

**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 (Aug. 2023 – present)  
Assistant Professor (Aug. 2017 – Jul. 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 –     **Water Institute, UNC Gillings School of Global Public Health**     **Chapel Hill, NC**  
Jul 2017     Lead Scientist

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

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

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

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

## PUBLICATIONS

---

### In Preparation

“Patterns of water bill payment behavior and debt in Nairobi, Kenya” with Tiana Randriamaro, Joseph Cook (*In preparation*)

“Inequality in water and sanitation service delivery in the United States” in *Oxford Encyclopedia of Water, Sanitation, and Global Health* (*Under contract*)

“Effective pricing of water and sanitation services: Perspectives from Wukro, Ethiopia” with Katrina Charles, Catherine Grasham and Sonia Hoque (*In preparation*)

“Coping with intermittent supply: Estimates of coping costs among firms in Nairobi, Kenya” with Joseph Cook, Jackson Otieno, and Fridah Nyakundi (*In preparation*)

“Water and sanitation service delivery in rural Alaska: A systematic review” with Emily Kumpel and Caitlyn Butler

### Under Review

Randriamaro, Tiana, Espinola-Arredondo, Anna, Fuente, David and Joseph Cook. “A theoretical model of utility bill payment behavior” (*Under review*).

### Journal Articles

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>.

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>.

**Journal Articles**  
(cont.'d)

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-Ballester, 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>.

<sup>†</sup>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>.

<sup>†</sup> 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<sup>a</sup>, Katherine, Mwaura Mbutu, Jamie Bartram, and **David Fuente**<sup>\*</sup>. “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>.

<sup>a</sup> Graduate student co-author

<sup>\*</sup> 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>.

<sup>^†</sup>**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. <sup>[L]</sup><sub>[SEP]</sub>

<sup>†</sup> Selected by the editors to be profiled as a Research Spotlight on the WRR website and in the American Geophysical Union publication *Eos* ([link](#)).

<sup>^</sup> Received 2017 *Water Resources Research* Editors’ Choice Award

**Journal Articles**  
(cont.'d)

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**

Randriamaro, Tiana, Espinola-Arredondo, Anna, **Fuente, David** and Joseph Cook. "A theoretical model of utility bill payment behavior" *Environment for Development Discussion Paper Series* EfD DP 24-01 ([link](#))

**Fuente, D.** 2023. *Economic Analysis of Urban Water Supply and Sanitation Projects Considering Resilience and Circularity*. Prepared for the World Bank.

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.

**Reports &  
Working Papers (cont.'d)**

- 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**

---

**Under Review/**

**In progress**

“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) 2024-2029 (~\$5.75M; Fuente share: ~\$100K) (*Under review*)

**Awarded**

“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.

“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.

“Water Insecurity and Water Equity in South Carolina” Fuente, David (PI) Office of the Vice President for Research USC (\$14,262) 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 (Total:~\$3M; Fuente share: \$55,827 plus travel and logistical support covered by NSF Polar Field Services) 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.

## DAVID E. FUENTE

### Awarded (cont.'d)

“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 (2017-2024) PRESENTATIONS & SEMINARS

---

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) 17<sup>th</sup> 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, 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.

**Conference presentations  
& seminars (cont.'d)**

Fuente, David, Cook, Joseph, Mulwa, Richard. 2022. "Out of sight out of mind: Household perceptions of "fair" water prices in Nairobi, Kenya" Presented at 16<sup>th</sup> 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 15<sup>th</sup> 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 15<sup>th</sup> 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.



**Conference presentations  
& seminars (cont.'d)**

\* 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) 60<sup>th</sup> 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 13<sup>th</sup> Annual Meeting of the Environment for Development Initiative, November 22-25, 2019 – Bogota, 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) 59<sup>th</sup> 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) 59<sup>th</sup> Annual Conference, October 24-27, 2019 – Greenville, SC.

Fuente, D. 2019. "Best practice solutions to WaSH inequities from the USA and developing countries". 12<sup>th</sup> 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 8<sup>th</sup> 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 6<sup>th</sup> 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 6<sup>th</sup> 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) 58<sup>th</sup> 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

**Conference presentations  
& seminars (cont.'d)**

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 12<sup>th</sup> 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 12<sup>th</sup> 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
<b><i>University of South Carolina</i></b>				
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	~25	Mixed	Lead faculty
MSCI 390	Marine Science and Policy	~35	Ugrad	Lead faculty
ENVR 490	Applied Research in Energy and Water Equity	~30	Ugrad	Co-lead faculty
<b><i>University of North Carolina at Chapel Hill</i></b>				
PLAN 785	Public Investment Theory Water and Sanitation in Less Developed	~30	Grad	TA/IA
PLAN 685	Countries	~35	Grad	TA/IA
PLAN 710	Microeconomics for Planning	~40	Grad	TA/IA
<b><i>School of Public an Environmental Affairs - Indiana University, Bloomington</i></b>				
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
<b><i>Other</i></b>				
n.a.	Putney Student Travel GAIA - Indian Himalaya	~15	Highschool	Co-leader

**Student Mentoring**

Masters – current

Nia Thomas (MEERM – Chair)  
Luke DeVore (MEERM – Chair)  
Tyler Drafts (MEERM – Chair)

Masters – completed

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

n.a.

Undergraduate – completed

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**

---

**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**

---

Jun 2013 – Present	<b>Environment for Development (Efd) Kenya</b> International Research Associate	<b>Nairobi, Kenya</b>
Periodic 2015-pres	<b>The World Bank Group</b> Short-term Consultant	<b>Washington, DC</b>
Aug 2017- Aug 2018	<b>United States Millennium Challenge Corporation (as subcontract to CH2M Hill)</b> Consultant	<b>Washington, DC</b>
Sep 2011 – Nov 2012	<b>USAID (as subcontract to Chemonics International)</b> Consultant	<b>Cairo, Egypt</b>
Oct 2010 - Jul 2013	<b>Global Development Network</b> Consultant	<b>New Delhi, India</b>
Jun 2010 - Aug 2010	<b>Food and Agriculture Organization (FAO), United Nations</b> Senior Water Specialist	<b>Rome, Italy</b>
Jul 2006 - Dec 2006	<b>American India Foundation</b> Consultant	<b>New Delhi, India</b>

**DAVID E. FUENTE**

**ADDITIONAL PROFESSIONAL DEVELOPMENT**

---

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