


Charlotte County Sustainability and Resiliency



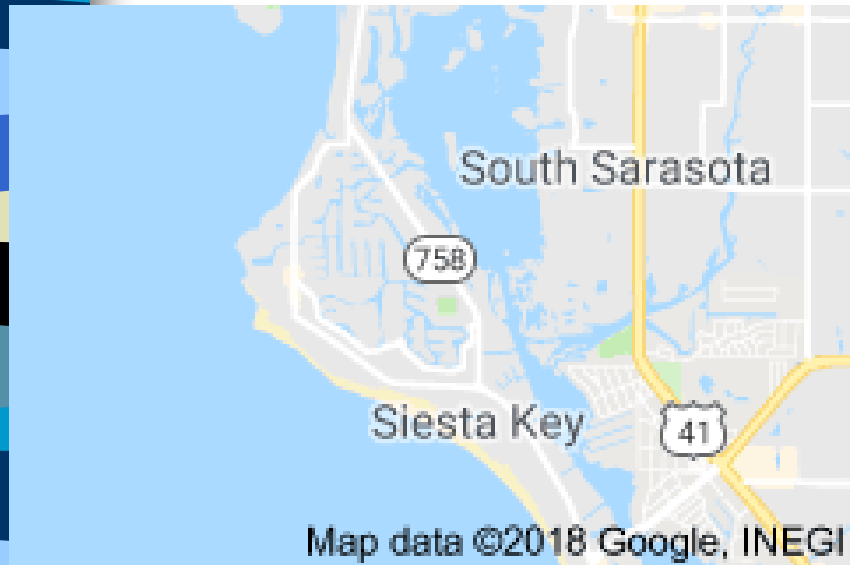
Beaches and Shores Advisory
Committee
Dr. Coty Keller



Outline

- Beach video
- Flooding maps
- Other threats to beaches and shores
- Two kinds of action
 - Adaptation, mitigation
 - Compare, contrast, examples
 - Local government scorecard
- Recommendations
- Q&A, discussion

Siesta Key

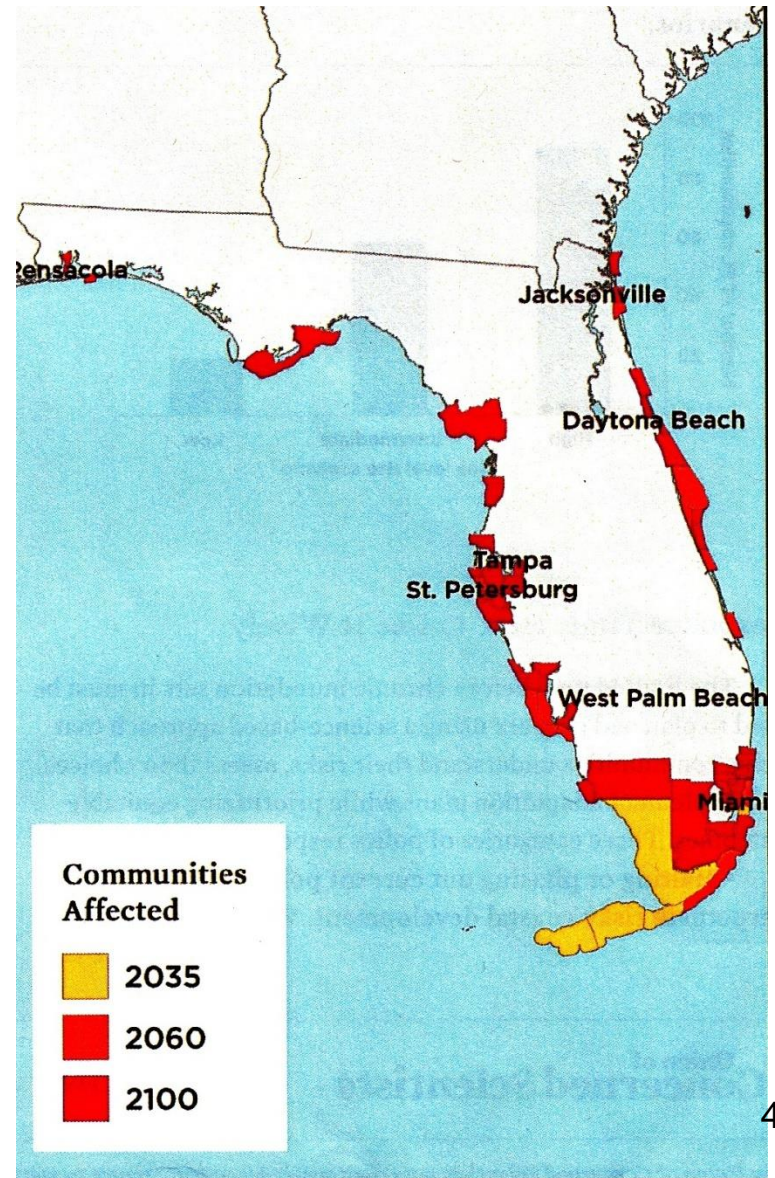


Chronic Inundation

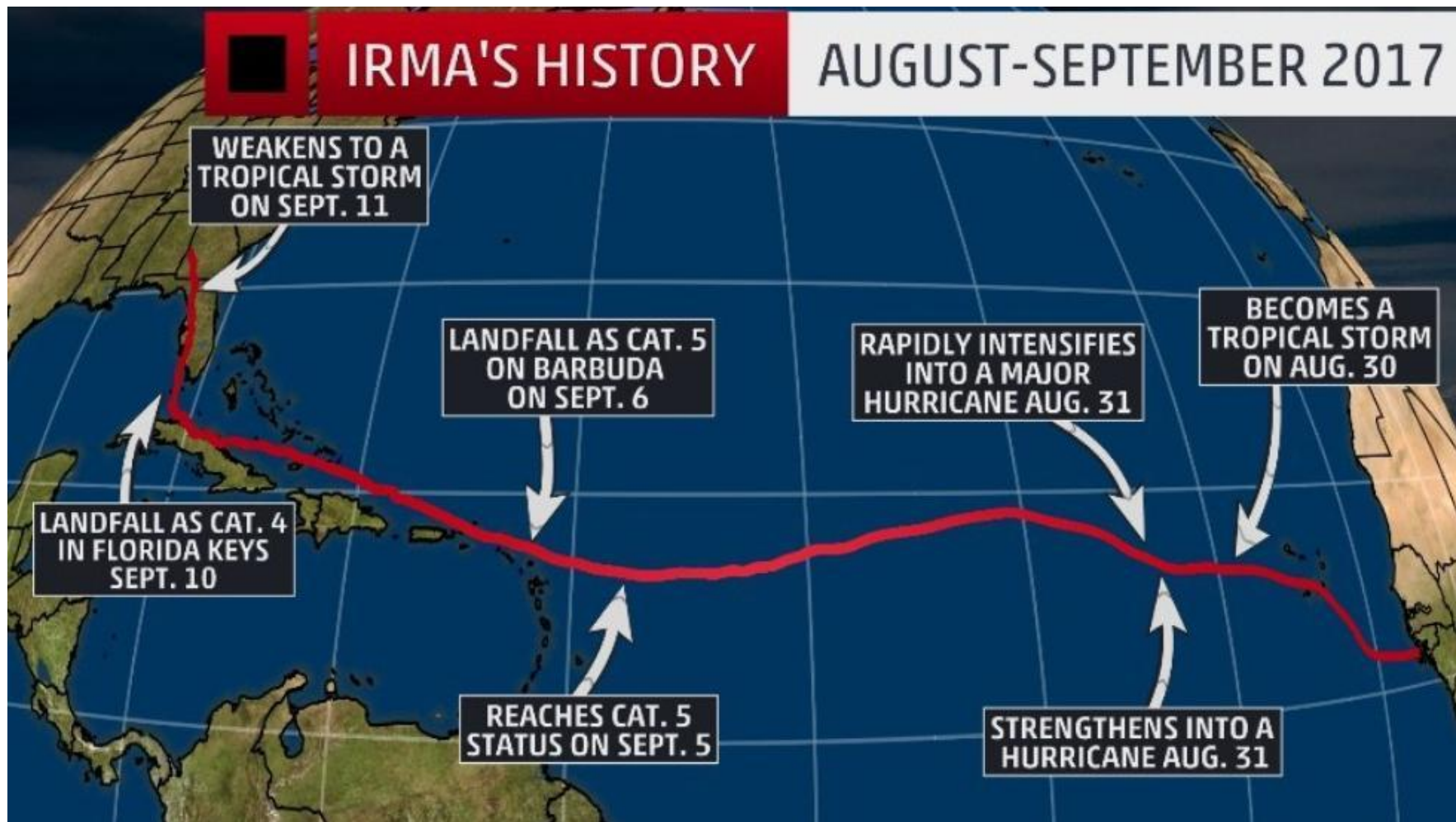
Union of Concerned Scientists have created a [series of maps](#) for areas which will be flooded 26 times or more per year—an average of about twice per month—from today through 2100

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Its more than Sea Level Rise



Two ways of dealing with the climate crisis

Adaptation is trying to manage what you cannot avoid

- “To adjust to environmental conditions”
- “The process of adjusting to actual or expected climate change.”

Mitigation is trying to avoid what you cannot manage

- “To make less harsh or harmful”
- “A human intervention to reduce heat-trapping emissions or remove carbon already in the atmosphere”



Adaptation –managing the unavoidable

Individual, businesses strategies

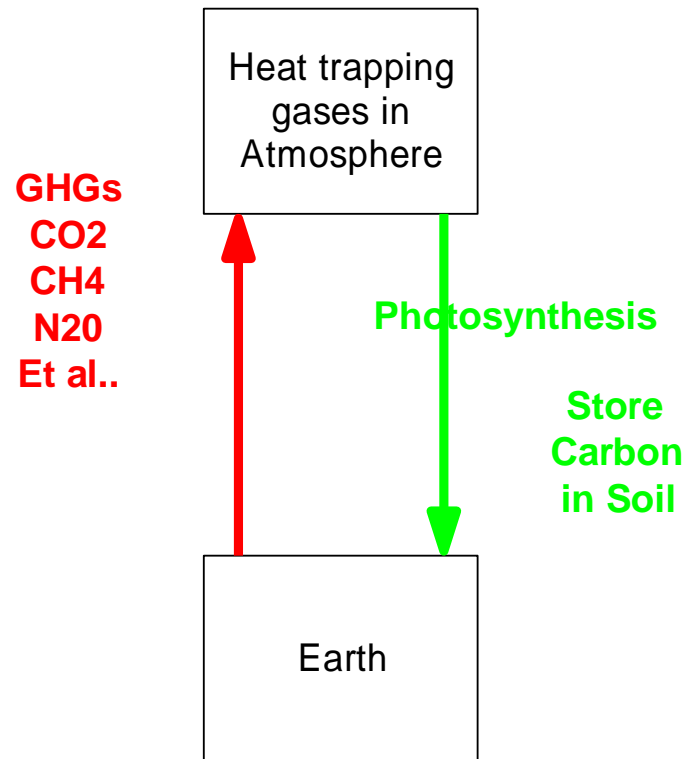
- Insurance
- Storm shutters
- Flood barriers
- Elevate
- Migrate
- Turn a profit

Governments strategies

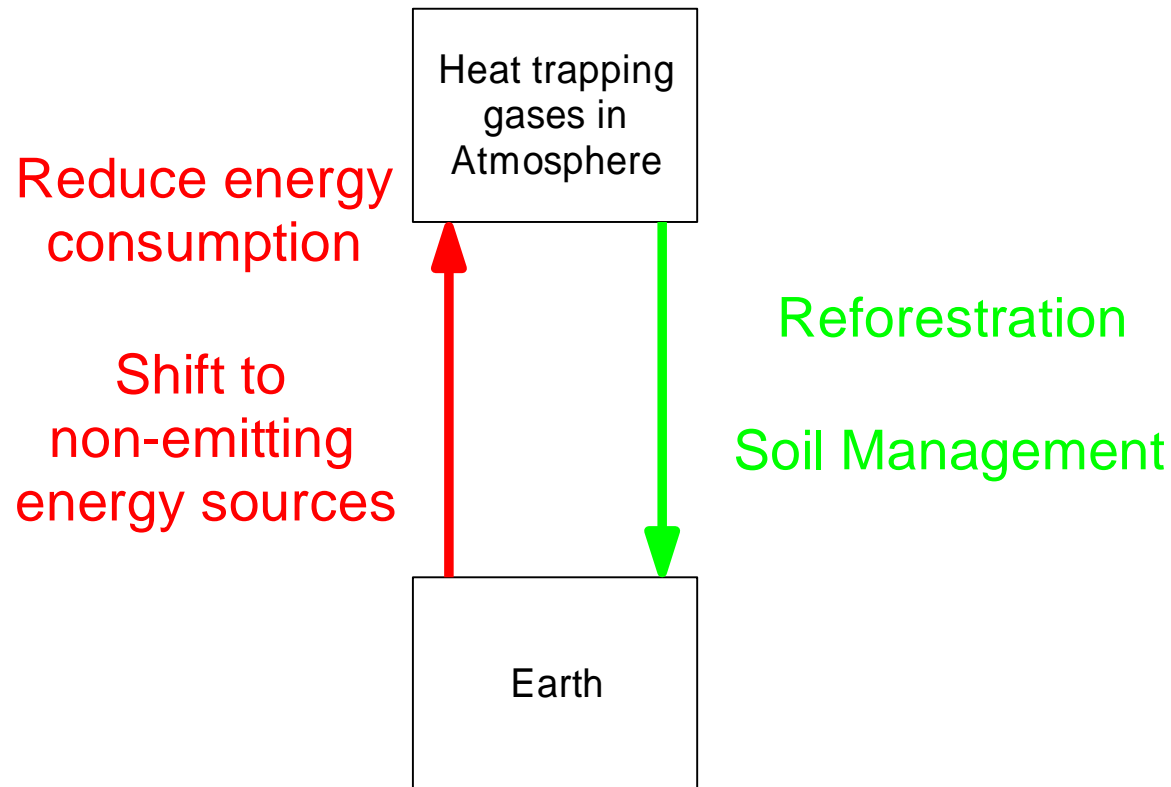
- Dikes
- Protect assets identified as vulnerable to sea level rise.
- Oyster reefs, more mangroves
- Planned retreat

Mitigation – avoiding the unmanageable

Key to solutions is understanding causes



Mitigation – draw down excess carbon in the atmosphere



City of Sarasota Resolution

- Community target: 100 % renewable, zero emission energy sources by 2045.
- Municipal Operations target: 100 % renewable, zero emission by 2030 (50% by 2024).
- Incorporate into the City's Climate Adaptation Plan and other planning processes
- Work with community stakeholders to devise implementation strategies.
- Be inclusive, promote equity, focus on economic and employment opportunities
- Report to City Commission every two years, beginning in 2018.

RESOLUTION NO. 17R-2648

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF SARASOTA, FLORIDA FOR A TRANSITION TO 100 PERCENT RENEWABLE, ZERO EMISSION ENERGY SOURCES IN ACCORDANCE WITH THE 100 PERCENT RENEWABLE ENERGY INITIATIVE; PROVIDING FOR READING OF THIS RESOLUTION BY TITLE ONLY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Sarasota is a coastal community on the front lines of the environmental, economic and public health impacts of climate change stemming from sea level rise, storm surge, flooding, and rising temperatures; and

WHEREAS, the City of Sarasota seeks a healthy, sustainable future with less toxic pollution threatening residents and more economic growth opportunities for workers; and

WHEREAS, the transition to 100 percent renewable, zero emission energy sources, such as solar power, will improve air and water quality and protect public health, particularly for the most vulnerable across our community; and

WHEREAS, 100 percent renewable, zero emission energy sources as well as energy efficiency represent an enormous economic opportunity for City of Sarasota to create jobs in an emerging industry and expand prosperity for residents; and

WHEREAS, one out of every 50 new jobs added in the United States in 2016 was created by the solar industry; and

WHEREAS, 100 percent renewable, zero emission energy sources and energy efficiency now offer greater economic security, lower electricity costs, and an affordable energy solution for City of Sarasota residents; and

WHEREAS, according to the U.S. Department of Energy, solar costs are down between 54 percent and 64 percent from 2008; and

WHEREAS, individuals, families, businesses, and organizations throughout the City of Sarasota seek greater energy freedom through the use of distributed 100 percent renewable, zero emission energy sources like rooftop solar; and

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Mitigation- Economic and Health Benefits

- Decoupling
- Jobs/Growth
- Families and Businesses
- Utility Companies
- Savings-Health Costs
- \$ Savings from Damage Avoided



Local Government Scorecard

	Adaptation?	Mitigation?
Charlotte County	No	No
City of Punta Gorda	Yes	Not Explicit
City of Sarasota	Yes	Pending
Miami Dade	Yes	Yes

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Recommendations

- Adaptive Mitigation strategy
- Economic caveats
- Consider “Sustainability/ Resiliency” function
- Include in Comprehensive plan by 2021





Outcomes

Adaptation

- Protect
- Retreat
- Building codes, urban planning

Mitigation

- Net zero emissions
 - Electrical power
 - Transportation
 - Buildings
 - What we eat, buy and waste
- Reforestation, soil management
 - Mangroves
 - Native Landscapes
 - Carbon farming
- Building codes, urban planning

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Toward the county's sustainability/resiliency plan



- Questions?
- Comments
- Concerns