

POSTER #16

Declining Water Conditions and Recreation Demand at Oklahoma Reservoirs

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This poster presents research on the impact of climate and water conditions on the demand for reservoir recreation in Oklahoma. Increased temperatures are known to impact recreation demand while declining water conditions and algae bloom events at lakes and reservoirs are a growing concern in the United States. Recreational users are often directly impacted by declining water conditions, which can result in reduced tourism traffic and the loss of an important source of local income. We relate state park visitation at public reservoirs to water levels, water quality and swim warning events. Our demand model is estimated using panel data on park visitation in Oklahoma with a monthly time series that runs from 1998 to 2015. Over this time visitation has declined by as much as 50 percent at Oklahoma parks. The results of this research allows us to determine the extent of the economic impact, in terms of tourism traffic, that poor water conditions will have on the rural economies that surround these state parks.