

Linda Estelí Méndez Barrientos

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: Environmental Policy and Human Ecology (expected April 2021)

Dissertation title: Dealing with Change. Power and institutional change in sustainability reforms.

Committee Chair: Dr. Mark Lubell; Co-Tutelle: Dr. Tiffany Morrison (James Cook University)

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)

PUBLICATIONS

Refereed Journal Articles

Méndez-Barrientos, L.E., DeVincentis, A., Rudnick, J., Dahlquist-Willard, R., Lowry, B. and K. Gould. (2020). Farmer participation and institutional capture in common-pool resource governance reforms: The case of groundwater management in California. *Society and Natural Resources*, 1-22.

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. (2020). Developing an interdisciplinary science of sustainability: what can be learned from water systems? *Ecology & Society*, 25(2).

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*, 3(1), 1-13.

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.

Manuscripts in Submission

Méndez-Barrientos, L.E., Lubell, M., and T. Morrison. “Where do we go from here”: Indicators of power in environmental governance. (Submitted to *Environmental Politics*).

Méndez-Barrientos, L.E. Weathering change: Power asymmetries in deliberate sustainability reforms. The case of groundwater management reform in California. (Submitted to *Global Environmental Change*).

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. (Submitted to *Ecología Política*).

Manuscripts in Preparation

Méndez-Barrientos, L.E., Rudnick, J., Hidalgo-Bastidas, J.P, Cisneros, P., Lowry, B., and A. Ye. Actors and their strategies on environmental conflicts. A network analysis on environmental justice in Ecuador.

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

Laca, E., Provost, M., Koontz, M., Ng, J., Rudnick, J., **Méndez-Barrientos, L.E.**, and A. Todgham. Novel integration of holistic review and statistical analysis to rank applications in an R1 STEM graduate program.

Reform without transformation: unpacking the relationships between power, institutional outputs, and allocation of environmental burdens.

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. Mendez-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.

GRANTS AND AWARDS

External Grants

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
Political Networks Conference Travel Fellowship 2019	\$900

Internal Grants

(<i>Team selected</i>) University of California Davis DataLab: Data Science and Informatics Collaboration	
University of California Davis Mentorship Fellowship 2018-2019	\$48,417.48
The Green Fund Initiative (TGFI) for <i>S2E-Science to Empower</i>	\$11,000
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’, 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 removal of the *GRE* requirement 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 Alternatives, Water SA, Environmental Management, Groundwater and Sustainable Development, Case Studies in the Environment

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 (Spring 2020))

Advising

Sean Maxson (IAD Master thesis, 2018)

Clara MacLeod (EPAP Undergraduate thesis, 2017)

Mentoring

Darcy Bostic (Hydrology MSc.)

Bridget Lowry (ESM BSc.)

Angi Ye (EPAP BSc.)

Lauren Josefov (EPAP BSc.)

Nanci Torres-Poblano (EPAP BSc.)

Nguyen Nhat Nguyen (Comm. Dev. BSc.)

Iván Ornelas (Comms. BSc.)

INVITED TALKS (after 2015)

Weathering change: Power asymmetries in deliberate sustainability reforms. The case of groundwater management reform in California. Dept. Sociology & Anthropology, University of Texas El Paso, TX, November 5th, 2020.

Weathering change: Power asymmetries in deliberate sustainability reforms. The case of groundwater management reform in California. Global Institute of Sustainability and Innovation, Arizona State University, AZ, October 5th, 2020.

Where do we go from here? Indicators of power in Environmental Governance. Dept. Political Science, Colorado State University, CO, September 8th, 2020.

Dealing with change: Integrating power scholarship into environmental governance. Energy and Resources (ERG) and Environmental Science Policy and Management (ESPM) Seminar. University of California Berkeley, CA, March 4th, 2020.

Water at the heart of politics in California. Swing Left, San Francisco, CA, September 11th, 2019.

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

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

Developing equitable governance institutions in complex socio-ecological systems. Modeling and Measuring Socio-Hydrological Dynamics across Scales Water Workshop, Santa Fe Institute, NM, June 11-14th, 2018.

Developing equitable governance institutions in complex socio-ecological systems. The Hydraulic Society Revisited Workshop, University of California Berkeley, CA, April 21st, 2017.

RESEARCH IN THE NEWS

- [Small farmers shortchanged by SGMA?](#) SF Estuary Magazine. September 2020.
- [Water reform in California's institutional ecosystem.](#) Water Talk Podcast. California Institute of Water Resources, July 7th. Statistics: 1000 downloads, July 30th, 2020.
- [Highlighting the gap between policy design and implementation.](#) The Confluence. California Institute of Water Resources, University of California. December 2nd, 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. Plan V Especiales, 2019.
- [San Pablo de Amalí: Un pueblo sin agua.](#) La Fuente, Periodismo de Investigación. January 3rd, 2019.
- Downing, J. (2018). [UC groundwater research: A survey.](#) *California Agriculture*, 72(1), 8-15.
- [A new shade of green: turning wine into water in California.](#) Environmental Defense Fund's Solutions Magazine, Spring 2013.
- [What's nature worth?](#) Environmental Defense Fund's Solutions Magazine, Winter 2012.

CONFERENCES (after 2015)

Conference, Workshops or Panels Organized

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

(Lead 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.

Papers Presented

(Invited). S-E approaches to watershed management and governance workshop, National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD, February 19th-21st, 2020.

Weathering change: The influence of power asymmetries on groundwater management reform in California. Southern Political Science Association (SPSA) Conference, San Juan, Puerto Rico, January 9-11th, 2020.

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

Drivers of farmer participation in groundwater management in California. International Association for the Study of the Commons (IASC) Conference, Lima, Peru, July 1-5th, 2019.

What explains collaborative networks for groundwater management in California under state-mandated water reform? Political Networks (POLNET) conference, Durham, NC, May 29th-June 1st, 2019, and Western Political Science Association (WPSA), San Diego, CA, April 17-20th, 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. International Association for the Study of the Commons (IASC) Conference, Lima, Peru, July 1-5th, 2019, and Encuentro de Geógrafos de América Latina (EGAL), Quito, Ecuador, April 9-12th, 2019.

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

What determines ‘voluntary’ action? Understanding the implementation of groundwater management plans in California. International Association for the Study of the Commons (IASC) Conference, Utrecht, The Netherlands, July 10-14th, 2017.

Understanding the timing and duration of implementation processes of groundwater management plans under AB3030 in California. “Toward Sustainable Groundwater in Agriculture – International Conference linking Science and Policy”, San Francisco, CA, June 28-30th, 2017.

Developing Equitable Governance Institutions in Complex Socio-Ecological Systems. American Association of Geographers (AAG) Conference, San Francisco, CA, March 29th-April 2nd, 2016.

Chair and Discussant

Chair (Environmental Politics), Southern Political Science Association (SPSA), 2020.

PROFESSIONAL EXPERIENCE

Consultant (August 2018-November 2018)

Secretaría Nacional del Agua, República del Ecuador

- Developed the Strategic Groundwater Management Plan for the country’s National Water Plan.

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 high-impact meetings with government officials, coordinated implementation and management of science-related deliverables, consultants, internal and external science committees and partner relationships

Researcher and GIS Analyst (March 2011-September 2011)

International Rivers, Berkeley, CA

- Conducted research and GIS analyses for different international campaigns

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 the KwaZulu-Natal province

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

LANGUAGES AND SKILLS

- Trilingual: Native Spanish speaker with bilingual proficiency in English and French
- Software R, Qualtrics, ArcGIS, and LaTeX

REFERENCES

Mark N. Lubell

Professor

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Gwen Arnold

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Tyler A. Scott

Assistant Professor

Dept. Environmental Science and Policy

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Tiffany Morrison

Professor

Centre of Excellence for Coral Reef Studies

James Cook University Townsville

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Philippus Wester

Regional Program Manager

International Centre for Integrated Mountain

Development (ICIMOD)

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