

AMANDA L. FENCL

EDUCATION

UNIVERSITY OF CALIFORNIA, DAVIS, PHD (2013-) GPA 3.79/4.0

Ph. D. Candidate, Graduate Group in Geography, Exp. 06/2019

Center for Environmental Policy and Behavior, Department of Environmental Science and Policy

2014-19 Fellow, NSF Graduate Research Fellowships Program

2013-15 Trainee, NSF Climate Change, Water, and Society (CCWAS) IGERT

TUFTS UNIVERSITY, MEDFORD, MA (2003-2007) GPA 3.67/4.0, MAGNA CUM LAUDE, DEAN'S LIST

B.A., Environmental Studies and International Relations with High Thesis Honors, May 2007

School for International Training: Ecology & Conservation, Ft. Dauphin, Madagascar, Fall 2005

EXPERIENCE

UC SANTA CRUZ SOCIAL SCIENCES DIVISION, (REMOTE FROM DAVIS, CA)

“Groundwater Security Under Drought”

Graduate Student Researcher, Step VII | Sept 2017- June 2018

UC DAVIS CENTER FOR REGIONAL CHANGE, DAVIS, CA

“The Struggle for Water Justice in California’s San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities”

Graduate Student Researcher, Volunteer | Dec 2016- Feb 2018

UC DAVIS POLICY INSTITUTE FOR ENERGY, ENVIRONMENT AND THE ECONOMY, DAVIS, CA

“Drought Management and Climate Adaptation of Small, Self-Sufficient Drinking Water Systems in California”

Graduate Student Researcher, Volunteer | Oct-Dec 2017; **Step VII** | Jul-Sep 2017

Graduate Student Researcher, Step V | Apr-Jun 2017; **Step III** | Jul-Sep 2016 and Jul-Sep 2015

GOVERNOR’S OFFICE OF PLANNING AND RESEARCH, SACRAMENTO, CA

Student Assistant, Local Drought Liaison | Sep 2014- Mar 2017

Policy Intern (volunteer) | Apr - Sep 2014

Co-facilitated a cross-agency Governor’s Drought Task Force Work Group on drought vulnerable small systems and private-well reliant households; helped develop CA’s first household water shortage reporting system and managed its database.

STOCKHOLM ENVIRONMENT INSTITUTE- US CENTER, SOMERVILLE, MA & DAVIS, CA

Staff Scientist II | Jan 2013-Sep 2013 (Davis, CA)

Staff Scientist I | Jan 2009-Dec 2012 (Somerville, MA and Davis, CA as of Sep 2011)

Analyst | May 2007-Dec 2008 (Somerville, MA)

TUFTS INSTITUTE OF THE ENVIRONMENT (TIE), TUFTS UNIVERSITY, MEDFORD, MA

Student Assistant, Office of Sustainability | Jan-Aug 2007

Student Assistant, TIE & Tufts Climate Initiative | Sep 2003-May 2007 (work study)

ACADEMIC SERVICE

UNIVERSITY OF CALIFORNIA, DAVIS | 2013 – PRESENT

- **Continuing Student Representative**, UC Davis GGG Executive Committee | Jan 2018-present
- **Co-convener**, UC Davis Graduate Student Environmental Justice Network | May 2017-present
- **Officer**, GLOBAL (Geography student organization) | Sep 2015- present
- **Mentor**, First Friends Program (mentored 5 1st year international grad students) | Sep 2015-Jun 2016

- **Mentor**, Geography Graduate Group (GGG) and CCWAS IGERT (1 student in each) | Sep 2014-Jun 2015
- **Organizer**, Fall and Spring Geography Speaker Series, Jul 2014-Feb 2015
- **Organizer**, “Climate Change and the Future of Groundwater in California” CCWAS State of the Science and Policy Workshop, Sep 2013 – Apr 2014 [[podcast URL](#)]
- **GGG Representative**, UC Davis Graduate Student Association | Sep 2013-Jun 2014

DROUGHT AND EQUITY IN CALIFORNIA, PACIFIC INSTITUTE RESEARCH PROJECT, OAKLAND, CA

- **Member**, Project Advisory Committee | Jun 2016-Jan 2017

FELLOWSHIPS, AWARDS, AND RESEARCH GRANTS

2018 **Member**, UC Davis Leaders for the Future Cohort; Food, Agriculture and Health Entrepreneurship Academy

- A cross-campus collaboration between the Office of Research, the Internship and Career Center, GradPathways, and the Mike and Renee Child Institute for Innovation and Entrepreneurship,

2016-2018 “DROUGHT PLANNING AND CLIMATE ADAPTATION OF SMALL SELF-SUFFICIENT WATER UTILITIES IN CALIFORNIA”:

- co-author, \$300,000 grant from CA’s 4th Climate Change Impact Assessment; partial PhD fieldwork funding

2017 **Awardee**, California Geographical Society Best Physical Geography Paper (\$500); Travel Award (\$100)

2016 **Awardee**, AAG Jeanne X. Kasperson Student Award (awarded 10/2015) (\$155, AAG registration fee)

2015-18 “DROUGHT PLANNING AND CLIMATE ADAPTATION OF SMALL SELF-SUFFICIENT WATER UTILITIES IN CALIFORNIA”:

- 2017-18 Henry A. Jastro Research Award, UC Davis (\$2,500)
- 2016-17 Henry A. Jastro Research Award, UC Davis (\$2,000)
- White Family Graduate Student Award for Environmental Justice Research, UC Davis (\$3,100)
- 2015-16 Henry A. Jastro Research Award, UC Davis (\$1,500)

2011 **Fellow**, Across Borders: Managing Trans-Boundary Environmental Resources in the Middle East and the U.S.

- Selected as 1/ 17 emerging U.S. young professionals to participate in an study-tour of Israel, Jordan, Palestinian Territories and Egypt; US Department of State Funded grant to Dickson College (US).

2010 STOCKHOLM ENVIRONMENT INSTITUTE, INTERNALLY-FUNDED STAFF AWARDS:

- Staff exchange award to collaborate with SEI Asia Center staff; NOVA Research Grant (for junior staff-led project)

2007 **Fellow**, StartingBloc Global Institute for Social Innovation (June 2007)

2006 **Scholar**, Morris K. Udall Foundation Undergraduate Scholarship (\$5,000)

2006 **Awardee**, Tufts University Nancy W. Anderson Award for Environmental Sustainability

2005-2006 TUFTS UNIVERSITY UNDERGRADUATE THESIS RESEARCH IN TULÉAR, MADAGASCAR:

- Tufts Institute of the Environment Undergraduate Research Fellow (\$2,000)
- International Relations Program Summer Scholar (\$3,500)

PUBLICATIONS

Co-authored Peer Reviewed

Ekstrom et al. (2017) Gauging climate preparedness to inform adaptation needs: local level adaptation in drinking water quality in CA, USA. *Climatic Change*. 10.1007/s10584-016-1870-3

Barron et al. (2015) Mapping the potential success of agricultural water management interventions for smallholders: Where are the best opportunities? *Water Resources and Rural Development*. 10.1016/j.wrr.2015.06.001

Dermawan et al. (2012) Testing a multi-scale scenario approach for smallholder tree plantations in Indonesia and Vietnam. *Technological Forecasting and Social Change*. 10.1016/j.techfore.2012.10.021

Haidera et al. (2011) Adapting to climate change-water scarcity for Yemen’s vulnerable communities. *Local Environment*. 10.1080/13549839.2011.565465.

Dougherty et al. (2009). Greenhouse Gas Reduction Benefits and Costs of a Large-Scale Transition to Hydrogen in the USA. *Energy Policy*, 37(1) 10.1016/j.enpol.2008.06.039.

Co-authored Research Reports (selected)

Ekstrom, J.E., Klasic, M., **Fencl, A.** et al. (in review- 2018). Drought Management and Climate Adaptation of Small, Self-Sufficient Drinking Water Systems in California. UC Davis Policy Institute for Energy, Environment and the Economy. A Report for California’s Fourth Climate Change Assessment.

London, J.K., **Fencl, A.**, et al. (in prep - 2018) The Struggle for Water Justice in California’s San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities. UC Davis Center for Regional Change.

- Langridge, R., Mendez-Barrientos, L.E., **Fencl, A.** (in prep- 2018) Groundwater Security under Drought: Synthesis and Analysis of Information, and Recommendations to Address Knowledge Gaps. NSF SciSIP Report.
- Groves et al. (2014). A Framework for Assessing Climate Change Vulnerability and Defining Robust Risk Management Strategies for Water Utilities. *Water Research Foundation*. [Available online](#).
- Fencl** et al. (2012) Water for Electricity: Resource Scarcity, Climate Change and Business in a Finite World. *SEI Project Report*. [Available online](#).
- Kemp-Benedict et al. (2012) Biomass in a Low-Carbon Economy: Resource Scarcity, Climate Change, and Business in a Finite World. *SEI Project Report*. [Available online](#).
- Mikhail et al. (2010) Innovation and diffusion of sustainable agricultural water resource management in a changing climate: A case study in Northeast Thailand. SEI Project Report. [Available online](#).
- Stanton et al. (2010) Costing Climate Impacts and Adaptation: A Canadian Study on Coastal Zones. Report commissioned by the National Round Table on the Environment and the Economy Economic Risks and Opportunities of Climate Change Program. [Available online](#).
- Dougherty, W., **Fencl, A.**, Fisher, J., Klein, R., Osman, B., Swartz, C., and Yates, D. (2008). Summary for Policymakers, Coastal Zones and Water Resources in Abu Dhabi, n Climate Change Impacts, Vulnerability, and Adaptation in the United Arab Emirates - Coastal Zones, Water Resources, and Dryland Ecosystems. Prepared for the Abu Dhabi Environment Agency.

Outreach

- Fencl** and Klasic (2017) "Small, self-sufficient water systems continue to battle a hidden drought". *California Water Blog*. UC Davis Center for Watershed Sciences. [Available online](#).
- Fencl, A.** (2015) "Climate Change and the Future of Groundwater in California" UC Davis Policy Institute Policy Brief. [Available online](#).

OUTREACH AND CONFERENCE TALKS

- Presenter**, "Synthesis Review: Groundwater Security under Drought", National Academy of Sciences Workshop on Government Decision-Making to Allocate Scientific Resources. Jan 2018. Washington, D.C.
- Presenter**, "Drought Resilient Drinking Water Utilities: Californian Utilities' Drought Responses" American Association of Water Resources (AWRA) Annual Meeting. Nov 2017. Portland, OR.
- Presenter**, "Drought Resilience of Small Drinking Water Systems: Preparing for Changing Future" UC Davis Center for Poverty Research Graduate Student Retreat. Sep 2017. Calistoga, CA.
- Presenter**, "Building Regional Resilience for Vulnerable Water Utilities: Learning from Californian Drought Responses" Resilience 2017. Aug 2017. Stockholm, Sweden.
- Co-Organizer**, Regional Small System Drought Resilience Workshops; **Presenter**, "Drought Resilience and Water Utilities" Summer 2017: Central Coast (July, Salinas, CA); Northern San Joaquin Valley (June, Modesto, CA); Clear Lake (June, Lakeport, CA).
- Presenter**, "Drought Resilience of Small Californian Utilities", American Association of Geographers Meeting, Apr 2017. Boston, MA.
- Presenter**, "Drought Resilience of Small Californian Utilities", California Geographical Society, Apr 2017. El Cajon, CA.
- Panelist**, "What are Researchers/Scientists doing to Build Resilience among California's Water Users". California Adaptation Forum, Sep 2016. Long Beach, CA.
- Speed Talk**, "Climate, Drought, and Drinking Water: Survey Results from California Utilities". World Water Week. Aug 2016. Stockholm, Sweden.
- Presenter**, "Drought Resilience among California's Drinking Water System" American Association of Geographers Annual Meeting (AAG), April 2016. San Francisco, CA.
- Presenter**, "Understanding California water agencies' climate adaptation decision-making" UCOWR/NIWR/CUAHSI Annual Conference. June 2014. Medford, MA.
- Presenter**, "Indexing Quito's vulnerability: a useful policy tool?" SEI Science Forum. Feb. 2013. Sweden.
- Presenter**, "Analyzing the Role of Rural Institutions in Enabling Adaptation to Climate Change in the Agricultural Sector" Adaptation Futures. May, 2012. Tucson, AZ.
- Presenter**, Initiative for Climate Adaptation Research and Understanding through the Social Sciences (ICARUS) II Conference (2011) and ICARUS I Conference (2010).