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SUSAN L. CUTTER
(abbreviated Curriculum Vitae)

Current Position

Carolina Distinguished Professor
Director, Hazards & Vulnerability Research Institute
Department of Geography
University of South Carolina
Columbia, SC 29208
(803) 777-5236, FAX: 803-777-4972
e-mail: scutter@sc.edu

Publications

Books and Monographs (2000-present)

- Susan L. Cutter, Christopher T. Emrich, Jerry T. Mitchell, Walter W. Piegorsch, Mark M. Smith, and Lynn Weber. 2014. *Hurricane Katrina and the Forgotten Coast of Mississippi*. New York, NY and Cambridge, UK: Cambridge University Press.
- Susan L. Cutter. 2006. *Hazards, Vulnerability, and Environmental Justice*. London and Sterling, VA: Earthscan. 418 pp.
- M. Duane Nellis, Janice Monk, and Susan L. Cutter (eds.). 2004. *Presidential Musings from the Meridian: Reflections on the Nature of Geography by Past Presidents of the Association of American Geographers*. Morgantown, WV: West Virginia University Press. 276 pp.
- Stanley D. Brunn, Susan L. Cutter, and J. W. Harrington Jr. (eds.). 2004. *Geography and Technology*. Dordrecht, Boston, and London: Kluwer Academic Publishers. 613 pp.
- Susan L. Cutter, Douglas Richardson, and Thomas Wilbanks (eds.). 2003. *The Geographical Dimensions of Terrorism*. New York and London: Routledge. 274 pp.
- Susan L. Cutter and William H. Renwick. 2003. *Exploitation, Conservation, Preservation: A Geographic Perspective on Natural Resource Use Fourth Edition*. New York: John Wiley & Sons. 390 pp. (3rd Edition published in 1999, 391 pp.)
- Susan L. Cutter (editor), 2001. *American Hazardscapes: The Regionalization of Hazards and Disasters*. Washington D.C.: Joseph Henry Press/National Academy of Sciences. 211 pp.

Refereed Articles (2010-present)

115. Birkmann, J., F. Wenzel, S. Greiving, M. Garschagen, D. Vallée, W. Nowak, T. Welle, S. Fina, A. Goris, B. Rilling, F. Fiedrich, A. Fekete, S. L. Cutter, S. Düzung, A. Ley, M. Friedrich, E. Kuhlmann, B. Novák, S. Wiprecht, C. Riegel, A. Thieken, J. Rhynier, U. Ulbrich, and J. K. Mitchell, 2016. Extreme events, critical infrastructures, human vulnerability and strategic planning: emerging research issues, *J. Extreme Events* 3(2): doi:10.1142/S23455737616500172 (March 16, 2017).
114. Cutter, S. L., 2016. The changing context of hazard extremes: Events, impacts, and consequences, *J. Extreme Events*, 3(2): doi:10.1142/S2345737616710056 (February 2, 2017).
113. Ismail-Zadeh, A. T., S. L. Cutter, K. Takeuchi, and D. Paton, 2017. Forging a paradigm shift in disaster science, *Natural Hazards* 86(2): 969-988.
112. Hofferth, S. L., E. F. Moran, B. Entwistle, J. L. Aber, H. E. Brady, D. Conley, S. L. Cutter, C. C. Eckel, D. Hamilton, and K. Hubacek, 2017. Introduction: History and motivation, *Annals, American Academy of Political and Social Science (AAPSS)* 669: 6-17.
111. Cutter, S. L., 2017. The forgotten casualties redux: Women, children, and disaster risk, *Global Environmental Change* 42:117-121.
110. Cutter, S. L., 2017. The perilous nature of food supplies: Natural hazards, social vulnerability, and disaster resilience, *Environment: Science and Policy for Sustainable Development* 59(1): 4-15.
109. Cutter, S.L., K. D. Ash, and C. T. Emrich, 2016. Urban-rural differences in disaster resilience, *Annals of the American Association of Geographers* 106(6):1236-1252.
108. Hummell, B. M. de L., S. L. Cutter, and C. T. Emrich, 2016. Social vulnerability to natural hazards in Brazil, *Int J. Disaster Risk Sci* 7(2):111-122.
107. Cutter, S.L., 2016. Commentary, Resilience to What? Resilience for Whom? *The Geographical Journal* 182(2):110-113.
106. Cutter, S. L. 2016. The landscape of disaster resilience indicators in the USA, *Natural Hazards* 80(2): 741-758.
105. Bowser, G. C. and S. L. Cutter, 2015. Stay or go? Examining decision making and behavior in hurricane evacuations, *Environment: Science and Policy for Sustainable Development* 57(6):28-41.
104. Cutter, S. L. and M. Gall, 2015. Sendai targets at risk, *Nature Climate Change* 5 (August):707-709.
103. Cutter, S. L., A. Ismail-Zadeh, I. Alcántara-Ayala, O. Altan, D. N. Baker, S. Briceño, H. Gupta, A. Holloway, D. Johnston, G. A. McBean, Y. Ogawa, D. Paton, E. Porio, R. K. Silbereisen, K. Takeuchi, G. B. Valsecchi, C. Vogel, and G. Wu, 2015. Pool knowledge to stem losses from disasters, *Nature* 522:277-279.
102. Gall, M., K. H. Nguyen, and S.L. Cutter, 2015. Integrated research on disaster risk: Is it really integrated? *Intl. Journal of Disaster Risk Reduction* 12:255-267.

101. Moran, E. F., S. L. Hofferth, C. C. Eckel, D. Hamilton, B. Entwistle, J. L. Aber, H. E. Brady, D. Conley, S. L. Cutter, K. Hubacek, and J. T. Scholz, 2014. Opinion: Building a 21st-century infrastructure for the social sciences, *Proceedings, US National Academy of Sciences (PNAS)* 111 (45):15855-15856.
100. Cutter, S. L., K. D. Ash, and C. T. Emrich, 2014. The geographies of community disaster resilience, *Global Environmental Change* 29:65-77.
99. Cutter, S. L., R. Schumann, and C. T. Emrich, 2014. Exposure, social vulnerability and recovery disparities in New Jersey after Hurricane Sandy, *Journal of Extreme Events*, 1(1): 23 pp. doi: 10.1142/S234573761450002X
98. Cutter, S. L., 2014. What makes events extreme? *J. Extreme Events* 1(1): 4 pp. doi: 10.1142/S2345737614020011
97. Guillard-Gonçalves, C., S. L. Cutter, C. T. Emrich, and J. L. Zêzere, 2014. Application of Social Vulnerability Index (SoVI) and delineation of natural risk zones in Greater Lisbon, Portugal. *J. of Risk Research*, <http://dx.doi.org/10.1080/13669877.2014.910689>
96. Cutter, S. L., 2014. Building disaster resilience: Steps toward sustainability, *Challenges in Sustainability* 1(2): 72-79.
95. Chen, W., S. L. Cutter, C. T. Emrich, and P. Shi, 2013. Measuring social vulnerability to natural hazards in the Yangtze River Delta region, China. *Intl Journal of Disaster Risk Science*, 4(4):169-181.
94. Birkmann, J., S. L. Cutter, D. S. Rothman, T. Welle, M. Garshagen, B. van Ruijven, B. O'Neill, B. Preston, S. Kienberger, O. D. Cardona, T. Siagian, D. Hidayati, N. J. Setiadi, C. Binder, B. Hughes, and R. Pulwarty, 2015. Scenarios for vulnerability—opportunities and constraints in the context of climate change and disaster risk, *Climatic Change* 133: 53-68. DOI 10.1007s10584-013-0913-2 (2013).
93. Ash, K., S. L. Cutter, and C. T. Emrich, 2013. Acceptable losses: The relative impacts of natural hazards in the United States, 1980-2009. *Intl. Journal Disaster Risk Reduction* 5:61-72.
92. Cutter, S. L. and M. L. Zoback, 2013. Improving the nation's resilience to disasters. *EOS, Transactions of the AGU*, 94(9): 89-90.
91. Cutter, S. L., J.A. Ahearn, B. Amadei, P.Crawford, E. A. Eide, G.E. Galloway, Jr., M.F. Goodchild, H.C. Kunreuther, M.Li-Vollmer, M. Schoch-Spana, S.C. Scrimshaw, E.M. Stanley, Sr., G.Whitney, and M.L.Zoback, 2013. Disaster resilience: A national imperative, *Environment: Science and Policy for Sustainable Development* 55(2):25-29.
90. Cutter, S.L., C. Emrich, D. Morath, and C.M. Dunning, 2013. Integrating social vulnerability into federal flood risk management planning, *J. Flood Risk Management*, 6(4):332-344.
89. Gao, P., D. Guo, K. Liao, J. Webb, and S.L. Cutter, 2013. Early detection of terrorism outbreaks using prospective space-time scan statistics, *Professional Geographer* 65 (4): 676-691.
88. Kunkel, K. E., T. R. Karl, H. Brooks, J. Kossin, J. H. Lawrimore, D. Arndt, L. Bosart, D. Changnon,

- S. L. Cutter, N. Doesken, K. Emanuel, P.Y. Groisman, R. W. Katz, T. Knutson, J. O'Brien, c. J. Paciorek, T. C. Peterson, K. Redmond, D. Robinson, J. Trapp, R. Vose, S. Weaver, M. Wehner, K. Wolter, and D. Wuebbles, 2013. Monitoring and understanding trends in extreme storms: State of knowledge. *Bulletin of the American Meteorological Society (BAMS)* 94(4):499-514.
87. O'Riordan, T., A. A. Leiserowitz, A. H. McGowan, and S. L. Cutter, 2012. Rio + 20: An Endangered Species? *Environment: Science and Policy for Sustainable Development* 54 (2): 44-51.
86. Cutter, S. L., 2012. A ciência da vulnerabilidade: Modelos, métodos e indicadores (Vulnerability Science: Models, Methods, and Indicators), *Revista Crítica de Ciências Sociais* (93): June 2011: 59-69 In Portuguese.
85. Gall, M., K. A. Borden, C. T. Emrich, and S. L. Cutter, 2011. The unsustainable trend of natural hazard losses in the United States. *Sustainability* 3: 2157-2181.
84. Emrich, C. T. and S.L. Cutter, 2011. Social vulnerability to climate-sensitive hazards in the southern United States. *Weather, Climate, and Society* 3(3): 193-208.
83. Tate, E., C. G. Burton, M. Berry, C. T. Emrich, and S. L. Cutter, 2011. Integrated hazards mapping tool. *Transactions in GIS* 15 (5): 689-706.
82. Battersby, S., J. T. Mitchell, and S. L. Cutter, 2011. Facilitating Disaster Awareness with an Online Hazards Atlas, *Intl. Research in Geographical and Environmental Education* 20(4): 297-308.
81. Burton, C., J. T. Mitchell, S. L. Cutter, 2011. Evaluating post-Katrina recovery in Mississippi with repeat photography, *Disasters* 3: 488-509. 27 JAN 2011, DOI: 10.1111/j.1467-7717.2010.01227.x 35
80. Schmidlein, M. C., J. M. Shafer, M. Berry, and S. L. Cutter, 2011. Modeled earthquake losses and social vulnerability in Charleston, South Carolina, *Applied Geography* 31(1):269-281. doi: 10.1016/j.apgeog.2010.06.001
79. Tate, E., S. L. Cutter, and M. Berry, 2010. Integrated multi-hazard mapping. *Environment and Planning B* 37(4): 646-663.
78. Cutter, S. L., C. G. Burton, and C. T. Emrich, 2010. Disaster resilience indicators for benchmarking baseline conditions, *Journal of Homeland Security and Emergency Management* 7(1): Article 51.
77. Stevenson, J. R., C. T. Emrich, J. T. Mitchell, and S. L. Cutter, 2010. Using building permits to monitor disaster recovery: a spatio-temporal case study of coastal Mississippi following Hurricane Katrina, *Cartography and Geographic Information Science* 37 (1): 57-68.
76. Jordan, T. E., O.E. Sala, S. G. Stafford, J. L. Bubier, J. C. Crittenden, S. L. Cutter, A.C. Kay, G. D. Libecap, J. C. Moore, N. N. Rabalais, J. M. Shepherd, and J. Travis, 2010. Tipping our science: New NSF report recommends interdisciplinary approach to study natural and social systems, *EOS, Transactions of the AGU* 91 (16): 143-144.
75. Stafford, S. G., D. M. Bartels, S. Gegay-Campbell, J. L. Bubier, J. C. Crittenden, S. L. Cutter, J. L.

Delany, T. E. Jordan, A. C. Kay, G. D. Libecap, J. C. Moore, N. N. Rabalais, D. Rejeski, O. E. Sala, J. M. Shepherd, and J. Travis, 2010. Now is the time for action: transitions and tipping points in complex environmental systems, *Environment: Science and Policy for Sustainable Development* 52 (1):38-45.

74. Finch, C., C. T. Emrich, and S. L. Cutter, 2010. Disaster disparities and differential recovery from New Orleans. *Population & Environment* 31 (4):179-202. Published online January 9, 2010 DOI 10.1007/s11111-009-0099-8.

73. Melton, G., M. Gall, J. T. Mitchell, and S. L. Cutter, 2010. Hurricane Katrina storm surge delineation: implications for future storm surge forecasts and warnings. *Natural Hazards* 54: 519-536. Published online December 9, 2009, DOI 10.1007/s11069-009-9483-z.

72. Wood, N. J., C. G. Burton, and S. L. Cutter, 2010. Community variations in social vulnerability to Cascadia-related tsunamis in the U.S. Pacific Northwest. *Natural Hazards* 52: 369-389. DOI 10.1007/s11069-009-9376-1. Published online: 26 March 2009

Articles in Books and Proceedings (2010-present)

52. Gall, M. and S. L. Cutter, 2016. Understanding disaster risk through loss data. In *Solving the Puzzle: Where to Invest to Understand Risk, Written Contributions*. Washington DC: World Bank, p. p. 70-73.

51. Cutter, S. L., 2016. Demographic change after Hurricane Katrina: A tale of two places, in Helen James and Douglas Paton, *The Consequences of Disasters: Demographic, Planning and Policy Implications*. Springfield, IL: CH Thomas Publishers, p. 49-64.

50. Cutter, S. L. and M. Gall, 2016. Chapter 27 Hurrikan Katrina—gescheiterte Planung oder geglantes Scheitern? In C. Felgentreff and T. Glade (eds.), *Naturrisiken und Sozialkatastrophen*. Berlin and Heidelberg: Springer-Verlag, pp.

49. Pelling, M. R. Basher, J. Birkmann, S. Cutter, B. Desai, S.H.M. Fakhruddin, F. Ferrugini, T. Mitchell, T. Oliver-Smith, J. Rees, and K. Takeuchi, 2014. Disaster risk reduction and sustainable development, in K. Sassa, P. Canuti, and Y. Yin (eds.), *Landslide Science for a Safer Geoenvironment, Vol. 1*. Switzerland: Springer International Publishing, pp. 211-216.

48. Cutter, S. L., W. D. Solecki, N. Bragado, J. Carmin, M. Fragnas, M. Ruth, and T. Wilbanks, 2014. Chapter 11: Urban systems, infrastructure, and vulnerability, in *Climate Change Impacts in the United States: The Third National Climate Assessment*, J.M. Melillo, T.C. Richmond, and G.W. Yohe (eds), Washington D.C.: US Global Change Research Program, 11-1-11-nn.

47. Cutter, S.L., 2013. Vulnerability. *Encyclopedia of Natural Hazards*, P.T. Bobrowsky (ed.), Dordrecht: Springer, pp. 1088-1090.

46. Cutter, S. L. and D.P. Morath, 2013. “The evolution of the Social Vulnerability Index,” in J. Birkmann (ed.), *Measuring Vulnerability to Natural Hazards, 2nd Edition*. Bonn: United Nations University Press, pp. 304-321.

45. Cutter, S., B. Osman-Elasha, J. Campbell, S-M. Cheong, S. McCormick, R. Pulwarty, S. Supratid, and G. Zier vogel, 2012: Managing the risks from climate extremes at the local level. In *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* [Field, C. B., V. Barros, T. F. Stocker, D. Qin, D. J. Dokken, K. L. Ebi, M. D. Mastrandrea, K. J. Mach, G.-K. Plattner, S. K. Allen, M. Tignor, and P. M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC). Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 291-338.
44. Gall, M. and S. L. Cutter, 2012. Chapter 7 2005 Events and Outcomes: Hurricane Katrina and Beyond. In C. Rubin, *Emergency Management: The American Experience 1900-2010, Second Edition*. Philadelphia: Taylor and Francis, pp. 191-212.
43. Cutter, S. L., 2011. "The Katrina exodus: Internal displacements and unequal outcomes," Foresight Global Environmental Migration, CS1 New Orleans—examining multiple migration outcomes from the same event. <http://www.bis.gov.uk/assets/bispartners/foresight/docs/migration/case-studies/11-1156-cs1-katrina-exodus-internal-displacements.pdf>
42. Emrich, C.; S. L. Cutter, and P. J. Weschler, 2011. "GIS and Emergency Management," in Nyerges, T., H. Couclelis, and R. B. McMaster (eds.), *The SAGE Handbook of GIS and Society*, SAGE Publications, pp. 321-343.
41. Cutter, S. L. 2010. Social science perspectives on hazards and vulnerability science. In T. Beer (ed.), *Geophysical Hazards: Minimizing Risk Maximizing Awareness*. Springer: 17-30.

Other Publications

43. Emrich, Christopher T, Jeffrey R. Sanderson, and Susan L. Cutter, 2016. The social vulnerability index (SoVI®) as a decision support tool in prioritizing disaster recovery efforts, in S.E. Flynn, *The South Carolina Deluge: Lessons from a Watershed Disaster A Center for Resilience Studies Assessment*, Boston, MA: Northeastern University Center for Resilience Studies, pp 41-51.
http://www.northeastern.edu/resilience/wp-content/uploads/2016/09/S_Flynn_South_Carolina_Deluge-Resilience_Lessons-from_a_Watershed_Disaster_Northeastern_Univ_Aug16.pdf
42. Cutter, S.L. and C. Emrich, 2015. "A Tale of Two Recoveries: 5 Lessons from Hurricanes Katrina and Sandy. *Emergency Management* June 25, 2015. <http://www.emergencymgmt.com/disaster/A-Tale-of-Two-Recoveries-Hurricanes-Katrina-and-Sandy-.html>
41. Ismail-Zadeh, A. and S. Cutter (editors and authors), 2015. *Disaster Risks Research and Assessment to Promote Risk Reduction and Management*. Paris: ICSU-ISSC Ad-hoc Group on Disaster Risk Assessment. http://www.icsu.org/science-for-policy/disaster-risk/documents/DRRsynthesisPaper_2015.pdf
40. Gall, M., C. T. Emrich and S. L. Cutter, 2014. Who Needs Loss Data? Background Paper for the Global Assessment Report on Disaster Risk Reduction 2015 (GAR15). Geneva, Switzerland: UNISDR. <http://www.preventionweb.net/gar> [forthcoming]; excerpts included in GFDRR, 2014. Understanding Risk in an Evolving World: Emerging Best Practices in Natural Disaster Risk Assessment. Washington, D.C.: The World Bank, pp 59-63. Available at

https://www.gfdrr.org/sites/gfdrr/files/publication/Understanding_Risk-Web_Version-rev_1.8.0.pdf

39. Gall, M., S. L. Cutter, and K. Nguyen, 2014. Incentives for Disaster Risk Management (IRDR AIRDR Publication No. 2). Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org/>
38. Gall, M., S. L. Cutter, and K. Nguyen, 2014. Governance in Disaster Risk Management (IRDR AIRDR Publication No. 3). Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org>
37. Gall, M., S. L. Cutter, and K. Nguyen, 2014. Transformative Development and Disaster Risk Management (IRDR AIRDR Publication No. 4). Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org>
- IRDR, 2014. Guide to the IRDR Assessment on Integrated Research on Disaster Risk, IRDR AIRDR Publication No. 1. Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org>
36. IRDR, 2014. Peril Classification and Hazard Glossary. Report by the DATA Working Group of the IRDR. Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org/2014/03/28/irdr-peril-classification-and-hazard-glossary/>
35. Cutter, S. L. and C. Corendea (eds), 2013. *From Social Vulnerability to Resilience: Measuring Progress toward Disaster Risk Reduction*. Source No. 17, Bonn: UNU-EHS, United Nations University.
34. Oliver-Smith, A., S. L. Cutter, K. Warner, C. Corendea, and K. Yuzva, 2012. *Addressing loss and damage in the context of social vulnerability and resilience*. Policy Brief No. 7. Bonn: United Nations University, Institute for Environment and Human Security (UNU-EHS), 46 pp.
33. National Research Council, 2012. *Disaster Resilience; A National Imperative*. Washington D.C.: National Academies Press. Chair of the authoring team, Committee on Increasing National Resilience to Hazards and Disasters.

Thesis/Dissertation Supervision

Current Advising: 3 Ph.D. students, 5 MA/MS students

Number of Ph.D. students: 22

Number of MA/MS students (thesis): 30

Number of MA/MS students (non-thesis): 12

Honors/Awards

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| 2015 | Elected as foreign member, The Royal Norwegian Society of Sciences and Letters |
| 2015 | Gilbert F. White Lecture, American Geophysical Union, Natural Hazards Focus Group |
| 2015 | Honorary Degree (<i>Doctor Honoris Causa</i>), Norwegian University of Science and Technology |
| 2014 | Gilbert F. White Lecture in the Geographical Sciences, US National Research Council
[Bell, Trudy 2015. Column on the Gilbert F. White Lecture by Susan L. Cutter. |

http://nationalcalamityeaster1913flood.blogspot.com/2015_02_01_archive.html

- 2013 Southeastern Conference (SEC) Faculty Achievement Award
- 2011 Lifetime Achievement Award, Association of American Geographers
- 2009-12 MunichRe Foundation Chair in Social Vulnerability
- 2005 Distinguished Geographer Award, Pennsylvania Geographic Society
- 2001 Honor's Convocation speaker, California State University, Hayward (May)
- 2001 Named Distinguished Carolina Professor, University of South Carolina
- 1999 Elected Fellow, American Association for the Advancement of Science (AAAS)
- 1999 Russell Research Award for the Humanities and Social Sciences, University of South Carolina