School of Natural Resources and the Environment

Seminar Series: Fall 2022

ECOSYSTEM ACCLIMATION: A CRITICAL BUT OVERLOOKED UNCERTAINTY IN PROJECTIONS OF CLIMATE CHANGE IMPACTS

SPEAKER: Peter Adler,

Utah State University Quinney College of Natural Resources

DATE: Wednesday, September 7th

TIME: 3:00-4:00 pm

LOCATION: ENR2 S107 & Zoom

ABSTRACT:

Ecosystems respond to climate change via processes spanning time scales from minutes to centuries. I refer to the net effect of these processes as "ecosystem acclimation." The slow components of ecosystem acclimation are likely to lag behind the pace of climate change, creating disequilibria with climate and threatening to erode ecosystem functioning. However, the rates of these processes and the magnitude of their effects are poorly understood, creating tremendous uncertainty in decadal-scale projections of climate change impacts. I will describe one approach to place quantitative bounds on this uncertainty, and make the case that a better integration of subdisciplines and research approaches could dramatically reduce it.

Ph.: (520) 621-7255 | Fax: (520) 621-8801