



Department of
LAND, AIR AND WATER RESOURCES
University of California, Davis

Climate Change • Sustainable Agriculture
Environmental Quality • Landscape Processes

Postgraduate / Postdoctoral Researcher Positions Available

Groundwater-Surface Water Basin Modeling (1 position)
Groundwater & Land Subsidence Modeling and Assessment (1 position)

Research positions are available for postgraduate (M.S. degree or equivalent) or postdoctoral researchers interested in pursuing research in subsurface hydrology as part of a dynamic research team that links field and laboratory research with numerical modeling. Successful candidates will lead numerical modeling efforts for projects evaluating subsurface flow, groundwater-stream interaction, and land subsidence related to agriculture and animal farming in the Central Valley and in a montane Northern California basin. This is a very timely issue in California as public agencies and diverse stakeholder groups are in conflict over how to address declining groundwater resources while managing nonpoint source pollution from animal farming, crop farming, and urban sources. The project work offers the possibility to work on:

1. Basin groundwater-surface water modeling to address groundwater management in conjunction with protecting stream baseflow for ecosystem services, and to develop a field program to assess the groundwater-stream interface.
2. Development of a regional groundwater model to assess water use, groundwater use, and land subsidence

For both projects, we have already collected substantial datasets and candidates will find a relatively data-rich environment. Candidates must have strong skills in computational modeling of environmental systems (preferably groundwater flow and transport systems, heat transport, and – for the second position – in land subsidence). Demonstrated experience in MODFLOW modeling and in programming with Matlab is required. Additional experience in programming with Fortran and experience with COMSOL (formerly “FEMLAB”) is a plus but not necessary. Preferably, candidates are familiar with GIS (ArcGIS) and data management software (e.g., in MS Excel, MS Access). Suitable candidates enjoy the responsibility and collaboration skills needed in working with a research team. The successful candidates will be part of an extended project modeling team developing numerical modeling approaches and model applications. The successful candidates will be responsible for meeting the projects’ reporting requirements, will prepare scientific manuscripts, and will participate in public outreach events. Excellent writing, communication, and organizational skills are required.

The positions are funded for one year. Our research group website is <http://groundwater.ucdavis.edu>. Interested applicants should send a resume and contact information for at least two references to: Dr. Thomas Harter, Department of Land, Air, and Water Resources; Veihmeyer Hall 125, University of California, Davis, CA 95616-8628, cell-phone: (530) 400-1784; e-mail: tharter@ucdavis.edu. Review of applications will begin immediately and will continue until the positions are filled. The University of California is committed to equal opportunity and the diversity of its workforce.