

## SOURCE WATER PROTECTION AND THE ENERGY-WATER NEXUS

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Developing the data analysis tools to monitor water quality and to assess available supplies has become critical to resource management and to maintaining levels required to sustain energy production levels. In response, the GWPC is expanding its Risk Based Data Management System (RBDMS) into source water quality protection, laboratory information management, produced water management, and water quantity assessment. RBDMS for Water tracks water and waste stream parameters and makes site-specific monitoring data available in a GIS format. This paper discusses how RBDMS for Water is being customized to fit the very different goals of two regulatory agencies.

In Ohio, RBDMS for Water will be used to manage surface and ground water and waste stream (oil field brine and acid mine drainage) quality data associated with mining operations oversight. Oil and gas and mine owners and their laboratory consultants will be able to refer to the database through the Web to track compliance with water information reporting requirements.

In Nebraska, the GIS component of RBDMS for Water is being used to combine coverages of wellhead protection areas with oil, gas, and UIC well locations from its oil and gas database. The resulting maps allow NOGCC to manage its field inspection activities to target wells located in high-risk, environmentally sensitive areas for quarterly inspections.

The GWPC successfully deployed earlier versions of RBDMS for Water to agencies overseeing source water protection programs in Oklahoma, Nevada, Nebraska, and Mississippi.