

**David G. Evans**

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**Education**

Ph.D. Geology & Geophysics - 1990  
Louisiana State University  
M.S. Geophysics - 1984  
University of Kansas  
B.A. Geophysics - 1981  
University of California, Berkeley

**Employment History**

- Department Chair & Professor, Department of Geology, California State University, Sacramento, CA, 2003 – Present
- Associate Professor, Department of Geology, California State University, Sacramento, CA, 1999 – 2003
- Adjunct Associate Professor, Department of Marine, Earth & Atmospheric Sciences, North Carolina State University, 1999 – 2003
- Assistant Professor, Department of Marine, Earth & Atmospheric Sciences, North Carolina State University, Raleigh, NC 1992 – 1999
- Assistant Professor, Department of Geology, University of Maine, Orono, ME, 1990 – 1992

**Administrative Experience**

- Chair, Department of Geology, Sacramento State University, 2003 – Present
- Graduate Coordinator, Department of Geology, Sacramento State University, 2002 – 2003
- Board Member, University Enterprises, Inc. (formerly the CSUS Foundation), 2006 – Present
  - Serve on Budget and Finance Committee*
  - Serve on Personnel Committee*
  - Serve on Travel-Grants Awards Committee*
  - Chaired ad hoc committee to evaluate dining services on campus*
- Chair, Academic Council, College of Natural Sciences and Mathematics, 2006 – 2008
- Other appointments by President, Provost or Dean
  - Chaired Search Committee for Director of University Center for Teaching and Learning (2007-2008).
  - Chaired ad hoc committee to evaluate the financial and logistical efficacy of outsourcing food services on campus (2007-2008).
  - Chaired Search Committee for Dean of the College of Natural Sciences and Mathematics (2006-2007).
  - Chaired Search Committee for Associate Dean of the College of Natural Sciences and Mathematics (2005-2006).

## **Teaching Experience**

*Courses developed and taught at California State University, Sacramento*

Applied Geophysics, Groundwater Modeling, Contaminant Hydrogeology, Advanced Hydrogeology, Natural Disasters

*Other courses taught at California State University, Sacramento*

Earth Science, Physical Geology, Hydrogeology, Environmental Geology, Geophysics for Geologists

*Courses developed and taught at North Carolina State University*

Hydrogeology, Groundwater Pollution, Exploration Geophysics, Fractured-Rock Hydrology

*Graduate Students and Postdoctoral Researchers Advised and Mentored*

Directed 25 M.S. thesis research projects, 1 Ph.D. dissertation research project, 1 Post-doctoral research project.

*Teaching Workshops*

Teaching Effectiveness Workshop for College Science Teachers (workshop leader at North Carolina State University, 2001 & 2002).

*Professional Geologists Workshops for Professional Geologist Licensing Continuing Education Credit*

Characterization & Hydrology of Fractured-Rock Aquifers (2001, 2002); Fractured Rock Hydrology (2000); Groundwater Modeling (1999); Contaminant Transport by Groundwater Flow (1998).

## **Other Professional Experience**

- Consulting Project Hydrogeologist and Technical Leader for site characterization at a RCRA facility investigation at a pharmaceutical research company in Durham County, North Carolina (2002).
- Consultant for City of San Francisco: Provided independent review of groundwater modeling studies and provided written and oral reports. Presented findings at a public meeting and addressed questions from public and city managers regarding water use and safe aquifer yield (2000).
- Independent reviewer of groundwater modeling studies at an RCRA facility in Guilford County, North Carolina. Served as liaison between public, potentially responsible parties, consultants, and State regulators (1999).
- Lead specialist in hydrogeology for the North Carolina Division of Radiation Protection (NC DRP) review team for siting a low-level radioactive waste facility. Led meetings of the review team, reviewed hydrologic, geologic, and performance assessment components of the license application; conducted independent analysis of data and modeling results from the proposed site (1997-1998).
- Consulting Project Hydrogeologist for site characterization at a large petroleum release site in western Georgia. Facilitated meetings with potentially responsible parties and state regulators; designed work plan for subsurface characterization at a fractured crystalline rock site (1998-1999).

## **Professional Service and Societies**

- Reviewer for *Groundwater Monitoring and Remediation*, *GeoFluids*, *Water Resources Research*, *American Journal of Science*, *Hydrological Science and Technology*, *Geophysics*, *Society of Economic Geologists Special Publications*, *Mathematical Geology*, US Geological Survey, American Chemical Society, National Science Foundation, NC Water Resources Research Institute, Natural Science and Engineering Research Council of Canada.
- Member of Planning Committee for 2009 Annual Meeting of Association of Engineering and Environmental Geologists.
- Member of American Geophysical Union, Association of Engineering and Environmental Geologists, Sigma Xi.

### **Service to the University**

- Member of College Academic Council (2002-present: 3 terms at-large, 1 term as Vice Chair, 2 terms as Chair);
- Member of College Personnel Committee (2008-present; currently chair);
- Faculty Senator (2001-2004; 2007-2008);
- Member of College Community Advisory Committee (2002-present);
- Program Reviewer for CSU Northridge Department of Geological Sciences periodic review (2005);
- Program Reviewer for Department of Biology periodic review (2003);
- Member of College Curriculum and Resources Committee (2002-2003, 2009);
- Reviewer for University Research and Creative Activities grants (2000-2003).

### **Grants and Contracts**

- 2002-2007 W.M. Keck Foundation (\$400,000) to establish the *W.M. Keck Foundation Facilities for Applied Hydrogeology at California State University, Sacramento*.
- 2002-2003 Sacramento State Internal Research and Creative Activities Grant (release time & summer salary) for *Developing A Semi-Analytical Model for Aquifer Testing in Fractured-Rock Aquifers*.
- 1997-1999 North Carolina Department of Environment and Natural Resources – Groundwater Section (\$40,000): *Groundwater Modeling to Assess the Impact of Riparian Buffers on Nutrient Transport to Streams*.
- 1995-1997 North Carolina Water Resources Research Institute (\$45,000): *Assessing the impact of septic discharge on water quality on the Cape Hatteras National Seashore*.
- 1993-1995 USDOJ, National Park Service (\$112,000): *Spatial and temporal variations in the water table on Hatteras Island*.
- 1994-1995 USDOJ, National Park Service (\$44,000): *Determining hydraulic characteristics of the Buxton Woods aquifer on Lower Hatteras Island, North Carolina*.
- 1993-1995 American Chemical Society (Petroleum Research Fund) (\$20,000): *Bifurcating Solutions to Coupled Groundwater Flow Near Salt Domes*.
- 1993-1994 North Carolina State University Faculty Research and Professional Development Grant (\$4730): *A Laboratory Well-bore Simulator to Test Fluid Logging Analysis*.
- 1992-1993 North Carolina Water Resources Research Institute (\$2500): *Logging Research Wells on Centennial Campus at North Carolina State University*.
- 1990-1992 US Department of Energy Young Faculty Award in Environmental Restoration/Waste Management (\$100,000): *Tests of the effectiveness of groundwater restoration methods in fractured rock*.
- 1990-1991 University-State Agency Partnership Program in Maine (\$17,186): *Density-driven groundwater flow near salt contamination sites in Maine* with M. Loiselle and E. Decker.

### **Publications & Abstracts**

#### *Opinion Articles*

Evans, D.G. "How Not to Reward Outstanding Teachers," *The Chronicle Review*, (*The Chronicle of Higher Education*, Section B) May 20, 2005, B20.

#### *Peer Reviewed Publications*

Evans, D.G. and N. Solá-Llanch, N. (*in revision*). Deconvolving water-table response: An analytical approach to estimating time-varying recharge, submitted to *Math. Geology*.

Saleh, D. K. , Kratzer, C. R., Green, C., and Evans, D. G., (2009). Using the Soil and Water Assessment Tool (SWAT) to Simulate Runoff in Mustang Creek Basin, California, *U.S. Geological Survey Water-Resources Scientific Investigations Report 2009–5031*, 28 p.

- Downing, B.D., Bergamaschi, B.A., Evans, D.G., and Boss, E. (2009). Assessing contribution of DOC from sediments to a drinking-water reservoir using optical profiling, *Lakes and Reservoir Management*, **24**, 381-391.
- W.P. Anderson, Jr. and D.G. Evans, (2007). On the interpretation of recharge estimates based on steady-state model calibrations, *Ground Water*, **45**(4), 499-505.
- Faye, S., S. Cissé Faye and D. Evans (2003). Origin and distribution of saline groundwater in the Saloum (Senegal) coastal aquifer, in *Proceedings of Second International Conference on Saltwater Intrusion and Coastal Aquifers*, Mérida, Yucatán, México, April.
- Anderson, William P., Jr. and David G. Evans (2001). Discussion of “Anomalous Fresh Water Lens Morphology on a Strip Barrier Island” by C. Ruppel, G. Schultz, and S. Kruse, *Groundwater*, **39**(6), 804-805.
- Faye, S., I. Niang Diop, D.G. Evans, M. Pfister, P. Maloszewski and K.P. Seiler (2001). Seawater intrusion in the Dakar (Senegal) confined aquifer: calibration and testing of a 3D finite element model, in *New Approaches to Characterizing Groundwater Flow*, Seiler & Wohnlich (eds), Swets & Zeitlinger Lisse.
- Anderson, William P., Jr., David G. Evans and Stephen W. Snyder (2000). The Effects of Holocene Barrier-Island Evolution on Water-Table Elevations - Hatteras Island, NC, *Hydrogeology J.*, **8**(4), 390-404.
- Faye, S., I. Niang Diop, D.G. Evans, M. Pfister, P. Maloszewski and K.P. Seiler (1999). Seawater intrusion in the Dakar (Senegal) confined aquifer, in *Proceedings of ModelCARE99 Conference*, Zurich, Switzerland, September 1999.
- Evans, David G. (1995). Inverting Fluid Conductivity Logs for Fracture Inflow Parameters, *Water Resour. Res.*, **31**, 2905-2915.
- Loiselle, Marc and David G. Evans (1995). Fracture yield and density distributions in Coastal Maine, *Ground Water*, **33**, 190-197.
- Morgan, A., J. Gregory and D.G. Evans (1994). A barrier island aquifer response to Hurricane Emily, Hatteras Island, North Carolina, in *Proceedings of the 2nd International Conference on Groundwater Ecology*, Am. Water Resour. Assoc. and USEPA, Nov. 1994.
- Evans, David G. and Jeffrey P. Raffensperger (1992). On the stream function for variable-density groundwater flow, *Water Resources Research*, **28**, 2141-2145.
- Evans, David G., William P. Anderson, Jr., and Chin-Fu Tsang (1992). Borehole fluid Experiments near salt contamination sites in Maine, in *proceedings of the NGWA Conference on Eastern Regional Ground Water Issues*, Boston, 797-807.
- Evans, David G., Jeffrey A. Nunn, and Jeffrey S. Hanor (1991). Mechanisms driving groundwater flow near salt domes, *Geophysical Research Letters*, **18**, 927-930.
- Deming, D., J. A. Nunn, and D. G. Evans (1990). Thermal Effects of Compaction-Driven Groundwater Flow From Overthrust Belts, *J. Geophys. Res.*, **95**(B5), 6669–6683.
- Evans, David G. and Jeffrey A. Nunn (1989). Free thermohaline convection in sediments surrounding a salt column, *J. Geophysical Research*, **94**, 12,413-12,422.
- Evans, David G. and Steven M. Jones (1987). Detecting Voronoi (area-of-influence) polygons, *Math. Geology*, **19**, 523-537.
- Hanna, M.S., D.G. Evans and P.N. Schweitzer, On the approximation of plane curves by parametric cubic splines, *BIT Numerical Mathematics*, **26**(2), 217-232.
- Evans, D.G., P.N. Schweitzer and M.S. Hanna (1985). Parametric cubic splines and geologic shape descriptions, *Mathematical Geology*, **17**(6), 611-624.

#### *Published Abstracts in Last 5 years*

- Sneed, M., D.L. Galloway and D.G. Evans (2009). Comparison of the MODFLOW-2000 IBS1 and SUB Subsidence Packages for Simulating Residual Aquifer-System Compaction, National Ground Water Association Program and Abstracts (Proceedings of the 2009 Ground Water Summit of the National Ground Water Association, Tucson, AZ, April 19-23, 2009

- Evans, D. and W.P. Anderson, Jr. (2007). Fractal interpolation and Monte Carlo simulations to address aliasing in well hydrographs, *EOS Trans. AGU*, Fall Meet. Suppl.
- Downing, B.D., B.A. Bergamaschi, D.G. Evans, E. Boss, and R. Fujii (2006). Quantifying DOC flux from sediments into a drinking water reservoir using optical profiling, *Eos Trans. AGU*, **87** (52), Fall Meet. Suppl., Abstract B11C-1034.
- Evans, D. and W.P. Anderson, Jr. (2006). Stochastic anti-aliasing of water-table hydrographs to determine long-term recharge. *GSA Abstracts with Programs* **38**(7). GSA Annual Meeting, Philadelphia, PA.
- Silver, M., T. Horner and D. Evans (2006). Evaluation of Heat as a tracer to quantify longitudinal water flow in the hyporheic zone. *GSA Abstracts with Programs* **38**(7). GSA Annual Meeting, Philadelphia, PA.
- Evans, D. and J.W. Borchers (2005). Approaches to assessing groundwater resources in fractured rock. 25<sup>th</sup> Biennial Groundwater Conference and 14<sup>th</sup> Groundwater Resources Association Annual Meeting, Sacramento, CA (*invited abstract and presentation*).
- Anderson, Jr., W.P., and D.G. Evans (2005). On the interpretation of recharge estimates based on steady-state model calibrations. *GSA Abstracts and Programs* **37**(7). GSA annual Meeting Salt Lake City, UT.