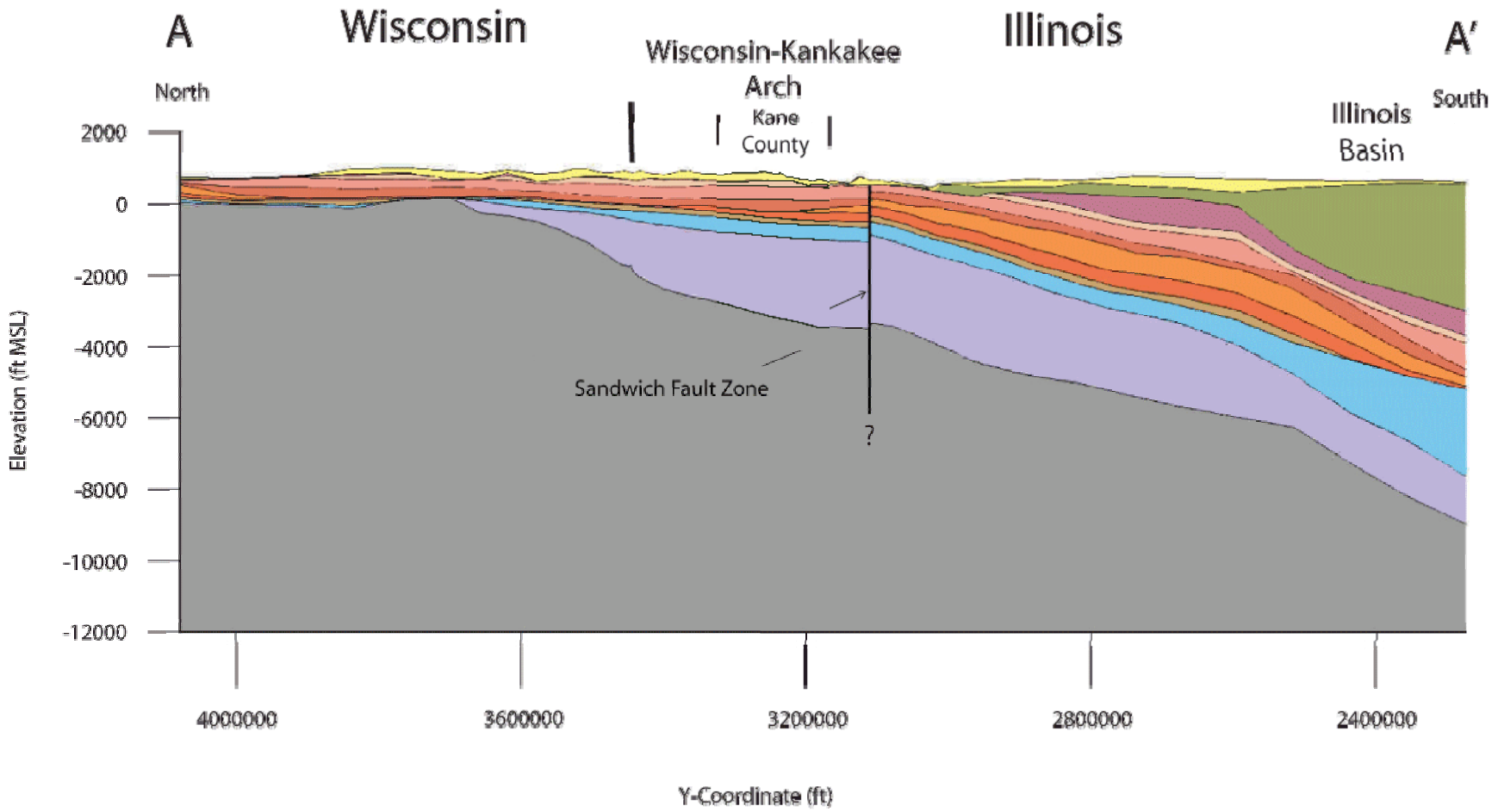
Galena-Platteville Groups



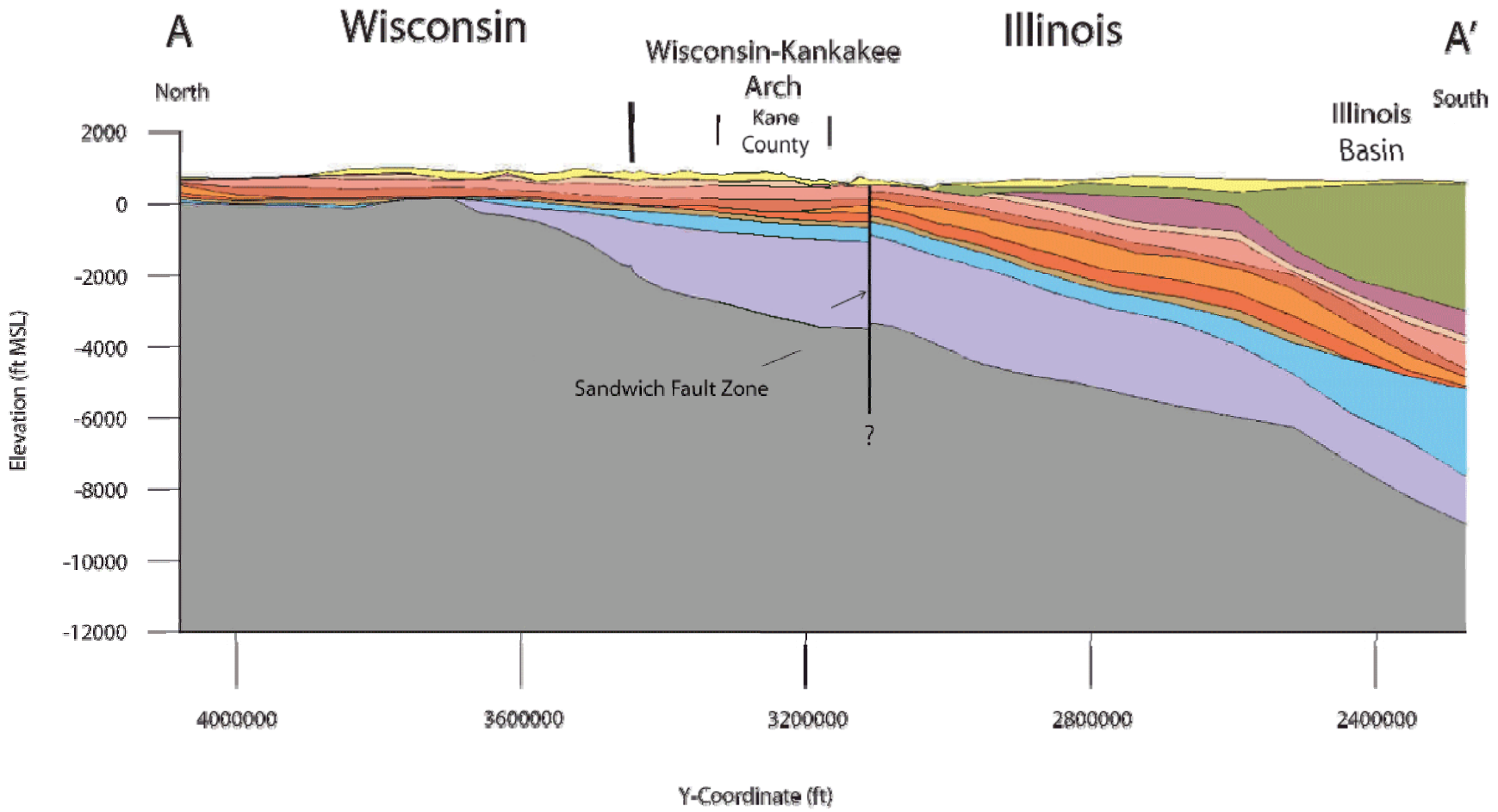
Maquoketa Group



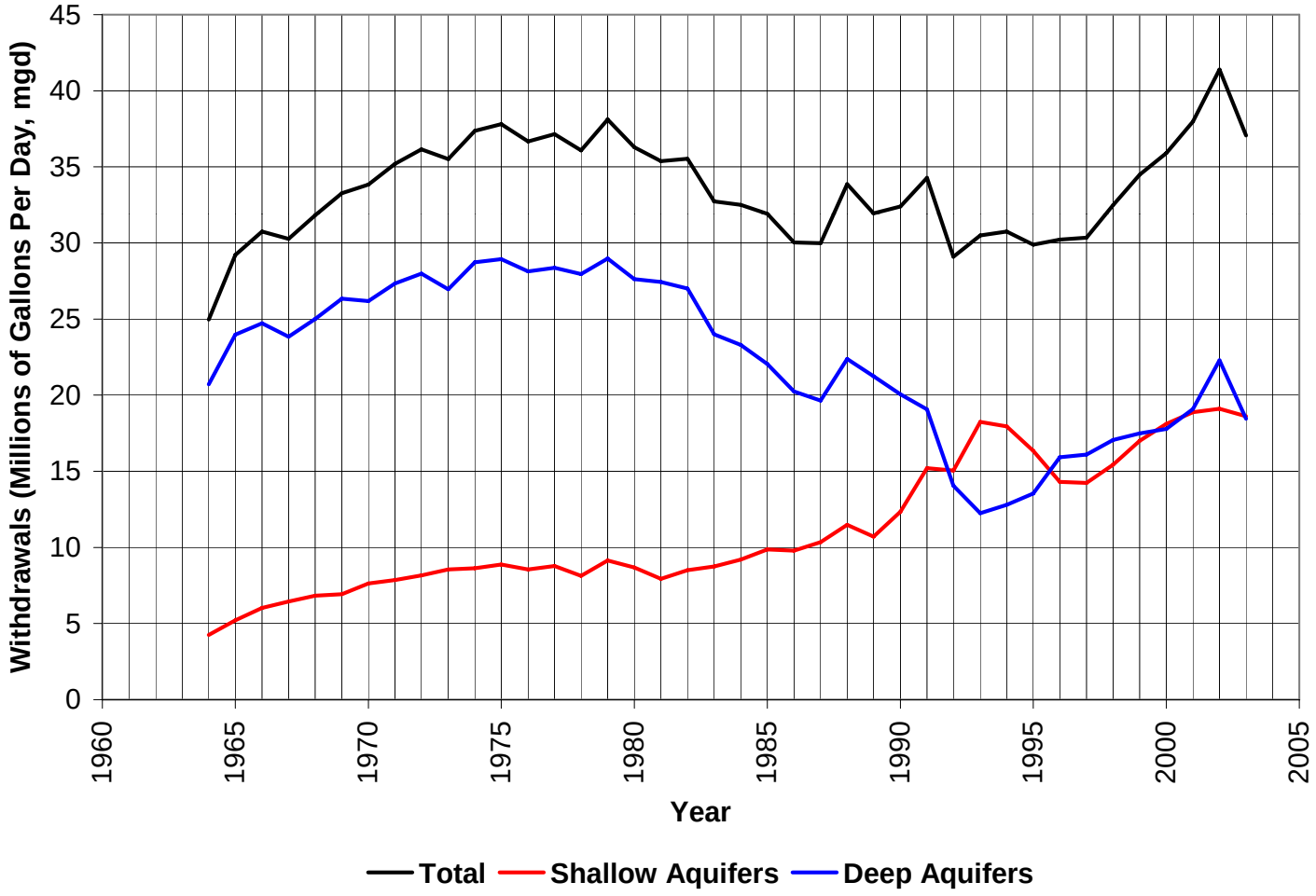
Silurian-Devonian Systems



Quaternary Deposits



Kane County Groundwater Withdrawals (1964-2003)



Conclusions

- The regional geology has a major influence on the availability of groundwater within Kane County.
- The regional geology can be classified as a system of deep aquifers and shallow aquifers.
- Groundwater in the shallow aquifers is recharged more locally.
- The deep aquifers are more of a regional groundwater resource.