



Planning for Community Resilience in Satellite Beach: Laying the Groundwork

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- First Secretary of the Florida Department of Community Affairs
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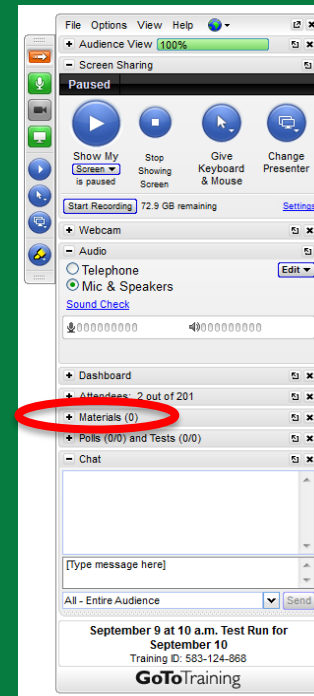
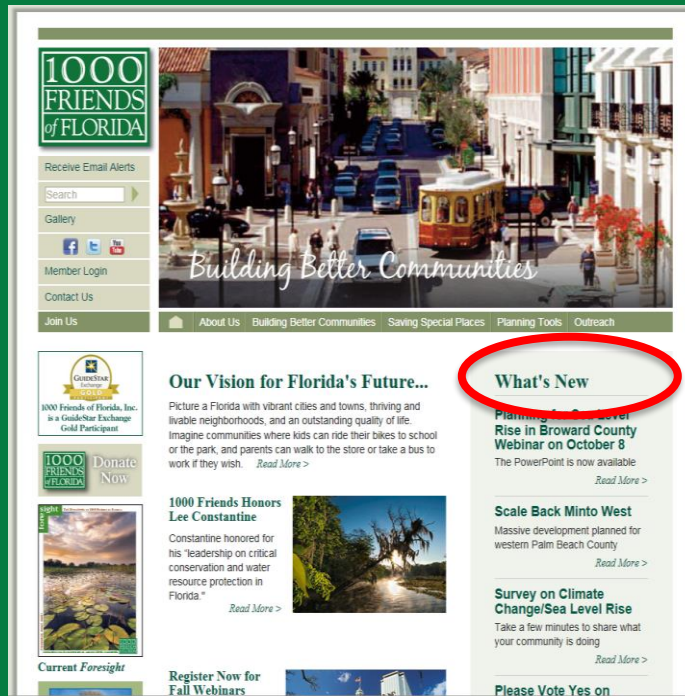
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The PowerPoint is available at www.1000friendsofflorida.org



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- *1 CEC for Certified Floodplain Managers*
- *2 CLE for Florida attorneys (1708850N- Intermediate)*
- *.125 CEUs for Florida Environmental Health Professionals.*

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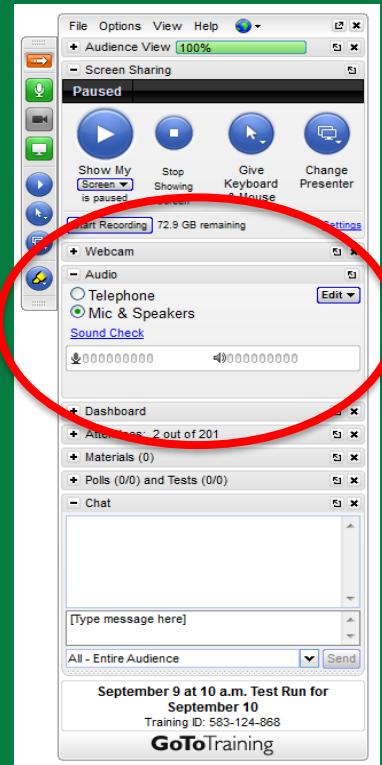
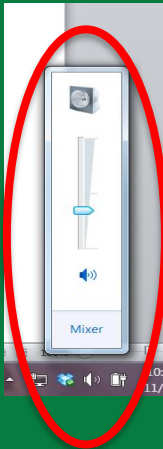
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- February 21, 2018 **NOTE TIME: 2:00 – 3:30 p.m.** -- *Planning for Community Resilience in Satellite Beach: Stormwater Infrastructure and LDRs*
- March 21, 2018, Noon to 1:30 p.m. -- *2018 Florida Legislative Wrap Up*

Visit www.1000friendsofflorida.org/webinar/
to find out more!

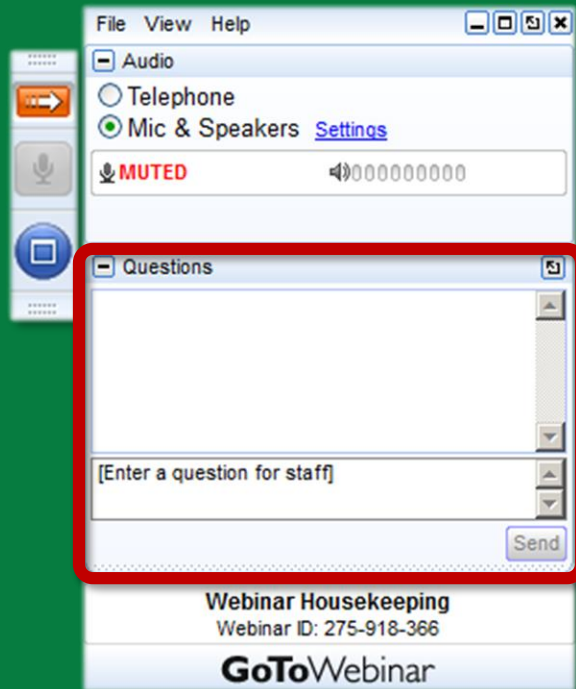


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- Staff will ask the presenters questions, as time permits

Check out our Legislative Webpage!

Available at:

www.1000friendsofflorida.org/2018-florida-legislative-session-custom/

This site is:

- Updated weekly (or more often as needed)
- Includes Growth Management, Transportation and Conservation Legislation
- Includes links to the bills

The screenshot shows the website for 1000 Friends of Florida's 2018 Florida Legislative Session. The header includes navigation links: Home, About Us, Building Better Communities, Saving Special Places, Planning Tools, Outreach, and Donate Now. The main title is "2018 Florida Legislative Session" with a sub-header "Updated December 5, 2017". Below this, there are links for "Useful Links" (Florida House, Florida Senate, Find Your Legislators) and a "Bill Status" section indicating "PASSED, DID NOT PASS". A "Register now for FREE 2018 Florida Legislative Preview Webinar" is advertised for Wednesday, December 6 from noon to 1:30. Another "Register now for FREE 2018 Florida Legislative Wrap Up Webinar" is advertised for Wednesday, March 21, 2018 from noon to 1:30. A "Support 1000 Friends of Florida's Legislative Advocacy" link is also present. The main content area is titled "GROWTH MANAGEMENT/PLANNING LEGISLATION" and features a search bar. A table lists bills with columns for "Bill #/Sponsor" and "Title / Description". The table includes entries for SB 84 Lee, SB 292 Rodriguez, SB 324 Young/HB 697 Miller, SB 362 Perry/HB 207 McClain/Clemens, SB 432 Lee/HB 17 Raburn, SB 494 Lee/HB 405 Williamson, SB 542 Rodriguez, and SB 574 Steube/HB 521 Edwards. Each entry has a "Read More" link. The left sidebar contains a "Receive Email Alerts" section, a "Search" bar, a "Gallery" with social media links, a "Member Login" section, and a "Contact Us" section. The bottom of the sidebar features a "Charity Navigator" logo, a "Goldstar" logo, and a "Donate Now" button. The footer includes a "Current Forefront" section with a photo of a tree and a "1% FOR THE PLANET" logo.

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2018 Florida Legislative Session

Updated December 5, 2017

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Bill Status: PASSED, DID NOT PASS

Register now for FREE 2018 Florida Legislative Preview Webinar
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Support 1000 Friends of Florida's Legislative Advocacy

GROWTH MANAGEMENT/PLANNING LEGISLATION

Search:

| Bill #/Sponsor | Title / Description |
|---|--|
| SB 84 Lee | SUPPORT Municipal Conversion of Independent Special Districts Read More |
| SB 292 Rodriguez | SUPPORT Private Property Rights SUPPORT -- SB 292 exempts property owners who produce renewable energy and distribute it to users on their property from being defined as a public utility. <i>Senate Referrals (SB 292):</i> Communications, Energy, and Public Utilities; Community Affairs, and Rules Committees. Hide |
| SB 324 Young HB 697 Miller | Impact Fees UPDATED 12/5 Read More |
| SB 362 Perry HB 207 McClain Clemens | OPPOSE Growth Management/Private Property Rights OPPOSE -- SB 362/HB 207 require local government adoption of a private property rights element into their comprehensive plan. <i>House Referrals (HB 207):</i> Agriculture and Property Rights Subcommittee; Local, Federal and Veterans Affairs Subcommittee; and Commerce Committee. <i>Senate Referrals (SB 362):</i> Agriculture and Property Rights Subcommittee; Local, Federal and Veterans Affairs Subcommittee; and Commerce Committee. Hide |
| SB 432 Lee HB 17 Raburn | Community Redevelopment Agencies Read More |
| SB 494 Lee HB 405 Williamson | Linear Facilities UPDATED 12/5 Read More |
| SB 542 Rodriguez | SUPPORT Public Financing of Construction Projects Read More |
| SB 574 Steube HB 521 Edwards | OPPOSE Tree and Timber Trimming, Removal, and Harvesting Read More |

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Presenters



Ken Lindeman, Ph.D.



- Professor, Sustainability Program Chair, Florida Institute of Technology.
- With diverse partners, his group uses emerging science and policy tools to advance the sustainable management of coastal systems.
- The Northern Caribbean and Southeast U.S. are the primary focus of 70 publications in over 20 differing science and policy journals, and two books (Smithsonian Institution Press and Duke University Press).
- Resident of four counties and seven cities on East Florida's coast.
- Employment includes NOAA, University of Miami, several non-profits. PI, Co-PI, 25 applied research or policy grants. Ph.D., University of Miami, Rosenstiel School of Marine and Atmospheric Sciences.





- Director of Planning and Community Development at the East Central Florida Regional Planning Council
- Has worked for the past 14 years on a variety of regional and local projects across sectors aimed at creating healthy, resilient and sustainable communities.
- In 2003 she managed the U.S EPA sea level rise project for Volusia and Brevard County, one of the first studies examining sea level rise in the region.
- Since then, she and the RPC have been working with agencies, departments and jurisdictions in Volusia and Brevard Counties, as well as universities and other federal, state and regional agencies and stakeholders to further coastal resiliency in East Central Florida.
- Co-authored two white papers examining land use impacts to rising sea level.
- B.S. in Marine Biology from UNCW and Masters in Environmental Resource Management from Florida Institute of Technology.

Thomas Rupert, Coastal Planning Specialist



- Coastal Planning Specialist at the Florida Sea Grant College Program
- A licensed attorney developing legal and policy analysis for local governments on aspects of adaptive planning for sea-level rise, community resilience, and associated long-term challenges and opportunities for Florida's coastal communities
- Areas of expertise include federal and state property rights law, beach and coastal policy in Florida, flood insurance, Florida's Coastal Construction Control Line program, planning law, and coastal and marine permitting programs
- Has worked with over a dozen partners to organize and host legal workshops on coastal issues and flood insurance around the state
- Currently involved with several initiatives within Florida communities planning for sea-level rise
- Maintains a website of original resources at www.flseagrant.org/climatechange/coastalplanning/



Planning for Community Resilience in Satellite Beach, Florida

Ken Lindeman, Ph.D.

Professor, Sustainability Program Chair

Department of Education & Interdisciplinary Studies

Florida Institute of Technology



Planning for Community Resilience in Satellite Beach, Florida

Ken Lindeman, Professor, Sustainability Program Chair
Department of Education & Interdisciplinary Studies
Florida Institute of Technology



Regional Coastal Overview

Regional setting

Climate science trends. Hurricanes.

Satellite Beach Land Use Board and AAAs

Land use board (CPAB) and Sea Level Rise SubCommittee

Adaptation Action Areas

Summary & Resources

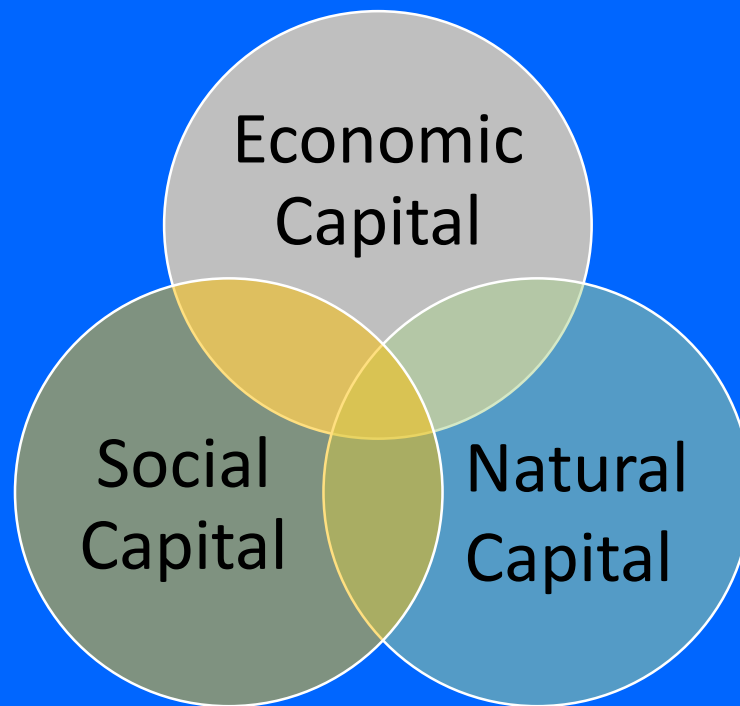
Selected take-aways for barrier island city planning

Resource overview

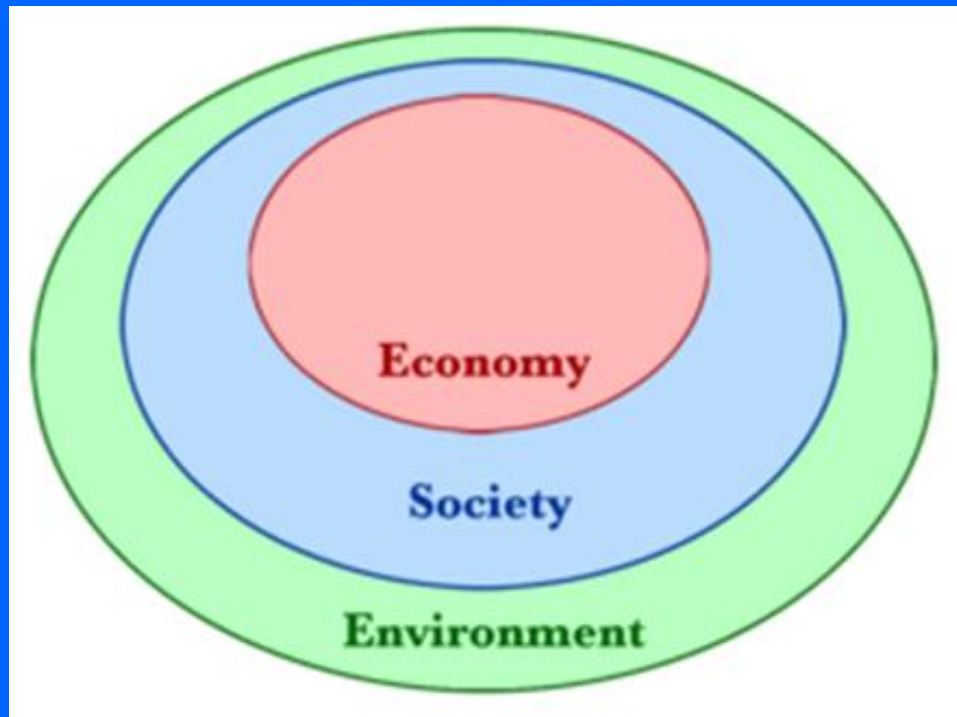


- Florida is a flat, highly exposed marine peninsula, projecting into the northwest Caribbean.
- The limestone bedrock of much of the state is permeable to water.
 - Mixture of tropical and temperate biodiversity *and* weather.

The Three Capitals
capital = assets, resources



The *Three Capitals* Have deeper relationships

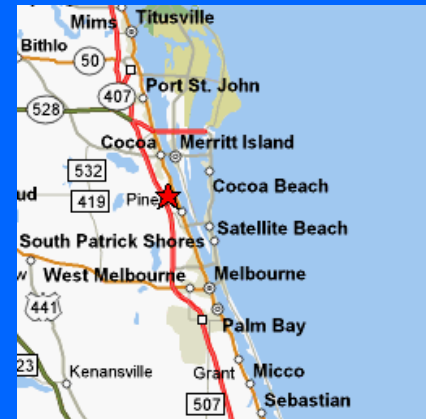


Scales

Macro,
Regional



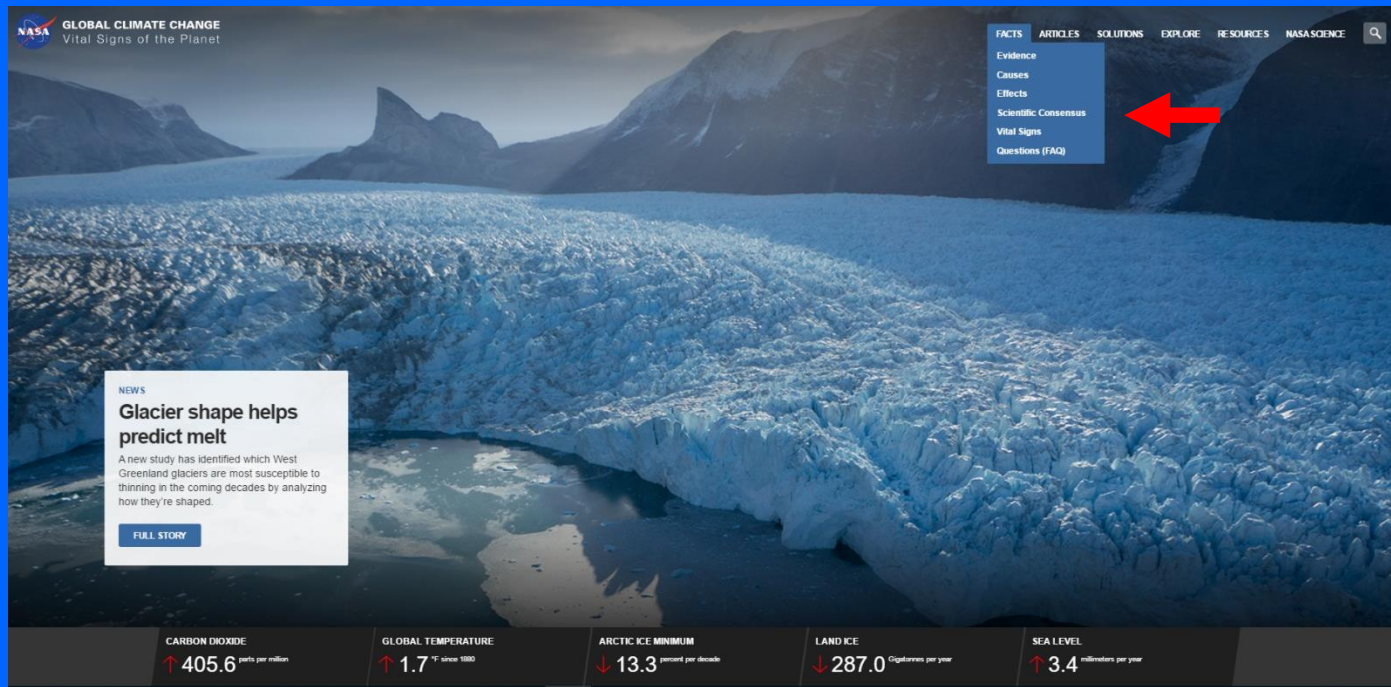
Meso,
County, city



Micro,
Individual, family



climate.nasa.gov



NASA Climate: Positions by Leading U.S. Scientific Societies

Statement on climate change from 18 scientific associations

"Observations throughout the world make it clear that climate change is occurring, and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver." (2009)²



American Association for the Advancement of Science

"The scientific evidence is clear: global climate change caused by human activities is occurring now, and it is a growing threat to society." (2006)³



American Chemical Society

"Comprehensive scientific assessments of our current and potential future climates clearly indicate that climate change is real, largely attributable to emissions from human activities, and potentially a very serious problem." (2004)⁴



American Geophysical Union

"Human-induced climate change requires urgent action. Humanity is the major influence on the global climate change observed over the past 50 years. Rapid societal responses can significantly lessen negative outcomes." (Adopted 2003, revised and reaffirmed 2007, 2012, 2013)⁵



American Medical Association

"Our AMA ... supports the findings of the Intergovernmental Panel on Climate Change's fourth assessment report and concurs with the scientific consensus that the Earth is undergoing adverse global climate change and that anthropogenic contributions are significant." (2013)⁶



American Meteorological Society

"It is clear from extensive scientific evidence that the dominant cause of the rapid change in climate of the past half century is human-induced increases in the amount of atmospheric greenhouse gases, including carbon dioxide (CO₂), chlorofluorocarbons, methane, and nitrous oxide." (2012)⁷



American Physical Society

"The evidence is incontrovertible: Global warming is occurring. If no mitigating actions are taken, significant disruptions in the Earth's physical and ecological systems, social systems, security and human health are likely to occur. We must reduce emissions of greenhouse gases beginning now." (2007)⁸



The Geological Society of America

"The Geological Society of America (GSA) concurs with assessments by the National Academies of Science (2005), the National Research Council (2006), and the Intergovernmental Panel on Climate Change (IPCC, 2007) that global climate has warmed and that human activities (mainly greenhouse-gas emissions) account for most of the warming since the middle 1900s." (2006; revised 2010)⁹

SCIENCE ACADEMIES

International academies: Joint statement

"Climate change is real. There will always be uncertainty in understanding a system as complex as the world's climate. However there is now strong evidence that significant global warming is occurring. The evidence comes from direct measurements of rising surface air temperatures and subsurface ocean temperatures and from phenomena such as increases in average global sea levels, retreating glaciers, and changes to many physical and biological systems. It is likely that most of the warming in recent decades can be attributed to human activities (IPCC 2001)." (2005, 11 international science academies)¹⁰



U.S. National Academy of Sciences

"The scientific understanding of climate change is now sufficiently clear to justify taking steps to reduce the amount of greenhouse gases in the atmosphere." (2005)¹¹

climate.nasa.gov/scientific-consensus/



American Association for the Advancement of Science

"The scientific evidence is clear: global climate change caused by human activities is occurring now, and it is a growing threat to society." (2006)³

AAAS

Since 1848, > 100,000 members



American Physical Society

"The evidence is incontrovertible: Global warming is occurring. If no mitigating actions are taken, significant disruptions in the Earth's physical and ecological systems, social systems, security and human health are likely to occur. We must reduce emissions of greenhouse gases beginning now." (2007)⁸

APS

Since 1899, > 50,000 members



American Geophysical Union

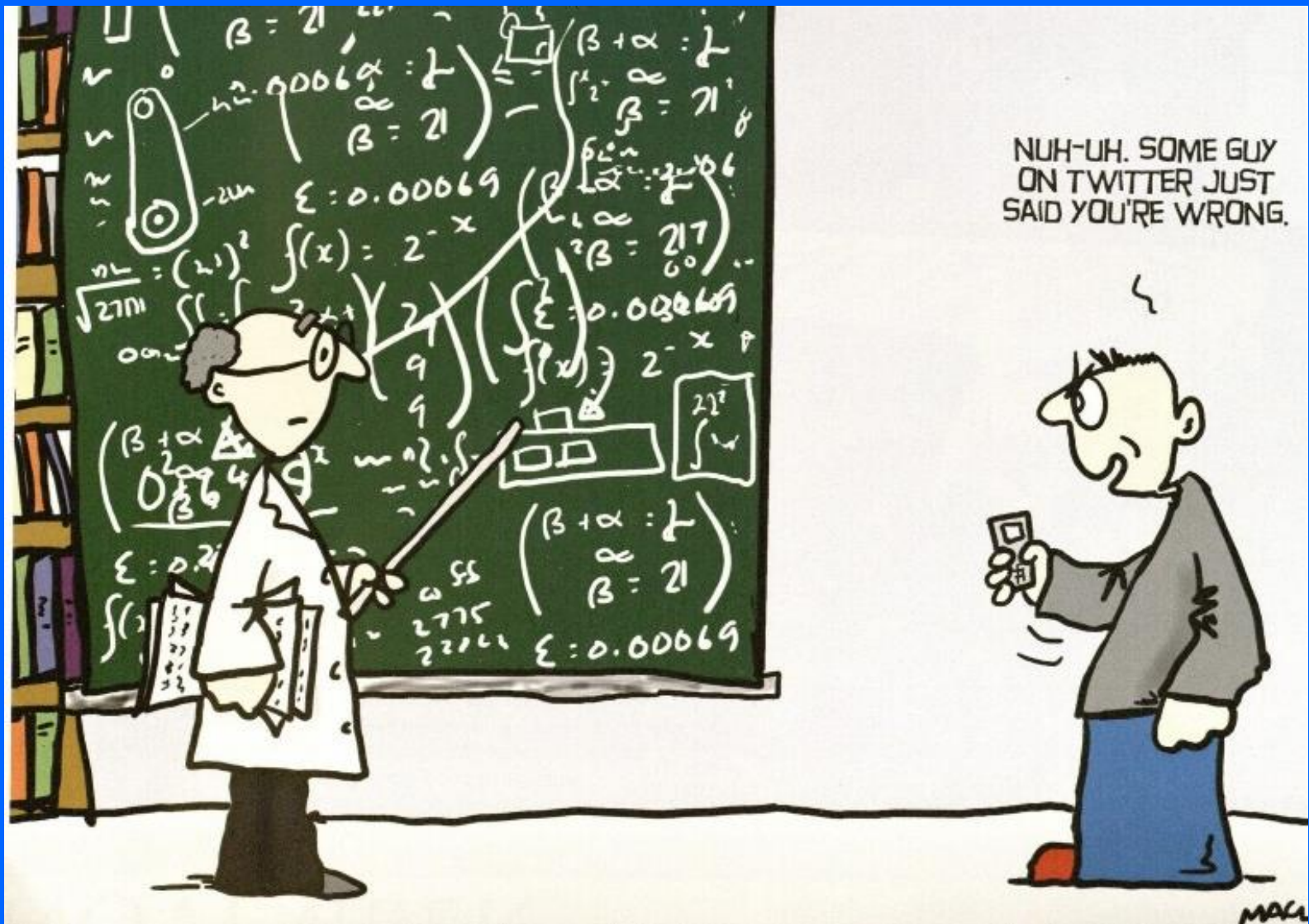
"Human-induced climate change requires urgent action. Humanity is the major influence on the global climate change observed over the past 50 years. Rapid societal responses can significantly lessen negative outcomes." (Adopted 2003, revised and reaffirmed 2007, 2012, 2013)⁵

AGU

Since 1919, > 60,000 members

Many, many other science
orgs...

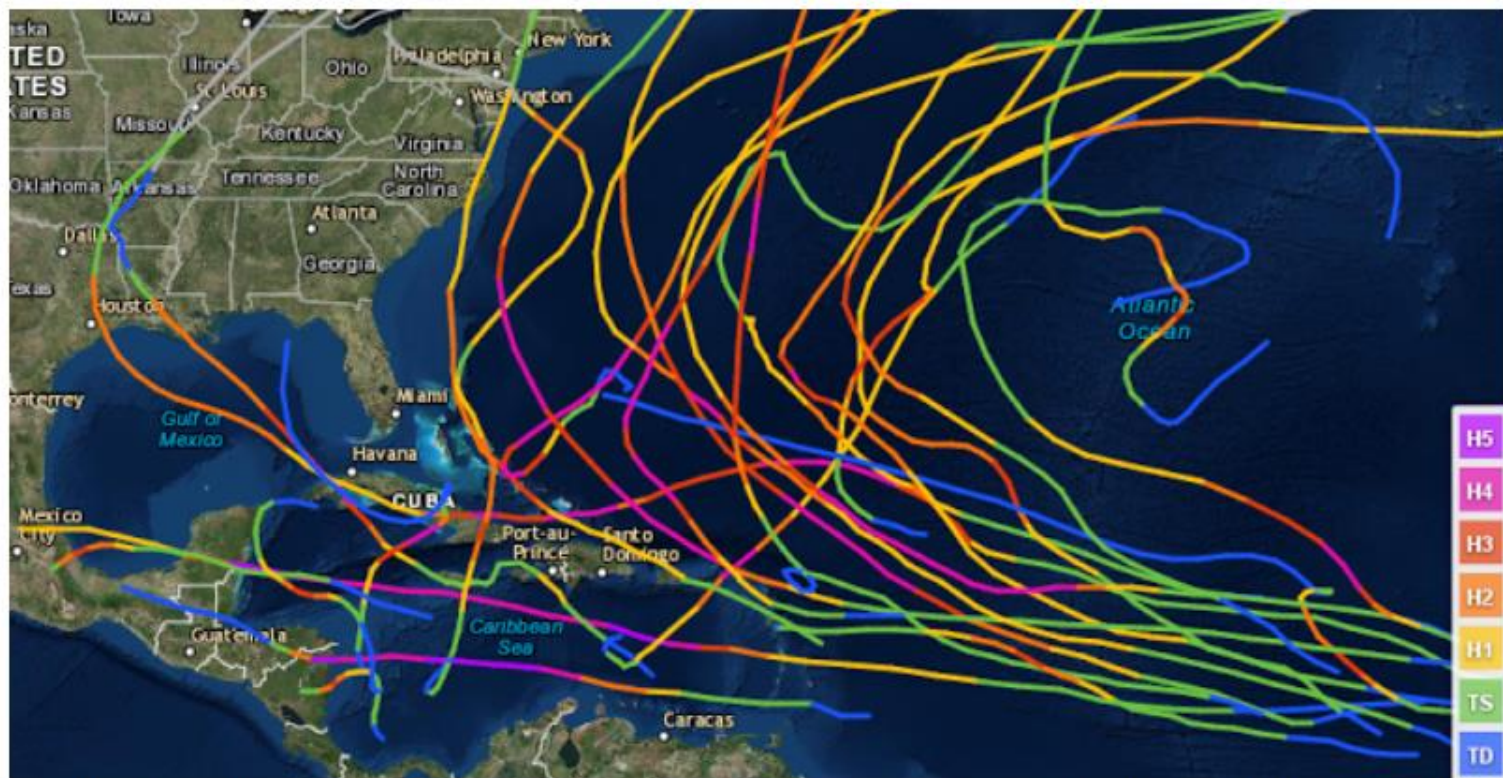
100s of specific sciences
represented by these societies



- In terms of countries globally, Florida has the 17th largest economy as of 2017. **Top 5% of GDP of all countries...**
- Florida' land development economy and related interests comprises one of the larger economic mega-systems on the planet.
- With the recovery of the economy in the last years, consider the speed with which remaining open coastal land is being built out. Examples across many coastal cities, 2017-2018.

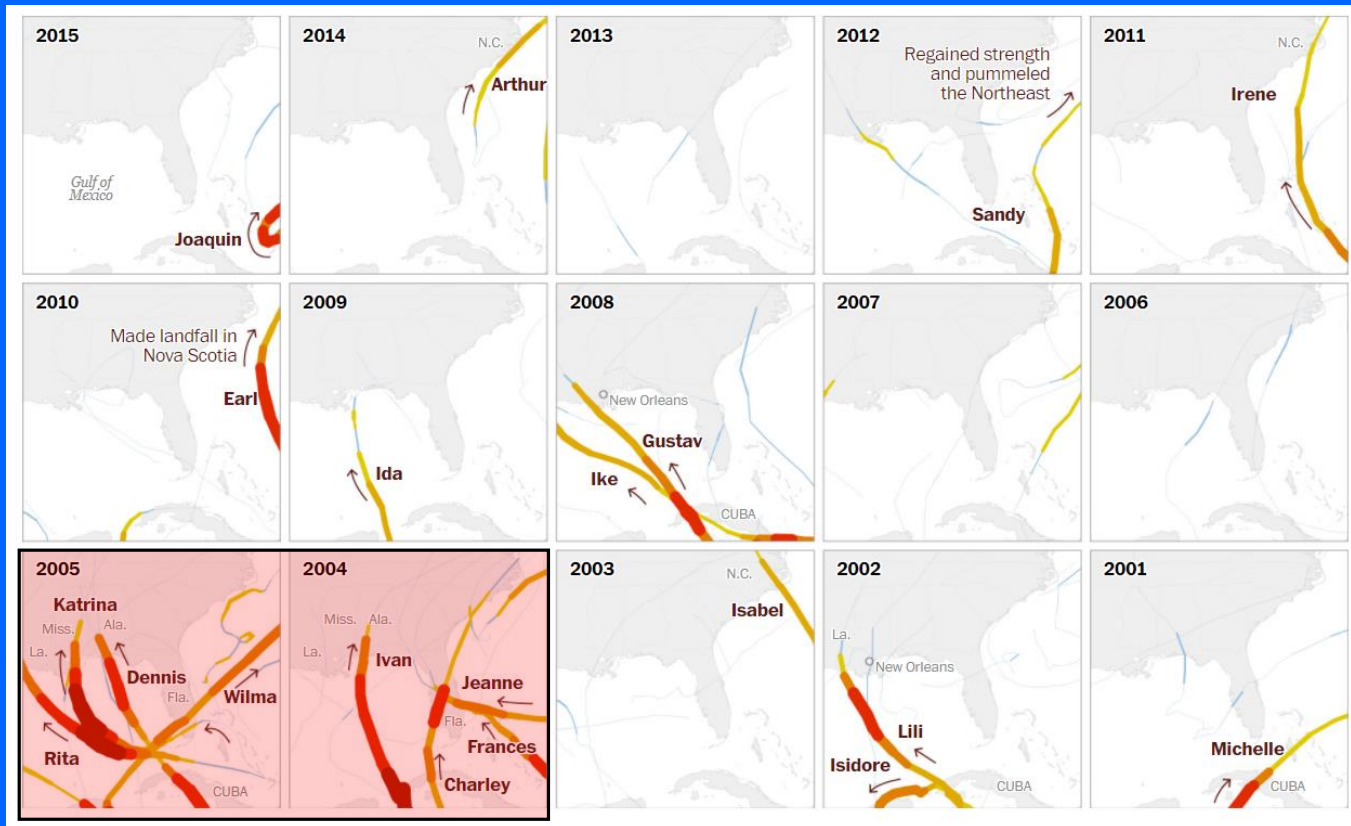


Dec 2017 – Jan 2018, most of the last available oceanfront lands between Indialantic and Satellite Beach have multi-story condos in construction.



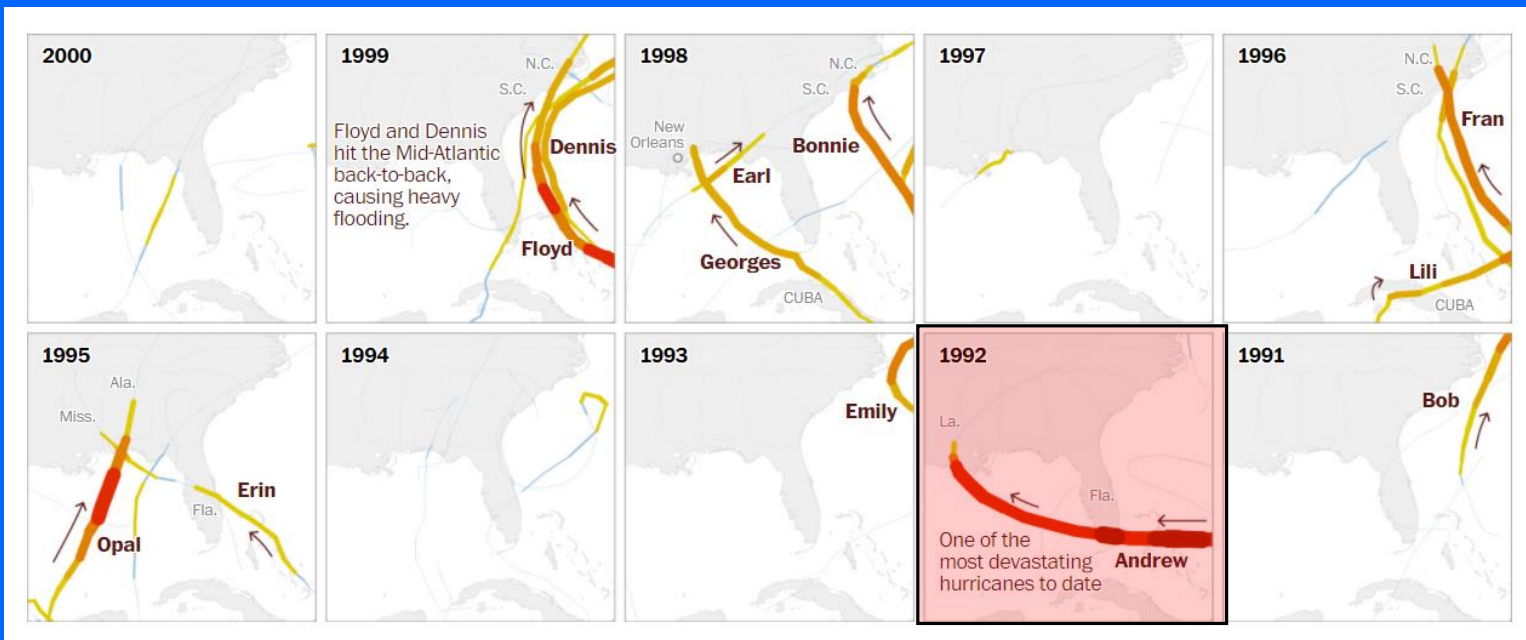
Tracks of 27 of the 29 major hurricanes that have been observed in the Atlantic since Hurricane Wilma. Gaston and Matthew from 2016 are not shown.

McNoldy, 2016, Principia Scientific



2016 - Hurricane Matthew, Cat 3 2017 – Hurricane Irma, Cat 3

(Gamio, Wash. Post, 2016)



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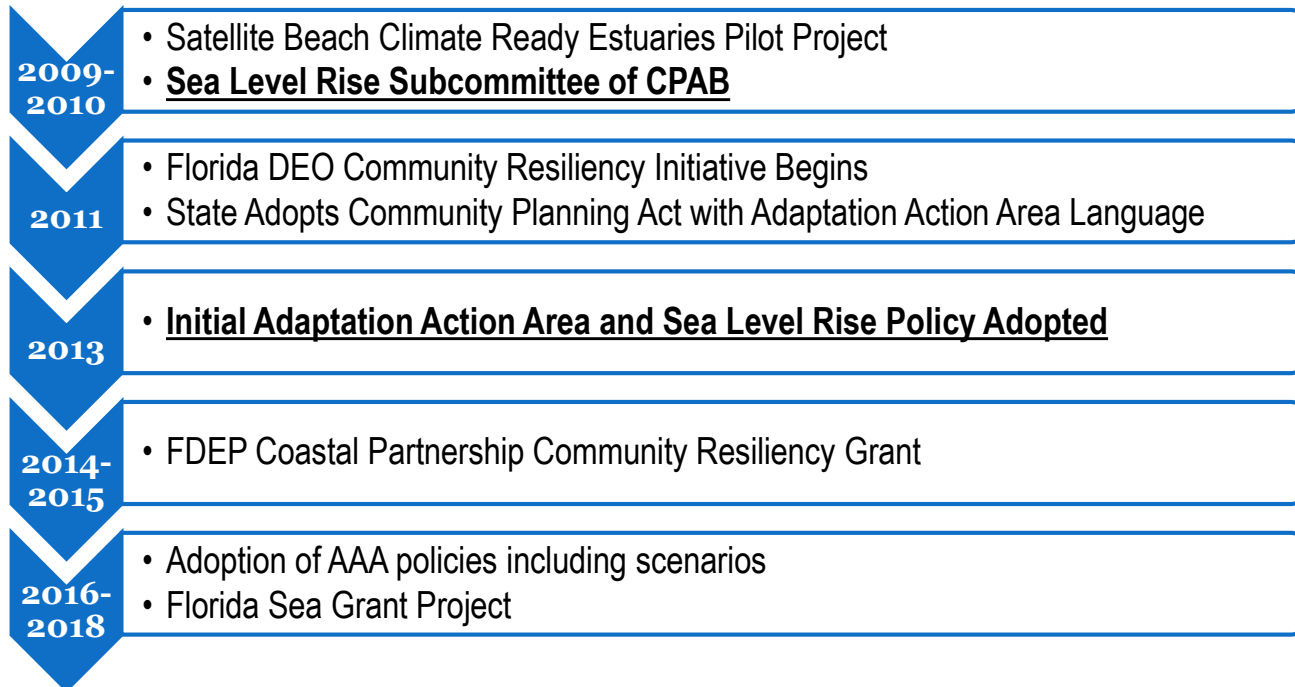
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Resource overview

Satellite Beach Actions Involving Adaptation/Resilience

From T. McCue, next presentation

Underline = focus of this talk



Citizen Land Use Board and Sea Level Discussions, Satellite Beach, 2009-1013

(Until Jan 2017, land use issues within the Comprehensive Plan were managed by a citizen advisory board, the **CPAB: Comprehensive Planning Advisory Board**.)

- 2009 grant from the EPA Climate Ready Estuary Program through IRL NEP to City with Dr. R. Parkinson, Space Coast Climate Change Initiative, & T. McCue, ECFPRC.
- 2009: The CPAB created an internal Sea Level Rise Subcommittee.
- SLR Subcommittee met approx. six times from late 2009 through 2010. Input to CPAB in mid-late 2010 included extensive editing of comp plan language.
- Between 2009-13, the CPAB met approx. 19 times, with approx. 12 votes involving the Coastal Element of the city's Comprehensive Land Use Plan.

Adaptation Action Areas through 2013 adoption of Comp Plan language

- AAAs are present in minutes from Jan 2012 CPAB mtg on multiple Comp Plan revisions, incl 9-1 vote for document that included AAA language.
- Feb 2012, CPAB Mtg : voted 8-0 to send to Council. No City Council action.
- Jan 2013, CPAB Mtg: With a new council in place and working with John Fergus and others, I proposed final AAA text as part of amendments to the comp plan.
- Mar. 2013: The new Council approved the language and sent to DEO, who processed in 2-3 months
- **AAAs with DEP review adopted in amended Coastal Element of the City Comprehensive Plan by the City Council by 4-1 votes: Aug 7, 2013.**

Satellite Beach Comprehensive Plan: Primary AAA language

Coastal Mgmt/Conservation: Policy 1.12A.1

The City of Satellite Beach designates the Coastal High Hazard Area as “the area defined by the SLOSH model to be inundated from a Category 1 Hurricane”.

Coastal Mgmt/Conservation: Policy 1.12A.2

The City of Satellite Beach designates the Adaptation Action Area (AAA) as that area which includes the CHHA and other areas of the City as may be identified by the City Council in the future as being subject to coastal erosion, flooding, sea level rise, or damage to environmental systems.

Satellite Beach Comprehensive Plan: Primary AAA language (cont.)

Coastal Mgmt/Conservation: Policy 1.4A.1

The City shall initiate a public process to identify Adaptation Action Areas (AAAs) in accordance with Sections 163.3164(1) and 163.3177(6)(g)10 Florida Statutes. *The purpose of the AAAs is to increase grant and other funding opportunities and identify creative solutions to achieve the following goals:*

- *Protect the health, safety and welfare of residents,*
- *Prevent damage to public and private property, and*
- *Reduce National Flood Insurance Program premiums to property owners.*

Information for Citizens

Information on AAAs

FL State Dept. of Economic Opportunity
www.floridajobs.org/community-planning-and-development/programs/technical-assistance/community-resiliency/adaptation-planning

Adaptation Resources include

Climate Adaptation Knowledge Exchange: <http://www.cakex.org/>

Georgetown Adaptation Clearinghouse:
<http://www.georgetownclimate.org/adaptation/clearinghouse>

Virtual Climate Adaptation Library: <http://research.fit.edu/sealevelriselibrary/>

NOAA's Digital Coast: <http://www.csc.noaa.gov/digitalcoast/>

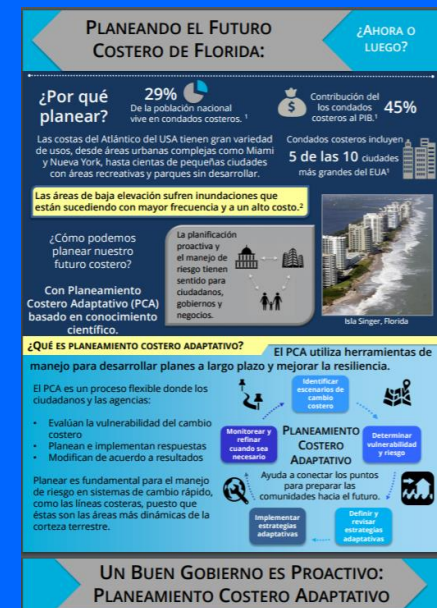
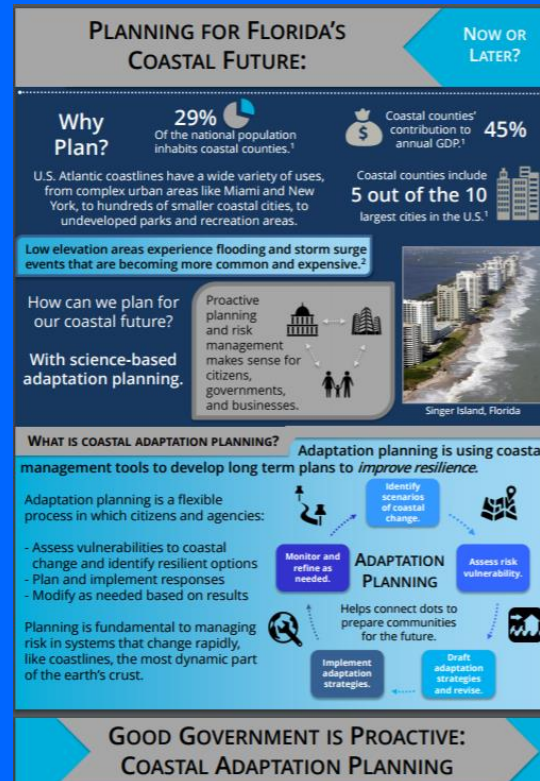
SE Florida Regional Climate Compact: <http://southeastfloridacclimatecompact.org/>

Climate Science includes (much is for non-scientists)

NASA Climate: <http://climate.nasa.gov/>

American Geophysical Union:
http://www.agu.org/sci_pol/pdf/position_statements/AGU_Climate_Statement_new.pdf

Skeptical Science: <http://www.skepticalscience.com/>



Continuing CPAB and AAA activities after 2013 include

Nov. 2015: Community Resiliency Comp Plan Amendments

Jan 2016: Community Resiliency Comp Plan Amendments

The separate Metroquest Project described by Tara in the next presentation, coupled with discussion in the above CPAB meetings, identified two fundamental categories of AAAs: a) Inland Flooding, and b) Erosional.

Work to further develop city AAA applications is covered by subsequent talks.

May 2017: CPAB merged with old Planning and Zoning Board to create one new Planning Advisory Board. Comp Plan issues are now handled by the PAB.

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Resource overview

Land Use and Other Citizen Boards: Climate Resilience Needs

- Committed Council majority is essential (no movement w/o)
- Committed staff are essential
- Committed citizens are essential (15 citizens on CPAB, 2009-13)
- Start-up & follow-up grants with partners: extremely valuable...
- Political timing is critical... many examples, even in small towns
- New emergence events can occur, e.g., City Sustainability Brd
- The new Sust. Brd then produced the region's first sustainability plan for a barrier island city.

Coastal Construction Control Line (CCCL)

There are still germane issues from a comprehensive CCCL review (Ruppert (2008) that have not been addressed. Examples include:

- The CCCL and its regulations *do not take sea level rise into account.*
- Requiring easements when permitting seawalls is not routine. This tool ensures the public will have later access across permitted seawalls where the public has established an easement by custom to use the beach.
- Other issues as detailed in the summary of Ruppert (2008)

Ruppert, T.K., 2008. Eroding long-term prospects for Florida's beaches: Florida's coastal construction control line program. Sea Grant L. & Policy J., 1, p.65.

Many resources available to aid local government climate adaptation and resilience planning

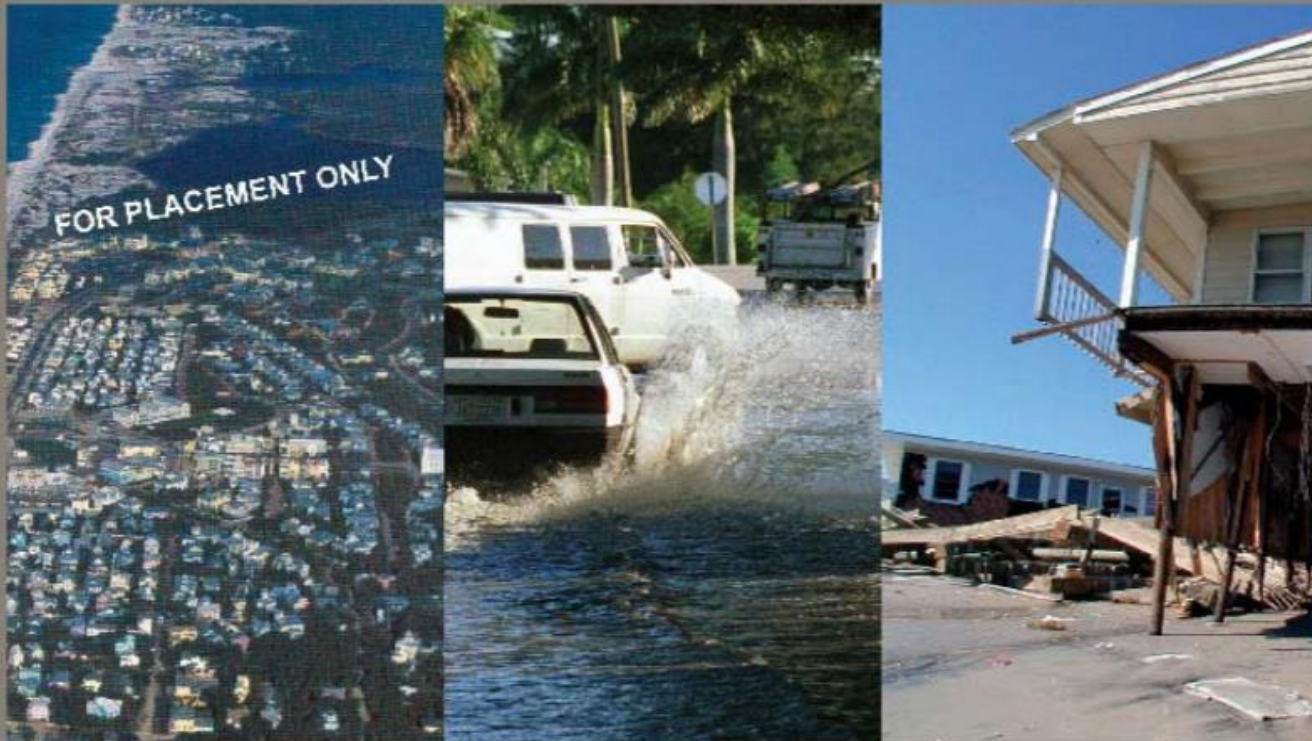


Resources include

- South Florida Climate Change Compact
- Local Governments for Sustainability (ICLEI)
- 100 Resilient Cities
- NOAA Digital Coasts
- APA and FL state chapter
- Environ. Land Use & Law Section, Fl. Bar
- Regional Planning Councils
- National Estuary Program Offices
- Water Management Districts
- DEP: DEO and others
- Leagues of Cities – *per county*
- The Counties and Cities themselves
- The nonprofits (e.g. Climate Central, Surging Seas)
- Multiple sectors of the Business Community
- Climate Adaptation Knowledge Exchange
- Adaptation Clearinghouse, Georgetown
- Virtual Climate Adaptation Library, F.I.T.
- Natural Capital Project
- And multiple other resources

PROTECTING FLORIDA'S COMMUNITIES

Land Use Planning Strategies and Best Development Practices
for Minimizing Vulnerability to Flooding and Coastal Storms



FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS
DIVISION OF COMMUNITY PLANNING and DIVISION OF EMERGENCY MANAGEMENT

DCA,
2005

Florida Department of Community Affairs

Thaddeus L. Cohen, AIA, Secretary

Valerie J. Hubbard, AICP, Director
Division of Community Planning

Craig Fugate, Director
Division of Emergency Management

*The Florida Department of Community Affairs wishes
to express its appreciation to the following individuals:*

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*The Florida Department of Community Affairs also
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John L. Knott, Jr., President, The Noisette Company,
LLC, Panel Chair

James Durrett, Executive Director, ULI Atlanta,
Panel Member

Diana Gonzalez, DMG Consulting Services, Inc.,
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David Tillis, Vice President, The St. Joe Company,
Panel Member

Megan Welsch, Associate, ULI Advisory Services,
Project Director

*The document produced by ULI as a part of its review of this
guidebook is titled "Florida Department of Community Affairs,
Review of Best Practices Guidelines," June 23-25, 2003.*

*This guidebook is available on the Florida Department of
Community Affairs website: [www.dca.state.fl.us/fdcp/DCP/
publications/index.htm](http://www.dca.state.fl.us/fdcp/DCP/publications/index.htm).*

*For additional copies of this guidebook, please contact:
Division of Community Planning, Publications, Florida
Department of Community Affairs, 2555 Shumard Oak
Boulevard, Tallahassee, Florida 32399-2100, (850)487-4545.*

*A publication of the Florida Department of Community
Affairs prepared by the URS Corporation and the Florida
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Management Agency Hazard Mitigation Grant Program,
and the State of Florida Residential Construction Mitigation
Program (authorized under Section 215.559 Florida
Statutes).*

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210 pp.
Sect. 2.4
Many
other
valuable
sections

Florida Tech Virtual Climate Adaptation Library (just search *sealevelriselibrary*)

Over 170 reports on climate adaptation & resilience just for Florida – by region

Florida Institute of Technology
High Tech with a Human Touch™
Virtual Climate Adaptation Library

Archives: **US: Florida** US: East Coast US: Gulf Coast US: West Coast & Hawai'i US: National Canada & Arctic Latin America & Caribbean Europe Africa Middle East Asia & India
Australia & New Zealand Pacific Islands Global Climate Communications

Coastal Climate Change: Adaptation and Resilience

Searchable archives on local through international coastal climate planning:

- Over 2700 reports, articles, and guidance documents in 15 directories with >90 global subdirectories, above.
- Coastal planning guidelines in >10 languages can be downloaded. Quality documents from journal or grey literature sources are welcome in any language (see below).
- The *Climate Communications* directory has >100 reports on ready-to-go messaging and underlying socio-behavioral components.
- The Virtual Climate Adaptation Library is an unfunded service of the students and faculty of the F.I.T. Sustainability Program.

English and Spanish infographic summaries of coastal adaptation alternatives in Florida are now available. These four-page infographic documents can be used for multiple adaptation and education purposes.

The NOAA Climate Program Office and the Rutgers Sea Level and Climate Program supported this work.

Other Adaptation Planning Resources - U.S. and Global

Wide arrays of related resources are also available at the [Climate Adaptation Knowledge Exchange](#), [Ecosystem-based Management Tools Network](#), [Climate Central](#), [Georgetown's Adaptation Clearinghouse](#), [Climate.gov](#), [NOAA's Digital Coast](#), [Storm Smart Coasts](#), and other sources.

Submissions and Additional Information

We thank many colleagues who have contributed files from diverse regions since 2009. If you have documents on coastal climate adaptation and resilience to contribute, please forward to slrlibrary@fit.edu. Use of copyrighted material is restricted to nonprofit educational purposes only and is not intended for commercial use. The Virtual Climate Adaptation Library is an unfunded service of the students and faculty of the F.I.T. Sustainability Program. Please address any questions to slrlibrary@fit.edu.

Of Note:

- [National](#)
- [Adaptation Tool](#)
- [Coastal Land Use](#)
- [Protecting](#)

RSS Feeds

Scientific American

- Sea Level Rise Is S
- Southeastern U.S.
- Court Scuttles Rule
- Gas
- Federal Climate Re
- Administration Sta

Logos: Sea Grant Florida, National Marine Science Museum, StrongerSafer Florida, NOAA, MOTE Marine Laboratory, Sea Turtle Conservancy, Rutgers, MRG, SCCC, CleanEnergy.org, and others.

Thank you:

All CPAB members.

City of Satellite Beach staff, including C. Barker, M. Crotty, L. Olexa, J. Finch, and others.

Dr. John Fergus has been on this before, during, and after.

The elected officials we worked with in and outside of SB.

Dr. R. Parkinson, T. McCue, T. Ruppert and other technical experts.

A. Otto, Z. Eichholz, A. Miller, and other Florida Tech students.



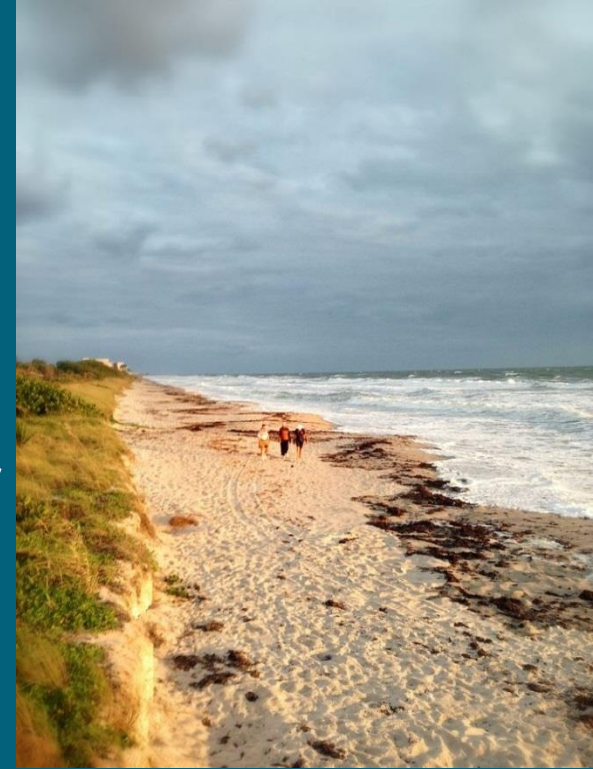
lindeman@fit.edu

www.fit.edu/sustainability

Community Based Planning for Coastal Resiliency

Tara McCue, AICP
Director of Planning and Community Development
East Central Florida Regional Planning Council

City of Satellite Beach *Community Based Planning for Coastal Resiliency*



1000 Friends of Florida
January 24, 2018

Tara McCue, AICP
Director of Planning and Community Development
East Central Florida Regional Planning Council



The Long Road of Resiliency

2009-
2010

- Satellite Beach Climate Ready Estuaries Pilot Project
- Sea Level Rise Subcommittee of CPAB

2011

- Florida DEO Community Resiliency Initiative Begins
- State Adopts Community Planning Act with Adaptation Action Area Language

2013

- Initial Adaptation Action Area and Sea Level Rise Policy Adopted

2014 -
2015

- FDEP Coastal Partnership Community Resiliency Grant

2016-
2018

- Adoption of AAA policies including scenario
- Sea Grant Project



Creating a Resilient Community Project Overview

- Florida Department of Protection Grant Program – Coastal Partnership Initiative



- Project Goals

- Identify “*other areas of the City*” and/or criteria for Adaptation Action Areas as per Comprehensive Plan.
- Set the foundation to bring in Adaptation Action Areas to the community and the City Council as a tool for improving community resilience.
- Engage the public to help develop strategies and priorities for the City to implement and address.



- **PROJECT LEAD TEAM**

- City of Satellite Beach
- East Central Florida Regional Planning Council
- Brevard County
- Florida Institute of Technology
- Florida Department of Economic Opportunity
- UF – Florida Sea Grant

- **TECHNICAL ADVISORY TEAM**

- City of Satellite Beach
- East Central Florida Regional Planning Council
- Brevard County
- Volusia County
- Florida Institute of Technology
- Florida Department of Economic Opportunity
- UF – Florida Sea Grant and GeoPlan
- Space Coast TPO
- River to Sea TPO
- FDOT
- NOAA – Melbourne Office
- Environmental Remediation
- USACE
- Coastal Tech

First Public Workshop

- September 23, 2014
- Over 60 attendees
- Speakers from Florida Sea Grant, City of Ft. Lauderdale, City Emergency Management Director
- Public Engagement Activities and Discussion



- Public input on vulnerability concerns, strategies and opportunities
 - “When you think about the environmental, social and economic aspects of the City, what are the biggest **opportunities** over the next 50 years?”
 - “When you think about the environmental, social and economic aspects of the City, what are the biggest **challenges** over the next 50 years?”
 - “What **approaches** would you like the City to take to address the opportunities and challenges identified in the previous questions?”
- Map exercise:
 - Vulnerable Areas Vs Valued Areas





Results of Public Workshop

- Opportunities:

- Do Nothing at all
- Clean up the Lagoon
- Move utilities underground/lighting
- Grow tax base away from high hazard areas
- Better Beach Restoration Plan
- Go green

- Issues:

- Implementing efficient zoning ordinances
- Cost of living in the City
- Revenue generation
- Belief in Scientific Hoaxes

- Strategies:

- Underground utilities
- Address needs of seniors
- Maintain healthy beach and dune system
- Solar energy
- Get tax base into lower risk areas
- Create more access to the river
- Encourage renewable energy
- Wider pipes



Public Input Survey



MetroQuest
Engagement Made Easy



Creating a Resilient Community

? Progress

✓ Welcome Creating a Resilient Community

WELCOME

As a coastal city, Satellite Beach is vulnerable to various natural hazards. Residents, business owners, and the City need to work together to turn challenges into opportunities for a thriving and resilient future for our City.

➔ Click here to begin

Creating a Resilient Community

Resiliency is the ability of a community to adapt and prepare to withstand and recover from damaging events (e.g., hurricanes) and processes (e.g., coastal erosion), and preserve desirable natural, social and economic features of the community.



2 VULNERABILITIES

3 STRATEGIES

4 CITY OPPORTUNITIES

5 STAY INVOLVED



help

The City of Satellite Beach strives to ensure all its services and activities are accessible to individuals with disabilities. If you need assistance in navigating and/or completing the City's Creating a Resilient Community survey, please contact City Hall at (321) 773-4407.



Progress

Which Vulnerabilities are of Most Concern to You?

WELCOME VULNERABILITIES STRATEGIES CITY OPPORTUNITIES STAY INVOLVED

Drag to order up to 3 vulnerabilities above this line.

- Sea Level Rise
- Flooding
- None
- Coastal Erosion
- Storm Surge
- Loss of Utilities/Power

Loss of utilities/power



Source: Satellite Beach

Satellite Beach FPL Substation

Comment

Suggest Another Vulnerability

Next

help

Progress

Strategies What strategies will best help us address our vulnerabilities?

WELCOME VULNERABILITIES STRATEGIES CITY OPPORTUNITIES STAY INVOLVED

INTRODUCTION

Coastal Erosion

Storm Surge

Loss of Utilities/Power

Storm Surge
Ocean or River Flooding

Flood Insurance
City takes action to reduce property owners' premiums for the National Flood Insurance Program.

Raise Elevations
Encourage higher minimum elevations for buildings and infrastructure, where feasible.

Redirect Development - Surge
Implement policies to direct development away from high-risk areas.

Increase Shoreline Setback
Increase construction setbacks from the shoreline.

No Action - Storm Surge
Property owners should make these decisions on their own without depending on government assistance or policy support.

Comment

Suggest another strategy

Next

Progress


Prioritize Your Opportunities for the City

WELCOME VULNERABILITIES STRATEGIES CITY OPPORTUNITIES STAY INVOLVED

Drag to order up to 5 opportunities above this line.

- Vibrant Business Community
- Do Nothing
- Preserve Neighborhoods
- Eco-Friendly
- Improve A1A
- Restore Lagoon
- Increase River Access
- Beach Preservation

Sustainable and Environmentally Sensitive



Rooftop Solar - Source: Satellite Beach

Introduce Green Practices

Comment

Suggest Another Opportunity

help



- 479 validated City respondents
- 3 months of input
- Events/Community Center





Top 2 strategies with the most support for each Vulnerability

1 - Loss of Power/Utilities:

- 1) Work with utility companies to determine the feasibility of moving pole-mounted utilities underground.
 - 2) Move critical utilities (electric trunk line and substation, sewer force main, etc.) to higher ground west of A1A
-

2 - Coastal Erosion:

- 1) Plant native coastal vegetation such as sea oats
 - 2) Implement policies to direct development away from high-risk areas
-

3 - Storm Surge:

- 1) Increase construction setbacks from the shoreline
- 2) Implement policies to direct development away from high-risk areas.



4 - Flooding:

- 1) Install larger drainage pipes and structures as the system undergoes maintenance and repair.
 - 2) This strategy would recognize periodic flood may block access to the roadway, but the roadway would be built to withstand the prolonged exposure to water.
-

5 - Sea Level Rise:

- 1) Identify areas subject to hazards of sea level rise that would benefit from long term strategies
 - 2) Consider sea level rise projections in policies regarding infrastructure, zoning and construction standards
-

6 - None:

- 1) Plan for only storms (rainfall and hurricanes) and coastal erosion without considering climate change or sea level rise
- 2) None of this is necessary and we should stop all efforts towards planning for a climate resilient community



SEA LEVEL SCENARIO SKETCH PLANNING TOOL

USACE Low, Intermediate and High Projection Rate Curves
Planning Horizon: 2040, 2070, 2100



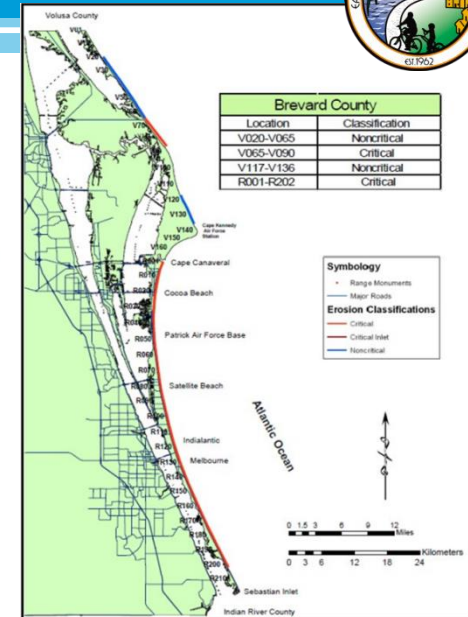
Vulnerability Assessment

Impacts of

- Sea Level Rise
- Storm Surge
- Flood (FEMA Flood Plain)
- Coastal Erosion

On:

- Financial Exposure
- Land Use and Building Exposure
- Critical Facility Exposure
- Environmental/Ecological Exposure





Low USACE Projection Rate Curve

- 2040:
 - **9-36** inch inundation using MHHW (Atlantic),
- 2070:
 - **12-39** inch inundation using MHHW (Atlantic),
- 2100:
 - **14-41** inch inundation using MHHW (Atlantic),





Intermediate USACE Projection Rate Curve 2040

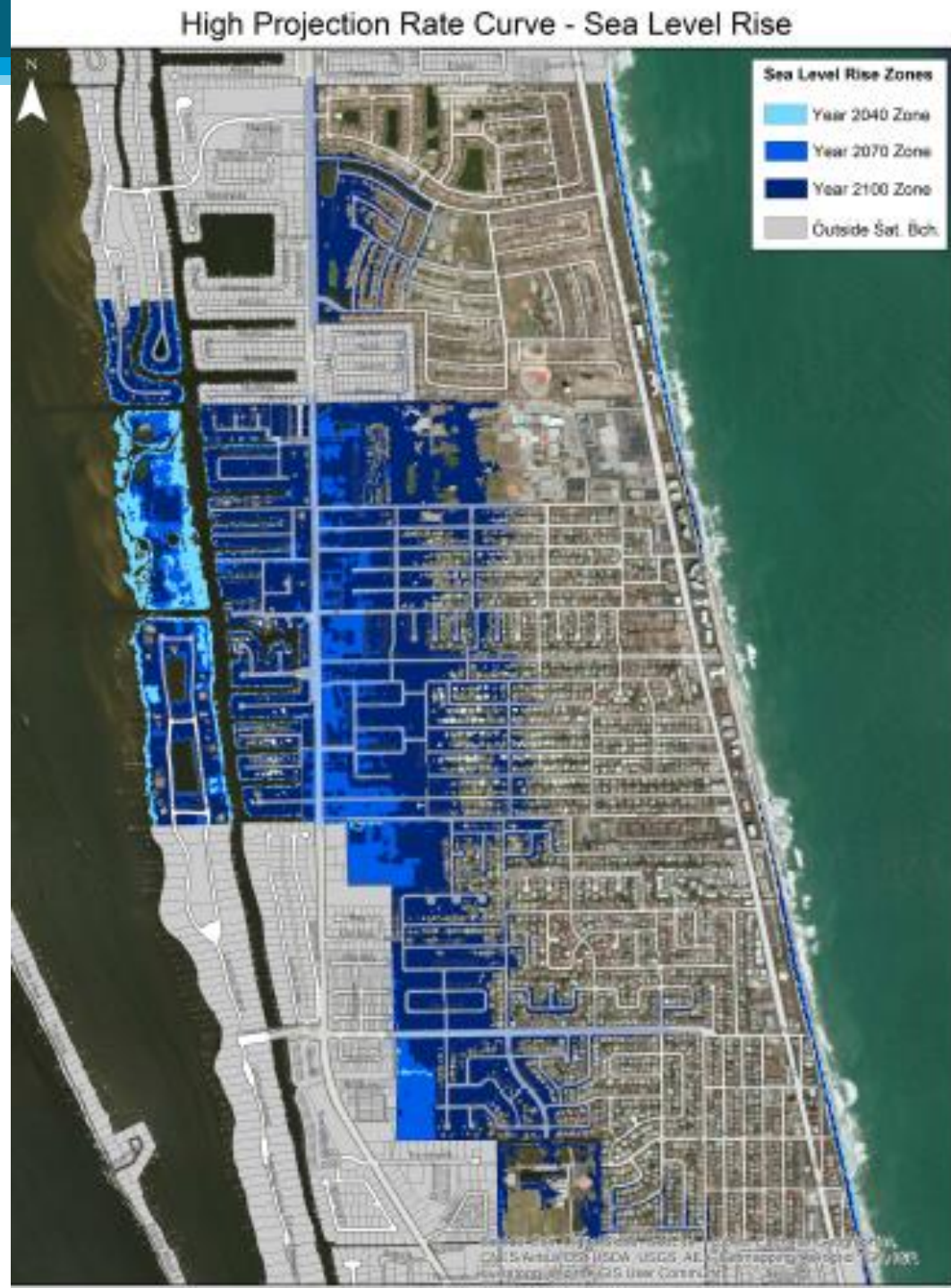
- 2040:
 - **11-38** inch inundation using MHHW (Atlantic),
- 2070:
 - **18-45** inch inundation using MHHW (Atlantic),
- 2100:
 - **27-54** inch inundation using MHHW (Atlantic),





High USACE Projection Rate Curve 2040

- 2040:
 - **19-46** inch inundation using MHHW (Atlantic),
- 2070:
 - **39-66** inch inundation using MHHW (Atlantic),
- 2100:
 - **66-93** inch inundation using MHHW (Atlantic),



Adaptation Action Area Policies

- Proposed AAA Policies for consideration by the City to move through the public vetting and adoption process
- Policies proposed 2 AAA areas
 - Inland Flooding
 - Erosion
- Areas of Focus
 - Location description
 - How it functions and what its purpose is
 - Review of new data/updates
 - Way out
 - Works to establish process of determining extent of benefits



Resiliency Strategies

- Based upon public input and comments
- Continuation of public input
- Implementation



Open House

- June 9, 2015
- Over 40 attendees
- Breakout Areas for each vulnerability
- Islamorada Team
- Brevard County – Coastal Initiatives





From the Bottom Up: Implementing Resiliency at the Local Government Level 2016-2018

- Grant from Sea Grant (Stetson University, Florida Sea Grant, ECFRPC, UF GeoPlan and Deady Law) to conduct detailed flood risk modeling of infrastructure, and consider additional policy and strategy development, and public outreach/ education.



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Director of Planning and Community Development
East Central Florida Regional Planning Council

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Working with Local Governments on Resilience and Sea-Level Rise: Satellite Beach

Thomas Ruppert, Coastal Planning Specialist
Florida Sea Grant



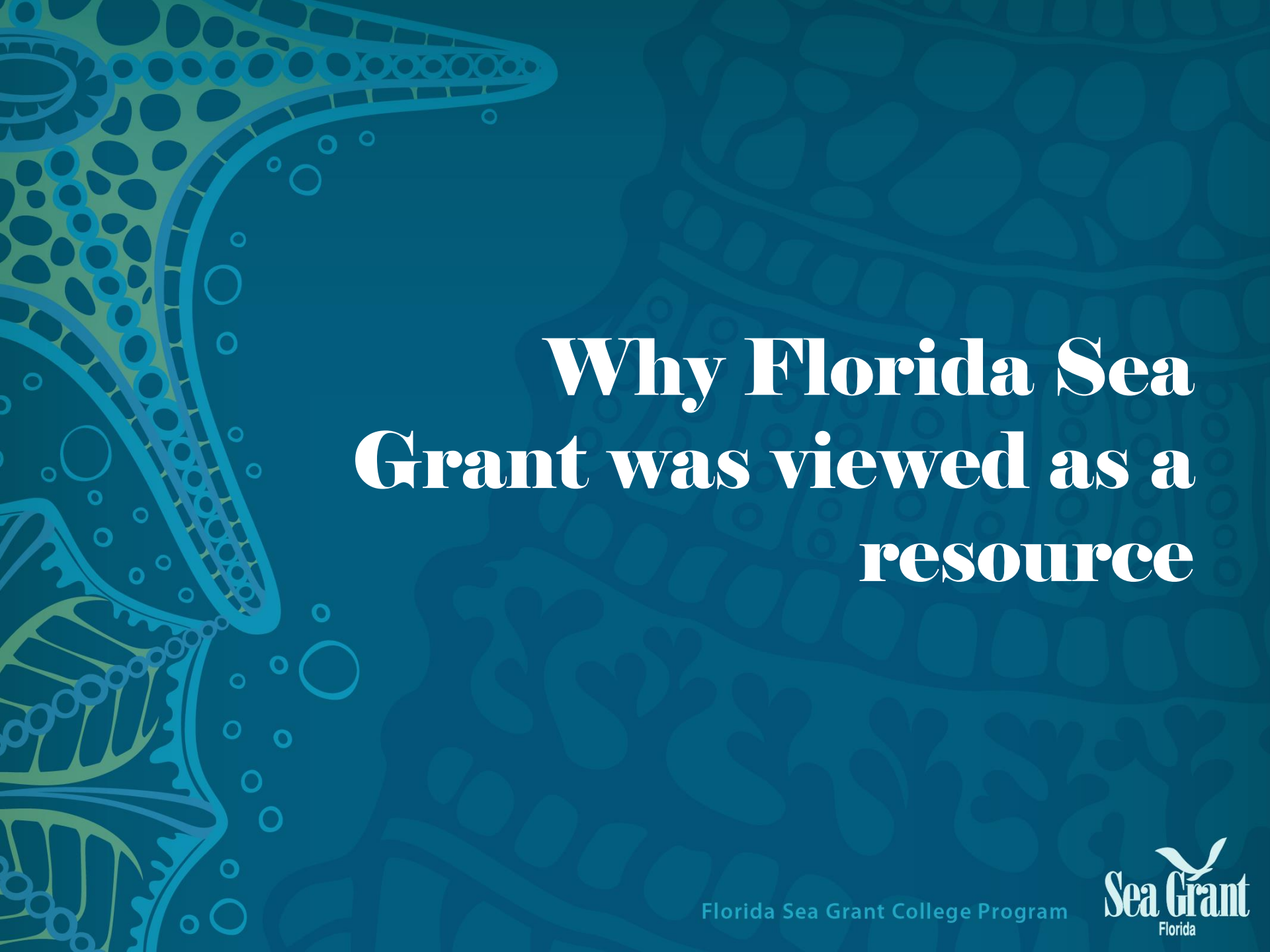
Working with Local Governments on Resilience and Sea-Level Rise: Satellite Beach

Thomas Ruppert
Coastal Planning
Specialist



Overview

- Background
 - Why Florida Sea Grant was seen as a resource
- How Florida Sea Grant has been involved
 - Outlining legal issues and liability
 - Sharing approaches of other communities
 - Assisting in policy innovation & development
- Lessons learned



Why Florida Sea Grant was viewed as a resource

Eroding Long-Term Prospects for Florida's Beaches: Florida's Coastal Management Policy

By:

Thomas K. Ruppert, Asst. in Env't'l Law, University of Florida Institute
for Food and Agricultural Sciences

and

Levin College of Law Conservation Clinic
Thomas Ankersen, Legal Skills Professor, Director, Levin College of Law Conservation Clinic

Christine Covington, J.D. Candidate, UF College of Law
Ryan Feinberg, J.D., UF College of Law
Yee Huang, J.D., UF College of Law
Michael McDonnell, J.D., UF College of Law
Andrew Miller, J.D., UF College of Law

August 19, 2008

Full report and
appendices
available at
<https://www.law.ufl.edu/academics/dynamic-habitat-accommodation-the-policy-framework-for-migrating-shorelines>



Legal & Policy Products

Use of Future Interests in Land as a Sea-Level Rise Adaptation Strategy in Florida

This three-page document examines the prospects of using future interests in land for adaptation purposes in Florida. James Titus of the U.S. EPA has advocated for rolling easements for years, and his 2011 primer on the topic extensively discusses the rolling easement concept. Specifics in Florida law suggest that there may be more flexible options than

Environmentally Compromised Road Segments—A Model Ordinance

The legal case of *Jordan v. St. Johns County*, Case No. CA05-694 (Fla. 7th Jud. Cir. May 21, 2009), *aff'd in part, rev'd in part* by *Jordan v. St. Johns County*, 63 So. 3d 835, 837 (Fla. 2011), brought into stark relief for local governments in Florida the physical, legal, and financial dangers of coastal hazards. The model ordinance presented here developed from a concern about how erosion, and other coastal hazards being exacerbated by sea-level rise, could impact local governments. The ordinance seeks to provide a framework for local governments to protect property rights and access to coastal resources may counsel local governments to consider

Reasonable Investment-Backed Expectations: Should Notice of Rising Seas Lead to Falling Expectations for Coastal Property Purchaser?

This article, published in Volume 26 of the *Journal of Land Use & Environmental Law*, delves into the concept of “reasonable, investment-backed expectations in federal takings law. This leads into analysis of the importance of “notice” in evaluation of reasonable, investment-backed expectations. The importance of notice—and issues of fairness and personal responsibility—coalesce to support the idea that local governments could institute notice or disclosure ordinances for coastal hazards. The article cites to examples of disclosure or notice in other contexts and makes recommendations for drafting of a local notice ordinance.

Legal & Policy Products

Find
out
more

CONFUSED
ABOUT FLOOD
INSURANCE?

[About Flood Insurance](#)

Questions and Answers About Flood Insurance

Not sure where to start with purchasing flood insurance for your home? This new frequently asked questions guides answers any questions you might have about the National Flood Insurance Program in an easy-to-read format. Visit the following link to learn more: [Questions and Answers](#)

Example Sea–Level Rise Language & Case Studies

Adaptation to sea-level rise (SLR) typically begins with a vulnerability assessment, progresses to policy development, and finally moves into implementation. While many communities in the United States and around the world have begun or completed vulnerability analysis, far fewer have developed SLR policies and even fewer have reached the stage of implementing SLR policies. This section, which is currently under development and being further populated as time permits, provides resources and links for examples of SLR policy development and implementation.

Coastal Planning & Policy Tools

[Home](#) / [Climate Change](#) / [Coastal Planning & Policy Tools](#)



The Florida Sea Grant Coastal Planning Program supports Florida Sea Grant's mission of using academic research, education and extension to foster a sustainable coastal economy and environment.

The Coastal Planning Program assists and provides resources for local governments addressing coastal hazards through their planning process, including land use planning, hazard mitigation planning, and emergency planning.

Florida's coastlines define Florida for many residents and visitors. Even as Florida's coastal areas offer great beauty and diverse natural habitats, they also present many potential hazards to human development and communities.

This website provides information and resources on coastal hazards for the local government attorneys, land use planners, and coastal managers that address these hazards in their work. The focus here is on sea-level rise and adaptation with additional information on the related hazards of storms and storm surge, coastal flooding, and erosion. Florida Sea Grant is building a cache of resources for local

governments that incorporates both original research and links to resources from other organizations and researchers.

NEW: Florida Trend Report: Reality, Risk and Rising Seas

Florida Sea Grant is at the leading edge of actionable research to improve the



Develop
website
for
products

Response: Professional Dev.

Workshops

SEA-LEVEL RISE AND FLOODING: PLANNING & LAW FOR LOCAL GOVERNMENTS



Professional Credits

Registration includes professional credits:

- 5 CMs for AICP planners (estimated)
- 5.5 CECs for Floodplain Managers
- 7 CLEs for attorneys
- 0.7 CEUs (7 PDH credits) for engineers (estimated)



How Florida Sea Grant has been involved

Florida Sea Grant College Program



Adaptation Action Areas

- New, permissive legislation in 2011
- Work with partners
 - Satellite Beach (CPAB, Lindeman, Fergus, etc.)
 - ECFPRC
- Review and provide input
 - Encourage focus on flood insurance and long-term financial viability

Satellite Beach

Objective 1.4A The City shall strive to reduce the exposure of human life and public and private property to natural hazards **while reducing the cost of flood insurance.**

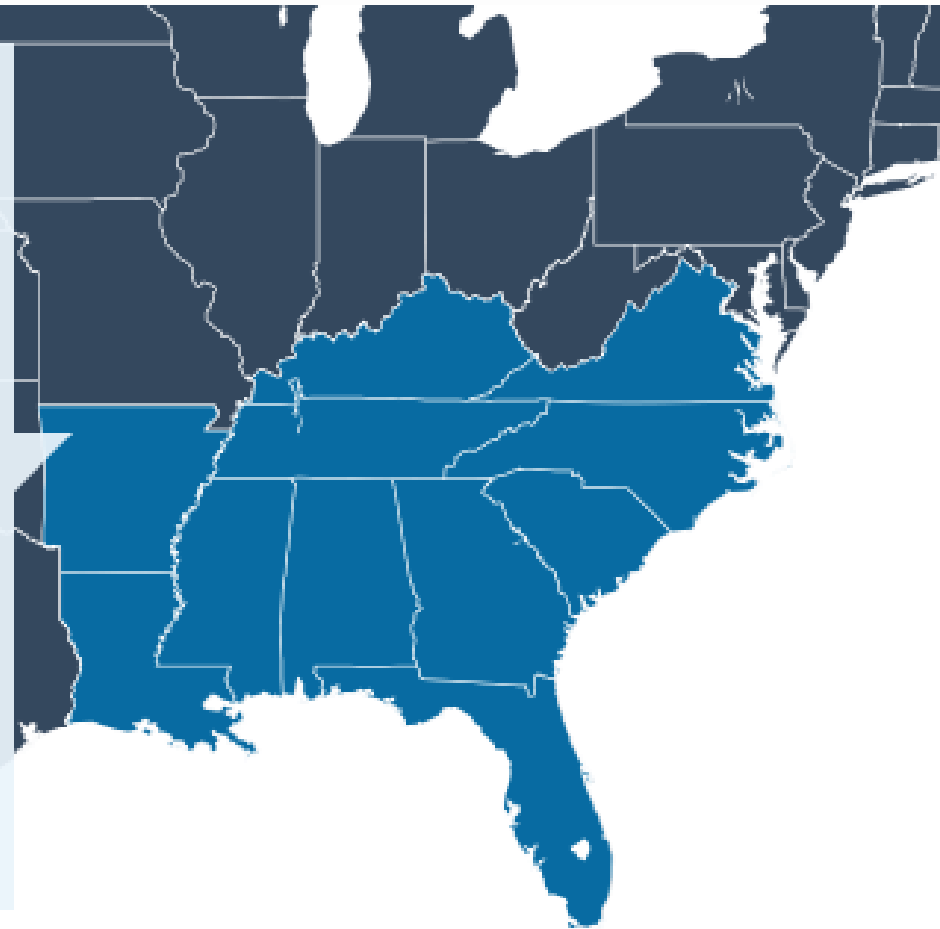
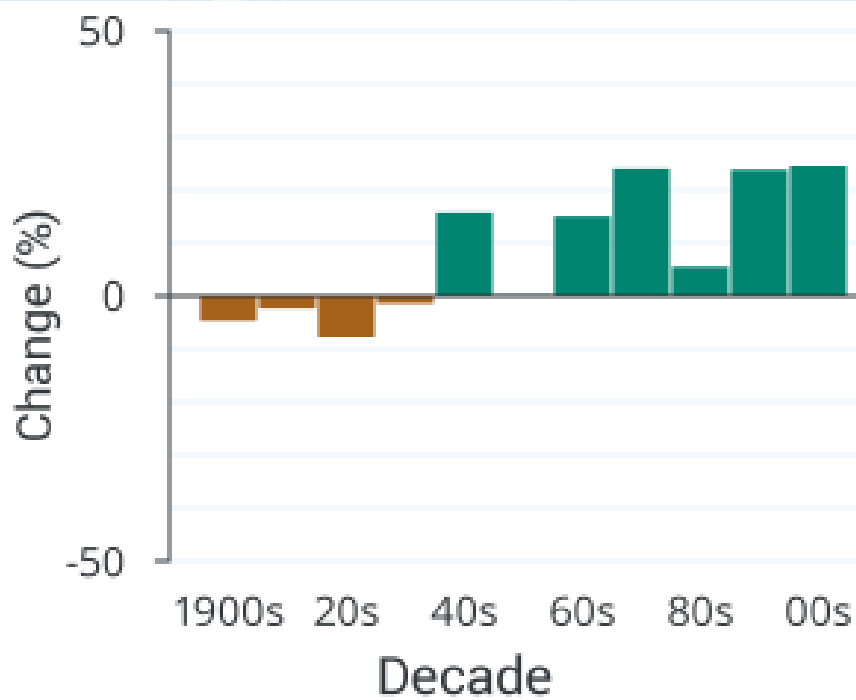
Policy 1.4A.1 - **The City shall initiate a public process to identify Adaptation Action Areas (AAAs) in accordance with Sections 163.3164(1) and 163.3177(6)(g)10 Florida Statutes.** The purpose of the AAAs is to increase grant and other funding opportunities and identify creative solutions to achieve the following goals: •
Protect the health, safety and welfare of residents, •
Prevent damage to public and private property, and •
Reduce National Flood Insurance Program premiums to property owners.



Sept. 23,
2014

Increasing heavy rainfall events

Southeast





NOAA

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

UNITED STATES DEPARTMENT OF COMMERCE



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NOAA: 'Nuisance flooding' an increasing problem as coastal sea levels rise

Study looks at more than 60 years of coastal water level and local elevation data changes

July 28, 2014

Eight of the top 10 U.S. cities that have seen an increase in so-called "nuisance flooding"--which causes such public inconveniences as frequent road closures, overwhelmed storm drains and compromised infrastructure--are on the East Coast, according to a new NOAA technical report.

This nuisance flooding, caused by rising sea levels, has increased on all three U.S. coasts, between 300 and 925 percent since the 1960s.

The report, [Sea Level Rise and Nuisance Flood Frequency Changes around the United States](#), also finds Annapolis and Baltimore, Maryland, lead the list with an increase in number of flood days of more than 920 percent since 1960. Port Isabel, Texas, along the Gulf coast, showed an increase of 547 percent, and nuisance flood days in San Francisco, California increased 364 percent.



Annapolis, Maryland, pictured here in 2012, saw the greatest increase in nuisance flooding in a recent NOAA study. (Credit: With permission from Amy McGovern.)

"Achieving resilience requires understanding environmental threats and vulnerabilities to combat issues like

Liability Takes Many Forms

- Potential liability for permitting risky dev.
- Liability if local gov't causes flooding
 - Tort (civil damages) or “taking” of property (Drake v. Walton County, 6 So. 3d 717, 720-21 (1st DCA 2009))
 - Can be due to development approval
- Liability for infrastructure & maintenance costs of infrastructure in at-risk areas
- Increased costs for flood insurance



We the People

WE THE PEOPLE of the United States, in order to form a more perfect Union, establish Justice, insure domestic Tranquillity, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

Article. 1

Section 1. All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

Section 2. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

"T. L." "H. C. M. B."

"Takings" in the U.S. Constitution

not exceed three fifths of all other Powers. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every

of thousands, and each State shall have at least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania six, Delaware three, Maryland five, Virginia six, North Carolina five, South Carolina five, and Georgia three.

There vacancies happen in the Representation from any death, removal, disability, or of shall, in whole or in part, be filled by the House of Representatives, who shall have the sole Power of Impeachment.

“nor shall private property be taken for

... nor shall private property be taken for

public use, without just compensation."

No Man shall be admitted who shall not have attained to the Age of thirty Years, and been some Years a Citizen of the United States, and who shall not, when admitted, be well recommended of that State for which he shall be chosen.

The Vice President of the United States shall be President of the Senate, and shall have no vote, unless he be equally divided.
The Senate shall choose their other officers, and also a President pro tempore, in the absence of the Vice President, or when he shall exercise the office.

These Resolutions shall have the effect of Law, as soon as they shall be approved by the Convention, and shall be in full force, until the next meeting of the Convention.

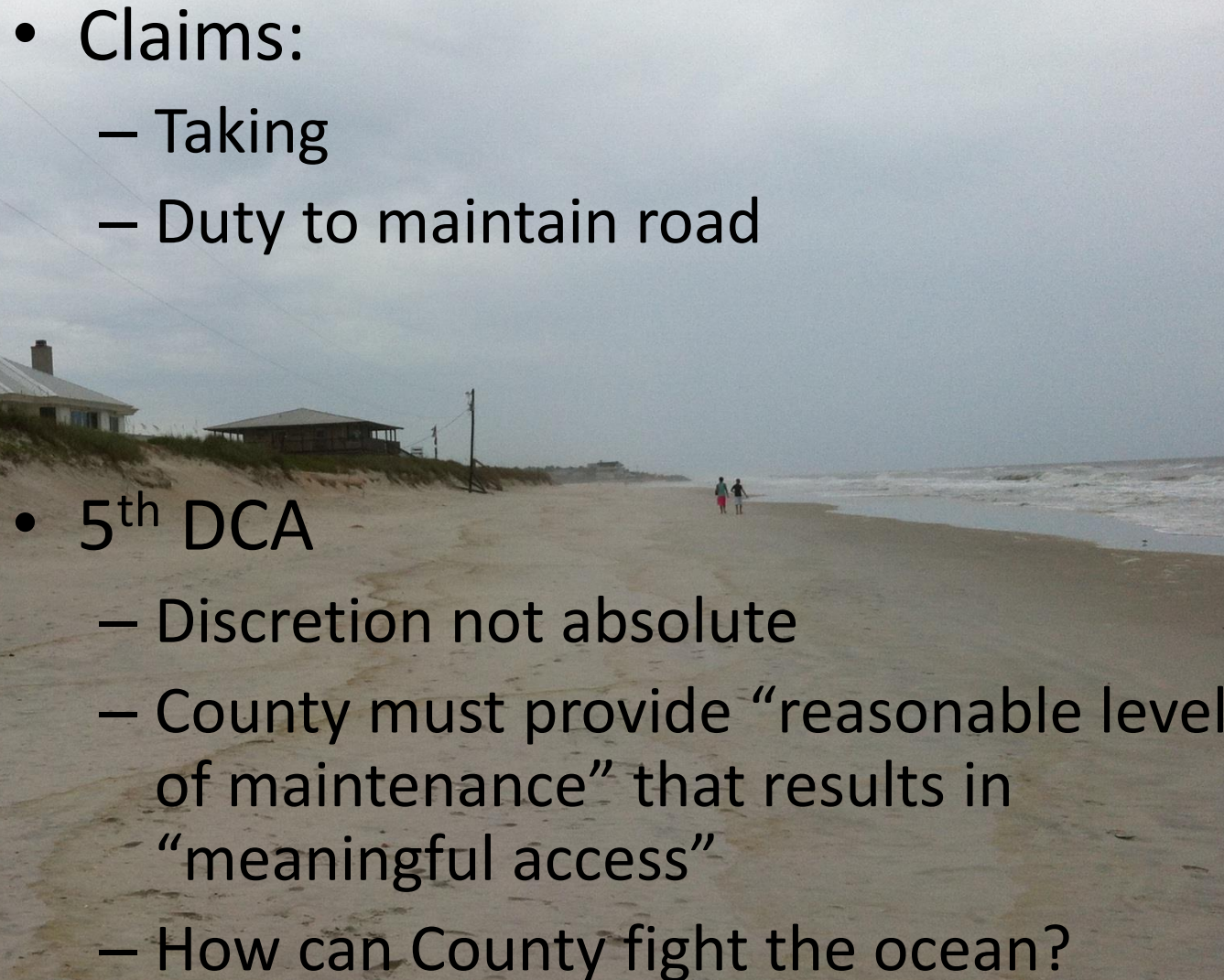
judgment in cases of impeachment shall not extend further than to remove from office and disqualification to hold and enjoy any office of honor or profit under the United States; but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment.

Bert J. Harris Act (Ch. 70)

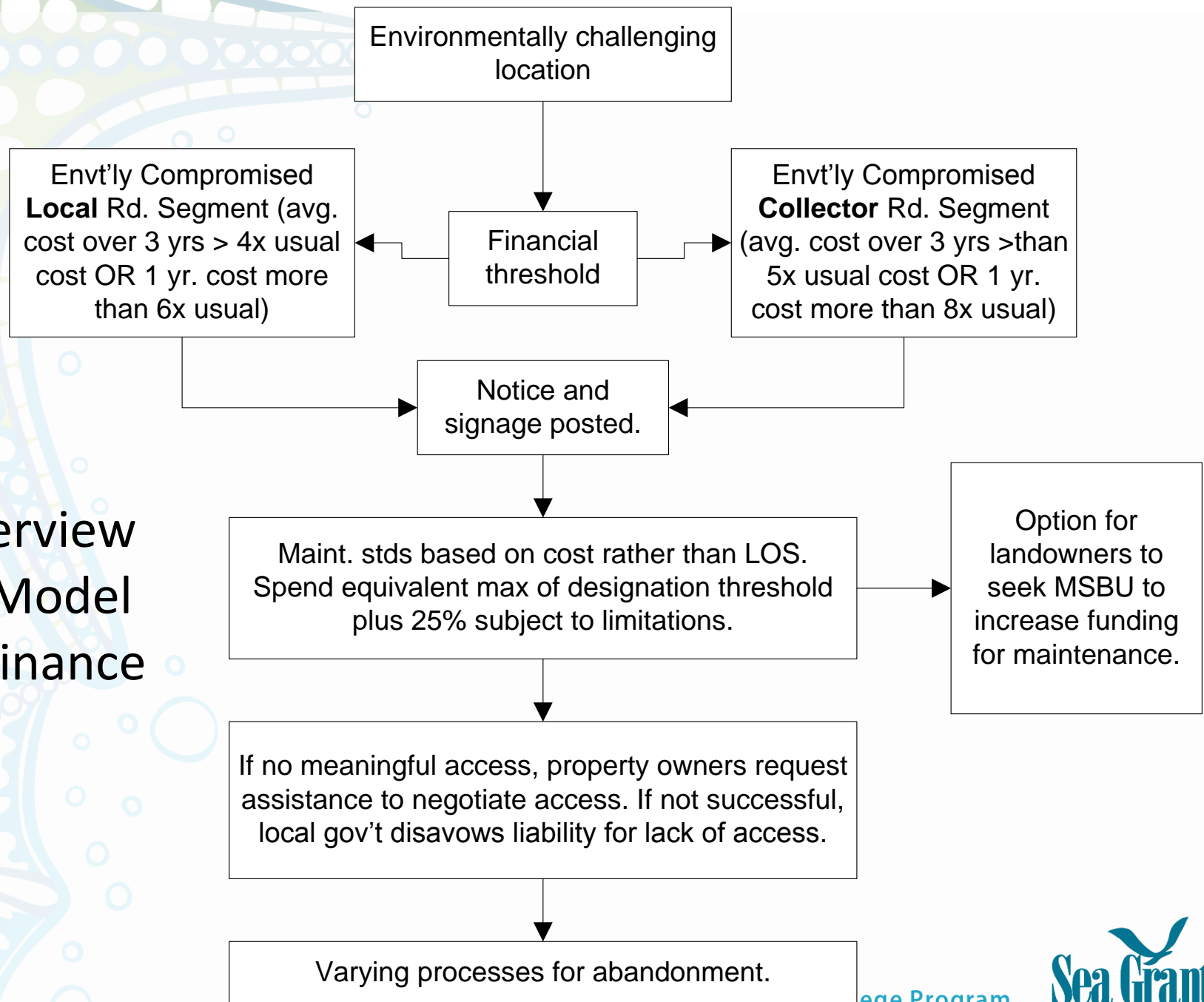
- Inordinate burden on property
 - Lots of confusion due to similar language
- Focus on two types of “existing use”
 - Current
 - Future: rsbly foreseeable, non-spec, suitable for property, **and** compatible with adjacent land uses
- Definitions of “suitable” and “compatible” but no *in pari materia* interpretation
- Safest to regulate floodplains and flooding

Jordan et al. v. St. Johns County



- 
- A photograph of a coastal scene. In the foreground, a wide, sandy beach stretches from the bottom left towards the right. In the middle ground, a dune rises from the beach, topped with a white house and a smaller structure. A utility pole stands on the left side of the dune. In the background, the ocean waves are visible under a cloudy sky. Two small figures of people are walking on the beach near the water's edge.
- Claims:
 - Taking
 - Duty to maintain road
 - 5th DCA
 - Discretion not absolute
 - County must provide “reasonable level of maintenance” that results in “meaningful access”
 - How can County fight the ocean?

Overview of Model Ordinance



The Florida Bar Journal

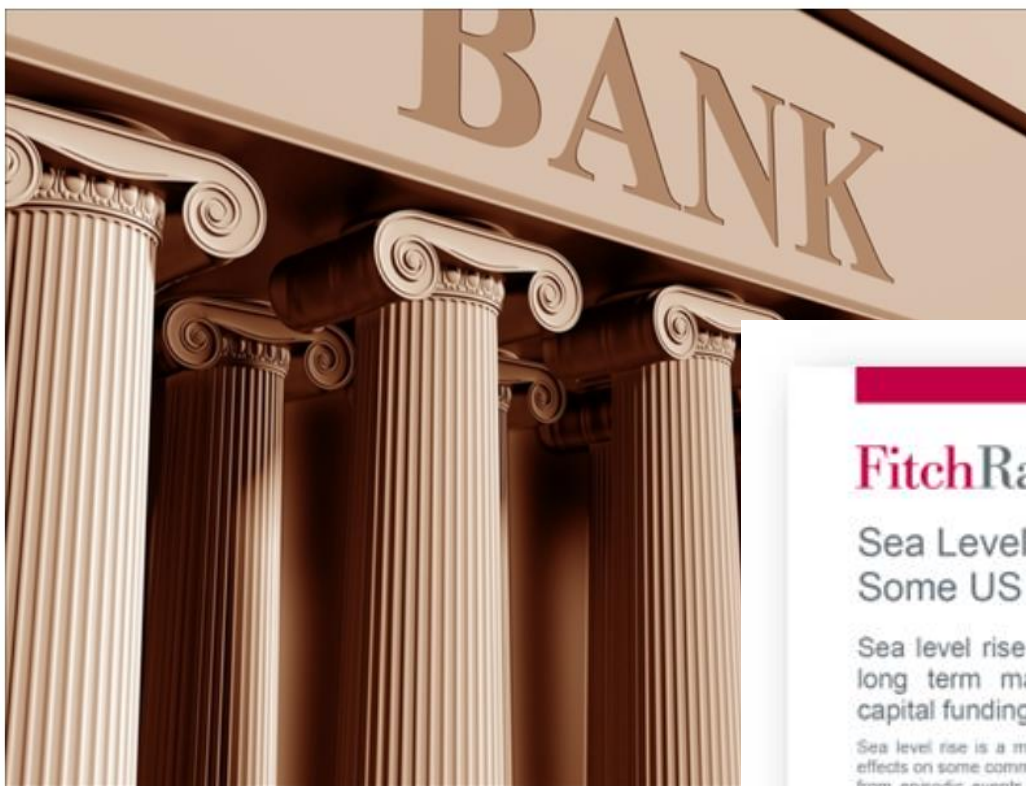
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November, 2013 Volume 87, No. 9

Drowning in Place: Local Government Costs and Liabilities for Flooding Due to Sea-level Rise

by Thomas Ruppert and Carly Grimm

- No duty of local gov't to provide drainage
 - As with many services, *authority* or *power* to provide, but not duty (fire, police, etc.)
- However, if provided, duty to maintain arises
 - Maintenance must be done with reasonable care
 - Liability for failure to maintain
- Distinction between maintenance and planning



Florida real estate prices will collapse 30 years BEFORE rising seas begin flooding I

The Day the Banks Abandon Florida

[http://m.dailykos.com/story/2015/12/20/1462300/-The-](http://m.dailykos.com/story/2015/12/20/1462300/-The-Day-the-Banks-Abandon-Florida)

[Day-the-Banks-Abandon-Florida](http://m.dailykos.com/story/2015/12/20/1462300/-The-Day-the-Banks-Abandon-Florida)

FitchRatings

Sea Level Rise May Pose Challenges For Some US Local Governments

Sea level rise already affects some communities and in the long term may pressure some communities' operations, capital funding requirements, and indebtedness.

Sea level rise is a manifestation of global climate change that is already having noticeable effects on some communities situated along the U.S. coasts. Risks include heightened damage from episodic events such as hurricanes and storm surges (event risk) in addition to more chronic damage from pervasive flooding and permanent loss of land. These risks present a myriad of financial and logistical challenges to local governments.

To date, sea level rise has not played a material role in Fitch's assessment of the fundamental credit characteristics of any of its rated issuers. Fitch's special report, "[Event Risk and Overall Credit Resiliency](#)" provides more detail. However, there are real threats faced by governments in coastal areas. As the effects of sea level rise upon issuers' credit fundamentals become known and measurable, over time these considerations may take on greater importance as a credit factor in Fitch's rating decisions.



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Moody's Warns Cities to Address Climate Risks or Face Downgrades

By **Christopher Flavelle**

November 29, 2017 4:00 AM EST

Government Planning

o disruption from sea level rise as well as the ability of utilities to treat long-term municipal planning efforts cities and private property near — one of the most vulnerable and vel rise — Miami-Dade, Broward, m the Southeast Florida Regional to address the effects of climate and Sewer Department's decision er treatment plant and expand an ts situated along the coast. The from 1854 to 2006.

Florida

**Summary and
Regional Action Plan**

A Report of the
Emergency Preparedness Committee on Sea Level Rise



Regional Community Institute of Northeast Florida, Inc.
September 2013
Northeast Florida Regional Council
November 2013

P2R2

**Public/Private Regional Resiliency:
Good for Business**

RECOMMENDATION FOR A UNIFIED PROJECTION OF SEA-LEVEL RISE IN THE TAMPA BAY REGION

*Tampa Bay Climate
Science Advisory Panel*



Libby Carnahan
Sea Grant Agent



**A Region Responds to a
Changing Climate**

Southeast Florida Regional Climate
Change Compact Counties

Regional Climate Action Plan

October 2012



Summary and Commentary on Sea-Level Rise Adaptation Language in Florida Local Government Comprehensive Plans and Ordinances¹

By: Thomas Ruppert, Esq.² & Alexander Stewart³

July, 2015

https://www.flseagrant.org/wp-content/uploads/Ruppert-Updated-Sea-Level-Language_7.2.15.pdf

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Florida
Climate Institute

da Sea Grant College Program





Lessons Learned. . . .



Is It Fair?



REASONABLE INVESTMENT-BACKED EXPECTATIONS: SHOULD NOTICE OF RISING SEAS LEAD TO FALLING EXPECTATIONS FOR COASTAL PROPERTY PURCHASERS?

THOMAS RUPPERT*

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Florida's Coastal Hazards Disclosure Law: Property Owner Perceptions of the Physical and Regulatory Environment

KEVIN WOZNIAK
GARIN DAVIDSON
TOM ANKERSEN

JULY 2012

UF|Levin College of Law
Conservation Clinic
UNIVERSITY of FLORIDA

Sea Grant
Florida



Southeast
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KATRINA HIGH WATER 2005

Bay St. Louis officials oppose Hurricane Katrina high-water markers on highway

Published: Saturday, July 23, 2011, 9:00 PM



By **The Associated Press**



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Bay St. Louis, Miss., officials want **high-water markers** placed by the state at Mississippi Highway 603 and Interstate 10 camouflaged so they no longer commemorate the tragedies of **Hurricane Katrina** in 2005.



The **Sea Coast Echo** reports there are two high-water markers at the intersection, one facing north and the other facing south on Mississippi 603. They were placed there following Katrina to commemorate the area's comeback from the killer storm. In Katrina, water ran up the roadway so







Is It Fair? -- Reprise

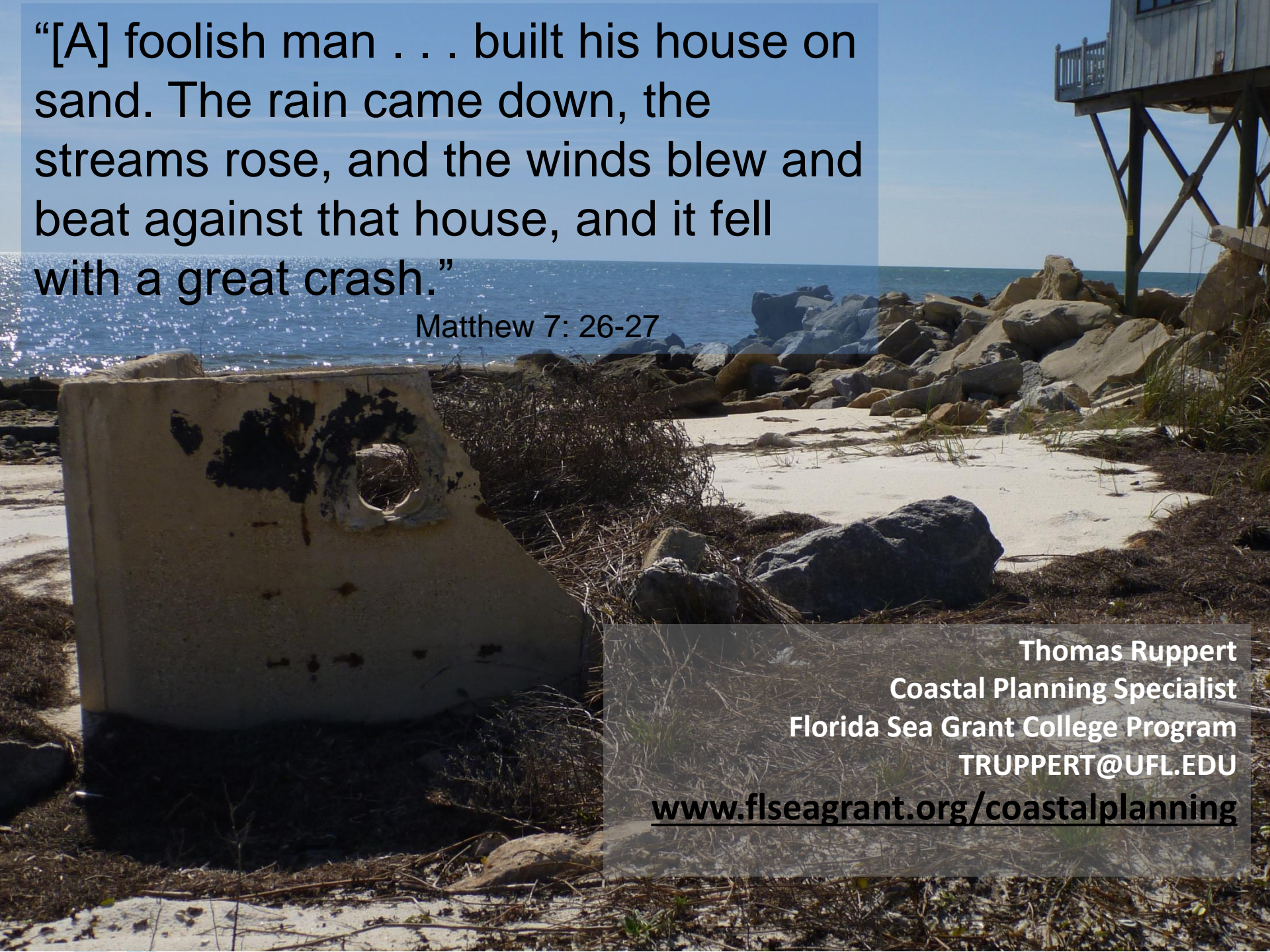
- When there's loss, who should pay?
- Why?
- What if it requires changing the law?
 - Is it a taking?
- Should the law evolve?
 - When? Why? By what method?

“At the center of today’s debate [about property] . . . Lies a collective failure on our part to think clearly and intently about the institution [of property], how it works, why it exists, and many shapes it can take, in terms of landowner rights and responsibilities. . . . In operation, [the right to property] is less an individual right than a tool society uses to promote overall social good. Important truths about this arrangement have largely passed from our collective memory. We need to regain these truths.”

-Eric Freyfogle, *On Private Property: Finding Common Ground on the Ownership of Land*

“...when [our current idea of property] emerged in the nineteenth century, it was greeted with considerable dissent and resistance. Far from being timeless, our image of ownership reflects the dominant values and aspirations of the industrial, frontier era. Lawmakers of that era revised ownership norms to help them achieve the development goals that then prevailed.”

-Eric Freyfogle, *On Private Property: Finding Common Ground on the Ownership of Land*

A coastal scene with a lighthouse on stilts in the upper right, a rocky shore in the middle ground, and a large, weathered concrete block in the foreground. The sky is blue, and the ocean is visible in the background.

“[A] foolish man . . . built his house on sand. The rain came down, the streams rose, and the winds blew and beat against that house, and it fell with a great crash.”

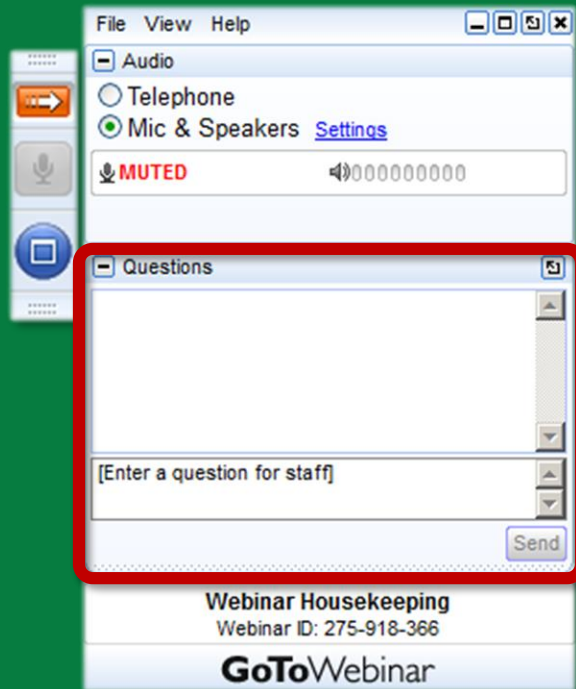
Matthew 7: 26-27

Thomas Ruppert
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TRUPPERT@UFL.EDU
www.flseagrant.org/coastalplanning

Questions and Answers

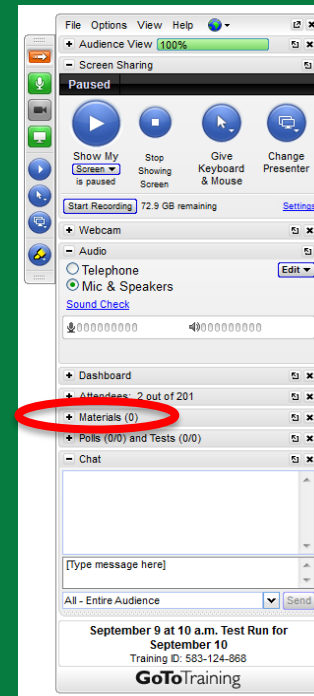
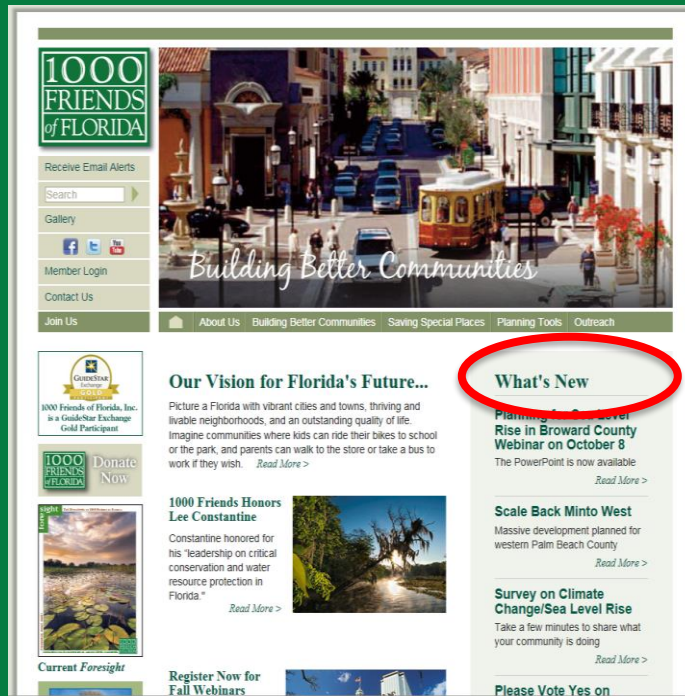


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The PowerPoint is available at www.1000friendsofflorida.org



This webinar has been approved for:

- *1.5 AICP CM Credits for planners (#9138850)*
- *1 CEC for Certified Floodplain Managers*
- *2 CLE for Florida attorneys (1708850N- Intermediate)*
- *.125 CEUs for Florida Environmental Health Professionals.*

There is a link to a **BRIEF SURVEY** in the follow-up email you will receive. Please take a few minutes to give us feedback!



Upcoming Dr. John M. DeGrove Webinars

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All webinars are noon to 1:30 unless otherwise noted.

Each has been approved for professional certification credits for Planners (AICP CM) and Certified Floodplain Managers. 1000 Friends has applied for credits for Florida attorneys (CLE) and Florida Environmental Health Professionals but cannot guarantee they will be offered.

Register Now!

- February 21, 2018 **NOTE TIME: 2:00 – 3:30 p.m.** -- *Planning for Community Resilience in Satellite Beach: Stormwater Infrastructure and LDRs*
- March 21, 2018, Noon to 1:30 p.m. -- *2018 Florida Legislative Wrap Up*

Visit www.1000friendsofflorida.org/webinar/
to find out more!



Check out our Legislative Webpage!

Available at:

www.1000friendsofflorida.org/2018-florida-legislative-session-custom/

This site is:

- Updated frequently
- Includes Growth Management, Transportation and Conservation Legislation
- Includes links to the bills

The screenshot shows the homepage for the 2018 Florida Legislative Session. The header includes the 1000 Friends of Florida logo and navigation links: Home, About Us, Building Better Communities, Saving Special Places, Planning Tools, Outreach, and Donate Now. The main heading is "2018 Florida Legislative Session" with a sub-header "Updated December 5, 2017". Below this, there are links for "Useful Links" (Florida House, Florida Senate, Find Your Legislators) and a "Bill Status" section indicating "PASSED, DID NOT PASS". A "Register now for FREE 2018 Florida Legislative Preview Webinar" is advertised for Wednesday, December 6 from noon to 1:30. Another "Register now for FREE 2018 Florida Legislative Wrap Up Webinar" is advertised for Wednesday, March 21, 2018 from noon to 1:30. A "Support 1000 Friends of Florida's Legislative Advocacy" link is also present. The "GROWTH MANAGEMENT/PLANNING LEGISLATION" section features a table with columns "Bill #/Sponsor" and "Title / Description". The table lists several bills, including SB 84 Lee (SUPPORT Municipal Conversion of Independent Special Districts), SB 292 Rodriguez (SUPPORT Private Property Rights), SB 324 Young / HB 697 Miller (Impact Fees UPDATED 12/5), SB 362 Perry / HB 207 McClain, Clemens (OPPOSE Growth Management/Private Property Rights), SB 432 Lee / HB 17 Raburn (Community Redevelopment Agencies), SB 494 Lee / HB 405 Williamson (Linear Facilities UPDATED 12/5), SB 542 Rodriguez (SUPPORT Public Financing of Construction Projects), and SB 574 Steube / HB 521 Edwards (OPPOSE Tree and Timber Trimming, Removal, and Harvesting). The left sidebar contains a "Receive Email Alerts" section, a search bar, a gallery, member login, contact us, and join us links. It also features logos for Charity Navigator, Guidestar, and 1000 Friends of Florida, along with a "Donate Now" button and a "Current Forestry" image.

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| SB 292 Rodriguez | SUPPORT Private Property Rights SUPPORT -- SB 292 exempts property owners who produce renewable energy and distribute it to users on their property from being defined as a public utility. Senate Referrals (SB 292): Communications, Energy, and Public Utilities; Community Affairs, and Rules Committees. Hide |
| SB 324 Young HB 697 Miller | Impact Fees UPDATED 12/5 Read More |
| SB 362 Perry HB 207 McClain, Clemens | OPPOSE Growth Management/Private Property Rights OPPOSE -- SB 362/HB 207 require local government adoption of a private property rights element into their comprehensive plan. House Referrals (HB 207): Agriculture and Property Rights Subcommittee; Local, Federal and Veterans Affairs Subcommittee; and Commerce Committee. Senate Referrals (SB 362): Agriculture and Property Rights Subcommittee; Local, Federal and Veterans Affairs Subcommittee; and Commerce Committee. Hide |
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