

- Based on well water level elevation data, the lake does not appear to contribute to the underlying confined aquifer system.
- The aquifer contains primary porosity within the sandstone formation and secondary porosity controlled by bedding orientation and fracture features.

The average groundwater flow system can be approximated using a steady-state model that ignores daily and seasonal variations in the water table in favor of long-term, average flow conditions. The groundwater system described in the conceptual model is a three-dimensional phenomenon; groundwater flows from high elevation at the recharge area to low elevation at the discharge area. The flow paths are influenced not only by the geological orientation of the aquifer system, but also the vertical changes in hydraulic properties within the aquifer. For this reason, a three-dimensional modeling approach was used to describe the groundwater flow movements through the system. To account for the variation of hydraulic properties for the various stratigraphic units, the hydrogeologic model is created as a six layer system.