YUSUKE KUWAYAMA

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EMPLOYMENT

Fellow, Resources for the Future (2011 – Present)

EDUCATION

Ph.D., Agricultural and Applied Economics, University of Illinois at Urbana-Champaign (2011)

M.S., Economics, University of Illinois at Urbana-Champaign (2006)

A.B., Economics, Amherst College (2004)

RESEARCH INTERESTS

Environmental and natural resource economics; Water resource economics

JOURNAL ARTICLES

Kuwayama, Yusuke, and Nicholas Brozović. 2016. Optimal management of environmental externalities with time lags and uncertainty. *Environmental and Resource Economics*, forthcoming.

Kuwayama, Yusuke, and Hannah Kamen. 2016. What drives the reuse of municipal wastewater? A county-level analysis of Florida. *Land Economics*, forthcoming.

Kuwayama, Yusuke, Sheila Olmstead, and Alan Krupnick. 2015. Water quality and quantity impacts of hydraulic fracturing. *Current Sustainable/Renewable Energy Reports*, 2 (1): 17–24.

Kuwayama, Yusuke, and Nicholas Brozović. 2013. The regulation of a spatially heterogeneous externality: Tradable groundwater permits to protect streams. *Journal of Environmental Economics and Management*, 66 (2): 364–382.

Kuwayama, Yusuke, and Nicholas Brozović. 2012. Analytical hydrologic models and the design of policy instruments for groundwater-quality management. *Hydrogeology Journal*, 20 (5): 957–972.

BOOK CHAPTERS

Kuwayama, Yusuke, Richael Young, and Nicholas Brozović. 2016. Groundwater scarcity: Management approaches and recent innovations. In J. R. Ziolkowska and J. M. Peterson, editors, *Competition for Water Resources – Experiences and Management Approaches in the US and Europe*. Elsevier, forthcoming.

Bernknopf, Richard, David Brookshire, Molly Macauley, Guy Jakeman, **Yusuke Kuwayama**, Holly Miller, Leslie Richardson, and Alan Smart. 2016. Societal benefits – Methods and examples for estimating the value of remote sensing information. Allen Press, forthcoming.

Kuwayama, Yusuke, and Sheila Olmstead. 2015. Water quality and economics: Willingness to pay, efficiency, cost-effectiveness, and new research frontiers. In D. Layton and R. Halvorsen, editors, *The Handbook of Natural Resource Economics* (pp. 474-501). Edward Elgar Publishing, Amsterdam.

OTHER PUBLICATIONS

Kuwayama, Yusuke, and Hannah Kamen. 2015. Commentary: Getting past the "yuck" factor: Recycled water in Florida and other states. *Resources*, 189: 10-12.

Kuwayama, Yusuke. 2014. Groundwater markets: Managing a critical, hidden resource. *Resources*, 186: 18–24.

Kuwayama, Yusuke. 2013. Book review – Water policy reform: Lessons in sustainability from the Murray-Darling Basin. *Journal of Natural Resources Policy Research*, 5 (4): 273–274.

WORKING PAPERS

Kuwayama, Yusuke, Skyler Roeshot, Alan Krupnick, Nathan Richardson, and Jan Mares. Risks and mitigation options for on-site storage of wastewater from shale gas and tight oil development. *Submitted*.

Bernknopf, Richard, David Brookshire, **Yusuke Kuwayama**, Molly Macauley, Matthew Rodell, Alexandra Thompson, Peter Vail, and Benjamin Zaitchik. The value of remotely sensed information: The case of GRACE-enhanced drought severity index. *Submitted*.

Fitzgerald, Timothy, **Yusuke Kuwayama**, and Sheila Olmstead. How does natural resource ownership mediate the impacts of local extraction activities? Evidence from fracking and farms.

Kuwayama, Yusuke, Richard Bernknopf, Benjamin Zaitchik, Alexandra Thompson, and Peter Vail. Estimating the impact of drought on farm income using the US Drought Monitor.

Kuwayama, Yusuke, Sheila Olmstead, and Alan Krupnick. Water resources and unconventional fossil fuel development: Linking physical impacts to social costs. *RFF Discussion Paper* 13–34, 2013.

Kandpal, Eeshani, **Yusuke Kuwayama**, and Kathy Baylis. Can irrigation mitigate the impacts of weather shocks on child health? Evidence from household-level irrigation adoption in India.

WORKS IN PROGRESS

Kuwayama, Yusuke, Jhih-Shyang Shih, and Anna Malinovskaya. Policies to incentivize adoption of fecal waste treatment technologies with resource recovery.

Ando, Amy, and **Yusuke Kuwayama**. Fishery quota allocation with commercial and recreational harvest.

GRANTS

Yusuke Kuwayama (PI) and Jhih-Shyang Shih (co-PI). 2013. "Economic Modeling of Welfare Gains from Resource Recovery from Fecal Waste." *The Bill & Melinda Gates Foundation*, \$56,887.

James Mihelcic (PI), Treavor Boyer, Earnest Coney, Jeffrey Cunningham, Allen Davis, Sarina Ergas, **Yusuke Kuwayama**, Sheila Olmstead, Nathan Richardson, Jhih-Shyang Shih, Maya Trotz, Daniel Yeh, Qiong Zhang, and Julie Zimmerman (co-PIs). 2013. "Center for Reinventing Aging Infrastructue for Nutrient Management (RAINmgt)." *Environmental Protection Agency*, \$2,499,235.

TEACHING EXPERIENCE

University of Illinois at Urbana-Champaign

Head Teaching Assistant: Principles of Macroeconomics (Fall 2006)

Teaching Assistant: Environmental Economics (Spring 2010); Agricultural, Consumer, and Resource Economics (Spring 2008); Principles of Macroeconomics (Spring 2005, Spring 2006); Principles of Microeconomics (Fall 2004)

Amherst College

Teaching Assistant: Microeconomics (Spring 2003, Spring 2004)

AWARDS AND FELLOWSHIPS

Department of Agricultural and Consumer Economics Outstanding Dissertation Award, University of Illinois at Urbana-Champaign (Spring 2012)

Department of Agricultural and Consumer Economics Outstanding Ph.D. Student Award, University of Illinois at Urbana-Champaign (Spring 2011)

Graduate Student Travel Grant, AAEA Foundation (Spring 2010)

List of Teachers Ranked as Excellent by Their Students, University of Illinois at Urbana-Champaign (Spring 2010, Spring 2008, Fall 2006, Spring 2006, Spring 2005, Fall 2004)

Graduate College Conference Travel Award, University of Illinois at Urbana-Champaign (Fall 2009, Fall 2010)

Program in Environmental and Resource Economics Graduate Student Travel Grant, University of Illinois at Urbana-Champaign (Spring 2009)

Program in Environmental and Resource Economics Fellowship, University of Illinois at Urbana-Champaign (Spring 2008)

Graduate Teaching Certificate, Center for Teaching Excellence (Spring 2005)

Roswell Dwight Hitchcock Fellowship, Amherst College (Spring 2004)

John M. Vine Fellowship, Amherst College (Spring 2003)

PRESENTATIONS

2016: Data to Decisions Workshop (GEOValue)

2015: American Geophysical Union (AGU) Fall Meeting; Agricultural and Applied Economics Association (AAEA) Annual Meeting; Association of Environmental and Resource Economists (AERE) Summer Conference; Environment for Development (EfD) Annual Meeting; George Washington University; The Bill & Melinda Gates Foundation; University of Florida; University of Nebraska-Lincoln

2014: Stanford Climate Change and Water Governance Workshop

2013: American Geophysical Union (AGU) Fall Meeting; Association of Environmental and Resource Economists (AERE) Summer Conference; Colby College; NASA Water Resources Program Meeting; Peking University; UNC Water and Health Conference; U.S. Water Alliance

2012: American Geophysical Union (AGU) Fall Meeting; Annual Washington Energy Policy Conference Resources for the Future; The Nature Conservancy

2011: Economic Research Service, USDA; Resources for the Future; Saint Mary's College of Maryland; University of Illinois at Urbana-Champaign; University of Wyoming

2010: Allied Social Science Associations (ASSA) Annual Meeting; Agricultural and Applied Economics Association (AAEA) Annual Meeting; CU Environmental and Resource Economics Workshop; NBER Summer Institute Environmental and Energy Economics (EEE) Workshop; World Congress of Environmental and Resource Economists (WCERE)

2009: Agricultural and Applied Economics Association (AAEA) Annual Meeting; Heartland Environmental and Resource Economics Workshop; Northeastern Agricultural and Resource Economics Association (NAREA) Annual Conference; Southern Economic Association (SEA) Annual Meeting; Universities Council on Water Resources and National Institutes for Water Resources (UCOWR/NIWR) Annual Conference

OTHER INFORMATION

Affiliations: Agricultural and Applied Economics Association, American Economic Association, American Geophysical Union, Association of Environmental and Resource Economists, Northeastern Agricultural and Resource Economics Association

Referee Services: Agricultural and Resource Economics Review, Agricultural Water Management, American Journal of Agricultural Economics, Ecological Economics, Economics Bulletin, Environmental and Resource Economics, Environmental Modelling and Software, Hydrogeology Journal, Journal of Environmental Economics and Management, Journal of the Association of Environmental and Resource Economists, Water Resources and Economics, Water Resources Research

Spoken Languages: English (native), Spanish (native), Japanese (working knowledge)

Computer Skills: MATLAB, Stata, R, ArcGIS, LaTeX