

1014-65-1102      **Clint Dawson\*** ([clint@ices.utexas.edu](mailto:clint@ices.utexas.edu)), 1 University Station, C0200, The University of Texas,  
Austin, TX 78712. *Numerical simulation of coupled ground water/surface flow and transport.*

Comprehensive water resource management requires a careful study of the interaction of ground and surface water. Historically, these systems have been studied in isolation, without properly accounting for the interactions between them. We will discuss mathematical models and numerical methods for modeling such coupled systems. In particular, we will focus on the use of discontinuous Galerkin and mixed finite element methods for modeling shallow water zones coupled to a vadose zone. (Received September 27, 2005)