

Climate Uncertainty for Coastal and Estuarine Environments

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How will coastal ecosystems respond to climate change stressors? Will that response affect land management strategies today and in the future? As the Defense Coastal/Estuarine Research Program (DCERP) reaches its final years of a decade long program, its researchers look to apply discoveries made on how the New River Estuary (NRE) ecosystem responds to changes in environmental factors under future climate scenarios. The National Climate Assessment's 2014 Report can offer large-scale guidance on broad impacts. Yet, land managers need quantitative reports that assess the range of possible future climates and the possible effects. This need motivates researchers to work together to produce a suite of information helping land managers make informed decisions in the face of an uncertain future.

We share our stories on: how we as climatologists work with ecosystem researchers to assess their climate data needs, what strategies we use to communicate and quantify climate change for the NRE, and why understanding the needs and problems of land managers can motivate scientific discovery.