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William L. Allen, III

Employment

- 1994 – Present **The Conservation Fund** Chapel Hill, NC
2005 – Present: Director of Strategic Conservation
1998 – Present: Instructor, Conservation Leadership Network
1995 – 2005: Geographic Information Services Coordinator
1994 – 1995: GIS and Southeast Regional Greenways Intern
- 1992 **World Wildlife Fund** Washington, DC
Research Assistant, *Choosing a Sustainable Future*, National Commission on the Environment, Stanford in Washington Program Internship

Current Positions

Director of Strategic Conservation: Responsible for program and project design, management and delivery of customized conservation services for partners that advance The Conservation Fund's dual charter of environmental protection and economic development. Strategic Conservation services utilize a green infrastructure planning approach that helps partners identify conservation priorities and goals, inventory assets, map green infrastructure networks, develop strategies for implementation, and build local capacity for partners to achieve their conservation vision. The toolkit includes comprehensive green infrastructure plans, design of decision support frameworks for land use decision making, compatible land use partnerships, mitigation support, high quality cartography, and consultation to solve complex conservation problems and design effective strategies that foster partnerships, collaboration, and leverage of available resources.

Instructor, Conservation Leadership Network: Responsible for curriculum design and course delivery of green infrastructure planning modules and GIS courses, including *Strategic Conservation Planning Using a Green Infrastructure Approach*, *GIS Tools for Strategic Conservation Planning*, and *GIS Design for Regional Conservation Planning*.

Managing Editor & Co-Editor-in-Chief, Journal of Conservation Planning: Since 2004, overseen review process, design, and production of peer reviewed professional journal covering topics including application of conservation science to planning, conservation plan evaluation, ecological network modeling, GIS/spatial analysis in conservation planning, green infrastructure planning, modeling effects of land use change, prioritizing conservation efforts, public involvement in conservation planning, and suitability analysis. (<http://www.journalconsplanning.org>).

Education

- 1993 – 1995 **University of North Carolina** Chapel Hill, NC
Master of Regional Planning
- 1989 – 1993 **Stanford University** Stanford, CA
Bachelor of Arts. Urban Studies

Selected Publications

Allen, William L. Allen; Ole M. Amundsen, III; Jozo Dujmović; Kent D. Messer. 2011. Identifying and selecting strategic mitigation opportunities: Criteria design and project evaluation using Logic Scoring of Preference and optimization. Journal of Conservation Planning, Volume 7, pp. 61-68. (<http://www.journalconsplanning.org/2011/index.html>)

Allen, William L., III, Ted C. Weber and Kris A. Hoellen. 2010. "Green Infrastructure Design and Benefit-Cost Optimization in Transportation Planning: Maximizing Conservation and Restoration Opportunities in Four Southern Maryland Watersheds." Chapter in Burke, David G. and Joel E. Dunn (eds.). A Sustainable Chesapeake: Better Models for Conservation. (<http://www.conservationfund.org/sustainable-chesapeake>)

Allen, William L., III, Ted C. Weber. 2009. "Advancing the Strategic Conservation through Green Infrastructure" Sustainability Tomorrow. April – June, pp.6-12.

Allen, W.L., O. Amundsen, K.D. Messer, B.T. Phillips, and T. Weber. 2006. *Kent County Rapid Assessment of Green Infrastructure*. Arlington, Virginia: The Conservation Fund. (http://www.conservationfund.org/delaware/kent_county)

Allen, William L. 2001. *A Regional Approach to Conservation Planning and Hazard Mitigation*, Conservation Geography, ESRI Press, pp. 74-75.

Amundsen, Ole M., Will Allen and Kris Hoellen. 2009. *Green Infrastructure Planning: Recent Advances and Applications*, American Planning Association, PAS Memo, May/June 2009.

Amundsen O.M., Messer, K.D. and Allen, W.L. 2011. Integrating Optimization and Strategic Conservation to Achieve Higher Efficiencies in Land Protection. University of Delaware Working Papers series, (<http://www.lerner.udel.edu/Economics/workingpapersseries.html>).

Benedict, Mark A., William L. Allen, III, and E. T. McMahon. 2004. *Advancing Strategic Conservation in the Commonwealth of Virginia: Using a Green Infrastructure Approach to Conserving and Managing the Commonwealth's Natural Areas, Working Landscapes, Open Space, and Other Critical Resources*. Prepared for the Virginia Department of Forestry.

Amundsen, Ole M., Will Allen and Kent Messer. December 2009. "The Next Big Step in Strategic Land Conservation: Conservation Optimization". Eastern Lands and Resource Council White Paper.

Conservation Fund. 2011. Implementing the NiSource Multi-Species Habitat Conservation Plan: A Framework for Mitigation Using Green Infrastructure Network Design and Decision Support Tools. (http://www.conservationfund.org/sites/default/files/The_Conservation_Fund_NiSource_Summary_2011.pdf)

Dujmović, J.J. and Allen, W.L. 2011. A Family of Soft Computing Decision Models for Selecting Multi-Species Habitat Mitigation Projects, World Conference on Soft Computing, San Francisco, May 2011. Peer Reviewed.

Hector, Thomas S., William L. Allen, III, Margaret Carr, Paul D. Zwick, Ellen Huntley, Daniel J. Smith, David S. Maehr, Ramesh Buch, Richard Hilsenbeck. *Land Corridors in the Southeast USA: Connectivity to Protect Biodiversity and Ecosystem Services*. Journal of Conservation Planning, Volume 4. 2008, pp. 90-122. (<http://www.journalconsplanning.org/2008/index.html>)

McDonald (King), Leigh Anne, W. L. Allen III, M. A. Benedict, and K O'Connor. 2005. *Green Infrastructure Plan Evaluation Frameworks*. Journal of Conservation Planning, Volume 1, pp. 6-25. (<http://www.journalconsplanning.org/2005/index.html>) Peer Reviewed.

Messer, Kent D. and William Allen III, 2011. *Development of a Best Practices Framework for County Land Protection Programs in Maryland: Quantifying Benefits, Costs and Effectiveness of Land Parcel Selection*. Maryland Center for Agro-Ecology. Peer Reviewed.

Messer, Kent D. and William Allen III, 2010. *Applying Optimization and the Analytic Hierarchy Process to Enhance Agricultural Preservation Strategies in the State of Delaware*. *Agricultural and Resource Economics Review*. 39(2). Peer Reviewed

Messer, Kent D., William L. Allen, III, and Heather Cisar. 2009. *Optimizing Project Selection for the U.S. Army Compatible Use Buffer Program*. White paper prepared for US Army Environmental Command and LMI Government Consulting.

Sheldon, Daniel, Bistra Dilkina. Adam Elmachtoub. Ryan Finseth. Ashish Sabharwal. Jon Conrad. David Shmoys. Will Allen. Ole Amundsen. Buck Vaughan. 2010. *Optimal Network Design for the Spread of Cascades*. Cornell University Computing and Information Science Technical Reports. <http://ecommons.library.cornell.edu/handle/1813/14917>. Peer Reviewed.

Weber, T.C. and Allen, W.L. 2010. Beyond on-site mitigation: An integrated, multi-scale approach to environmental mitigation and stewardship for transportation projects. Landscape and Urban Planning. Volume 96, pp. 240-256. Peer Reviewed.

Application & Tool Development Projects

Optimization Decision Support Tool – ODST (with Dr. Kent Messer)

LSPweb – Logic Scoring of Preference Tools for Project Selection (with Dr. Jozo Dujmović)

Green Infrastructure Network Design Tools for ESRI ModelBuilder (TCF Strategic Conservation)

ConservationGIS.com GIS Portal & Map Services (TCF Strategic Conservation)

Awards

2011 – ESRI International Conservation Mapping Contest, Second Prize – Social Impact (Nashville: *Naturally* Connecting Wildlife & Water Networks map)

2009 – Outstanding Planning Award from the American Planning Association's Hawaii Chapter for Kona Community Development Plan (Green Infrastructure Technical Report for Kona CDP)

1995 – Outstanding Student Project from North Carolina APA – UNC Department of City & Regional Planning workshop (Sustainable Development in Chapel Hill)

Affiliations

American Planning Association (Member, 1995-present), Society for Conservation GIS (Co-Founder & Board Co-President 1998-1999), Town of Chapel Hill Planning Board (Member, 1996-1997), UNC Center for Urban and Regional Studies (Research Assistant, 1994-1995)

Selected Training Deliveries and Workshop Presentations

Using Green Infrastructure as a Tool to Identify Smart Mitigation Opportunities (With Kris Hoellen)

- Pikes Peak COG, Colorado Springs, Colorado, July 2011

Planning the Green and the Grey as Complementary Systems: Optimizing Environmental Project Selection (with Dr. Kent Messer)

- Maryland State Highway Administration – Optimization Decision Support Tool Training Course, Owings Mills, Maryland, June 2011
- National Green Infrastructure Conference, Shepherdstown, West Virginia, February 2011
- Mid-America Regional Council, Kansas City, Missouri, February 2011
- Transportation Review Board – Looking Beyond the Transportation Footprint: A National Dialogue on New Partners and New Scales of Analysis, Shepherdstown, West Virginia, July 2009

GIS Tools for Strategic Conservation Planning (4-day course with NOAA Coastal Services Center)

- National Conservation Training Center, Shepherdstown, West Virginia, June 2008 & October 2009, August 2010
- NOAA Coastal Services Center, Charleston, South Carolina, April 2007, November 2007 & June 2009

A Family of Soft Computing Decision Models for Selecting Multi-Species Habitat Mitigation Projects (Logic Scoring of Preference methods with Dr. Jozo Dujmović)

- World Conference on Soft Computing, San Francisco, May 2011

Planning for Climate Change Using a Green Infrastructure Approach (with Conservation Leadership Network)

- National Conservation Training Center, Shepherdstown, West Virginia, April 2010

Green Infrastructure & Optimization Webinars

- FHWA NHI Innovations: Environmental GIS Tools Webinar – US Highway 301 Green Infrastructure & Optimization, June 2011 (AASHTO-TIG)
- Cecil County Green Infrastructure Plan case study, June 2011 (NOAA Coastal Services Center)
- Green Infrastructure and Large Landscape Plans, May 2011 (National Association of Counties - NaCo)
- Green Infrastructure and Habitat Conservation Plans, April 2011 (NaCo)
- Green Infrastructure and Wildlife Corridor, May 2010 (NaCo)

Strategic Conservation Planning Using a Green Infrastructure Approach – Creating and Assessing a Green Infrastructure Network Design (with Conservation Leadership Network)

- Pikes Peak COG, Colorado Springs, Colorado, July 2011
- National Green Infrastructure Conference, Shepherdstown, West Virginia, February 2011; Silverton, Oregon, May 2009
- National Association of Clean Water Agencies, Shepherdstown, West Virginia, April 2009
- Maryland State Highway Administration, Baltimore, Maryland, October 2008; Kenai, Alaska, September 2008
- National Association of Regional Councils, Jackson, Mississippi, June 2007; Kansas City, Missouri, March 2007

- Georgia Green Infrastructure Workshop, Jekyll Island, Georgia, February 2007
- Carolina Mountain Land Conservancy, Hendersonville, North Carolina, June 2001
- ASPRS, Washington, DC, May 2000

Compatible Land Use Workshop (with National Association of Counties)

- Fort Stewart-Hunter Army Airfield, Georgia, December 2006

New Tools for Cost Effective Farmland Conservation (with Dr. Kent Messer)

- American Farmland Trust, Newark, Delaware, November 2006

Re-enacting with Civil War with GIS: Identifying Conservation Priorities (with Jamie Christensen, WorldView Solutions)

- American Battlefield Protection Program Conference, Nashville, Tennessee, April 2004
- ESRI User Conference, San Diego, California, July 2003
- North Carolina GIS Conference, Winston-Salem, North Carolina, March 2003

GIS Design for Regional Conservation Planning (with University of Florida and US Fish and Wildlife Service)

- National Conservation Training Center, Shepherdstown, West Virginia, 13 course deliveries from 1998-2006

GIS Overview for Community-Based Conservation (with Canaan Valley Institute)

- National Conservation Training Center, Shepherdstown, West Virginia, 1999-2003

Land Trust GIS & Strategic Conservation Presentations

- *Strategic Conservation for Land Trusts* (with Ole Amundsen), Land Trust Alliance – Southeast, Columbia, South Carolina, April 2006 & National Land Trust Rally Workshop, Portland, Oregon, October 2005
- *Advanced GIS: A Discussion for Experienced Users*, National Land Trust Rally, Austin, Texas, October 2002
- *Developing Custom Applications for Land Trusts* (with Frank Conkling, Panda Consulting), ESRI User Conference, San Diego, California & Society for Conservation GIS Conference, Borrego Springs, California, July 2002
- *Advanced Information Management for Land Trusts* (with Jamie Christensen, Worldview Solutions), National Land Trust Rally, Baltimore, Maryland, October 2001 & ESRI User Conference, San Diego, California, July 2001
- *GIS on a Budget: Tips and Tricks for Land Trusts*, National Land Trust Rally, Portland, Oregon, October 2000 & Snowmass Village, Colorado, October 1999
- *ArcView GIS for NC Land Trusts*, Charlotte & Durham, North Carolina, June 1998

Empowering the Public in Forest Planning using GIS (with Frank Conkling, Panda Consulting)

- ESRI User Conference, San Diego, California, June 2000
- GIS 2000 Conference, Toronto, Ontario, March 2000
- Society for Conservation GIS Conference, Idyllwild, California, July 1999

ArcView Applications for the NC Wildlife Resources Commission (with Dr. Pat Halpin, Duke University Nicholas School of the Environment)

- Duke University Nicholas School of the Environment, Durham, North Carolina, August 1998

GIS in Conservation Planning

- North Carolina GIS Conference, Winston-Salem, North Carolina, March 2001
- American Planning Association Conference, Seattle, Washington, April 1999
- National Land Trust Rally, Savannah, Georgia, September 1997
- Duke University Nicholas School of the Environment, Durham, NC, *Land Conservation Strategies*, 1996 & 1998
- ESRI User Conference, San Diego, California, July 1997
- Society for Conservation GIS Conference, Idyllwild, California, July 1997
- National Fish and Wildlife GIS Workshop, Hagerstown, Maryland, June 1997

Selected Projects and Plans

- Ongoing. *A Green Infrastructure Plan for the Greater Houston Region.*
- Ongoing. *Refinement of the Chicago Wilderness Green Infrastructure Vision.*
- Ongoing. Implementation and mapping of the America's Longleaf Regional Plan. (<http://www.americaslongleaf.org>)
- 2011. *Nashville Open Space Plan – Creating, Preserving, and Enhancing the Places That Matter – A Report of Nashville: Naturally*
- 2010. *Strategic Opportunity Assessment of Green Infrastructure: Integrating State Wildlife Actions Plans, Climate Change Adaptation, and Sensitive Alternative Energy Site Design to Identify Land Conservation Acquisition Priorities in the Midwest US*
- 2010. *Green Infrastructure Network Design to Identify Potential Mitigation Opportunities for the NiSource Multiple Species Habitat Conservation Plan (MSHCP)*, US Fish and Wildlife Service Section 6 Endangered Species Act grant program.
- 2010. *Strategic conservation guidance to support the Office of the Secretary of Defense and the Southeast Regional Partnership for Planning and Sustainability (SERPPAS)*
- 2009. *Green Infrastructure Network Design to Identify Environmental Stewardship Opportunities for the US Highway 301 Waldorf, MD Transportation Improvements Project*, Maryland State Highway Administration (Collaboration with USFWS and MD DNR).
- 2009. *Greening the Crossroads: A Green Infrastructure Vision for Central Indiana*
- 2008. *Lufkin-Angelina County, TX Green Infrastructure Plan*
- 2008. *Strategic Lands Inventory: Land Suitability Analysis for a 44-County Area in Eastern North Carolina.* Prepared with the NC Center for Geographic Information and Analysis.
- 2007. *Cecil County, MD Green Infrastructure Plan*
- 2007. *Where Our Four Towns Meet: The Prosper Valley of Barnard, Bridgewater, Pomfret, and Woodstock.* Prepared with the National Park Service
- 2006. *Baltimore County Land Preservation Model: Water Quality Assessment*
- 2006. *Kent County, DE Rapid Assessment of Green Infrastructure*
- 2006. *Green Infrastructure Technical Report for the Kona Community Development Plan*
- 2006. *Spartanburg County Rapid Parks Assessment*
- 2005. *Fort A.P. Hill Bufferland Assessment*
- 2005. *Houston Parks Rapid Assessment for New Parkland Acquisition*
- 2005. *Lewis & Clark Lower Columbia River Atlas*
- 2004. *National Park Service Community Profiles for the Appomattox Courthouse NHP, C&O Canal NHP, Catocin Mountain Park, Fredericksburg-Spotsylvania NHP, and the George Washington Birthplace NHP.*
- 2004. *Talbot County, MD Green Infrastructure Plan*
- 2004. *Pennsylvania Protected Land Inventor*
- 2004. *Houston Wilderness Rapid Open Space Assessment*
- 2004. Congaree Land Trust GIS system design and project tracking database
- 2003. *Civil War Battlefield Rapid Assessments.* (Civil War Preservation Trust)
- 2002. *Little Tennessee Watershed Conservation Prioritization Model*

- 2002. *Catoctin Mountain Explorer* GIS Application. Prepared with Panda Consulting.
- 2002. *Schuylkill River Watershed Atlas*
- 2002. *New River Watershed, NC: Conservation Prioritization Models* (with RDI)
- 2001. *Kinston-Lenoir County Green Infrastructure Plan*, Prepared as part of a UNC Department of City and Regional Planning graduate student workshop
- 2001. *Metro Atlanta Rapid Open Space Assessment* (Arthur M. Blank Family Foundation)
- 2001. *Neuse River, NC Watershed Atlas*
- 2001. *Conservation Planning and Decision Support Tools for the New River Watershed*
- 2000. *Lower James River Scoping Study*. Prepared for the Brunckhorst Foundation.
- 2000-2002. GIS system design for Duke Farms. Land Advisory Services.
- 1999. GIS system design for the Hershey Trust Company. Land Advisory Services.
- 1996-1998. *Midwin Prairie Forest Planning and GIS Explorer Application*. Prepared with Panda Consulting.
- 1996. *Chattooga Watershed Conservation Plan* Prepared with the Chattooga Watershed Coalition, and Southern Appalachian Forest Coalition.
- 1995. *Albemarle-Pamlico Bioregional Greenway Plan*

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