



First Name: **Esther** Last Name: **Parish**  
 Title: **Landscape Ecologist**  
 Institution: **Oak Ridge National Laboratory**  
 Mailing Address: **Environmental Sciences Division**  
**1 Bethel Valley Road, MS-6036**  
 City: **Oak Ridge** State: **TN** Zip Code: **37831-6036**  
 Country: **USA**  
 Country Code: **1** Phone: **(865) 241-3118**



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Email: [parishes@ornl.gov](mailto:parishes@ornl.gov) Website: <https://www.ornl.gov/staff-profile/esther-s-parish>

**Education:**

PhD: **Energy Science & Engineering** MS: **Geography** BS: **Geology & Geophysics**

**General Areas of Expertise:**

Sustainability of renewable energy resources (bioenergy, hydropower); Climate change impacts, adaptation and vulnerability; Geographic information science; Decision support

**Short Bio:**

Dr. Esther Parish is a geographer & landscape ecologist for the U.S. Department of Energy's Oak Ridge National Laboratory (ORNL) Environmental Sciences Division where she works on interdisciplinary projects for ORNL's Center for BioEnergy Sustainability, Climate Change Science Institute, and Urban Dynamics Institute. Her primary research interests include utilizing geographic information science (GIS) and integrated models and datasets to assess (1) potential tradeoffs between environmental and socioeconomic indicators of sustainability and (2) climate change impacts on human populations and water resources. Dr. Parish has expertise in bioenergy sustainability analysis, watershed hydrology, and pollution prevention. She has published in a variety of journals, including Ecological Indicators, Environmental Management, Proceedings of the National Academy of Sciences, and Computers & Geosciences. Dr. Parish has just finished her Ph.D. in Energy Science and Engineering through Bredesen Center for Interdisciplinary Research and Education, a new program that is jointly managed by the University of Tennessee and ORNL.

**Five Representative Publications:**

1. Parish ES, Herzberger A, Phifer C, Dale VH (in press) Telecoupled transatlantic wood pellet trade provides benefits in both the sending and receiving systems. Special issue of Ecology and Society on "Telecoupling: A New Frontier for Global Sustainability."
2. Parish ES, Dale VH, Kline KL, Abt RC (2017) Reference scenarios for evaluating wood pellet production in the Southeastern United States. Wiley Interdisciplinary Reviews, e259. doi:10.1002/wene.259
3. Parish ES, Dale VH, English BC, Jackson SW, Tyler DD (2016) Assessing multimetric aspects of sustainability: Application to a bioenergy crop production system in East Tennessee. Ecosphere 7 (2):e01206. 10.1002/ecs2.1206.
4. Parish ES, Hilliard M, Baskaran LM, Dale VH, Griffiths NA, Mulholland PJ, Sorokine A, Thomas NA, Downing ME, Middleton R (2012) Multimetric Spatial Optimization of Switchgrass Plantings Across a Watershed. Biofuels, Bioproducts & Biorefining 6(1):58-72.
5. Parish ES, Kodra E, Steinhäuser K, Ganguly AR (2012) Estimating future global per capita water availability based on changes in climate and population. Computers & Geosciences 42:79-86.

**FEWSTERN Symposium 2017 Presentation Title and Abstract:**

I am not currently scheduled to give a presentation.