

Amy L. McNally

Education

PhD, Department of Geography, University of California, Santa Barbara (UCSB). Estimating root-zone soil moisture in the West Africa Sahel using remotely sensed rainfall and vegetation. September 2013.

M.S., Water Resources Policy and Management, Oregon State University (OSU), Corvallis, OR. September 2008.

B.S., Environmental and Forest Biology, SUNY College of Environmental Science and Forestry, Syracuse, NY. December 2002.

Research Experience

Research Assistant, *A Land Data Assimilation System for Famine Early Warning*, UCSB Climate Hazards Group, Spring 2010 - Present

Visiting Researcher, *Global Water Futures*, Center for Strategic and International Studies, Global Strategy Institute, Washington D.C., 2008

Research Assistant, *International water conflicts in the news 2005-2008*, UNESCO and OSU Program on Water Conflict Management, 2008

Research Assistant, *The vulnerability of transboundary hydropower agreements to climate change*, The World Bank and OSU Program in Water Conflict Management, 2007-2008

Research Fellow, *Project Atmospheric Brown Cloud: Precipitation trends in Korea*. Korea Science Foundation & US NSF, Seoul National University, Korea, 2007

Research Assistant, *Spatial models and the social impact of dams*, OSU, 2007

Publications

McNally, A., C. Funk, G. Husak, J. Michaelsen, B. Cappelaere, J. Demarty, and T. Pellarin: Estimating Sahelian and East African soil moisture using the Normalized Difference Vegetation Index. *Hydrol. Earth Syst. Sci. Discuss.* 2013.

Johnson, L. R., K.D. Lafferty, **A. McNally**, E. Mordecai, K. Paaijmans, S. Pawar, and Ryan., S. J.: Mapping the Distribution of Malaria: current approaches and future directions, in: *Infectious Disease Modeling*, edited by: Chen, D., John Wiley & Sons, Inc., , Hoboken, New Jersey, 2014.

Mordecai, E., K. Paaijmans, L. Johnson, C. Balzer, T. Ben-Horin, E. de Moor, **A. McNally**, S. Pawar, S. Ryan, T. Smith, K. Lafferty. (2012). Physiological constraints dramatically lower the expected temperature for peak malaria transmission. *Ecology Letters*.

Dinar, S., O. Odom, **A. McNally**, B. Blankenspoor, P. Kurukulasuriya (2010). Climate Change and State Grievances: The Resiliency of International River Treaties to Increased Water Variability. Institute of Advanced Study Insights Working Paper Series, Durham University, V 3.

McNally, A., D. Magee, and A.T Wolf. (2009). Hydropower and sustainability: Resilience and vulnerability in China's powersheds. *Journal of Environmental Management*, 90, S286-S293

McNally, A (2008) A Collaborative Potential Assessment of Project Atmospheric Brown Clouds. Oregon State University, M.S. thesis.

Papers in Preparation

Grace, K., M. Brown, **A. McNally**. Maize Prices and Low Birth Weight in Kenya. *Social Science & Medicine* (In Revision).

Ryan, S. J., **A. McNally**, LR Johnson, E. Mordicai, and K. Lafferty: Climate change and malaria shifts: new implications for health geography and targeting control, submitted to *Nature Climate Change* 2013.

McNally, A, G. Husak, C. Funk, J. Michaelsen, M. Carroll, M. Brown, J.P. Verdin: Estimating crop water stress with satellite rainfall- and NDVI-derived soil moisture. In prep for *Hydrological Processes*.

McNally, A, S. Yatheendradas, C. Peters-Lidard, C. Funk, G. Husak, G. Senay, J. Michealsen, J.P. Verdin: Comparison of soil moisture and evapotranspiration estimated from water balance models and NDVI. In prep for *Journal of Hydrometeorology*.

McNally, A, C. Funk, M. Brown, J.P. Verdin: Agricultural drought monitoring with remotely sensed soil moisture in data sparse regions. In prep for *Soil Moisture Active Passive (SMAP) Early Adopter Special Collection, Journal of Hydrometeorology*.

Professional Experience

Teaching Assistant & Tutor, *Intermediate Geographical Analysis: Statistics Lab in R*, UCSB, Fall 2009, Fall 2011

Associate Lecturer, *Land and Surface Processes*, UCSB, Summer 2009

Teaching Assistant, *Oil, Water and Climate: ArcGIS Lab*, UCSB, Winter 2009, 2010

Teaching Assistant, *Geography of California*, UCSB, Fall 2008

Teaching Assistant, *Introduction to Soils*, OSU 2007-2008

Biologist/Educator, Teton Science Schools, Jackson, WY 2005-06

Biological Technician, US Forest Service, Amphibian Monitoring, Sonora, CA 2004

Field Assistant, Cornell Lab of Ornithology, Peru, Fall 2003; Channel Islands, CA, Fall 2009

Biological Technician, US Forest Service, Aquatic and Riparian Monitoring, Corvallis, OR 2002-03

Teaching Assistant and Naturalist, University of Georgia, Organization for Tropical Studies Costa Rica 2003

Laboratory Technician, Environmental Toxicology, SUNY-ESF, Syracuse, NY 2000

Biological Technician, Department of Entomology, Cornell-NYS Agricultural Experiment Station, Geneva, NY 1999

Skills and Training

Programming skills: IDL/ENVI, Matlab, R, Fortran, ArcGIS, MS Excel

NASA Land Information System (LIS) Data Assimilation Tutorial, Nov 27-29, 2012, Goddard Space Flight Center, MD.

Service and Memberships

Soil Moisture Active Passive (SMAP) Early Adopters: Incorporating soil moisture retrievals into the FEWS NET Land Data Assimilation System (FLDAS), 2012-2014

American Geophysical Union, 2009-2012

American Water Resources Association, Student Member 2006-2011

Geography Department events committee, UCSB 2010-2012

External Advisory Board Water Resource Graduate Program, Student Representative, OSU 2007-2008

Global Climate Change Group, OSU 2007-2008

'Hydrophiles' Interdisciplinary Water Group, OSU 2006-2008