James Luke Boutwell

Economist

Manager, Special Projects, Mather Economics, LLC luke@mathereconomics.com

Education

Doctor of Philosophy, Agricultural Economics, Louisiana State University (2016) Concentrations: Natural Resource and Environmental Economics, Applied Econometrics

Master of Science, Agricultural Economics, Louisiana State University (2013) Concentration: Natural Resource and Environmental Policy

Bachelor of Science, Geography, University of Alabama (2011)

Tracts: Environment and Natural Resources, Geographic Information Systems (GIS)

Minor: Business Administration

Experience

Manager, Special Projects, 2018-present Senior Analyst – Mather Economics, 2017-2018 Analyst – Mather Economics, 2016-2017

- Econometric analysis and data model development
- Manage research project teams and client relationships
- Agricultural and environmental economics and analysis
- Predictive analytics business development across a variety of industries, including agriculture and environment, ecommerce, and digital and print media
- Conduct research and develop economic recommendations and reports

Graduate Research Fellow – Center for Natural Resource Economics and Policy, Louisiana State University, 2013-2016

- United States Department of Agriculture (USDA) Fellowship in Areas of Identified National Need (National Needs Fellowship)
- Perform applied research "improving the economic resilience of communities under natural disaster and environmental risk"
- Assess economic risk associated with asset damage from flooding
- Estimate the value of coastal wetlands as natural infrastructure
- Model economic outcomes resulting from land use changes
- Environmental policy analysis and project prioritization

Subject Matter Consultant – The Nature Conservancy, 2013-2014

- Economic analysis of USDA Conservation Reserve Program
- Ecosystem service valuation
- Estimate financing needed to meet The Nature Conservancy objectives
- Advise of the environmental and economic impacts of TNC policy
- Identify sources of decreased enrollment in federal conservation programs
- Lead authored a white paper for programmatic guidance

Research Assistant – AgCenter, Louisiana State University, 2011-2013

- Develop GIS-based methodology for environmental policy analysis
- Develop and apply methodology for the assessment of damages to agriculture and wildlife from Mississippi River flooding
- Spatial modeling of coastal economic vulnerability

Scholarly Distinctions and Affiliations

- American Shore and Beach Preservation Association (ASBPA) 2015 Doctoral Award for "furthering the state of science of coastal or riverine systems"
- USDA National Needs Fellowship recipient, for "improving the economic resiliency of communities under natural disaster and environmental risk" (2013-2016)
- L.S.U. Flagship Assistantship recipient, for "climate change research using GIS" (2013-2014, 2015-2016)
- Center for Natural Resource Economics and Policy (CNREP), Cooperating Member
- American Water Resources Association, Member
- Moderator Chair for CNREP 2016: Challenges of Natural Resource Economics and Policy: The Fifth National Forum on Socioeconomic Research in Coastal Systems
- Outstanding Masters Student, LSU Dept. of Agricultural Economics, 2012-2013
- Gulf Estuarine Research Society, Member, Research Travel Award Recipient
- Gamma Sigma Delta, Agricultural Honor Society, Member
- University of Alabama Geographic Information System (GIS) Certificate (2011)
- Team Captain, University of Alabama Men's Swimming (2009, 2010)

Journal Reviewer

- Journal of the American Water Resources Association
- Journal of Environmental Management
- Shore and Beach
- Natural Resources

Publications

- Boutwell, J.L. and J.V. Westra, 2016. The Role of Wetlands for Mitigating Economic Damage from Hurricanes. JAWRA Journal of the American Water Resources Association, 52(6), pp.1472-1481.
- Boutwell, J.L. New Research on Wetland Loss in Louisiana. *Coastal Voice*. Invited column, ASBPA periodical. November, 2015. Access at: http://www.asbpa.org/1115asbpa.pdf
- Boutwell, J.L. The True Cost of Wetland Loss in Louisiana: Toward the Tipping Point. Awarded Paper, October, 2015. American Shore and Beach Preservation Association Education Award. (Access by request)

- Boutwell, J.L., J.V. Westra. Evidence of Diminishing Marginal Product of Wetlands for Damage Mitigation. *Natural Resources*. 2015, 6, 48-55.
- Boutwell, J.L., J.V. Westra. Potential for Error in Valuing Ecosystem Services Using the Expected Damage Function Approach. Southern Agricultural Economics Association Selected Paper. Atlanta, Ga. February, 2015.
- Boutwell J.L., J.V. Westra. The Efficacy of Wetlands for Storm Damage Mitigation. *Louisiana Agriculture*. Summer, 2014.
- Boutwell, J.L., J.V. Westra. Economic Risk, Tropical Storm Intensity and Coastal Wetlands: A Factor Analysis. Southern Agricultural Economics Association Selected Paper. Dallas, Tx. February, 2014.
- Boutwell, J.L. The Value of Ecosystem Services Produced by Restored Wetlands on Agricultural Land in the Lower Mississippi Alluvial Valley. White Paper for The Nature Conservancy. January, 2014. (Access by request)
- Boutwell, J.L., J.V. Westra. Benefit Transfer: A Review of Methodologies and Challenges. *Resources*. 2013, 2, 1-x manuscripts; doi:10.3390/resources20x000x

Presentations

- Boutwell, J.L. Valuing Ecosystem Services from Coastal Natural Infrastrucure. Session Panelist. A Community on Ecosystem Services 2016 Conference. Jacksonville, Fl. December, 2016.
- Boutwell, J.L. Coastal Tourism and Climate Change. Session Panelist. The Georgia Department of Natural Resources 2016 Climate Conference: Plan, Respond and Adapt: Is Georgia Climate Ready? Jekyll Island, Ga. November, 2016.
- Boutwell, J.L. The Value of Wetlands for Hurricane Risk Reduction. Invited Seminar. University of Georgia, Dept. of Agricultural and Applied Economics. Athens, Ga. August, 2016.
- Boutwell, J.L., J.V. Westra, R. Caffey. Analyzing Economic Vulnerability along a Rapidly Changing Coast: The Cost of Wetland Loss. Workshop. Northeastern Agricultural and Resource Economics Association 2016 Workshop on Economics of Changing Coastal Resources: the Nexus of Food, Energy, and Water Systems. Bar Harbor, Me. June, 2016.
- Boutwell, J.L., J.V. Westra, R. Caffey. Using the Expected Damage Function Approach to Valuing Wetlands as Storm Buffers in Louisiana. CNREP 2016: Challenges of Natural Resource Economics and Policy: The Fifth National Forum on Socioeconomic Research in Coastal Systems. New Orleans, La. March, 2016.
- Boutwell, J.L. The True Cost of Wetland Loss in Louisiana: Toward the Tipping Point. Award acceptance presentation. American Shore and Beach Preservation Association Conference. New Orleans, La. October, 2015.
- Boutwell, J.L., J.V. Westra. Interactions between Wetlands, Economies and Hurricanes in a Changing Climate. Oral presentation. American Water Resources Association Conference on Climate Change Adaptation. New Orleans, La. June, 2015.

- Boutwell, J.L., J.V. Westra. The Economic Value of Wetlands as Storm Buffers. Oral presentation. Southern Agricultural Economics Association Annual Meeting. Atlanta, Ga. February, 2015.
- Boutwell, J.L. Economics of Natural Systems for Hurricane Risk Reduction. Oral presentation. W-3133 Federal Workshop on Benefits and Costs of Natural Resources Policies Affecting Ecosystem Services on Public and Private Lands. Pensacola, Fl. February, 2015
- Boutwell, J.L. Economics of Coastal Systems for Hurricane Risk Reduction. Oral presentation. U.S.-China International Workshop on Key Processes and Regulation of Wetland Ecosystems. Baton Rouge, La. November, 2014.
- Boutwell, J.L., J.V. Westra. Context-Dependent Values of Wetlands for Protection against Coastal Storms. Poster. Restore Americas Estuaries and The Coastal Society Seventh National Summit on Coastal and Estuarine Restoration. Washington, DC. November, 2014.
- Boutwell, J.L., J.V. Westra, R. Caffey. Considering the Influence of Storm Intensity, Population Size and Wetland Abundance on the Value of Wetlands as Storm Buffers. Oral presentation. Gulf Estuarine Research Society Biennial Meeting. Port Aransas, Tx. October, 2014.
- Boutwell, J.L. The Economics of Wetland Restoration and Coastal Risk Management. Oral presentation. Louisiana State University Coastal Ecology Coffee Talk. School of Energy, Coast and the Environment, Baton Rouge, La. September, 2014.
- Boutwell, J.L., *J.V. Westra*. Wetlands as Storm Buffers: Case Studies from Louisiana. Oral presentation. Agricultural and Applied Economics Association 2014 Annual Meeting, Minneapolis, Minnesota. July, 2014.
- Boutwell, J.L., J.V. Westra. Managing Coastal Ecosystems to Maximize Resilience to Disasters. Oral presentation. NOAA Social Coast Forum. Charleston, SC. February, 2014.
- Boutwell, J.L., J.V. Westra. Factor Analysis: A Novel Approach for Exploring the Relationship between Disturbances, Communities and the Natural Environment. Oral presentation. NOAA Social Coast Forum. Charleston, SC. February, 2014.
- Boutwell, J.L., J.V. Westra. Economic Risk, Tropical Storm Intensity and Coastal Wetlands: A Factor Analysis. Oral presentation. SAEA Annual Meeting. Dallas, Tx. February, 2014.
- Boutwell, J.L., *J.V. Westra*. Wetlands as protective buffers: relationships between storms, stakeholders and the environment. Oral presentation. American Water Resources Association Summer Meeting. Harford, Ct. June, 2013.
- Boutwell, J.L., *J.V. Westra*. A Factor Analysis of Economic Damages from Coastal Storms in Louisiana. Oral presentation. Northeastern Agricultural and Resource Economics Annual Meeting. Ithaca, New York. June, 2013.

- Boutwell, J.L., J.V. Westra. Estimated Economic Loss to Producers of Row Crops in Louisiana Resulting from the 2011 Mississippi River Flood. Poster Presentation. Louisiana Remote Sensing and GIS Workshop. Lafayette, La. April, 2013.
- Boutwell, J.L., J.V. Westra. Using Meta-Analysis and Geographic Information Systems (GIS) to Improve the Validity of Benefit Transfer. Oral Presentation. CNREP 4th National Conference on Socioeconomic Research in Coastal Systems: Challenges of Natural Resource Economics and Policy. New Orleans, La. March, 2013.
- Boutwell, J.L., J.V. Westra. Estimated Economic Loss to Producers of Row Crops in Louisiana Resulting from the 2011 Mississippi River Flood. Poster Presentation. CNREP 4th National Conference. New Orleans, La. March, 2013.
- Boutwell, J.L. Identifying Stakeholders and Distinguishing Environmental Commodities for Wetland Ecosystem Services: Challenges for Economic Modeling. Oral presentation. LSU Wetland Symposium. Baton Rouge, La. February, 2013.