Judith K. Haschenburger

Center for Water Research
Department of Geological Sciences
University of Texas at San Antonio
San Antonio, Texas 78249
(210) 458-4553 (voice)
(210) 458-4469 (fax)
judy.haschenburger@utsa.edu

ACADEMIC TRAINING

Ph.D. University of British Columbia, 1996, Geography

M.A. Arizona State University, Summa cum laude, 1989, Geography

B.S. University of Nebraska at Kearney, Summa cum laude, 1984, Geography and Computer Science

INSTRUCTIONAL TRAINING

Instructional Skills Sessions, University of British Columbia, Faculty Development, 1994

Instructional Skills Workshop, University of British Columbia, Faculty Development, 1993

ACADEMIC APPOINTMENTS

Associate Professor, Department of Geological Sciences, University of Texas at San Antonio, 2009-present
Assistant Professor, 2005-2009

Visiting Academic, Department of Geography, Loughborough University, January-February 2004

Visiting Scholar, Department of Geography, Indiana University, September-December 2003

Visiting Assistant Professor, Department of Geography, University of British Columbia, June-September 2003

Visiting Assistant Professor, Department of Geography and Environmental Engineering, Johns Hopkins University, January-June 2000

Visiting Assistant Professor, Department of Geography, University of British Columbia, November-December 1999

Lecturer, School of Geography and Environmental Science, University of Auckland, 1997-2005

National Research Council Postdoctoral Research Associate, U.S. Geological Survey, 1996

PUBLICATIONS SINCE 2003

Refereed invited articles

Haschenburger, J.K., Bedload, in Wohl, E.E. (ed.), *Treatise on fluvial geomorphology*, Elsevier, in preparation.

Haschenburger, J.K. and C. Souch, 2004, Contributions to the understanding of geomorphic landscapes published in the *Annals*, *Annals of the Association of American Geographers*, 94, 771-793.

Refereed articles

Haschenburger, J.K., Vertical mixing of gravels after a long flood series, *Water Resources Research*, in revise post review.

Haschenburger, J.K. and M. Cowie, 2008, Floodplain stages in the braided Ngaruroro River, New Zealand. *Geomorphology*, doi:10.1016/j.geomorph.2008.07.016.

Haschenburger, J.K. and P. Roest, 2008, Substrate indices as indicators of interstitial pore space in gravel-bed channels, *River Research and Applications*, 24, doi:10.1002/rra.1168.

Haschenburger, J.K., S.P. Rice, and E. Voyde, 2007, Evaluation of bulk sediment sampling criteria for gravel-bed rivers. *Journal of Sedimentary Research*, 77, doi:10.2110/jsr.2007.040.

Haschenburger, J.K., 2006, Observations of event-based streambed deformation in a gravel-bed channel, *Water Resources Research*, 42, W11412, doi:10.1029/2006WR004985.

Scott, D.J. and J.K. Haschenburger, 2005, Using the hyperbolic distribution to estimate percentile precision of fluvial gravels, *Computers & Geosciences*, 31, 1224-1233.

Haschenburger, J.K. and J.J. Spinelli, 2005, Assessing the goodness-of-fit of statistical distributions when data are grouped, *Mathematical Geology*, 37, 261-276.

Haschenburger, J.K. and S.P. Rice, 2004, Changes in woody debris and bed material texture in a gravel-bed channel, *Geomorphology*, 60, 241-267.

Rice, S. and J.K. Haschenburger, 2004, A hybrid method for size-characterization of coarse subsurface fluvial sediments, *Earth Surface Processes and Landforms*, 29, 373-389.

Haschenburger, J.K. and P.R. Wilcock, 2003, Partial transport in a natural gravel bed channel, *Water Resources Research*, 39, 1020, doi:10.1029/2002WR001532.

Book chapters and other publications

Murray, K., J. Bush, J.K. Haschenburger, and R. French, 2007, Management practices for natural waterways, Technical report for the City of San Antonio, 81 pp.

RESEARCH GRANTS SINCE 2003

In review

Haschenburger, J.K., 2009, Characteristic functions of fluvial gravel dispersion, Norman Hackerman Advanced Research Program, $148,000, two years.

Haschenburger, J.K., 2008, Collaborative research: Control of bedrock boundary characteristics on flow hydraulics in open channels, National Science Foundation, $153,314, two years.

Funded

Haschenburger, J.K., 2009, Toward a general understanding of sediment deposition on river floodplains, University of Texas at San Antonio TRAC award, $22,000, 9/1/09-8/31/10 (declined)

Haschenburger, J.K., 2008, Sediment transport modeling of channel scale geomorphic processes, Texas Water Development Board, $35,000, 8/1/09-8/1/10.

Haschenburger, J.K. and J.C. Curran, 2008, Sediment transport modeling of reach scale geomorphic processes, Texas Water Development Board, $35,000, 3/1/09-3/1/10.

Haschenburger, J.K., 2007, A time-integrated map of streambed stability, National Geographic Research and Exploration Committee, $21,414, 5/07-5/09.

Haschenburger, J.K., 2005, The existence of armor layers in dryland gravel-bed rivers, University of Texas at San Antonio Faculty Research Award, $5,000, 12/05-8/06.

Murray, K., J. Bush, R. French, and J.K. Haschenburger, 2005, Management practices for natural waterways, City of San Antonio, $50,000, 11/05-11/06.

Haschenburger, J.K., 2004, Floodplain sediment storage in a braided river: acquisition of field observations, Auckland University Research Committee, NZ$8,321, 10/04-10/06.

Haschenburger, J.K., 2003, Gravel dispersion over an extended flood series, Auckland University Research Committee, NZ$18,000, 5/03-5/05.

PRESENTATIONS SINCE 2003

Invited conferences and workshops

Haschenburger, J.K., 2007, Streambed armoring in Texas channels, Fluvial Geomorphology of Texas Rivers Seminar, Texas Water Development Board, Austin.

Haschenburger, J.K., 2006, Streambed activity during floods, Texas Fluvial Environment Workshop, Texas Water Development Board, Austin.

Conferences and workshops

Haschenburger, J.K., 2008, Grain exchange probabilities within a gravel bed, American Geophysical Union, San Francisco.

Haschenburger, J.K., 2008, Vertical exchange of gravels over a flood series, Geological Society of America, Houston.

Alcocer, S. and J.K. Haschenburger, 2007, Characteristics of gravels exhibiting limited downstream mobility, National Center for Earth-surface Dynamics summer research workshop, Minneapolis.

Haschenburger, J.K., 2006, Control of source area lithology on armor layer development, Geological Society of America, Philadelphia.

Haschenburger, J.K., E. Voyde, and S.P. Rice, 2005, An experimental assessment of bulk sediment sampling criteria in gravel-bed channels, Gravel-Bed Rivers 6, Lienz, Austria.

Research seminars

Haschenburger, J.K., 2009, Disturbance patterns of salmonid freshwater habitat, University of Texas as San Antonio.

Haschenburger, J.K., 2006, Vertical mixing of gravels after a long flood series, National Center for Earth-surface Dynamics, St. Anthony Falls Hydraulic Laboratory, Minneapolis.

Haschenburger, J.K., 2003, Changes in woody debris and bed material texture, Indiana University-Purdue University Indianapolis, Indianapolis.

Haschenburger, J.K., 2003, A field evaluation of partial sediment transport, Indiana University, Bloomington.

TEACHING EXPERIENCE AT UTSA

(^team taught)

	Typical number of:					
	lectures / seminars	research projects	labs	problem sets	field days	students
1013 The third planet	36					450
1103 Introduction to Earth systems	36				0.25	110
4113 Geomorphology	36	1		5		10
4121 Geomorphology laboratory			10		2	10
4953 Special studies: freshwater ecology^ (physical basis of habitat)	18			2	2	10
5405 Dynamics of geomorphic landscapes	36	1	8		1	7
6973 Special problems: fluvial processes	36	1		8	1	7

THESIS AND DISSERTATION SUPERVISION SINCE 2003

Brandy Walker, M.S. (geology), University of Texas at San Antonio, 2008-present

Katherine Moore, M.S. (environmental science), University of Texas at San Antonio, 2008-present

Paul Roest, Observations and predictions of porosity in gravel-bed channels, M.Sc., University of Auckland, 2005

THESIS SUPERVISORY COMMITTEES SINCE 2003

Fernando A. Martinez, Ph.D., University of Texas at San Antonio, 2009-present

Katherine Moore, M.S., University of Texas at San Antonio, 2006-2008

Marla Roberts, Time series resistivity analysis of unsaturated karst terrain, Edwards limestone, San Antonio, Texas, M.S., University of Texas at San Antonio, 2005-2007

UNDERGRADUATE SUMMER RESEARCH SUPERVISION SINCE 2003

Sonya Alcocer, Characteristics of gravels with limited mobility, University of Texas at San Antonio, 2007

Ashley Bishop, Mapping streambed configuration, University of Texas at San Antonio, 2007

Antonieta Arteaga, How flashy are the floods in central Texas?, University of Texas at San Antonio, 2006

Michaela Cowie, Rates of fine sediment accretion on a braided river floodplain, University of Auckland, 2004

Emily Voyde, Experimental assessment of sampling criteria for gravel-bed channels, University of Auckland, 2004

PROFESSIONAL SERVICE ACTIVITIES SINCE 2003

University of Texas at San Antonio

Department

Graduate advisor of record, 2008-2009

Graduate studies committee, 2007-present; Chair, 2008-present

Budget advisory committee, 2006-present

Seminar series revision sub-committee, 2006

College of Sciences

NSF ADVANCE project team member, proposal development: Advancement of women in academics in the STEM disciplines, 2007

Recruitment committee, 2007

Budget advisory committee, 2006-2007

University

Faculty senate representative, 2008-present

Graduate Council alternate representative, 2008-present

University of Auckland

Department

Geo-Graphics policy committee, 2002-2005; Chair, 2002-2005

Geo-Graphics unit manager search committee, 2001

Faculty of Science

Women in Science and Engineering advisor, 2003-2005

Scientific community

Research grant proposal reviews: National Science Foundation, Royal Geographical Society

Manuscript reviews: *Earth Surface Processes and Landforms*, *Geomorphology*, *Hydrological Processes*, *Journal of Geophysical Research-Earth Surface*, *Journal of Hydraulic Engineering*, *Journal of Hydrology New Zealand*, *Journal of Maps*, *New Zealand Geographer*, *North American Journal of Fisheries Management*, *Physical Geography*, *Sedimentology*, *Water Resources Research*

Manuscript reviews for edited books:

Bed disturbance processes and the physical mechanisms of scour and fill in Salmonid spawning habitat in *Salmon spawning habitat in rivers: physical controls, biological responses and approaches to remediation*

Ancillary data requirements for the validation of surrogate measurements of bedload flux: non-invasive bed material grain size and definitive measurements of flux in *Proceedings of the international bedload-surrogate monitoring workshop*

Member, American Geophysical Union, Association of American Geographers, Australian-New Zealand Geomorphology Group, Geological Society of America

Community

Member, River Styles advisory team, Instream flows program, Texas Water Development Board, 2006

Advisor, Sediment transport issues, Hawkes Bay Regional Council, 2004-2005

Special awards judge, Association for Women Geoscientists, Exxon Mobil Texas state science and engineering fair, San Antonio, 2006-2009

Judge, Exxon Mobil Texas state science and engineering fair, San Antonio, 2006-2007