Brendan Yuill, Ph.D. Research Associate, The Water Institute of the Gulf

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EDUCATION

Ph.D. in Watershed Management and Hydrology, 2009 University of Arizona, Tucson, AZ, USA

M.A. in Geography, 2003 University of Wyoming, Laramie, WY, USA

B.A. in International Relations (Regional Development), 1999 Boston University, Boston MA, USA

RESEARCH INTERESTS:

- Depresent Processes of Coastal Restoration
- □ Fluvial Geomorphology and Sedimentology
- □ Watershed Hydrology, Modeling and Management
- □ Natural Resource Economics and Planning

PROFESSIONAL EXPERIENCE:

The Water Institute of the Gulf Research Associate 	2013-Present
Tulane University, Earth and Environmental Sciences• Adjunct Assistant Professor	20011-Present
USACE Coastal and Hydraulics Lab, Engineer Research and Development Center Research Geologist 	2010-2013
University of New Orleans, Earth and Environmental Sciences Research Associate (Post-doctoral Researcher) 	2008-2010

PEER-REVIEW PUBLICATIONS

Allison, M., Yuill, B., Törnqvist, T., Amelung, F., Dixon, T.H., Erkens, G., Stuurman, R., Jones, C., Milne, G., Steckler, M. and Syvitski, J., 2016. Global Risks and Research Priorities. EOS, 1 October 2016.

Yuill, B.T., Khadka, A.K., Pereira, J., Allison, M.A. and Meselhe, E.A., 2016. Morphodynamics of the erosional phase of crevasse-splay evolution and implications for river sediment diversion function. Geomorphology, 259, DOI: 10.1016/j.geomorph.2016.02.005.

Yuill, B.T., Gaweesh, A., Allison, M.A., Meselhe, E.A., 2015. Morphodynamic evolution of a lower Mississippi River channel bar after sand mining. Earth Surface Processes and Landforms. DOI: 10.1002/esp.3846.

Yuill, B.T., Roig-Silva, C., Walshire, L. 2013. *Application of an alluvial architecture model to predicting seepage risk in floodplains*. Engineering Geology. doi.org/10.1016/j.enggeo.2013.04.003

PEER-REVIEW PUBLICATIONS (continued)

Yuill, B.T., Gasparini, N.M. 2011. *Hydrologic controls on wash load concentrations in first-ordered watersheds*. Journal of Hydrology, doi: 10.1016/j.jhydrol.2011.09.11

Yuill, B.T., Nichols, M.H. 2010. *Patterns of grain-size dependent sediment transport in low ordered, ephemeral channels*. Earth Surface Processes & Landforms. doi: 10.1002/esp.2041.

Yuill, B.T., Nichols, M.H., Yager, E. 2010. *Coarse bed material patch evolution in low-order, ephemeral channels.* Catena 81: 126-136.

Yuill, B.T., Lavoie, D., and Reed, D.J. 2009. Understanding subsidence processes in southern Louisiana. Journal of Coastal Research, SP 54: 23-36.

Reports and Theses

Yuill, B.T., Baustian, M.M., Moss, L.C., Allison, M.A. and Authority, R., 2014. *Researching Uncertainties Related to Sediment Diversions: Fresh Water, Nutrient and Sediment Effects to Coastal Louisiana Receiving Basins Research Work Plan.* Water Institute Technical Report.

Yuill, B.T., Roig-Silva, C. 2013. A Computational Model to Simulate Groundwater Seepage Risk in Support of Geotechnical Investigations of Levee and Dam Projects. USACE Technical Report, ERDC/GSL TR-13-5, 46 p.

Yuill, B.T. 2012. *Predicting Coarse Sediment Transport From Desert Washes With Patchy Bed Material*. USACE Technical Report, ERDC/GSL TR-12-17, 29 p.

Klimas, C., Yuill, B.T. 2011. *Skokomish River Ecosystem Restoration Project Ecosystem Benefits Analysis*. ERDC report prepared for the Seattle District, USACE. 43 p.

Yuill, B.T., and Reed, D.J. 2009. *Subsidence in Coastal Louisiana*. EOS, Transaction, American Geophysical Union, 90(25): 217.

Reed, D.J. and Yuill, B.T. 2009. *Understanding Subsidence in Coastal Louisiana*. Prepared for the Louisiana Coastal Area, Science and Technology Program, 69 p.

Yuill, B.T. 2003. An Application of Weak Sustainability: Coal Bed Methane Mining in the Powder River Basin, Wyoming. Master's thesis, Geography Dept., University of Wyoming, Laramie, WY, 110 p.

Yuill, B.T. 1999. *The Economic Valuation of Bio-Diversity: A Literature Survey*. NSW National Parks and Wildlife Service Draft Report.

Conference Proceedings (a selection of recent oral presentations)

Yuill, B.T., Changes in Channel Bar Morphology and Sediment Infilling Rates in Response to Dredging within the Lower Mississippi River. State of the Coast Conference. New Orleans, LA, March 19, 2014.

Yuill, B.T., Gasparini, N.M. Predicting Runoff Sediment Concentrations in Low-order, Desert Watersheds: Accounting for the Effects of Transmission Loss. 9th International Conference on Military Geosciences. Las Vegas, NV, June 21, 2011.

Yuill, B.T. Weighing Form and Process in the Geomorphic Analyses of Engineering Projects. USACE Infrastructure Systems Conference Atlanta, GA, June. 16th, 2011.