



JOINT GFDI & KARST WATER CENTER COLLOQUIUM

Title

"Using Chemical and Biological Indicators to Assess the Impacts of the Land Application of Treated Municipal Wastewater on Water Quality in the Karstic Floridan Aquifer"

Speaker

Dr. Brian Katz
US Geological Survey

Time and Place

3:30PM, Monday, November 20, 2006
GFDI Reading Room, 18 Keen Bldg.

Refreshments will be served at 3:15PM

Abstract:

Increasing nitrate concentrations in many large spring systems throughout northern Florida have raised concerns about both ecosystem and human health. To better understand sources of nitrate in two karstic springs basins, multiple chemical constituents (nutrients; stable isotopes of N, O, H, and C; 64 organic wastewater compounds, 16 pharmaceutical compounds) and microbiological indicators are being used to assess the impact of the land application of treated municipal wastewater at sprayfields on ground-water quality. Results indicate that the Upper Floridan aquifer in the Ichetucknee Springs and Wakulla Springs basins is highly vulnerable to contamination from several anthropogenic sources of nitrate throughout each basin.