

2022-2023 Faculty Colloquium Series

Wednesday, September 14, 2022, 3-4 pm Escalante Hall, Room 128

"The Impact of Wildfires on Visitation to the National Parks in the Four Corners Region of the United States" Kara Walter, PhD Assistant Professor of Economics



With the incidence of wildfires increasing annually, accurately estimating the impacts of fires is increasingly essential. One of the potential impacts is using wildlands for recreational activities such as mountain biking, camping, and hiking. While the extant literature has estimated the willingness to pay for changes to outdoor activities following a wildfire, most research is done using stated preference surveys. These surveys typically use photos of burned forests to gauge how use shifts for a hypothetical fire. I developed a unique data set combining monthly visitation data from the 13 National Parks (NP) in the Four Corners Region from 1980-2015, combining the observed wildfire data with wildfire characteristics, climate data, and economic data. This analysis aims to evaluate the impact of wildfire on park visitation while controlling for other observable factors. Within the study area, there are parks with widespread name recognition (e.g., Grand Canyon NP), parks with name recognition to hikers (e.g., Arches NP), parks with little name recognition (e.g., Black Canyon of the Gunnison NP), and parks with limited traditional outdoor activities (e.g., Carlsbad Caverns NP). I find that most parks have an increase in visitation when there is a wildfire. However, as the number of fires in the previous twelve months increases, visitation decreases for most parks. This research adds to the body of knowledge of the economic impacts of wildfires, which can help inform management and policy decisions, mainly if one of the anticipated impacts of climate change is more frequent wildfires.