

# Overview and Demonstration of **MAGNET**

Multiscale, Adaptive Global Network  
for Water Science & Engineering



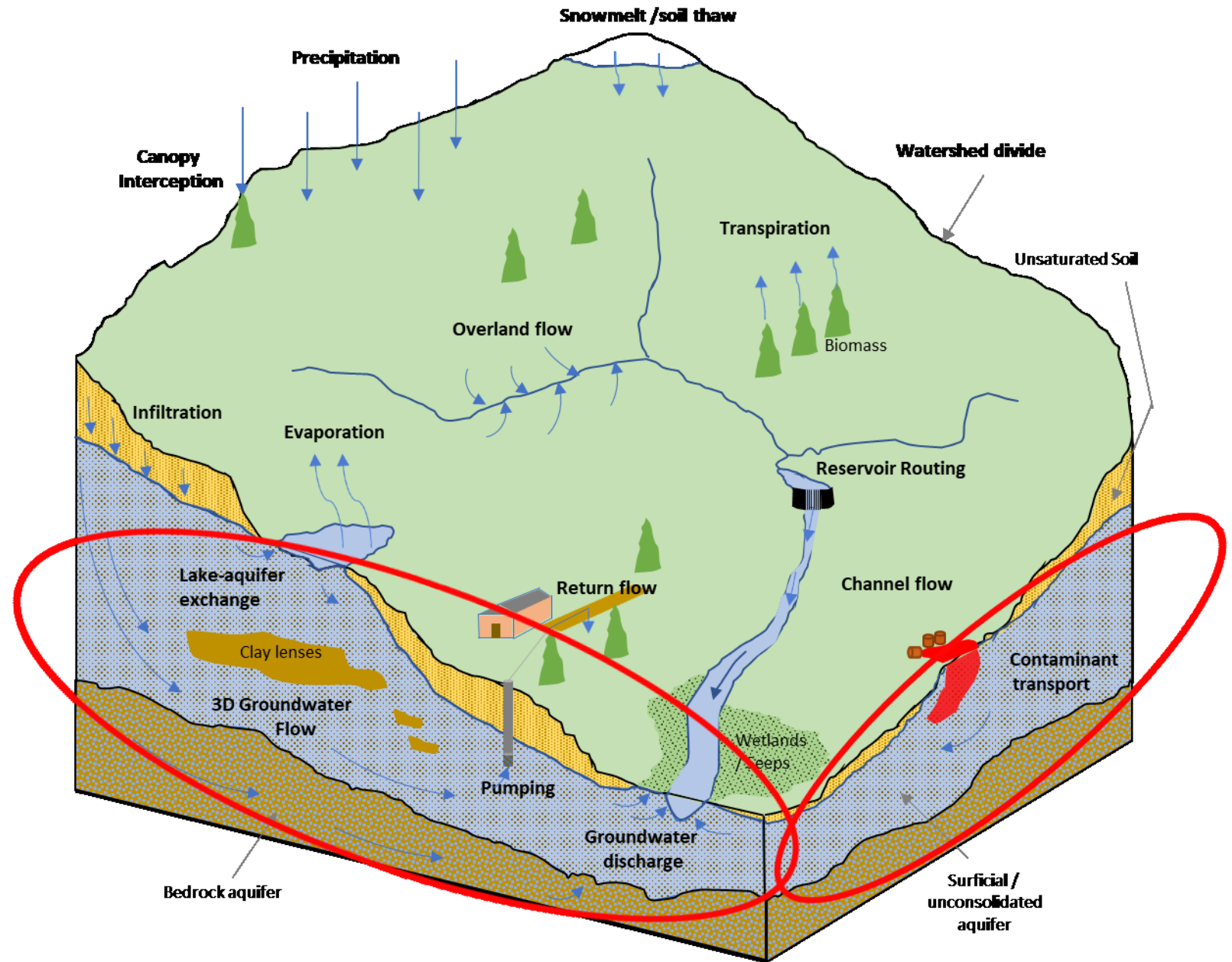
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*[magnet4water.com](http://magnet4water.com)*

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## MAGNET Groundwater

- Complex 3D Groundwater Flow
- Contaminant / Plume Transport
- Groundwater Pumping
- Groundwater-surface water interaction
- Groundwater Seepage to Wetlands/Springs



# MAGNET 4 Water Modeling Platform

- Web-based
  - accessible anywhere, anytime, on desktop, smart phone, etc.
- Real-time Interactive
  - ‘Immediately’ see results and analytics; flexible changes to model attributes
- Data-enabled
  - Pre-processed, embedded datasets for modeling and analysis
- Socially-enabled
  - Share – on the platform - models, data, results, questions, comments, etc.

⇒ Focus on Scientific Discovery and Problem solving,  
... instead of data management, processing, etc.

# Outline

- Real-world site demo
  - TCE plume in northern Michigan
- Synthetic Model demo
  - Simple, multi-layer aquifer system
- Web Resources
  - Short Tutorials
  - Email Chat/Help
  - MAGNET Forum
  - Real-Time Help Pages

Questions at end,  
please...

Or email me:  
[zach@magnet4water.com](mailto:zach@magnet4water.com)

# MAGNET Groundwater

<https://www.magnet4water.com/magnet/>

Magnet Quick Helper

Sign Up for a MAGNET Account and Login to instantly map the prevailing regional groundwater flow patterns in your area using BIGDATA

The Steps Are:

1. New user? Click **LogIn** (under **Utilities**) to sign up
2. Login to your account
3. Draw a study area "box" on the Map
4. Click **SIMULATE**

Level: 2 | GeoLayer Name: | GeolIndex: 1

World map labels: Arctic Ocean, North Pacific Ocean, North Atlantic Ocean, Southern Ocean, South Pacific Ocean, Indian Ocean, ANTARCTICA.