



PROCEEDINGS OF THE RESPONDING TO RISING WATERS IN SOUTHWEST FLORIDA WEBINAR

“Coastal Effects of Climate Change: Assessing Impacts of Sea Level Rise on the Southeast”

**Doug Marcy, doug.marcy@noaa.gov
Coastal Hazards Specialist, NOAA
Office for Coastal Management, Charleston, SC.**

This talk spoke to climate change impacts in the Southeast, with a focus on sea level rise trends and projections. It also touched on planning implications, decision-support tools, and resilience measures.

“Assessing Flooding Vulnerability Due to Sea Level Rise in Collier County Using ACUNE”

**Dr. Michael Savarese, msavares@fgcu.edu
Professor of Coastal Resilience and Climate Adaptation,
The Water School, Florida Gulf Coast University.**

ACUNE (Adaptation of Coastal Urban and Natural Ecosystems) is a package of vulnerability analysis tools, funded by NOAA to assist Collier County, that assesses the risks associated with future flooding caused by climate-change-driven sea-level rise (nuisance flooding) and increased storminess (due to storm surge and waves). The tools, developed by coastal engineers and computer modelers at University of Florida, generate maps showing the depth of inundation on the landscape predicted for years 2030, 2060, and 2100 under three different sea-level rise magnitudes. Additionally, civic leaders, governmental staffers, elected officials, and professional managers with NGOs and governmental agencies from throughout the county provided geospatial datasets of assets (i.e., features of value to the community); these can be overlaid on the inundation maps generated, allowing for vulnerability assessments of specific infrastructural elements. The tools were demonstrated, and examples of vulnerability analyses already undertaken were shared.

“Use of Engineering With Nature® - Straies and Natural Infrastructure as Techniques for Reducing Flood Risk”

**Dr. Jeffrey K. King, Ph.D., P.E., jeffrey.k.king@usace.army.mil
Deputy National Lead and Program Manager, U.S. Army Corps of Engineers.**

Climate change has resulted in amplified risk to numerous communities in the US. Intensifying storms, flash flooding, and sea level rise are increasingly the cause of impacts in areas subject to coastal and riverine systems, and holistic solutions for flood risk management are essential to creating greater resilience. The US Army Corps of Engineers’ (USACE) Engineering With Nature® (EWN®) Program seeks to identify opportunities to integrate engineering and natural processes in order to achieve more resilience through use of natural infrastructure. This presentation will introduce the USACE’s EWN Program and provide an overview of the International Guidelines on Natural and Nature-Based Features for Flood Risk Management (NNBF Guide). Launched in September 2021, the NNBF Guide was developed to enable more sustainable delivery of economic, social, and environmental benefits associated with infrastructure. The NNBF Guide is a result of 5 years of large-scale collaboration intended to provide a comprehensive framework to building flood resilience through natural and nature-based approaches. For more information, please visit www.engineeringwithnature.org.

“Reduce Disaster Suffering (National Flood Insurance Program)”

**David I. Maurstad, FEMA Senior Executive of the National Flood Insurance Program
& Andy Neal, FEMA Actuary**

David Maurstad and Andy Neal provided a briefing on the National Flood Insurance Program’s new pricing methodology, Risk Rating 2.0: Equity in Action. Risk Rating 2.0 fundamentally improves the flood insurance landscape with its modern risk-based, property specific, and actuarially sound rating system.

“Building Resilience in Broward County: From Regional Planning to Local Collaboration”

**Dr. Jennifer Jurado, jjurado@broward.org
Chief Resilience Officer and Deputy Director,
Broward County Resilient Environment Department.**

This presentation described the regional planning, partnerships, technical evaluations and communications tools supporting resilience initiatives in Broward County including establishment of future conditions standards and development of a county-wide resilience plan to help coordinate infrastructure improvements and redevelopment strategies.

Local Climate Groups Discuss Goals and Objectives Panel

Sarasota Students for Climate

Anja Schwarzbauer and Mehak Sandu, sarasotastudents4climate@gmail.com

Climate Reality Leadership Corps

Ariel Hoover, ariel.hoover@verizon.net

The CLEO Institute

Salome Garcia, salome@CLEOInstitute.org

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