

Linda Estelí Méndez Barrientos

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CONTACT INFORMATION

Department of Environmental Science and Policy
University of California, Davis
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EDUCATION

University of California Davis, United States

Ph.D. Ecology
Concentration: Human Ecology (2015-expected 2020)

Montpellier SupAgro/Institut des Régions Chaudes (IRC), France

MSc. Tropical Agricultural Systems
Concentration: Institutions, Public Policies and Markets (2009-2010)

Wageningen Universiteit and Researchcentrum (WUR), The Netherlands

MSc. International Land and Water Management
Concentration: Water Management (2008-2010)

Pan-American School of Agriculture, Zamorano, Honduras

BSc. Agricultural Engineering
Concentration: Environmental Sciences and Development Economics (2004-2007)

PEER-REVIEWED PUBLICATIONS

Published

MacLeod, C., and **L. E. Méndez-Barrientos**. (2019). Groundwater Management in California's Central Valley: A Focus on Disadvantaged Communities. *Case Studies in the Environment*.

Méndez-Barrientos, L.E., Wester, P., Kemerink, J.S. and F. Molle. (2018). Commercial farmers' strategies to control water resources in South Africa: an empirical view of reform. *International Journal of Water Resources Development*, 34(2), 245-258.

Kemerink, J.S., **Méndez, L.E.**, Ahlers, R., Wester, P. and P. van der Zaag. (2013). The question of inclusion and representation in rural South Africa: challenging the concept of Water User Associations as a vehicle for transformation. *Water Policy*, 15(2), 243-257.

In Review

Méndez-Barrientos, L.E., DeVincentis, A., Rudnick, J., Dahlquist-Willard, R., Lowry, B. and K. Gould. Farmer participation in common-pool resource governance reforms: The case of groundwater management in California. *Society and Natural Resources* (submitted June 2019; accepted February 2020).

Brelsford, C., Dumas, M., Schlager, E., Dermody, B., Aiuvalasit, M., Allen-Dumas, M., Beecher, J., Bhatia, U., D'Odorico, P., Garcia, M., Gober, P., Groenfeldt, D., Lansing, S., Madani, K., **Méndez-Barrientos, L.E.**, Mondino, E., Muller, M., O'Donnell, F., Mbullo Owuor, P., Rising, J., Sanderson, M., Arguello de Souza, F., and S. Zipper. Developing an interdisciplinary science of sustainability: what can be learned from water systems? *Ecology & Society* (submitted September 2019).

Méndez-Barrientos, L.E., and H. Vera Coelho. Rol y producción de análisis científico como mecanismo de legitimación en la resistencia y defensa de derechos humanos en conflictos socio-ambientales. El caso del Proyecto Hidrotambo en Ecuador. *Íconos: Revista de Ciencias Sociales* (submitted December 2019).

Working papers

Méndez-Barrientos, L.E. A systematic review of power in collaborative environmental governance. (Target: *Public Administration Review*, February 2020).

Méndez-Barrientos, L.E. and M. Lubell. Weathering change: The influence of power asymmetries on groundwater management reform in California. (Target: *Global Environmental Change*, February 2020).

Méndez-Barrientos, L.E., Hidalgo-Bastidas, J.P., Rudnick, J., Ye, A., and A. Bucheli. Extractive and counter strategies of resistance for environmental justice in Ecuador. Analysis from a country-wide database on Environmental Justice. (Target: *Environmental Justice*, May 2020).

Méndez-Barrientos, L.E. and M. Lubell. Patterns of participation and representation: unpacking the relationships between power, institutional outputs and socio-environmental conditions.

Méndez-Barrientos, L.E., Lubell, M., and T. Scott. What explains collaborative networks for groundwater management under state-mandated water reform in California?

Méndez-Barrientos, L.E. and M. Lubell. Linking process to outputs: The influence of power asymmetries on perceptions of institutional performance.

Ng, J., Lee, S., Rudnick, J., Provost, M., **Méndez-Barrientos, L.E.**, Zemenick, A., and E. Laca. Holistic review in graduate admissions for an R1 STEM Program: Design, implementation, and assessment by students, faculty, and administration.

OTHER PUBLICATIONS (after 2015)

Méndez-Barrientos, L.E., Bostic, D., and M. Lubell. (2019). Implementing SGMA. Results from a stakeholder survey. Center for Environmental Policy and Behavior, University of California Davis.

Langridge, R., Fencl, A., and **L.E. Méndez-Barrientos**. (2019) Groundwater Security under Drought: Synthesis and Analysis of Information, and Recommendations to Address Knowledge Gaps. NSF SciSIP Report.

Lubell, M., Beutler, L., **Méndez-Barrientos, L.E.**, Dobbin, K., Rudnick, J., Struthers, C.L., Johnson, M., and S. Maxson. (2018). The Sustainable Groundwater Management Act Governance Conference: Research and Practice. Synthesis Report 2018.

Méndez-Barrientos, L.E. (2018). Plan de implementación para la gobernanza de agua subterránea. Plan Nacional del Agua del Ecuador. Secretaría Nacional del Agua, Ecuador.

Langridge, R., Sepaniak, S., Fencl, A., and **L.E. Méndez-Barrientos**. (2018). Management of Groundwater and Drought under Climate Change. A Report for California's Fourth Climate Assessment.

Rudnick, J., DeVincentis, A., and **L. Méndez-Barrientos**. (2016). The Sustainable Groundwater Management Act challenges the diversity of California farms. *California Agriculture*, 70(4), 169-173.

FUNDING AND AWARDS

External

Ford Foundation Fellowship Honorable Mention 2016

National Science Foundation (NSF) Graduate Research Fellowship Awardee (GRFP) 2016 (\$138,000)

NSF Climate Change, Water and Society (CCWAS) IGERT Trainee 2015-2017 (\$62,000)

AGRIS MUNDUS Scholarship (European Commission) 2008- 2010 (€42,000)

Internal

University of California Davis Mentorship Fellowship 2018-2019	(\$48,417.48)
Henry A. Jastro Research Grant 2019	(\$3960)
William and Linda Sullivan Environmental Sciences Scholarship 2019	(\$2000)
Henry A. Jastro Research Grant 2018	(\$3000)
Henry A. Jastro Research Grant 2017	(\$3000)
Tinker Foundation Awardee Summer Research Grant 2016	(\$2000)

Awards

Best Ph.D. student paper on 'Local Governance and Sustainability', Conference within the Conference, Southern Political Science Association (SPSA) conference, San Juan, Puerto Rico, January 9-11th, 2020.

Young Scientist Award Living Territories International Conference, Montpellier, France, January 22-24th, 2018

Young Professionals for Agricultural Development (YPARD) Mentorship Award, Tropentag Conference, Prague, Czech Republic, September 17-19th, 2014

Water Leader 2013, Water Education Foundation, California

Honors MSc. Thesis, Wageningen University, The Netherlands, November 11th, 2010

Honors Agriculture Students Society "Gamma Sigma Delta" (2007-present)

SERVICE AND LEADERSHIP

Diversity

- Member of the Staff Diversity Administrative Advisory Committee (SDAAC), an advisory body to the Provost and Chancellor at UC Davis (2018)
- Co-chair of the Diversity Committee for the Ecology Graduate Group, UC Davis (September 2016-2018); co-led introduction and development of 8-trait rubric for *holistic review* and the structural change on GRE requirement (to be dropped by 2020) for the Graduate Group in Ecology (GGE)
- Member of the Admissions Committee for the GGE, UC Davis (September 2016-2018) that led development of holistic review process now being expanded by Graduate Studies
- Member of the Diversity Committee, Environmental Defense Fund (EDF)(September 2012- 2015); co-led development of EDF's first diversity strategic plan (2014)

Social and Environmental Justice

- Founder, *S2E - Science to Empower*, an initiative to connect disadvantaged communities to scientists and researchers to meet scientific needs that would support environmental justice claims (2018-present)
- Co-founder of the Environmental Justice Graduate Working Group at UC Davis (2017)
- Member of the Left Coast Political Ecology Group (2018-present)
- Board of Directors member of *Help Educate*, a non-profit that supports access to higher education for students coming from rural communities in Nicaragua (September 2013-2016)
- Degrowth and Environmental Justice Summer School, ICTA-UAB, Barcelona, Spain, July 4-15th, 2016
- Co-founder of the Youth Political Movement PUENTE of Nicaragua (2008), a youth organization with the goal of supporting democracy and a new political culture in Nicaragua
- Community Organizer for the Yeguaré Initiative, Dept. Environment and Socioeconomic Development, Zamorano, Honduras. Led outreach to organize a water commission, developed microfinance plans for individual small-scale farmers, and led movement building to improve youth participation and inclusion in different development projects (January 2005-December 2006)

Reviewer

Water SA, Environmental Management

Other

- President AGRIS MUNDUS Student Association (2008-2009)
- Representative for NITROCA: International Land and Water Management Student Association at Wageningen University, the Netherlands (2008)
- Founder and President of the Soil Science Club of Zamorano University, Honduras (2005-2007)

TEACHING, ADVISING AND MENTORSHIP

Courses

Upper Division and Graduate level: Environmental Justice (*Instructor of Record* (Spring 2019), Teaching Assistant (Spring 2018))

Graduate level: Grant Writing (Teaching Assistant (Fall 2016, 2017, 2019))

Upper Division level: Water Policy (Teaching Assistant (expected Spring 2020))

Advising

Sean Maxson (IAD Master thesis)

Clara MacLeod (EPAP Undergraduate thesis)

Mentoring

Darcy Bostic (Hydrology MSc.)

Bridget Lowry (ESM BSc.)

Angi Ye (EPAP BSc.)

Alexandra Bucheli (Pol Sci. BSc.)

Lauren Josefov (EPAP BSc.)

Nanci Torres-Poblano (EPAP BSc.)

Nguyen Nhat Nguyen (Comm. Dev. BSc.)

Iván Ornelas (Comms. BSc.)

CONFERENCES (after 2015)

Méndez-Barrientos, L.E. (invited). S-E approaches to watershed management and governance workshop, National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD, February 19th-21st.

Méndez-Barrientos, L.E., and M. Lubell. (2020). Weathering change: The influence of power asymmetries on groundwater management reform in California. Presented at the South Political Scientist Association (SPSA) Conference, San Juan, Puerto Rico, January 9-11th, 2020.

Méndez-Barrientos, L.E. (2019). A systematic review of power in collaborative environmental governance. Presented at the International Association for the Study of the Commons (IASC) Conference, Lima, Peru, July 1-5th.

Méndez-Barrientos, L.E., Rudnick, J., DeVincentis, A., Dahlquist-Willard, R., Lowry, B. and K. Gould. (2019). Drivers of farmer participation in groundwater management in California. Presented at the International Association for the Study of the Commons (IASC) Conference, Lima, Peru, July 1-5th.

Méndez-Barrientos, L.E., and M. Lubell. (2019). What explains collaborative networks for groundwater management in California under state-mandated water reform? Presented at the Political Networks (POLNET) conference, Durham, NC, May 29th-June 1st, and at the Western Political Science Association (WPSA), San Diego, CA, April 17-20th.

Méndez-Barrientos, L.E., and H. Vera Coelho. (2019). Rol y producción de análisis científico como mecanismo de legitimación en la resistencia y defensa de derechos humanos en conflictos socio-ambientales. El caso del Proyecto Hidrotambo en Ecuador. Presented at the International Association for the Study of the Commons (IASC) Conference, Lima, Peru, July 1-5th, and at the Encuentro de Geógrafos de América Latina (EGAL), Quito, Ecuador, April 9-12th.

(*Organizer*) Sustainable Groundwater Governance Research and Practice Workshop. (2018). Davis, CA, February 6th, 2018.

Méndez-Barrientos, L.E. (2018). An empirical view on the implementation of the Sustainable Groundwater Management Act (SGMA) in California. Presented at the Duck Family Graduate Workshop on Environmental Governance, Seattle, WA, May 16-18th, 2018, and at the American Political Science Association (APSA), San Francisco, CA, August 31st-September 3rd, 2017.

Méndez-Barrientos, L.E., Lubell, M., and C. MacLeod. (2017). What determines ‘voluntary’ action? Understanding the implementation of groundwater management plans in California. Presented at the XVI Biennial International Association for the Study of the Commons (IASC) Conference, Utrecht, The Netherlands, July 10-14th.

Méndez-Barrientos, L.E., Lubell, M. and C. MacLeod. (2016). Understanding the timing and duration of implementation processes of groundwater management plans under AB3030 in California. Presented at the “Toward Sustainable Groundwater in Agriculture – International Conference linking Science and Policy”, San Francisco, CA, June 28-30th.

(*Organizer*) Weathering Change: The impact of climate change and the Sustainable Groundwater Management Act (SGMA) on California’s Water Conference, Davis, CA, April 4-5th, 2016.

Méndez-Barrientos, L.E. (2016). Developing Equitable Governance Institutions in Complex Socio-Ecological Systems. Poster presented at the American Association of Geographers (AAG) Conference, San Francisco, CA, March 29th-April 2nd.

PROFESSIONAL EXPERIENCE

Consultant (August 2018-November 2018)

Secretaría Nacional del Agua, República del Ecuador

- Developed the Strategic Groundwater Management Plan for the country National Water Plan.
- Reviewed the engineering, environmental, and social studies of the Hidrotambo hydroelectric project
- Provided expert testimony to the Community San Pablo de Amalf in their environmental justice case

Senior Analyst (April 2014 – May 2015), *Research Analyst* (September 2012-April 2014), *Tom Graff Fellow* (September 2011-September 2012)

Environmental Defense Fund, San Francisco, CA

- Represented EDF in multiple collaborative settings and advocated for science and performance-based conservation
- Tracked, analyzed, coordinated outreach and developed recommendations for the development of the Sustainable Groundwater Management Act (SGMA) of 2014
- Coordinated implementation and management of science-related deliverables, manage consultants, internal and external science committees and partner relationships
- Coordinated scientific committees to develop habitat quantification metrics for multiple California-based payment for ecosystem services (PES) pilot programs
- Identified and prepared habitat restoration proposals for a variety of private funders and State agencies, secure funding, and led environmental and policy analyses to inform strategic planning decisions.
- Facilitated high-impact meetings and workshops with various state agencies officials and partners; conducted stakeholder outreach

Researcher and GIS Analyst (March 2011-September 2011)

International Rivers, Berkeley, CA

- Conducted research and GIS analyses for different international campaigns; Analyzed and modeled inundated areas for proposed dams

Visiting Researcher (April-November 2010)

UNESCO-IHE Institute for Water Education/University of KwaZulu-Natal, South Africa

- Led conception, design and implementation of a research project to analyze the current institutional decentralization processes of land and water reform in KwaZulu-Natal province

- Led ethnographic research; spearheaded stakeholder interviews with policy makers, farmers, non-profits and community members on land and water policy reform; facilitated community meetings and focus group discussions

Consultant (March-April 2010)

Groupe d'Etude de Recherche et d'Appui au Développement, Senegal

- Co-led impact evaluation assessment of the microfinance program of GERAD, region of Fatick

Program Coordinator (January-June 2008)

Dept. Environment and Socioeconomic Development, Zamorano, Honduras

- Led impact evaluation of an irrigation project funded by Engineers without Borders and AECI (Spanish Cooperation for Development) in Jinotega, Nicaragua

Research Intern (January-April 2007)

Development Economics Group, Wageningen University, the Netherlands

- With STATA and the LSMS database, analyzed rural households' strategies to cope with disaster and risk in the aftermath of Hurricane Mitch (1998) in Nicaragua

INVITED TALKS AND WORKSHOPS (after 2015)

Méndez-Barrientos, L.E. (2019). Water at the heart of politics in California. Presentation to the organization Swing Left, San Francisco, CA, September 11th.

Méndez-Barrientos, L.E. (2019). Dealing with institutional change. Understanding the implementation of the Sustainable Groundwater Management Act (SGMA) in California. Presentation to the Mexican, Chicano and Latin American Student Association, University of California Davis, CA, May 11th.

Méndez-Barrientos, L.E. (2018). From chaos to order? The evolution of groundwater management in California. Presentation to the Water Ministry of Morocco (Convener: World Bank), Rabat, Morocco, June 19th.

Méndez-Barrientos, L.E. (2018). Developing equitable governance institutions in complex socio-ecological systems. Research jam presentation at the Modeling and Measuring Socio-Hydrological Dynamics across Scales Water Workshop, Santa Fe Institute, NM, June 11-14th.

Méndez-Barrientos, L.E. (2017). Developing equitable governance institutions in complex socio-ecological systems. Presented at the Hydraulic Society Revisited Workshop, University of California Berkeley, CA, April 21st.

RESEARCH IN THE NEWS

Plan V Especiales. (2019). [Ecuador legaliza el agua que no existe](#). Sobrevivientes: Una bitácora que pone rostro a las violaciones a los DDHH en Ecuador entre 2007 y 2017.

La Fuente, Periodismo de Investigación. (2019). [San Pablo de Amalí: Un pueblo sin agua](#). January 3rd, 2019.

Downing, J. (2018). [UC groundwater research: A survey](#). *California Agriculture*, 72(1), 8-15.

Horn, M. (2013). [A new shade of green: turning wine into water in California](#). Environmental Defense Fund's Solutions Magazine, Spring 2013.

Klebnikov, P. (2012). [What's nature worth?](#) Environmental Defense Fund's Solutions Magazine, Winter 2012.

LANGUAGES AND SKILLS

- Trilingual: Native Spanish speaker with bilingual proficiency in English and French
- Software: Proficient user of R (for statistical computing), ArcGIS and Microsoft Package