

## Alexandra Thompson

Resources for the Future  
1616 P Street NW  
Washington, DC 20036  
thompson@rff.org

### SUMMARY

Work supports a wide range of resource economics policy areas through geospatial analysis design and interdisciplinary research. Expertise in engineering of geospatial data relating to land cover, sea level rise, habitat, protected areas, hydrography, energy resources, socioeconomics, and agriculture. Improvement of GIS capacity at institutional level through engagement and technical support.

### EDUCATION

M.A., Urban & Regional Planning	Virginia Tech (2014)
Major Paper Title: "Land Use Planning for Ecosystem Services: Science, Methods, and Applications in Floyd County, VA"	
Thesis Committee: Diane Zahm (Chair), Ted Koebel, Jesse Richardson, Yang Zhang	
Graduate Certificate in Geospatial Information Technology	Virginia Tech (2014)
B.A., Public & Urban Affairs	Virginia Tech (2012)
Undergraduate Certificate in Watershed Management	Virginia Tech (2012)

### POSITIONS

2020 – present	Senior Research Associate and GIS Coordinator, Resources for the Future, Washington, DC
2018 – 2020	Research Associate and GIS Coordinator, Resources for the Future, Washington, DC
2018	Short Term Consultant, Development Research Group of The World Bank
2017 – 2018	Research Associate, Resources for the Future, Washington, DC
2014 – 2017	Research Assistant, Resources for the Future, Washington, DC
2012 – 2014	Research Assistant, Virginia Water Resources Research Center, Virginia Tech
2010 – 2013	Planning Intern, Northern Virginia Regional Commission, Fairfax, VA
2011	Development Intern, Potomac Conservancy, Silver Spring, MD

## PUBLICATIONS

### Peer-Reviewed

Fitzgerald, T., Kuwayama, Y., Olmstead, S., & **Thompson, A.** (2020). Dynamic impacts of US energy development on agricultural land use. *Energy Policy*, 137, 111163.

Kuwayama, Y., **Thompson, A.**, Bernknopf, R., Zaitchik, B., & Vail, P. (2019). Estimating the impact of drought on agriculture using the US Drought Monitor. *American Journal of Agricultural Economics*, 101(1), 193-210.

Bernknopf, R., Brookshire, D., Kuwayama, Y., Macauley, M., Rodell, M., **Thompson, A.**, Vail, P., & Zaitchik, B. (2018). The Value of Remotely Sensed Information: The Case of a GRACE-Enhanced Drought Severity Index, *Weather, Climate, and Society*, 10(1), 187-203.

Blackburn, L., Epanchin-Niell, R., **Thompson, A.**, & Liebhold, A. (2017). Predicting costs of alien species surveillance across varying transportation networks. *Journal of Applied Ecology*, 54(1), 225-233.

Epanchin-Niell, R., Kousky, C., **Thompson, A.**, Walls, M. (2017). Threatened protection: Sea level rise and coastal protected lands of the eastern United States. *Ocean & Coastal Management*, 137, 118-130.

### Other

[The Societal Value of NOAA's Digital Coast](#), Resources for the Future, Report, February 9, 2021.

[Coastal Protected Lands and Sea-Level Rise](#), Resources for the Future, Common Resources Blog Post, January 19, 2017.

[Investing in Coastal Protected Lands under Threat from Sea-Level Rise](#), Resources for the Future, Resources Magazine, April 4, 2017

### Works in Progress

Protected area, easement, and rental contract data reveal five communities of land protection in the United States (with H. Jackson, K. Kroetz, J. Sanchirico, A. Thompson, P. Armsworth)

Public contributions to early detection of new invasive pests (with R. Epanchin-Niell, T. Treakle)

Socio-environmental drivers of gypsy moth (*Lymantria dispar* L.) establishment in the United States (with R. Epanchin-Niell, J. Lu, A. Liebhold)

Coastal land use change: agricultural adaptation to saltwater intrusion and sea level rise (with R. Epanchin-Niell)

**PRESENTATIONS**

GIS @ RFF: Looking Ahead, Resources for the Future Board of Directors and President's Council, October 22, 2020

Farmer Adaptations to Coastal Saltwater Intrusion: Analyzing Land Use Change, Esri User Conference, July 10, 2019

Data and Code Management for Easier, Better Research, Resources for the Future Internal Presentation, June 26, 2019

Using Geospatial Data for Solar Energy Siting, Resources for the Future Board of Directors and President's Council, May 16, 2019

Mitigating the Effects of Energy Resource Booms on Water Consumption, Resources for the Future Webinar, August 22, 2017

Oil for wheat? The impact of unconventional energy development on agriculture in North Dakota, Map Gallery Presentation, Esri User Conference, June 2016

GIS Learning Workshop, Resources for the Future Internal Presentation, April 23, 2015

**AWARDS**

C. David Loeks Award for Outstanding Second Year Graduate Student, Virginia Tech, 2014