

Biographical Sketch Tracy Ann Boyer

a. Professional Preparation

University of Minnesota, Minneapolis, MN	Applied Economics	Ph.D., 2003
University of Minnesota, Minneapolis, MN	Public Affairs	M.A., 1997
Stanford University, Stanford, CA.	International Relations	B.A., 2003

b. Appointments

2010-present	Associate Professor, Department of Agricultural Economics, Oklahoma State University, Stillwater, OK.
2003-2010	Assistant Professor, Department of Agricultural Economics, Oklahoma State University, Stillwater, OK.
1998-2002	Research Assistant, Professor K. William Easter, Applied Economics Department, University of Minnesota, St. Paul, MN.
1996-1997	Research Assistant, Prof. Sandra O. Archibald, Great Lakes Interdisciplinary Water Policy Research Project, Humphrey Institute, University of Minnesota, Minneapolis, MN. , Applied Economics Department, University of Minnesota, St. Paul, MN.
6/1996-8/1996	Graduate Summer Intern, Climate Institute, Washington, D.C.
1995-1996	Research Assistant, Zbigniew Bochniarz, Director and Senior Research Fellow, Center for Nations in Transition, Humphrey Institute, University of Minnesota, Minneapolis, MN.

c. Publications

(i) Closely related to the proposed project

Ghimire, M., **Boyer, T.A.**, Chung, C., and Moss, J.Q. 2015. Estimation of Residential Water Demand under Uniform Volumetric Water Pricing. 10: 1061. *J. of Water Resource Planning and Management*. [http://ascelibrary.org/doi/abs/10.1061/\(ASCE\)WR.1943-5452.0000580](http://ascelibrary.org/doi/abs/10.1061/(ASCE)WR.1943-5452.0000580)

Boyer, T.A., Kanza, P. Ghimire, M. and Moss, J.Q. 2015. Household Adoption of Water Conservation and Resilience Under Drought: The Case of Oklahoma City Water Economics and Policy. *Water Economics and Policy*. Vol 1. No.2. <http://www.worldscientific.com/loi/wep>

Debnath, D., **Boyer, T.A.**, Stoecker, A., and Sanders, L. 2015 . Nonlinear Reservoir Optimization Model with Stochastic Inflows: Case Study of Lake Tenkiller. *J. Water Resour. Plann. Manage.*, 141(1), 04014046.

Debnath, D., **Boyer, T.A.**, Stoecker, A, Sanders. L. 2014. Integrating economic and hydrologic interdependence in reservoir management. *Lakes & Reservoirs: Research & Management*, 19: 211–224. doi: 10.1111/lre.12070.

Mahasuweerachai, Phumsith*, **Boyer, Tracy A.**, Balsman, Dane M.* and Shoup, Daniel E. 2010. "Close to Home Fishing Program: Estimating Demand for Urban Fisheries Management " *North American Journal of Fisheries Management* . 30:1339-1351 *(student author)

David Roberts*, **Tracy Boyer**, and Jayson Lusk. 2008. "Environmental Preferences Under Uncertainty." *Ecological Economics*. 66:584-593. *(student author)

Norwood, Bailey, Lusk, J. and **Boyer, T.**, "Forecasting Hypothetical Bias: A Tale of Two Calibrations" Book Chapter for edited volume in *Experimental Methods in Environmental Economics*. Shogren, et al, editors. 2007. (Routledge).

Boyer, Tracy and Stephen Polasky "Valuing Urban Wetlands." *Wetlands*, January 2005.

(ii) Other publications

Boyer, T.A. Hopkins, M. and Moss, J. Q., in press for October 2016. "Public Acceptance and Willingness to Pay for Water Reuse: A Case Study for Oklahoma" in edited volume, Competition for Water Resources in the 21st Century –Experiences and Perspectives from Two Sides of Atlantic by Ziolkowska, Jr. R. and Peterson, J.

Boyer, Tracy A.; Sanders, Larry D.; Melstrom, Richard; Stoecker, Art; and Ferrell, Shannon. 2015. Water-based Recreation in Oklahoma: Water Rights, Valuation, and Implications for Public Policy, Economic Development, and Management. Oklahoma Cooperative Extension Service, AGEC-1057. Oklahoma State University. Available at <http://osufacts.okstate.edu>

Stambaugh, Kasie D; **Boyer, Tracy A.**; Fox, Garey A. 2015. Benefits and Concerns Associated with Aerobic Treatment Systems (ATS). Oklahoma Cooperative Extension Service, AGEC-1056. Oklahoma State University. Available at <http://osufacts.okstate.edu>

Boyer, Tracy; Sanders, Larry D., Stoecker, Art, and Ferrell, Shannon. 2015. Municipal Water Conservation in Oklahoma: Background, Issues and, Options. Oklahoma Cooperative Extension Service, AGEC-1055. Oklahoma State University

Boyer, Tracy; Sanders, Larry D.; Adams, Damian C.; Boyer, Christopher N.; Smolen, Michael D. 2015 "Water Rate Structure: A Tool for Water Conservation in Oklahoma." Oklahoma Cooperative Extension Service, AGEC-1017. Oklahoma State University. Available at <http://osufacts.okstate.edu>

Melstrom, Richard T.; Jayasekera, D.; Jager, C.; and **Boyer, T.A.** 2015. The Economic Value of Sportfishing Trips to Oklahoma Lakes. Oklahoma Cooperative Extension Service, AGEC-1054. Oklahoma State University.

Moss, Justin; Haase, John. E. ; Martin, Dennis L., Vogel, Jason R., and **Boyer, Tracy A.** Simple Irrigation Audit for Home Lawns in Oklahoma. Oklahoma Cooperative Extension Service HLA-6610. August 2011. Available at <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-7896/HLA-6610web.pdf>

Dave Shideler, **Tracy Boyer**, Bradley Bain 2011. The Economic Impact of Trout Fishing on the Lower Mountain Fork River on the Economy of McCurtain County, OK. Departmental Paper, AE-11032

Chung, Chanjin, Boyer, Tracy, and Han, Sungill. 2010. "How Many Choice Sets are Optimal? Consistency in Choice Experiments. *Agribusiness: An International Journal*. 26:1-12.

Chung, Chanjin, Boyer, Tracy, and Han, Sungill. 2009. "Valuing Quality Attributes and Country Origin in the Korean Beef Market." *Journal of Agricultural Economics*. 60(3):682-698.

Boyer, Tracy, Briggeman, Brian, and Norwood, Bailey. 2009. "Demand for Multimedia in the Classroom." *Journal of Agricultural and Applied Economics*. 41(3):791-808.

Boyer, Tracy and Hickman, Karen R. September 2007 "Do High School Study Habits Matter for First-Semester College Performance? Predicting Success Using Various Measures of Academic Preparation." *Journal of North American College Teachers of Agriculture*.

d. Synergistic Activities

Member of cross-disciplinary faculty of Oklahoma State Undergraduate and Graduate Environmental Science Faculty and School of International Studies Faculty, Oklahoma State. Advisor, Undergraduate Environmental Science Club. Instructor of AGEC 4503 and AGEC 5503 Environmental Economics, respectively undergraduate and undergraduate level.

Coordinator and principal founder of Minor Program in Environmental Economics and Policy in collaboration with the Department of Political Science, Oklahoma State University. (Since Spring 2009)

e. Grants and Contracts

Recent grants illustrate experience working with multidisciplinary teams successfully to value and conserve water resources in Oklahoma and the region.

Boyer, T., Chung, C., Wu, Y., Martin, D., Moss, J.Q., et al. (multistate grant) "Persistence, Survival, and Recovery of Warm-Season Turfgrass for Sustainable Urban Landscapes Under Limited Irrigation and Long-Term Drought" Specialty Crops Research Initiative.. January 1, 2016 - Dec 31, 2019. \$955,000 to OSU, \$3.4 million total. .

Boyer, Tracy; Melstrom, Richard; Stoecker, Art. "Estimating Lake Amenity Values to Residential Homes on Grand Lake o' the Cherokees, OK." Grand River Dam Authority. 8/1/2015-7/31/2016. \$87,178.

Melstrom, Richard, **Boyer, Tracy**, Stoecker, Art, "Estimating Non-Market Value for the Grand River Watershed." Grand River Dam Authority. 3/1/2015 to 5/31/2016. \$150,000

Garey Fox, Steiner, Jean; Starks, Patrick; Moraisi, Daniel, Storm, Dan, Vogel, Jason, **Boyer Tracy**, Sanders, Larry and Stoecker, Art. *Implementation of In-stream, Streambank and Riparian Practices in Conjunction with Upland Practices for Conservation of Water Resources*. USDA NIFA, NIQWP, \$638,000. 10/1/2013-9/30/2015.

Wicksted, Jim, Knoedler, A.; **Boyer, T.A.** et al. Adapting Socio-ecological Systems to Increased Climate Variability. National Science Foundation EPSCOR. \$20 million. June 1, 2013-May 31, 2018. (Boyer serves on Executive Committee)

Boyer, Tracy and Moss, Justin. “Oklahoma City Outdoor Water Conservation: Extension Education, Training, Demonstration/Research and Assessment.” Oklahoma City Water Utility Trust. January 1, 2013-January 31, 2015 (Total 1.1 Million and 210,000).

Wicksted, Jim, Knoedler, A.; Boyer, T.A. et al. Adapting Socio-ecological Systems to Increased Climate Variability. National Science Foundation EPSCOR. \$20 million. June 1, 2013-May 31, 2018.

Boyer, Tracy and Moss, Justin. “Oklahoma City Outdoor Water Conservation: Extension Education, Training, Demonstration/Research and Assessment.” Oklahoma City Water Utility Trust. (Moss: 365,297, Boyer: 78,585 in 2013) January 1, 2013-January 31, 2015 to be renewed upon mutual agreement for next 2 years. (Total 1.1 Million and 210,000).

Served as Lead PI for **Boyer, T. A.** Stoecker and L. Sanders. 2007. Decision Support Model for Optimal Water Pricing Protocol for Oklahoma Water Planning: Lake Tenkiller Case Study. Duration: 01 Mar 07 to 16 June 2008.. \$50,000. Ongoing work with state agencies to provide input on Oklahoma State Water Comprehensive Planning Process impact on value of water for species and recreation.

Boyer, Tracy, “Stream Channel Restoration in the Illinois River and Eucha/Spavinaw Watersheds to Protect Water Supply Reservoirs. American Reinvest Recovery Act via Oklahoma Conservation Commission, June 1, 2011 -30 Sept 2012. With Vogel, J., Storm, D., Fox ,G. \$2 million. Boyer portion (\$56,000 to study ecosystem prioritization and valuation).

Boyer, Tracy A., Shideler, David*, and Long, J. Economic impact of the cold-water fishery in the Lower Mountain Fork River, January 1, 2010-July 30, 2012. U.S. Fish and Wildlife Service/Oklahoma Department of Fish and Wildlife. \$86,000. *(*Collaborator on EPSCOR*)

Moss, J.C., **Boyer, T.A.** Adams, D.C., Smolen, M., Dennis, M. and Haase, J. 2009. “Water Conservation in Oklahoma’s Urban and Suburban Watersheds through Modification of Irrigation Practices” Oklahoma Water Resources Research Institute. Project. March 1, 2010-February 28, 2010. \$50,000. (One extension publication, television production on Oklahoma Gardening (20,000 viewers), approximately 60 master gardeners, and 200 other individuals have been trained regarding efficient irrigation and water use using information resulting from this grant)