

Elizabeth A. Dudley-Murphy
Department of Civil and Environmental Engineering
University of Utah, Salt Lake City, Utah 84108

Professional Preparation

University of Utah, Anthropology, BA 1981
University of Utah, Geography, MS 1990
University of Utah, Geography, Ph.D. 1996

Appointments

January 2015 to present – teach a completely online Introduction to GIS in the City and Metropolitan Planning Department.

2002 to present – Research Assistant Professor in Civil and Environmental Engineering, University of Utah. Teach a completely online introduction to GIS class in the Civil and Environmental Engineering Department.

1996 to present – Adjunct Associate Professor in the Geography Department. Full development and full teaching responsibility for 3 classes for the Geography Department. Co-Teaching responsibilities for an online introduction to GIS class in the Geography Department. University of Utah.

1996 to 2014 - Geographer/Remote Sensing Research Scientist, Geomatics Laboratory Energy & Geoscience Institute (EGI), University of Utah.

June 10, 1999 – August 25, 1999 - Participant in NASA Summer Faculty Program at Marshall Space Flight Center, Huntsville, Alabama.

February 12, 1999 - May 29, 1999 - Geography Instructor for the Semester at Sea Program through the University of Pittsburgh.

1991 to 1996 - Research Assistant/Associate, Center for Remote Sensing and Cartography, University of Utah Research Institute.

1987 to 1995 - Teaching Fellow/Graduate Student, Department of Geography, University of Utah.

Honors and Awards

April 2008 – Awarded Outstanding Teacher Award for Auxiliary Professors by graduate students in the Civil and Environmental Engineering Department.

March 2000 – Invited by the chair of the Geography Department at East Central University in Ada, Oklahoma to be the guest lecturer as part of the Visiting Geographical Scientist Program. This invitation included visits and lectures at two other institutions.

June – September 1999 - Awarded a NASA Faculty Fellowship to Marshall Space Flight Center to work with thermal imagery as applied to urban environments.

September 1994 - presented with a certificate of recognition by the Secretary of Finance and Planning of the State of Mexico, for the presentation of dissertation research in Mexico City.

Short Courses Instructed

Spring 2011 – Bahamian Petroleum Company, GIS Short Course

December 10 – 11, 2009, RedLeaf Resources, Inc. GIS Short Course.

August 2004, SIPETROL, Taught GIS Short Course in Bogota, Colombia.

Other Contributions to Educational Mission

May 10 – June 3, 2009, University of Utah Environmental Studies Department. Led a study abroad to Costa Rica with 18 University of Utah students.

Graduate Students – (On graduate committees of the following Students)

Abigail Ryder, Master of Science Student in CVEEN in hydrology.

Ivana Tasic, PhD student in CVEEN in transportation engineering, anticipated graduation 2015.

Recent Synergistic Activities

January 2008 – September 2008 – Assisted in a research project for Salt Lake City's Urban Forestry Department that was submitted by NCDC Imaging and Mapping from Colorado Springs, Colorado.

Between 2006 and 2008, was involved with professors from several departments on campus in a multidisciplinary research effort called Ecosystems + Health + Built Environment.

Between September 2006 and July 2007 was a member of Mayor Anderson's Initiative for Sustainability – Natural Lands Subcommittee.

Poster Presentations

AAPG, New Orleans April 11 – 14, 2010. Integrated Remote Sensing, Structural and Petroleum Systems Modeling of the Iraqi-Kurdish Fold Belt. C.M Burberry, M. Greb, M. Laughland, **E. Dudley-Murphy** (B. Murphy), G. Nash and Iraqi Kurdistan Region Ministry of Natural Resources.

Publications

Burian, S., Goel, R., and Hong, A. *Meeting Data Needs to Perform a Water Impact Assessment for Oil Shale Development in the Uinta and Piceance Basins*, 2009. Contributing Authors: Nash, G., **Dudley-Murphy, (Beth) Elizabeth**, Han, Woo Suk. Utah Heavy Oil Program. University of Utah.

D.E. Pataki, P.C. Emmi, C.B. Forster, J.I. Mills, E.R. Pardyjak, T.R. Peterson, J.D. Thompson, **E. Dudley-Murphy**, 2009. *An integrated approach to improving fossil fuel emissions scenarios with urban ecosystem studies*. Ecological Complexity 6(1):1-4.

Dudley-Murphy, E.A., 2008. *Black Canyon of the Gunnison National Park Water Quantification Case Study*. Bureau of Reclamation. Salt Lake City, Utah.

Jeyachandran, I., Burian, S., Dennison, P., Nash, G., and **Dudley-Murphy, E.A.** 2007. "Techniques to estimate urban canopy parameters using satellite data." AMS 7 Symposium on the Urban Environment, 10-13 September 2007, San Diego, CA.

Dudley-Murphy, E.A., 2006. Contributing Author: Remote Sensing of Human Settlements. Manual of Remote Sensing 3rd. Ed., Vol. 5. Edited by Merrill k. Ridd and James D. Hipple.

Dudley-Murphy, E.A., 2006. *Water Conflicts in the Upper Colorado Basin – Phase II.* Bureau of Reclamation, Salt Lake City, Utah. Final Report.

Dudley-Murphy, E.A., Nash, G.D., 2004. Built Non-Built Analysis by Remote Sensing. Envision Utah/ Wasatch Front Regional Council. Salt Lake City, Utah. Final Report.

Dudley-Murphy, E.A., 2004. TIR (ASTER) Geothermal Anomaly Detection. Department of Energy. Final Report.

Segall, M.P., Sawyer, R.K., Nash, G.D., Umbriaco, J., Kessler, C. and **Dudley-Murphy, E.**, 2004. GIS applications of DSDP-ODP data for hydrocarbon exploration. AAPG paper #88095, Program with Abstracts.

Segall, M.P., Nash, G.D., Umbriaco, J., Kesler, C., **Dudley-Murphy, E.** and Sawyer, R.K., 2003. "BHP-Billiton – EGI DSDP-ODP Digital Database Project. Phase I – Northwest Africa". Energy & Geoscience Institute Technical Report 50500985-03-30-03. 20 pp, 32 enclosures, 3 CD's.

Dudley-Murphy, E.A., Nash, G. D., 2003. *TIR (ASTER) Geothermal Anomalies.* Geothermal Resources Council Transactions, Vol. 27.

Dudley-Murphy, E.A., 2001. *Application of Airborne Remote Sensing Measurements to Improve Information of Land-Area-Surface Characteristics Dugway Proving Ground,* Utah. Universities Space Research Association Global Hydrology and Climate Center, Huntsville, Alabama. Final Report.

Dudley-Murphy, E.A., 1999. *Analysis and Application of Airborne Thermal Data at the Local Level in Salt Lake City,* Utah. NASA/ASEE Summer Faculty Fellowship Program. Final Report.

Dudley-Murphy, E.A., 1996. *Monitoring Urban Change and Growth in Mexico City Using Merged TM and SPOT Satellite Imagery.* Department of Geography, Salt Lake City, Utah.