CASE SCHOOL OF ENGINEERING
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Department of Civil and Environmental Engineering
Case Western Reserve University
Bingham Bldg. Room 237
10900 Euclid Ave
Cleveland, OH 44106

Civil and Environmental Engineering Department Seminar

Elevating Local Knowledge Through Participatory Modeling: Active Community Engagement in Restoration Planning in Coastal Louisiana

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The Water Institute of the Gulf

February 11, 2021, 12:45 – 2:00 PM

Join Zoom Meeting
URL: https://cwru.zoom.us/j/92502635986?pwd=dkZEMWVocGZWL0UvQlJudlM4bHl5Zz09
Meeting ID: 925 0263 5986 Passcode: 151477

Abstract
Current coastal management practices in south Louisiana need to be more transparent and accountable to individuals and communities impacted by their actions. Numerical modeling efforts in support of restoration and protection activities in coastal Louisiana have traditionally been conducted externally to any stakeholder engagement processes. This separation has resulted in planning and project-level models built solely on technical observation and analysis of natural processes. Despite its scientific rigor, this process often fails to account for the knowledge, values, and experiences of local stakeholders that often contextualizes a modeled system. To bridge this gap, a team of natural and social scientists is working directly with local residents and resource users on a participatory modeling approach to collect and utilize local knowledge in the design of nature-based restoration solutions and modeling scenarios for the Mississippi River Delta in southeast Louisiana. This intersection of traditional science and modeling activities with the collection and analysis of traditional ecological knowledge proved useful in increasing stakeholder buy-in and elevating the confidence that community members had in modeled restoration outcomes.

Bio sketch

Scott Hemmerling, Ph.D. is the Director of Human Dimensions for The Water Institute of the Gulf, focusing on research related to climate adaptation and community resilience. A cultural geographer with more than twenty years of experience investigating the impacts of environmental change on coastal communities, his recent work is focused on developing approaches to incorporate local knowledge into assessments of community resilience and quantifying the social value of ecosystem restoration projects. He is the principal investigator on the Louisiana Coastal Atlas project, a geographical study examining the effects of historical social, economic, and environmental stresses on community resilience.