

# MAURA C. ALLAIRE

Department of Urban Planning & Public Policy  
University of California, Irvine  
218F Social Ecology I  
Irvine, CA 92697-7075

maura.allaire[at]uci.edu  
<http://faculty.sites.uci.edu/allaire>  
(949) 824-5797

## EDUCATION

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### University of North Carolina at Chapel Hill

Ph.D. Environmental Management and Policy 2015  
Department of Environmental Sciences and Engineering

### Tufts University

B.S. Economics 2006  
B.S. Geology 2006

## PROFESSIONAL APPOINTMENTS

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**University of California, Irvine**, Department of Urban Planning and Public Policy 2017 - present  
*Assistant Professor of Water Economics and Policy*

**Columbia University**, Earth Institute 2017 - present  
*Adjunct Associate Research Scientist*

**Columbia University**, Earth Institute 2015 - 2017  
*Postdoctoral Research Scientist*

## PUBLICATIONS

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### PEER-REVIEWED JOURNAL ARTICLES

9. Moftakhari, H., AghaKouchak, A., Sanders, B., **Allaire, M.**, Matthew, R. (2018). What is Nuisance Flooding? Defining an Emerging Challenge Facing Coastal Regions. *Water Resources Research*. 54(7)4218-4227.
8. **Allaire, M.**, Wu, H., Lall, U. (2018). National Trends in Drinking Water Quality Violations. *Proceedings of the National Academy of Sciences*. 115 (9) 2078-2083.
7. Ho, M., Lall, U., **Allaire, M.**, Devineni, N., Kwon, H., Pal, I., Raff, D., Wegner, D. (2017). The Future Role of Dams in the United States of America. *Water Resources Research*. 53(2) 982–998.
6. **Allaire, M.** (2016). Disaster Loss and Social Media: Can Online Information Increase Flood Resilience? *Water Resources Research*. 52(9) 7408-7423.
5. **Allaire, M.** (2016). Using Practical and Social Information to Influence Flood Adaptation Behavior. *Water Resources Research*. 52(8) 6078-6093.
4. **Allaire, M.**, Kroll, C., and Vogel, R. (2015). The Hydromorphology of an Urbanizing Watershed Using Multivariate Elasticity. *Advances in Water Resources*. (86)147-154.
3. **Allaire, M.** and Brown, S. (2015). The Green Paradox of U.S. Biofuel Subsidies: Impact on Greenhouse Gas Emissions. *Economics of Energy & Environmental Policy*. 4(2)83-102.
2. Nabangchang, O., **Allaire, M.**, Leangcharoen, P., Jarungrattanapong, R., and Whittington, D. (2015). Economic Costs Incurred by Households in the 2011 Bangkok Flood. *Water Resources Research*. 51(1)58-77.
1. Jeuland, M., Fuente, D., Özdemir, S., **Allaire, M.**, and Whittington, D. (2013). The long-term dynamics of mortality benefits from improved water and sanitation in less developed countries. *PloS one*. 8(10), e74804.

## BOOK CHAPTERS AND REPORTS

8. Jeuland, M., Fuente, D., Özdemir, S., **Allaire, M.**, and Whittington, D. (2013). Economic Losses from Poor Water and Sanitation: Past, Present, and Future. *In* B. Lomborg (Ed.), *How Much Have Global Problems Cost the World? A Scorecard from 1900 to 2050*. Cambridge University Press.
7. Sadoff, C., Whittington, D. and **Allaire, M.** (2013). The Economic Value of Moving Toward a More Water Secure World. Global Water Partnership. TEC Background Paper No. 18.
6. **Allaire, M.** and Brown, S. (2012). U.S. Energy Subsidies: Effects on Energy Markets and Carbon Dioxide Emissions. Pew Charitable Trusts. Washington, D.C. August 2012.
5. **Allaire, M.**, Nabangchang, O., Leangcharoen, P., Jarungrattanapong, R. and Whittington, D. (2012). Thailand's 2011 Floods. Teaching Case Study. Economy and Environment Program for Southeast Asia.
4. **Allaire, M.** (2011). Global Successes – Water and Sanitation System Expansion. *In* Cambodia Water Sector Review. East Asia and Pacific Infrastructure Unit. World Bank. Washington, DC.
3. Palmer, K., Sweeney, R., and **Allaire, M.** (2010). Modeling Policies to Promote Renewable and Low Carbon Sources of Electricity. Background Paper. Resources for the Future. Washington, D.C.
2. **Allaire, M.** and Brown, S. (2009). Eliminating Subsidies for Fossil Fuel Production: Implications for U.S. Oil and Natural Gas Markets. Issue Brief. Resources for the Future. Washington, D.C.
1. **Allaire, M.** (2009). Drought Mitigation in Semi-Arid Africa: The Potential of Small-Scale Groundwater Irrigation. SustainUS Citizen Science Paper.

## FELLOWSHIPS, HONORS AND AWARDS

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2018	Best Paper in <i>Economics of Energy &amp; Environmental Policy</i> , 2012-2016
2017	Editor's Choice Finalist, Yale Environment Review
2016	Best Paper Award, International Conference on Sustainable Development, Columbia Univ.
2011-2015	NSF Graduate Research Fellowship (\$121,500)
2014	Outstanding Student Paper Award, American Geophysical Union Fall 2014 Meeting
2014	P.E.O. Scholar Award (\$15,000)
2010	UNC Gillings Merit Award (\$10,000)
2009	SustainUS Best Student Paper Award, UN Commission on Sustainable Development 17 <sup>th</sup> Session
2006-2007	Fulbright Scholar, Ghana (\$22,000)

## TEACHING

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### UC Irvine

- 2018 Environmental Economics and Policy (PPD 205), graduate lecture course
- 2018 Global Water Security (PPD 275), graduate seminar
- 2018 Field Study (PPD 195), undergraduate workshop
- 2018 Principles of Economics for Planning and Policy (PPD 100), undergraduate lecture course

### UNC-Chapel Hill

- 2012 Water & Sanitation Policy in Developing Countries (ENVR 685), graduate seminar (TA)
- 2010 Environmental Health (ENVR 600), graduate lecture course (TA)

## SERVICE

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**Editorial Board:** *Water Economics and Policy*, Book Review Editor (2018 – present)

**Technical Advisor:** *Public Policy Institute of California's Water Policy Center*, Research Network Expert (2018 – present)

**Journal Peer Review:** *PloS one; Earth's Future; Water Resources Research; Advances in Water Resources; Energy Policy*

**Review Panel:** NSF GRFP Review Panel (2018)

**Proposal Review:** NSF Economics Program (2016)

**American Geophysical Union:**

**Convener,** Hydrology, Society, & Environmental Change: Human-Water Interactions Across Scales (2018)

**Convener and Session Chair,** Addressing Limited Water Demand Data for Research and Policy (2017)

**Judge,** AGU Outstanding Student Paper Award (2017)

**UC Irvine:**

**Member,** Undergraduate Programs Committee (2018 - )

**Member,** Doctoral Admissions Committee (2018 - )

**Member,** Ad hoc committee, Merit case (Fall 2018)

**Outreach**

10. **Presenter.** OC Bridges (2018). "National Trends in Water Quality & Implications for California's Proposed Drinking Water Fund". Irvine, CA.

9. **Invited Expert.** KALW Public Radio (2018). "How can we ensure access to safe and affordable drinking water in the US?". San Francisco, CA.

8. **Presenter.** Association of State Drinking Water Administrators (2018). "Research Priorities to Help Reduce Drinking Water Violations". Webinar.

7. **Presenter.** The Nature Conservancy (2016). "Water for Society and Ecosystems in New York". Albany, NY.

6. **Presenter.** Thailand Land Forum (2013) "Household Economic Losses due to 2011 Bangkok Flood" Bangkok.

5. **Instructor.** Global Development Network (2011). Training Workshop: Sensitivity Analysis in Cost-Effectiveness. Bangkok.

4. **Team Member.** Engineers Without Borders (2010-2011) Sanitation in Ciudad de Dios, Peru.

3. **Hydrologist.** Howard University (2009- 2010) Dewatering system for UNESCO archaeological site.

2. **Co-Author.** U.S. Senate Committee on Finance (2009). "An Economic Assessment of Eliminating Oil and Gas Company Tax Preferences". Prepared for Senate Hearing. (with S. Brown)

1. **Presenter.** United Nations (2009). "Drought Mitigation in Semi-Arid Africa". UN Commission on Sustainable Development, 17th Session, New York, NY.

**FUNDED RESEARCH**

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6. UC-Irvine, Social Ecology Faculty Research Development Fund. "Urban Hydrology and Water Use Behavior in California". (\$6,100). 6/2018 – 9/2018. (Lead-PI)

5. UC-Irvine Multidisciplinary Design Program. "Ocean to Tap: Assessing the Technology Options and Economics of Desalination in California". (\$3,000). 1/2018 – 6/2018. (Co-PI)

4. Earth Institute Summer Internship Fund. "Beyond Flint: National Assessment of Water Quality Trends". (\$4,700). 5/2016 – 8/2016. (Lead-PI)

3. NSF REU - Research Experience for Undergraduates. "America's Water - The Changing Landscape of Risk, Competing Demands and Climate". (\$16,800). 5/2016 – 8/2016. (Lead-PI)

2. World Bank. "Building Capacity for Rapid Financial Response to Natural Hazards" (\$100,000). 10/2016-6/2017. (Co-PI)

1. The Nature Conservancy. "NatureNet Postdoctoral Fellowship". (\$200,000). 2015-2017. (Lead-PI)

## PROFESSIONAL EXPERIENCE

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<b>Global Development Network</b>	<i>Technical Advisor – Policy Simulation and Cost-Benefit Analysis</i>	2010- 2013
<b>World Bank</b>	<i>Short Term Consultant - East Asia and Pacific Infrastructure Unit</i>	2011
<b>Resources for the Future</b>	<i>Economic Analysis - Research Assistant</i>	2008- 2010
<b>AMEC Earth &amp; Environmental</b>	<i>Environmental Impact Assessment</i>	2007- 2008
<b>IWMI</b>	<i>Fulbright Scholar in Ghana</i>	2006- 2007

## CONFERENCES AND PRESENTATIONS

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### INVITED SEMINARS

3. UC-Riverside, School of Public Policy. (2017). *Household Response to Water Insecurity*. Water Seminar Series.
2. Tufts University, Department of Civil and Environmental Engineering (2015). *Adapting to Extreme Events: Household Response to Floods in Urban Areas*. CEE 291 Graduate Environmental Seminar.
1. Columbia University, Department of Earth and Environmental Engineering (2015). *Adapting to Extreme Events: Household Response to Floods in Urban Areas*.

### CONFERENCES

19. **Allaire, M.**, Zheng, S.; Lall, U. (2018). Community Response to Impaired Drinking Water Quality. 1<sup>st</sup> Annual Water Security Conference. Toronto, Canada.
18. **Allaire, M.**, Zheng, S.; Lall, U. (2018). Big Data and Health Impacts of Drinking Water Quality Violations. SESYNC Workshop: Advances in Socio-Environmental Systems Research. Annapolis, MD.
17. **Allaire, M.**, Zheng, S.; Lall, U. (2017). Community Response to Impaired Drinking Water Quality: Evidence from Bottled Water Sales. American Geophysical Union. Fall Meeting. New Orleans, LA.
16. **Allaire, M.**, Zheng, S.; Lall, U. (2017). Big Data and Health Impacts of Drinking Water Quality Violations. American Geophysical Union. Fall Meeting. New Orleans, LA.
15. **Allaire, M.**, Wu, H.; Lall, U. (2017). National Trends in Drinking Water Quality Violations. World Environmental & Water Resources Congress (EWRI). Sacramento, CA.
14. **Allaire, M.**, Wu, H.; Lall, U. (2016). Beyond Flint: National Trends in Drinking Water Quality Violations. American Geophysical Union. Fall Meeting. San Francisco, CA.
13. **Allaire, M.** (2016). Disaster Loss and Social Media: Can Online Information Increase Flood Resilience? International Conference on Sustainable Development, New York, NY.
12. **Allaire, M.** (2016). Informing Mitigation of Disaster Loss through Social Media. World Environmental & Water Resources Congress (EWRI). Palm Beach, FL.
11. **Allaire, M.** (2016). Can information encourage flood adaptation action? Evidence from a randomized field experiment. EAERE FEEM VIU Summer School in Resource and Environmental Economics. Venice, Italy.
10. **Allaire, M.** (2015). Using practical and social information to influence flood adaptation behavior. Southern Economics Association (SEA). New Orleans, LA.
9. **Allaire, M.** (2015). Can Social Media Inform Mitigation of Disaster Loss? American Geophysical Union. Fall Meeting. San Francisco, CA.
8. **Allaire, M.**, Kroll, C., and Vogel, R. (2014). The Hydromorphology of an Urbanizing Watershed Using Multivariate Elasticity. American Geophysical Union. Fall Meeting. San Francisco, CA.
7. **Allaire, M.** and Brown, S. (2014). The Green Paradox of U.S. Biofuel Subsidies: Impact on Greenhouse Gas Emissions. World Congress of Environmental and Resource Economics. Istanbul, Turkey.

6. **Allaire, M.** and Brown, S. (2014). Energy Security and Climate Implications of U.S. Fossil Fuel Subsidies. World Congress of Environmental and Resource Economics. Istanbul, Turkey.
5. **Allaire, M.**, Fuente, D., Whittington, D., and Jeuland, M. (2014). Forecasts of health costs due to poor water and sanitation in Africa. University Council on Water Resources, Annual Conference. Medford, MA.
4. **Allaire, M.** (2008). Evaluating the Influence of Small Reservoirs on Groundwater Recharge. 33<sup>rd</sup> International Geological Congress. Oslo, Norway.
3. **Allaire, M.** and Archfield, S. (2007). USGS Firm Yield Estimator Model: Evaluating the Influence of Small Reservoirs on Groundwater Recharge. Geological Society of America Annual Meeting, Denver, CO.
2. Baum, C., Williams, B., **Allaire, M.**, et al. (2006). Understanding the Path of the Popo Agie River through the Sinks Canyon Cave. Proceedings of the GSA Annual Meeting, Philadelphia, PA.
1. Kney, A., Brandes, D., **Allaire, M.**, et al. (2005). Development of a Graphical Assessment Method for Interpreting Stream Conductivity Data. Environmental & Water Resources Research Institute. Anchorage, Alaska.

## **PROFESSIONAL AFFILIATIONS**

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Association for Public Policy Analysis and Management; American Association for the Advancement of Science; American Geophysical Union

## **MEDIA COVERAGE**

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New York Times (Here are the places that struggle to meet the rules on safe drinking water)

USA Today (Tens of millions of Americans exposed to unsafe drinking water each year)

AAAS Science Magazine (Millions of Americans drink potentially unsafe tap water)

Michigan Public Radio (Environment Report)

KALW San Francisco Public Radio (Your Call: One Planet Series)

Business Insider (American drinking water could soon get a lot dirtier)

Huffington Post (Common for Americans to go days without safe drinking water)

Yale Environment Review (The power of social media in reducing flood losses)

KRLD News - CBS Radio 1080 – Dallas (Minute with Mitch Carr)

HBO Vice documentary series (Episode 45: The Future of Energy)

Others:

The Guardian, Philadelphia Inquirer, Louisville Public Media (NPR affiliate), HealthDay News, HBO VICE News Tonight, The Source (International Water Association), Seeker.com (Discovery Communications), NBC KING 5 News – Pacific Northwest, PhysOrg, Science Newsline, Eurasia Review, United Press International, ABC KBMT-TV- South Texas, ABC KXTV- Sacramento, Kitsap Sun, Physician's Briefing, NewsMax, NewsWise, Central Valley PBS.