

JOSEPH H. COOK

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

(updated January 2020)

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

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

Brent, D., C. Lott, M. Taylor, **J. Cook**, K. Rollins and S. Stoddard. 2019. "What causes heterogeneous responses to social comparison messages for water conservation? Strong normative messages or opportunity costs". *LSU Economics Department [Working paper](#)*. *Revise and resubmit Env & Res Economics*.

Hills, K., G. Yorgey, and **J. Cook**. 2019. "Demand for bio-based fertilizers from dairy manure in Washington State: a small-scale discrete choice experiment." *Under review October 2019*.

Cook, J., J. Kabubo-Mariara and Peter Kimuyu. 2018. "Happy collecting water? Measuring time use and affect among water carriers in rural Kenya using the Experience Sampling Method". [RFF-EfD Working Paper Series \(Jan 2018\)](#).

Cook, J., J. Kabubo-Mariara and Peter Kimuyu. 2018. "The short-run impacts of exogenously reducing water collection times in rural Kenya". *Working paper*.

***Cook, J.**, J. Wagner, and G. Newell. 2019. "A decision support tool for rural water supply planning". *Working paper*.

Brent, D., **J. Cook**, and A. Lassiter. 2019. "Who signs up for free raingardens? Distributional effects of green infrastructure subsidies". *In preparation*.

*Masuda, Y. and **J. Cook**. "Does improved water access increase child schooling? A quasi-experimental approach from rural Ethiopia". [Evans School Working Paper 2013-02](#).

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

25. **Cook, J.**, D. Fuente, and D. Whittington. 2020. "Choosing among pro-poor policy options in providing municipal water services". *Water Economics and Policy*, forthcoming.

24. *Wagner, J., **J. Cook**, and P. Kimuyu. 2019. "Household demand for water in rural Kenya". *Environmental and Resource Economics*, 74(4).

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. [Working paper version](#).

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)

B1. **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.

B3. 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

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>

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.

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

Cook, J. "Confusion in risk aversion experiments in low-income countries". [SSRN Working Paper](#).

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.

GRANTS

“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 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.

AWARDS

Excellence in Teaching Award (Evans School (UW), 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".

MEDIA

- KUOW "The Record", interviewed on water markets, [August 21, 2019](#).
- 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).

OTHER RESEARCH-RELATED WORK EXPERIENCE

Field experience in Ethiopia, Kenya, Mozambique, India, Vietnam, and the U.S.

Millennium Challenge Corporation (subcontract to CH2M and CVM), Washington DC. October 2017 - June 2018. Led a team that reviewed the existing literature on pro-poor water pricing policies around the world, including "customer assistance programs" (CAPs) in the U.S. and Europe.

Global Water Challenge, Washington, D.C. August 2008 – August 2009. Consultant. Examined the potential for using microfinance and other innovative forms of financing to improve access to water supply and sanitation in Kenya and Ethiopia.

The Hopi Tribe, Kykotsmovi, AZ, June 2005-2008. Consultant. With Dale Whittington and Michael Hanemann. Led survey of households living on the Hopi reservation to support the Tribe's water rights claim in the Little Colorado River Basin adjudication.

International Vaccine Institute, June 2003 – May 2006, Research assistant (UNC-CH) and consultant. Led stated preference (contingent valuation and discrete choice) studies of private household willingness-to-pay for improved cholera and typhoid vaccines in Kolkata, India. Supported similar study in Hue, Vietnam. Led survey of costs-of-illness of contracting cholera in Beira, Mozambique.

Asian Development Bank, March 2003, consultant. With Dale Whittington, Donald Lauria, and Vimalanand Prabhu. Designed a user-interfaced, probabilistic spreadsheet model of the economic costs and benefits of the Melamchi Water Supply Scheme in Kathmandu, Nepal to support an economic reappraisal of the project.

UNC-CH Environmental Finance Center, May 2002 – May 2003. Built financial models for the Orange County solid waste department examining different ways to fund recycling and solid waste programs.

Resources for the Future, Washington DC, March 1999 – June 2001. Research assistant for Allen Blackman, Alan Krupnick, Dallas Burtraw and Winston Harrington. Projects included a benefit-cost analysis of regulating air pollution in small brickyards in Ciudad Juarez, Mexico; stated preference studies of willingness-to-pay for mortality risk reductions and for recovery of acidified lake ecosystems in Adirondack Park (NY); and an analysis of 8,000 FHA-insured mortgages in Chicago to evaluate the Location Efficient Mortgage (LEM) program.

TEACHING EXPERIENCE

Washington State University

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

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)

ACADEMIC SERVICE & PROFESSIONAL AFFILIATIONS

University

Advising:

Washington State University

Jake Wagner (PhD, Economics, chair)
Nicholas Potter (PhD, Economics, member)
Chelsea Pardini (PhD, Economics, member)

University of Washington

Yuta Masuda (PhD, Evans, 2014, primary advisor)
Skylar Olsen (PhD, Economics, 2014, GSR)
Julie Vano (PhD, Civil and Environmental Engineering, 2013, GSR)
Laura Fricke (MS, Evans, 2013)
Daniel Brent (PhD, Economics, 2013, committee member)
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)
Kevin Feltes (BS, UNC-CH, 2005, committee member)

University Committees & Service:

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

External

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

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

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.

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*

Affiliations

American Economic Association
Association of Environmental and Resource Economists
International Water Resource Economics Consortium
Society for Benefit-Cost Analysis
Association for Public Policy Analysis and Management