The UA Division of Agriculture Arkansas Water Resources Center (AWRC) is one of 54 institutes established through the Water Resources Research Act of 1964. The overall program has focused on providing information to local, state, and federal agencies to assist in management and protection of Arkansas’ water resources. Each year, the AWRC administers several projects focused on regional water quality issues, with the majority of the projects focused on the impacts on non-point and point sources on water quality, stream and other aquatic system processes, and factors impacting the quality of water supply reservoirs. The Center host an annual research conference each spring, and its training and information dissemination programs are intricately involved with the research projects. Typically about 50 students are trained through participation in research projects administered by the AWRC and also at the AWRC Water Quality Laboratory.
The following projects were funded through the USGS 104B program in 2007 and 2008:

- **Source of Geosmin and MIB in drinking water:** Identifying the source and mechanism of taste and odor compounds at Beaver Reservoir, northwest Arkansas
- **Continuous water-quality monitoring and potential phosphorus source identification with oxygen isotopes**
- **Metal mobilization, especially arsenic, in the alluvial aquifer in response to water level fluctuations measured by field and laboratory column data**
- **Role of fluvial sediments in modifying phosphorus exports from northwest Arkansas Watersheds**
- **Biogeochemical controls and interactions of carbon and nutrient cycling in karst hydrologic systems.**
- **Spatial and historical distribution of Geosmin and MIB producers in Beaver Reservoir, northwest Arkansas**

### Water Quality and Watershed Management Planning

In 2008, the AWRC teamed up with the Illinois River Watershed Partnership to manage its volunteer water quality monitoring program and write the Watershed Management Plan for the Upper Illinois River Watershed. The AWRC trained over 25 local volunteers to collect water samples from 37 sites throughout this watershed. The volunteers drop the collected water samples at the AWRC Water Quality Lab which analyzes the samples, and the sampled sub-basins will be ranked for BMP implementation and restoration priority based on these results. The AWRC put together a team, including the UA Cooperative Extension Service, FTN and Associates, the Forrester Group, and the USDA ARS to complete the development of the Watershed Management Plan.