

CURRICULUM VITA

DAVID W. HULSE, Professor, Department of Landscape Architecture, Director, Florida Institute for Built Environment Resilience, PO Box 115702, University of Florida Gainesville, Florida 32611-5702 (352)294-3378 FAX (352) 294-6783, e-mail dhulse@ufl.edu

Education

1981 B.S.L.A. Colorado State University, College of Forestry and Natural Resources Ft. Collins, Colorado
1984 M.L.A. (Distinction) Harvard University Graduate School of Design Cambridge, Massachusetts

Honors

1985 Fulbright Scholar
1989 Young Researcher Award of Distinction, Council of Educators in Landscape Architecture
1994 President's Service Award, American Society of Landscape Architects
1999 UO Fellow, Consortium of Asian & Pacific Rim Universities
2004 Philip H. Knight Professor in Landscape Architecture
2005 US IALE Distinguished Landscape Practitioner Award
2012 *Design Intelligence* 25 Most Admired Faculty
2012 International RiverPrize – group submission for Willamette River conservation and restoration

Employment

2019-present Professor & Director, Univ. of Florida
2013-2018 Director, Ph.D. program, Univ. of Oregon
2006-2018 Philip H. Knight Professor, Univ. of Oregon
1999-2018 Professor, Univ. of Oregon
1995-2000 Department Head, Landscape Architecture
1985-1999 Asst./Associate Professor, Univ. of Oregon
1984-1985 Visiting Asst. Professor, Università' di Firenze

Selected Recent Professional Service

Oregon Department of Fish and Wildlife/BPA Restoration Technical Review Team 2010 – 2018, \$8+ million per year in land acquisition
3rd National Climate Assessment 2013-2014
Science Advisory Board for the Oregon Climate Change Research Institute 2010-2018
Habitat Technical Team National Marine FS Biological Opinion 2013 – 2015
Science/technology Committee for the Oregon Global Warming Commission 2008-2010

Peer Reviewed Publications

Wang, Y., D. Hulse, J. von Meding, M. Brown, L. Dedenbach. 2020. Conceiving resilience: lexical shifts and proximal meanings in the human-centered natural and built environment literature from 1990-2018. *Developments in the Built Environment*. <https://doi.org/10.1016/j.dibe.2019.100003>

Santelmann, M.W., D. Hulse, M. Wright, C. Enright, A. Branscomb, M. Tchintcharauli-Harrison, J. Bolson. 2019. Designing and modeling innovation across scales for urban water systems. *Urban Ecosystems*. Vol. 22, No. 6, 1149-1164. doi: 10.1007/s11252-019-00882-6

Gregory, S., R. Wildman, D. Hulse, L. Ashkenas, K. Boyer. 2019. Historical changes in hydrology, geomorphology and floodplain vegetation of the Willamette River, Oregon. *River Research and Applications*. doi:10.1002/rra.3495

- Hulse, D., A. Branscomb, C. Enright, B. Johnson, C. Evers, J. Bolte, A. Ager. 2016. Anticipating Surprise: using agent-based alternative futures simulation modeling to identify and map surprising fires in the Willamette Valley, Oregon USA. *Landscape and Urban Plan.* 156. doi: 10.1016/j.landurbplan.2016.05.012
- Hong Wu, J. Bolte, D. Hulse, B. Johnson. 2015. A scenario-based approach to integrating flow-ecology research with watershed development planning. *Landscape and Urban Plan.* 144, 74-89. doi:10.1016/j.landurbplan.2015.08.012
- Brown, D. G., C. Polsky, P. Bolstad, S. D. Brody, D. Hulse, R. Kroh, T. R. Loveland, and A. Thomson, 2014: Ch. 13: Land Use and Land Cover Change. *Climate Change Impacts in the United States: The Third National Climate Assessment*, J. M. Melillo, Terese (T.C.) Richmond, and G. W. Yohe, Eds., U.S. Global Change Research Program, 318-332. doi:10.7930/J05Q4T1Q.
- Wallick, J.R., Jones, K.L. O'Connor, J.E., Keith, M.K., Hulse, D., Gregory, S.V. 2013. Geomorphic and vegetation processes of the Willamette River floodplain, Oregon: Current understanding and unanswered questions. U.S. Geological Survey Open-File Report 2013-1246. 78 p.
- Jaeger, W.K., A.J. Plantinga, H. Chang, G. Grant, D. Hulse, J. McDonnell, H. Moradkhani A.T. Morzillo, P. Mote, A. Nolin, M. Santelmann, J. Wu. 2013. Toward a formal definition of water scarcity in natural-human systems. *Journal of Water Resources Research.* vol. 49, 1-11, doi:10.1002/wrcr.20249.
- Santelmann, M.V., J. McDonnell, J. Bolte, S. Chan, A.T. Morzillo, and D. Hulse. 2012. Willamette Water 2100: River basins as complex social-ecological systems. In: *The Sustainable City VII*, Vol. 1, 575-586. ed. M. Pacetti. WIT Transactions on Ecology and The Environment, Vol 155 ISBN: 978-1-84564-578-6
- Gregory, S., D. Hulse, M. Bertrand, D. Oetter. 2012. The role of remotely sensed data in future scenario analyses at a regional scale. Ch. 12 in Carbonneau, P. and H. Piegay (eds). *Fluvial Remote sensing for Science and management*. Wiley and Sons. ISBN: 978-0-470-71427-0.
- D. Hulse, A. Branscomb, C. Enright, J. Bolte. 2009 Anticipating floodplain trajectories through alternative futures analysis. *Journal of Landscape Ecology.* (24):8 pp. 1067-1090. DOI:10.1007/s10980-008-9255-2.
- M. Guzy, C. Smith, J. Bolte, D. Hulse, S. Gregory. 2008. Policy research employing agent-based modeling to assess future impacts of urban expansion onto farm and forest lands. *Ecology and Society* 13(1): 37.
- Liu, Y., M. Mahmoud, H. Hartmann, S. Stewart, T. Wagener, D. Semmens, R. Stewart, H. Gupta, D. Dominguez, D. Hulse, R. Letcher, B. Rashleigh, C. Smith, R. Street, J. Ticehurst, M. Twery, H. van Delden, R. Waldick, D. White, and L. Winter. 2007. Formal scenario development for environmental impact assessment studies, in *State of the Art and Futures in Environmental Modeling and Software*, edited by Jakeman, A., A. Voinov, A. E. Rizzoli, and S. Chen, IDEA Book Series, Elsevier.

- J. P. Bolte, D.W. Hulse, S.V. Gregory, C. Smith. 2007. Modeling biocomplexity -- actors, landscapes and alternative futures. *Env. Modeling and Software*. 22(5) 570-579.
- D. Hulse, S. Gregory. 2004. Integrating resilience into floodplain restoration. *Journal of Urban Ecology*. Special Issue on Large-Scale Ecosystem Studies: Emerging trends in urban and regional ecology. Vol. 7: 295-314.
- D. Hulse, A. Branscomb, S. Payne. 2004. Envisioning Alternatives: using citizen guidance to map future land and water use. *Journal of Ecological Applications*. v. 14, no. 2, pp. 325-341.
- J. Baker, D. Hulse, S. Gregory, D. White, J. Van Sickle, P.A. Berger, D. Dole, N.H. Schumaker. 2004. Alternative futures for the Willamette River Basin, Oregon. *Journal of Ecological Applications*. v. 14, no. 2, pp. 313-324.
- D. HULSE, S. GREGORY, J. BAKER. (EDS). 2002. Willamette River Basin Planning Atlas: Trajectories of environmental and ecological change. (2nd edition), Oregon State University Press, Corvallis, Oregon 97333. 180 p.
- D. Hulse And S.V. Gregory. 2001. Alternative Futures as an integrative framework for riparian restoration of large rivers, chapter 9 in *Applying Ecological Principles to Land Management*, V.H. Dale and R. Haeuber (eds.). Springer-Verlag, New York. Pp. 194-212. ISBN 0-387-95099-0.
- D. Hulse And R. Ribe. 2000. Land conversion and the production of wealth. *Journal of Ecological Applications*. 10(3). Pp. 679-682.
- D. Hulse, J. Eilers, K. Freemark, D. White, C. Hummon. 2000. Planning alternative future landscapes in Oregon: evaluating effects on water quality and biodiversity., *Landscape Journal* 19(2): 1-19.
- Gregory, S.V., D.W. Hulse, D.H. Landers, E. Whitelaw. 1998. Integration of biophysical and socio-economic patterns in riparian restoration of large rivers, in *Hydrology in a Changing Environment*, H. Wheater and C. Kirby (eds.), vol. I, Theme 2 Ecological and hydrological interactions, D. Gilvear editor, John Wiley and Sons, Chichester. pp. 231-247.
- R. Ribe, R. Morganti, D. Hulse, R. Shull. 1998. A management driven investigation of landscape patterns of northern spotted owl nesting territories in the high Cascades of Oregon. *Journal of Landscape Ecology*. 13: pp. 1-13.
- K. Freemark, C. Hummon, D. White And D. Hulse. 1996 *Modeling risks to biodiversity in past, present and future landscapes.*, Technical Report No. 268, Canadian Wildlife Service, Headquarters, Environment Canada, Ottawa K1A 0H3. 60 pp.
- D. Hulse, K. Larsen., D. Liberty. 1996. *macGIS 3.0: A Geographic Information System for the Macintosh.*, Department of Landscape Architecture, University of Oregon, Eugene, Oregon 97403, 236 p. (also in Italian translation)
- D. Hulse. 1995. Of Science, Salmon and Sprawl: Landscape Planning in the Pacific Northwest, *Landscape Architecture*, vol. 85, No. 4, p. 56-60.
- I.D. Bishop and D. Hulse. 1994. Prediction of scenic beauty using mapped data and geographic information systems. *Journal of Landscape and Urban Planning*. V. 30. pp. 59-70.

• Recent Research Support and Collaborators

- National Science Foundation Coupled Human/Natural Systems² Program. Developing adaptive capacity in wildfire-prone regions. 2019 – 2024. \$1,590,000.
- National Science Foundation Sustainable Research Network Program. U-WIN: Urban Water Information Network. 2015 – 2019. \$12 million.
- Meyer Memorial Trust. Tracking Progress Towards Restoration Goals in the Willamette River Network. 2015 – 2017. \$155,000.
- Eugene Water and Electric Board. Tracking Progress Towards Restoration Goals in the McKenzie River System. 2016 – 2018. \$61,800.
- National Science Foundation Coupled Human/Natural Systems Program. Interactions of Climate Change, Land-Management Policies, and Forest Succession on Fire Hazard and Ecosystem Trajectories in the Wildland-Urban Interface. 2008 – 2013. \$306,000.
- National Oceanic and Atmospheric Administration Regional Integrated Science Assessment. Climate Impacts Research Consortium, 2010 – 2015. \$526,000.
- National Science Foundation Water, Sustainability and Climate Program. Willamette Water 2100., 2010 – 2015. \$4.5 million.
- Meyer Memorial Trust. Expanding an information framework for research, monitoring and evaluation in the Willamette River floodplain. 2012 – 2014. \$216,000.
- Oregon Watershed Enhancement Board. Linking cold-water refuges into a biologically effective network., 2008 – 2011. \$236,734.
- U.S. Army Corps of Engineers. Cooperative Agreement., Prioritizing Willamette Project revetments for removal or modification to restore natural river functions. 2011-2012. \$70,000.
- U.S. Environmental Protection Agency. Harnessing the hydrologic disturbance regime: sustaining multiple benefits in large river floodplains in the PNW". 2005 – 2008. \$288,000.
- National Science Foundation Biocomplexity Program. "Interactions of riparian pattern, policy and biocomplexity in coupled human/riverine systems", Oregon State University and the University of Oregon., 2001-2006. \$560,000.
- U.S. Environmental Protection Agency, "Pacific Northwest Ecosystem Research Consortium". A multi-university consortium consisting of Oregon State University, the University of Oregon, and the University of Washington. 1995 – 2001. \$1.84 million.

Research Collaborators of the past five years

Roy Haggerty, Phil Mote, Stan Gregory, John Bolte, Bart Johnson, Rob Ribe, Bill Jaeger, Gordon Grant, Max Nielsen-Pincus, Alan Ager, Anne Nolin, Brent Steel.

Graduate Student Dissertation and Thesis Advisees of the past ten years

Eve Bohnett (Ph.D.-Member), Shirley Morque (Ph.D.-Member), Crystal Goodison (Ph.D.-Member), Chris Enright (Ph.D.-Chair), Homero Penteado (Ph.D.-Chair), Wu Hong (Ph.D.-member), Herve Memiaghe (Ph.D.-member) Suzanne Walther (GEOG Ph.D.-member), Patrick Hurley (ESS Ph.D. - member). Monica Roche, Alison Lewis, Kate Tromp Van Holst, Jim Figurski, Liz Podowski, Stephanie Bailey, Thomas Bennett, Rachel Aronson, Sara Robertson, Amy Annino, Christo Brehm (MLA).

Own Graduate Advisors

Carl Steinitz, Laurie Olin, John Stilgoe

Selected Technical Reports

W. Hudson, D. Hulse, K. Bierly, P. Burgess, S. Gregory, B. Graham-Hudson, K. Moore, A. Mullan, R. Wallick, D. Welch, P. Wiley. 2015. Tracking progress in restoring the Willamette River Floodplain: A report to the Habitat Technical Team of the Willamette Action Team for Ecosystem Restoration. 15 pp.

D. Hulse, A. Branscomb, C. Brehm, C. Enright, S. Gregory, S. Wright. 2013. Assessment of potential for improving ESA-listed fish habitat associated with Operations and maintenance of the U.S. Army Corps of Engineers Willamette project: an approach to prioritizing revetments for removal or modification to restore natural river function. Project Report to U.S. Army Corps of Engineers Portland District. 51 pages plus appendices.

P. Risser, S. Arnold, W. Boggess, S. Gregory, D. Hulse, P. Jepson, N. Johnson, J. Lubchenco, P. Murtaugh, J.R. Pratt, M. Vavra, S. Woods. 2000. Oregon State of the Environment Report. Oregon Progress Board. 775 Summer Street. NE, Salem, OR. 97310. 80 p.

J. Miller, S. Vickerman, S. Anderson, B. Chambers, F. Collins, K. Euhus, B. Gaffi, S. Gregory, M. Houck, D. Hulse, G. Killam, R. Lyon, D. Marriott, S. Mater, J. McGowan, F. Miller, J. Nelson, P. Ruffier, H. Sawyer, L. Silva, J.B. Summers. 1997. Willamette River Basin Task Force: Recommendations to Governor John Kitzhaber. December. 59 p.

Other Research Grants and Awards

U.S. Environmental Protection Agency, "MultiScale Biodiversity Conservation: A Prototype Process for Oregon" \$550,000 (co-PI) - funded 3 terms GRF at .35 FTE 1994-1995

U.S. Environmental Protection Agency, "The Willamette River Basin Project: Methods for Landscape Classification" \$25,000 (PI) 1993-1995

MacArthur Foundation Grants for Collaborative Studies, "Chernobyl: Applied Information for Education and Regional Decision-Making" \$250,000 (PI) funded 2 terms of GRF's at .35 FTE 1990-1993

Apple Computer, Inc. "Chernobyl: Applied Information for Education and Regional Decision-Making" \$100,000 (PI) 1990-1993

Apple Computer, Inc. "SYNTHESIS: Creativity enhancing software for environmental design" \$38,000 (PI) 1987-19988

National Endowment for the Arts, "Possible Futures for the Columbia River Gorge: Predictive and Descriptive computer modeling and its application to

landscape planning" \$20,300 (PI) 1986-1987

Publications about work by David Hulse

Deming, M.E. and S. Swaffield. Landscape Architecture Research: Inquiry, Strategy, Design. 2011. Wiley and Sons. pp. 108-109.

Benedict, M.A., E.T. McMahon. 2008. Green infrastructure: linking landscapes and communities. Island Press. 1718 Connecticut Ave., NW. Ste. 300, Wash. D.C. pp.264-265.

Johnson, K.N., Gordon, S., Duncan, S., Lach, D., McComb, B., Reynolds, K. 2007. Conserving creatures of the forest: A guide to decision making and decision models for forest biodiversity. Corvallis, OR : Oregon State University, College of Forestry. 88 pp.

Petrosillo, I, F. Mueller, K.B. Jones, G. Zurlini, K. Krauze, S. Victorov, B.L. Li, and W. Kepner (Eds.). 2007. Use of Landscape Sciences for Environmental Security. 2007. Security through Science Series, Springer Publishers, The Netherlands. ISBN 978-1-4020-6588-0, 497 pp.

Kepner, W.G., M. Hernandez, D.J. Semmens, D.C. Goodrich. 2008. The use of scenario analysis to assess future landscape change on watershed condition in the Pacific Northwest (USA) in Petrosillo et al. (eds.), Use of Landscape Sciences for the Assessment of Environmental Security, 237-261. © 2008 Springer.

Ahern, J., E. LeDuc, M.L. York. 2006. Biodiversity planning and design: sustainable practices. Island Press. Landscape Architecture Foundation Case Studies. Washington, D.C. ISBN 978-1-59726-108-1. pp. 57-68.

Lombard, J. 2006. Saving Puget Sound: a conservation strategy for the 21st century. American Fisheries Society. Bethesda, Maryland. ISBN 978-0-295-98674-3. pp. 23-27.

Hoobyar, P. 2002. Future growth patterns in the Willamette: a landscape perspective. In Restoration: a newsletter about salmon, watersheds and people. Oregon Sea Grant. No. 31. Pp.1-10.

Williams, T. 2002. A River of Restoration Opportunity. In Restoration: a newsletter about salmon, watersheds and people. Oregon Sea Grant. No. 31. Pp.11-12.

U. S. Environmental Protection Agency, Sept. 2000. Environmental Planning for Communities: A Guide to the Visioning Process utilizing Geographic Information Systems, EPA/625/R-98/003, Office of Research and Development, USEPA, 26 W. Martin Luther King Drive, Cincinnati, OH 45268.

McKay, C., A Guide to Agency Visioning., 2000, Chapter 5: Ecoregion Visioning Process., U.S. Fish and Wildlife Service (USF&WS), U.S. Department of Interior, Federal Aid Division, 911 NE 11th Ave., Portland, OR 97232-4181.

Courses Taught at UF (since 2019)

2019/20

Fall

DCP 6931 Resilience Research and Practice Seminar

Spring

LAA 6656c Advanced Landscape Architectural Design Studio (w/ Murtha)

University Service (since 2019)

2019/20

College of DCP

Dean's Consultative Council

Doctoral Research Faculty

Ph.D. Committee

Director, Florida Institute for Built Environment Resilience

2018/19

College of DCP

Dean's Consultative Council

Doctoral Research Faculty

Director, Florida Institute for Built Environment Resilience

Select Invited Presentations 2019-present

June 28, 2019 presentation to Administrator of Florida Resilient Coastlines Program, Fl Dept of Env. Protection. Tallahassee, Fl.

June 28, 2019 presentation to Bureau of Community Planning and Growth, Fl Dept of Economic Opportunity. Tallahassee, Fl.

June 28, 2019 presentation to Florida Division of Emergency Management. Tallahassee, Fl.

Aug. 9, 2019 part of Florida Dept of Env. Protection Resiliency Panel representing resilience-related university efforts in Florida. Tampa, Fla.

Sept. 16, 2019 presentation to a group of 35 resilience-related researchers at U of Florida convened by FIBER