

New studies find global warming will have significant economic impacts on Florida coasts

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Leading Florida-based scientific researchers released two new studies today, including a Florida State University report finding that climate change will cause significant impacts on Florida's coastlines and economy due to increased sea level rise. A second study by researchers at Florida Atlantic University recommends that the state of Florida adopt a series of policy programs aimed at adapting to these large coastal and other impacts as a result of climate change. Key findings of the FAU report were included just this week by Florida Gov. Charlie Crist's Climate and Energy Action Team when it adopted the "Adaptation" section of its final report.

"The impacts of climate change on Florida's coasts and on our economy will be substantial, persistent and long-term, even under our conservative estimates," said Julie Harrington, director of the Center for Economic Forecasting and Analysis at FSU. "Should, as many models predict, sea level rise, and hurricane strength and other factors become more extreme, much greater economic impacts will occur along many parts of Florida's coast in this century."

The second new study, by researchers at FAU, focused on state adaptation policies needed as Florida faces the impacts of climate change.

"The goal of our study is to help the state of Florida adapt, in the most

effective way possible, to climate change impacts that are now inevitable," said Jim Murley, director of Florida Atlantic University's Center for Urban and Environmental Solutions and leader of the study. "These approaches must be comprehensive and strategic, not piecemeal and episodic. Governor Crist and other leaders have rightly identified adapting to climate change as one of the state's greatest challenges -- we look forward to working with the state to protect our people, natural splendor, and economic livelihood. There is real work to be done."

This research was supported by a grant from the National Commission on Energy Policy, a project of the Bipartisan Policy Center.

About the FSU study:

This study uses current estimates of sea level rise from Florida State University's Beaches and Shores Resource Center and 2001 estimates from the Intergovernmental Panel on Climate Change to evaluate the effect of sea level rise on the six coastal counties. The results show projected trends in storm-surge flood return periods associated with hurricanes, damage costs associated with flooding from major storm events, and the value and area of land at risk.

Under the FSU study's estimates for sea level in Dade County, the value of land at risk totals \$6.7 billion in 2080 (in 2005 dollars). (By comparison, using International Panel on Climate Change sea level estimates, the value of land at risk in Dade County ranges from \$1 billion to \$12.3 billion in 2080). The study also calculated the effect of storm surge and sea level rise on future damage costs, finding that if a storm like Hurricane Wilma from 2005 occurred in 2080, the cost to Dade alone would be from 12 percent to 31 percent higher (in 2005 constant dollars). While these findings do not account for adaptive strategies or potential future increases in property values, they still provide valuable information about potential impacts and resources that

are put at risk from sea level rise.

About the FAU study:

Key findings of the report have been included by Gov. Crist's Climate and Energy Action Team as it adopted the "Adaptation" section of its final report this week in Tallahassee. Important findings from the FAU study call for major state environmental, growth management and public infrastructure decision-making processes to be adjusted so they are responsive to future climate change impacts.

"FAU will continue to research how Florida can be a leader in providing guidance to other states on how best to put in place workable solutions that will help communities adapt to future climate change impacts," Murley said.

"Storm events associated with certain levels of storm surge could increase in frequency in the future, due to sea level rise," Harrington said.

"As sea level rises, damage costs associated with extreme storm events increases significantly for the Florida counties examined in this study," she said.

Source: Florida State University

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