

# Curriculum Vitae Kelly Lynn Hondula

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## Academic training

University of Maryland	Marine, Estuarine, & Environmental Sciences	Spring 2016 to present advanced to candidacy May 2017
	Advised by Dr. Margaret Palmer	
University of Virginia	Environmental Sciences	M.S. 2012
	Advised by Dr. Michael Pace	
University of Virginia	Environmental Sciences	B.A. with honors 2009
	Environmental Thought & Practice	B.A. 2009

## Professional experience

2015–present	Quantitative Researcher & Computer Programmer, National Socio-Environmental Synthesis Center, University of Maryland
2014–2015	Quantitative Programs Researcher, National Socio-Environmental Synthesis Center, University of Maryland
2012–2014	Faculty Research Assistant, National Socio-Environmental Synthesis Center, University of Maryland
2012	Editorial Assistant, Ecological Society of America
2009–2012	Research and Teaching Assistant, Department of Environmental Sciences, University of Virginia

## Peer-reviewed publications

1. SA Woznicki, **KL Hondula**, S. Taylor Jarnagin. 2018. Effectiveness of landscape-based green infrastructure for stormwater management in suburban catchments. *Hydrologic Processes*. <https://onlinelibrary.wiley.com/doi/abs/10.1002/hyp.13144>
2. Metson GS, SM Powers, RL Hale, JS Sayles, G Öberg, GK MacDonald, Y Kuwayama, NP Springer, AJ Weatherley, **KL Hondula**, K Jones, RB Chowdhury, AHW Beusen, AF Bouwman. 2017. Socio-environmental consideration of phosphorus flows in the urban sanitation chain of contrasting cities. *Regional Environmental Change*. <https://doi.org/10.1007/s10113-017-1257-7>.
3. Suding K, MA Palmer, E Higgs, JB Callicot, C Anderson, J Gutrich, **KL Hondula**, M LaFevor, A Randall, JB Ruhl, K Schwartz, ME Baker. 2015. Taking the path of comprehensive ecological restoration. *Science*. 348:638-640.
4. Palmer MA, **KL Hondula**, BJ Koch. 2014. Ecological restoration of streams and rivers: shifting strategies and shifting goals. *Annual Review of Ecology, Evolution & Systematics* 45:247–69.
5. Palmer MA & **KL Hondula**. 2014. Restoration as mitigation: analysis of stream mitigation for coal mining impacts in southern Appalachia. *Environmental Science & Technology* 48(18): 10552–10560. doi: 10.1021/es503052f

6. **Hondula KL**, ML Pace, JJ Cole, RD Batt. 2014. Hydrogen isotope fractionation in aquatic primary producers: implications of aquatic food web studies. *Aquatic Sciences* **76**(2): 217–229.
7. **Hondula KL** & ML Pace. 2014. Macroalgal support of cultured hard clams in a low nitrogen coastal lagoon. *Marine Ecology Progress Series* **498**:187–201.

### Submitted manuscripts

ME Fernández-Giménez, GRH Allington, J Angerer, RS Reid, C Jamsranjav, T Ulambayar, **K Hondula**, B Baival, B Batjav, T Altanzul, Y Baasandorj. Using an integrated social-ecological analysis to detect effects of household herding practices on indicators of rangeland resilience in Mongolia. (in revision at *Environmental Research Letters*)

### Presentations

1. (upcoming) B DeVries, KL Hondula, C Huang, CN Jones, MW Lang, MA Palmer. “Unravelling the effects of inundation dynamics on methane cycling in forested wetlands using spaceborne optical and radar data.” ForestSat 2018.
2. (upcoming) KL Hondula, C Maietta, & MA Palmer. “Seasonal patterns of methane concentrations and fluxes from Delmarva Bays in relation to hydrologic variability.” ASLO 2018 Summer Meeting.
3. KL Hondula & MA Palmer. “Linking seasonal surface water dynamics with methane emissions and export from small, forested wetlands.” American Geophysical Union Fall Meeting, New Orleans LA, December 2017.
4. (Invited) KL Hondula & MA Palmer. “Mitigation mismatches: Ecological interpretation of some common assumptions underlying mitigation protocols.” Society for Freshwater Science Annual Meeting 2016.
5. KL Hondula, D Hogan, ST Jarnagin. “Accounting for disproportionately large runoff events in urban catchments.” Catchment Science Gordon Research Conference, Andover, New Hampshire, June 2015.
6. NR Magliocca, D Hart, KL Hondula, I Munoz, M Shelley, M Smorul. “Data-driven synthesis for investigating food systems resilience to climate change.” American Geophysical Union Fall Meeting, San Francisco CA, 15–19 December 2014.
7. MA Palmer & K Hondula. “Stream restoration outcomes: What is being measured? What should be measured?” European Society for Ecological Restoration Conference. Oulu, Finland 3–8 August 2014.
8. KL Hondula & MA Palmer. “Restoration as mitigation: ecological vs. regulatory approaches to evaluating stream and wetland mitigation.” Joint Aquatic Sciences Meeting, Portland OR, May 2014.
9. KL Hondula & ML Pace. Diet of cultured hard clams in a Virginia coastal lagoon determined by multiple stable isotopes. Virginia Coast Reserve LTER All Scientists Meeting 2012.
10. KL Hondula, ML Pace, JJ Cole, RD Batt. Hydrogen isotope fractionation in aquatic plants. Robert J. Huskey Research Exhibition, University of Virginia. 21 March 2012. 2nd place in Biological and Biomedical sciences.
11. KL Hondula, ML Pace, JJ Cole, RD Batt. Hydrogen isotope fractionation in aquatic plants: implications for food web studies. Fall meeting of the American Geophysical Union 2011.
12. KL Hondula & LK Reynolds. Reproduction of *Zostera marina* in a chronosequence of seagrass meadows. Enviroday Student Research Symposium, University of Virginia 2009.

13. KL Hondula, M Potapova, D Charles. An Investigation of the Freshwater Diatom Genus *Reimeria*: Distinctions between *Reimeria sinuata* and *Reimeria uniseriata*. North American Diatom Symposium 2007.

### **Selected grants & awards**

ROpenSci Fellowship “Enhancing Reproducibility in Watershed Science” (\$47,000), 2018  
Raven Society; scholarship and service to the University of Virginia, 2010  
Mahlon G. Kelly prize; top undergraduate in ecology, 2009  
Housing Division Resident Staff Service Award, 2009  
Double Hoo Research Grant (\$5000), 2008

### **Non-peer-reviewed publications**

- Jones, K., N. Magliocca, KL Hondula. An Overview of Conceptual Models, Analytical Frameworks and Research Questions in the Food-Energy-Water Nexus. White paper. Available for download [\[link\]](#)
- Lessons developed for SESYNC workshops [\[link\]](#): RNetLogo, Leaflet in R, Shiny apps, Basic R
- Contributions to SESYNC Cyber Help blog [\[link\]](#): Images for data exploration in RShiny Apps (January 2018), Writing data management plans (January 2018), Build a shiny app to explore MODIS data (April 2018)
- Contributions to SESYNC blog: The role of dams in creating a water-secure world. February 2014 [\[link\]](#); Should ecology be more like a smartphone? September 2013 [\[link\]](#); Promise and peril in assessing nature's value. May 2013 [\[link\]](#); What is the recipe for a sustainability research center? March 2013 [\[link\]](#); Finding the link between conservation and human health. December 2012 [\[link\]](#)
- Rising temperatures threaten popular penguins. *Frontiers in Ecology and the Environment Dispatches*, October 2012 [\[link\]](#)

### **Teaching & Service**

2018 Instructor, SESYNC Geospatial Data Analysis Short Course  
2017 Session organizer, “Hydrologic connectivity: linking land use changes and management to movement and transformations of resources within catchments” at ASLO 2017 Aquatic Sciences meeting  
Guest lecturer, Data Graphics in R graduate seminar, MEES 608Y  
Instructor, Data skills workshop for UMD Plant Sciences  
2016 Instructor, SESYNC workshop Introduction to Spatial Agent-Based Modeling  
2014– Instructor, SESYNC Computational Summer Institute (annual workshop)  
2015 Software Carpentry Instructor, Software Carpentry workshop Developing, Maintaining, and Employing Large Computational Frameworks for the Ecological Sciences (April 13–17, 2015 at Statistical and Applied Mathematical Sciences Institute, NC)  
2009–2012 Graduate teaching assistant, University of Virginia Department of Environmental Sciences: Fundamentals of Ecology (laboratory); Introduction to Environmental Policy (discussion); Beaches, Coasts, and Rivers; Coastal Geomorphology (laboratory)

### **Professional training**

Software Carpentry Instructor Training, Sept 2016  
Writing Science with Dr Josh Schimel, April 2015

Bayesian Statistics for Ecological and Social Scientists, January 2015

Software Carpentry Bootcamp, December 2013

Science Communication Workshop with Chris Joyce (NPR) and Erik Stokstad (Science Magazine), November 2013