DAVID E. FUENTE
Associate Professor
School of the Earth, Ocean & Environment
University of South Carolina
fuente@seoe.sc.edu - 803.777.2757

CURRENT APPOINTMENT

2017-pres. **School of the Earth, Ocean & Environment** **Columbia, SC**
University of South Carolina
Associate Professor (with tenure) (2023 – present)
McCausland Faculty Fellow (2023 – present)
Assistant Professor (Aug. 2017 – 2023)
Affiliations:
Faculty Associate – Walker Institute for International and Area Studies (Fall 2017 – present)
Faculty Affiliate – Rule of Law Collaborative (Fall 2017 – present)

Research interests: Water & Sanitation Service Delivery, Infrastructure Planning & Regulation, International Development, Water Policy, Environmental Economics & Policy, Benefit-Cost Analysis

EDUCATION

2017 **Department of City and Regional Planning** **Chapel Hill, NC**
University of North Carolina – Chapel Hill
PhD, 2017
Dissertation: *Water and Sanitation Service Delivery in Sub Saharan Africa*.
Chair: Dale Whittington

2007 **School of Public and Environmental Affairs (SPEA)** **Bloomington, IN**
Indiana University
MPA (Policy Analysis), 2007
MS in Environmental Science (Water Resources), 2007

2003 **Lilly Family School of Philanthropy** **Indianapolis, IN**
Indiana University
MA in Philanthropic Studies, 2003

2001 **Colby College** **Waterville, ME**
BA in Geology with Distinction, 2001
Summa Cum Laude Phi Beta Kappa

ADDITIONAL PROFESSIONAL EXPERIENCE

Jul 2015 – Jul 2017 **Water Institute, UNC Gillings School of Global Public Health** **Chapel Hill, NC**
Lead Scientist

Oct 2008 - Jan 2011 **Centre for Development Finance, IFMR** **Chennai, India**
Program Head, Infrastructure and Governance

May 2007 - Aug 2008 **Indiana University** **Bloomington, IN**
Adjunct Faculty, School of Public and Environmental Affairs
Interim Director, Office of Sustainability

Aug 2003 - Jul 2004 **Self-Employed Women's Association (SEWA)** **Ahmedabad, India**
American India Foundation William J. Clinton Fellow

Jul 2001 - Jul 2003 **The Center on Philanthropy** **Indianapolis, IN**
Coordinator, Jane Addams-Andrew Carnegie Fellowship (2002-3)
Jane Addams-Andrew Carnegie Fellow (2001-2)

PUBLICATIONS

Under Review

"How intermittent piped water supplies impact households and coping strategies: A systematic review" with Broyles et al. (Revise and resubmit at *Environmental Research Letters*)

"Learning by doing: Distributional analysis of Ghana's Free Water Program during the COVID-19 pandemic" with Amoah, A., Amuakwa-Mensah, F. and J. Cook. (Revise and resubmit at *Water Resources Research*)

Journal Articles

Fuente, David, Richard Mulwa, Mbutu Mwaura, Josiah Gitu, and Joseph Cook. "Forgive Us Our Sins—Experimental Evidence on Arrears Forgiveness and Bill Payment from Nairobi, Kenya." *Journal of Policy Analysis and Management* 45, no. 4 (2026): e70132. https://doi.org/10.1002/pam.70132.

Thelemaque, Nathalie, Emily Kumpel, Caitlyn Butler, Bessie Weston, Charissa Williar, and **David Fuente**. "Water and Sanitation in Rural Alaska: A Scoping Review." *ACS ES&T Water*, ahead of print, August 24, 2026. https://doi.org/10.1021/acsestwater.6c00343.

Fuente, David, Mbutu Mwaura, Josiah Gitu, Richard Mulwa, and Joseph Cook. 2026. "Improving Payment for Essential Services – A Field Experiment in Nairobi, Kenya." *Utilities Policy* 101: 102240. doi:10.1016/j.jup.2026.102240.

Thomson, Patrick, Melissa Beresford, Jobayer Hossain, Cara Jacob, Carolina Jordão, Oswaldo Medina-Ramírez, Sophie Neems, et al. 2026. "Addressing Failing Water Systems: A Qualitative Protocol for Intervention Research on Water Insecurity." *International Journal of Qualitative Methods* 25: 16094069261432752. doi:10.1177/16094069261432752.

Thomson, Patrick, Amber L. Pearson, Emily Kumpel, Danice B. Guzmán, Cassandra L. Workman, **David Fuente**, Amber Wutich, and Justin Stoler. "Water Supply Interruptions Are Associated with More Frequent Stressful Behaviors and Emotions but Mitigated by Predictability: A Multisite Study." *Environmental Science & Technology*, April 10, 2024. https://doi.org/10.1021/acs.est.3c08443.

Fuente, David, Richard Mulwa, and Joseph Cook. "Out of Sight Out of Mind: Household Perceptions of 'Fair' Water Prices in Nairobi, Kenya." *Water Resources Research* 59, no. 3 (2023): e2022WR033374. https://doi.org/10.1029/2022WR033374.

Grasham, C. F., Hoque, S. F., Korzenevica, M., **Fuente, D.**, Goyol, K., Verstraete, L., Mueze, K., Tsadik, M. Zeleke, G. and K. Charles. 2022. "Equitable Urban Water Security: Beyond Connections on Premises." *Environmental Research: Infrastructure and Sustainability* 2, no. 4 (December 2022): 045011. https://doi.org/10.1088/2634-4505/ac9c8d.

Fuente, David, Emily Mosites, Sara Bressler, Laura Eichelberger, Brian Lefferts, Gerald January, Rosalyn Singleton, and Timothy Thomas. 2022. "Health-Related Economic Benefits of Universal Access to Piped Water in Arctic Communities: Estimates for the Yukon-Kuskokwim Delta Region of Alaska." *International Journal of Hygiene and Environmental Health* 240 (March 1, 2022): 113915. https://doi.org/10.1016/j.ijheh.2021.113915.

Fuente, David, Jane Kabubo-Mariara, Peter Kimuyu, Mbutu Mwaura, and Dale Whittington. 2021. "Assessing the Performance of Water and Sanitation Tariffs: The Case of Nairobi, Kenya." *Water Resources Research* 57, no. 9 (2021): e2019WR025791. https://doi.org/10.1029/2019WR025791.

Journal Articles (cont.'d)

Kanyangarara, Mufaro, Savannah Allen, Safia S. Jiwani, and **David Fuente**. 2021. "Access to Water, Sanitation and Hygiene Services in Health Facilities in Sub-Saharan Africa 2013–2018: Results of Health Facility Surveys and Implications for COVID-19 Transmission." *BMC Health Services Research* 21, no. 1 (June 25, 2021): 601. https://doi.org/10.1186/s12913-021-06515-z.

Anderson, D., Cronk, R., Pak, E., **Fuente, D.**, Tracy, J., Mofolo, I., Hoffman, I. and J. Bartram. 2021. "Development and Application of Tools to Cost Delivery of Environmental Health Services in Healthcare Facilities: A Financial Analysis in Urban Malawi." *BMC Health Services Research* 21: 329. (April 13, 2021) https://doi.org/10.1186/s12913-021-06325-3

Crocker, Jonny, **Fuente, David**, and Jamie Bartram. 2021. "Cost Effectiveness of Community Led Total Sanitation in Ethiopia and Ghana." *International Journal of Hygiene and Environmental Health* 232 (March 1, 2021): 113682. https://doi.org/10.1016/j.ijheh.2020.113682.

Amaechina, E., Amoah, A., Amuakwa-Mensah, F., Amuakwa-Mensah, S., Bbaale, E., Bonilla, J., Brühl, J., Chukwuone, N., Cook, J., **Fuente, D.**, Madrigal-Ballestero, R., Marin, R., Nam, P., Otieno, J., Ponce, R., Saldarriaga, C., Lavín, F., Viguera, B., and M. Visser. 2020. "Policy Note: Policy responses to ensure access to water and sanitation services during COVID-19: Snapshots from the Environment for Development (EFD) network." *Water Economics and Policy* 6(4): 2071002. https://doi.org/10.1142/S2382624X20710022.

[+]Mosites, Emily, Brian Lefferts, Sara Seeman, Gerald January, Jennifer Dobson, **David Fuente**, Michael Bruce, Timothy Thomas, and Thomas Hennessy. 2020. "Community Water Service and Incidence of Respiratory, Skin, and Gastrointestinal Infections in Rural Alaska, 2013–2015." *International Journal of Hygiene and Environmental Health* 225 (April 1, 2020): 113475. https://doi.org/10.1016/j.ijheh.2020.113475.
[+] *Nominated for the U.S. Centers for Disease Control and Prevention Charles C. Shepard Science Award*

Fuente, David, Maura Allaire, Marc Jeuland, and Dale Whittington. 2020. "Forecasts of Mortality and Economic Losses from Poor Water and Sanitation in Sub-Saharan Africa." *PLOS ONE* 15, no. 3 (March 20, 2020): e0227611. https://doi.org/10.1371/journal.pone.0227611.

Cook, Joseph, **Fuente, David**, and Dale Whittington. 2020. "Choosing Among Pro-Poor Policy Options in the Delivery of Municipal Water Services." *Water Economics and Policy*, 1950013. https://doi.org/10.1142/S2382624X19500139.

Fuente. D. 2019. The design and evaluation of water tariffs: A systematic review. *Utilities Policy*, 61: 100975. https://doi.org/10.1016/j.jup.2019.100975.

Connolly[a], Katherine, Mwaura Mbutu, Jamie Bartram, and **David Fuente**[*]. "Perceptions of Climate-Related Risk among Water Sector Professionals in Africa—Insights from the 2016 African Water Association Congress." *International Journal of Hygiene and Environmental Health*, April 2018. https://doi.org/10.1016/j.ijheh.2018.04.007.
[a] *Graduate student co-author*
[*] *Corresponding author*

Fuente, D. and J. Bartram. 2018. Pro-Poor Governance in Water and Sanitation Service Delivery: Evidence from Global Analysis and Assessment of Sanitation and Drinking Water Surveys. *Perspectives in Public Health*, 175791391878810. https://doi.org/10.1177/1757913918788109.

Journal Articles (cont.'d)

^+**Fuente, D.**, Gakii Gatua, J., Ikiara, M., Kabubo-Mariara, J., Mwaura, M., Whittington, D. 2016. Water and sanitation service delivery, pricing, and the poor: An empirical estimate of subsidy incidence in Nairobi, Kenya, *Water Resources Research*, 52, doi:10.1002/ 2015WR018375.

+ Selected by the editors to be profiled as a Research Spotlight on the WRR website and in the American Geophysical Union publication Eos (link).

^ Received 2017 *Water Resources Research* Editors' Choice Award

Whittington, D., Nauges, C., **Fuente, D.,** Wu, X. 2015. A Diagnostic Tool for Estimating the Incidence of Subsidies Delivered by Water Utilities in Low- and Medium-Income Countries, with Illustrative Simulations. *Utilities Policy* 34:70-81.

Jeuland, M., **Fuente, D.**, Ozdemir, S., Allaire, M., Whittington, D. 2013. The long-term dynamics of mortality benefits from improved water and sanitation in less developed countries. *PLoS One* 8(10).

Book Chapters

Cook, J., D. Whittington, **Fuente, D.**, and M. Matichich. 2020. "A global assessment of non-tariff customer assistance programs in water supply and sanitation." In Z. Chen, W. M. Bowen, and D. Whittington, eds. *Development Studies in Regional Science: Essays in Honor of Kingsley E. Haynes*. Springer Nature.

Jeuland, M., Ozdemir, S., **Fuente, D.**, Allaire, M., Whittington, D. 2013. "Economic losses from poor water and sanitation: Past, present, and future." In Lomborg, B. (ed). *The Twentieth Century Scorecard: How Much Did Global Problems Cost the World? Progress Since 1900, Prospects to 2050*. Cambridge: Cambridge University Press.

Fuente, D. and Whittington, D. 2012. Randomized control trials: What are they, why are they promoted as the 'gold standard' for casual identification, and what can they (not) tell us? In Wu, X., Ramesh, M.H., Fritzen, S., and Araral, E. (eds). *Routledge Handbook of the Policy Process*. Oxford: Routledge.

Fuente, D. 2011. Pro-Poor renewable technology and its impact on society: Decentralized renewable energy technologies. In Lele, A. and Goswami, N. (eds). *Imaging Asia in 2030: Trends, Scenarios and Alternatives*. New Delhi: Academic Foundation Press.

Reports & Working Papers

Fuente, D., Gitu, J., Mwaura, M., Mulwa, R., and J. Cook. "Forgive us our sins – Experimental evidence on arrears forgiveness and bill payment from Nairobi, Kenya." *Environment for Development Discussion Paper Series* EfD DP 25-12 (link)

Fuente, D., Gitu, J., Mwaura, M., Mulwa, R., and J. Cook. 2024. "Improving payment for essential services – A field experiment in Nairobi, Kenya." *Environment for Development Discussion Paper Series* EfD DP 24-13. (link)

** Awarded the Peter Berck Best Discussion Paper Award at the 19th Annual Meeting of the Environment for Development Initiative in Dar es Salaam, Tanzania.*

Randriamaro, T., Espinola-Arredondo, A., **Fuente, D.** and J. Cook. 2024. "A theoretical model of utility bill payment behavior" *Environment for Development Discussion Paper Series* EfD DP 24-01 (link)

Fuente, D. 2024. "Guidelines for economic analysis of investments based on climate resilience and circularity for urban water infrastructure" in *Water and Climate Economics Research and Analytics: Guidelines of Economic Analysis*. Washington, DC: World Bank. (link)

Reports &
Working Papers (cont.'d)

Otieno, J., Cook, J. and **D. Fuente**. 2023. "The coping costs of dealing with unreliable water supply in the Nairobi commercial sector: An analysis of coping mechanisms for Kenya business". EfD Discussion paper DP23-03.

Grasham, C.F., Hoque, S.F., Korzenevica, M., **Fuente, D.**, Goyol, K., Verstraete, L., Mueze, K., Tsadik, M., Zeleke, G., and Charles, K.J. 2022. Improving management in piped water systems in small towns in Ethiopia. Research Brief: REACH Research Programme.

Howard, G., Bartram, J., Williams, A., Overbo, A., **Fuente, D.** and J. Geere. 2020. *Domestic Water Quantity, Accessibility and Health - 2nd Edition*. Geneva: World Health Organization. (link)

Fuente, D. and Whittington, D. 2018. *Water and sanitation tariffs – A review of global practices*. Prepared for the World Bank.

Fuente, D., Jackson, D., Whittington, D. 2018. *Tariff design and assessment – Best practices and new approaches*. Prepared for the United States Millennium Challenge Corporation.

Cook, J., Whittington, D., **Fuente, D.**, Matichich, M. 2018. *Customer assistance for water and sanitation services – Global assessment and best practices*. Prepared for the United States Millennium Challenge Corporation.

Barnes, N., **Fuente, D.**, Cook, J., Whittington, D., Jackson, D. Matichich, M. 2018. *Handbook of Water Sector Tariff Setting: Balancing Cost-of-Service Equity and Social Equity*. Prepared for the United States Millennium Challenge Corporation.

Fuente, D., Kabubo-Mariara, J., Kimuyu, P. Mwaura, M., and D. Whittington. 2017. Assessing the performance of alternative water and sanitation tariffs – The case of Nairobi, Kenya. *Environment for Development Discussion Paper Series* DP 17-21 Rev: 1-45. (link)

Fuente, D. 2017. *Scoping study and strategy for global research program on subsidies in the water and sanitation sectors.* Prepared for the World Bank.

Brockelhurst, C., Lockwood, H., **Fuente, D.** 2017. Community management. *WaSH Policy Research Digest* 6, 1-4. (link)

Brockelhurst, C., Feighery, J. **Fuente, D.** 2017. Intermittent water supply. *WaSH Policy Research Digest* 7, 1-4. (link)

Fuente, D. and C. Brockelhurst. 2016. Water tariffs and subsidies. *WaSH Policy Research Digest* 5, 1-4. (link)

Fuente, D. 2016. *Pro-poor programming in water and sanitation service delivery: Insights from the GLAAS surveys*. Prepared for the World Health Organization.

Fuente, D. and C. Brockelhurst. 2015. Sanitation subsidies. *WaSH Policy Research Digest* 1, 1-4. (link)

Fuente, D., Allaire, M., Jeuland, M., Whittington, D. 2015. Forecasts of mortality and economic losses from poor water and sanitation in sub-Saharan Africa. *Global Development Network Technical Focus Paper.* (link)

Fuente, D., Ozdemir, S., Allaire, M., Whittington, D. 2012. *Application of Cost-Effectiveness Analysis in the Water and Sanitation Sector*. Global Development Network Public Expenditure Accountability Discussion Paper No. 1: 1-28. (link)

Whittington, D. Nauges, C., Wu, X., **Fuente, D.**, Ramadan, R. 2012. *The Challenge of Cost Recovery and Tariff Reform in Six Utilities in the Delta Region of Egypt*. Report submitted to the Egyptian Water Regulatory Authority and USAID Water Policy and Regulatory Reform Project**.**

Bairiganjan, S., Cheung, R., Delio, E. **Fuente, D.**, Lall, S., Singh, S. 2010. *Power to the People: Investing in Clean Energy for the Base of the Pyramid in India*. World Resources Institute: Washington, DC. (link)

Fuente, D. 2006. *Perspectives on Gender, Water, and Conflict: The AIF Learning Program on Water*. American India Foundation: New Delhi.

Fuente, D. 2004. *Targeting the Poorest: SEWA's Approach*. Jeevika – Livelihood Security Project for Earthquake-Affected Rural Households in Gujarat. Self-Employed Women's Association: Ahmedabad, Gujarat.

Fuente, D. 2004. *Water and Sanitation: Voices of SEWA Members.* SEWA Drinking Water Campaign. Self-Employed Women's Association: Ahmedabad, Gujarat.

GRANT ACTIVITY

Awarded

"Unlocking finance to support resilient water and sanitation service delivery in African cities" Fuente, David (Co-PI), Visser, Martine (Co-PI), Cook, Jospeh (Co-PI), Madrigal, Roger (Co-PI) Environment for Development Initiative (~$224,000) 2026-2028. (Approved but not disbursed)

"Chu med na yul med (without water there is no life): Investigating water security in the trans-Himalayan region of Ladakh, India." Fuente, David (PI) Office of the Vice President for Research USC ($15,000) 2025-2026.

"Evaluation of the Alaska Native Tribal Health Consortium's Potable Water Delivery Project." Fuente, D. (PI). Alaska Native Tribal Health Consortium ($80,757) 2024-2026.

"Applied Implementation Research for Clean Cooking in Cambodia (AIRC3): Equity, exposure, costs, and benefits of induction stove interventions" Freeman, M. (PI), Pillarisetti, A (PI), Fuente (Co-I), et al. National Institute of Environmental Health Sciences (NIEHS) (~$5.75M) 2024-2029.

"Water Insecurity and Water Equity in South Carolina" Fuente, David (PI) Office of the Vice President for Research USC ($14,262) 2024-2026.

"Climate adaptation and resilience among remote communities: Comparative perspectives from the Yukon-Kuskokwim Delta of Alaska and the Ladakh region of the Indian Himalaya". Walker Institute of International and Area Studies - University of South Carolina. Fuente, David (PI). 4,000 2024

"Understanding and Improving Bill Payment in Ghana" Amoah, Anthony (PI), Fuente, David (Co-PI), Cook, Joseph (Co-PI) Environment for Development Initiative ($56,735) 2024-2025.

"Applied Research in Energy and Water Equity" Fuente, David (Co-PI), Harrison, Conor (Co-PI) McCausland Innovation Fund College of Arts and Sciences USC ($29,941) 2023-2024.

"Burden sharing and fairness principles in water management for the Global South" Visser, Martine (PI), Cook, Joseph (Co-PI), Fuente, David (Co-PI), Madrigal, Roger (Co-PI), Vasquez Lavín, Felipe (Co-PI) Environment for Development Initiative (~180K) 2023-2025.

"Collaborative Research: NNA Research: Meq unguvatkarput (water is our livelihood) - building community resilience for the future" Bringham-Grett, J. (PI), Temte, J. (Co-PI), Kumpel, E. (Co-PI) Butler, C. (Co-PI), Maio, C. (Co-PI), Fuente, D. (Co-PI) NSF Navigating New Arctic (~$3M) 2023-2026.

"Improving Bill Payment for Water and Sanitation Services in Uganda" Fuente, D. (Co-PI) and Bbaale, E. (Co-PI) Environment for Development Initiative ($50,324) 2022-2024.

"Urban Water Scarcity and Affordability in the Global South: A Network of Observatories" Madrigal, R. (Co-PI), Fuente, D. (Co-PI), Cook, J. (Co-PI) Vasquez, F. et al. (Co-PI) Environment for Development Initiative ($120,750) 2022-2023.

"Water Insecurity among Native Alaska Communities" Fuente, D. (PI) Mueller, C. (Co-PI)[*] University of South Carolina Office of Research Magellan Scholars Program ($3,000) 2021-2022.
[*]*Undergraduate student researcher*

"Subsidies, incentives, and information: Testing approaches to improve customer bill payment in Nairobi, Kenya" Fuente, D. (Co-PI) and Mulwa, R. (Co-PI) Environment for Development Initiative ($65,648) 2020-2022.

"Water use in the Kenyan commercial sector: Measuring price elasticity and coping strategies to deal with unreliability." Otieno, J. (Co-PI), Cook, J. (Co-PI), Fuente, D. (collaborator) Environment for Development Initiative ($61,420) 2020-2021.

"Water Pricing and The Poor: Designing and Delivering Improved Subsidies for Water and Sanitation Services in Nairobi, Kenya" Fuente, D. (Co-PI) and Mulwa, R. (Co-PI) Environment for Development Initiative ($20,690) 2018-2020.

"Scoping Study on the Costs and Benefits of Improved Water Supply in Rural Alaska" Fuente, D. (Co-PI) and Thomas, T. (Co-PI) Alaska Native Tribal Health Consortium ($50,000) 2018-2020.

"Global Health Initiative Curriculum Grant" Fuente, D. (PI) Center of Teaching Excellence – University of South Carolina ($3,500) 2018-2020.

"Walker Institute International Education Grant" Fuente, D. (PI) Walker Institute – University of South Carolina ($1,000) 2018.

"Walker Institute International Travel Grant" Fuente, D. (PI) Walker Institute – University of South Carolina ($1,000) 2018.

"The Demand for Piped Water and Sanitation Services in Kenya" Fuente, D. (Co-PI) and Richard, M. (Co-PI) Environment for Development Initiative ($45,000) 2015-2017.

"Scoping Study for Smart(er) Subsidies for Water and Sanitation Services" Fuente, D. (PI). The World Bank ($30,000), 2016-2017.

"Water Pricing, Subsidies and the Poor in Nairobi, Kenya" Fuente, D. (Co-PI), Whittington, D. (Co-PI) and J. Kabubo-Mariara (Co-PI) Environment for Development Initiative ($50,000) 2015-2017.

RECENT (2017-2025) PRESENTATIONS & SEMINARS

Fuente, D. 2026. "Financing the transition to safe and resilient water and sanitation services for all: Evidence on what works (and doesn't) from Sub-Saharan Africa." Universsity of South Carolina Department of Geography Colloquia. 11 September 2026.

Fuente, D. 2025. "Financing the transition to safe and resilient water and sanitation services: The challenge of customer arrears and bill payment." Oberlin College Department of Economics Seminar Series. 5 December 2025.

Fuente, D., Mwaura, M., Gitu, J., Mulwa, R. and J. Cook. 2025. "Forgive us our sins – Experimental evidence on arrears forgiveness and bill payment from Nairobi, Kenya". EfD Annual Meeting Oct. 16-19, 2025 Dar es Salaam, Tanzania.

Fuente, D., Mulwa, R. Gitu, J. and M. Mwaura. 2025. "Financing the transition to safe, affordable, and resilient water and sanitation services in Nairobi: A co-developed policy research agenda." Environment for Development Webinar Series 7 May 2025 (virtual – link).

Fuente, D. 2025. CRAFT Seminar Monthly Webinar organized as a part of RCN: Co-creating Research for Just Arctic Future Infrastructure Transformations, Resilience, and Adaptation (CRAFT) (NSF, award # 2419971) 10 Feb 2025.

Fuente, D. 2024. "Financing the transition to safe, equitable, and resilient water and sanitation services in Africa." Institute for African Development - Cornell University 28 March 2024 Ithaca, NY.

Fuente, D., Cook, J., Shinha S., Whittington, D. 2024. "Water tariff design in the Anthropocene: Eight problems with the world's most popular water tariff structure." Society for Benefit Cost Analysis Annual Conference 19 March 2024 Washington, DC.

Fuente, David. 2024. *The design and delivery of water and sanitation assistance programs*. Presented to the Alaska Rural Water and Sanitation Working Group. 7 Feb 2024 (virtual).

Fuente, David, Cook, Joseph, Mwaura, Mbutu, Gitu, Josiah, Mulwa, Richard. "Improving payment for essential services: A field experiment in Nairobi, Kenya." Environment for Development Initiative (EfD) 17th Annual Meeting, October 5-8, 2023 Accra, Ghana.

Fuente, David, Cook, Joseph, Mwaura, Mbutu, Gitu, Josiah, Mulwa, Richard. "Does debt forgiveness improve water bill payment? A field experiment in Nairobi, Kenya." Water and Health – Where Science Meets Policy, October 23-27, 2023 Chapel Hill, NC.

Fuente, David, Randriamaro, Tiana, Espinola-Arredondo, Anna, Cook, Joseph. "Exploring patterns of water bill payment behavior and debt in Nairobi, Kenya." 28th Annual Conference of the European Association of Environmental and Resource Economists, June 27-30, 2023 Limassol, Cyprus.

Fuente, D. "Out of sight, out of mind: Perceptions of "fair" water prices in Nairobi, Kenya." WaSH Economics Conference, London School of Hygiene and Tropical Medicine, London - UK March 30, 2023 (Virtual).

Fuente, D. "Economic analysis of investments to promote resilience and circularity in urban water infrastructure" in Guidelines for Economic Analysis of Water Projects (Session 2). World Bank Water Week 2023. March 9, 2023.

Fuente, David, Cook, Joseph, Mulwa, Richard. 2022. "Household preferences for water subsidy programs and perceptions of "fair" water prices: Insights from two field experiments in Nairobi, Kenya. Association

of Collegiate Schools of Planning (ACSP) 62nd Annual Conference, November 3-6, 2022 Toronto, Ontario.

Fuente, David, Cook, Joseph, Mulwa, Richard. 2022. "Out of sight out of mind: Household perceptions of "fair" water prices in Nairobi, Kenya" Presented at 16th Annual Meeting of the Environment for Development Initiative September 22-26, 2022 (Kampala, Uganda)

Fuente, David, Cook, Joseph, Mulwa, Richard. 2022. "Household perceptions of affordability and "fair" water prices: Insights from a field experiment in Nairobi, Kenya" Presented in Session 64 - Water and sanitation planning and policy in low- and middle-income countries at Society for Benefit-Cost Analysis Annual Conference March 17-18 & 21-22, 2022 (Online).

Fuente, David. 2022. "The history of increasing block tariffs – A global perspective" Presented in Session 70 - Welfare and Distributional Effects of Different Water Pricing Schemes at Society for Benefit-Cost Analysis Annual Conference March 17-18 & 21-22, 2022 (Online).

Fuente, David. 2022. Organizer and Chair Session 64: "Water and sanitation planning and policy in low- and middle-income countries". Society for Benefit-Cost Analysis Annual Conference March 17-18 & 21-22, 2022 (Online).

Vásquez-Lavín, Felipe, Madrigal, Roger, Fuente, David. 2022. Organizers Session 41: "New planning and policy challenges due to climate change to utility companies." Society for Benefit-Cost Analysis Annual Conference March 17-18 & 21-22, 2022 (Online).

Fuente, D. 2021. Chair Session 23a: Health and Social Policy. Society for Benefit-Cost Analysis Annual Conference March 17-19 & 22-24, 2021. (Online due to COVID-19).

Bbaale, E., Kilimani, N., Kaggwa, R., Mwebaze, N. and D. Fuente. 2020. "Improving Bill Payment for Water and Sanitation Services in Uganda." Research Funding Proposal presented at 15th Annual Meeting of the Environment for Development Initiative November 15-19, 2021 (Online due to COVID-19).

Madrigal, R., Fuente, D., Cook, J., Vasquez, F. et al. "Urban Water Scarcity and Affordability in the Global South: A Network of Observatories" Research Funding Proposal presented at 15th Annual Meeting of the Environment for Development Initiative November 15-19, 2021 (Online due to COVID-19).

Fuente, D. "Demystifying tariff discussions: the good, the bad and the ugly" Sanitation and Water for All (SWA) Webinar. June 1, 2021.

Fuente, D., Cook, J., Mulwa, R. 2020. "Subsidies, incentives, and information: Testing approaches to improve customer bill payment in Nairobi, Kenya". Presented at Environment for Development-Kenya Policy Workshop. December 16, 2020. Nairobi, Kenya.

Bbaale, E., Kilimani, N., Kaggwa, R., Mwebaze, N. and D. Fuente. 2020. "Improving Bill Payment for Water and Sanitation Services in Uganda." Research Funding Proposal presented at the 14h Annual Meeting of the Environment for Development Initiative, November 16-20, 2020 – Virtual.

Nyakundi, F., Otieno, J., Fuente, D. and J. Cook. 2020. The elasticity of commercial water demand in Nairobi, Kenya. Paper presented at the 14h Annual Meeting of the Environment for Development Initiative, November 16-20, 2020 – Virtual.

Nyakundi, F., Otieno, J., Fuente, D. and J. Cook. 2020. "The elasticity of commercial water demand in Nairobi, Kenya." Presented at Environment for Development-Kenya Policy Workshop. December 16, 2020. Nairobi, Kenya.

* Fuente, D. 2020. "Designing Smart(er) Subsidies for Water and Sanitation Services: Household Preferences for Subsidies in Nairobi, Kenya." 2020. Association of Collegiate Schools of Planning (ACSP) 60th Annual Conference, Nov. 5-8, 2020 (Accepted but not presented due to COVID-19 and concussion).

Gallagher, D., Sahagian, D., Stephens, J. Fuente, D., Franco, R., Gruber, J. 2020. "Crossing the Abyss: The Value of Working at the Science-Policy Interface" Panel Discussion at the National Council for Science and the Environment. January 6, 2020. Washington, DC.

Fuente, D. and Mulwa, R. 2019. "Subsidies, incentives, and information: Testing approaches to improve customer bill payment in Nairobi, Kenya" Research Funding Proposal presented at the 13h Annual Meeting of the Environment for Development Initiative, November 22-25, 2019 – Bogata, Colombia.

Fuente, D., Das, P., Das, A., Tewari, M., Carolini, G. and Spencer, J. 2019. "Planning for water equity" Roundtable discussion organized at the Association of Collegiate Schools of Planning (ACSP) 59th Annual Conference, October 24-27, 2019 – Greenville, SC.

Fuente, D. 2019. "Water and sanitation for all: The economic benefits of providing universal access to water and sanitation services to Native Alaskan communities." Paper presented at the Association of Collegiate Schools of Planning (ACSP) 59th Annual Conference, October 24-27, 2019 – Greenville, SC.

Fuente, D. 2019. "Best practice solutions to WaSH inequities from the USA and developing countries". 12th Annual Conference of the Global Water Alliance, March 21, 2019 – Wharton School of Business at the University of Pennsylvania.

Fuente, D. 2018. "Valuing the benefits of water and sanitation interventions: An economic perspective". Keynote Address delivered at the 8th Annual Water and Sanitation Innovations for the Arctic Workshop (US Arctic Research Commission), January 19, 2018 – Anchorage, AK.

Fuente, D., Kabubo-Mariara, J., Kimuyu, P. Mwaura, M., and D. Whittington. 2018. "Assessing the performance of alternative water and sanitation tariffs – The case of Nairobi, Kenya". Paper presented at the 6th World Congress of Environmental and Resource Economists (WCERE), June 25-29, 2018 – Gothenburg, Sweden.

Cook, J., Whittington, D., Fuente, D., and Matichich, M., 2018. A global assessment of non-tariff customer assistance programs (CAPs) in water supply and sanitation. Paper presented at the 6th World Congress of Environmental and Resource Economists (WCERE), June 25-29, 2018 – Gothenburg, Sweden.

Fuente, D., Connolly, K., Mwaura, M., and Bartram, J. 2018. "Perceptions of Climate-Related Risk among Water Sector Professionals in Africa—Insights from the 2016 African Water Association Congress." Paper presented at the Association of Collegiate Schools of Planning (ACSP) 58th Annual Conference, October 25-28, 2018 – Buffalo, NY.

Fuente, D., Cook, J., Whittington, D., and Matichich, M., 2018. "A global assessment of non-tariff customer assistance programs (CAPs) in water supply and sanitation". Paper presented at the Water and Health: Where Science Meets Policy annual conference, October 29 – November 2, 2018 – Chapel Hill, NC.

Boring, A.* and Fuente, D. 2018. "Inequity in access to safe water and sanitation services in the United States: A systematic review." Poster presented Paper presented at the Water and Health: Where Science Meets Policy annual conference, October 29-November 2, 2018 – Chapel Hill, NC.

* Undergraduate student

Fuente, D. and Mulwa, R. 2018. "Water pricing and the poor: Designing and delivering improved subsidies for water and sanitation services in Nairobi, Kenya." Research Funding Proposal presented at the

12th Annual Meeting of the Environment for Development Initiative, November 1-5, 2018 – Hanoi, Vietnam.

Mulwa, R., Fuente, D., Kabubo-Mariara, J. 2018. "Benchmarking water utilities in Kenya: A stochastic nonparametric envelopment of data approach". Paper presented at the 12th Annual Meeting of the Environment for Development Initiative, November 1-5, 2018 – Hanoi, Vietnam.

Bartram, J., Fuente, D. Fisher, M., Kelly M, and Setty, K. 2017. "Clear thinking on water and health?" Invited Oxford Water Network Seminar, Christchurch College, November 23, 2017 – University of Oxford.

Fuente, D. (2017). Assessing the performance of alternative water and sanitation tariffs: The case of Nairobi. Paper presented at the Association of Collegiate Schools of Planning Annual Conference, October 2017 – Denver, CO.

TEACHING & MENTORING

Teaching

Course No.	Course Title	Class size	Grad/ Ugrad	Role
University of South Carolina				
ENVR 101	Introduction to the environment	~400	Ugrad	Lead faculty
ENVR 480	Environmental Issues Capstone Seminar	~25	Ugrad	Lead faculty
ENVR 534	Water and Sanitation in Global Perspective	~30	Mixed	Lead faculty
MSCI 390	Marine Science and Policy	~35	Ugrad	Lead faculty
ENVR 490	Applied Research in Energy and Water Security	~35	Ugrad	Co-lead faculty
University of North Carolina at Chapel Hill				
PLAN 785	Public Investment Theory	~30	Grad	TA/IA
PLAN 685	Water and Sanitation in Less Developed Countries	~35	Grad	TA/IA
PLAN 710	Microeconomics for Planning	~40	Grad	TA/IA
School of Public an Environmental Affairs - Indiana University, Bloomington				
SPEA VXX	Seminar in Sustainability	~20	Mixed	Lead instructor
SPEA V221	The Nonprofit and Voluntary Sector	~40	Ugrad	Lead instructor
SPEA V161	Urban Problems and Solutions	~30	Ugrad	Lead instructor
SPEA E526	Applied Mathematics for Environmental Science	~35	Grad	TA/IA
SPEA E456	Lake and Watershed Management	~35	Grad	TA/IA
SPEA E363	Environmental Management	~75	Ugrad	TA/IA
Other				
n.a.	Putney Student Travel GAIA - Indian Himalaya	~15	Highschool	Co-leader

Student Mentoring

PhD[*] – Current (*[*]SEOE currently does not have an environmental science or social science PhD program.*)
Sridevi Prasad – (PhD Global Health and Development, Emory University – Committee member)

Masters – current
Kate Caminita (MEERM – Chair)
Tyler Drafts (MEERM – Chair)
Liz Anderson (MEERM – Committee member)

Masters – completed
Nia Thomas (MEERM – Chair)
Holly Young (MEERM/JD – Chair)
Luke DeVore (MEERM – Chair)
Cole Hybarger (MEERM – Committee member)
La'Nya Green (MEERM – Chair)
Catherine Min (MEERM – Chair)
Clare Wilson (MEERM – Chair)
Ritvik Shukla (MEERM – Committee member)
Emma DeLoughry (MEERM - Committee member)
Myoung So Ko (MEERM - Committee member)
Justin Edwards (MEERM - Committee member)

Undergraduate – current
Lukas Helmstetter (BS International Business and Economics – Honors College) Chair "The challenge of customer utility bill payment – Insights from East African water utilities"
Ella Michel (BARSC Environmental Policy and Conservation – Honors College) Second Reader "Blocking Out the Carolina Heat: An Investigative Study into Localized Energy Assistance in South Carolina"

Undergraduate – completed
Shayla Smith (BBA International Business and Finance – Honors College) Chair "Financing sustainable water infrastructure – The case of Thames Water"
Janie O'Shea (BA Environmental Studies and Political Science – Honors College) Second Reader "Addressing the Feasibility of Retiring, Rehabilitating, and Releasing Captive Marine Mammals in the United States"
Christian Fredericks (BA Environmental Studies and Political Science – Honors College) Second Reader "Israel Palestine water conflict"
Sophie Manson (BS Environmental Science)
Christina Mueller (BS Marine Science - Honors College) Chair "Water Insecurity Among Alaska Native Communities"
[*] *2021-22 Magellan Scholars grant for "Water Insecurity among Alaska Native Communities" ($3,000)*
Ryan Church (BS Public Health - Honors College) Chair "Source Water Protection and Proposed Future Efforts to Safeguard the Columbia, South Carolina Water Supply"
Emma Sylves-Berry (BS Environmental Science, BA Political Science – Honors College) Chair "Evaluation of the National Estuarine Research Reserve System's Engagement with Indigenous Communities"
Morgiana McDevitt (BA Environmental Studies, BA Economics – Honors College) Second reader "The Power of Preferences in a World of Sustainability: The Voter Versus the Consumer"
Julia Madey (BS Environmental Science) "Economics of Green Roofs in Columbia, SC"
Peyton Moore (BS Marine Science - Honors College) Chair "Documenting personal perspectives on climate change in the Galapagos Islands"
Anna Boring (BS Marine Science)
[*] *Ronald E. McNair Post-Baccalaureate Achievement Program Outstanding Researcher Award-2018 for summer research entitled "Inequity in access to safe water and sanitation services in the United States."*

HONORS & AWARDS

Peter Berck Best Discussion Paper Award, *Environment for Development (EfD) Initiative* (2025)
EfD Policy Impact Award, *Environment for Development (EfD) Initiative* (2024)
McCausland Faculty Fellow, *University of South Carolina* (2023-2026)
Editors' Choice Award, *Water Resources Research* (2017)
Kenan Institute of Private Enterprise Research Fellow, UNC-Chapel Hill (August 2016 – May 2017)
William R. Kenan, Jr. Fellow, Royster Society of Fellows, UNC-Chapel Hill (August 2010 – August 2015)
Affiliated Research Fellow, Global Research Institute, UNC-Chapel Hill (August 2014 – May 2015)
Presidential Management Fellowship Finalist, United States Federal Government (2007, awarded not accepted)
Top MS/MPA Graduate Student, SPEA Indiana University, Bloomington (May 2007)
Scholarship for International Research, SPEA Indiana University, Bloomington (Summer 2006)
SPEA Award for Academic Excellence, SPEA Indiana University, Bloomington (2005, 2006, 2007)
Pi Alpha Alpha Honors Society, SPEA Indiana University, Bloomington (Inducted 2006)
Charles F. Bonser Scholarship, SPEA Indiana University, Bloomington (2005 – 2006)
SPEA Scholar, SPEA Indiana University, Bloomington (2004 – 2006)
William J. Clinton Fellow, American India Foundation (2003 – 2004)
Jane Addams-Andrew Carnegie Fellow, Lilly Family School of Philanthropy at Indiana University (2001 – 2002)
Summa Cum Laude, Colby College (May 2001)
Phi Beta Kappa Honors Society, Colby College (Inducted 2001)
Department of Geology Senior Class Award, Colby College (2001)
Department of Geology Alumni Award, Colby College (2001)
Department of Geology Sophomore Class Award, Colby College (1999)
Dean's List Honors, Colby College (1997-2001)

CONSULTING EXPERIENCE & ADDITIONAL AFFILIATIONS

Dec 2024 – Jan 2025*	**USAID URBAN WASH (as subcontract to Segura Consulting)** Consultant *(*scheduled through March 2026, terminated with closure of USAID)*	**Accra, Ghana**
Jun 2013 – Present	**Environment for Development (Efd) Kenya** International Research Associate	**Nairobi, Kenya**
Periodic 2015-pres	**The World Bank Group** Short-term Consultant	**Washington, DC**
Aug 2017- Aug 2018	**United States Millennium Challenge Corporation (as subcontract to CH2M Hill)** Consultant	**Washington, DC**
Sep 2011 – Nov 2012	**USAID (as subcontract to Chemonics International)** Consultant	**Cairo, Egypt**
Oct 2010 - Jul 2013	**Global Development Network** Consultant	**New Delhi, India**
Jun 2010 - Aug 2010	**Food and Agriculture Organization (FAO), United Nations** Senior Water Specialist	**Rome, Italy**
Jul 2006 - Dec 2006	**American India Foundation** Consultant	**New Delhi, India**

ADDITIONAL PROFESSIONAL DEVELOPMENT

Dec 2013	**Designing and Implementing Successful Water Utility Reform**	**World Bank Institute**
Jan 2012	**International Training Program on Utility Strategy and Regulation**	**PURC/World Bank**
Nov 2003	**Grassroots Immersion Program/Exposure Dialogue Program**	**World Bank**
Oct 2001	**Principles and Techniques of Fundraising**	**The Fundraising School**