

Economic Vulnerability to Climate Change on the Jersey Shore: Promoting Adaptation, Resilience and Sustainability in Coastal New Jersey R/6210-0012

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Residents of New Jersey's coastal communities have become concerned in recent years about the impacts climate change may have on their communities. Most of the climate change research in New Jersey has focused on mapping different projections for sea level rise and potential flooding impacts. In this study scientists will take a different approach to studying climate change by focusing more on its local-level social and economic impacts. It is important for coastal communities to better understand the economic value of businesses that are vulnerable to climate change and to learn about ways they can better prepare for and adapt to these changes.

Led by Dr. Robin Leichenko, director of the Rutgers Initiative on Climate and Society and associate professor of Geography



Dr. McDermott (left) and Dr. Leichenko.

at Rutgers University, this research project will investigate the economic vulnerability of coastal New Jersey to climate change, options for adaptation, and ways to help community decision-makers use this information to inform local-level planning. Co-investigators on the project include Richard Lathrop, Lisa Auermuller and Melanie McDermott. Data



Flooded parking lot, spring 2011.

will be collected by conducting interviews with representatives from different economic sectors, ranging from fishing to tourism, and by analyzing numerical data relating to the economic impacts of climate change and adaptation. Geographic Information Systems (GIS) will help researchers map and identify areas of high vulnerability to climate change and cost benefit analysis will help to assess the different options for adaptation.

The key benefit of this project is to enhance the ability of coastal communities to prepare for and adapt to climate change. Unlike studies that analyze the science behind climate change and create predictive models, this research will allow scientists to better interact with community members to understand the human dimensions of the impacts of climate change.