

MODFLOW

- Cell-Centered, 3D, finite difference groundwater flow model
- Developed by McDonald & Harbaugh (USGS, 1983). Several versions available - MODFLOW 88, 96, 2000, 2005 (as well as utility programs for pre-processing input data and post-processing simulation results). See USGS Web pages:
<http://water.usgs.gov/nrp/gwsoftware/modflow.html>
<http://water.usgs.gov/nrp/gwsoftware/modelviewer/ModelViewer.html>
- Public domain
- Widely used groundwater model

What MODFLOW can simulate:

1. Unconfined and confined aquifers
2. Faults and other barriers
3. Fine-grained confining units and interbeds
4. Confining unit - Ground-water flow and storage changes
5. River - aquifer water exchange
6. Discharge of water from drains and springs
7. Ephemeral stream - aquifer water exchange
8. Reservoir - aquifer water exchange
9. Recharge from precipitation and irrigation
10. Evapotranspiration
11. Withdrawal or recharge wells
12. Seawater intrusion

