Graham E. Fogg Professor of Hydgrology Department of Land, Air, and Water Resources 237 Veihmeyer Hall University of California, Davis Davis, CA 95616 530-752-6810 / gefogg@ucdavis.edu

Education and Training:			
Institution	Major/Area of Study	Degree	Year
University of New Hampshire	Hydrology	B.S.	1975
University of Arizona	Hydrology & Water Resources	M.S.	1978
The University of Texas at Austin	Geology	Ph.D.	1986

Research and Professional Experience:

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Chair, Hydrologic Sciences Graduate Group, Univ. of CA, Davis
Professor of Hydrogeology, Dept. of Land, Air, and Water Resources, University
of California, Davis
Vice-Chair for Hydrology, Dept. of Land, Air and Water Resources, University
of California, Davis
Chair, Hydrologic Sciences Graduate Group, University of California, Davis
Associate Professor of Hydrogeology, Dept. of Land, Air, and Water Resources,
University of California, Davis
Research Scientist/Associate, Bureau of Economic Geology, The University of
Texas at Austin

Awards

Fellow of Geological Society of America, awarded 2002 Geological Society of America Birdsall-Dreiss Distinguished Lecturer, 2002 O.E. Meinzer Award for 2011, Geological Society of America

University of Texas at Austin Bur. of Econ. Geology Alumni of the Year, 2012

Publications:

- 1. Ahmed, A.A. and **G.E. Fogg**. 2014. The impact of groundwater and agricultural expansion on the archaeological sites at Luxor, Egypt. Journal of African Earth Sciences, 2014. 95: p. 93-104.
- 2. Miyasaka, S.C., McCulloch, C.E., **Fogg, G.E.**, Hollyer, J.E. 2013. Optimum Plot Size for Field Trials of Taro (Colocasia esculenta). Hortscience, 48(4): p. 435-443.
- 3. Engdahl, N.B., Ginn, T.R. and **Fogg, G.E.** 2013. Using groundwater age distributions to estimate the effective parameters of Fickian and non-Fickian models of solute transport. Advances in Water Resources (Elsevier Ltd.), 54: 11-21.
- 4. Zhang, Y., Green, C.T., Fogg, G.E. 2013. The impact of medium architecture of alluvial settings on non-Fickian transport. Elsevier Ltd; Advances in Water Resources, 54: 78-99.
- Hornberger, G.M., E. Bernhardt, W.E. Dietrich, D. Entekhabi, G.E. Fogg, E. Foiufoula-Georgiou, W.J. Gutowski, W.B. Lyons, K.W. Potter, S.W. Tyler, H.J. Vaux, Jr., C.H. Vorosmarty, C. Welty, C.A. Woodhouse, C. Zheng. 2012. <u>Challenges and Opportunities in</u> <u>Hydrologic Sciences</u>, National Academy Press, 173 p.

- Boyle, D., King, A., Kourakos, G., Lockhart, K., Mayzelle, M., Fogg, G.E. & Harter, T., 2012. Groundwater Nitrate Occurrence. Technical Report 4, 277p., in: Addressing Nitrate in California's Drinking Water with a Focus on Tulare Lake Basin and Salinas Valley Groundwater. Report for the State Water Resources Control Board Report to the Legislature. Center for Watershed Sciences, University of California, Davis (http://groundwaternitrate.ucdavis.edu/).
- 7. Engdahl, N.B., Ginn, T.R. and **Fogg,G.E.** 2012, Non-Fickian dispersion of groundwater age, Water Resources Research, 48, W07508, doi:10.1029/2012WR012251.
- 8. Rasa, E., S.W. Chapman, B. Bekins, **G.E. Fogg**, K.M. Scow, and D.M. Mackay. 2011. Role of back diffusion and biodegradation reactions in sustaining an MTBE/TBA plume in alluvial media, Journal of Contaminant Hydrology, http://dx.doi.org/10.1016/j.jconhyd.2011.08.006.
- 9. Fleckenstein, J.H., R.G. Niswonger and **G.E. Fogg**. 2006. River-aquifer interactions, geologic heterogeneity, and low-flow management. 2006.; doi: 10.1111/j.1745-6584.2006.00190.x. Ground Water, 1-16.
- 10. LaBolle, E.M. and **G.E. Fogg**. 2001. Role of molecular diffusion in contaminant migration and recovery in an alluvial aquifer system. Transport in Porous Media, Special Issue on Modeling Dispersion, 42: 155-179.
- 11. Niswonger, R.G. and **G.E. Fogg**. 2008. Influence of perched groundwater on baseflow, Water Resources Research, 44, W03405, doi:10.1029/2007WR006160, Web access.
- 12. Fogg, G.E. and E.M. LaBolle. 2006. Motivation of synthesis, with an example on groundwater quality sustainability, Water Resources Research (special forum on synthesis in the hydrologic sciences), 42, W03S05, doi:10.1029/2005WR004372, Web access.

Synergistic Activities:

- 1. *Research center leadership:* PI of UC Davis IGERT Climate Change, Water, and Society, 2010-2017.
- Courses developed: Water, Power, Society (freshman course based on <u>Cadillac Desert</u>); Groundwater Hydrology; Hydrogeology and Contaminant Transport; Modeling of Groundwater Systems; Intro. to Geostatistics; Geostatistical Modeling of Geologic Systems (short course); Introduction to Groundwater Modeling (short course); Introduction to Hydrology (short course)
- 3. Panels: Committee convened by Governor Brown of CA on Groundwater Resources and Climate Change; Chair of Characterization Panel, DOE Workshop on Basic Research Needs for Geosciences: Facilitating 21st Century Energy Systems, 2007 (focusing on CO₂ sequestration and nuclear waste isolation); Performance review of Geological Survey of Denmark and Greenland (2007); Davis-Woodland water resources advisory panel (current); Governor's panel on management of low-level nuclear waste in CA (2000); Chair of Groundwater Committee for San Joaquin Valley Drainage Implementation Program (1999-2000).
- 4. *Curriculum Development:* Developed Climate Change, Water, and Society IGERT curriculum at UCD; Co-founded and designed new Graduate Group in Hydrologic Sciences (1990-92).
- 5. *Computational algorithms (that are now in wide use):* Transition Probability Geostatistical Simulation (TPROGS) of geologic heterogeneity for more accurate, reliable modeling of groundwater phenomena; Random Walk Simulation in Heterogeneous Media (RWHET) for more accurate, reliable simulation of mass transport in groundwater.