ES SEMINAR SERIES
12:30-1:30 pm
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Zoom

Oriana Chegwidden

Using open data to plan for climate change

Abstract: Decision-makers are increasingly seeing the need to plan for climate change in a data-driven way. But what does that process entail? What are some approaches to better understand the climate-driven risks coming down the pipeline? In this presentation I will share two stories of using climate information to help plan for the (often already-visible) impacts of climate change. I will discuss how decision-makers in the worlds of water resources and forest management are currently grappling with using climate information. Along the way I will describe the nitty gritty of the underlying datasets and the approach of using chains of numerical models (climate models, downscaling models, hydrologic models, statistical fire models) to create actionable insights. I will make the case for the benefits of open science, particularly in an arena as urgent as climate change adaptation planning.

Bio: Dr. Oriana Chegwidden is a research scientist at CarbonPlan, a non-profit that contributes science and data for climate action. Her latest work has focused on climate-driven risks to forests, satellite-based biomass estimation, and global-scale downscaling. She earned her PhD in Civil and Environmental Engineering from the University of Washington, where she focused on climate change impacts on water resources. Her science has been used by federal, state, tribal, and local natural resource managers and decision-makers

Papers:

Chegwidden, Oriana S., et al. "How do modeling decisions affect the spread among hydrologic climate change projections? Exploring a large ensemble of simulations across a diversity of hydroclimates." *Earth's Future* 7.6 (2019): 623-637.

Risks to forest carbon in a changing climate