

JOSEPH H. COOK

School of Economic Sciences
Washington State University
Pullman, WA 99164
509-335-3817

(updated July 2021)

joe.cook@wsu.edu

ACADEMIC APPOINTMENTS

Associate Professor, School of Economic Sciences, Washington State University, Pullman, WA. (Partial extension appointment: Sustainable Stormwater, Washington Stormwater Center, WSU Puyallup). Fall 2017-current.

Associate Professor, Daniel J. Evans School of Public Policy & Governance, University of Washington, Seattle, WA, 2013-2017. **Assistant Professor**, 2007 - 2013.

Visiting Professor, University of Colorado. Fall 2014 (Economics, CU-Boulder), Spring 2015 (School of Public Affairs, CU-Denver).

EDUCATION

University of North Carolina, Chapel Hill, NC

Department of Environmental Sciences and Engineering, School of Public Health
Environmental Management and Policy, M.S. 2004, Ph.D 2007.

Cornell University, Ithaca, NY

Natural Resources, B.S. 1996

PEER-REVIEWED JOURNAL ARTICLES (*paper co-authored with students and mentees)

29. **Cook, J.**, J. Brühl, and M. Visser. 2021. "Distributional statistics of municipal water use during Cape Town's drought: implications for affordability, conservation and tariff design." *Water Resources Research*, accepted April 2021.
28. Brent, D., C. Lott, M. Taylor, **J. Cook**, K. Rollins and S. Stoddard. 2020. "What causes heterogeneous responses to social comparison messages for water conservation?". *Environmental and Resource Economics*, 77(3): 503-537.
27. ***Cook, J.**, J. Wagner, and G. Newell. 2020. "A decision support tool for rural water supply planning". *J Water Sanitation and Hygiene for Development*, 10(3): 447-457. Tool available at: www.ruralwaterdecision.org

26. Hills, K., G. Yorgey, and **J. Cook**. 2020. "Demand for bio-based fertilizers from dairy manure in Washington State: a small-scale discrete choice experiment." *Renewable Agriculture and Food Systems*, 1-8. <https://doi.org/10.1017/S174217052000023X>
25. **Cook, J.**, D. Fuente, and D. Whittington. 2020. "Choosing among pro-poor policy options in providing municipal water services". *Water Economics and Policy*, 6(3).
24. *Wagner, J., **J. Cook**, and P. Kimuyu. 2019. "Household demand for water in rural Kenya". *Environmental and Resource Economics*, 74(4): 1563-1584.
23. Whittington, D. and **J. Cook**. 2019. "Valuing Changes in Time Use in Low and Middle-Income Countries." *Journal of Benefit-Cost Analysis*, 10(S1): 51-72.
22. ***Cook, J.** and S. Lahren. 2017. "Why do water points fail? Learning from open-ended failure descriptions in the WPDx dataset." *J Water Sanitation and Hygiene for Development*, 7(4): 535-545.
21. Yoder, J., J. Adam, M. Brady, **J. Cook**, S. Katz, D. Brent, S. Johnston, K. Malek, J. McMillan, Q. Yang. 2017. "Benefit-cost analyses of Integrated Water Resource Management: The Yakima Basin Integrated Plan. *Journal of the American Water Resources Association*, 53(2):456-477.
20. ***Cook, J.**, Kimuyu, P., A. Blum, and J. Gatua. 2016. "Estimating the value of travel time in rural Africa from a stated preference experiment on water source choices". *Journal of Benefit Cost Analysis*, 7(2): 221-247. Available as [RFF-EfD Working Paper 15-09](#).
19. **Cook, J.**, P. Kimuyu, and D. Whittington. 2016. "The costs of coping with poor water supply in rural Kenya." *Water Resources Research* 52: 841-859. Available as [Efd Working Paper 15-08](#).
18. Yoder, J., M. Brady and **J. Cook**. 2016. "Water markets and storage: Substitutes or complements for drought risk mitigation?" *Water Economics and Policy*, 2(2).
- 17*. Brent, D., **J. Cook**, and S. Olsen. 2015. "Social comparisons, household water use and participation in utility conservation programs: Evidence from three randomized trials." *Journal of the Association of Environmental and Resource Economists* 2(4): 597-627.
- 16*. Donfouet, H., **J. Cook** and P.W. Jeanty. 2015. "The economic value of improved air quality in urban Africa: Results from Douala, Cameroon". *Environment and Development Economics* 20(5):630-649.
15. **Cook, J.** and S. Rabotyagov. 2014. "Assessing irrigators' preferences for water market lease attributes with a stated preferences approach". *Water Resources and Economics* 7: 19-38.

- 14*. Masuda, Y., L. Fortmann, M.K. Gugerty, M. Smith-Nilson, and **J. Cook**. 2014. "Pictorial approaches for measuring time use in rural Ethiopia." *Social Indicators Research*, January 2012. (Corresponding author).
13. **Cook, J.**, S. Chatterjee, D. Sur and D. Whittington. 2013. "Measuring risk aversion among the urban poor in Kolkata, India". *Applied Economics Letters*, 20(1): 1-13.
- 12*. R. Chaudhri, K. Lieberg, R. Sodt, J. Chilton, G. Borriello, Y. Masuda and **J. Cook**. 2012. "Low power sensors and smartphones for tracking water collection in rural Ethiopia". *IEEE Pervasive Computing*. March 2012: 15-24. (Special Issue on Information Communication Technologies for Development (ICT4D)).
11. **Cook, J.**, B. Maskery, M. Jeuland and D. Whittington, 2012. "The case for giving stated preference respondents 'time to think': results from four countries." *Environmental and Resource Economics*, 51: 473-496.
10. **Cook, J.**, M. Jeuland, B. Maskery, D. Lauria, D. Sur, J. Clemens, and D. Whittington. 2009. "Using private demand studies to calculate socially optimal vaccine subsidies in developing countries." *Journal of Policy Analysis and Management*, 28(1): 6-28.
9. **Cook, J.**, D. Sur, J. Clemens, and D. Whittington. 2009. "Evaluating investments in typhoid vaccines in two Kolkata slums." *Journal of Health, Population and Nutrition*, 27(6): 711-724.
8. Jeuland, M., **J. Cook**, C. Poulos, J. Clemens, D. Whittington, and DOMI Cholera Economics Study Group. 2009. "Cost-effectiveness of new-generation oral cholera vaccines: A multi-site analysis". *Value in Health*, 12(6): 899-908.
7. Whittington, D., D. Sur, **J. Cook**, S. Chatterjee, B. Maskery, M. Lahiri, C. Poulos, S. Boral, A. Nyamete, J. Deen, L. Ochiai and S. K. Bhattacharya. 2008. "Rethinking cholera and typhoid vaccination policies for the poor: Private demand in Kolkata, India." *World Development*, 37(2): 399-409.
6. **Cook, J.**, M. Jeuland, D. Whittington, C.Poulos, J. Clemens, D.Sur, D. D.Anh, M. Agtini, and Z.Bhutta. 2008. "The cost-effectiveness of typhoid Vi vaccination programs: Calculations for four urban sites in four Asian countries." *Vaccine*, 26: 6305-6316.
5. Kim, D., D. G. Canh, C. Poulos, L. T. K. Thoa, **J. Cook**, N. T. Hoa, A. Nyamete, D. T. D. Thuy, J. Deen, N. D. Son, J. Clemens, D. D. Trach, V. D. Thiem, D. D. Anh, and D. Whittington. 2008. "Private demand for cholera vaccines in Hue, Vietnam." *Value in Health*, 11(1): 119-128.
4. **Cook, J.**, D. Whittington, D.G. Cahn, F. Reed Johnson, and A. Nyamete. 2007. "Reliability of stated preferences for cholera and typhoid vaccines with time to think in Hue, Vietnam." *Economic Inquiry*, 45(1): 100-114.

3. Sur, D., **J. Cook**, S. Chatterjee, J. Deen, D. Whittington. 2006. "Increasing the transparency of stated choice studies for policy analysis: designing experiments to produce policy graphs." *Journal of Policy Analysis and Management*, 26(1): 189-199. (Corresponding author)
2. Blackman, A., S. Newbold, J.-S. Shih, D. Evans, **J. Cook** and M. Batz. 2006. "The benefits and costs of informal sector pollution control: Traditional Mexican brick kilns." *Environment and Development Economics* 11(5): 603-627.
1. Whittington, D., D. Lauria, V. Prabhu and **J. Cook**. 2004. "An economic reappraisal of the Melamchi water supply project – Kathmandu, Nepal." *Portuguese Economic Journal* 3: 157-178.

BOOK CHAPTERS and OTHER (Peer-reviewed)

- B5. **J. Cook** and D. Brent. 2021. "Do households respond to the marginal or average price of piped water services?" In *Oxford Encyclopedia of Water, Sanitation, and Global Health*. Ed. . New York: Oxford University Press, forthcoming.
- B4. **Cook, J.** 2020. "Customer Assistance Programs and Affordability Issues in Water Supply and Sanitation". In *Oxford Encyclopedia of Water, Sanitation, and Global Health*. Ed. . New York: Oxford University Press.
- B3. **Cook, J.**, D. Fuente, M. Matichich, and D. Whittington. 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.
- B2. **Cook, J.** 2013. "Principles and standards for benefit-cost analysis of public health preparedness and pandemic mitigation programs". In *Principles and Standards for Benefit-Cost Analysis*. Eds. R. Scott Farrow and Richard O. Zerbe. Edward Elgar.
- B1. Blackman, A., S. Newbold, J.-S. Shih, D.A. Evans, **J. Cook**, and M. Batz. 2006. "The benefits and costs of controlling small-firm pollution: informal brickmaking in Ciudad Juarez, Mexico". Chapter 2 in "Small Firms and the Environment in Developing Countries: Collective Impacts, Collective Action". RFF Press, Washington DC. 246 pp.

REPORTS AND OTHER NON-PEER REVIEWED WORK

- R7. Amaechina, E., A. Amoah, F. Amuakwa-Mensa, S. Amuakwa-Mensa, E. Bbaale, J. Bonilla, J. Bruhl, **J. Cook**, N. Chukwuone, D. Fuente, R. Madrigal-Ballesteros, R. Marin, P. Khanh Nam, J. Otieno, R. Ponce, C. Saldarriaga, F. Vasquez Lavin, B. Viguera, and M. Visser. 2020. "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. [Corresponding author]

- R6. **Cook, J.** and D. Whittington. 2020. “Editorial - Water Tariffs and Affordability: The Economics and Policy of Protecting the Poor.” Introduction from Guest Editors to Special Issue of *Water Economics and Policy*. 6(3): 1-9.
- R5. Katz, S., H. Beecher, M. Brady, **J. Cook**, K. Gates, J. Padowski, G. Pess, M. Scheuerell, and J. Yoder. 2019. “Technical Supplement: Determining Net Ecological Benefit”, appendix to “Final Guidance for Determining Net Ecological Benefit”
<https://fortress.wa.gov/ecy/publications/documents/1911079.pdf>
- R4. Yoder, J., J. Adam, M. Brady, **J. Cook** and S. Katz. 2014. "Benefit-cost analysis of the Yakima Basin Integrated Plan Projects." Submitted to the Washington State Legislature December 15, 2014.
- R3. **Cook, J.** and J. Onjala. “Microfinance in the water supply and sanitation sector in Kenya” (August 2009). Prepared for Global Water Challenge, with support from the Packard Foundation. Online at:
http://water.3cdn.net/cedec9aa55ab5b6ed9_slm6ivaye.pdf
- R2. **Cook, J.** "Confusion in risk aversion experiments in low-income countries". [SSRN Working Paper](#).
- R1. Borger, T. and **J. Cook**. 2017 “Giving respondents ‘time to think’ reduces the randomness of responses in repeated discrete choice tasks”. [University of St. Andrews Discussion Papers in Environmental Economics](#) 2016-13.

WORKING PAPERS (*paper co-authored with students and mentees.)

- WP4. **Cook, J.**, J. Kabubo-Mariara and Peter Kimuyu. 2021. “The short-run impacts of reducing water collection times on time use, well-being and education in rural Kenya”.
Under review.
- WP3. ***Cook, J.** and M.T. Randriamaro. 2021. “The value of time, with and without a smartphone”. *Under review*.
- WP2. Brent, D., **J. Cook**, and A. Lassiter. 2021. “Who signs up for free raingardens? Distributional effects of green infrastructure subsidies”. *Revising to resubmit, Land Economics, January 2021*.
- WP1. **Cook, J.**, J. Kabubo-Mariara and Peter Kimuyu. 2021. “Happy at work in Africa? Measuring time use and affect among water carriers in rural Kenya using the Experience Sampling Method”. [RFF-EfD Working Paper Series \(Jan 2018\)](#). *Revisions resubmitted, J Happiness Studies, April 2021*.

GRANTS

“Evaluating the Effectiveness of Stormwater Education and Outreach: Permittee Guidance for Addressing Challenges through Behavior Change.” Washington State Department of Ecology. Joseph Cook (PI), Ani Jayakaran, Laurie Larson-Pugh, Aimee Navickis-Brasch. **\$270,100**. 2021-2022

“Subsidies, incentives, and information: Testing approaches to improve customer bill payment in Nairobi, Kenya.” Richard Mulwa (PI), David Fuente, Fridah Nyakundi, Jackson Otieno and Joseph Cook. Environment for Development initiative. **\$60,000**. 2020-2021

“Water use in the Kenyan commercial Sector: Measuring price elasticity and coping strategies to deal with unreliability.” Jackson Otieno (PI), David Fuente, Fridah Nyakundi, and Joseph Cook. Environment for Development initiative. **\$70,000**. 2020-2021

“Technology for trade: new tools and new rules for water use efficiency in agriculture and beyond”. USDA National Institute of Food and Agriculture (NIFA). PI Jon Yoder. Total award **\$4,966,223**. Co-I Cook leading component on surveys, simulation games to identify how irrigators interact with technologies and institutional innovations, and test behavioral responses and outcomes; direct budget ~\$553,000. 2018-2022.

“Defining Net Ecological Benefit for implementation of ESSB 6091”. Washington State Department of Ecology. PI Jon Yoder. **\$72,000**. 2018-19.

“Short- and long-term effects of exogenously reducing water collection times on school attendance, hours studying and time use: Meru County, Kenya.” Environment for Development Initiative. Co-PI (with Jane Mariara and Peter Kimuyu). **\$75,000**. 2016-2017.

“Evaluating Truckee Meadows Water Authority’s Conservation Messaging, Co-Investigator (with Kim Rollins (PI), Shawn Stoddard, Michael Taylor, Daniel Brent, and Corey Lott), Truckee Meadows Water Authority, **\$69,002**. 2015-2016.

“Benefit-cost analyses of the Yakima Basin Integrated Plan Projects.” Washington State Legislature, Section 5057, State of Washington Capital Budget 2013. Co-investigator (with Jon Yoder (PI), J. Adam, M. Brady, S. Katz, D. Brent, S. Johnston, K. Malek, J. McMillan, and Q. Yang). **\$300,000**. 2013-2014.

“How does improving access to safe water change household time use in rural Ethiopia?” University of Washington Royalty Research Fund. PI. **\$39,750**. June 2010 – June 2011.

“Adapting to climate-induced hydrological changes in the Yakima River basin of Washington State: unlocking water markets”. University of Washington Environmental Institute (College of the Environment). Co-PI (with Sergey Rabotyagov) **\$143,468**. March 2010 – June 2012.

PRESENTATIONS, EXTENSION, MEDIA & TESTIMONY (since 2014)

- [UNC WASH Policy Research Digest](#), podcast interview about guest-edited special issue on affordability in water in *Water Economics and Policy*. April 2021
- “Value of time, with and without your smartphone.” Society of Benefit-Cost Analysis Annual Conference, February 2021
- Invited presentation “Water Marketing” for Seminar Group conference “Water Law in Central Washington”, August 2020 and November 2020.
- Invited testimony on water markets to Washington State Legislature, House Rural Development and Natural Resources subcommittee. February 25, 2020.
- “A decision support tool for rural water supply planning”. Environment for Development Annual Meeting, November 2019.
- “Happy at work in Africa? Measuring time use and affect among water carriers in rural Kenya using the Experience Sampling Method”. Invited presentation, University of California Riverside, February 2019.
- KUOW “The Record”, interviewed on water markets, [August 21, 2019](#).
- “A global assessment of non-tariff customer assistance programs in water supply and sanitation”. World Congress of Environmental and Resource Economists, Gothenburg, Sweden, 2018.
- NPR “Marketplace”, interviewed on water markets, [February 17, 2017](#).
- “WSU report says water plan overvalues fish recovery.” *Seattle Times*, [December 18, 2014](#). (Yakima Report to Legislature)
- “WSU Study: Yakima Basin projects don’t pencil out.” *Capital Press*, [December 15, 2014](#) (Yakima Report to Legislature)
- “WSU study challenges economics of Yakima Basin water plan.” Yakima Herald-Republic. [December 4, 2014](#). (Yakima Report to Legislature).

TEACHING

Washington State University

- EconS 301 Intermediate Microeconomics with Calculus (undergrad; 2017, 2018, 2019, 2021)
- EconS 581 Resource Economics (doctoral; Spring 2018, Fall 2018, 2019, 2021)

University of Washington (all masters-level courses)

- PBAF 594 Economic Approaches to Environmental Management (2015)
- PBAF 595 Water Resource Economics (2009, 2011, 2012, 2017)
- PBAF 517 Economics for Policy Analysis and Management II (2011, 2012, 2013)
- PBAF 587 Water and Sanitation Policy in Developing Countries (2008, 2009, 2010, 2011, 2013)
- PBAF 518 Applied Benefit-Cost Analysis (2010, 2012, 2017)
- PBAF 527 Quantitative Analysis (2008, 2009, 2010)
- PBAF 521/CFR 529/ESRM 429 Water Center Seminar (2011)

- PBAF 599D Special Topics: Updating the principles and guidelines used in benefit-cost analyses of large water projects by the Army Corps of Engineers (for the Congressional Research Service). Co-taught with Richard Zerbe. (2009)

STUDENT ADVISING

Washington State University

Current

Mary Tiana Randriamaro (PhD, Economics, chair)
 Chelsea Pardini (PhD, Economics, member)
 Pedro Jimenez (MS, Economics, member)
 Ajay Barman (PhD, Economics, member)

Graduates

Nicholas Potter (PhD, Economics, member, 2021. USDA ERS)
 Jake Wagner (PhD, Economics, chair, 2020. Assistant Research Professor, WSU)
 Aditi Surve (MS, Economics, member 2020)
 Linda Umwali (MS, Economics, member, 2020)
 Richard Houghton (MS, Economics, chair, 2020)
 Rokas Piliusenko (MS, Economics, chair, 2020)

University of Washington

Tyler Blake-Davis (PhD, Evans, 2018, committee member. Principal Project Manager, Amazon)
 Susan Dickerson-Lange (PhD, Civil and Environmental Engineering, 2016, committee member. Hydrologist, Natural Systems Design)
 Yuta Masuda (PhD, Evans, 2014, chair. Senior Sustainable Development and Behavioral Scientist, The Nature Conservancy)
 Skylar Olsen (PhD, Economics, 2014, committee member. Senior Economist Zillow)
 Julie Vano (PhD, Civil and Environmental Engineering, 2013, committee member. Research Director, Aspen Global Change Institute)
 Daniel Brent (PhD, Economics, 2013, committee member, Assistant Professor, Penn State University)
 Laura Fricke (MS, Evans, 2013)
 Matthew Schoellhamer (MS, Forest Resources, committee member)
 Patrick Green (MUP, Urban Planning, 2012, committee member)
 Erin Donley (MS, Forest Resources, 2010, committee member)
 Evans School Degree Projects: Cairns, Cammarano, Gilbert, Levin, Rosenberg, Smith, Stampher, Sztern, Trimble)

SERVICE

University Committees & Service:

Director's Advisory Committee, WSU, 2019-current
Search committee, WSU, 2019-2020
Undergraduate studies, WSU, 2018-current
Co-advisor, University of Washington chapter of Engineers without Borders (2014-16)
Graduate Program Coordinator (UW Evans, 2012-2014)
UW Graduate School Council (2012-2014)
Faculty Council (UW Evans, 2011-2013)
Peace Corps Master International (PCMI), Faculty Director (UW Evans, 2008-2014)
Admissions (UW Evans, 2010-11)
Curriculum (UW Evans, 2007-08, 10-11)
Research Committee (UW Evans, 2008-09)
Diversity Oversight (UW Evans, 2009)

External

External peer reviewer, "Technical Report on Economic Model for the Development of Water Loss Performance Standards", California State Water Resources Control Board, December 2020.

Member, Expert Consultative Group on Global Monitoring of Water, Sanitation, and Hygiene (WASH) Affordability, Joint Monitoring Programme (WHO, UNICEF), 2018-2020.

Network member, Environment for Development (Efd) Kenya, School of Economics, University of Nairobi, 2013 – present.

Member, Editorial Board. Environment for Development (Efd) Discussion Paper Series. 2019-current.

Member, Washington State Academy of Sciences (WSAS) Committee to advise the Washington Department of Fish and Wildlife on fish hatchery reform. 2018-2019

Resource Person (responsible for proposal reviews and mentoring) for *Center for Environmental Economics and Policy in Africa* (CEEPA), Pretoria, South Africa, 2009 – 2015.

Referee: National Science Foundation (SES-Economics), *Proceedings of the National Academy of Sciences (PNAS)*, *Journal of Environmental Economics and Management*, *American Journal of Agricultural Economics*, *Environmental & Resource Economics*, *Environment and Development Economics*, *Health Economics*, *Water Resources Research*, *Agricultural Economics*, *Social Science and Medicine*, *Journal of Environmental Management*, *J. Contemporary Water Research and Education*

HONORS and AWARDS

Excellence in Teaching Award (Evans School University of Washington, student-awarded),

- 2010-2011
- 2015-2016

Dean's Excellence in Teaching Award, 2013

Bruce Gardner Memorial Prize for Applied Policy Analysis, Agricultural and Applied Economics Association, 2016, for "Benefit-cost analyses of the Yakima Basin Integrated Plan Projects".