
Science, Management, Practice and Policy: Resilience & Co-Production

Apr 27, 2022 1:30 - 2:15 PM **Abstract Title:** Exploring Successes, Challenges, and Best Practices for Regional Resilience Advancement

Abstract Description: Sea-level rise (SLR) is having a disproportionate impact in the Gulf of Mexico, with higher rates of rise than the global average, low topography, and areas of high socioeconomic vulnerability. The impacts are ubiquitous, negatively impacting public health, increasing frequency and intensity of flood damages, disrupting commerce, and eroding community capacity to absorb disasters. Local municipalities have been on the forefront of both the impacts and the efforts to increase resilience to rising seas. As resilience efforts have progressed, municipal leaders have identified the need for more explicit coordination at regional and state levels to maximize the impact of their efforts and prevent unintentional counterproductive actions or policies. There are already existing mechanisms for some coordination between municipalities however, these often lack explicit, regionally-focused conversations about SLR resilience needs and strategies. This panel will convene a mix of local, regional, and state officials from across the Gulf of Mexico with a range of experiences in coordinating or undertaking these regional and state collaborations to support local SLR resilience planning and implementation efforts. A discussion-style panel, they will discuss successes, challenges, and best practices around regional and state resilience coordination and take answers from the audience for an interactive knowledge-building experience.

Speaker: Collini, Renee, Regional Coastal Climate Resilience Specialist Program for Local Adaptation to Climate Effects | Sea Level Rise, MSU, MS/AL SeaGrant

Panelists: Chase Glisson, Director of Engineering and Planning, Jackson County Utility Authority
CJ Reynolds, Director of Resiliency and Engagement, Tampa Bay Regional Planning Council
Shonda Mace, Community Development and Revitalization, Texas General Land Office

Apr 27, 2022 2:15 - 2:30 PM **Abstract Title:** Guiding Principles for Establishing a Community of Practice

Abstract Description: An outcome of the Deepwater Horizon Oil Spill (DWH) was the recognition of multiple challenges to acquiring, interpreting, using, and sharing monitoring data. The limited development and consistent application of Best Practices for mapping, monitoring, and reporting data on seagrasses was a severe impediment to assessing the impacts of DWH on seagrass ecosystems in the Gulf of Mexico. The Gulf of Mexico Seagrass Monitoring Community of Practice (GOMCoP) was the outgrowth of a clear need to establish a Gulf-wide mapping program and to standardize monitoring data within a Tier 1 and Tier 2 framework. During four years working with experts and users in the region, the GOMCoP has developed some Guiding Principles that can serve as a foundation for establishing other CoPs. This presentation addresses elements for developing a CoP: 1) an organizational mandate with a mission, goals, and objectives, and an operational structure; 2) a process implementing the goals and objectives while obtaining consensus from the CoP constituents; 3) the development of products that guide

the course and fulfill the CoP goals; 4) recognition of collaboration/coordination with regional, national, and international CoPs; and, 5) suggestions for funding and sustainability.

Speaker: Handley, Lawrence, Scientist Emeritus USGS WARC

Apr 27, 2022 2:30 - 2:45 PM **Abstract Title:** Strategic Conservation Assessment for land conservation planning in the Gulf of Mexico region

Abstract Description: A persistent challenge in conservation planning is identifying optimal opportunities for land conservation that address ecological and socioeconomic priorities of stakeholders. The Strategic Conservation Assessment of Gulf Coast Landscapes (SCA) integrates comprehensive priorities in a multi-criteria decision analysis framework to assist Gulf of Mexico Coastal Region (GCR) stakeholders in identifying co-benefits of proposed areas for land conservation. We used a co-production approach to develop a dynamic suite of conservation planning support tools that 1) coalesced land conservation plans and priorities in the GCR; 2) incorporated priorities and geospatial data to assess relative co-benefits of proposed projects; and 3) provided a comprehensive geospatial framework to identify land conservation opportunities. Priorities of >650 stakeholders were identified during design charrettes in 2018 under the framework of RESTORE Council goals, and this feedback led to development of our online tool suite, which incorporates 30 geospatial datasets aggregated into 1 km² hexagons. The tools were vetted in a series of stakeholder charrettes in 2018 and 2020 in each Gulf state. We provide use cases and highlight lessons learned in identifying shared stakeholder priorities for GCR land conservation, as well as the process of incorporating priorities into an iterative analytical framework using best available scientific data.

Speaker: Evans, Kristine, Strategic Conservation Assessment for land conservation planning in the Gulf of Mexico region Department of Wildlife, Fisheries and Aquaculture, Mississippi State University

Apr 27, 2022 2:45 - 3:00 PM **Abstract Title:** Developing the Texas Coastal Resiliency Master Plan through Data Analysis, Modeling, and Expert Elicitation

Abstract Description: Texas is developing its 2023 Coastal Resiliency Master Plan (TCRMP) for addressing vulnerabilities affecting society, ecology, and economy. Through elicitation from a Technical Advisory Committee (TAC), analyses of environmental change, and modeling of future sea level rise and storm surge impacts, action plans are developed to address one or more of eight vulnerabilities: gulf shoreline change; degraded or lost habitat; storm surge; bay shoreline change; degraded water quality; inland flooding; tidal flooding; and degraded water quantity. TAC members scored the importance of each vulnerability for each coastal HUC 10 watershed. This information plus data and model analyses and information on how projects provide societal benefits, direct and indirect economic benefits, and ecosystem services is used by the TAC and TCRMP team, led by the Texas General Land Office, to assess how well a project may increase resiliency. In addition to presenting worthy projects, the TCRMP provides information and data that describe the dynamics of the Texas coast and linkages between natural and

human systems. Geohazards maps showing current critical environments and processes, historical change, and how systems are projected to shift by 2100 will transfer knowledge to stakeholders.

Speaker: Gibeaut, James, Harte Research Institute, Texas A&M University-Corpus Christi