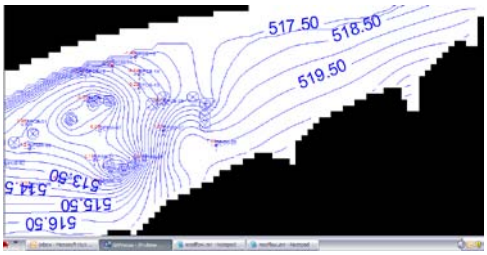
TIPS
Technical Innovation
And Professional
Services



Groundwater Vistas (GWV)

Groundwater Vistas is software used to model and predict flow and other characteristics as the ground water responds to pumping from wells or recharge from natural and man-made sources. This program is a powerful Windows-based graphical design system that utilizes the U.S.G.S.'s three-dimensional groundwater flow model, MODFLOW. Using standard modeling techniques, permit reviewers and AML staff can create a robust ground-water model of the hydrologic systems in the area of the mines or project sites. The model can be calibrated via the easy-to-use sensitivity analysis feature to obtain a realistic representation of the ground water for analysis and prediction of mining-related impacts.

SELECTED FEATURES:

- Plot hydraulic head, drawdown, and concentration vs. time
- Easy data access via spreadsheets and import/export formats
- Track or predict ground-water movement for flow or contamination
- Detailed parameter sensitivity analysis
- Charting capabilities and tools for comprehensive graphical analysis
- Simulates ground-water flow in confined and unconfined aquifers under steady-state or transient conditions
- Model design can be viewed in plan and cross section using a split window
- Model results using contours, shaded contours, or velocity vectors
- Use as graphical user-interface for MODFLOW MODPATH (both steady-state and transient versions), MT3DMS, MODFLOWT, SEAWAT, GFLOW, MODFLOW-SURFACT, PATH3D, MODFLOW2000, RT3D, and PEST

Groundwater Vistas

Obtaining Software

This software is available under OSM's license management system – KeyServer

For installation instructions please visit: http://www.tips.osmre.gov/tips_html/GroundwaterVistas.asp

SMCRA Benefits and Uses

* Modeling impacts of mine dewatering operations to regional or local aquifers (PHC evaluation, CHIA development)
* Modeling predictions of spoil aquifer
* Estimating resaturation rates
* Performing analyses associated with permitting and bond release through comparison of pre- and post-mining scenarios of ground-water systems

TIPS Training Classes

Training classes are offered on a bi-yearly schedule

Need Help????

Contact GWV Software Manager
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