

Candidate for Councilor

Louis Rivers, Ph.D.



I am an associate professor in the Department of Forestry and Environmental Resources at North Carolina State University. I received my B.Sc. in Biology from Kentucky State University, my M.Sc. in Natural Resources from Ohio State University, and my PhD in Natural Resources with a concentration in risk perception and decision-making. My research focuses on the examination of risk and judgment and decision process in minority and at-risk communities, particularly in regard to the natural environment. Traditionally, the study of risk has been from a highly technical and quantitative perspective. This approach can be found in studies of financial risk done by economists and in studies of toxicity factors in chemistry and human health sciences.

Unfortunately, this perspective has largely discounted the perceptions of lay stakeholders. This is one of my key areas of research.

As the study of risk and, by extension, the management of risk has become the province of experts, approaches neglect the input and viewpoint of the publics, who regularly encounter risks in their everyday lives, but have little say in how these risks are regulated. In a democratic society this state of affairs is untenable. Recognizing this dilemma, there is a significant body of literature that examines how to increase the participation of the public in the management of technical risks. This has led to the development of an inclusive risk governance model that emphasizes the open interface between representatives from the sciences, politics, economic concerns, and civil society in the assessment and management of risk. A significant gap in this model is the inclusion of minority and at-risk populations in the risk management processes. The exclusion of these populations is particularly damning considering that they may face the greatest chance of exposure to a number of risks. My work aims to understand why this gap continues to exist and to ultimately develop policies to enfranchise minority and at-risk communities

In order to include minority and/or at-risk communities into the risk governance process there is a need to better understand how these populations assess or perceive a variety of risks and subsequently make decisions in relation to these risks. Addressing this gap is a major part of my research agenda and is reflected in a number of my publications. This work has involved a number of disenfranchised populations entangled in contentious socio-environmental issues such as, but not limited to: GMO trees and Native American nations; Black farmers and access to loans and technical information, and green infrastructure in minority communities. This line of inquiry has also led to a number of projects and related publications focused on questions of environmental justice.

Beyond this contextual and theoretical focus on minority and at-risk communities' perception of risk and judgment and decision process in an environmental context; methodologically, I am also interested in qualitative modeling techniques. Specifically, I have done significant work to refine and advance mental modeling methodology (a qualitative modeling technique developed in the cognitive sciences), especially with minority and at-risk communities. I apply this methodology in a number of contexts: carbon trading, environmental regulation, climate-based

migration, open-air drug markets, food security in West Africa, and intersectionality and food security.

In addition to this methodological work and risk governance in minority communities, I have been invited to participate in a number of research collaborations as an expert on cognitive psychological approaches to risk and decision making. This work has been across a number of environmental contexts: urban ecological processes; air quality sensors; fisheries governance; ecosystem services, climate change mitigation, tree planting programs and gentrification, and green infrastructure. All of my research efforts and related publications are united by a focus on risk and decision-making processes from a cognitive psychology theoretical perspective. This work often explores methodological concerns, such as mental modeling; and spans a number of contexts. Most importantly, much of this work focuses on examining and developing potential solutions for the environmental challenges (built and natural) confronting minority and at-risk frontline communities.

Statement of Goals

I have been involved with SRA for well over a decade. I am greatly appreciative of the opportunities for professional development and the friendships I have formed thanks to SRA. I have thought deeply about my place in the society and relatedly what goals I would like for the society to advance. Below are my top 3:

#1. Continue efforts to increase the racial diversity of the membership of SRA.

Specifically, I would like to increase the participation of individuals from Black and Brown communities in the United States and internationally. Much of our work takes place in these communities and I think it should be a goal of SRA to empower individuals from Black and Brown communities to examine and engage in the policy discussions related to the risk analysis issues they face.

#2. Make efforts to increase the presence of SRA in the fields of criminology and environmental justice.

During the course of my career I have done considerable work and developed relationships with individuals in the fields of criminology and environmental justice. These experiences have led me to realize that there is a significant need for the nuanced and well theorized perspectives on risk found at SRA in these disciplines. I would like to develop efforts that make SRA a welcoming society to people that operate in criminology and environmental justice spaces that are adjacent to risk analysis.

#3. Examine SRA's role in a long COVID-19 world.

Over the past two years we have collectively had our lives changed significantly and irrevocably by COVID-19. Risk and uncertainty have been at the heart of this crisis. I would like for SRA and its membership to think about the organization's place in a world shaped by COVID-19.