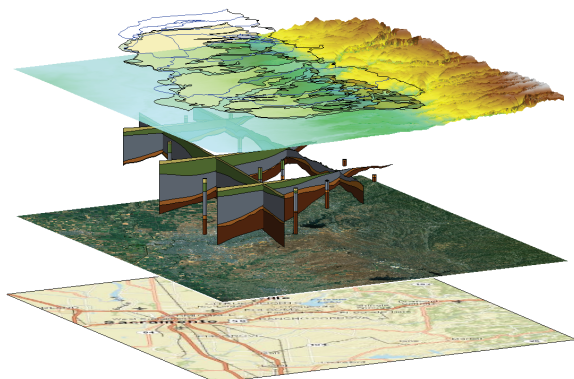




Speed & Simplicity in 3D

The Groundwater Modeling System is the most intuitive and capable software platform used to create groundwater and subsurface simulations in a 3D environment

- MODFLOW
USG, LGR*, NWT, 2005, 2000, 96, 88
- MODPATH
Particle tracking
- MT3DMS
Transport simulation
- SEAWAT
Variable density flow and transport modeling
- PHT3D, RT3D, SEAM3D
Reactive Transport Modeling
- PEST, Parallel PEST
Automated parameter estimation
- SAMG SOLVER
Efficient MODFLOW solver
- MODAEM
Analytic element modeling
- UTEXAS
Slope stability analysis
- SEEP2D
Seepage analysis
- FEFLOW
Mesh import & export*
- FEMWATER
Sat/unsat and coupled density dependent flow and transport
- T-PROGS
Transition probability geostatistics on borehole data



Speed up & simplify model building with the conceptual model approach in GMS

We pioneered conceptual modeling and have refined it over many years. That's why GMS is the quickest and most intuitive interface available. Construct a high level representation of the model using familiar GIS objects: points, arcs and polygons and easily update the model as needed.

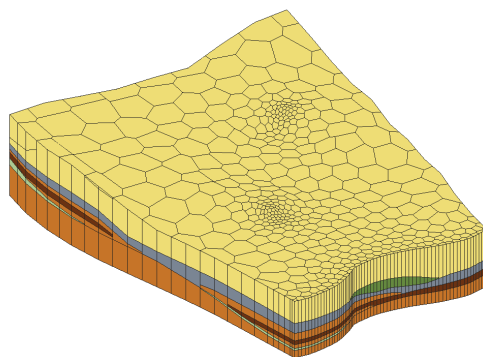
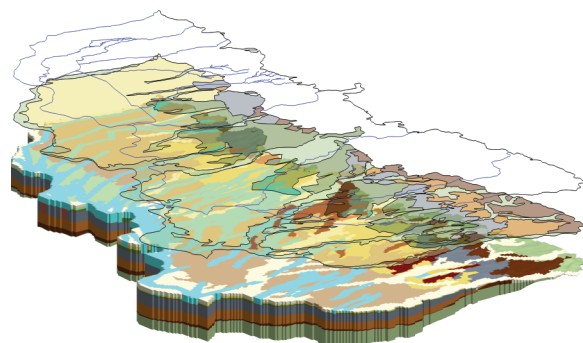
For models with simple geometry and boundary conditions, use the grid approach and edit values directly in the grid.

Use state-of-the-art tools to build and maintain MODFLOW models

GMS supports multiple versions of MODFLOW including a broad range of MODFLOW packages and utilities.

Simulate contaminant transport with MT3DMS and reactive transport with PHT3D, RT3D or SEAM3D.

Automatically define model grid and model parameters, run MODFLOW models, and visualize the results in 3D.



Import a variety of data formats & imagery

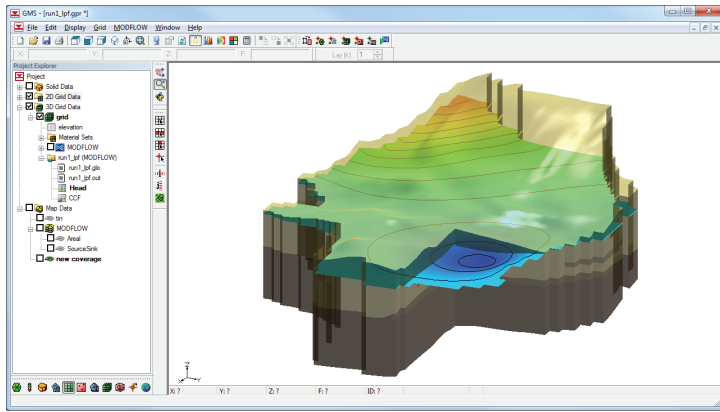
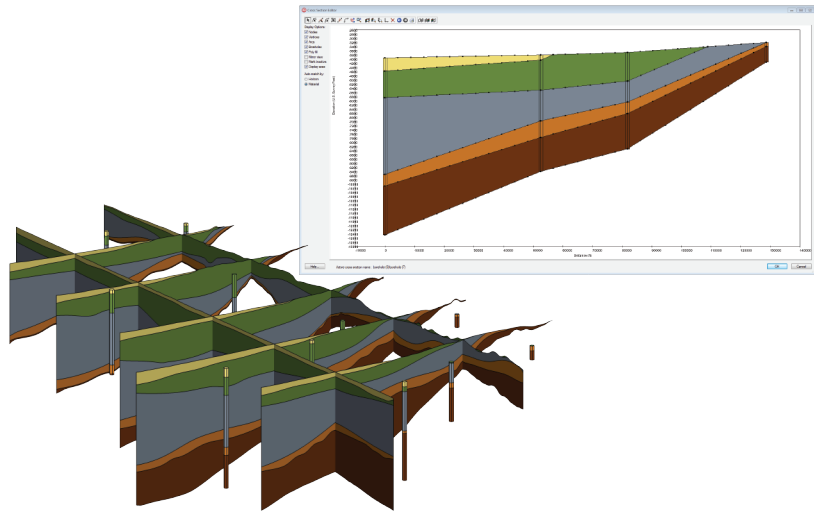
Download free online imagery & DEM's from within GMS to quickly begin a modeling project.

Import a wide range of file formats including:

- Topo maps, satellite imagery, aerial photos
- Elevations (DEMs, TINs, Grids)
- Borehole & scatter data
- CAD and GIS data.

Employ advanced subsurface characterization tools

- Import & visualize borehole or scatter data
- Create & manage cross-sections & fence diagrams
- Create solids from stratigraphy
- Import & visualize plume data with iso-surfaces
- Export subsurface & MODFLOW data to ArchHydro Groundwater for use in ArcGIS



Visualize and interact with models in true 3D

GMS is the most advanced software system available for performing groundwater simulations in a three-dimensional environment.

GMS has optimized OpenGL graphics for improved hardware rendering and interacting with models in true 3D. Create photo-realistic images and generate compelling animations for PowerPoint, print or web presentations

Additional GMS Capabilities:

Stochastic (Monte Carlo) Modeling

- PEST Null space Monte Carlo
- Indicator simulations with T-PROGS
- Parameter Zonation
- Uncertainty Analysis
- Use advanced calibration tools
- Automated calibration with PEST

Finite Element Modeling

- FEFLOW mesh import and export
- Groundwater Flow & Transport with FEMWATER
 - Unsaturated zone modeling
 - Salinity intrusion
- 2D seepage analysis with SEEP2D
- Slope stability analysis with UTEXAS