Quarry View of Quaternary Units

Weathered silty clay diamicton (Yorkville Mbr)

Sandy loam diamicton (Batestown Mbr)  Silty clay diamicton (Yorkville Mbr)

Sand and gravel

Dolomite

2007 Priority Places Workshop: Implementing a Sustainable Water Supply for Kane County’s Future
Sequence of Geologic Units
Geologic Cross Section
Regional Moraines
Bedrock Surface
Glasford Lower Fine-textured Unit
Glasford Lower Coarse-textured Unit
Glasford Middle Fine-textured Unit
Glasford Upper Coarse-textured Unit
Glasford Upper Fine-textured Unit
Ashmore Tongue
Tiskilwa Formation
Sub-Batestown Tongue
Batestown Member
Sub-Yorkville Tongue
Yorkville Member
Haeger Member

2007 Priority Places Workshop: Implementing a Sustainable Water Supply for Kane County’s Future
Sub-Wadsworth Tongue
Wadsworth Formation
Surficial Henry Formation
Equality Formation
Hampshire Aquifer Cross Section

Surficial Henry Formation

Tiskilwa Fm

Glasford fine-textured unit

Glasford coarse-textured unit

Glasford fine-textured unit

bedrock

Ashmore Tongue
Hampshire Aquifer Thickness
Major Quaternary Aquifers
Aquifer Sensitivity to Contamination
Conclusions

- Extensive mapping has provided a very good understanding of the distribution of shallow geologic units.
- Groundwater resources consist of upper bedrock units where secondary porosity has developed and Quaternary sand and gravel units.
- Discontinuities in the fine-textured units provide pathways for groundwater flow and allow vertically adjacent sand and gravels to behave as a single aquifer.
- Three-dimensional modeling of the geologic units has provided maps of the location and thickness of aquifers, potential for aquifer contamination from surface sources, and input for groundwater flow modeling.