WILLIAM K. JAEGER

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EDUCATION

Ph.D., Stanford University 1985. **Master of Arts**, Stanford University 1981. **Bachelor of Arts**, Washington State University, 1976.

PROFESSIONAL EXPERIENCE

2007-present	Professor, Department of Applied Economics, Oregon State University.
Sept. 2016- Jan. 2017	Visiting Fellow, Robert Schuman Centre for Advanced Studies, European University Institute, Florence, Italy
Fall 2010	Professor, Consortium of Universities for International Studies, CIMBA Program, Paderno del Grappa, Italy.
Fall 2007	Fulbright Scholar, University Ca' Foscari of Venice, Italy (Department of Economics), and visiting researcher, Fondazione Eni Enrico Mattei (FEEM), Venice, Italy.
2001-2007	Associate Professor, Department of Applied Economics (formerly Agricultural and Resource Economics), Oregon State University.
1997-2001	Associate Professor of Economics, Williams College, Williamstown, MA.
1998-2000	Mikesell Visiting Professor of Environmental and Resource Economics, Department of Economics, University of Oregon, Eugene.
1989-97	Assistant Professor of Economics, Williams College, Williamstown, MA.
Summer '96	Visiting Professor, School of Marine Affairs, University of Washington, Seattle.
1994 - 1995	Visiting Scholar, Graduate School of Public Affairs and Institute of Environmental Studies, University of Washington.
1987- 1989	Economist, World Bank Trade and Finance Division, Africa Region. Research on economic development and policy impacts in Sub-Saharan Africa.
1985-1987	Consulting economist, Development Research Department, World Bank.

REFEREED PUBLICATIONS

Jaeger, W.K., Amos, A., Bigelow, D.P., Chang, H., Conklin, D.R., Haggerty, R., Langpap, C., Moore, K., Mote, P.W., Nolin, A.W. and Plantinga, A.J., C.L. Schwartz, D. Tullos, D. P. Turner, 2017. Finding water scarcity amid abundance using human–natural system models. *Proceedings of the National Academy of Sciences*, p.201706847.

Grout, Cyrus, Andrew J. Plantinga, and William K. Jaeger. "Pay or Waive: An Economic Assessment of Property Owner Compensation Laws in the United States." *Review of Environmental Economics and Policy* 8.1 (2014): 103-119.

Jaeger, W.K., A. J. Plantinga, H. Chang, K. Dello, G. Grant, D. Hulse, J. J. McDonnell, S. Lancaster, H. Moradkhani, A. T. Morzillo, P. Mote, A. Nolin, M. Santelmann and J. Wu. Toward a formal definition of water scarcity in natural-human systems. *Water Resources Research*, Volume 49. Published online: 8 JUL 2013 | DOI: 10.1002/wrcr.20249

Jaeger, W.K., 2012. Determinants of Urban Land Market Outcomes: Evidence from California. *Land Use Policy*. doi:10.1016/j.landusepol.2012.02.001

Jaeger W.K. and T.M. Egelkraut, 2011. Biofuel economics in a setting of multiple objectives and unintended consequences. *Renewable and Sustainable Energy Reviews*. 15(9): 4320-4333.

Jaeger, WK, 2011. The welfare effects of environmental taxation. *Environmental and Resource Economics*. Volume 49(1): 101-119.

Jaeger, WK, AJ Plantinga and C Grout, 2012. How Has Oregon's Land Use Planning System Affected Property Values? *Land Use Policy* Vol. 29(1) 62-72.

Grout, C., W.K. Jaeger and A.J. Plantinga, 2011. Land-Use Regulations and Property Values in Portland, Oregon: A Regression Discontinuity Design Approach. *Regional Science and Urban Economics*, Vol. 41(2): 98-107.

Boehlert, B. B., and W. K. Jaeger, 2010. Past and future water conflicts in the Upper Klamath Basin: An economic appraisal, *Water Resources Research*, Volume 46, W10518, doi:10.1029/2009WR007925.

Jaeger, W.K., 2006. The hidden costs of relocating sand & gravel mines. *Resources Policy*, Vol. 31(3): 146-164.

Jaeger, W.K., "The effects of land use regulations on property values" *Environmental Law*, Vol. 36, Spring 2006.

Jaeger, W.K., "Conflicts over water in the Upper Klamath Basin & the potential role for market-based allocations," *Journal of Agricultural and Resource Economics*, 29(2), August 2004, pp. 167-84.

Jaeger, W.K., "Optimal environmental taxation from society's perspective," *American Journal of Agricultural Economics*, 86(3), August 2004. pp. 805-12.

Jaeger, W.K., "Status seeking and social welfare: Is there virtue in vanity?" *Social Science Quarterly*, 85(2), June 2004, pp. 361-79.

Jaeger, W.K., "Carbon taxation when climate affects productivity," *Land Economics*, 78(3), August 2002, pp. 354-67.

Jaeger, W.K. and R. Mikesell, "Increasing stream flows to sustain salmon and other native fish in the Pacific Northwest." *Contemporary Economic Policy*, 20(4), October 2002, pp. 366-80.

Jaeger, W.K., "Saving salmon with fishwheels: a bioeconomic analysis," *Natural Resources Journal*, 37(4), Fall 1997.

Jaeger, W.K., "The welfare cost of a global carbon tax when tax revenues are recycled," *Resource and Energy Economics*, 17 (1), March 1995.

Jaeger, W.K., "Is sustainability optimal?: examining the differences between economists and environmentalists." *Ecological Economics*, 15, October 1995.

Patel, S., T. Pinckney, and W.K. Jaeger, "Smallholder wood production and population pressure in East Africa: evidence of an environmental Kuznets curve?" (with) *Land Economics*, November 1995.

Jaeger, W.K., "The causes of Africa's food crisis," World Development, 20(11), 1992.

Jaeger, W.K. and P. Matlon, "Utilization, profitability, and the adoption of animal draft power in West Africa." *American Journal of Agricultural Economics*, 72(1), Feb. 1990.

Jaeger, W.K. and C. Humphreys, "The effect of policy reforms on agricultural incentives in Sub-Saharan Africa." *American J. of Agric. Economics*, 70(5), December 1988.

BOOKS & BOOK CHAPTERS

Jaeger, William K. 2015. Chapter 2: Institutions and Water. In <u>Handbook of Water Economics</u> (Ariel Dinar and Kurt Schwabe, eds.). Edward Elgar Publishing, Northhampton, MA.

Jaeger, William K. 2013. Double Dividend. In <u>Encyclopedia of Encyclopedia of Energy</u>, <u>Natural Resource</u>, and <u>Environmental Economics</u> (Jason Shogren, ed.) Elsevier Science.

Jaeger, William K., 2013. The Double Dividend Debate. In <u>Handbook of Research on Environmental Taxation</u> (Janet E. Milne and Mikael S. Anderson editors). Edward Elgar Publishing.

Jaeger, W.K., <u>Environmental Economics for Tree Huggers and Other Skeptics</u>, Island Press, 2005.

Jaeger, W.K., <u>Agricultural Mechanization: The Economics of Animal Draft Power in West Africa</u>. Boulder, CO: Westview Press, 1986.

MANUSCRIPTS, MONOGRAPHS AND NON-REFEREED PUBLICATIONS

Jaeger, W. A. Plantinga, C. Langpap, D. Bigelow, K. Moore, 2017. Water, Economics, and Climate Change in the Willamette Basin. Oregon State University. Extension Publication EM 9157. Forthcoming.

Jaeger, W., A. Plantinga, R. Haggerty, C. Langpap, 2014. Anticipating Water Scarcity with Climate Change in the U.S. Pacific Northwest Using a Landscape Model of a Coupled Natural-Human System. Presented at the Fifth World Congress of Environmental and Resource Economists, 28 June - 2 July 2014, Istanbul, Turkey.

Jaeger, W., 2013. The economics of carbon reduction: climate change policy and normative science. Terra Magazine, Oregon State University, Sept. 28th, 2013. http://oregonstate.edu/terra/.

Jaeger, W, (with Roger Mann, Daniel D. Huppert, Noelwah R. Netusil, JunJie Wu) 2013. Cost-Effectiveness of Fish Tagging Technologies and Programs in the Columbia River Basin. Independent Economic Analysis Board, Fish and Wildlife Program, Northwest Power and Conservation Council. http://www.nwcouncil.org/media/6866845/ieab2013-1.pdf

Jaeger, W.K. Ecosystem Services and the Potential Role for Markets.OSU Extension Publication EM 9033. August 2011.

http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/22427/em9033.pdf

Jaeger, W.K. and T. Egelkraut, 2011. Biofuel economics: multiple objectives and unintended consequences. FEEM Nota di Lavoro 37.2011. http://www.feem.it/userfiles/attach/201151316034NDL2011-037.pdf

Jaeger, W.K., "Perspectives on Oregon's Taxes – an Economic Look at Measures 66 & 67." OSU Extension Publication EM 8997. December 2009. http://ir.library.oregonstate.edu/jspui/bitstream/1957/13620/1/em8997.pdf

Jaeger, W.K., "Ecosystem Services and the Potential Role for Markets," November 2009. Paper presented at the Oregon Resource and Environmental Economics Workshop, Salem, OR.

Jaeger, W.K. and T. Egelkraut, "The cost effectiveness of biofuels given multiple objectives," 2009. Paper presented at the Western Economics Association International, Vancouver, BC, June 2009, and at the 2009 AERE Workshop: *Energy and the Environment*, June 18-20.

Jaeger, W.K., "The welfare effects of environmental taxation." FEEM Nota di Lavoro 09.2009, February. (http://www.feem.it/NR/rdonlyres/08647559-ED6D-47DE-AC20-92FE1A5D4B97/2819/909.pdf)

Jaeger, W.K. and V. Kolpin, "The Environmental Kuznets Curve from multiple perspectives," 2008. FEEM Working Paper 38.08. (http://www.feem.it/getpage.aspx?id=1796&sez=Publications&padre=73)

Jaeger, W.K., C. Grout and A. Plantinga, "Evidence of the effects of Oregon's land use planning system on land prices," 2008. Lincoln Institute of Land Policy Working Paper #WP08WJ1 (http://www.lincolninst.edu/pubs/PubDetail.aspx?pubid=1390).

Jaeger, W.K. and R. Siegel, "Economics of oilseed crops and their biodiesel potential in Oregon's Willamette Valley. Special Report 1081. Oregon State University Extension Service, May 2008. (http://extension.oregonstate.edu/catalog/pdf/sr/sr1081.pdf)

Jaeger, W.K., "Subsidizing biofuels in not the answer: more flexible solutions like raising the gas tax could address energy concerns." Genetic Engineering & Biotechnology News. Vol 27(20): pp. 6,9. November 15, 2007

Jaeger, W.K., "A market for water: managing expectations." Sockeye Magazine, Volume 12(1): 36-37. Autumn 2007.

Jaeger, W.K., R. Cross and T. Egelkraut, "Biofuels potential in Oregon: background and evaluation of options." Special Report #1078. Oregon State University Extension Service. July 2007. (http://extension.oregonstate.edu/catalog/pdf/sr/sr1078.pdf)

Jaeger, W.K. and A. Plantinga, "How have land-use regulations affected property values in Oregon?" Special Report #1077, Oregon State University Extension Service. June 2007 (http://extension.oregonstate.edu/catalog/pdf/sr/sr1077.pdf).

Jaeger, W.K., "Correcting some misleading myths about Measure 37" Guest Commentary, Portland Business Journal, May 4, 2007

Jaeger, W.K., "Three methods for evaluating Measure 37 claims," Oregon State University Extension Publication EM 8933-E. March 2007. (http://extension.oregonstate.edu/catalog/pdf/em/em8933-e.pdf)

Jaeger, W.K. and A. Plantinga, "The economics behind Measure 37," Oregon State University Extension Publication EM 8925. February 2007. (http://extension.oregonstate.edu/catalog/html/em/em8925/)

Jaeger, W.K., "Stakes high in land claims," Eugene Register-Guard, 12/10/2006.

Jaeger, W.K. and A. Plantinga, "Measure 37: Parsing the economics in the land-use debate" OP-ED in The Oregonian, November 8, 2005

Jaeger, W.K., "An economic analysis of land use conflicts in Oregon: agriculture versus aggregate mining." Report to the Governor's Aggregate/Farmland Consensus Working Group. August 1, 2005.

Jaeger, W.K., "Brief #3: Energy pricing and irrigated agriculture in the Upper Klamath Basin." Oregon State University Extension Publication EM 8846-E, July 2004.

Jaeger, W.K. and B. Weber, "7 Frequently Asked Questions About Taxes and Spending in Oregon." Oregon State University Extension Publication EM 8853, January 2004.

Jaeger, W.K., "Brief #1: The value of water varies enormously across the Upper Klamath Basin." Oregon State University Extension Publication EM 8843-E, January 2004.

Jaeger, W.K., "Brief #2: Potential benefits from water banks and water transfers. Oregon State." University Extension Publication EM 8844-E, January 2004.

Jaeger, W.K. and V. Kolpin, "Income, population and U-shaped environmental paths," processed, April 2003.

Jaeger, W.K., "Policy Implications of Environmental Taxation with Pre-Existing Revenue Taxes," in Proceedings of the "Market Mechanisms and Incentives: Applications to Environmental Policy" Workshop Sponsored by the US Environmental Protection Agency's National Center for Environmental Economics and National Center for Environmental Research, May 1-2, 2003. http://yosemite.epa.gov/ee/epa/eermfile.nsf/vwAN/EE-0472-04.pdf

Jaeger, W.K., B. Eleveld and M. Melbye, "Rapid Assessment of Possible Economic Impacts from Irrigation Curtailments in the Fern Ridge Reservoir Irrigation Areas," OSU report, September 2003.

Jaeger, W.K., "Economic Issues and Oregon Ballot Measure 27: Labeling of Genetically Modified Foods." OSU Extension Publication EM8817, October 2002.

Jaeger, W.K., "Water Allocation Alternatives for the Upper Klamath Basin." Chapter 19 in: "Water Allocation in the Klamath Reclamation Project, 2001: An Assessment of Natural Resource, Economic, Social, and Institutional Issues with a Focus on the Upper Klamath Basin" by Oregon State University & University of California, December 2002.

Jaeger, W.K., "What actually happened in 2001? A comparison of estimated impacts and reported outcomes of the irrigation curtailment in the Upper Klamath Basin" Chapter 14 in: "Water Allocation in the Klamath Reclamation Project, 2001: An Assessment of Natural Resource, Economic, Social, and Institutional Issues with a Focus on the Upper Klamath Basin," Oregon State University & University of California, December 2002.

Jaeger, W.K. and Bruce Weber, "Preface to the Economics Chapters," Chapter 10 in: "Water Allocation in the Klamath Reclamation Project, 2001: An Assessment of Natural Resource, Economic, Social, and Institutional Issues with a Focus on the Upper Klamath Basin" by Oregon State University and the University of California, December 2002.

Jaeger, W.K. and B. Doppelt, "Benefits to Fish, Benefits to Farmers: Improving Streamflow and Water Allocation in the Northwest." Published on-line by the Center for Watershed and Community Health, University of Oregon. 2002. http://arec.oregonstate.edu/jaeger/personal/cwchwaterbenefits.pdf

Jaeger, W.K. and D.L. Fluharty, "The impact of timber harvesting on salmon abundance." http://arec.oregonstate.edu/jaeger/personal/loggingsalmon.pdf, 2002.

Jaeger, W.K., "Double dividend reconsidered" Association of Environmental and Resource Economists (AERE) Newsletter Essay, November 2000.

Jaeger, W.K., "Comment on 'Landing Fees versus Harvest Quotas with Uncertain Fish Stocks,' by Martin Weitzman. <u>Proceedings of the IIFET 2000 Conference</u>, International Institute of Fisheries Economics and Trade, July 2000.

Jaeger, W.K., "Pollution, smoke and mirrors: environmental taxes and the double dividend hypothesis," In <u>Proceedings: 91st Annual Conference on Taxation</u>. Washington, DC: National Tax Association, 1999.

Jaeger, W.K., "Environmental taxation and the double dividend." In Internet Encyclopedia of Ecological Economics, http://www.ecologicaleconomics.org/publica/encyc.htm.

BOOK REVIEW

Daniel S. Holland, James N. Sanchirico, Robert J. Johnson, and Deepak Joglekar, <u>Economic Analysis for Ecosystem-Based Management</u>. In Journal of Regional Science, October 2011.

Robert L. Nadeau, The Environmental Endgame: Mainstream Economics, Ecological Disaster, and Human Survival. In <u>Peace Review</u>, 2007.

D. Bromley and K. Segerson (eds.), <u>The Social Response to Environmental Risk</u>, Kluwer Academic Press (1992). In Journal of Regional Science, August 1993.

D. Ghai and L. Smith, <u>Agricultural Prices</u>, <u>Policy and Equity in Sub-Saharan Africa</u>, Lynne Rienner Pub. 1987. In American Journal of Agricultural Economics, Nov. 1987.

TEACHING EXPERIENCE

Graduate teaching (Oregon State University, University of Oregon, University of Washington): environmental and resource economics, institutional economics, microeconomics, water law and policy, water economics.

Graduate teaching (University of Venice, Venice International University): Topics in environment and development.

Graduate teaching (Williams College Center for Development Economics): environmental and resource economics, agricultural economics, sustainable development

Undergraduate teaching (Williams College and Oregon State University): institutional economics, intermediate microeconomics, sustainable development, environmental and resource economics, open economy macroeconomics, introduction to economics, applied welfare topics in economics, development economics.

Short courses and training:

Trainer and advisor, Center for Environmental Economics and Policy in Africa, 2009. Speaker and advisor, Economy and Environment Program of Southeast Asia, 2008. Economic Tools for Conservation, Conservation Strategy Fund, Stanford, CA 2008, 2010.

Microeconomics topics, Business School of Hohai University, Nanjing, China, 2005. Environmental Economics & Development Policy Training, World Bank, 1997. Environmental economics and law, Environmental Law Alliance Worldwide (ELAW).

RECENT RESEARCH FUNDING

NSF Water Sustainability & Climate Category 2: Anticipating water scarcity and informing integrative water system response in the Pacific Northwest, 2010-15 (\$4.3m)

US Forest Service. Evaluating Land Markets and the Effects of Land Use Regulations: A Comparative GIS Approach. 2008-2009 (\$23,000)

Oregon Department of Agriculture-OSU Canola/Oilseed Research in the Willamette Valley. 2007-2008 (\$53,000).

Oregon Community Foundation, Oregon Land Value Study, 2006-2007 (\$85,000).

EPA STAR Grant. "Reappraisal of welfare and policy implications of environmental taxation." 2002-2005 (\$99,000).

Center for Watershed and Community Health, Mark O. Hatfield School of Government at Portland State University, Portland, Oregon. "Assessing costs of stream flow augmentation in the Pacific Northwest," 2000 (\$5,000).

US Forest Service/Olympic Natural Resources Center, "Land Use Impacts on Salmon Abundance," October 1995 - June 1997 (\$50,000).

CONSULTING/ADVISING/TRAINING

American Rivers

Bureau of Indian Affairs

Conservation Strategy Fund

Center for Environmental Economics and Policy in Africa (CEEPA)

Environmental Economics Program for South East Asia (EEPSEA)

International Resources Group/USAID—Litani River Basin Management Support Program (Lebanon)

Linn County Department of Parks and Recreation, Oregon

Oregon Restaurant Association

Oregon-California Resources Conservation & Development (OR-Cal RC&D)

Puget Sound Partnership

U.S. Department of Justice

World Bank

AWARDS

Fulbright Scholar, Italy 2007-2008 (at University Ca' Foscari of Venice and Fondazione Eni Enrico Mattei (FEEM), Venice.

James and Mildred Oldfield/E.R. Jackman Team Award, Oregon State University, 2005.

ADVISING/BOARDS

Member: Independent Economic Analysis Board, Northwest Power & Conservation Council (2010 -).

Member: Independent Science Advisory Board, Northwest Power & Conservation Council (2015 -).

Member: GHG Expert Panel of the Council on Sustainable Biomass Production (2010-2012).

Member: Scientific and Technical Advisory Committee (STAC) of the Ocean Policy Advisory Council (OPAC), State of Oregon (2010-).

Member: Board of Directors, ELAW (Environmental Law Alliance Worldwide)(2012-).

OTHER PROFESIONAL SERVICE

Associate Editor, Water Resources Research

Referee for: Journal of Environmental Economics and Management, Land Economics, Environmental and Resource Economics, Resource and Energy Economics, Journal of Hydrology, World Development, Economic Development and Cultural Change, American Journal of Agricultural Economics, Ecological Economics, Journal of Environment and Development, Environment and Development Economics, Journal of the American Water Resources Association, Journal of Agricultural and Resource Economics, North American Journal of Fisheries Management, Journal of Productivity Analysis, Agricultural Systems, Eastern Economic Journal, Journal of Extension, Public Finance Review, Agronomy Journal, Energy Economics, Environmental and Resource Economics, Water Resources Research.

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