

CURRICULUM VITAE  
FRANCIS J. MAGILLIGAN

PRESENT ADDRESS:

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ADVANCED EDUCATION:

- Ph.D. (December, 1988) - Department of Geography, University of Wisconsin, Madison.
- M.S. (December, 1983) - Department of Geography, University of Wisconsin, Madison.
- M.S. (May, 1981) - Water Resources Management, University of Wisconsin, Madison
- B.A. (June, 1977) - Department of Geography, Boston University.

Ph.D. RESEARCH:

Slope and roughness variations in small meandering alluvial streams, thesis under the supervision of J.C. Knox.

M.S. RESEARCH:

Historical floodplain alluviation in the Galena River basin, southwest Wisconsin – northwest Illinois, thesis under the supervision of J.C. Knox.

TEACHING INTERESTS:

Geomorphology  
Geohydrology  
Water Resources Management & Policy  
Human Impacts on the Environment  
Watershed Science

RESEARCH INTERESTS:

Flood Hydrology  
Quaternary Studies  
Fluvial Processes and Environments  
Human Impacts on Watersheds  
Soil Erosion, Sedimentation, and Sediment Mobility

## PUBLICATIONS:

- Marks, C.O., Nislow, K.H., Zimmerman, J.K.H., Magilligan, F.J. and Lutz, K.A., n.d., Influence of hydrologic alteration on floodplain ecosystems in the Connecticut River Basin, northeastern USA: is the south our future?, **Under Review**, *Wetlands*.
- Fisher, G.B., Magilligan, F.J., Kaste, J.M., and Nislow, K.H., n.d., Constraining the timescales of sediment sequestration associated with large woody debris with cosmogenic beryllium-7, *Journal of Geophysical Research - Earth Surface*, **Under Review**.
- Svendsen, K.M., Renshaw, C.E., Magilligan, F.J., Nislow, K.H., and Kaste, J.M., n.d., Altered flow and sediment regimes at tributary junctions on flow regulated rivers: impact of hydrologic disruptions on benthic macroinvertebrate communities, *Hydrologic Processes*, **Revised and Re-Submitted**.
- Magilligan, F.J., Goldstein, P., Fisher, G.B., Bostick, B.C, and Manners, R., n.d., Late Quaternary hydroclimatology of a hyper-arid Andean watershed: Climate change, floods, and fluvial responses to the El Niño-Southern Oscillation in the Atacama Desert, **In Press**, *Geomorphology*.
- Magilligan, F.J., Haynie, H.J., and Nislow, K.H., 2008, Channel adjustments to dams in the Connecticut River basin: implications for forested mesic watersheds, *Annals Association American Geographers*, 98(2): 267-284. doi:10.1080/00045600801944160
- Sennatt, K.M., Salant, N.L., Renshaw, C.E. and Magilligan, F.J., 2008. Reply to discussion - "Assessment of methods for measuring embeddedness: application to sedimentation in flow regulated streams". *Journal of the American Water Resources Association*, 44(1): 262-264.
- Magilligan, F.J., Nislow, K.H., Fisher, G.B., Wright, J., Mackey, G., Laser, M., The geomorphic function and characteristics of large woody debris in low gradient rivers, coastal Maine, USA, *Geomorphology* (2007), doi:10.1016/j.geomorph.2007.08.016
- Manners, R., Magilligan, F.J. and Goldstein, P. 2007, Floodplain development, El Niño, and cultural consequences in a hyperarid Andean environment, *Annals Association American Geographers*, 97(2): 229-249.
- Salant, N.L., Renshaw, C.E., Magilligan, F.J., Kaste, J., Nislow, K., and Heimsath, A., 2007, The use of fallout radionuclides to quantify transitional bed load transport, *Earth Surface Processes and Landforms*. 32(4): 509-524.

## PUBLICATIONS (cont.)

- Sennat, K.M, Salant, N.L., Renshaw, C.E., Magilligan, F.J., 2006, Field-based methods of measuring substrate embeddedness in regulated and unregulated streams, *Journal American Water Resources Association*, 42(6):1671-1682.
- Salant, N.L, Renshaw, C.E. and Magilligan, F.J., 2006, Short and long-term changes to bed mobility and bed composition under altered sediment regimes, *Geomorphology*, 76: 43-53.
- Magilligan F.J., Salant, N.L., Renshaw, C.E., Nislow, K.H., Heimsath, A., and Kaste, J., 2006, Evaluating the impacts of impoundment on sediment transport using short-lived fallout radionuclides, In: *Sediment Dynamics And The Hydromorphology Of Fluvial Systems* (Ed. Rowan, J. and Werrity, A.), The International Association of Hydrological Sciences (IAHS) Special Publication 306, IAHS Press, Wallingford, UK, pp. 159 – 165.
- Smith, L.C., Sheng, Y., Magilligan, F.J., Smith, N.D., Gomez, B., Mertes, L.A.K., Krabill, W.B., and Garvin, J.B., 2006, Geomorphic impact and recovery from the 1996 Skeidarársandur jökulhlaup, Iceland assessed with repeat-pass airborne lidar, *Geomorphology* 75: 65-75.
- Magilligan, F.J., and Nislow, K.H., 2005, Changes in hydrologic regime by dams, *Geomorphology*. 71: 61-78.
- Harrison, S., Massey, D., Richards, K., Magilligan, F.J., Thrift, N., and Bender, B., 2004, Thinking across the divide: perspectives on the conversations between physical and human geography, *Area*, 36: 435-442.
- Magilligan, F.J., Nislow, K.H., and Graber, B.E., 2003, A scale-independent assessment of discharge reduction and riparian dis-connectivity following flow regulation by dams, *Geology*, 31: 569-572.
- Nislow, K.H., Magilligan, F.J., Fassnacht, H., Bechtel, D. and Ruesink, A., 2002, Effects of hydrologic alteration on flood regime of natural floodplain communities in the Upper Connecticut River, *Journal American Water Resources Association*, 38: 1533-1548.
- Nislow, K.H., Magilligan, F.J., Folt, C.L., and Kennedy, B.P., 2002, Within-basin variation in the immediate effects of a major flood on stream fishes and invertebrates, *Journal of Freshwater Ecology*, 17: 305-318.
- Magilligan, F.J., Gomez, B., Mertes, L., Smith, L., Finnegan, D., Smith, N.D., and Garvin, J., 2002, Geomorphic effectiveness, sandur development, and the pattern of landscape response during jökulhlaups: Skeidarársandur, southeastern Iceland, *Geomorphology*, 44: 95-113.

## PUBLICATIONS (cont.)

- Magilligan, F.J. and Nislow, K., 2001, Hydrologic alteration in a changing landscape: effects of impoundment in the Upper Connecticut River Basin, USA, *Journal American Water Resources Association*, 36(7): 1551-1569.
- Hren, M.T., Chamberlain, C.P., and Magilligan, F.J., 2001, A combined flood surface and geochemical analysis of metal fluxes in a historically mined region: A case study from the New World Mining District, MT, *Environmental Geology*, 40: 1334-46.
- Magilligan, F.J. and Goldstein, P.S., 2001, El Niño floods and culture change: A late Holocene flood history for the Rio Moquegua, southern Peru, *Geology*, 29: 431-34.
- Gomez, B., Magilligan, F. J., Mertes, L.A.K., and Smith, L.C., 2000, Glacier outburst floods and outwash plain development: Skeidarársandur, Iceland, *Terra Nova*, 12:126-31.
- Smith, L.C., Alsdorf, D.E, Magilligan, F.J., Gomez, B., Mertes, L.A.K., Smith, N.D., and Garvin, J.B., 2000, Estimation of erosion and deposition from SAR interferometry and net topographic change during the 1996 jökulhlaup, Skeidarársandur, Iceland, *Water Resources Research*, 36:1583-94.
- Magilligan, F.J., Phillips, J.D., Gomez, B., and James, L.A., 1998, Geomorphic and sedimentological controls on the effectiveness of an extreme flood, *Journal of Geology*, 106: 87-95.
- Magilligan, F.J. and McDowell, P.F., 1997, Stream channel adjustments following the elimination of cattle grazing, *Journal American Water Resources Association*, 33: 867-878
- Gomez, B., Phillips, J.D., Magilligan, F.J., and James, L.A., 1997, Floodplain sedimentation and sensitivity: Summer 1993 Flood, Upper Mississippi River Valley, *Earth Surface Processes and Landforms*, 22: 923-36.
- McDowell, P.F. and Magilligan, F.J. 1997, Response of stream channels to removal of cattle grazing disturbance: overview of western U.S. exclosure studies, In (eds.) S.S.Y. Wang, E.J. Langendoen, and F.D. Shields, *Management of Landscapes Disturbed by Channel Incision*, pp. 469-75, Oxford, Mississippi.
- Magilligan, F.J. and Stamp, M.L., 1997, Historical land-cover changes and hydrogeomorphic adjustment in a small Georgia watershed, *Annals Association of American Geographers*, 87: 614-35.
- Magilligan, F.J. and Graber, B., 1996, Hydroclimatological and geomorphic controls on the timing and spatial variability of floods in New England, USA, *Journal of Hydrology*, 178:159-80.

## PUBLICATIONS (cont.)

- Gomez, B., Mertes, L.A.K., Phillips, J.D., Magilligan, F.J. and James, L.A., 1995, Sediment characteristics of an extreme flood: 1993 Upper Mississippi River flood, *Geology*, 23: 963-66.
- Brakenridge, G.R., Knox, J.C., Paylor, N., and Magilligan, F.J., 1994, Radar remote sensing aids study of the Great Flood of 1993. *EOS*, 75: 521-527.
- Kull, C. A. and Magilligan, F. J., 1994, Controls over landslide distribution in the White Mountains, New Hampshire, *Physical Geography*, 15: 325-341.
- Beach, T. and Magilligan, F.J., 1993, Providence Canyon: The Grand Canyon of Southwest Georgia. In (ed.) Bederman, S., *Guidebook for the 1993 Annual Meeting*, Association of American Geographers, pp. 103-09.
- Magilligan, F. J. 1992, Thresholds and the spatial variability of flood power during extreme floods, *Geomorphology*, 5:373-390.
- Magilligan, F.J., 1992, Sedimentology of a fine-grained aggrading floodplain. *Geomorphology*, 4:393-408.
- Magilligan, F.J., 1990, An analysis of the Rae's Creek Geomorphic Report, In: Morgan R.Crook (ed.), *Rae's Creek: A Multicomponent Archeological Site at the Fall Line Along the Savannah River*. Archeology Report to the Environmental Analysis Bureau, Georgia Dept. of Transportation, pp. 203-06.
- Magilligan, F.J., 1988, Variations in slope components during large magnitude floods, Wisconsin, *Annals Association American Geographers.*, 78: 520-533.
- Magilligan, F.J., 1985, Historical floodplain sedimentation in the Galena River basin, Wisconsin and Illinois, *Annals Association American Geographers*, 75: 583-594.
- Knox, J.C., S.A. Cary, and F.J. Magilligan, 1981, Climate variation and the mobility and storage of sediment in watersheds, Technical Report WIS WRC 81-03, Water Resources Center, University of Wisconsin, Madison, 56 pp.
- Water Resources Management Workshop, 1981, Lake Redstone: a water quality and management study, University of Wisconsin, Madison, Inst. of Environmental Studies Report No. 115, 24 pp.

## GRANTS:

- 2008 *The Nature Conservancy*, (\$27,174), Linking riparian dis-connectivity to hydrologic reductions following flow regulation in the Connecticut River basin, PI, Magilligan
- 2007 *National Science Foundation*, The effects of dams on watershed fragmentation and riparian dis-connectivity across multiple scales (\$315,000), PI: Magilligan, co-PIs (C. Renshaw, J. Kaste, and B. Dade).
- 2007 *National Science Foundation*, Acquisition of Intrinsic Ge Gamma Spectrometers (\$97,000). PI: Renshaw; co-PIs (Magilligan, Kaste, and Dade).
- 2006 USDA Forest Service, Monitoring the effects of large woody debris on the sediment budgets of small streams in the Green Mountain National Forest (\$25,000), PI: Magilligan.
- 2005 *National Fish and Wildlife Foundation*, Assessing the role of large woody debris in Maine watersheds (\$118,000), PIs: F.J. Magilligan and K.H. Nislow.
- 2004 *Dartmouth College: Rockefeller Center for the Social Sciences*, Climate change and floodplain development in an arid Andean environment, (\$13,000), P.I. Magilligan, F.J.
- 2003 *USDA Forest Service*, Pattern and process in channel unit structure in New England streams: implications for stream ecosystems and fish populations (\$10,000), PI: Magilligan.
- 2003 *National Science Foundation*, The impacts of flow regulation by dams on the physical and ecological characteristics of rivers (\$244,300), PI: Magilligan, co-PIs: Renshaw, C., Heimsath, A., and Nislow, K.H.
- 2002 *Dartmouth College: Rockefeller Center for the Social Sciences*, The effects of dams on riparian habitat (\$16,000), Magilligan, F., PI
- 2001 *Dartmouth College: Venture Fund*, Global Positioning Systems within the Geography Curriculum (\$10,000).
- 1999 *Dartmouth College: Rockefeller Center for the Social Sciences*, A multi-scale analysis of geomorphic and ecological influences on pool development, (\$20,000), Magilligan, F., PI.
- 1998 *NASA Land Surface Hydrology Program*, Real-time forecasting and rapid post-event assessment of erosional and depositional flood damage, (\$343,000 for three years) PI: Smith, L. (UCLA); Co-PIs: Alsdorf, D., Garvin, J., Gomez, B., Izenberg, N., Jacobson, R., Magilligan, F., and Mertes, L.

GRANTS (cont.):

- 1997 *The Nature Conservancy*, Hydrologic Regimes in the Connecticut River Rapids Macrosite (CRRM): links to landscape change and ecological integrity, (\$43,000), Magilligan, PI.
- 1997 *National Science Foundation*, Geomorphic impacts of the jökulhlaup flood on the Skeidararsandur, Iceland. Gomez, Magilligan, Mertes, Smith, co-PIs (\$48,000).
- 1996 *Dartmouth College: Rockefeller Center for Social Sciences*, Riparian and stream channel morphologic adjustments in New England streams, (\$6,810).
- 1994 *National Science Foundation*. Processes and timing of geomorphic and hydraulic adjustments during stream channel recovery. (\$105,000). P. McDowell (University of Oregon), co-PI.
- 1993 *Whiting Foundation*. Hydropolitics in the Middle East: hydrologic and social impacts of the Ataturk Dam (Turkey) (\$5,800). Magilligan, PI.
- 1993 *Dartmouth College: Rockefeller Program for Interdisciplinary Research*. The hydrologic response to historical land use change in a Maine watershed (\$10,000).  
Magilligan and Birnie, co-PIs.
- 1993 *National Science Foundation*. Overbank sedimentation during the Upper Mississippi River flood of 1993 between Muscatine and Keokuk. (\$22,000). Gomez, Magilligan, Phillips and James, co-PIs.
- 1992 *National Science Foundation*. Teaching Enhancement Workshop in Hydrology. Co-sponsored by NSF-USGS. (\$500).
- 1992 *National Science Foundation*. Response and recovery of watersheds to environmental change (\$100,000). Magilligan, PI.
- 1992 *National Science Foundation*. Research Experience for Undergraduates (\$5,000). Magilligan, PI.
- 1991 *American Chemical Society*. Spatial and temporal patterns of sediment mobility during basin de-stabilization. (\$18,000). Magilligan, PI.
- 1990 *Georgia State University*. Vice-President's Research Award. Roughness variation in north Georgia stream channels (\$2,000). Magilligan, PI.
- 1989 *Georgia State University*. Vice-President's Research Award. Roughness variation in north Georgia stream channels (\$3,000). Magilligan, PI.

## GRANTS (cont.)

- 1986 *National Science Foundation*: Doctoral Dissertation Improvement Grant. Slope and roughness variation in small, meandering channels (\$11,610). Magilligan, PI.
- 1986 *Geological Society of America*. Penrose Dissertation Research Award. Slope and roughness variation in small, meandering channels (\$800). Magilligan, PI.
- 1985 *University of Wisconsin*. Graduate School Domestic Travel Fellowship. Slope and roughness variation in small, meandering channels (\$150). Magilligan, PI.

## CONFERENCE PAPERS:

“Constraining the timescales of sediment sequestration associated with large woody debris using cosmogenic beryllium-7, Annual Meeting of the American Geophysical Union, San Francisco December 2007 (with Fisher, G.B., Kaste, J.M., Nislow, K.H.)

“Altered flow and sediment regimes at tributary junctions on flow regulated rivers: impact of hydrologic disruptions on benthic macroinvertebrate communities”, Association American Geographers Annual Meeting, presented, April 2007 (with K. Svendsen, K. Nislow, C. Renshaw, A. Heimsath, and J. Kaste).

"Large woody debris characteristics in Maine Rivers: its frequency, geometry, and role in sediment storage." Annual Meeting of the American Geophysical Union, San Francisco, (with G. Fisher, K. Nislow, J. Wright, and G. Mackey)

“A GIS analysis of broadscale geomorphic and eco-geomorphic controls on Atlantic salmon habitat in Downeast Maine”. Geological Society America Meeting, Philadelphia 2006 (with Fisher, G.B., Nislow, K.H., Wright, J., Mackey, G.)

“Evaluating the impacts of impoundment on sediment transport using short-lived fallout radionuclides,” The International Association of Hydrological Sciences (IAHS) Conference, Dundee, Scotland (with Salant, N., Nislow, K., Renshaw, C., Heimsath, A., Kaste, J.)

“The use of short-lived fallout radionuclides to quantify transitional bed load transport in a regulated river, Association American Geographers, Chicago, IL, March, 2006. (N.L. Salant, C.E. Renshaw, K. H. Nislow, and A. Heimsath).

“Timescales of stream bed stabilization due to altered flow and sediment regimes below dams, American Geophysical Union Meeting. December 2005 (with Salant, N.L and Renshaw, C.E.)

“Characterizing the hydro-geomorphic effects of impoundment: reference conditions, approaches, and long-term fluvial adjustments, American Geophysical Union Meeting. December 2004 (Invited) (with K.H. Nislow and N.L. Salant)

“Sedimentation and sediment storage in a flow-regulated stream and the impact on aquatic ecosystems. American Geophysical Union Meeting. December 2004 (with N. L. Salant, C.E. Renshaw, J.M. Kaste, and K.H. Nislow) (ref.)

“Changes in hydrologic regime by dams”, Royal Geographical Society Conference, Glasgow, Scotland, September 2004.

“Hydro-ecologic impacts of impoundment in the Upper Connecticut River Basin, Massachusetts Water Commission Annual Conference, Amherst, MA, (Invited). (with K. Nislow). 2004

“Hydrologic impacts of impoundment: a watershed perspective”, Annual Meeting AAG. April 2004. (with H. Haynie and K. Nislow)

"At-a-Station and Reach Scale Adjustments to Hydrologic Changes by Dams", Association American Geographers, Philadelphia, PA April, 2003. (with H. Haynie, K. Nislow, and R. Manners).

"El Niño floods in southern Peru: geomorphic effects, chronologies, and archaeological significance", 3<sup>rd</sup> Annual International Paleo-flood Conference, Hood River, Oregon, July 2004 (with P. Goldstein)

"Geomorphic Effects, Chronologies, and Archaeological Significance of El Niño Floods in Southern Peru", Paper Presented Annual Meeting American Geophysical Union, S.F., December 2003. (with R. Manners, and P. Goldstein).

"Changes in hydrologic regime by dams", presented at Annual Meeting of the Geological Society of America, Denver, CO, November, (with Nislow, K.) 2002 (ref.).

"Riparian dis-connectivity and changes in hydrologic regime by dams", presented at the American Geophysical Union Annual Meeting, San Francisco, CA (with Nislow, K.), December, 2002 (ref.).

"Changes in hydrologic regime by dams", presented at the Binghamton Geomorphology Symposium, October 2002, Bloomsburg, Pennsylvania (with Nislow, K.).

"A watershed and regional scale perspective on the eco-hydrologic impacts of dams", presented at Association of American Geographers Annual Meeting, Los Angeles, CA, (with Nislow, K.), April 2002.

"Habitat loss and riparian dis-connectivity following long-term impoundment in the Connecticut River Basin", presented at the American Geophysical Union Annual Meeting, San Francisco, CA (with Nislow, K.), December, 2001 (ref.).

"Hydrologic and ecological impacts of flow regulation by dams in the Upper Connecticut River Corridor", presented at Association of American Geographers Annual Meeting, New York, (with Nislow, K., Fassnacht, H., Bechtel, D., and Ruesnik, A.), March, 2001

"Links between El Niño floods and cultural settlement and abandonment in the mid-valley Rio Moquegua", Paper Presented at the Northeast Andean Archaeology Conference, Hanover, NH (with Goldstein, P.), November, 2000.

"A late Holocene and modern El Niño flood history for the mid-valley Rio Moquegua, Southern Peru", presented at Association of American Geographers Annual Meeting, Pittsburgh, PA, (with Goldstein, P.), April 2000.

"Hydrologic impacts of dams in the upper Connecticut River basin" presented the American Geophysical Union Annual Meeting, San Francisco, CA (with Nislow, K.), December, 1999 (ref.).

"A late Holocene and modern El Niño flood history for the mid-valley Rio Moquegua, Southern Peru, (with P. Goldstein), presented at the Second International Paleoflood Conference, 1999, Prescott, Arizona.

"Hydrologic impacts of dams in the Connecticut River watershed" presented at Association of American Geographers Annual Meeting, Honolulu, Hawaii (with Nislow, K.), 1999.

"What can synthetic aperture radar tell us about floodplain sedimentation processes? ", presented at American Geophysical Union Meeting, San Francisco, CA (with L. Smith, D. Alsdorf, B. Gomez, L. Mertes, N. Smith). 1999 (ref.)

"Erosional and depositional characteristics of the 1996 Skeidararsandur jokulhlaup observed from field measurements and SAR interferometry", presented at American Geophysical Union Meeting, Boston, MA (with L.C. Smith, D.E. Alsdorf, B. Gomez, L.A.K. Mertes, and N.D. Smith), 1998 (ref.)

"Stream channel response to removal of grazing disturbance", presented at Association of American Geographers annual meeting, Boston, MA, March (with McDowell, P.), 1998.

"Processes of pool development in ungrazed streams, presented at American Geophysical Union Meeting, in the Special Session on "Impacts of Land use on hydrologic-geomorphic response of watersheds," Dec., San Francisco, CA (with McDowell, P.F.), 1997 (ref.).

"Response and recovery of stream channels following removal of cattle grazing, presented at Conference on Management of Landscapes Disturbed by Channel Incision: Stabilization, Rehabilitation, Restoration, May 20-22, 1997, Oxford, MS. (with McDowell, P.F.), 1997.

"Channel unit assemblages in small upland streams: human vs. natural influences", presented at Association of American Geographers annual meeting, Charlotte, North Carolina (with McDowell, P.F.), 1996.

“Channel adjustment: A comparison of response following natural and human disturbance.” Annual Meeting of the Geological Society of America, New Orleans, LA, November, (with P. McDowell) 1995 (ref.).

“Stream bed and channel adjustments following removal of riparian cattle grazing, Oregon.” Poster and Abstract accepted for presentation at the 26th Binghamton Geomorphology Symposium (with P. McDowell), October, 1995.

"Where's the silt?: impacts of the '93 Mississippi River flood", Annual Meeting of the Association of American Geographers, Chicago (with Phillips, J.D., Gomez, James, L.A., and Mertes, L.A.K.) 1995.

"Geomorphic impacts of the 1993 Mississippi River flood", Poster and Abstract accepted for presentation at the 25th Binghamton Geomorphology Symposium (with Phillips, J.D., Gomez, B., and James, L.A.) 1994.

"ERS-1 remote sensing of flood water surface profiles", Poster and Abstract accepted for presentation at the 25th Binghamton Geomorphology Symposium, (with Brakenridge, G.R., Tracy, B.T., and Knox, J.C.) 1994.

"Anatomy of a levee break." Annual Meeting of the Association of American Geographers, San Francisco, CA (with Gomez, B., Phillips, J.D. and James, L.A.) 1994.

"Geologic and topographic controls on landslides in the White Mountains, NH." Annual Meeting of the Association of American Geographers, San Francisco, CA, April 1994 (with Kull, C.).

"Hydrologic adjustments to historical land clearing and subsequent re-vegetation." Annual Meeting of the Association of American Geographers, San Francisco, CA (with Stamp, M.) 1994

"Pathways, timing, and magnitude of watershed de-stabilization and recovery." Annual Meeting of the Geological Society of America, Boston, Mass., November, 1993 (ref.)

"Recovery of watersheds to intensive land use change" Annual Meeting of the Association of American Geographers, Atlanta, GA, April, 1993.

“Variability of flow frequencies of catastrophic floods: Annual Meeting of the Association of American Geographers, San Diego, CA, April, 1992.

"Lateral and vertical sedimentological variation during floodplain alluviation." Annual Meeting of the Association of American Geographers, Toronto, Ontario, April, 1990.

"Sedimentology of an aggrading floodplain." Annual Meeting of the Geological Society of America, St. Louis, Missouri, Nov. 1989 (ref.)

"Stream channel hydrologic adjustments to increases in stage." Annual Meeting of the

Association of American Geographers, Phoenix, Arizona, April, 1988.

"Slope and roughness response to channel bed particle size variations." Annual Meeting of the Association of American Geographers, Portland, Oregon, April, 1987.

"An analysis of slope and roughness variations in small meandering alluvial streams." Annual Meeting of the Association of American Geographers, Minneapolis, Minnesota, May, 1986.

"Changes in floodplain sedimentation and stream channel dimensions since 1940 in the Galena River basin, southwest Wisconsin." Annual Meeting of the Association of American Geographers, Denver, CO, April, 1983.

#### HONORS AND AWARDS:

Dartmouth College: Petitt Family Fellowship (2002-2003)  
AAG Geomorphology Specialty Group, Chair, (2002-03)  
AAG Geomorphology Specialty Group, Secretary-Treasurer, (2001-02)  
Dartmouth College: Senior Faculty Fellowship (1999)  
Dartmouth College: J. Kenneth Huntington Award For Teaching Excellence (1996)  
Dartmouth College: Junior Faculty Fellowship (1994)  
Association of American Geographers: Miami Group  
Marsico Visiting Fellow, University of Denver, Winter, 2008.

#### INVITED LECTURES:

University of Denver, Department of Geography, "The effects of flow regulation on channel scale and reach scale geomorphology", February, 2008.

University of Wisconsin, Madison, Department of Geography, "Evaluating the effects of impoundment on watershed ecology and geomorphology, February, 2008.

University of Oregon, Department of Geography, "The hydrologic and eco-geomorphic impacts of dams." November, 2007.

University of California, Santa Barbara, Department of Geosciences, "Geomorphic adjustments to dams." November 2007.

University of California, Berkeley, Department of Geography, "The hydro-ecological impacts of flow regulation by dams." October, 2007.

Boston College, Department of Geosciences, "Regional and national impacts of dams on riverine hydrology and ecology", February 2007.

University of Arizona, Department of Geography, "The hydrologic and geomorphic impacts of dams", December, 2006

UNH, Department of Civil Engineering, "Riparian dis-connectivity, geomorphic adjustments, and changes in hydrologic regime by dams". March 2005

UNC, Chapel Hill, Department of Geography, "Damn dams: The hydro-ecologic impacts of impoundment". April 2004

Georgetown University, Department of Foreign Affairs, "Watershed fragmentation, riparian disconnectivity, and the hydro-ecological impacts of impoundment". November, 2003

Binghamton Geomorphology Conference, "Changes in hydrologic regime by dams", Bloomsburg University, Ohio, October, 2002.

Invited Plenary Panel Speaker on "State of Science". Managing River Flows for Biodiversity, Conference sponsored by The Nature Conservancy. "Hydrologic and geomorphic applications to riparian ecology." Fort Collins, CO, 2001.

University of California at Los Angeles, Department of Geography, "The geomorphic and hydrologic impacts of anthropogenic disturbance", 1999.

DePaul University, Department of Geography, "Stream channel recovery: links between fluvial geomorphology and aquatic ecology", 1998.

University of Oregon, Department of Geography, "Response and recovery of watersheds to environmental change", 1995.

University of Washington, Department of Geography, "Watershed recovery to historical land clearing", 1995.

Cornell University, "Geomorphic thresholds, equilibrium, and the spatial variability of extreme floods", May, 1993.

Denison College, "Geomorphic effects of extreme floods", October, 1992.

Binghamton Geomorphology Conference, "Thresholds and the spatial variability of flood power during extreme floods", Miami University, Ohio, October, 1992.

University of South Carolina, "Watershed responses to historical land use change", April 1990.

Southeast Division of the Association of American Geographers Annual Meeting, "Getting your first academic position", Panel Discussion co-sponsored by SEDAAG and the Phoenix Group, Charleston, W. Virginia, November, 1989.

University of Georgia, "Slope and roughness variation in small, meandering streams", May, 1989.

BOOK REVIEWS:

Magilligan, F.J. 2005, Review of R. Allison., Applied Geomorphology: Theory and Practice, *Geoarchaeology*, DOI 20067.

Magilligan, F.J., 2000, Review of Knighton. D., Fluvial Forms and Processes: A New Perspective, In: *Professional Geographer*, 52(3): 575-76.

Magilligan, F.J., 1992, Review of: DuBois, R. 1990, Soil Erosion in a Coastal River Basin, University of Chicago Geography Research Paper 232, In: *Geographical Review*, 82: 344-45.

Magilligan, F.J., 1995, Review of: Kliot, N., 1993, Water Resources Conflict in the Middle East, *Annals Association American Geographers*, 85: 380-83.

#### TEACHING EXPERIENCE:

July 2002 - present	Professor. Department of Geography. Dartmouth College, Hanover, NH (also Adjunct Professor in the Dept. of Earth Sciences).
July 1996 - June 2002	Associate Professor. Department of Geography. Dartmouth College, Hanover, NH (also Adjunct Associate Professor in the Dept. of Earth Sciences).
Sept. 1990 - June 1996	Assistant Professor. Department of Geography. Dartmouth College, Hanover, NH.
June 1990 - Aug. 1990	Visiting Assistant Professor. Dept. of Geography. University of Oregon, Eugene, Oregon.
Sept. 1988 - June 1990	Assistant Professor. Dept. of Geography. Georgia State University. Atlanta, Georgia.
Sept. 1985 - Dec. 1987	Lecturer. Department of Geography. University of Wisconsin, Madison. Introductory Physical Geography.
Sept. 1984 - Dec. 1984	Laboratory Instructor. Department of Geology and Geography. University of Wisconsin Center-Rock County Campus. Introductory Physical Geography.
Sept. 1980 - June 1981	Head Teaching Assistant. Department of Geography. University of Wisconsin, Madison. Introductory Physical Geography.
June 1980 - Aug. 1980	Teaching Assistant. Department of Geography. University

of Wisconsin, Madison. Fluvial Geomorphology and Introductory Physical Geography.

Sept. 1980 - June 1980

Teaching Assistant. Department of Geography. University of Wisconsin, Madison. Introductory Physical Geography.

#### WORK EXPERIENCE:

June 1983 - May 1985

Research Assistant. "The magnitude and frequency of Holocene floods" (Knox, PI; National Science Foundation).

June 1984 - Aug. 1984

Project Assistant. Mississippi Valley Archaeology Center. "The archaeology and geomorphology of Sand Lake Creek Coulee, Lacrosse, Wisconsin (Knox, PI).

June 1983 - Aug. 1983

Project Assistant. Wisconsin Department of Transportation Archaeological Investigations. "The archaeology and geomorphology of the Cox Creek site, Vernon County, Wisconsin." (Knox, PI).

June 1981 - June 1983

Research Assistant. "Responses of Midwest streams to Holocene climates." (Knox, PI; National Science Foundation)

June 1980 - Aug. 1980

Project Assistant. University of Wisconsin, Water Resources Management Program. "Lake Redstone: a water quality and management study (Knox, PI).

Sept. 1978 - Aug. 1979

Project Assistant. Wisconsin Water Resources Center. "Climate variation and the mobility and storage of sediments in watersheds." (Knox, PI).

June 1978 - Aug. 1978

Environmental Specialist I. Wisconsin Department of Natural Resources.

#### PROFESSIONAL MEMBERSHIPS:

Association of American Geographers  
Geological Society of America  
American Geophysical Union  
American Water Resources Association

#### SERVICE:

##### *Departmental:*

Search Committee for Human Geographer, 2005-2006  
Search Committee for Joint Search with Women's Studies, 2002-3, 2005-2006

Rockefeller Center Post-doc Competition Search Committee: 2000-2005  
Search Committee for GIS Position, 2001-2002  
Co-Chair Search Committee for Joint Search with Environmental Studies, 1999-2000  
Chair Search Committee for two positions in Human Geography 1996-1997  
Search Committee for Human Geographer, 1993-1994  
Co-Chair Search Committee for Director of the GIS Center

*College:*

Member, Sub-Committee on Priorities, 2003-2006  
Member, Steering Committee of Northern and Polar Studies 2003 – present  
Member, Search Committee for new Director of Office of Institutional Diversity, 1999  
Member, Search Committee for new Director of Rockefeller Center  
Member, Faculty General Steering Committee, 2002  
Member, Committee on Organization and Policy, 1995, 2001-2004  
Rockefeller Center Faculty Council, 2000-2007  
Committee on Graduate Fellowships 1996-1998

*Professional:*

Member & co-author, National Research Council (NRC/NAS) Report on “Strategic Directions for the Geographical Sciences in the Next Decade”, 2008.  
Panelist, National Science Foundation Geography & Regional Science Program 2005-07  
Panelist, National Science Foundation Graduate Fellowship Program 2005-08  
Advisory Committee, National Science Foundation Freshwater Initiative Program 2004  
Chair, Geomorphology Specialty Group 2002-2003  
Editorial Board, *Annals Association American Geographers*, 2003-2005  
Secretary-Treasurer, Geomorphology Specialty Group 2001-2002  
Member AAG Nystrom Committee 1996 and 1998

REVIEWER:

*Geological Society of America Bulletin*  
*Water Resources Research*  
*Annals of the Association of American Geographers*  
*National Science Foundation*  
*American Chemical Society*  
*National Research Council*  
*Journal of Geography*  
*Physical Geography*  
*Geomorphology*  
*Earth Surface Processes and Landforms*  
*Journal of Soil and Water Conservation*  
*Journal of Geophysical Research*  
*Journal of Great Lakes Research*  
*American Midland Naturalist*  
*Proceedings National Academy Sciences*

## SUPERVISED UNDERGRADUATE THESES:

- Jeff Bate '07: Landscape controls on LWD accumulation and wood-based restoration techniques in mountain streams of New England
- Haley Peckett '05 Yosemite National Park and the Development of American Sacred Space
- Rebecca  
Manners '04 Geomorphic Impacts of Large Floods in a Hyper-Arid Region: Relating Channel Behavior to Riparian Land Use Change
- Chelsea  
Lane-Miller '04: Chile and the BioBio Dams: Environmental Conflict in a Privatized Economy
- Hannah Haynie '03 Geomorphic Impacts of Dams in the Connecticut River Basin.
- Sara Donahue '02: Channel Bed Response to Watershed Disturbance: White Mountains, NH
- Peter Augello '02: Institutional and Policy Analysis of the New York City Water Supply
- Jolyon Rivoir-  
Pruzinski '00: The Geomorphic Response of the Dead Diamond River to Extreme Floods.
- Austyn Fudge '98: Characteristics and Mechanisms of Pool Formation in the White Mountains, NH, (Awarded Best Thesis '98 in the Earth Sciences Department).
- Lara Burgel '96: Native American Reserved Water Rights: The Legal and Historical Development of a Modern Dilemma (Senior Fellow).
- Rich Hoffman '94: The Morphology and Hydrology of Step-Pool Streams (Awarded Best Thesis '94 in the Earth Sciences Department).
- Jon Fidelak '93: Roughness Variation in Mink Brook, New Hampshire.
- Brian Graber '93: Land Use Change and Hydrologic Response in a New England Watershed: The Smith River, New Hampshire.
- Adam Light '93: Topographic Controls on Snowfall: Central Wasatch Mtns., Utah
- Ben Saunders '92: Quantification of Indian Reserved Water Rights in the West.
- Sean Andrish '92: Sedimentological Characteristics of Stream Confluences along the South Branch of the Ompompanoosuc River.
- Christian Kull '91: The Geomorphic and Topographic Controls on Landslide Genesis and Distribution in the White Mountains, New Hampshire.