Sarasota County Unified Local Mitigation Strategy

January 2021

Executive Summary

Sarasota County and its jurisdictions face a variety of natural and man-made hazards that could affect the lives and property of residents and visitors. The development and implementation of the Sarasota County Unified Local Mitigation Strategy (LMS) provides a mechanism for the County, its jurisdictions, and partners to address issues through implementation of projects that will reduce or eliminate exposure to and the impacts of hazards. The last update of the LMS, conducted in 2016, was a result of a coordinated, cooperative effort of local government and partners who make up the Sarasota County Local Mitigation Strategy Working Group.

Over the past 5 years Sarasota County has seen an increase in residential and commercial growth, including several high-rise condominium and hotels built in the downtown Sarasota area along the bayfront. Additional construction impacts the vulnerability of a community to hazards, primarily hurricane, flooding, and other severe weather. However, as growth increases some vulnerability is reduced. New construction in areas that used to be the wildland-urban interface reduces wildfire threat. Public safety also increases with growth. North Port for example will build two new fire stations within the next four years. Sarasota County Fire Department has added Station 10 in the eastern portion of the county with a fire engine and rescue crew, and Longboat Key has seen an increase in the demo-rebuild market. Mitigation activities have included wind retrofit and 1ft to 3ft freeboard to meet current local ordinances and state building codes. In 2018 Sarasota County Schools completed a construction project at Booker High School that meets the Enhanced Hurricane Protection Area requirements by adding 2400 shelter spaces and a project began in 2020 to retrofit and harden Taylor Ranch Elementary school in Venice in order to add more shelter space in the south part of the county.

Hazard mitigation is defined as any action taken to permanently reduce or eliminate long-term risk to people and property from the effects of hazards. Some examples of hazard mitigation include land use planning techniques that limit infrastructure in high hazard areas and programs for retrofitting existing structures to meet new building codes and standards. Ideally, a community can minimize the effects of future hazards through a mix of code enforcement, planning, and responsible development.

Mitigation occurs in many ways through various activities of governmental and non-governmental agencies and stakeholders. Together, these activities establish the mitigation goals for a community and provide the framework for effective redevelopment. Existing plans, programs, policies, and ordinances should regularly be reviewed to identify mitigation activities that have been implemented within a jurisdiction. These independent activities are combined and contained in the LMS.

Effective mitigation should not be viewed as an impediment to continued growth and development of a community. An overarching philosophy of mitigation should be applied to all decisions related to a community's growth so that communities across Florida can grow smarter. The intent of incorporating mitigation into development practices should be the creation of safer and more economically resilient communities.

The 2021 Sarasota County Unified Local Mitigation Strategy plan was developed as a multi-jurisdictional, multi-hazard strategy to involve the public, assess the hazards, determine the vulnerability, identify risks, set goals, and identify mitigation activities, and plan for natural and manmade hazards to Sarasota County and the jurisdictions therein. The LMS was established and continues to operate in accordance with prevailing federal, state, and local guidelines and requirements.

The LMS is a streamlined document, is user friendly, and is not maintenance intensive. This concept was originally incorporated to the FEMA-approved 2010 LMS and remains in place in the 2021 update. All planning requirements are met with little extra verbiage or information found in other plans.

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Section I: Planning Process

Local hazard mitigation planning is the process of organizing community resources, identifying and assessing hazard risks and determining how to best minimize or manage those risks. This process culminates in a hazard mitigation plan that identifies specific mitigation actions designed to achieve both short-term planning objectives and a long-term community vision.

Communities that participate in hazard mitigation planning may experience benefits including:

- Saving lives and property.
- Saving money.
- Accelerating recovery following disasters.
- Reducing future vulnerability (improving resiliency) through wise development and post-disaster recovery and reconstruction.
- Expediting the receipt of pre-disaster and post-disaster grant funding; and
- Demonstrating a firm commitment to improving community health and safety.

A. Multi-Jurisdictional Planning Participation

Development of the 2021 Sarasota County Unified Local Mitigation Strategy update was a multi-jurisdictional effort encompassing all the jurisdictions represented by the plan. Beginning in December of 2007, and each calendar quarter thereafter, the Sarasota County Local Mitigation Strategy Working Group has held quarterly meetings to identify, discuss, and recommend changes to maintain and update the plan. Each continuing and new jurisdiction participated in the development of the plan and was a full and integral member of the review and decision process. Table 1 below identifies the participating jurisdictions in The 2021 Sarasota County Unified Local Mitigation Strategy update. Meeting agendas, minutes, and public notices may be found in Appendix F.

Table 1: Participating Jurisdictions

Jurisdiction	Planning Participation		
	New	Continuing	No Longer
City of North Port		**X**	
City of Sarasota		**X**	
City of Venice		**X**	
Sarasota County		**X**	
Sarasota County Schools		**X**	
Sarasota Memorial Hospital		**X**	
Town of Longboat Key		**X**	
Sarasota Soil and Water Conservation District	X		

The Sarasota County Unified Local Mitigation Strategy includes Sarasota County, its unincorporated areas, four incorporated municipalities, Sarasota County Sheriff's Office the Sarasota County School Board, Sarasota Memorial Hospital, and the Sarasota County Soil and Water Conservation District. To satisfy multi-jurisdictional participation requirements, the county and participating jurisdictions were required to perform the following tasks:

- Participate in mitigation planning workshops.
- Provide data for the Hazard Analysis and Risk Assessment.
- Identify completed mitigation projects; and
- Adopt the Updated Local Mitigation Strategy.

B. Multi-Jurisdictional Plan Adoption

Adoption of the plan is a multi-jurisdictional function that requires each participating jurisdiction to independently accept and adopt the plan by resolution or ordinance. The specific jurisdictions represented by the 2021 Sarasota County Unified Local Mitigation Strategy plan are:

- City of North Port
- City of Sarasota
- City of Venice
- Town of Longboat Key
- Sarasota County
- Sarasota County Schools
- Sarasota Memorial Hospital
- Sarasota County Soil and Water Conservation District

Each participating jurisdiction will formally adopt the LMS following approval by FDEM/FEMA and adoption by the Sarasota County Board of County Commissioners. Supporting documentation for each jurisdiction will be incorporated into Appendix A once approval and adoption is complete.

C. History of Hazard Mitigation in Sarasota County

The first Sarasota County Local Mitigation Strategy was approved in 1999 and updated in 2004, 2009, and 2016. During the Spring of 2020, the Local Mitigation Strategy Work Group met to focus on the development of a process to update the 2016 LMS. The initial meeting identified two main focal points for the members: updating the current plan in accordance to established standards, and the integration of local floodplain plans into the local mitigation strategy to form one document.

A process was established to review the 2016 plan based upon the Local Mitigation Plan Review Crosswalk and to identify any deficiencies in that plan. Members were also tasked with identifying portions of the 2016 plan that did not meet their current goals and strategies. Through a series of quarterly meetings by the Local Mitigation Strategy Working Group and the Regional Floodplain Management Planning and Coordination Committee, a detailed analysis was conducted. Recommended revisions to the plan were drafted by the Emergency Management Chief (LMS Chair) of Sarasota County Emergency Management and forwarded to the Vice Chair for the initial review. Once the initial review was complete, the revisions were forwarded to the entire Local Mitigation Strategy Working Group for review and approval. Upon approval by the members of the Working Group, the revisions were incorporated into the updated plan.

The Local Mitigation Strategy Working Group and the Regional Floodplain Management Planning and Coordination Committee meeting laid the foundation for combining the Local Mitigation Strategy Plan with each jurisdiction participating in the Community Rating Systems Floodplain Management Plan. The plans were combined by including them as an annex to the Local Mitigation Strategy Plan. While this accomplishment is minor in the overall scheme, it did save several work hours for the participating jurisdictions by precluding the need for separate resolutions on each plan. Each jurisdiction continues to develop strategies and methods for the continued coordination of both plans.

During the December 2007 Sarasota County Local Mitigation Strategy Working Group meeting, a discussion took place to determine the need to form a plans committee. A decision was made that a separate plans committee would be formed after the update was completed and would be tasked with advising and recommending changes based upon new State and Federal regulations in subsequent years. It was determined by the members that each participating jurisdiction should have an equal and participating role in the update of the plan.

D. The 2021 LMS Update

The Sarasota County Local Mitigation Strategy Working Group prepared the 2021 LMS update by working collaboratively utilizing the Smartsheet application. The LMS Working Group Chair, Ed McCrane, Sarasota County Emergency Management Chief, led the update process, which was facilitated by Emergency Management Officer Ryan Murphy. Table 2 identifies the 2021 Local Mitigation Strategy Working Group members. The update of the Sarasota County LMS Plan began in January 2020.

The Sarasota County Local Mitigation Strategy Working Group reviewed and analyzed each section of the 2016 plan in accordance with the current Local Mitigation Plan Review Crosswalk. During the update of the 2010 LMS a unanimous decision was made to ensure the LMS is a streamlined document, is user friendly, and is not maintenance intensive. This concept remains in place in the 2021 LMS. All planning requirements are met with little extra verbiage or information found in other plans.

The Sarasota County Local Mitigation Strategy Working Group utilized the mitigation planning process recommended by FEMA (Publication Series 386) and the Florida Division of Emergency Management to complete the update of the Sarasota County LMS. A Local Mitigation Plan Crosswalk (Appendix J) provides a detailed summary of FEMA's current minimum standards of acceptability for compliance with the Disaster Mitigation Act of 2000 and notes the location of each requirement within the Plan.

The update process involved identifying additional hazards, updating the risk assessment using the most recent and best available data, and evaluating existing mitigation goals, projects, and programs for overall effectiveness. The hazard analysis includes the hazards from the 2010 LMS hazard profile, information from the August 2013 Florida State Risk Assessment, and hazards identified in other emergency management plans for Sarasota County. The 2021 LMS Update was prepared using and incorporating relevant content from the 2016 Sarasota County LMS.

Priority considerations that are reflective of some minor revisions to The 2021 LMS Update include change of leadership and impacts from Hurricane Irma. Since the 2015 LMS Update three of the five members of the Sarasota County Board of County Commissioners have changed. In addition, in 2018 Sarasota County hired a new County Administrator. The City of Sarasota has seen three different Mayors, as well as changes on their commission since the 2015 LMS Update. Similarly, the City of North Port received a new City Manager in 2017 and changes to it's commission and Mayor. The City of Venice has seen its entire council change since the 2015 LMS Update. The Town of Longboat Key hired a new Town Manager in 2018 and newly elected members of their commission and a new mayor. These changes in leadership have influenced many policy related decisions across each municipality within the LMS Working Group. Hurricane

Irma also served as a learning experience, which yielded 93 action items following an After-Action Review. Those lessons learned have influenced updates to The 2021 Local Mitigation Strategy.

Sarasota County and its jurisdictions are vulnerable to man-made and technological hazards. Man-made hazards are threats having an element of human intent, negligence, or error; or involving a failure of a human-made system. This is as opposed to natural hazards that cause natural disasters. The 2021 LMS update includes a man-made hazard profile.

Table 2: 2021 Planning Process Contributors

Jurisdiction	LMSWG Member	Title
City of North Port	Eric Tiefenthaler	EM Chief
City of North Port	Valerie Malingowski	Grants Coordinator
City of North Port	Elizabeth Wong	Storm Water Manager
City of Sarasota	Cynthia Cahill	CRS Coordinator
City of Sarasota	Richard Kerkering	EM Chief
City of Venice	Kathleen Weeden	City Engineer
City of Venice	Gillian Carney	Stormwater Engineering Research Analyst
Ringling Museum	Cherie Knudsen	Security Director
Sarasota County	Ed McCrane, Chairman	EM Chief
Sarasota County	Donna Bailey	CRS Coordinator
Sarasota County	Ryan Murphy	EM Officer
Sarasota County School Board	Darrell Reyka	Director, Safety and Security
Sarasota County Sheriff's Office	Karen Silano	Grant Coordinator
Sarasota Memorial Hospital	John Salt	Facilities Mgmt. Director
Sarasota Memorial Hospital	Aaron Schneck	EM Manager
Town of Longboat Key	James Linkogle	Public Works Director
University of South Florida	Richard Lyttle	Facilities Director

Coordination with other agencies and organizations outside of Sarasota County took place in many different forms. Notification to neighboring jurisdictions occurred via email and face to face updates during regional and other ongoing Emergency Management meetings and other projects. As in most local governments, employees are often involved in several different projects at the same time, but of a similar nature. The members of the Sarasota County Local Mitigation Strategy Working Group represent a diverse group of job specialties including professional planners, engineers, public works professionals, emergency management professionals and educators. Many of these same members participated in the Pennsylvania State University Sea Level Rise project in Sarasota County and continue to be involved in the Sarasota County Post Disaster Redevelopment Plan. Additionally, each job specialty offers its own set of collaboration methods with the member's counterparts in jurisdictions outside of Sarasota County. The jurisdiction of the Town of Longboat is equally divided between Sarasota and Manatee Counties and the representative from the Town of Longboat Key is a member on both LMS Working Groups. While direct involvement was limited by parties outside the jurisdiction, the indirect sharing of ideas, goals and objectives were of great value in the development of the updated plan.

The Sarasota County Local Mitigation Strategy Working Group continues to recognize that opportunity exists for greater involvement amongst the remaining jurisdictions, nonprofits, and other interested parties within the county as well as our neighboring communities. Additional jurisdictions include, but are not limited to, Englewood Water District, Englewood Fire District, and the Sarasota Bradenton Airport Authority. In addition to non-participating jurisdictions, the Working Group has identified educational, business, and civic groups for direct invitations to participate with the LMS Working Group.

E. Integration with Other Plans

Several existing plans and studies were reviewed or participated in by members of the Local Mitigation Strategy Working Group and the Regional Floodplain Management Planning and Coordination Committee. These included, but were not limited to:

- Sarasota County Comprehensive Emergency Management Plan
- Pennsylvania State University Sea Level Rise Study
- Post Disaster Redevelopment Plan (On-going)
- Sarasota 2050
- Jurisdiction Comprehensive Plans
- Jurisdiction Floodplain Management Plans
- Jurisdiction Codes and Ordinances
- State of Florida Hazard Mitigation Plan
- Peace River/Manasota Regional Water Supply Authority Reservoir Emergency Action Plan
- Unified Program for Public Information
- Sarasota County Continuity of Operations Plan (COOP) Update

Participating jurisdictions have incorporated the Local Mitigation Strategy and hazard mitigation into their local land use and comprehensive plans. Each of the cities through their comprehensive plans, permitting processes, and land development regulation programs implement the goals of the Sarasota County LMS.

Sarasota Memorial Hospital is a special jurisdiction which differs from local government as far as policies related to mitigation. However, the hospital requires all new project construction and renovation consider community wide vulnerability analysis and builds hurricane protection features into all new buildings and renovations of current facilities. A wind retrofit of the Sarasota Memorial East Tower was funded by a $619,851 Hazard Mitigation Grant Program to install hurricane shutters on the facility. Sarasota Memorial is an active participant in the Sarasota County LMS working group and continues to apply for future mitigation grants. See Sarasota Memorial's policy memo dated September 30, 2015 in Appendix K.

Sarasota County School Board is a special jurisdiction which also differs from local government as far as policies related to mitigation. By policy, Sarasota County

School Board has goals and objectives associated with providing a safe learning environment for the community, including multi-jurisdictional, multi-hazard strategies to assess hazards, identify risks, determine vulnerabilities, establish mitigation activities, and plan for natural and manmade hazards. School Board policies and procedures reflect their commitment to current and future initiatives of the updated 2016 Local Mitigation Strategy. See Sarasota County Schools LMS 2015 memo in Appendix K.

Examples of LMS and Hazard Mitigation integration in participating jurisdiction plans are provided in Appendix K.

F. Public Involvement

An important component of this planning process is the opportunity for the public to provide input. Individual citizen and community-based input provides the planning team with a greater understanding of local concerns and increases the likelihood of successfully implementing mitigation actions by developing community support from those directly affected by the decisions of public officials. As citizens become more involved in decisions that affect their safety, they are more likely to gain a greater appreciation of the natural hazards present in their community and take the steps necessary to reduce their impacts. Public awareness is a key component of any community's overall mitigation strategy aimed at making a home, neighborhood, school, business, or city safer from the potential effects of natural hazards.

Public input was sought using a variety of methods. Appendix F provides documentation of LMS public meeting notices, surveys, and other public involvement and outreach in the LMS update process. A webform survey was made available on the county website over a two-week period allowing citizens to review the draft update and provide feedback. This was review period was promoted via social media reaching nearly 20,000 followers. Engagement metrics from the associated social media posts are in Appendix F. No citizen input was received during this review period.

Improvements to obtaining a greater level of public feedback can be made in a number of ways. Specifically, for the next update the webform survey will be made available prior to draft revisions in order to gain public feedback early for ease of integration. Additional social media posts will be made encouraging feedback and a longer review period will be implemented. In addition, a key improvement will be to hold meetings in-person. Since March 2020 LMS Working Group Meetings have been help virtually due to challenges associated with the COVID-19 pandemic.

Website

The public has been provided an opportunity to provide input on the Sarasota County LMS since the December 2007 meeting. Each Local Mitigation Strategy Working Group meeting is advertised as a public service announcement in the local

newspaper. Sarasota County Emergency Management has also created a separate link for Local Mitigation Strategy on Sarasota County's All-Hazards web site. The website may be found at https://www.scgov.net/government/emergency-services/local-mitigation-strategy. This web site not only provided an opportunity to view the draft copy, but a direct link to email questions or comments to the Working Group via the lms@scgov.net email address. Prior to each jurisdiction's approval resolution, the public will be afforded a final opportunity to comment on the plan during the respective jurisdiction's adoption process.

Social Media

Sarasota County jurisdictions utilize social media for public outreach, disaster preparation messaging, and hazard mitigation activities. County staff posted information related to the LMS Plan Update on Sarasota County's Facebook page and that post carried through to other Facebook pages.

Community Meetings & Outreach

Participating jurisdictions constantly provide disaster preparedness and hazard mitigation activities and information to the public. These include community meetings, speaking engagements, use of social media, and other outreach campaigns.

The Sarasota County LMS Working Group survey is used during public outreach events. The survey is a tool to educate the public about the LMS as well as to receive input from the public about completed and future mitigation activities and/or projects.

Section II: Community Profile

A. Geographic Profile

Sarasota County is located on the west coast of Florida about 60 miles south of Tampa Bay. It is bordered to the north by Manatee County, the east by DeSoto County, to the south by Charlotte County, and to the west by the Gulf of Mexico. Sarasota County encompasses a total area of 725 square miles, of which 572 square miles is land, and 154 square miles are classified as a water feature. The county is surrounded by 35 miles of open shoreline along the Gulf of Mexico.

Sarasota County includes 4 incorporated jurisdictions:

- City of North Port
- City of Sarasota

- City of Venice
- Town of Longboat Key

Table 3: Jurisdiction Land Distribution

Jurisdiction	Land Area (Square Miles)	Percent of Total Land Area
City of North Port	**104.1**	**18.1%**
City of Sarasota	**14.7**	**2.6%**
City of Venice	**16.6**	**2.9%**
Town of Longboat Key	**2.3**	**0.4%**
Unincorporated County	**435**	**76%**

Sarasota County's generally flat topography is characterized by isolated swamps and marshes, which connect into sloughs and meandering streams that flow into the coastal estuaries. Elevation along the Gulf of Mexico coastline ranges from 1 to 18 feet above sea level with the highest natural elevation in the northeast portion of the County at 95 feet above sea level.

B. Population and Demographics

Sarasota County's 2019 population is 426,275 according to Florida's Bureau of Economic and Business Research (BEBR). Since the last decennial census in 2010, Sarasota County added 46,827 new residents countywide, but there were significant variations in the population growth within the jurisdictions. As a whole, the County grew by 12%, the same rate of growth experienced by the City of Venice. Sarasota County growth is being driven by new housing developments being built east of the I-75 corridor particularly in mid county. The City of Sarasota and the unincorporated area both increased their populations by 9% while the Town of Longboat Key (Sarasota County portion) grew by 2%. The City of North Port outpaced all other jurisdictions with a growth rate of 28% from 2010 to 2019. The extensive growth in the City of North Port has been partly due to the development and expansion of the planned West Villages community. In 2018, the City of North Port also saw the opening of the new Atlanta Braves spring training stadium known as Cool Today Stadium. Growth across all municipalities continues to be driven by housing developments. A new hospital is currently under construction and is scheduled to open in 2021 near Laurel Road and I-75. It is expected that this will bring additional jobs and residents to the area. With increased hardscape resulting from residential and commercial development throughout each municipality the potential vulnerability for residential flooding does increase; however, is offset through the development review process during which requirements for stormwater mitigation are closely analyzed. Sarasota County along with each municipality (City of Venice, City of Sarasota, City of North Port and Town of Longboat Key) have established development review processes that engage stormwater staff to ensure reductions in flood risk. Similarly, the development review process includes comments from transportation, planning, environmental services and others to further mitigate risk associated with traffic, coastal erosion, and structural damage. The mitigation stemming from increased regulatory standards actually decreases overall vulnerabilities by ensuring new development meets all codes.

For the next decade of 2020 to 2030, Sarasota County's population is expected to increase by 13%. As the population growth continues the LMS Working Group will continue to update the LMS accordingly to be reflective of community needs and changes. This will be

accomplished through our quarterly meetings and ensuring that representatives from Sarasota County Planning and Development are included in the working group. Table 4 below reflects the population growth projections through 2045 in Sarasota County.

Table 4: Population Projections

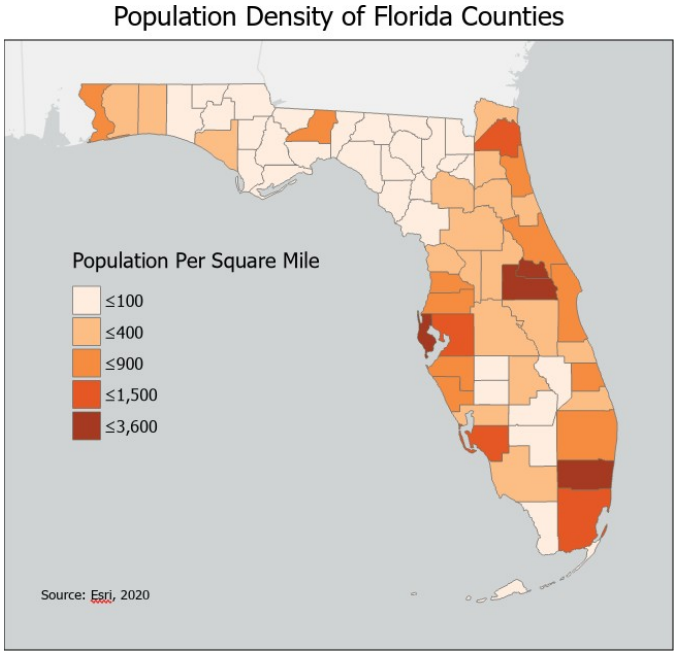
	BEBR Estimate	**Bureau of Economic and Business Research University of Florida Florida Population Studies, Volume 53, Bulletin 186, January 2020**					
Year	2019	2020	2025	2030	2035	2040	2045
Population	426,275	433,300	464,900	489,600	510,500	529,400	546,500

Sarasota County annually experiences many tourist/seasonal visitors throughout the County. According to the Economic Development Corporation of Sarasota County, the County experiences an average of 200,000 visitors per calendar year quarter, with an average stay of six or seven days. Peak visitation is usually during the first quarter of the year. Table 5 below reflects the population distribution by age in Sarasota County based on the 2019 estimates from BEBR.

Table 5: Population Distribution by Age

	Age Group				
	0-14	**15-24**	**25-44**	**45-64**	**65 Plus**
Population	51,430	36,680	76,059	113,472	148,634

Source: BEBR, Bulletin 187, June 2020



Population density per square mile for Florida counties excluding census blocks with zero population, 2020. Source: ESRI Demographics

C. Economic Profile

According to the 2018 U.S. Census Bureau's American Community Survey one-year estimates, Sarasota County's median household income was $61,683. Additionally, it was estimated that 10.3% of the population lived below the poverty level. Tables 6 through 8 are provided to offer a brief description of Sarasota County's economic profile.

Table 6: **Employment and Wages in Sarasota County, 2019**

Industry Title	Average Monthly Employment	Average Annual Wages
Total, All Industries	302,528	$46,268
Agriculture, Forestry, Fishing and Hunting	3,993	$28,199
Mining, Quarrying, and Oil and Gas Extraction	49	$122,135
Construction	25,840	$50,934
Manufacturing	16,793	$56,370
Wholesale Trade	8,139	$66,406
Retail Trade	43,949	$32,064
Transportation and Warehousing	7,156	$42,339
Utilities	674	$100,331
Information	3,265	$65,508
Finance and Insurance	8,063	$89,664
Real Estate and Rental and Leasing	6,546	$47,060
Professional and Technical Services	15,745	$70,782
Management of Companies and Enterprises	3,211	$121,901
Administrative and Waste Services	21,410	$39,725
Educational Services	18,497	$46,550
Health Care and Social Assistance	49,535	$51,275
Arts, Entertainment, and Recreation	9,997	$37,875
Accommodation and Food Services	35,672	$22,788
Other Services, Except Public Administration	11,222	$34,760
Public Administration	12,495	$55,803
Unclassified	277	$52,475

Source: Florida Department of Economic Opportunity, Quarterly Census of Employment and Wages, 2019 Annual Averages

Table 7: Sarasota County Unemployment Statistics, 2019

Category	Value
Labor Force	369,130
Employment	357,670
Unemployment Level	11,460
Unemployment Rate	3.1%

Source: Florida Department of Economic Opportunity, Local Area Unemployment Statistics, 2019 Annual Averages

Table 8: Sarasota County Property Values (All Jurisdictions)

Property Type	# of Parcels	% of Parcels	Total Value	Avg Value
Residential	271,034	94.25%	$66,934,453,600	$246,960
Commercial	9,014	3.13%	$8,959,332,800	$993,935
Industrial	2,598	.90%	$1,489,053,500	$573,154
Agriculture	849	.30%	$1,803,547,400	$2,124,320
Public	1,814	.63%	$6,098,663,500	$ 3,361,998
Miscellaneous	2,267	.79%	$539,335,200	$ 237,907

Source: Sarasota County Property Appraiser

Section III: Hazard Identification and Analysis

A. Identifying Hazards

Sarasota County is a medium-sized coastal community located in southwest Florida that is vulnerable to many types of natural hazards (i.e., hurricanes, flooding, wildfire). Residents and visitors are aware of the County's location within the "Hurricane Belt" but are complacent or unaware about the potential for other severe natural disasters within the County. All parts of the County are subject to natural disasters to some extent, which can take occur any time. Due to the County's low coastal topography and usually high-water table, the County can be particularly vulnerable to natural hazards that directly or indirectly result in flooding. Portions of coastal Sarasota County have begun to experience sunny day flooding associated with King Tides.

Historical occurrence of identified hazards shows that each participating jurisdiction is vulnerable to almost every hazard. The exception is the City of North Port, which is not considered directly vulnerable to coastal erosion or tsunami.

The 2021 Sarasota County Unified Local Mitigation Strategy plan profiled all hazards identified by the LMS Working Group, and considered historical occurrences, geographic extent, and probability for future occurrences. As part of the

2021 plan revision, each hazard was reconsidered, and new information was added for the updating period. The LMS Group focused on updating and adding new information relating to the hazards and emphasized the streamlining approach by considering the following:

- Validating the current general information.
- Identifying new hazard occurrences since the 2016 Plan.
- Identifying specific jurisdiction hazard variations.
- Aligning the extent and probability factors with the Sarasota County Comprehensive Emergency Management Plan and the State Mitigation Plan.

Hazard Probability and Impacts by Jurisdiction

Table 9 offers a brief description identifying the hazard type, location, extent, and probability that affect the jurisdictions within Sarasota County (refer to Tables 9A, 9B, and 9C for clarification of the data). A narrative description of each hazard follows Table 9C. Table 10 documents overall impacts on structures and infrastructure from each identified hazard. Jurisdiction boundary maps may be found in Appendix G. At a minimum, the risk assessment will be reviewed and validated at least annually by the Local Mitigation Strategy Working Group.

Table 9: Identified Natural Hazards

Hazard Type	Jurisdiction (1)	Extent (2)	Probability (3)
Avalanche	None	Unlikely	None
Coastal Erosion	2,3,4,7	Extensive	Annual
Coastal Storm	All	Extensive	Annual
Dam Failure	1,4	Low	Low
Drought	All	Low	Annual
Earthquake	All	Low	Unlikely
Expansive Soils	All	Unlikely	None
Levee Failure	1,4	Low	Unlikely
Flood	All	Catastrophic	Annual
Hailstorm	All	Low	Annual
Hurricane	All	Catastrophic	Annual
Land Subsidence	All	Low	Medium
Landslide	None	Unlikely	None
Seasonal Severe Weather Storm	All	Extensive	Annual
Tornado	All	Low	Annual
Tsunami	2,3,4,7	Unlikely	None
Volcano	None	Unlikely	None
Wildfire	All	Extensive	Annual
Windstorm	All	Extensive	Annual

Table 9A Jurisdiction

Jurisdiction	Identification #
City of North Port	1
City of Sarasota	2
City of Venice	3
Sarasota County Government	4
Sarasota County Schools	5
Sarasota Memorial Hospital	6
Town of Longboat Key	7

Table 9B Extent of Impact

Population Affected	Extent
No data available	Unlikely
0-1,000	Low
1,001 – 5,000	Medium
5,001 – 10,000	High
10,001 – 25,000	Extensive
25,001 plus	Catastrophic

Table 9C Probability of Impact

Years Between Events	Classification
Annual	Annual
1 – 5	High
6 – 10	Medium
11 – 20	Low
20 plus	Unlikely
No Occurrence on Record	None

Table 10: Impacts on Structures and Infrastructure from Identified Natural Hazards

Column1	All Structures	Mobile Homes	Poorly Constructed Homes	Non Elevated Homes	Government Facilities	Telecommunications	Electrical Utilities	Sewage Systems	Potable Water	Roadways	Waterways	Airports	Agriculture	Livestock	Fisheries	Economic Disruptions	Environmental Damage	No Risk
Avalanche																		X
Coastal Erosion	X				X	X	X	X	X	X	X					X	X	
Coastal Storms	X	X	X	X	X	X	X	X	X	X	X	X				X	X	
Dam Failure				X		X	X	X	X	X								
Drought									X				X	X		X	X	
Earthquake	X		X		X	X	X	X	X	X	X	X						
Expansive Soils																		X
Levee Failure			X	X		X	X	X	X									
Flood	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Hailstorm	X	X	X		X	X	X	X	X			X						
Hurricane	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
Land Subsidence	X	X	X		X	X	X	X	X	X		X				X	X	
Landslide																		X
Seasonal Severe Weather	X	X	X		X	X	X	X	X	X		X				X	X	
Tornado	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
Tsunami	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
Volcano																		X
Wildfire	X	X	X		X	X	X	X	X	X		X	X	X		X	X	
Windstorm	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	

B. Profiling Hazards Vulnerability

Avalanche

An avalanche is defined as a fall or slide of a large mass down a mountainside. Due to the topography of Sarasota County and the jurisdictions within, avalanches are not a natural threat. There have been no historical references to an avalanche taking place within Sarasota County. Avalanches are not considered a risk and therefore it will not be fully profiled.

Coastal Erosion

Coastal erosion is the removal of land or beach or dune sediments by wave action, tidal currents, wave currents, or drainage. Waves generated by coastal storms or hurricanes cause coastal erosion, which may take the form of long-term losses of sediment and rocks, or merely in the temporary redistribution of coastal sediments. Erosion in one location may result in accretion elsewhere. The jurisdictions that are affected by coastal erosion in Sarasota County are the City of Sarasota, City of Venice, unincorporated Sarasota County, and the Town of Longboat Key.

Sarasota County has taken the preemptive approach of creating of the Coastal Resources Department within the Environmental Protection Division of the Planning and Development Services Department. This organization focuses on numerous shoreline interests, from maintenance of navigable waterways to shoreline enhancement, habitat restoration, and the monitoring of coastal erosion through a series of benchmarks placed every 1000 feet along our shoreline. The extent of coastal erosion is measured by the linear mile of coastline impacted. One of the most important mitigation efforts to have taken place was the approval of the Coastal Setback Code with amendments on October 28, 2008. The revised code creates consistency with the Comprehensive Plan and other natural resources protection codes and addresses the requirements for shore protection structures such as seawalls and rock revetments.

The beaches and inland waterways will continue to shift and change; and will therefore continue to be an identifiable hazard. Whether or not coastal erosion takes place over a long period of time or by a single incident, coastal erosion is a continued hazard to the jurisdictions identified in Table 9.

Sarasota County has 35 miles of Gulf beach shoreline. Approximately 31 of these miles stretch along several barrier islands, including the southern portion of Longboat Key and the northern portion of Manasota Key, both of which extend into neighboring counties. The vast majority of the privately-owned properties located on the County's barrier islands, in addition to those within the Town of Longboat Key and the City of Sarasota, have been developed, while the publicly held properties are predominantly utilized as natural area parks (e.g., Siesta Key Public Beach, Caspersen Public Beach, Blind Pass Park). As land values have increased, redevelopment of the finite number of privately-owned, previously developed coastal properties has become common. Observed trends include the conversion of commercial marinas to condominiums, teardown, and reconstruction of single-family residences with larger structures and more impervious surfaces, and additional often larger ancillary features (e.g., pools, garages, docks, and patios). These trends have placed new demands and threats on coastal resources, which are being managed with regulatory and public educational programs. These trends can have a positive result, i.e., redevelopment has modernized structures to comply with improved building codes that better enable structures to withstand the adverse effects of hurricanes and coastal erosion. This will improve public health, safety and general welfare and reduce the need for Gulf-front coastal armoring (Source: Sarasota County Comprehensive Plan).

Vulnerability can impact the quality of life through damage to buildings, roads/bridges, and infrastructure (lifeline systems). According to the USGS, during the landfall of a category-1 storm, with wind speeds between 75 and 94 miles per hour, over wash is very likely for 70 percent of Gulf Coast beaches.

Over wash occurs when waves and storm surge overtop dunes and transport sand landward. Over wash is likely at these locations because of increased water levels at the shoreline. During category-1 hurricane events on the Gulf Coast, wave height and storm surge combine to increase water levels at the shoreline by 14.5 feet higher than their normal levels. Additional findings from the report show that during a category-1 storm landfall, 27 percent of sandy beaches along the U.S. Gulf of Mexico are projected to be inundated, which occurs when increased water levels completely submerge beaches and dunes. As a recreational amenity, the beaches are vital to the County's economic base. Recreational and visual access to the beaches and waters of the Gulf of Mexico are major factors in attracting tourists and residents to Sarasota County.

Coastal erosion and/or accretion occurs in various parts of Sarasota County's coastline and inland waterways throughout the year. The erosion and/or accretion rates within Sarasota County are very dynamic between the barrier islands and at different locations on the same island. The bay waters shaped by these dynamic features include Sarasota Bay, Little Sarasota Bay, Dona/Roberts Bays, and Lemon Bay. Elevations on the barrier islands are generally less than 15 feet. Changes in barrier island shorelines are the direct result of the energy associated with winds, waves, currents, and tides. The typical average rates within Sarasota County for a specific location range from ten feet of accretion to ten to fifteen feet of erosion. All coastal structures as well as the critical facilities that support these structures could be impacted by coastal erosion. During the previous ten years, Sarasota County has averaged the loss of one structure per year with a value of $1-5M because of coastal erosion and or undermining of the foundation. For planning purposes, this average is consistent with the expectations of the Local Mitigation Strategy Working Group estimates for this natural hazard occurrence per event.

In 2008, Tropical Storm Fay caused approximately $3M in coastal beach erosion. Sarasota County was eligible for Public Assistance under the FEMA-1785-DR.

Impacts in June 2012, Tropical Storm Debby developed from a trough of low pressure in the central Gulf of Mexico and made landfall near Steinhatchee, Florida. Initial predictions anticipated the storm to move towards Louisiana or Texas, but the storm moved in the opposite direction. Upwards to 10 inches of rain fell in Sarasota County flooding many secondary roads. The Lido Beach parking lot was impacted by flooding from the shifting of the high-water mark due to surf and tide conditions. Overall, Sarasota County suffered almost $2,000,000 in beach erosion damage which included Lido Key. Hurricane Irma passed just east of Sarasota County in September of 2017 however is inland path caused water to flow away from the shoreline and did not cause any coastal erosion.

For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Coastal Storms

Coastal storms are typically associated with hurricanes and or other tropical depressions and storms that may impact Sarasota County. The difference between the vulnerabilities and impacts of coastal storms and hurricanes is separated by the severity of the event. Coastal Storms will be profiled under the Hurricane natural hazard description.

Dam Failure

According to the US Army Corps of Engineers (USACE) National Inventory of Dams, as shown in Figure 4-1, only one dam exists in Sarasota County. The Hi-Hat Ranch Pond is an earthen dam. The area is surrounded by rural and agricultural lands. Failure of this dam is not likely to have a major impact on the surroundings. The main vulnerability would be flooding of agricultural land resulting in little to no structural impacts.

The Peace River/Manasota Regional Water Supply Authority (PRMRWSA) Reservoir is located in neighboring DeSoto County. Failure of this dam may affect Sarasota County and/or one of its incorporated municipalities. Depending on the location of the failure and water level of the reservoir, properties within the inundation area could experience water depths from 2 to 4 feet. The dam failure could impact non-elevated homes and temporarily impact critical facilities that directly support these homes.

The PRMRWSA Reservoir is located in a rural part of town, with some population residing in the potential impact area. There is minimal impact to the economy and major employers. However, flooding from a dam failure could damage property, and may cause drowning and/or injury to residents in the potential impact area. There is an Emergency Action Plan for this dam. The PRMRWSA has a reverse-911 system to alert and advise nearby property owners and residents in the event of an emergency condition at the reservoir.

The Reservoir is bounded by 4 miles of highly engineered earthen embankment. The embankment was designed to withstand a Category 5 hurricane and a simultaneous 48-hour, 60-inch rainfall event. The probability of a dam failure at the Reservoir is low.
Approximately 3,942 properties exist within the potential impact area and are vulnerable to the dam failure. PRMRWSA analyzed several breach scenarios and mapped the affected areas. The PRMRWSA performed a breach analysis to evaluate the impacts of a failure during extreme rain events. Attachment 10 contains inundation maps resulting from a Probable Maximum Precipitation condition along with a failure of the dam.

The recent completion of the six billion gallon Peace River/Manasota Regional Water Supply Authority Reservoir located in DeSoto County Florida has added the unlikely potential of a dam failure occurring and impacting a small population of residences located within Sarasota County and the City of North Port. The inundation maps indicate an impact to areas within unincorporated Sarasota County (all undeveloped ranch lands) and within the City of North Port. Sarasota County has identified those undeveloped areas within the unincorporated area and flagged them in the permitting system so if they should start developing them, the Emergency Management Department will be notified and E.M. will implement an emergency plan as required by the CRS program.

Currently, based upon the inundation studies, of the 3,942 properties located within the potential impact area, only two properties have structures with a combined value of $174K. Considering the different factors associated with a dam breach and the actual number of structures in the area, the impact would not exceed the $200K at this time.

Due to the partnership and collaboration of the Peace River/Manasota Regional Water Supply Authority and the surrounding jurisdictions, the threat of a dam failure in the future is unlikely.

A failure by any one or several of the structures within the County may have an impact on one or all the jurisdictions. While the loss of life or property damage would likely be minimal, there could be an undetermined measure of economic loss and inconvenience due the closure of a major roadway. Dam failures can result from anyone, or a combination, of the following causes:

- Prolonged periods of rainfall and flooding, which cause most failures.
- Internal erosion caused by embankment or foundation leakage or piping.
- Improper maintenance, including failure to remove trees, repair internal seepage problems, or maintain gates, valves, weirs, structure supports and other operational components

Depending on the location and extent of a dam or levee failure, impacts to congregate facilities, i.e. schools, nursing homes, etc., could result in facility evacuations. Evacuations may also be needed if residents in areas are impacted by flooding. Temporary roadway closures could result in traffic congestion. Floodwaters could cause wastewater treatment facilities to shut down, contaminate local water supplies, and disrupt utilities. These impacts would be short term, however. The overall extent of dam failure would be measured by the depth of flooding and the miles of impact.

According to the NOAA Satellite and Information Service, Sarasota County, and the jurisdictions within have experienced zero dam failure events during the last 5 years. To date, the only reported occurrences of dam (water control gate) failure within Sarasota County is located within the City of North Port. For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Based upon historical data and the type and function of the dam structures located within Sarasota County, it would be unlikely to see results of the subsequent flooding in depths greater than two feet. If this event were to occur within Sarasota County, non-elevated structures and critical facilities in the vicinity could be temporarily impacted. Structural damage because of this event would be like the historical average $500K per incident for flooding. For planning purposes, this average is consistent with the expectations of the Local Mitigation Strategy Working Group estimates for this natural hazard occurrence per event.

Drought

A drought is defined as a period of abnormally dry weather sufficiently prolonged by the lack of precipitation to cause a serious hydrological imbalance. While droughts are a normally occurring event, they are difficult to predict or forecast both as to when they will begin and how long they will last. The severity of a drought will depend upon the duration, seasonal or extended, moisture deficiency, and the size of the affected area.

Conceptually, droughts have often been associated with their impact on the agriculture industry of the affected area, but there may also be socioeconomic impacts because of a drought. Based upon Sarasota County's long history of involvement in the agriculture and livestock industry, an extended drought or drought conditions could be devastating to that particular industry, but as a whole it would be a low impact on the entire county and jurisdictions within based upon the direct population that would be impacted. As the duration of a drought increases, so does the socioeconomic impacts of the drought. Watering restrictions would be instituted, limitations in freshwater recreation and the potential increase of wildfires, while generally inconvenient to most, could impact the County as a whole.

Vulnerability to drought conditions is measured according to the characteristics of population, activities, or the environment that make them susceptible to the effects of drought. The degree of vulnerability depends on the environmental and social characteristics of the region and is measured by the ability to anticipate, cope with, resist, and recover from drought. Prolonged dry periods have spurred wildfires in North Port and Sarasota County, a reduction in the water table, water restrictions countywide, endangerment of wildlife and loss of crops in Sarasota County's agriculture areas. Economic impact to the community includes reduced farm revenue, and increased prices for produce and other farm-related items. In addition to a drought's social and economic risks, there is also the potential increase in the formation of sinkholes.

Sarasota County utilizes the Keetch-Byram Drought Index (KBDI) to monitor drought conditions. The Keetch-Byram drought index (KBDI) is a continuous reference scale for estimating the dryness of the soil and duff layers. The index increases for each day without rain (the amount of increase depends on the daily high temperature) and decreases when it rains. The scale ranges from 0 (no moisture deficit) to 800. The range of the index is determined by assuming that there are 8 inches of moisture in a saturated soil that is readily available to the vegetation.

Sarasota County reached its highest level on the KBDI scale with a 675 on June 10, 2006. All of Sarasota County and the jurisdictions within may be affected by drought conditions on an annual basis and could expect to see similar levels as high on the KBDI scale in the future.

According to the NOAA Satellite and Information Service, Sarasota County has not had a recorded drought that has taken place from January 1, 1950 to January 31,

2020. For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Earthquake

An earthquake is defined as a sudden and sometimes violent movement of the earth's surface because of movement along a fault or by volcanic disturbance. Earthquakes are measured by the Modified Mercalli Intensity Scale (Table 11A below) which measures detectability/level impact or by the Richter Scale (Table 11B below) which measures logarithmic magnitude scale of earthquake energy.

Table 11A: Modified Mercalli Intensity Scale

Intensity	Detectability/Level Impact
I	Detected only by sensitive instruments
II	Felt by a few persons at rest, especially on upper floors
III	Felt noticeably indoors, but not always recognized as a quake
IV	Felt indoors by many, outdoors by a few
V	Felt by most people, damage to glass and plaster
VI	Felt by all, many frightened and run outdoors, damage small
VII	Everybody runs outdoors, damage to buildings varies
VIII	Panel walls thrown out of frames, fall of walls and chimneys
IX	Buildings shifted off foundations, cracked, thrown out of plumb
X	Most masonry and framed structures destroyed; ground cracked
XI	New structures still standing, bridges destroyed, ground fissures
XII	Damage total, waves seen on ground surface

Table 11B: Richter Scale

Magnitude	Energies (TNT)
1	1.7 Kilograms
2	5.9 Kilograms
3	180 Kilograms
4	6 Tons
5	199 Tons
6	6,270 Tons
7	100,000 Tons
8	6,270,000 Tons
9	199,000,000 Tons

While Florida is not known for earthquakes, there have been over 30 recorded seismic activities in the State since the late 1700's. Sarasota has not recorded any damage from these seismic activities, but an event could affect all the jurisdictions within the County. The last seismic event to take place within the area occurred on September 10, 2006, in which the epicenter was located an estimated 250 miles west-southwest of the County in the Gulf of Mexico.

Based upon past historical data, the extent of damage from an earthquake would be low for all the jurisdictions within the County. Based upon these historical occurrences, the LMS Working Group estimates the probability of this phenomenon occurring in Sarasota County is 20 plus years between occurrences and would measure level I on the Modified Mercalli Intensity Scale. If this natural hazard did occur within Sarasota County, the impact could influence all the structures and critical facilities depending upon the severity. The structures most susceptible to damage can depend on the material that the structure is made from, the type of earthquake wave (motion) that is affecting the structure, and the ground on which the structure is built. Even though the entire county would be impacted in the event of an earthquake the damage (if any) would be minimal.

Typical impacts for a low-level earthquake could be cracks in walls from shaking or items knocked off shelves. Doors and windows could rattle but breaking of glass is unlikely.

For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Expansive Soils

Expansive soils are soils that expand with the addition of water and contract as the soil dries out. This may cause foundations and walls of structures to shift or crack. The 1991 Soil Survey of Sarasota County, Florida conducted by the United States Department of Agriculture did not highlight or specifically identify expansive soils as a hazard to any of the areas within the county. There have been no historical references to an expansive soil incident taking place within Sarasota County. Expansive soils are not considered a risk and therefore it will not be fully profiled.

Levee Failure

A levee failure is defined as a break in the water-retaining earthwork, allowing water to flood the land that the levee was designed to protect. Levee failure inundation studies conclude that depending upon the location of the failure and current level of the reservoir, residents within the inundation area could experience water depths from two to four feet. The impact of a levee failure could impact non-elevated homes and have a temporary impact to the critical facilities that directly support these homes. There have been no historical references to a levee failure taking place within Sarasota County. The overall extent of levee failure would be measured by the depth of flooding and the miles of impact.

There are no certified levees for Unincorporated Sarasota County; however, there are two non-certified levees that may affect Sarasota County. One private levee located in the Hidden River subdivision is maintained privately by their community HOA, and one public levee located in the Bahia Vista subdivision area. The Hidden River levee if breeched would impact the Hidden River subdivision in the eastern portion of un-incorporated Sarasota County. The Bahia Vista Levee, if breeched would primarily impact the southeastern part of the City

of Sarasota and the adjoining portion of un-incorporated Sarasota County.

The privately owned levee is located on the Myakka River at the Hidden River Subdivision. This levee has breached in the past after large rain events and flooding of the upper Myakka River. Even though privately owned, Emergency Services has a monitoring and response plan for this levee. According to Emergency Services, the levee breaches at approximately 22'. A levee failure at the Hidden River subdivision would place dozens of residential homes at risk for flooding, which could cause significant structural damage to these residential homes.

A rain gage is located on the river that monitors river levels near this structure. The gage belongs to our ARMS (Automated Rain Monitoring System) program, When the water reaches 18', a notification response is triggered and Alert Sarasota County is implemented for this neighborhood. This plan is part of Sarasota County's Comprehensive Emergency Management Plan.

The Bahia Vista Flood Reclamation Project in Sarasota County is designed to alleviate flooding along a roadway and surrounding properties. The majority of stormwater management facilities in the County have an operation and maintenance plan by which the control structures are inspected periodically for structural integrity. In addition, many are designed to the 100-year flood event. Therefore, the probability of structure failure is relatively low. If the Bahia Vista Levee were to fail residential and road flooding would result impacting dozens of residential structures and potentially casing temporary rad closures.

Flood

Flooding has been the most frequent occurrence in Sarasota County over the past 100 years. Sarasota County residents can experience flooding from two sources, and they can occur at the same time:

- Coastal flooding and erosion triggered by tropical storms and hurricanes.
- Riverine flooding, which is intense and abundant rainfall into our river, streams, channels, and numerous low-lying areas.

The extent of a flood is generally measured in water levels and amount of damage done. Sarasota County is highly subject to riverine flooding due to heavy rains. They are categorized using the following:

- 500-year flood (.02 percent chance per year)
- 100-year flood (1 percent chance per year)
- 50-year flood (2 percent chance per year)
- 25-year flood (4 percent chance per year)
- 10-year flood (10 percent chance per year)

These categories indicate a probability of occurrence (a 100-year flood has a 1% chance of occurrence in one year). The smaller percent chance of occurrence the more devastating the flood. In a worst-case scenario event, isolated areas in

Sarasota County can expect to experience up to 10 feet of flood waters but average flood water depths are 4 feet to 5 feet.

General flooding in the County has typically accompanied storms which have passed over or near Sarasota. In 1962, over 16 inches of rain fell in a 48-hour period. The “No Name" storm of 1982, caused severe flooding along the bays and coastline, while the accompanying heavy rain and wind in the region created floodwaters that inundated residential areas on the coastal islands, and covered. In 1992 areas of the county experienced almost 20 inches of rainfall over just a few days in late June, and 14 inches during about the same time in 2003.

Because of their proximity to bodies of water, or low-lying areas, all jurisdictions in Sarasota County are vulnerable to flooding. Major flooding occurring in the County would have a significant impact on population, property, and economy, along with the threat to human life. In addition, floodwaters could cause wastewater treatment facilities to shut down, contaminate local water supplies, and disrupt utilities. Major property losses could be expected in the communities previously mentioned. Floodwaters could also submerge portions of I-75, US41 and east west highways. The loss of these transportation networks would hinder evacuation and relief efforts, making it difficult to provide emergency response services.

Since 1950, there have been 46 flood events within Sarasota County recorded by the NOAA Satellite and Information Service. Usually these events have floodwaters ranging from one to two feet, and impact non-elevated structures causing a temporary disruption to critical facilities. In rare situations within the County, floodwaters have reached five to seven feet in depth and have impacted all types of structures. In these rare events, there have been disruptions to critical facilities.

Storm Events Database

Search Results for Sarasota County, Florida

Event Types: Coastal Flood, Flash Flood, Flood, Heavy Rain, Lakeshore Flood

Sarasota county contains the following zones:
'Coastal Sarasota', 'Inland Sarasota'

46 events were reported between 01/01/1950 and 01/31/2020 (25598 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	40
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	1
Number of Days with Event and Property Damage:	25
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	3

Specific jurisdiction details relating to locations, extent, past occurrences, structures, and the probability of future events occurring, may be found in each jurisdiction's Floodplain Management Plans located in Annexes A through E. Typical impacts over the last 5 years include mostly street flooding and occasional house flooding. Road closures due to bank erosion, failed pipes and overloaded drainage systems also occur. Structural damage because of flooding has been recorded 25 times by the NOAA Satellite and Information Service. Damage has ranged from as little as $1K to as much as $2.3M with the average of $500K per event. For planning purposes, this average is consistent with the expectations of the Local Mitigation Strategy Working Group estimates for this natural hazard occurrence per event.

Additional vulnerability information for this natural hazard, in relation to hurricane surge, is in the Hazard Identification and Vulnerability Analysis located in Appendix H. Maps associated with this natural hazard may be found on-line at https://www.scgov.net/AllHazards/Pages/LocalMitigation.aspx For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Repetitive Loss Properties

The jurisdictions within Sarasota County utilize National Flood Insurance Program data for tracking flood claims, locations, and losses. This data is used as a reliable base for identifying potential flood risks neighborhoods and hazard mitigation planning. The CRS coordinator in each jurisdiction also targets specific outreach for these areas of potential flood blight and/or federal grant opportunities. Table 12 below describes the vulnerability by jurisdictions in terms of numbers of repetitive loss and severe repetitive loss properties located within Sarasota County. Table 12A reflects the types of properties located in each jurisdiction.

Table 12

Jurisdiction	# of Repetitive Loss Properties	# of Severe Repetitive Loss Properties
City of North Port	0	0
City of Sarasota	50	3
City of Venice	16	0
Sarasota County Government	198	16
Town of Longboat Key	87	8

Table 12A

Type	City of North Port	City of Sarasota	City of Venice	Sarasota County	Town of Longboat Key
Single Family	0	32	1	183	82
Condominiums	0	15	14	3	3
Improved Commercial	0	3	1	11	7

Multi-Family (-10)	**0**	**3**	**0**	**15**	**0**
Mobile Homes	**0**	**0**	**0**	**3**	**3**

Hailstorm

Hail is a form of precipitation that occurs when updrafts in thunderstorms carry raindrops upward into extremely cold areas of the atmosphere where they freeze into balls of ice. Hail can damage aircraft, homes, and cars, and can be deadly to livestock and people. Hail is usually pea-sized to marble-sized, but big thunderstorms can produce big hail. The largest hailstone recovered in the U.S. fell in Vivian, SD on June 23, 2010 with a diameter of 8 inches and a circumference of 18.62 inches. It weighed 1 lb. 15oz.

Hail size is estimated by comparing it to a known object. Most hailstorms are made up of a mix of sizes, and only the very largest hail stones pose serious risk to people caught in the open.

- Pea = 1/4-inch diameter
- Marble/mothball = 1/2-inch diameter
- Dime/Penny = 3/4-inch diameter
- Nickel = 7/8 inch
- Quarter = 1 inch — hail quarter size or larger is considered severe
- Ping-Pong Ball = 1 1/2 inch
- Golf Ball = 1 3/4 inches
- Tennis Ball = 2 1/2 inches
- Baseball = 2 3/4 inches
- Teacup = 3 inches
- Grapefruit = 4 inches
- Softball = 4 1/2 inches

Hailstorms usually accompany thunderstorms which are common occurrences in Sarasota County. The extent of people impacted could be County-wide in all jurisdictions. Since 1969 the largest recorded hail in Sarasota County was 1.75”. Damage to structures and critical facilities is typically minimal.

Hailstorms associated with thunderstorms are not limited to any area of the county, but may be associated with damage to roofs, skylights, windows, patio furniture, and automobiles. Older construction and mobile homes may be more likely to be damaged by hail. While all populations can be impacted by hailstorms, lack of shelter puts the homeless population at highest risk.

Storm Events Database

Search Results for Sarasota County, Florida

Event Types: Hail, Marine Hail

Sarasota county contains the following zones:
'Coastal Sarasota', 'Inland Sarasota'

48 events were reported between 01/01/1950 and 01/31/2020 (25598 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	44
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	3
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

According to the NOAA Satellite and Information Service, Sarasota County, and the jurisdictions within have experienced 48 hailstorm events during the period from January 1, 1950 to January 31, 2020. The last hailstorm event occurred on July 11, 2017. For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Hurricanes

Hurricanes are large cyclonic storms with counter-clockwise winds of 74 mph or greater based upon the Saffir-Simpson Hurricane Wind Scale (Table 13). Coastal areas that receive the full force of hurricane winds and storm surge sustain the most damage. Since hurricanes dissipate quite rapidly to less than hurricane strength after they make landfall, inland areas typically receive less catastrophic damage. Inland damage is usually in the form of flooding associated with the exceptionally heavy rains commonly associated with the remaining storm system.

The maximum extent of hurricane impact to Sarasota County, City of Sarasota, City of North Port City of Venice and Town of Longboat Key would be from a Category 5 storm on the Saffir-Simpson Hurricane Wind Scale.

Table 13: Saffir-Simpson Hurricane Wind Scale

Category	Sustained Winds	Potential Damage
Tropical Storm	**39-73 mph**	**Some**
1	**74-95 mph**	**Some**
2	**96-110 mph**	**Extensive**
3	**111-130 mph**	**Devastating**
4	**131-155 mph**	**Catastrophic**
5	**156 mph plus**	**Catastrophic**

An average of two hurricanes make landfall in the continental U.S. annually, causing massive destruction and huge loses for anyone in its path. Sarasota County was impacted by Hurricane Irma in 2017.

Coastal storms, hurricanes and windstorms, and their associated consequences, all have the potential probability to affect all the jurisdictions within Sarasota County to varying degrees. The extent may vary from jurisdiction to jurisdiction, but each have the potential to create extensive to catastrophic damage based upon the dynamics of each storm. Hurricanes would cause the greatest impact to the jurisdictions of Sarasota County; thus, mitigation efforts are focused on hurricanes and include the mitigation efforts associated with coastal storms and wind events. This mitigation has resulted in Sarasota County and the City of North Port to be awarded the designation of "Storm Ready" from the National Weather Service. Sarasota County was among the first counties in Florida to achieve this distinction in 2001 and has updated it every 3 years since. North Port renewed its "Storm Ready" status in 2019 and is good until July 2023. North Port also became a Weather Ready Nation Ambassador (WRN) in 2019. The City of Sarasota achieved the Storm Ready Community Status in 2015 and the County's other 2 municipalities plan to become "Storm Ready".

The consequences of hurricane winds and storm surge, which are also seen in tornadoes, include loss of life, flooding, coastal erosion, structural failures, power failures, and utilities disruption and felled trees, as well as economic disruption.

Freshwater flooding associated with a hurricane may also inundate potential evacuation routes and prevent persons from evacuating areas vulnerable to storm surge. Flooded roads and storm drains have resulted in fatal accidents in many areas either during the effects of hurricanes or immediately following.

In terms of economic damage, the five costliest hurricanes in the history of the United States all impacted portions of Florida. Hurricane Charley (August 2004), which impacted the bordering county to the south, is ranked as the 4th costliest hurricane, at $15 billion.

Due to its geographic location in the subtropics, adjacent to the Gulf of Mexico, the entire County is vulnerable to damage caused by hurricane force winds and related flooding. Vulnerability to hurricane related flooding is dependent upon the severity of storm surge, a general rise in sea level caused by the low pressure and strong winds around a hurricane's eye, and the amount of rain carried by the

hurricane. Storm surge is related to hurricane velocity and can rise twenty feet or more above normal sea level and cause massive flooding and destruction along shorelines in its path. Flooding due to heavy rainfall may extend over widespread areas of the County.

During past storm events, private and public structures, shoreline protection structures, public roads, and facilities in Sarasota County have been damaged. Most recently, in 2008, due to Tropical Storm Fay, Sarasota County and the jurisdictions within experienced an estimated $3M in coastal beach erosion. Sarasota County has not experienced a severe hurricane for several decades, and the full impact of a destructive storm, for example, a landfall Category-4 hurricane, remains unknown and could exceed several billion dollars. In 2017, Hurricane Irma made landfall as a category 3 impacting Sarasota County causing significant coastal erosion, debris, and the mobilization of numerous resources to aid in recovery and coastal evacuations. Estimated damages were incurred by Sarasota County were approximately $10.5 million.

Storm Events Database

Search Results for Sarasota County, Florida

Event Types: Hurricane (Typhoon), Tropical Depression, Tropical Storm

Sarasota county contains the following zones:
'Coastal Sarasota', 'Inland Sarasota'

3 events were reported between 01/01/1950 and 01/31/2020 (25598 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	3
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	2
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Sarasota County has been affected by hurricanes or Tropical Storms a total of 3 times since 1950. For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Additional vulnerability information for this natural hazard is the Hazard

Identification and Vulnerability Analysis located in Appendix G Maps associated with this natural hazard may be found on-line at: https://www.scgov.net/AllHazards/Pages/LocalMitigation.aspx

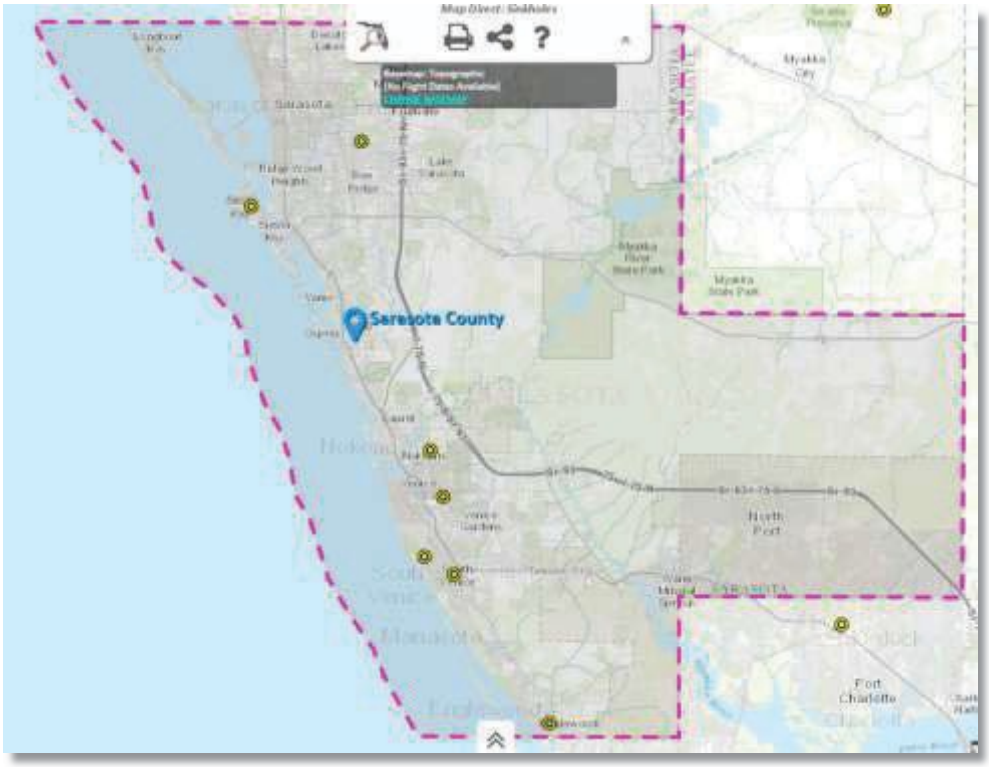
Land Subsidence/Sinkholes

Land subsidence is the lowering of a portion of the earth's crust and can occur naturally or because of human activity. Natural subsidence may occur when limestone, which is easily eroded carved by water, collapses and forms sinkholes on the surface, or by earthquakes along fault lines. Human activities such as mining or the extraction of oil, gas (through fracking) and water may also lead to land subsidence. Sinkholes are a common feature of Florida's landscape due to land subsidence. The extent of land subsidence/sinkhole is measured by the depth in feet.

Sinkholes are only one result of karst landforms, which include caves, disappearing streams, springs, and underground drainage systems, all of which occur in Florida. Sinkholes form in karst terrain principally from the collapse of surface sediments into underground cavities in the limestone bedrock. Slightly acidic ground water slowly dissolves cavities and caves in the limestone over a period of many years. When a cavity enlarges to the point that its ceiling can no longer support the weight of overlying sediments, the earth collapses into the cavity, forming a sinkhole. Sinkhole probability in Sarasota County is "uncommon" by the Florida Geologic Survey but deep collapse types and small subsidence sinkholes are possible and can be formed in the shallow shell beds.

Vulnerability from sinkholes includes impact to structures, roadways, or other infrastructure. All structures, utilities, systems, and populations are equally vulnerable. Depending on the location and size of a sinkhole, the social and economic impact can range from minimal to extensive. While sinkholes have been reported throughout the county, most are small and cause little damage. Impacts could range from minor damage to a home or road, to an entire city block. Even a small sinkhole can cause foundations or walls to shift or crack. Sinkholes typically reduce real estate values which has a direct impact on the economy and the tax base of local governments. Increase in insurance costs and uninsured losses becoming more frequent as affordable insurance becomes less available.

All jurisdictions within Sarasota County are vulnerable to land subsidence and the sinkholes that may be created in their aftermath. Since July of 1981, Sarasota County, and the jurisdictions within have recorded seven sinkhole events, all less than ten feet in diameter, and each was centered on a single property. The extent of sinkhole damage is low, and the probability of future occurrences is low based upon the number of historical occurrences. All structures and critical facilities could be impacted by this hazard along with the associated economic disruptions and environmental damage an incident could create. Based upon current historical data, it would be unlikely for a sinkhole event greater than ten feet in diameter to occur. Subsidence map from the Florida Geological Survey:



Of the 7 mapped Subsidence Incident Reports in Sarasota County, only 1 occurred in the last 5 years. Reported on July 7, 2013 several small holes were reported after heavy rainfall. The maximum dimensions were 2-8' wide with no property damage.

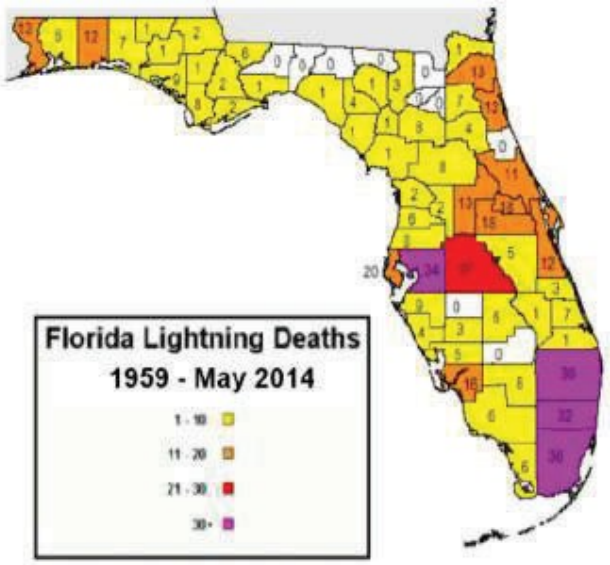
The Florida Division of Emergency Management completed a statewide Sinkhole vulnerability analysis in 2017.

Landslide

A landslide is defined as a mass movement of soil, mud, and (or) rock down a slope. Due to the topography of Sarasota County and the jurisdictions within, landslides are not a natural threat. There have been no historical references to a landslide taking place within Sarasota County. Landslides are not considered a risk and therefore it will not be fully profiled.

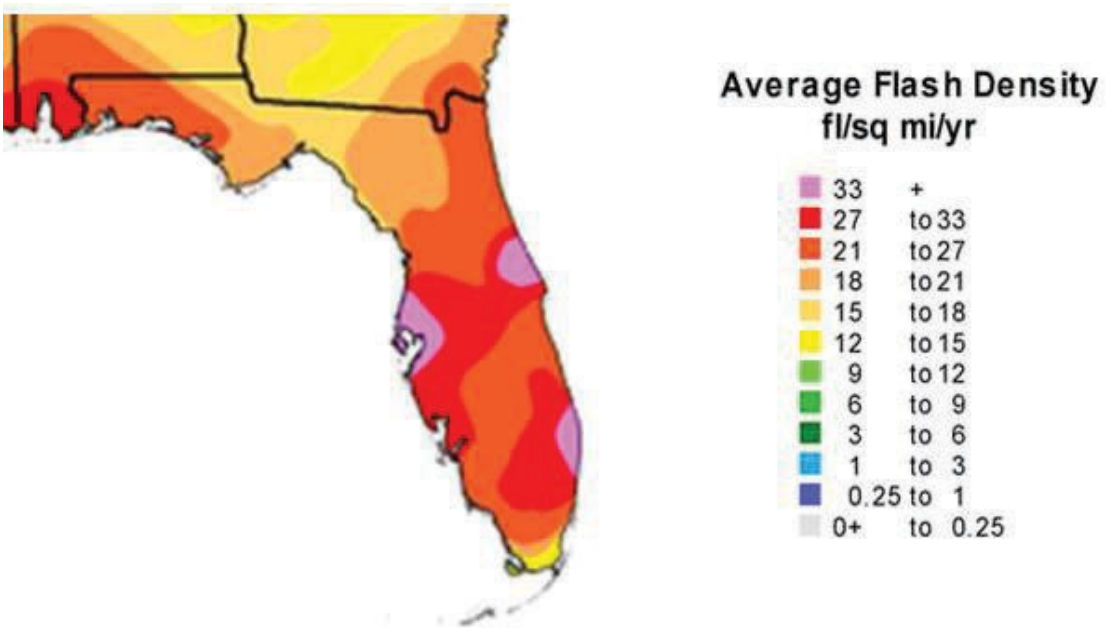
Severe Weather Storms

Phenomena associated with weather generated events are grouped under the category Seasonal Severe Weather. Each severe weather hazard has its own natural characteristics, areas, and seasons in which it may occur, duration, and associated risks. While these hazards have their own characteristics and effects, they often occur in conjunction with one another, thereby increasing and intensifying the effects. The primary hazards included under this category include lightning, freezes, and damaging winds.



Lightning is a discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a "bolt" when the buildup of charges become strong enough. This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit.

Central Florida is the most lightning prone area in the United States with about 90 thunderstorm days a year. Because of this, Florida has more lightning deaths than any other state. In fact, lightning kills more people in Florida than all other weather hazards combined. In the Florida Peninsula, thunderstorm season has two general periods. The summer months, running from early May to early October, is known as the wet season. Conversely, October through May is known as the dry season. Historically, the most dangerous months are June, July, and August.



Source: http://www.lightningsafety.noaa.gov/stats/97-11Flash_Density_miles.png

Sarasota County and all jurisdictions are vulnerable to lightning. Lightning occurs randomly and it is impossible to predict where it will strike. According to NOAA, Sarasota County average lightning density is 21 to 27 flashes per square mile per year. The risk of lightning is high in Sarasota County, mostly affecting electrical service to communities with restoration of service typically occurring within the same day. More critical is potential loss of physical damage and loss to computer systems/networks which are relied upon by businesses. Many lightning victims are individuals engaged in recreation or work. Recreational activities occur throughout the county. The worst-case scenario for Sarasota County would be to receive a thunderstorm that has cloud to ground lightning that strikes at a large outdoor gathering and injures or kills several people. A separate but also bad case scenario would be lightning that sparks a wildfire (see wildfire extent).

Lighting events have been recorded 26 times since 1950 by the NOAA Satellite and Information Service in Sarasota County. Structural damage because of lighting for these recorded events has totaled over $1.17M for an average of $45K per event. For planning purposes, this average is consistent with the expectations of the Local Mitigation Strategy Working Group estimates for this natural hazard occurrence per event.

Storm Events Database

Search Results for Sarasota County, Florida

Event Types: Extreme Cold/Wind Chill, Frost/Freeze

Sarasota county contains the following zones:
'Coastal Sarasota', 'Inland Sarasota'

1 events were reported between 01/01/1950 and 01/31/2020 (25598 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	1
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

Sarasota County is susceptible to freezing temperatures and damage resulting from freezes. A freeze is weather marked by low temperatures especially when below the freezing point (0° Celsius or 32° Fahrenheit) for a significant period. Freezing temperatures can damage agricultural crops and burst water pipes in homes and buildings. Frost often associated with freezes can increase damaging effects. Frost is a layer of ice crystals that is produced by the deposit of water from the air onto a surface that is at or below freezing.

The damage that can result from a freeze is typically associated with the agriculture industry, and not one affecting persons, structures, or associated property directly. During extended periods of low temperatures, individuals can suffer hypothermia and frostbite. Those highest at risk are primarily either engaged in outdoor activity or are the elderly who are chronically exposed to colder indoor temperatures. Vulnerable populations include elderly, homeless, and low-income residents. Sarasota County has had occurrences in the past where the temperature has dropped into the low 20's for several hours during the night and early morning according to the National Climatic Data Center report information. In the worst-case scenario Sarasota County could expect to see temperatures in the low 20's for 8-10 hours before warming to a less critical temperature. During cold weather events Sarasota county has a process in place to open cold weather shelters for those vulnerable to impacts.

Typically, December through February, are the months most susceptible to freeze events. A severe freeze in Sarasota County is possible each winter season. The exact probability would be very difficult to determine, but based on past experiences, it would be very low. The entire citrus and vegetable industry are vulnerable to freezes. The maximum threat for the County would be for a late or early season freeze to occur. Agricultural damage because of freezes for these recorded events has totaled over $12.4M.

Storm Events Database

Search Results for Sarasota County, Florida

Event Types: High Wind, Strong Wind, Thunderstorm Wind

Sarasota county contains the following zones:
'Coastal Sarasota', 'Inland Sarasota'

144 events were reported between 01/01/1950 and 01/31/2020 (25598 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	114
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	4
Number of Days with Event and Property Damage:	51
Number of Days with Event and Crop Damage:	1
Number of Event Types reported:	1

All of Sarasota County is susceptible to severe weather events on an annual basis and the damage could be extensive throughout the county. While not classified as a tropical cyclone, the most significant event occurred on June 18, 1982 when a no-name storm impacted the county with six inches of rain and 60 mph winds.

Damaging winds can be a consequence of hurricanes and tropical storms as well as thunderstorms. There are a variety of types of damaging winds formed by different thunderstorm processes, but thunderstorms produce some straight-line winds when the thunderstorm downdraft hits the ground and flows outward. A downburst is a strong downdraft which induces an outburst of damaging winds on or near the ground, and a microburst is a small but powerful downburst. Microburst winds can cause significant damage. Winds can cause damage when they reach 50 mph. In a windstorm, wind gusts could be as high as 73 mph and sustained winds can be up to 39-73mph in Sarasota County. While severe thunderstorm events may create high and damaging winds, their impact is usually not long lasting. Winds that are over 68mph trigger severe thunderstorm warnings from the National Weather Service. High winds associated with thunderstorms have been recorded 144 times since 1950 by the NOAA Satellite and Information Service in Sarasota County. Structural damage because of thunderstorms for these recorded events has totaled over $2.457M for an average of $17K per event. For planning purposes, this average is consistent with the expectations of the Local Mitigation Strategy Working Group estimates for this natural hazard occurrence per event.

Additional vulnerability information for this natural hazard is the Hazard Identification and Vulnerability Analysis located in Appendix H. Maps associated with this natural hazard may be found on-line at https://www.scgov.net/AllHazards/Pages/LocalMitigation.aspx
For a complete listing of events recorded by the NOAA Satellite and Information Service that have taken place in Sarasota County from January 1, 1950 to January 31, 2020 please refer to Appendix I.

Tornado/Waterspout

One of the most frequent and unpredictable natural hazards that all communities face are tornadoes. Tornadoes are cyclonic windstorms that usually accompany thunderstorms and hurricanes. While relatively short-lived in duration, tornadoes are intensely focused, making them one of the most destructive natural hazards. The weather conditions that tend to generate this phenomenon are unseasonably warm and humid earth surface air, cold air at the middle atmospheric levels, and strong upper-level jet stream winds. Waterspouts are weak tornadoes that form over warm water and occasionally move inland and become tornadoes.

More tornadoes and waterspouts occur in the United States than anywhere else in the world and Florida is considered an “at risk” state. Florida has two tornado/waterspout seasons. The summer tornado and waterspout season runs from June until September and has the highest frequencies of occurrences with usual intensities of EF0 or EF1 on the Enhanced Fujita Scale (Table 14). Since a waterspout is a tornado that is over

water the Fujita Tornado scale is also used to measure the extent of waterspouts. The spring tornado and waterspout season runs from February until April and is characterized by more powerful tornadoes on the Enhanced Fujita Scale.

Table 14: Enhanced Fujita Tornado/Waterspout Scale

Classification	MPH
EF0	65-85
EF1	86-110
EF2	111-135
EF3	136-165
EF4	166-200
EF5	Over 200

The Enhanced F-scale still is a set of wind estimates (not measurements) based on damage. Its uses three-second gusts estimated at the point of damage based on a judgment of 8 levels of damage to 28 indicators. These estimates vary with height and exposure. **Important**: The 3 second gust is not the same wind as in standard surface observations.

Source: http://www.spc.noaa.gov/efscale/ef-scale.html

All jurisdictions (City of Sarasota, City of North Port, City of Venice, Town of Longboat Key and Sarasota County) within Sarasota County are at risk to tornadoes. Coastal jurisdictions vulnerable to waterspouts are City of Sarasota, City of Venice, Town of Longboat Key and Sarasota County. Sarasota County has experienced 90 tornado and/or Waterspout events between January 1, 1950 and January 31, 2020. Several tornadoes have caused $500,000 or more in damage per incident.

Tornado History in Sarasota County: January 1950 – January 2020

Source: www.tornadohistoryproject.com

Following a tornado in June 2013, a National Weather Service survey found a narrow path of damage starting near the coast of Venice and moving northeast towards Highway 41. Damage included a few uprooted trees, including one large oak tree, numerous large branches down, minor roof damage to a couple houses and general light damage to a few car ports, pool cages, and fences. Damage was roughly estimated at $10,000.

All jurisdictions in Sarasota County can be impacted by a tornado. In January 2015, a Myakka State Park Forest Ranger reported tornado damage to a ranger station and a mobile home trailer at around 3:50 am. A subsequent NWS storm survey found a 50-yard-wide, one mile long intermittent path of damage that included snapped and uprooted trees and a mobile home trailer that had been picked up and tossed 30 to 40 yards. The damage was found to be consistent with an EF-0 tornado making multiple touchdowns with estimated peak winds of 85 mph. The survey found low end EF-0 damage to the east of the Myakka River State Park that included minor roof damage, a bent stop sign pole, and numerous broken tree branches.

A potent storm system developed and tracked quickly eastward across the Gulf of Mexico, and toward the state of Florida during Saturday January 16th, 2016. The impacts from this storm reached west central and southwest Florida during the early morning hours of Sunday January 17th, 2016. This storm system represented a classic setup for a strong El Nino tornado outbreak across the Florida peninsula. Preparation and public outreach efforts for just such an event, given the ongoing strong El Nino, had been underway at the NWS office in Ruskin for several months.

A squall line of strong and severe thunderstorms organized and quickly moved eastward during the 16th across the western and central Gulf of Mexico ahead of a cold front. This line of storms approached the Florida west coast after 2 AM EST on the 17th. Just ahead of this squall line, individual supercell thunderstorms developed and moved quickly northeastward toward the coast, south of the Tampa Bay area.

Multiple fast-moving supercell thunderstorms crossed the southwest Florida coast, with one storm producing at least two confirmed EF-2 tornadoes. The first tornado formed as a waterspout and came ashore near the Siesta Key/Sarasota area before briefly lifting. The same supercell then shortly thereafter produced another EF-2 tornado further inland, over northeast Manatee County, near the town of Duette.

The tornado that impacted Siesta Key in Sarasota County was rated as an EF2 with peak winds of 132 mph. It touched down at 3:17 a.m. and remained on the ground for five minutes, traveling just over one mile. It started out about 350 yards wide and narrowed to about 100 yards wide. The tornado damaged the roof of 3 condominium buildings and destroyed one two story home in the Baywinds neighborhood.

Factors that contribute to the vulnerability from tornadoes and waterspouts are the abundance of pre- engineered structures (including manufactured housing and metal buildings), recreational vehicles, and high concentrations of elderly populations. The most vulnerable populations include those in mobile home parks, recreational

vehicles, and aged or dilapidated housing. The potential for damage and loss of life increases as a function of population density. As the number of structures and people increase, the probability that a tornado will cause property damage or human casualties also increases. All critical facilities in the county and jurisdictions are susceptible to impacts from tornadoes. Coastal populations, structures and personal property such as boats are particularly vulnerable to waterspouts. Effective early warning systems are the best way to reduce the vulnerability from tornadoes. Damage to coastal structures including docks and coastal buildings, as well as personal property (boats) are at risk of waterspouts.

Historically, Sarasota County typically experiences tornado and waterspout activity on the EF0 or EF1 Fujita Tornado Scale, but a tornado of a higher magnitude EF3, struck the City of Venice in 1985 causing one death, 45 injuries, and damage to 150 homes. Based upon historical data, it would be highly unlikely for Sarasota County to experience a tornado or waterspout greater than an EF3. A tornado of any scale could impact all types of structures and critical facilities within its path. Economic disruptions and environmental damage will be dependent upon the magnitude of the tornado. Similarly, waterspouts can impact all coastal areas causing damage to coastal structures, such as docks and personal property including boats.

Tsunami

A tsunami is defined as a sea wave of local or distant origin created by an underwater disturbance such as an earthquake, landslide, volcanic eruption, or meteorite. Offshore and coastal features can determine the size and impact of tsunami waves. Reefs, bays, entrances to rivers, undersea features, and the slope of the beach all help to modify the tsunami as it approaches the coastline. When the tsunami reaches the coast and moves inland the water level can very quickly rise many feet. The extent of a tsunami would be measured by the depth of flooding and how far inland (in miles) the impacts extend.

Overall, Florida has not experienced any destructive tsunami events, but all coastlines of Florida, including Sarasota County's coastal jurisdictions, are prone to tsunami events. There is no historical data available to estimate the extent of impact or probability of an event occurring within Sarasota County. There are no significant earthquake sources within the Gulf of Mexico that are likely to generate tsunamis, despite recent seismic activity in the area. Tsunami propagation from significant earthquake sources outside the Gulf of Mexico, such as the northern Panama Convergence Zone, Northern South America, Cayman Trough, the Puerto Rico trench, or the Gibraltar area shows that wave amplitude is greatly attenuated by the narrow and shallow passages into the gulf, and as a result, these tsunami sources do not constitute a tsunami hazard to the Gulf of Mexico coast. This was reinforced by the Regional Assessment of Tsunami Potential in the Gulf of Mexico published by USGS in 2009.

Since Florida is not located along the convergent margins of the tectonic plates, there is no likelihood of earthquake-generated tsunamis. While history has shown that Florida's east coast has experienced some tsunami activity, there is no such

record for the Gulf coast due to the large continental shelf located in the Gulf of Mexico, even when the latest 6.0 earthquake happened on September 10, 2006 at 8:56 a.m. There were no documented flooding or aftereffects from this event. Consequently, it can be assumed that the Gulf coast has little to fear from this natural occurrence, however there is still a possibility that it could happen.

If a tsunami were to occur impacts would be felt by those with coastal frontage; specifically, Sarasota County, City of Sarasota, City of Venice and Town of Longboat Key. The City of North Port would likely not experience impacts as it is located inland and has no direct coastal exposure. Impacts would result in structural damage to coastal structures, both commercial and residential, as well as potential loss of life as many of our residents live within a mile or less of the coastal zone. Flooding would be significant causing damage to structures within a 1 to 3-mile radius of the coastal zone. Those structures and residents living within 1-mile of the coastal zone are the most vulnerable to impacts from tsumani.

Because of the extremely low probability and minimal, if any impacts, no further analysis will be completed for tsunami.

Additional vulnerability information for this natural hazard is the Hazard Identification and Vulnerability Analysis located in Appendix G Maps associated with this natural hazard may be found on-line at https://www.scgov.net/AllHazards/Pages/LocalMitigation.aspx

Volcano

A volcanic eruption is defined as the discharge of fragmentary ejecta, lava, and gases from a volcanic vent. Due to the topography of Sarasota County, the jurisdictions within, and the absence of any known volcanoes, this natural hazard is not a natural threat. There have been no historical references to a volcanic eruption taking place within Sarasota County. Volcanoes are not considered a risk and therefore it will not be fully profiled.

Wildfire

A wildfire is defined as an intense fire that usually occurs in both rural and urban settings. Sarasota County has experienced many wildfires each year of varying degrees of scale. This is a major concern for all the jurisdictions, directly or indirectly, within the County because over 75% of the County is vulnerable to wildfires. While the Town of Longboat Key is the only jurisdiction not directly vulnerable to wildfires it may be indirectly affected by the smoke and other associated hazards. The fire departments located within the County to work closely with outside fire suppression agencies on fire mitigation and controlled burns, and recently instituted a local Firewise Communities Program. Table 15 below addresses the wildfire by cause data in fiscal year 2020 (October 1, 2019 to September 30, 2020).

Table 15: Wildfires by Cause 10/2019 – 9/2020

Cause	Fires	Percent	Acres	Percent
Campfire	**2**	**7.69**	**7.0**	**7.53**

Children	**2**	**7.69**	**1.1**	**1.18**
Debris Burn*	**0**	**0**	**0**	**0**
Debris Burn--Auth--Broadcast/Acreage	**0**	**0**	**0**	**0**
Debris Burn--Auth--Piles	**0**	**0**	**0**	**0**
Debris Burn--Auth--Yard Trash	**0**	**0**	**0**	**0**
Debris Burn--Nonauth--Broadcast/Acreage	**0**	**0**	**0**	**0**
Debris Burn--Nonauth--Piles	**0**	**0**	**0**	**0**
Debris Burn--Nonauth--Yard Trash	**0**	**0**	**0**	**0**
Equipment use*	**0**	**0**	**0**	**0**
Equipment--Agriculture	**1**	**3.85**	**32.5**	**34.98**
Equipment--Logging	**0**	**0**	**0**	**0**
Equipment--Recreation	**1**	**3.85**	**3.0**	**3.23**
Equipment--Transportation	**0**	**0**	**0**	**0**
Incendiary	**0**	**0**	**0**	**0**
Lightning	**8**	**30.77**	**27.5**	**29.60**
Miscellaneous --Breakout	**2**	**7.69**	**5.1**	**5.49**
Miscellaneous --Electric Fence	**0**	**0**	**0**	**0**
Miscellaneous --Fireworks	**0**	**0**	**0**	**0**
Miscellaneous --Power Lines	**1**	**3.85**	**2.0**	**2.15**
Miscellaneous --Structure	**0**	**0**	**0**	**0**
Miscellaneous--Other	**2**	**7.69**	**0.6**	**0.65**
Railroad	**0**	**0**	**0**	**0**

Smoking	**0**	**0**	**0**	**0**
Unknown	**7**	**26.92**	**14.1**	**15.18**
Total	**26**		**92.9**	

Source: Florida Forest Service http://tlhfor013.doacs.state.fl.us/PublicReports/FiresByCause.aspx

Table 15 details wildfire activity in fiscal year 2019. Over the last 5 years Sarasota County and its jurisdictions have experienced 256 reported fires.

Wildfires impact residents and businesses by threatening physical structures. However, smoke can also have widespread impacts including closure of roadways and evacuations of areas of heavy smoke. This has personal as well as economic impacts, depending on the area affected. Uncontrolled wildfires can also cause severe economic impact to the agricultural industry. The extent of wildfires are measured in the number of acres impacted.

The largest wildfire on record for Sarasota County was over 6,00 acres in the Carlton Preserve during April of 2001. While the County has not experienced a wildfire of this magnitude since, it is still reasonable under the proper conditions that a similar fire of this severity could occur again. Most structures within the vicinity of the fire would be impacted as well as the critical facilities. Depending on the location within the County, a similar fire could cause an economic disruption and or environmental damage. The overall reduction of wildfires can be attributed to the Florida Forest Service Firewise Communities Program and the recent increase in precipitation.

Fire management has created a reduction in large fires. Sarasota County Mitigation Program has conducted over 300 prescribed burns since 2015 and burned more than 40,000 acres in that time. Also, other local agencies as well as private ranches have increased the amount of burning, they do. Additionally, steps have been taken to reduce the threat along each park and preserve within Sarasota County to reduce the threat of a wildfire impacting residents.

As the population in Sarasota County continues to grow, the number of residents living in or near wildland areas will also continue to increase. Subsequently, the threat of wildfire will increase as the urban areas extend into previously forested areas, or into or adjacent to forested areas not prescriptively burned on a regular basis. The number of human-caused fires is also predicted to increase as the population living in wildland urban interface areas continues to grow, and as natural areas within the urban area age out absent prescriptive fire or other vegetation and leaf litter management. Growth can reduce wildfire impacts. For example, North Port will build two new fire stations within the next four years. These additional firefighting resources will reduce response times and provide additional capabilities.

Firefighters from multiple jurisdictions extinguished a five-alarm wildfire in Venice on March 18, 2012. Roughly 20 to 30 homes were evacuated, and 3,700 households were without electricity while power lines were shut down as a precaution. The fire burned approximately 12 acres. Source: http://www.heraldtribune.com/article/20120318/BREAKING/120319544/0/search

One home was damaged in two brush fires just one mile apart on April 26, 2012 in North Port. One home had minor damage when pine needles in its gutters caught fire. Both fires were only about a quarter acre in size. Source: http://www.heraldtribune.com/article/20120426/BREAKING/120429672/0/search

A 100-acre wildfire caused Interstate 75 to be shut down for four hours on May 11, 2015. According to North Port spokesman Josh Taylor this is the biggest fire the department has found in about the last five years. Firefighters from Englewood, Nokomis and Sarasota, Charlotte, Lee, and Collier counties assisted the North Port fire department. Minor property damage, including a melted light on a home, some warped gutters and fences with burn marks also occurred. Source: http://www.heraldtribune.com/article/20150511/ARTICLE/150519960/0/search

The maximum and minimum size of a wildfire, and the associated impacts, cannot be easily calculated. A small fast-moving fire in the urban interface could cause property damage or injuries while a large fire in a rural area could cause neither.

The City of North Port is currently developing a Community Wildfire Protection Plan (CWPP) with an expected completion date of 2021. The Sarasota County Fire Department (Mitigation) has also partnered with the City of North Port. The development of a CWPP is due to the large size of the city 104.1 square miles, and the high hazard of Wildfire/Urban Interface (WUI) within the city. Also taking into consideration the City of North Port geographic location, with the Carlton Preserve to the Northern city boundary. The Deer Prairie Creek-Schewe Tract to the Western city boundary, and the large tract of undeveloped city area to the East creates further risk.

Windstorm

Damaging winds can be a consequence of hurricanes and tropical storms as well as thunderstorms. While severe thunderstorm events may create high and damaging winds, their impact is usually not long lasting. Winds that are over 68mph trigger severe thunderstorm warnings from the National Weather Service. High winds associated with thunderstorms have been recorded in Sarasota County by the NOAA Satellite and Information Service 144 times since 1950. Structural damage because of thunderstorms for these recorded events has totaled over $2.46M for an average of $17K per event. For planning purposes, this average is consistent with the expectations of the Local Mitigation Strategy Working Group estimates for this natural hazard occurrence per event.

Damage from high winds can impact all structures and utilities. The structures most susceptible to damage are older buildings, dilapidated housing, and other less hardened properties, such as mobile homes. Depending on the intensity of a hurricane, economic impacts can be severe. All populations may be impacted by these events, but those at highest risk are the elderly, the disabled, lower income, and the homeless. Hurricanes can also cause extensive environmental damage.
In a windstorm, wind gusts could be as high as 73 mph and sustained winds can be up to 39-73mph in Sarasota County.

Impacts from high winds in all Sarasota County jurisdictions could be like previous occurrences of high winds:

June 2009: Several manufactured homes along Blackburn Boulevard and Imperial Drive sustained damage when winds ripped off carports and portions of roofs.

March 2011: There was one large tree that fell onto a home causing some structural damage on Edmondson Road. In addition, there was some vehicle damage and damage to a carport as a large, snapped tree limb fell onto it. There was some roof damage to a home on Adriatic Street, and a snapped tree caused some vehicle and structure damage on Jessica Street.

July 2012: Broadcast media reported straight line winds removed a section of roofing from a shopping center on US 41 and Holland Street in Osprey. As a result of the roof damage, rainwater got into the building and caused further damage.

June 2015: Broadcast media relayed a report and picture of a large sign for a car repair business damaged by wind gusts.

August 2018: Winds damaged four roofs and six carports in communities such as Lake Village Mobile Home Park in Nokomis. The entire mobile home park lost power for a while. Nokomis firefighters helped residents safely place tarps over damaged roofs. The National Weather Service reported that the damage was most likely caused by microbursts from the storms.

All Sarasota County jurisdictions are vulnerable from high winds. Specific vulnerabilities include the number of mobile homes and structurally unsound buildings that were built before enhancements to local and the Florida building code. Sarasota County has adopted standards for canopy roads to help maintain and enhance scenic beauty, provide shade, increase economic value of properties, conserve the environment, and create a unique sense of character for these communities. These trees if not properly maintained however can increase vulnerability from high wind events.

Above ground powerlines are also common throughout the developed areas of Sarasota County. These above ground lines are vulnerable to impacts from high winds. While newer neighborhoods have underground powerlines, Florida Power & Light estimates only 30% of their lines are underground. http://realestate.heraldtribune.com/2015/06/07/power-lines-appeal-vs-cost/

As the population increases, ensuring that Sarasota County has enough shelter space to provide for its residents is paramount. The protection of critical infrastructure, communication systems, and power sources are key to the recovery after a tropical cyclone event. Ensuring that our private and public sector facilities meet existing building code to withstand the impacts of hurricanes should continue to be implemented.

Besides the damage severe weather (storm) events can produce, high winds can also create significant quantities of debris from downed trees, branches, and damaged buildings. This debris can impede emergency management efforts; present a safety hazard for emergency and repair workers and citizens; and present significant storage and disposal issues.

Storm Events Database

Search Results for Sarasota County, Florida

Event Types: High Wind, Strong Wind, Thunderstorm Wind

Sarasota county contains the following zones:
'Coastal Sarasota', 'Inland Sarasota'

144 events were reported between 01/01/1950 and 01/31/2020 (25598 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	114
Number of Days with Event and Death:	1
Number of Days with Event and Death or Injury:	4
Number of Days with Event and Property Damage:	51
Number of Days with Event and Crop Damage:	1
Number of Event Types reported:	1

All of Sarasota County is susceptible to severe weather events on an annual basis and the damage could be extensive. While not classified as a tropical cyclone, the most significant event occurred on June 18, 1982 when a no-name storm impacted the county with six inches of rain and 60 mph winds.

Pandemics

Beginning in January of 2020 the coronavirus disease 2019 (COVID-19) evolved from an isolated disease in a region of China to a global pandemic that brought countries to a standstill, pushed hospital systems to the brink, and dragged the global economy into a recession.

The first confirmed case of the novel coronavirus in the United States was discovered on January 21st in a Washington state resident. The man had recently returned from Wuhan on January 15. The CDC soon after deployed a team to help with the investigation, including potential use of contact tracing. On February 3rd, the President declared a public health emergency due to the coronavirus outbreak. The announcement came 3 days after the World Health Organization (WHO) declared a Global Health Emergency as more than 9800 cases of the virus and more than 200 deaths had been confirmed worldwide.

On March 9th, Governor Ron DeSantis issued Executive Order 20-52, declaring a State of Emergency for COVID-19. By declaring a State of Emergency, Governor DeSantis helped to ensure that state and local governments could acquire the resources and have the flexibility they needed to prepare and respond. On March 16th, Sarasota County declared a State of Emergency for the Novel Coronavirus and the Emergency Operations Center went to Level2

(partial activation). Due to the contagious factors of the virus the EOC was activated using initial entry screening, multiple rooms, social distancing, and virtual meetings.

The Sarasota County EOC went into a continuous state of level 2 activation (partial) with daily virtual Command meetings, weekly coordination calls with the Florida Division of Emergency Management and municipal, constitutional officers and response partners. The activation level remained at level 2 throughout most of 2020.

Man-made Hazards

The following man-made hazards are identified as possibly impacting Sarasota County jurisdictions.

Cyber Attack
Cyber-attacks include the use of electronic devices to attack, cripple or damage information systems held by governmental or private institutions, as well as individual citizens. Cyber-attacks are largely achieved through one of three means: 1) through wired and wireless Internet connections, 2) through the uploading of malicious software, and 3) through hardware transfer devices such as thumb drives. The sources of cyber-attacks include criminal groups seeking financial gain, nation states involved with espionage and plans to undermine foreign governments through a weakening of national defenses, activist groups bent on gaining public opinion or punishing those who disagree with their agenda as well as lone individuals seeking fame or fortune. Terrorist groups can also be a source of cyber-attacks; however, their current capabilities are somewhat limited. A sharp increase in the number of cyber intrusions into government and corporate computer networks has caused the United States to launch several new initiatives in cyber security. Many of the initiatives have focused on protecting critical infrastructure control and command systems, preventing access to sensitive government information, and thwarting acts of fraud and theft targeting business financial systems. Sarasota County Enterprise Information Technology and the municipal information technology departments have strict information security policies and continuously monitor their networks for any abnormalities and are prepared to take the necessary action to limit any impact.

Civil Disturbance
Civil disturbances can occur due to socio-economic, political, or other reasons. These types of events typically occur in public places, including court houses or town civic spaces. The Sarasota County Sheriff's Office maintains awareness of potential civil disturbance activity through various intelligence sources including trends on social media.

Terrorism
Terrorism includes any attempt to attack, cripple or damage public goods, public infrastructure, or citizens on a large scale. Sarasota County Emergency Services as well as the municipal law enforcement agencies maintain involvement with the Southwest Florida Regional Domestic Security Task Force to monitor and receive threat information.

Hazardous Materials
Hazardous material (HazMat) includes events when liquid, solid or gaseous chemicals that are harmful or fatal to humans or ecological infrastructure disperse into the atmosphere.

Mass Migration
Mass-migration occurs when persons of one geographic area move in large numbers to another geographic location. Although Sarasota County is more much farther away from Cuba than

other counties in southwest Florida, thirty Cuban migrants were dropped off on Longboat Key by a large fishing boat in 2006.

Analyzing Development Trends

Land uses and development trends are defined within each jurisdiction's adopted Comprehensive Plan. State Statues have given local governments the responsibility for coordinating the overall pattern of physical development in a community. To achieve this coordination, a local government needs a document which establishes long- range, general policies for the physical development of the community. A comprehensive plan meets this need.

The contents of these plans are all-inclusive, general, and long-range. "All-inclusive" means that the plan addresses all geographical parts of the community and all functional elements that can affect physical development. "General" means that it includes general policies and designations, not detailed regulations. "Long-range" means that the plan looks beyond pressing current issues to the problems and possibilities of years in the future.

Comprehensive plans can be amended at a specific time of year called the yearly amendment cycle. Amendments may be initiated by private citizens and the jurisdiction. Jurisdiction Commissions may approve an amendment after the State Department of Community Affairs considers the proposed change to follow state law.

In addition, the Sarasota 2050 is a 50-year land use plan designed to manage and shape future growth in Sarasota County. Sarasota 2050's primary goals are preserving our county's natural, cultural, and physical resources while making all neighborhoods more livable.

City of North Port, City of Sarasota, City of Venice, Sarasota County Government, and Town of Longboat Key future land use maps may be found in Appendix G. Sarasota County Schools and Sarasota Memorial Hospital do not have comprehensive land use plans.

Multi-Jurisdictional Risk Assessment

The multi-jurisdictional risk assessment may be found in Table 9. Due to the topography of the County, the jurisdictions within Sarasota County are vulnerable to the same natural hazards, with three exceptions. Coastal erosion and tsunamis only affect the City of Sarasota, City of Venice, Sarasota County Government, and the Town of Longboat Key because of their respective jurisdictional border with the Gulf of Mexico. A levee failure may impact the City of North Port and Sarasota County Government due to the reservoir located in an adjacent county that borders the two jurisdictions. Another area of concern is the Hidden River made berm along the Myakka River. This berm failed during a heavy rain event in 2003. The Sarasota County Flood warning and Response plan calls for a warning to residents of Hidden River when the water level on the man-made berm reaches 18 feet. It also initiates the plan for opening a command post and shelter at the Old Miakka Church which is located a short distance from the entrance to Hidden River.

Section IV: Mitigation Strategy

A. Local Hazard Mitigation Goals

The overall goal of the Sarasota County Local Mitigation Strategy Working Group is to develop and maintain a "Disaster Resilient Community", through awareness and application of hazard mitigation policies and the identification, prioritization, and achievement of cost-effective mitigation projects. To implement the strategy, the following goals and objectives or action items were established based effectively and efficiently upon the 2004, 2014 and 2015 versions of the LMS and were reviewed and updated in 2020:

Goal 1: Assess vulnerabilities and identify mitigation models for natural hazards relevant to Sarasota County.	
Objective 1:	Maintain up-to-date community-wide vulnerability assessment.
Objective 2:	Identify mitigation models and disseminate community wide.
Goal 2: Identify, prioritize, and achieve cost-effective mitigation projects for the prevention and protection of lives, property, and natural resources within Sarasota County.	
Objective 1:	Identify projects to mitigate losses and meet the strategies of mitigation "Best Practices" for:
	Acquisition of hazard prone property and conversion to open space.
	Retrofitting existing buildings and facilities.
	Elevation of flood prone structures.
	Vegetative management and soil stabilization.
	Infrastructure protection measures.
	Storm Water management.
	Minor structural flood control projects.
	Post-disaster code enforcement activities.
Objective 2:	Educate stakeholders in mitigation grant criteria.
Objective 3:	Maintain up-to-date project list and supporting documentation.
Objective 4:	Timely distribute grant opportunity information to stakeholders.
Goal 3: Promote the continued participation in the National Flood Insurance Program and the Community Rating System.	
Objective 1:	Continue to contribute, review, and support local ordinances related to the floodplain regulations within the National Flood Insurance Program and jurisdictional Floodplain Management Plans.
Objective 2:	Maintain, support, and improve administrative requirements at the local jurisdiction.
Goal 4: Maintain and develop effective "Public Outreach" activities.	
Objective 1:	Maintain citizen informational and contact web site.
Objective 2:	Maintain and distribute Federal Emergency Management Agency and National Flood Insurance Program literature to the citizens of Sarasota County.
Objective 3:	Appropriately advertise all Local Mitigation Strategy Working Group and Regional Floodplain Management Planning and Coordination Committee meetings.
Goal 5: Maintain and increase participation in the Sarasota County Local Mitigation Strategy Working Group.	
Objective 1:	Distribute annual invitation to non-participating jurisdictions.
Objective 2:	Identify Non-profit and Profit Non-Governmental Organizations and distribute invitations to participate.
Objective 3:	Identify Neighborhood Associations and distribute invitations to participate.
Goal 6: Support mitigation activities and research projects within Sarasota County and the surrounding local, State of Florida and Federal jurisdictions.	
Objective 1:	Participate in adjoining County Local Mitigation Strategy meetings.

Objective 2:	Identify and participate in mitigation activities and projects at all jurisdictional levels.
Objective 3:	Encourage research and demonstration projects within Sarasota County.

B. Identification and Analysis of Mitigation Actions

The 2021 Sarasota County Unified Local Mitigation Strategy plan identifies and analyzes a wide range of mitigation actions and projects for the natural hazards that may affect the jurisdictions encompassed by this plan. Projects range from public outreach to reducing the effects of natural hazards on new and existing buildings. A complete list of mitigation projects and actions may be found in Appendix D.

C. Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance

The communities of both incorporated and unincorporated Sarasota County have adopted, and continue eligibility in, the National Flood Insurance Program, which allows all residents to purchase Federal Flood Insurance and qualify for emergency assistance. Sarasota County Schools and Sarasota Memorial Hospital are legal jurisdictions in the State of Florida and may also purchase federal flood insurance through the respective eligible community. Tables 16A through 16C below summarize each participating community's involvement in the National Flood Insurance Program and Community Rating System (CRS) program as of May 1, 2020. CRS status changes are reported by FEMA twice a year on May 1st and October 1st. Those changes are posted to a website under "Communities and their Classes" visit http://www.fema.gov/library/viewRecord.do?id=3629 Additional information is provided in each jurisdiction's respective Floodplain Management Plan that may be found in Annexes A –E.

Table 16A Community Rating System Class

Jurisdiction	Date Joined NFIP	CRS Class	% of Savings	Office Designated as Floodplain Administrator
City of North Port	1981	5	25	Neighborhood Development Services
City of Sarasota	7/30/71	6	20	Development Services
City of Venice	7/30/71	6	20	Engineering Department
Sarasota County Government	12/71	5	25	Building Official
Town of Longboat Key		6	20	Town Manager

Table 16B National Flood Insurance Policies & Claims

Jurisdiction	# of Policies	Claims	
		#	$
City of North Port	2,091	88	$992,285
City of Sarasota	8,128	888	$7,057,885
City of Venice	5,396	316	$1,075,358
Sarasota County Government	37,783	2282	$27,438,659
Town of Longboat Key	11,691	754	$5,429,665

Table 16C Flood Map Dates

Jurisdiction	Date of Current Effective Maps*
City of North Port	November 4, 2016
City of Sarasota	November 4, 2016
City of Venice	November 4, 2016
Sarasota County Government	November 4, 2016
Town of Longboat Key	8-4-2016 (Sarasota) March 17, 2014

* Effective and historic Flood Insurance Rate Maps (FIRMs) are available both on line at www.msc.fema.gov . The printing of paper Flood Insurance Rate Maps was discontinued by FEMA on October 1, 2009; however, these maps are required to be retained by the Floodplain Manager in each participating community. Paper FIRMs are also available at the following libraries for review Selby and Fruitville Libraries in Sarasota, Venice Library, Elsie Quirk Library in Englewood, and the North Port Library.

Draft Digital Flood Insurance Rate Maps were released to the unincorporated and incorporated areas of Sarasota on December 15, 2014. A 90 Day Appeal and Comment period occurred January 30, 2015 and ended on April 30, 2015. Upon FEMA review and approval these map products became effective November 4, 2016. A second round of federal funding was also issued to the unincorporated and incorporated areas of Sarasota County to perform a coastal and tidal influence study which began in 2014 and is expected to be completed in 2018. In addition, Sarasota County Stormwater will continue with updates to the areas that were not digitally prepared for these products and will keep the public informed with public outreach as new products are available for review and eventual adoption. FEMA Coastal RISK map and local study map updates were sent to Sarasota County 12-31-2019. 4 public meetings were held in March 2020. The map process can take 18-24 months before they become effective. We anticipate the maps to be updated in late 2021.

The digital maps will include public comments about the riverine flood insurance study updates performed by both Sarasota County and SWFWMD, and utilize

updated LiDAR (topography aerials) performed by the State of Florida Sarasota County has developed an online High Risk Flood Zone interactive mapping application that allows all interested parties to search for County parcels by address and determine if the parcel is intersected by a PRELIMINARY FEMA-designated High Risk Flood Zone. The Flood Zone interactive mapping application also includes the current FEMA Flood Zones so the user can compare the current flood zones vs the preliminary flood zones. The application results-window also provides links for more flood information and to the Sarasota County Property Appraiser. Additionally, the Property Appraiser website displays flood data on all property record cards with a link to the flood zone interactive mapping application. https://ags3.scgov.net/sarcoflood/

Local community flood study updates not subject to federal regulation 44 CFR have occurred and been adopted and used for regulation in unincorporated Sarasota County since 1994. This flood risk data and regulations associated are routinely made available to as a regular step of the permit process.

Each jurisdiction plans to continue to comply with the NFIP. Each participating jurisdiction will:

- Continue to enforce its adopted Floodplain Management Ordinance requirements, which include regulating all new development and substantial improvements in Special Flood Hazard Areas (SFHA).
- Continue to maintain all records pertaining to floodplain development, which shall be available for public inspection.
- Continue to notify the public when there are proposed changes to the floodplain ordinance or Flood Insurance Rate Maps.
- Maintain the map and Letter of Map Change repositories.
- Continue to promote Flood Insurance for all properties.

D. Implementation of Mitigation Actions

Each jurisdiction within the Sarasota County Unified Local Mitigation Strategy plan may submit mitigation actions and projects to the Chairperson of the LMS Working Group at any time during the calendar year. All mitigation actions and projects will be prioritized using a cost benefit analysis through an evaluation criteria worksheet that is reviewed by the LMS Chair. At the time of submission, each jurisdiction is required to complete and submit to the Chairperson of the LMS Working Group a Hazard Mitigation Project Evaluation Criteria Worksheet (Appendix C) in order for the project to be added to the Sarasota County Local Mitigation Strategy Working Group Project List.

The Hazard Mitigation Project Evaluation Criteria Worksheet located in Appendix C includes a wide range of information related to a specific mitigation action or project. This information includes, but is not limited to, the responsible department, potential financial resources, timeframe of completion and the goals achieved. Also included is a cost-benefit review of each mitigation action or project. Using the Hazard

Mitigation Project Evaluation Criteria Worksheet projects are added by the Chairperson after careful consideration to cost benefit. If the cost of the project exceeds the overall long-term benefit it may not be considered for addition to the project list. Ultimately, it is the responsibility of each jurisdiction's representative of the LMS Working Group to keep the Chairperson informed on the status of their mitigation actions and/or projects. At a minimum, the LMS Working Group will conduct a review of the project list at the regularly scheduled December quarterly meeting to coincide with the January submissions of the project list to the Florida Division of Emergency Management.

As a benchmark for progress, completed mitigation actions and projects will be removed from the project list and placed in the Sarasota County Local Mitigation Strategy Working Group Successful Mitigation Projects booklet (Appendix E). Projects that are deferred will remain on the project list and a description will be listed as to why the project was deferred. A project that is identified to be deleted from the project list will remain on the project list for one reporting cycle along with a description as to why the project will be removed.

Jurisdictions wishing to submit a grant application for a specific action or project will have the project reviewed by the Project Ranking Committee Mitigation actions and projects receive their final prioritization by the Project Ranking Committee for externally funded projects by the State of Florida and/or other Federal sources. Upon the completion of the ranking process, a general vote of the members of the LMS Working Group will be conducted to approve the ranking process.

E. Multi-Jurisdictional Mitigation Actions

Identifiable actions and projects for each jurisdiction are in Appendix D. As a benchmark for progress, successful projects are identified in Appendix E, and deferred projects remain on the project list with a brief description as to why the project was deferred. A project that is identified to be deleted from the project list will remain on the project list for one reporting cycle along with a description as to why the project will be removed.

In July 2020, the LMS Working Group developed Smartsheet to better track and update the LMS Project List. Using Smartsheet allows for real time updates to be completed by all partners within the LMS Working Group. The Smartsheet also allows for photos to be added for improved project documentation.

Section V: Plan Evaluation and Maintenance

A. Monitoring, Evaluating, and Updating the Plan

Monitoring

The Sarasota County Emergency Management Division has the primary

responsibility of monitoring and supporting the LMS Plan. This effort shall include technical and clerical support for the benefit of the LMS Working Group. The division will monitor the status of LMS-supported projects throughout the year; and on a semi-annual basis (i.e., January and June) will assess the Plan against the LMS

Working Group and the Florida Division of Emergency Management established evaluation criteria to determine if any changes to the Plan are necessary. If, based on this cursory review, the Plan requires a formal evaluation and update; the LMS Working Group Chair will schedule a LMS Plan Committee meeting. Additionally, if a significant event occurs in Sarasota County, for which an LMS-supported project may be eligible for grant funding, a special meeting of the LMS Plan Committee will be scheduled by the Chair.

Evaluating

If no potential changes have been identified in the Monitoring phase, the LMS Plan Committee will meet at least once annually to review and evaluate the LMS Plan against FDEM and LMS Working Group established evaluation criteria. The annual review will take place during the first quarter of each calendar year and no later than the second quarter of each calendar year to complete the review process prior to the onset of hurricane season.

The LMS Working Group evaluation criteria utilized by the Sarasota County Emergency Management Division and the LMS Working Group and/or the LMS Plan Committee are not limited to, but shall include:

1. Are there any new or changing laws, regulations or policies that require changes to the Local Mitigation Strategy?

2. Have there been any mandates from Federal, State, or local agencies that require changes to the Local Mitigation Strategy?

3. Do the goals and objectives of the LMS Working Group address current and expected conditions for Sarasota County?

4. Has the nature, magnitude, and/or type of risks changed for Sarasota County?

5. Are current resources appropriate for implementing the plan?

6. Are there implementation challenges, such as technical, political, legal financial, or coordination issues with other agencies?

7. Have the outcomes occurred as expected?

8. Are the jurisdictions and other partners participating as originally planned?

9. Are there recommendations or lessons-learned from any incident or event during this review cycle?

Updating

In the event that the LMS Plan Committee determines an update or change to the LMS Plan is required, the committee will prepare the update or change, along with supporting documentation, for this information to be presented to the LMS Working

Group. The presentation for changes may be made at a regularly scheduled meeting or a special meeting scheduled by the Chair. The significance of the update or change will determine the LMS Working Group course of actions. If the actions are minor (determined by County administrator, City/Town manager or Working Group Chair) the LMS Working Group voting members can approve the update or change, and it will be adopted accordingly. If the actions are major (determined by County administrator, City/Town manager or Working Group Chair) the LMS Working Group voting members may approve the update or change, and each jurisdiction will complete their respective Resolution process.

As part of the annual review and update process for the five-year cycle, Table 17 identifies the tentative meeting date, attendees, and the minimum agenda items to be discussed.

Table 17 LMS Working Group Schedule

DATE	ATTENDEE	AGENDA ITEM
March 2021	Working Group	Review Projects & Action Items Review 27-P annual requirements
June 2021	Working Group	Review Jurisdiction Planning Mechanisms
September 2021	Working Group	Review Public Outreach Strategy
December 2021	Working Group	Review Risk Assessment
March 2022	Working Group	Review Projects & Action Items Review 27-P annual requirements
June 2022	Working Group	Review Jurisdiction Planning Mechanisms
September 2022	Working Group	Review Public Outreach Strategy
December 2022	Working Group	Review Risk Assessment
March 2023	Working Group	Review Projects & Action Items Review 27-P annual requirements
June 2023	Working Group	Review Jurisdiction Planning Mechanisms
September 2023	Working Group	Review Public Outreach Strategy
December 2023	Working Group	Review Risk Assessment
March 2024	Working Group	Review Projects & Action Items Review 27-P annual requirements Establish Planning Committee for Plan Update
April 2024	Planning Committee	Review Previous Planning Process
May 2024	Planning Committee	Draft Update Planning Process
June 2024	Working Group	Review Jurisdiction Planning Mechanisms
July 2024	Planning Committee	Review Identification of Hazards
August 2024	Planning Committee	Review Profile Hazards
September 2024	Planning Committee	Review Profile Hazards
September 2024	Working Group	Review Public Outreach Strategy
October 2024	Planning Committee	Review Profile Hazards
November 2024	Planning Committee	Review Vulnerability Assessment
December 2024	Planning Committee	Review Vulnerability Assessment
December 2024	Working Group	Review Risk Assessment
January 2025	Planning Committee	Review Repetitive Loss Program
February 2025	Planning Committee	Review Structures/Economic Loss

March 2025	Planning Committee	Review Development Trends
March 2025	Working Group	Review Projects & Action Items Review 27-P annual requirements
April 2025	Planning Committee	Review Goals and Objectives
May 2025	Planning Committee	Review Mitigation Actions
June 2025	Planning Committee	Review National Flood Insurance Program
June 2025	Working Group	Review Jurisdiction Planning Mechanisms
July 2025	Planning Committee	Review Plan Maintenance Process
August 2025	Planning Committee	Complete Draft for Review by Working Group
September 2025	Planning Committee	Review Draft Changes and Amendments
September 2025	Working Group	Review Public Outreach Strategy
September 2025	Planning Committee	Submit Draft Plan for Review
October 2025	Working Group	Review Risk Assessment
December 2025	Jurisdictions	Board Resolutions

Incorporation into Existing Planning Mechanisms

As part of the annual series of quarterly meetings of the Sarasota County Local Mitigation Strategy Working Group, members will dedicate at least one quarterly meeting to ensuring that the goals, objectives, priorities, projects, and actions established in this plan are maintained or incorporated into participating jurisdictions planning activities. In the event of an activity not meeting the established goals, objectives, priorities, projects, and actions, it is the responsibility of each jurisdiction member to ensure the appropriate changes are made through their individual jurisdiction change process. While not limited to, Table 18 identifies other local planning mechanisms available for incorporating the mitigation requirements of the mitigation plan. At a minimum, the planning mechanisms listed in Table 18 will be reviewed at the designated quarterly meeting.

Table 18 LMS Incorporation into Existing Planning Mechanisms

Current Plans	City of North Port	City of Sarasota	City of Venice	Sarasota County	Sarasota County Schools	Sarasota Memorial Hospital	Town of Longboat Key
Comprehensive Plan	X	X	X	X	X	X	X
Floodplain Management Plan	X	X	X	X			X
Codes & Ordinances	X	X	X	X			X
Sarasota 2050	X	X	X	X	X	X	X
Post Disaster Redevelopment Plan	X	X	X	X			X
Local Mitigation Strategy Plan	X	X	X	X			X
Comprehensive	X	X	X	X	X	X	X

Emergency Management Plan							
Capital Improvement Project List	**X**	**X**	**X**	**X**	**X**	**X**	**X**

The responsibility of identifying the appropriate methods or actions of incorporating the mitigation strategy into existing planning mechanisms rest with each jurisdiction's LMS Working Group representative. The process of incorporating the Local Mitigation Strategy into existing planning mechanisms begins with an audit by each jurisdiction of their plans to determine which mechanism is due for a required review or which mechanism was determined by their respective Administration for review in the upcoming year. This information is presented to the LMS Working Group at the regularly scheduled quarterly meeting to assist each jurisdiction in creating a strategy for incorporating the Sarasota County Unified Local Mitigation Strategy plan into these planning mechanisms. State of Florida Statutes and Administrative Law require specific procedures to enact change in many of these planning mechanisms. Ultimately, it is the responsibility of each jurisdiction to implement the respective changes to their planning mechanisms, and it is the responsibility of the LMS Working Group to support and assist when possible, other members of the LMS Working Group in implementing these changes.

Each jurisdiction (City of Venice, City of Sarasota, City of North Port, Town of Longboat Key and Sarasota County) has agreed to follow the same process of integration as outlined above. The audit phase completed by the LMS Working Group representative from each municipality identifies plans where the LMS can be further integrated into additional planning mechanisms. As a group the LMS Working Group is able to support each other to help guide LMS integration for greater regional consistency. Integration of the LMS into additional policies, programs and planning mechanisms are not formally adopted until approved by the board of each municipality.

One of the key advantages of the Sarasota County Local Mitigation Strategy Working Group is that it is made up of a diverse group of job specialties ranging from professional planners, engineers, public works professionals, emergency management professionals and educators that operate on a daily basis in a diverse group of business environments. Membership includes representatives that range from a zoning official and public works professional whose collateral duties are that of the Community Rating System coordinator, two city engineers that are also the floodplain managers, and emergency management professionals who are all responsible for several other planning mechanisms. Having representatives from each municipal (City of Venice, City of Sarasota, City of North Port, Town of Longboat Key and Sarasota County) planning agencies allows for the LMS Working Group to continuously look at plans for incorporating LMS. Integration into additional and or new plans is achieved through a collaborative effort among the LMS Working Group. Representatives from each agency in the LMS Working Group are able to bring plans, policies and programs to the group for assistance with integration of the LMS. Final adoption of individual plans, policies and programs are done at the municipal level by each entity's respective board or council with the following differences:

- **Sarasota County has a 5-member Board of County Commissioners**

(Commission/County Administrator form of government)

- **City of Sarasota has a 5-member City Commission that includes a Mayor and Vice-Mayor (City Commissioner/City Manager form of government)**
- **City of North Port has a 5-member City Commission that includes a Mayor and Vice-Mayor (City Commissioner/City Manager form of government)**
- **City of Venice has a 7-member City Council that includes a Mayor and Vice-Mayor (Council/Manager form of government)**
- **Town of Longboat Key has a 7-member Town Commission that includes a Mayor and Vice-Mayor (Town Commission/Town Manager form of government)**

The LMS Working Group has demonstrated the incorporation of the mitigation strategy into other planning mechanisms by combining the Local Mitigation Strategy Plan with each jurisdiction's Floodplain Management Plan in this document. In previous years, these planning tools were separate documents with each requiring their own jurisdictional Board resolution. While this is an initial step, it has avoided the duplication of effort, duplication within the documents, and the requirement of two distinct board resolutions. The LMS Working Group and the Regional Floodplain Management Planning and Coordination Committee will continue to identify areas of common interest and requirements that can be documented in the LMS Plan to avoid further duplication and present a more refined document in the future.

Many of the members of the LMS Working Group were directly involved in the updating of the Sarasota County Comprehensive Emergency Management Plan 2019 edition, in which the jurisdiction description in this plan is based upon. Additionally, the risk assessment in the Comprehensive Emergency Management Plan was initially based upon the 2010 LMS Plan and was modified to create an up-to-date risk assessment. This new risk assessment found in the Comprehensive Emergency Management Plan was then utilized to create the foundation for this updated LMS plan.

Another keen aspect of the diversity within the LMS Working Group membership is all the County and municipality representatives are involved in the updating and maintenance of each jurisdiction's Comprehensive Plan. Florida Statute requires each jurisdiction to submit an Evaluation and Appraisal Report that has been approved by their respective Board to the Florida Department of Community Affairs for approval. Currently, the Cities of North Port and Venice and Sarasota County are in this review process, and the City of Sarasota and Town of Longboat Key will begin the review process in the upcoming year. These offsetting review cycles work to the advantage of the LMS Working Group by allowing the group to support one or two jurisdictions in the review process, instead of all at once.

Continued Public Involvement

The Sarasota County Local Mitigation Strategy Working Group is dedicated to public involvement in the hazard mitigation planning and review process and continues to seek opportunities to increase public participation. In addition to Goal 4, and associated objectives of the Local Mitigation Strategy Goals and Objectives, the Working Group will continue to advertise all quarterly and special meetings, update and maintain comprehensive mitigation video, and form partnerships with other related entities to keep

the public informed and create greater involvement. At a minimum, public outreach plans and opportunities will be discussed at one of the quarterly meetings. In addition, the Sarasota County web site will be available with the most up-to-date documentation and points of contact for the public.

The partnership forged by the LMS Working Group and the Regional Floodplain Management Planning and Coordination Committee will offer an increased opportunity for success in generating public involvement during activities such as the adoption process of the new Flood Insurance Rate Maps for Sarasota County. This partnership has also created a joint public outreach committee whose mission is to integrate the mitigation and Community Rating System outreach activities into one, to reduce expenditures and reach a greater number of community residents.

Section VI: Plan Adoption

The Sarasota County Clerk of the Circuit Court and the Clerk of each municipality shall maintain original signed copies of the resolutions adopting the LMS Plan Update. All partners must follow the participation requirements described in Section I to remain in good standing with the Sarasota County Local Mitigation Strategy. An executed adoption resolution along with compliance with LMS participation rules qualifies partners to submit qualified mitigation projects for federal funding consideration.

When this plan is approved by FDEM and FEMA the Sarasota County Board of County Commissioners will adopt the 2021 Sarasota County LMS. Following adoption each municipality and the School Board will also adopt the 2021 LMS. Each resolution will be available in Appendix A.

Benefits of Adoption

The Sarasota County LMS is a multi-jurisdictional plan that assesses the vulnerability of the County and its jurisdictions to hazards and elaborates on the risk associated with each type of hazard. It identifies and evaluates local mitigation efforts and their usefulness, as well as providing guidance for implementation at the jurisdictional level. Through adoption of this Plan, the County and its jurisdictions will be eligible for Federal funds to carry out mitigation actions. Adoption of this plan will provide the following benefits to both county and municipal governmental entities:

- Compliance with Administrative Rules 27P-6, Florida Administrative Code (F.A.C.), requirements for local comprehensive emergency management plans to identify and describe hazard mitigation.
- Universal points from the National Flood Insurance Program's (NFIP) Community Rating System (CRS) Program for developing a Floodplain Management Program, which may help further reduce flood insurance premium rates for property owners.
- Access to the Federal Emergency Management Agency's (FEMA) Federal Mitigation Assistance grant programs.

- Compliance with the Disaster Mitigation Act of 2000.
- Identify and prioritize projects for funding under the State of Florida's Residential Construction Mitigation Program, to help reduce losses from repetitive flooding damage.
- Set forth the guiding principles with which both the County and municipal governmental entities of Sarasota County will address the issue of all hazard mitigation.
- Identify the known hazards to which the County is vulnerable and the range of hazard impacts and delineate the individual vulnerabilities of the various jurisdictions and population centers within the county.
- Develop a detailed method by which Sarasota County (municipalities, County government, and partners) can evaluate and prioritize proposed mitigation projects along with new federal requirements.
- Ensures jurisdictional plans are consistent and supportive.
- Expedites the receipt of pre-disaster and post-disaster grant funding; and
- Demonstrates a firm commitment to improving community health and safety.

LMS-Appendix A

City of North Port

RESOLUTION NO. 2016-R-02

A RESOLUTION OF THE CITY OF NORTH PORT, FLORIDA, ADOPTING THE 2016 SARASOTA COUNTY UNIFIED LOCAL MITIGATION STRATEGY, WITH THE NORTH PORT FLOODPLAIN MANAGEMENT PLAN ANNEX, AS THE FORMAL GUIDE FOR THE CITY OF NORTH PORT'S HAZARD MITIGATION AND FLOODPLAIN MANAGEMENT ACTIVITIES IN ACCORDANCE WITH PUBLIC LAW 106-390, THE FEDERAL DISASTER MITIGATION ACT 2000 (44 CFR §201.6), AND THE FLORIDA ADMINISTRATIVE CODE RULE 9-G22; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, City of North Port is subject to hazards including, severe weather, hurricanes, tornadoes, floods and wildfires and the City faces potential damage to life, property, natural resources and the local economy; and

WHEREAS, the Sarasota County Unified Local Mitigation Strategy Work Group is comprised of staff of Sarasota County Government; the Cities of North Port, Sarasota, and Venice; the Town of Longboat Key; Sarasota County School Board; and Sarasota Memorial Hospital, and community members is open for participation to any and all interested parties; and

WHEREAS, a City of North Port Community Rating System Work Group has also been formed to review and update the Floodplain Management Plan and is comprised of key City Department and community representatives, with the City's Stormwater Manager as the work group coordinator (City planner as an alternate) and those meetings are open for participation to any and all interested parties; and

WHEREAS, the Work Groups have identified these local hazards and have assessed County- and City-wide vulnerability and risk to these hazards, ultimately identifying and prioritizing mitigation initiatives that would reduce local vulnerability; and

WHEREAS, The Sarasota County Unified Local Mitigation Strategy and the North Port Floodplain Management Plan annex represents the City of North Port's commitment to reduce vulnerability and risks from all hazards, while it serves as a policy guide as resources are committed toward reducing the effects of all hazards, and is required of all communities

participating in the Community Rating System program through which provides flood insurance discounts through the National Flood Insurance Program; and

WHEREAS, initiatives identified, based upon established and accepted criteria, on the Unified Local Mitigation Strategy Project Lists are given greater consideration by State-managed funding programs, including but not limited to the Hazard Mitigation Grant program, the Flood Mitigation Assistance Program, the Pre-Disaster Mitigation Competitive Grant Program, Communities Trust, Community Development Block Grant, Coastal Partnerships Initiative; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF NORTH PORT, FLORIDA, THAT:

SECTION 1

1.01 The foregoing "WHEREAS" clauses above are hereby ratified as true and correct, and incorporated herein by reference.

1.02 The Sarasota County Unified Local Mitigation Strategy, with the North Port Floodplain Management Plan Annex, is adopted as the formal guide for the City of North Port's hazard mitigation and floodplain management activities.

1.03 The City Manager or his designee is authorized to apply for funding to support these activities.

SECTION 2 CONFLICTS

2.01 If there is any conflict between this Resolution and any other Resolution or Ordinance, or portions thereof, the provisions of this Resolution shall prevail to the extent of such conflict.

SECTION 3 SEVERABILITY

3.01 If any section, subsection, sentence, clause, phrase or portion of this Resolution is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions.

SECTION 4 EFFECTIVE DATE

4.01 This Resolution shall take effect immediately upon execution by the Chair.

PASSED AND DULY ADOPTED by the City Commission of the City of North Port, Florida this 9th day of February, 2016

CITY OF NORTH PORT

By: Jacqueline Moore
Jacqueline Moore
Mayor

ATTEST:

By: Helen N. Raimbeau
Helen Raimbeau, MMC
City Clerk

Approved as to form and legal sufficiency:

By: MM
Mark Moriarty
City Attorney

RESOLUTION NO. 16R-2561

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF SARASOTA, FLORIDA, ADOPTING THE SARASOTA COUNTY LOCAL MITIGATION STRATEGY AS THE FORMAL GUIDE FOR HAZARD MITIGATION ACTIVITIES OF THE CITY OF SARASOTA IN ACCORDANCE WITH 42 U.S.C., SECTION 5165, 44 C.F.R., SECTION 201.6, PART I OF CHAPTER 252, FLORIDA STATUTES, AND FLORIDA ADMINISTRATIVE CODE CHAPTER 27P-22; SETTING FORTH FINDINGS; AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO APPLY FOR FUNDING IN SUPPORT OF HAZARD MITIGATION ACTIVITIES; PROVIDING FOR THE READING OF THIS RESOLUTION BY TITLE ONLY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Sarasota County Local Mitigation Strategy is the representation of Sarasota County's commitment to reduce vulnerability and risks from natural hazards serving as a policy guide as resources are committed toward reducing the effects of natural hazards; and

WHEREAS, the City of Sarasota is subject to natural hazards which include hurricanes, tornadoes, floods, fire and severe weather; and

WHEREAS, the aforementioned natural hazards pose a potential for damage to life, property, natural resources and the local economy; and

WHEREAS, the Sarasota County Local Mitigation Strategy is the work product of the Local Mitigation Strategy Working Group comprised of employees and community members of Sarasota County, the City of Sarasota, the City of Venice, the City of North Port, the Town of Longboat Key, Sarasota County School Board and Sarasota Memorial Hospital, is open for participation to any and all interested parties and is chaired by the Emergency Management Chief of Sarasota County, or his designee; and

WHEREAS, the Working Group has identified local hazards and has assessed County-wide vulnerability and risk resulting from these hazards, so as to ultimately identify and prioritize mitigation initiatives that would reduce local vulnerability; and

WHEREAS, the initiatives identified, based upon established and accepted criteria, on the Local Mitigation Strategy Initiative Lists are given more consideration by State-managed funding programs, including but not limited to the Hazard Mitigation Grant Program, the Flood Mitigation Assistance Program, the Pre-Disaster Mitigation Competitive Grant Program, the Emergency Management Preparedness and

Assistance Trust Fund, Communities Trust, Community Development Block Grant, Coastal Partnerships Initiative; and

WHEREAS, the Local Mitigation Strategy can serve as the flood mitigation plan required of communities participating in the National Flood Insurance Program that seek project funding from the Flood Mitigation Assistance Program; and

WHEREAS, the Local Mitigation Strategy is designed to be a process oriented document encompassing review and revision policies that allow the Local Mitigation Strategy to be changed to meet new or altered conditions including frequency of hazardous events, perceived local needs, completed projects and initiatives as well as funding opportunities; and

WHEREAS, the City of Sarasota, Florida participates in the Community Rating System, a program within the National Flood Insurance Program so as to be eligible for a reduction in the cost of flood insurance for its citizens; and

WHEREAS, it is the intent of the City Commission to obtain credit through the Community Rating System for preparing, adopting, implementing, evaluating and updating a comprehensive floodplain management plan in accordance with the requirements of the Federal Emergency Management Agency (FEMA); and

WHEREAS it is the intent of the City Commission to continue the participation of the City of Sarasota in the Community Rating System within the National Flood Insurance Program.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF SARASOTA, FLORIDA:

Section 1. The City Commission hereby adopts the Sarasota County Local Mitigation Strategy as the formal guide for the City of Sarasota hazard mitigation activities. One copy of the Mitigation Strategy shall be filed with the City Auditor and Clerk and shall be available for review by the public.

Section 2. The City Manager, or his designee, is hereby authorized to apply for funding to support hazard mitigation activities.

Section 3. This Resolution 16R-2561 shall supersede and replace Resolution No. 10R-2185.

Section 4. This Resolution shall take effect immediately upon adoption.

ADOPTED by the City Commission of the City of Sarasota, Florida upon reading by title only, after posting on the bulletin board at City Hall for at least three (3) days prior to adoption, authorized by Article IV, Section 2, of the Charter of the City of Sarasota, this 4th day of April, 2016.

Willie Charles Shaw, Mayor

ATTEST:

Pamela M. Nadalini, MBA, CMC
City Auditor and Clerk

Yes Mayor Willie Charles Shaw
Yes Vice Mayor Suzanne Atwell
Yes Commissioner Liz Alpert
Yes Commissioner Susan Chapman
Yes Commissioner Shelli Freeland Eddie

Tammy/resolutions/2016/16R-2561 – hazard mitigation 4/4/16

Requested by: Engineering
Prepared by: City Clerk's Office

RESOLUTION NO. 2016-03

A RESOLUTION OF THE CITY OF VENICE, FLORIDA, SUPERSEDING RESOLUTION NO. 2010-18, ADOPTING THE SARASOTA COUNTY UNIFIED LOCAL MITIGATION STRATEGY 2016 AS THE FORMAL GUIDE FOR THE CITY OF VENICE'S HAZARD MITIGATION ACTIVITIES AND FLOODPLAIN MANAGEMENT PLAN AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Venice is subject to natural and man-made hazards including hurricanes, tornadoes, floods, fires and chemical releases which may cause damage to life, property, natural resources and the local economy; and

WHEREAS, the Local Mitigation Strategy Working Group consists of employees and community members of Sarasota County, City of Sarasota, Sarasota Memorial Hospital, American Red Cross, Sarasota County School Board, City of Venice, City of North Port and the Town of Longboat Key; and

WHEREAS, the Local Mitigation Strategy Working Group is open for participation to any and all interested parties, and is chaired by Sarasota County's Emergency Management Chief, or his designee; and

WHEREAS, the Local Mitigation Strategy Working Group through a series of public meetings held over the past three years has identified the above hazards and has assessed county-wide vulnerability and risk to these hazards; and

WHEREAS, the Local Mitigation Strategy Working Group has identified and prioritized mitigation initiatives that would reduce local vulnerability; and

WHEREAS, the Local Mitigation Strategy, which incorporates the City of Venice Floodplain Management Plan, serves as the Flood Mitigation Plan as required of all communities participating in the National Flood Insurance Program and seeking project funding from the Flood Mitigation Assistance program; and

WHEREAS, the City of Venice Floodplain Management Plan serves as the guide for floodplain management activities for the City of Venice, as required of all communities participating in the National Flood Insurance Program and seeking project funding from the Flood Mitigation Assistance program; and

WHEREAS, initiatives identified on the Local Mitigation Strategy Work Group Project List are given more consideration by state-managed funding programs such as the Hazard Mitigation Grant program, Emergency Management Preparedness Assistance Trust Fund, Communities Trust, Community Development Block Grant, Coastal Partnerships Initiative, and HOME; and

WHEREAS, the Local Mitigation Strategy is designed to be a process-oriented document with review and revision policies that allow the Local Mitigation Strategy to be changed to meet new or changing conditions including hazard-event frequency, perceived local needs and funding opportunities.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF VENICE, FLORIDA, as follows:

SECTION 1. The Whereas clauses above are ratified and confirmed as true and correct.

SECTION 2. City Council hereby adopts the Sarasota County Unified Local Mitigation Strategy 2016, adopted by the Sarasota County Board of Commissioners on January 12, 2016, as the formal guide for the City of Venice's Hazard Mitigation activities and Floodplain Management Plan.

SECTION 3. This resolution shall supersede Resolution No. 2010-18.

SECTION 4. This Resolution shall take effect immediately upon its adoption.

APPROVED AND ADOPTED AT A REGULAR MEETING OF THE VENICE CITY COUNCIL HELD ON THE 26TH DAY OF JANUARY 2016.

John Holic, Mayor

ATTEST

Lori Stelzer, MMC, City Clerk

I, **LORI STELZER**, MMC, City Clerk of the City of Venice, Florida, a municipal corporation in Sarasota County, Florida, do hereby certify that the foregoing is a full and complete, true and correct copy of a Resolution duly adopted by the City Council of said City at a meeting thereof duly convened and held on the 26th day of January 2016, a quorum being present.

WITNESS my hand and the official seal of said City this 26th day of January 2016.

Lori Stelzer, MMC, City Clerk

(S E A L)

Approved as to form:

David Persson, City Attorney

Resolution No. 2016 - 001

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA, ADOPTING THE LOCAL MITIGATION STRATEGY AS THE FORMAL GUIDE FOR SARASOTA COUNTY'S HAZARD MITIGATION ACTIVITIES IN ACCORDANCE WITH 42 U.S.C. §5165, 44 C.F.R. §201.6, Part I of Chapter 252, Florida Statutes, and Florida Administrative Code Chapter 27P-22.

2016 JAN 14 AM 8:33
KAREN E. RUSHING
CLERK OF THE CIRCUIT COURT
SARASOTA COUNTY, FL
BOARD RECORDS
FILED FOR THE RECORD

WHEREAS, The Sarasota County Local Mitigation Strategy is the representation of Sarasota County's commitment to reduce vulnerability and risks from natural hazards, serving as a policy guide as resources are committed toward reducing the effects of natural hazards; and

WHEREAS, Sarasota County is subject to natural hazards including, severe weather, hurricanes, tornadoes, floods, fires and faces potential damage to life, property, natural resources and the local economy; and

WHEREAS, the Local Mitigation Strategy Work Group is comprised of employees and community members of Sarasota County Government and the City of Sarasota, the City of Venice, the City of North Port, the Town of Longboat Key, Sarasota County School Board and Sarasota Memorial Hospital, is open for participation to any and all interested parties, and is chaired by the Emergency Management Chief, or his designee, and

WHEREAS, the Work Group has identified these local hazards and has assessed county-wide vulnerability and risk to these hazards, ultimately identifying and prioritizing mitigation initiatives that would reduce local vulnerability; and

WHEREAS, initiatives identified, based upon established and accepted criteria, on the Local Mitigation Strategy Initiatives Lists are given more consideration by state-managed funding programs, including but not limited to the Hazard Mitigation Grant program, the Flood Mitigation Assistance Program, the Pre-Disaster Mitigation Competitive Grant Program, the Emergency Management Preparedness and Assistance trust Fund, Communities Trust, Community Development Block Grant, Coastal Partnerships Initiative, and

WHEREAS, the Local Mitigation Strategy can serve as the Flood Mitigation Plan as required of all communities participating in the National Flood Insurance Program and seeking project funding from the Flood Mitigation Assistance program; and

WHEREAS, the Local Mitigation Strategy supplements and compliments the Post-Disaster Redevelopment Plan as required of all coastal counties in Florida by Florida Administrative Code rule 9J-5 as part of the county Comprehensive Growth Management Plan; and

WHEREAS, the Local Mitigation Strategy is designed to be a process-oriented document with review and revision policies that allow the Local Mitigation Strategy to be changed to meet new or changing conditions including hazard-event frequency, perceived local needs, completed projects and initiatives, and funding opportunities; and

R 2016-001

WHEREAS, the Local Mitigation Strategy includes the Sarasota County Floodplain Management Plan, a requirement of the Community Rating System program that serves as a guide for best management floodplain activities; and

WHEREAS, the Sarasota County Floodplain Management Plan will continue to be updated to meet the requirements of the Community Rating System program with updates automatically incorporated into the Local Mitigation Strategy.

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA, FLORIDA:

1. The Sarasota County Local Mitigation Strategy is adopted as the formal guide for Sarasota County's Hazard Mitigation Activities.

2. The County Administrator or his designee is authorized to apply for funding to support these activities.

3. This resolution shall supersede Resolution No. 2010-207.

ADOPTED this the 12 day of Jan., 2016.

BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA

By: _____
Chairperson

ATTEST:
Karen E. Rushing
Clerk of the Circuit Court
And Ex-Officio Clerk of the Board of
County Commissioners

By: _____

R 2016-001

RESOLUTION 2016-04

A RESOLUTION OF THE TOWN OF LONGBOAT KEY, FLORIDA, ADOPTING THE SARASOTA COUNTY LOCAL MITIGATION STRATEGY AS A FORMAL GUIDE FOR THE TOWN'S HAZARD MITIGATION STRATEGY AND ACTIVITIES IN ACCORDANCE WITH 42 U.S.C. §5165, 44 C.F.R. §201.6, PART I OF CHAPTER 252, FLORIDA STATUTES, AND CHAPTER 27P-22, FLORIDA ADMINISTRATIVE CODE; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Sarasota County Local Mitigation Strategy is the representation of Sarasota County and the Town's commitment to reduce vulnerability and risks from natural hazards, serving as a policy guide as resources are committed toward reducing the effects of natural hazards; and

WHEREAS, the Town is subject to natural hazards including, severe weather, hurricanes, tornadoes, floods, and fires and faces potential damage to life, property, natural resources, and the local economy; and

WHEREAS, the Sarasota County Local Mitigation Strategy Work Group ("Work Group") is comprised of employees and community members of the Town of Longboat Key, Sarasota County Government, and the City of Sarasota, the City of Venice, the City of North Port, Sarasota County School Board, and Sarasota Memorial Hospital, and is open for participation to any and all interested parties, and is chaired by the Sarasota County Emergency Management Chief, or his designee; and

WHEREAS, the Work Group has identified the above listed local hazards and has assessed county-wide vulnerability and risk from these hazards, ultimately identifying and prioritizing mitigation initiatives that would reduce local vulnerability; and

WHEREAS, the Work Group has identified certain initiatives with a Local Mitigation Strategy Initiative List, based upon established and accepted criteria; and

WHEREAS, the Work Group's Local Mitigation Strategy Initiatives Lists are given more consideration by state-managed funding programs, including but not limited to the Hazard Mitigation Grant program, the Flood Mitigation Assistance Program, the Pre-Disaster Mitigation Competitive Grant Program, the Emergency Management Preparedness and Assistance Trust Fund, Communities Trust, Community Development Block Grant, and Coastal Partnerships Initiative; and

WHEREAS, an adopted Local Mitigation Strategy can serve as the Flood Mitigation Plan as required of all communities participating in the National Flood Insurance Program and seeking project funding from the Flood Mitigation Assistance program; and

WHEREAS, the Local Mitigation Strategy supplements and compliments the Post-Disaster Redevelopment Plan as required of all coastal counties in Florida by Chapter 27P-22, Florida Administrative Code as part of the County Comprehensive Growth Management Plan; and

WHEREAS, the Local Mitigation Strategy is designed to be a process-oriented document with review and revision policies that allow the Local Mitigation Strategy to be changed to meet new or changing conditions including hazard-event frequency, perceived local needs, completed projects and initiatives, and funding opportunities; and

WHEREAS, the Local Mitigation Strategy includes the Town of Longboat Key Floodplain Management Plan as an Appendices, a requirement of the Community Rating System program that serves as a guide for best management floodplain activities; and

WHEREAS, the Town of Longboat Key Floodplain Management Plan will continue to be updated to meet the requirements of the Community Rating System program with updates automatically incorporated into the Sarasota County Local Mitigation Strategy

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COMMISSION OF THE TOWN OF LONGBOAT KEY, FLORIDA, THAT:

SECTION 1. The above recitals are true and correct and are hereby fully adopted by reference.

SECTION 2. The Sarasota County Local Mitigation Strategy, having been fully coordinated with all supporting departments, agencies, and participating municipal governments, is hereby adopted by the Town of Longboat Key for pursuing hazard mitigation activities and initiatives. A full and complete copy of the Sarasota County Local Mitigation Strategy can be obtained from the Sarasota County Website at:

https://www.scgov.net/AllHazards/Pages/LocalMitigation.aspx

SECTION 3. The Town Commission of Longboat Key hereby authorizes the Town Manager or his designee to continue to participate as an active member of the Sarasota County Local Mitigation Strategy Work Group to implement goals and to pursue and apply for potential grant funding opportunities for mitigation projects.

SECTION 4. This Resolution shall take effect immediately upon adoption.

Adopted by the Town Commission of the Town of Longboat Key, Florida on the 7th day of March, 2016.

Jack G. Duncan, Mayor

ATTEST:

Trish Granger, Town Clerk

LMS-Appendix B

The Sarasota County Local Mitigation Strategy Work Group By-Laws

ARTICLE I. PURPOSE OF THE LMS WORK GROUP

The Sarasota County Board of County Commisioners, Local Mitigation Strategy (LMS) Work Group is responsible for maintaining current the LMS in accordance with Chapter 27P-22.004 and 27P-22.005 of the Florida Administrative Code. The LMS Work Group will develop a comprehensive planning document intended to reduce or attempt to eliminate the loss of life, property and economic vitality in the event of a natural or technological disaster; to be formally adopted by local government officials, County Commissioners, incorporated jurisdictions within the county for eligibility to pre-disaster mitigation funding and federal disaster relief. The LMS Work Group will develop, update and maintain a comprehensive plan for hazard mitigation which will be intended to accomplish said purpose.

ARTICLE II MEMBERSHIP

Participation in the LMS Work Group is voluntary by all entities. Membership in the LMS Work Group is open to all jurisdictions, county government, private and civic organizations, trade and commercial support groups, property owners associations, Native American Tribes or authorized tribal organizations, State agencies, regional planning council, independent special districts, and non-profit organizations.

Establishment of an LMS Work Group including participants, organizational structure and eligibility are authorized by Chapter 27P-22.004 and 27P-22.005 F.A.C. These rules are authorized under Chapter 252 F.S.

A. ***Voting members***

Jurisdictions within the Sarasota County Local Mitigation Strategy Work Group are based upon the 44 C.F.R. 201.2 and 27P-22.003 F.A.C. and are defined as: any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity that would have mitigation projects meeting the eligibility requirements set forth by the Code of Federal Regulations and the Florida Administrative Code.

Jurisdictions in good standing are eligible to vote and submit mitigation projects by complying with each of the following criteria: 1) the jurisdiction must have adopted the most recent LMS by Resolution or Ordinance; and 2) the jurisdiction's voting member or alternate(s) must have attended at least one of the preceding two consecutive most recent LMS Work Group meetings (min. 66.7% attendance rate).

Current jurisdictions within Sarasota County eligible to vote upon satisfying the above prerequisites:

City of North Port
City of Venice
Sarasota County School Board
Town of Longboat Key
City of Sarasota
Sarasota County
Sarasota Memorial Hospital

B. ***Non voting members***

Chapter 27P, (c) F.A.C. – Representation from interested private organizations, civic organizations, trade and commercial support groups, property owners associations, regional planning councils, and non-profit organizations.

The LMS Work Group encourages organizations, community stakeholders and other agencies, listed in Chapter 27P-22.004 and 27P-22.005 F.A.C. above, to demonstrate their participation by endorsing the LMS Work Group by letter and participating in Work Group meetings.

ARTICLE III ORGANIZATIONAL STRUCTURE

A. ***Officers***

The organizational structure of the LMS Work Group shall consist of a Chair and Vice Chair. The Chair will be a staff member of the Sarasota County Emergency Management Department and appointed by the Sarasota County Emergency Management Chief. The Vice Chair will be elected by majority vote of the voting members, with additional officers appointed by the Chair as needed. Any voting member or alternate of the LMS Work Group in good standing as described in Article II. A. is eligible for election as an officer. The Chair of the LMS Work Group will declare meetings, prepare agendas, and preside at each meeting of the LMS Work Group, as well as establish permanent or temporary Committees when necessary and assign personnel to them. The Vice Chair will fulfill the duties and responsibilities of the Chair in his or her absence. The Vice Chair will serve a term of one calendar year beginning January through December and be eligible for re-election.

Elections for officers of the subsequent term will occur during the last quarter meeting of each calendar year.

B. ***Membership***

- Representatives from Sarasota County Board of County Commisioners
- Representatives from each jurisdiction within Sarasota County

- Representatives from private business or civic associations and/or other groups the Chair may invite (per Chapter 27P-22.004 and .005 F.A.C.) who support the LMS.
- Independent Special District
- General Public

C. ***Committees***

A permanent or temporary Committee and their members may be established at any time for special purposes by the LMS Work Group and the Chair. All members of the Committee (s) may vote regardless of their jurisdiction or organizational membership.

1. The Project Ranking Committee

The Project Ranking Committee will work on a permanent basis while scoring projects for ranking purposes. This Committee serves at the pleasure of the Chair and the LMS Work Group and must report to the Work Group on project scoring at each Work Group meeting. Initially, this Committee will meet on a quarterly basis depending on volume of projects.

2. Local Mitigation Strategy Plan Committee

The Local Mitigation Strategy Plan Committee will work on a permanent basis to maintain the plan in accordance with State and Federal regulations. This Committee serves at the pleasure of the Chair and the LMS Work Group and must report to the Work Group on changes to State and Federal regulations that impact the plan. Initially, this Committee will meet on a quarterly basis depending on volume of changes to State and Federal regulations.

D. ***Staffing***

Sarasota County Emergency Services Business Center, Department of Emergency Management will provide staff support to the LMS Work Group, Chair and any Committee created by the Chair. This support shall include technical and clerical support as necessary for the benefit of the LMS Work Group. Other jurisdictions and organizations may also provide such services on a voluntary basis upon request of the chair of the LMS Work Group.

ARTICLE IV RESPONSIBILITIES

All responsibilities of the LMS Work Group shall be as specified by Chapter 27P-22.004 and 27P-22.005 F.A.C These rules are authorized under F.S. 252.

The LMS Work Group will be responsible for oversight and coordination of all actions and decisions by each Committee formed and are solely responsible for formal actions in

the name of the Committee, including the release of reports, development of resolutions, issuance of position papers and similar activities. The LMS Work Group makes assignments to the Committee, coordinates their work and takes action on their recommendations. All duties described above are within the supervision of the LMS Work Group Chair.

A. ***Planning***

The LMS Work Group will be responsible to identify, analyze hazards threatening Sarasota County and the vulnerabilities to those hazards as well as to assist in the definition of actions to mitigate the impacts of those hazards; to define structural and non-structural actions needed to decrease the human, economic and environmental impacts of disasters and to prepare for consideration and action by the LMS Work Group a strategy for implementation of those initiatives in both the pre and post-disaster time frame; to define the general financial vulnerability of the community to the impacts of disasters; to assist with identification of initiatives to minimize vulnerabilities; and to seek funding sources for all priority mitigation initiatives identified in the mitigation strategy developed by the LMS Work Group.

B. ***Public Information***

The LMS Work Group will encourage public input. Sarasota County Emergency Services Business Center, Department of Emergency Management staff will inform the public about the activities of the LMS Work Group by way of local newspaper published in the Public Meetings section and when possible on the Sarasota County Web site in accordance with Chapter 286 F.S.

ARTICLE V ACTIONS BY THE LMS WORK GROUP

A. ***Authority of Actions***

The LMS Work Group voting members have final authority regarding decisions and or actions to the LMS including adoption of recommendations from any or all Committee groups.

B. ***Meetings, Voting and Quorum***

Meetings of the LMS Work Group including all Committee groups will be conducted in accord with Robert's Rules of Order, if and when deemed necessary by the Chair of the meeting. Regular meetings of the LMS Work Group will be scheduled at least quarterly with a minimum of ten (10) working days notice. Committee groups, then assigned by the LMS Work Group, will meet as necessary.

Each voting member in good standing, as defined in Article II of this document, is allowed to cast one vote. Voting must be done in person while attending a LMS Work

Group meeting. Proxy voting is not allowed. However, each jurisdiction may designate up to two alternate members who may vote in the absence of the regular voting member. Such alternate voting members must be permanent alternates and so designated at least 10 working days in advance of the meeting at which they will vote. Each jurisdiction must provide a list and maintain any revisions of the regular and alternate members to the LMS Work Group.

All final actions and decisions made by the LMS Work Group will be by affirmative vote of a quorum of the voting members. A quorum consists of a minimum of three (3) voting members in attendance.

The Chair, or the Vice Chair in his or her absence, will not be a general voting member. The Chair or Vice Chair will only cast a vote to break a tie vote.

C. ***Special meetings***

Special meetings and any possible voting may be conducted under administrative emergency situations or when other extenuating circumstances judged necessary by both the Chair and Vice Chair of the LMS Work Group. If extenuating circumstances occur and it is impossible for the LMS Work Group to meet together in one location, it is acceptable to meet via conference call, the web or other methods available at that time. All special meetings shall be conducted in accordance with Chapter 125 F.S. under emergency situations including any waivers of Article IV, Public Information.

D. ***Public Hearings***

When required by statute or the policies of Sarasota County Board of County Commisioners or when deemed necessary by the LMS Work Group, a public hearing regarding actions under consideration for implementation by the LMS Work Group will be held in accord with Chapter 125 F.S. for public hearings.

E. ***Documentation of Actions***

All meetings minutes and other forms of action by the LMS Work Group and any Committees will be documented and made available for inspection by the public as provided by Chapter 119 F.S.

Meeting minutes will be prepared by the Recorder and distributed by the Chair to the attending members for approval. Attending members will have three working days to voice approval or disapproval of the meeting minutes. Failure to respond within three working days will constitute approval of the meeting minutes. Upon approval by the attending members, the Chair will ensure the meeting minutes are recorded with the Sarasota County Public Records office.

ARTICLE VI ADOPTION OF AND AMENDMENTS TO THE BYLAWS

The Bylaws of the LMS may be adopted and/or amended by a two-thirds vote of the voting members present, during a regular meeting. All proposed amendments to the Bylaws will be provided to each member of the LMS Work Group not less than ten (10) working days prior to a vote.

ARTICLE VII DISSOLVEMENT OF THE LMS WORKING GROUP

The LMS Work Group may be dissolved by the affirmative vote of two-thirds of the voting membership in good standing of the LMS Work Group and/or by instruction of the Sarasota County Board of County Commisioners. When the LMS Work Group terminates activity; all remaining documents, records, equipment and supplies belonging to the LMS Work Group will be transferred for disposition to Sarasota County Emergency Services Business Center, Department of Emergency Management who is responsible for the Local Mitigation Strategy per Chapter 27P-22.004 and 27P -22.005 F.A.C. and specific authority F.S. 252**.**

LMS-Appendix C

HAZARD MITIGATION PROJECT EVALUATION CRITERIA WORKSHEET

This worksheet is used, as a consistent approach, to assign a numeric value to each project. It allows the Sarasota County Local Mitigation Strategy Work Group to prioritize projects relative to one another based on several factors outlined below.

Project Information

Project Priority *	
Project Score	
Name of Project	
Brief Description of Project	
Hazard Mitigated*	
Hazard Mitigation Strategy*	
Hazard Mitigation Goals Achieved *	
Funding Source	
Jurisdiction Project Benefit (List all applicable jurisdictions)*	
Jurisdiction	
Jurisdiction Project #	
Agency Responsible for Implementation	
Estimated Cost	
Timeframe for Project Completion	
Mitigate New or Existing	

* Refer to The Sarasota County Local Mitigation Strategy Project List notes for assistance.

Project Scoring

Cost or Cost Impact: This would refer to the actual cost of the project over the life of the project and/or the cost impact that would occur because of the project.

Score	Points	Description
	4	No quantifiable Cost or Cost Impact, or the Cost/Cost Impact is less than 50,000
	3	Cost/Cost Impact is between $50,000 and $250,000
	2	Cost/Cost Impact is between $250,001 and $1,000,000
	1	Cost/Cost Impact is between $1,000,001 and $5,000,000
	0	Cost/Cost Impact exceeds $5,000,000

Probability of Funding: How likely is it that this project could get funded?

Score	Points	Description
	4	Funding is available through local short-term budgeting (less than two years) or a grant for this type of project is available and the likelihood of success is high.
	3	Funding is available through local long-term budgeting (more than two years) or grants for this type of project are available, but the likelihood of success is moderate.
	2	Funding could only be accomplished through matching local dollars with funds from other sources; or would require a blend of funding sources.
	1	Funding could only be accomplished through post-disaster funding options.
	0	No funding sources can be identified.

Probability of Community Acceptance:

Score	Points	Description
	4	This type of project would likely be endorsed by the entire community.
	3	This type of project would benefit only those directly affected and would not adversely affect the rest of the community.
	2	This type of project could place some burden of cost on the community, but would likely be endorsed as an acceptable cost for the benefit received.
	1	This type of project would place a burden of cost on the community that might not win endorsement y residents and/or businesses.
	0	This type of project is not likely to be endorsed by the community.

Estimated Ration of Benefit vs. Cost: The individual or entity proposing this project should have completed a "Consequence Analysis" to support the ration of benefit vs. cost.

Score	Points	Description
	4	Both quantitative and qualitative benefits make this a high priority project.
	3	The benefit of this project is 2 to 4, or more, times the cost and/or the qualitative benefits make the project one that should be given a relatively high priority.
	2	The benefit of this project is over 1, but less than 2 times the cost and/or the qualitative benefits make the project one that should be strongly considered.

	1	The benefit of this project is equal to or less than the cost and/or the benefits are difficult to quantify due to their qualitative nature.
	0	The ratio of benefits vs. cost cannot be quantified.

Complexity of Implementation: The following list shows examples of various items that can make a project more complex;

- Time involved for planning and/or completion.
- Involves numerous agencies and/or jurisdictions
- Permitting (Either the type of permitting required or the time period involved, or both)
- Difficulty in obtaining funding
- Requires a public vote
- Requires a public hearing

Score	Points	Description
	4	This project will be relatively easy to put in place in a short period of time.
	3	This project should not be very complex based on the items listed.
	2	This project will be somewhat complex due to one of the items listed.
	1	This is a complex project because it involves at least two of the items listed.
	0	This is a complex project because it involves three or more of the items listed.

Addressed in Plans, Programs, and Policies: The following list shows examples of various guiding principles that may affect, or be affected by, the project;

- Goals & Objectives of Sarasota LMS
- Comprehensive Growth Management Plans
- Comprehensive Emergency Management Plans
- Land Development Codes, Zoning Ordinances, or Building Codes
- Environmental, Conservation, Preservation and/or Reclamation plans, programs or policies.
- Statutes, Public Laws, other local laws, and/or other plans, programs, or policies.

Score	Points	Description
	4	This project is addressed in at least three of the items listed.
	3	This project is addressed in at least two of the items listed.
	2	This project is addressed in at least one of the items listed.
	1	Where this project is addressed in any plans, programs or policies is not clear.
	0	This project may not fall within the purview of Sarasota LMS.

Health and Safety:

Score	Points	Description
	4	This project could affect the Health & Safety of several jurisdictions (totaling over 250,000 people) and/or major portions of the county population.
	3	This project could affect the Health & Safety of between 50,000 and 250,000 people
	2	This project could affect the Health & Safety of between 1,000 and 50,000 people
	1	This project could affect the Health & Safety of less than 1,000 people.
	0	This project has no Health & Safety implications.

Compilation of Scores	
Scores	**Issues**
	Cost or Cost Impact
	Probability of Funding
	Probability of Community Acceptance
	Ration of Benefit vs. Cost
	Complexity of Implementation
	Consistency with other Plans, Programs, and Policies
	Health and Safety Considerations
	Total Score

Date Completed: _____

Scoring performed by: _____ Local Mitigation Strategy Committee

_____ Other (Describe): _____

Chair, Co-Chair, or Authorized Committee Member acknowledgement:

LMS-Appendix D

LMS Project List

	Priority	Name of Project	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments
1	Medium	Reconstruction of Failing Seawalls	Reconstruct existing seawalls City-wide	1 11 2 7 9	5	2	Penny Sales Tax	ALL	SRQ	RP-18.0	Public Works	$5M	☐	☐	☑	☐	☐		FY24	E (Existing)	On-Going Planning
2	High	Bayfront Park Seawall	Reconstruct existing seawalls	1 11 2 7 9	5	2	Penny Sales Tax	ALL	SRQ	RP-18.1	Public Works	$500K	☐	☐	☑	☐	☐		FY20	E (Existing)	On-Going Planning
3	High	10th Street Seawall	Reconstruct existing seawalls	1 11 2 7 9	5	2	Penny Sales Tax	ALL	SRQ	RP-18.2	Public Works	$1.2M	☐	☐	☐	☐	☑	Funding		E (Existing)	Sarasota Bay Project
4	Medium	12th Street Complex Upgrade	Construct new building	All	5	5	Penny Sales Tax	2 4	SRQ	WU-50.0	Public Works	$1.1M	☐	☐	☐	☐	☑	Funding		E (Existing)	
5	High	Stormwater utility Projects	Construct improvement to existing storm drainage system	11 2 7 9	6	2	Penny Sales Tax	2 4	SRQ	SU-02.0	Public Works	$5.2M	☐	☐	☑	☐	☐		FY20	E (Existing)	On-Going Planning
6	Medium	Indian Beach Stormwater Project	Make enhancements to existing storm drainage system (Bio)	11 2 7 9	6	2	CIP	2	SRQ	SU-03.0	Public Works	$3.8M	☐	☐	☐	☐	☑	Funding		E (Existing)	Right-of-Way Issues
7	High	City-wide Traffic Signalization	Replace wire line attachment with mast	11 12 15 2 8 9	2	5	Penny Sales Tax	ALL	SRQ	EN-20.0	Public Works	$10M	☐	☐	☑	☐	☐		FY24	E (Existing)	On-Going Planning
8	High	MLK/Old Bradenton Int.	Replace wire line attachment with mast	11 12 15 2 8 9	2	5	Penny Sales Tax	ALL	SRQ	EN-20.1	Public Works	$350K	☐	☐	☑	☐	☐		FY20	E (Existing)	On-Going Planning; HMGP Irma
9	High	MLK/Cocoanut Int.	Replace wire line attachment with mast	11 12 15 2 8 9	2	5	Penny Sales Tax	ALL	SRQ	EN-20.2	Public Works	$350K	☐	☐	☑	☐	☐		FY20	E (Existing)	On-Going Planning; HMGP Irma
10	High	MLK/Central Int.	Replace wire line attachment with mast	11 12 15 2 8 9	2	5	Penny Sales Tax	ALL	SRQ	EN-20.3	Public Works	$350K	☐	☑	☐	☐	☐		FY19	E (Existing)	
11	High	Coon Key Utility Line Undergrounding	Remove overhead power lines and install underground	11 12 15 2 8 9	5	5	Penny Sales Tax	2 4	SRQ	EN-118.0	Public Works	$1.2M	☐	☐	☑	☐	☐		FY21	E (Existing)	On-Going Planning
12	Medium	Lift Station 87 & 13	Relocate and construct new lift station	All	5	5	Revenue Bonds	2	SRQ	WU-46	Utilities	$32M	☐	☐	☑	☐	☐		FY21	E (Existing)	In Progress
13	High	Facilities Structural Eval	Structural Evaluation of City Buildings	All			CIP		SRQ	CIP	Facilities	$100K	☐	☐	☐	☐	☑	Funding		E (Existing)	On-Hold
14	High	RLT Fixed Generator	Install fixed generator at major critical facility	All	5	All	General Funds	ALL	SRQ	PR-18.1	Parks and Recreation	$410K	☐	☐	☑	☐	☐		FY20	E (Existing)	Pre-construction Phase; HMGP Irma
15	High	Portable Generator Lift Station 33	Portable generator for major lift station w/o land area for fixed	11 12 13 2 5 7 8 9	2 5	1 2 4	Operating Fees	2 4 5 6 7	SRQ	WU-77	Utilities	$75K	☐	☐	☐	☐	☑	Funding feasibility		E (Existing)	
16	High	Portable Generator Lift Station 21	Portable generator for major lift station w/o land area for fixed	11 12 13 2 5 7 8 9	2 5	1 2 4	Operating Fees	2 4 5 6 7	SRQ	WU-78	Utilities	$75K	☐	☐	☐	☐	☑	Funding feasibility		E (Existing)	
17	High	Portable Generator Lift Station 27	Portable generator for major lift station w/o land area for fixed	11 12 13 2 5 7 8 9	2 5	1 2 4	Operating Fees	2 4 5 6 7	SRQ	WU-79	Utilities	$75K	☐	☐	☐	☐	☑	Funding feasibility		E (Existing)	
18	High	Portable Generator Lift Station 30	Portable generator for major lift station w/o land area for fixed	11 12 13 2 5 7 8 9	11 12 13 2 5 7 8 9	1 2 4 All	Operating Fees	2 4 5 6 7	SRQ	WU-80	Utilities	$200K	☐	☐	☑	☐	☐		FY21	E (Existing)	On-Going Planning
19	High	Rep/Loss Study	Repetitive loss study on identified locations	1 11 2 6 7 9	6	All	General Funds	2 4 5 6 7	SRQ	DS/CRS1	Develop Services	$75K	☑	☐	☐	☐	☑	Funding		E (Existing)	
20	High	Purchase lots along the Myakkahatchee Creek	Purchase lots to reduce flood vulnerability	All	1	2, 4	FDEP Grants	1 4	NP	N/A	CM, NDS, PW	$3.5M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
21	High	Deer Prairie Creek Bridge	Install bridge in order to decrease response time	All	5	5	CIP Grants Infrastructure Surtax III	1 5	NP	N/A	Fire Rescue	$1M	☐	☐	☐	☐	☑	Funding	2024	E (Existing)	
22	High	City EOC/Fire Rescue HQ/Data Center/PD 911 Dispatch/Property Evidence Building	Build a new facility to accomodate emergency operations center to include showers, and back-up emergency power to entire bldg	All	2	5	Grants HMGP Other City Funds	ALL	NP	N/A	Public Works, FM	$6M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	Preliminary planning started
23	High	North Port Utilities Admin/Field Operations	Replace buildings with hardened structures	All	2 3	5	Revenue Bonds User Rates	ALL	NP	N/A	Utilities	$13.2M	☐	☐	☑	☐	☐		2023	E (Existing)	Planning started.
24	Medium	North Port Utilities construction of additional source for R/O	To add additional wells to the current wellfield to increase drought tolerance and protect the existing system	4	5	1 4 5	Capacity Fees	ALL	NP	N/A	Utilities	$4.5M	☐	☐	☑	☐	☐			E (Existing)	
25	Medium	Hardening of water & sewer utility structures	Upgrade utility structures at bridge crossings, etc.	All	5	5	User Rates	ALL	NP	N/A	Utilities	$600K	☐	☐	☑	☐	☐		2020	E (Existing)	
26	Medium	Additional emergency water interconnect	12" Potable water emergency inter-connect between Sarasota and NP	All	5	5	County User Rates	1 4	NP	N/A	Utilities	$32K	☐	☐	☐	☐	☑		2021	E (Existing)	
27	High	Replacement of shallow depth water and wastewater lines at Lazy River		4	5	1 2 5	User Rates	1 2 4	NP	N/A	Utilities	$150K	☐	☑	☐	☐	☐			E (Existing)	
28	High	Inflow & Infiltration in identified areas of the City		10	2 5	1 4 5	User Rates	1 5	NP	N/A	Utilities	$300K	☐	☐	☑	☐	☐			E (Existing)	
29	High	Vault style master pumping lift station #12 rehabilitation to ground level		All	2 5 7	1 2 4 5	User Rates	1	NP	N/A	Utilities	$370K	☐	☐	☑	☐	☐		2021	E (Existing)	
30	High	Phase 1 Water Treatment Plant rehabilitation of Flocculation #1		All	2 5	2 4 5	User Rates	1 5	NP	N/A	Utilities	$575K	☐	☑	☐	☐	☐		2021	E (Existing)	
31	High	Distribution line installation to serve the Western reaches of the City based on hydraulic modeling		4	5	1 4	Capacity Fees	1 4 5	NP	N/A	Utilities	$3.5M	☐	☐	☑	☐	☐		2021	N (New)	
32	High	Rehabilitation of lift stations that are 30 plus years old that have been identified in need		All	2 5 7	1 2 5	User Rates	1 5	NP	N/A	Utilities	$150K	☐	☐	☑	☐	☐		2021	E (Existing)	
33	High	VFDs installed on current raw water intake structures at the Water Treatment Plant		All	2 5	1 4	User Rates	1 4 5	NP	N/A	Utilities	$30K	☐	☐	☑	☐	☐		2021	E (Existing)	
34	High	Installation of additional analyzers and integration to SCADA to achieve 24 hour operations at the Water Treatment Plant		All	2	1 2 4	User Rates	1 4 5	NP	N/A	Utilities	$48K	☐	☐	☑	☐	☐		2021	E (Existing)	
35	High	Upgrade the 14 year old control panel at the Wastewater Treatment Plant to improve operational efficiency		All	2	1 2 5	User Rates	1 4 5	NP	N/A	Utilities	$35K	☐	☑	☐	☐	☐			E (Existing)	
36	Medium	Public Works Administration Building	Replace buildings with hardened structures	All	2 3	5	RDA	ALL	NP	N/A	Public Works	$6.28M	☐	☐	☐	☐	☑	Funding	As funding is available	N (New)	
37	High	Pipe Lining on major outfalls	CMP pipes that are difficult to replace can be lined. Only those that are deemed structurally sufficient can be lined. All others will need to be replaced.	All	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$1M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
38	NA	Design 4 Lane Price Blvd Sumter to Toledo Blade	Four-lane and elevate roadway.	All	5	5	Surtax III	ALL	NP	N/A	Public Works	$2.2M	☐	☐	☐	☑	☐		2020	E (Existing)	
39	NA	Construct 4 Lane Price Blvd Sumter to Toledo Blade	Four-lane and elevate roadway.	All	5	5	Grants Other City Funds Surtax III	ALL	NP	N/A	Public Works	$43M	☐	☐	☑	☐	☐		2022	E (Existing)	
40	High	Design 4 Lane Price Blvd Sumter to West of North Port High School	Four-lane and elevate roadway.	All	5	5	Grants Other City Funds Surtax III	ALL	NP	N/A	Public Works	$7M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
41	High	Construct 4 Lane Price Blvd Sumter to West of North Port High School	Four-lane and elevate roadway.	All	5	5	Grants Other City Funds Surtax III	ALL	NP	N/A	Public Works	$33M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
42	High	Design 4 Lane Price Blvd Toledo Blade to Haberland	Four-lane and elevate roadway.	All	5	5	Surtax III	ALL	NP	N/A	Public Works	$5.6M	☐	☐	☐	☐	☑	Level of Service	As funding is available	E (Existing)	
43	High	Construct 4 Lane Price Blvd Toledo Blade to Haberland	Four-lane and elevate roadway.	All	5	5	Surtax III	ALL	NP	N/A	Public Works	$30.7M	☐	☐	☐	☐	☑	Level of Service	As funding is available	E (Existing)	
44	High	Design 4 Lane Price Blvd Haberland to Veterans	Four-lane and elevate roadway.	All	5	5	Surtax III	ALL	NP	N/A	Public Works	$6.7M	☐	☐	☐	☐	☑	Level of Service	As funding is available	E (Existing)	
45	High	Construct 4 Lane Price Blvd Haberland to Veterans	Four-lane and elevate roadway.	All	5	5	Surtax III	ALL	NP	N/A	Public Works	$34M	☐	☐	☐	☐	☑	Level of Service	As funding is available	E (Existing)	
46	High	Toledo Blade Blvd Extension, Tropicaire Blvd to SR72	Roadway extension	9	2	1	Revenue Bonds	1	4 NP	N/A	Public Works	$16M	☑	☐	☐	☐	☐		As funding is available	N (New)	
47	High	Big Slough Flood Reduction Study	Consultant to recommend solutions to reduce flooding in 2 areas	2 7	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$300K	☐	☑	☐	☐	☐		2020	E (Existing)	Funded by SWFWMD
48	High	Design replacement for flood control structure #115	Corroded Structure Need to rehab, replace for flood protection	11 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$109K	☐	☑	☐	☐	☐		2017	E (Existing)	
49	High	Construct replacement for flood control structure #115	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$165K	☐	☑	☐	☐	☐		2018	E (Existing)	
50	High	Design replacement for flood control structure #106	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$168K	☐	☑	☐	☐	☐		2018	E (Existing)	

	Priority	Name of Project	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments
51	High	Construct replacement for flood control structure #106	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$2.274M	☐	☑	☐	☐	☐		2020	E (Existing)	
52	High	Design replacement for flood control structure #108	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$192K	☐	☐	☑	☐	☐		2020	E (Existing)	
53	High	Construct replacement for flood control structure #108	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	2.48M	☐	☐	☐	☐	☑	Funding	2021	E (Existing)	
54	High	Design replacement for flood control structure #113	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	HMGP RDA Surtax III	1 4	NP	N/A	Public Works	$308K	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
55	High	Construct replacement for flood control structure #113	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	HMGP RDA Surtax III	1 4	NP	N/A	Public Works	$3.85M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
56	High	Design replacement for flood control structure #114	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$300K	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
57	High	Construct replacement for flood control structure #114	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$3.6M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
58	High	Design replacement for flood control structure #157	Corroded structure. Needs rehabilitated and replaced for flood protection.	10 2 3 6 7 9	2 5 6 7	1 2 5	Grants RDA Surtax III	1 4	NP	N/A	Public Works	$175K	☐	☐	☐	☐	☐				
59	High	Construct replacement for flood control structure #157	Corroded structure. Needs rehabilitated and replaced for flood protection.	10 2 3 6 7 9	2 5 6 7	1 2 5	Grants RDA Surtax III	1 4	NP	N/A	Public Works	$1.8M	☐	☐	☐	☐	☐				
60	Medium	Design replacement for other flood control structures	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$500K	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
61	Medium	Construct replacement for other flood control structures	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$3M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
62	Medium	Drainage System Improvements	Rehab and replacement of swales, ditches, pipes, outfalls and canals	11 2 7 9	5 6 7	1 2	RDA Surtax III	1	NP	N/A	Public Works	$1.5M	☑	☐	☐	☐	☐		As funding is available	E (Existing)	
63	Medium	Bridge Rehabilitation and Repairs	Repairs to evacuation route bridges	2 9	3	1	RDA Surtax III	1 4	NP	N/A	Public Works	$1.5M	☑	☐	☐	☐	☐		As funding is available	E (Existing)	
64	Medium	Big Slough Flood Reduction Projects	Implementationo of projects to reduce flooding	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$43M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
65	High	Property Maintenance Yard	Replace buildings with hardened structures	All	2 3	5	CIP HMGP	ALL	NP	N/A	Parks and Rec	$7M	☑	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	
66	High	Generator for City Hall	Add emergency power to entire building	All	2 3	5	CIP HMGP	ALL	NP	N/A	Public Works FM	$1M	☐	☐	☑	☐	☐			E (Existing)	
67	High	Lift station bypass pump project	Upgrade existing lift stations to include bypass pumps at all major stations.	All	2 3 5	All	User Rates	1	NP	N/A	Utilities	$5M	☑	☐	☐	☐	☐		2029	E (Existing)	
68	Medium	North Port THIRA Update	Update to the THIRA Plan	All	All	All	General Revenues Grants	1	NP	N/A	Fire	$30K	☑	☐	☐	☐	☐				
69	N/A	Streets and drainage improvements	Provide additional drainage and retention in suitable locations	5	1	5	CIP HMGP	7	LBK	LBK9	Public Works	$600K	☐	☐	☐	☐	☑	Funding	2013-2017	E (Existing)	$200K Completed 2013/14
70	N/A	Purchase generators	Reduce dependency on rental equipment	All	5	All	CIP HMGP	ALL	LBK	LBK13	Public Works	$165K	☐	☐	☐	☐	☑	Funding	2017	N (New)	$80K Completed 2013-15
71	High	North shore groins	Reduce beach erosion	1	4	4	CIP HMGP	2 3 4 7	LBK	LBK18	Public Works	$2.5M	☐	☑	☐	☐	☐		2015	N (New)	
72	High	North potable water connection	Replace existing potable water connection to community	All	5	All	CIP HMGP	ALL	LBK	LBK19	Public Works	$1.2M	☐	☑	☐	☐	☐		2015	N (New)	
73	Medium	South Fire Station 92	Renovate or replace current fire station	All	5	All	CIP HMGP	ALL	LBK	LBK20	Public Works	$1.4M	☐	☐	☑	☐	☐		2015-2018	N (New)	
74	High	Wastewater force main	Replace existing wastewater connection to Manatee County	4	4	All	CIP HMGP	ALL	LBK	LBK21	Public Works	$15M	☐	☐	☑	☐	☐		2015-2020	E (Existing)	
75	High	Lift station E renovations	Upgrade motors, controls, roof, and exterior of building	All	2	5	CIP HMGP	7	LBK	LBK4	Public Works	$700K	☐	☑	☑	☐	☐		2015	E (Existing)	$1.2M Completed 2015; In-progress includes upgrades.
76	High	Town Hall renovations	Hurricane shutters and generator upgrade	All	2	5	CIP HMGP	7	LBK	LBK5	Public Works	$473,333.00	☐	☐	☑	☐	☐		2019/20	E (Existing)	Grant Application
77	High	North fire renovations	Hurricane shutters and upgrade apparatus bay doors	All	2	5	CIP HMGP	7	LBK	LBK6	Public Works	$71.5K	☐	☐	☑	☐	☐		2019/20	E (Existing)	Grant Application
78	High	Police department renovations	Hurricane shutters and exterior of building	All	2	5	CIP HMGP	7	LBK	LBK7	Public Works	$56K	☐	☐	☐	☐	☐		2019/20	E (Existing)	Grant Application
79	High	Upgrade & Update 800 MHZ Emergency Comm System	Replace countywide public safety mission critical voice system w/regional integrated IP	All	2 3		Commercial Paper Manatee County Stormwater Assessments Surtax III Utility Rates		Sarasota County	84355	Emergency Services	$15.35M	☐	☑	☐	☐	☐		10/10-09/2019	E (Existing)	fy19 THRU 2023 CIP\84355.pdf
80	High	Next Generation 9-1-1 Phase II	Build upon Next Generation Project #843232 upgrade systems that support NG9-1-1	All	2 3		911 Funds		Sarasota County	84358	Emergency Services	$1.25M	☑	☐	☑	☐	☐		10/18 to 9/2023	E (Existing)	fy19 THRU 2023 CIP\84358.pdf
81	High	Fire Station Apex Rd	Construct and equip +13,000 sq. ft 4 bay fire rescue station and special ops storage facility	All	2 3		Commercial Paper EMS Impact Fees Fire Impact Fees		Sarasota County	84359	Emergency Services	$8.6M	☐	☐	☑	☐	☐		10/17 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\84359.pdf
82	High	Fire Station Bee Ridge Rd	Construct and equip 8600 sq ft 3 bay fire rescue	All	2 3		Commercial Paper Fire and EMS Assessments		Sarasota County	84360	Emergency Services	$5.3M	☑	☐	☑	☐	☐		10/18 to 9/2020	N (New)	fy19 THRU 2023 CIP\84360.pdf
83	High	Hardened Emergency Evacuation Ctr Space	Design Construct 20,000 sq ft hardened shelter Cenral Sarasota County Area.	All	2 3		Surtax III		Sarasota County	84362	Emergency Services	$3M	☑	☐	☑	☐	☐		10/18 to 9/20	N (New)	fy19 THRU 2023 CIP\84362.pdf
84	Medium	Enterprise GIS/Browser Based Land Info Mgt Sys	Implement a GIS browser based Land Info Mgmt Syst	All	2 3		Building Permit Fees IT Project Funding		Sarasota County	83185	EIT	$4.9M	☐	☐	☑	☐	☐		10/09 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83185.pdf
85	Low	GRM Gov't Revenue Mgmt Sys	GRM formerly Prop Appraiser automates operations	All	2		Long Term Bond		Sarasota County	83186	EIT	$3M	☐	☑	☐	☐	☐		10/09 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\83186.pdf
86	Low	Enterprise Content Mgmt System (ECMS)	Acquisition ECMS purchase install and configure	All	2		Tech Internal Service Fees		Sarasota County	83297	EIT	$1.5M	☐	☐	☑	☐	☐		10/14 to 9/2019	E (Existing)	fy19 THRU 2023 CIP\83297.pdf
87	Low	IT Service Mgmt (ITSM) Replacement System	Replace current HELP application with ITSM solution	All	2		Tech Internal Service Fees		Sarasota County	83308	EIT	$450K	☐	☐	☑	☐	☐		10/16 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83308.pdf
88	Low	Master Capital Project Planning and Development Program	Advanced CIP planning and development	All	2		General Revenues		Sarasota County	83115	General Services	$1.3M	☐	☐	☑	☐	☐		10/02 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\83115.pdf
89	High	Jail Facility Renovation Replacements and Upgrades	Renovations repairs to Sarasota County Jail	All	2 3		General Revenues		Sarasota County	83237	General Services	$9.5M	☐	☐	☑	☐	☐		10/05 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\83237.pdf
90	High	Facilities Renovations Upgrades and Replacements Program	Bldg access systems upgrade FEMA 490 compliant essential facilities	All	2		Commercial Paper General Revenues Surtax III		Sarasota County	83238	General Services	$32.6M	☐	☐	☑	☐	☐		10/05 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\83238.pdf
91	High	Venice Fuel Site Replacement	Renovation of fuel site at Venice Fleet Facility	All	2		Commercial Paper Fleet User Fees		Sarasota County	83295	General Services	$1.2M	☐	☐	☑	☐	☐		10/14 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83295.pdf
92	Medium	Downtown Cooling Plant Replacemtn Full Design	Design and Construct central energy plant (CEP)	All	2		General Revenues		Sarasota County	83304	General Services	$1.25M	☐	☐	☑	☐	☐		10/15 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\83314.pdf
93	High	Pinkney Ave Fuel Site Replacement	Design and renovate fuel site and Bee Ridge Fire Station 8	All	2		Commercial Paper Fleet User Fees		Sarasota County	83310	General Services	$1.2M	☐	☐	☑	☐	☐		10/17 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83310.pdf
94	High	Bee Ridge Fuel Site Replacement	Revonate fuel may be combined with Fire Station #8	All	2		Commercial Paper Fleet User Fees		Sarasota County	83311	General Services	$1.2M	☐	☐	☑	☐	☐		10/17 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83311.pdf
95	High	Sheriff's Off Support Services Facility Design & Construction	Construct new Sheriff's Support Facility	All	2		Commercial Paper Justice Impact Fees Law Enforcement Impact Fees		Sarasota County	83312	General Services	$20.8M	☐	☐	☑	☐	☐		10/16 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\83312.pdf
96	High	South County Courts/RL Anderson Bldg Remodel	Significant civil site work and new 4 courtroom courthouse and renovations to RL Anderson existing bldg	All	2		Commercial Paper Justice Impact Fees Law Enforcement Impact Fees		Sarasota County	83314	General Services	$26.3M	☐	☐	☑	☐	☐		10/16 to 09/2021	E (Existing)	fy19 THRU 2023 CIP\83314.pdf
97	High	Pinkey/Fire Station 20 Wash Rack System	Construct concrete pad and install wash rack system	All	2		Fleet User Fees		Sarasota County	83315	General Services	$400K	☐	☐	☑	☐	☐		10/17 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83315.pdf
98	High	Sheriff's Office Administrative Headquarters	Acquisition and equip land and bldg for use as Sarasot aCheriff's Office Adm Hdqtrs	All	2		General Revenues Half-Cent Sales Tax		Sarasota County	83313	General Services	$18.4M	☐	☐	☑	☐	☐		10/16 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83313.pdf
99	Medium	South County Safety Bldg Renovations Upgrades and Replacements	Systematic repair renovation upgrade installation and replacement of key operating systems including roofing syste upgrade and generator	All	2		Fire and EMS Assessments General Revenues		Sarasota County	83318	General Services	$1.07M	☐	☐	☑	☐	☐		10/16 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83318.pdf
100	Low	Human Resources Management System	Replace current HR System w/ comprehensive cloud based Human Capital Mgmt Service	All	2		Transfer from CIP 83292 and 1.6M Technology Internal Service Fees		Sarasota County	83309	Human Resources	$2M	☐	☐	☑	☐	☐		10/16 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83309.pdf
101	Low	Computer & Circulation Materials Purchase Program	Auguments collection ofbooks and other materials, update systems user database	All	2		Capital Impovements Library Impact Fees		Sarasota County	74203	Libraries and Historical Resources	$4M	☐	☐	☑	☐	☐		10/06 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\74203.pdf

	Priority	Name of Project	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments
102	Low	Library Technology and Books Program	Increase Library computer system and add materials to collection	All	2		Gen Govt Surtax Infrastructure Surtax FY08-FY09 Revenue Bonds Surtax 3 Rev Note FY16 Surtax III		Sarasota County	83179	Libraries and Historical Resources	$9M	☐	☐	☑	☐	☐		10/08 to 09/2024	E (Existing)	fy19 THRU 2023 CIP\83179.pdf
103	Low	Venice Library	Replace former library facility at 300 S Nokomis Ave site	All	2		Commercial Paper Private Donation Surtax 3 Rev Note FY16 Surtax III		Sarasota County	83190	Libraries and Historical Resources	$12.1M	☐	☑	☐	☐	☐		10/15 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83190.pdf
104	Medium	Old Miakka -Davidson ESLPP Parcel Acquisition & Start UP	20 acre parcel within Old Miakka Protection priority site	All	2		ESLPP Funds Transferable Dev Rights		Sarasota County	85645	Parks, Recreation and Natural Resources	$423K	☐	☑	☐	☐	☐		05/18 to 09/2018	E (Existing)	fy19 THRU 2023 CIP\85645.pdf
105	High	Spoil Island Restoration Program	Restore degraded coastal habitat	All	2		Community Foundation Grants Infrastructure Surtax III Pollution Recovery RESTORE ACT SWFWMD Grants WCIND		Sarasota County	85459	Planning and Development Services	$2.5M	☐	☐	☑	☐	☐		10/2003 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\85459.pdf
106	High	Repetitive Loss Properties and Severe Repetitive Loss Properties	Current 212 Properties Total repetitive flooding require mitigation Addresses under protection Federal Privacty Act 1974 see CRS Coordinator for list	All	2		Potential Flood Mitigation Assistance Grants		Sarasota County	Protected Federal Privacy Act	Public Utilities	$0.5M	☐	☐	☐	☐	☑	Awaiting funding	1992 to present	E (Existing)	CRS Coordinator
107	High	Bee Ridge WRF Renovation Replacement and Upgrade Program	Renovations, replacements and upgrades to operate 24/7	All	2		Utility Rates		Sarasota County	88053	Public Utilities	$2.5M	☐	☐	☑	☐	☐		10/18 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88053.pdf
108	High	Central County WRF Improvements	Rehabilitation and improvements to enhance operational capabilities at CCWRF	All	2		Enterprise Fund Planned Borrows FY20-FY23 Utility Rates		Sarasota County	88062	Public Utilities	$18M	☐	☐	☑	☐	☐		10/18 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88062.pdf
109	Medium	Honore Ave Reclaimed Extension	Resuse extension project multi-year multiphase to extend reclaimed service to future development south of SR681	All	2		Enterprise Fund Planned Borrows FY20-FY23 Utility Rates		Sarasota County	88058	Public Utilities	$3.4M	☐	☐	☑	☐	☐		10/18-09/2023	E (Existing)	fy19 THRU 2023 CIP\88058.pdf
110	Medium	Venice Gardens WRF Renovation Replacement and Upgrade	Renovations replacements and upgrades of equipment components and systesm at the VG Water Reclamation Facility	All	2		Utility Rates		Sarasota County	88054	Public Utilities	$1.5M	☐	☐	☑	☐	☐		10/18 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88054.pdf
111	Medium	Venice Gardens WTP Renovation Replacement and Upgrade Program	Renovate Venice Garden Water Treatment Plant	All	2		Utility Rates		Sarasota County	88056	Public Utilities	$1.5M	☐	☐	☑	☐	☐		10/18 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88056.pdf
112	High	Wastewater Pump Stations Resiliency Improvement Program	Resiliency Improvements including fixed generators	All	2		Utility Rates		Sarasota County	88065	Public Utilities	$15M	☐	☐	☑	☐	☐		10/18 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88065.pdf
113	Medium	Bee Ridge WRF Reclaimed Systems Improvements	Design Permit and construct exploratory well to determine aquifer conditions underlying the Ree Ridge Water Reclamation Facility site	All	2		Utility Rates Wastewater Capacity Fees		Sarasota County	88015	Public Utilities	$14.2M	☐	☐	☑	☐	☐		10/15 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88015.pdf
114	Medium	Carlton WTF Replacement of 3 EDR Units	End of useful life need to be rehabilitated with current EDR technology Phases I and II of CIP 55983 replace 5 of 10 EDR units and corrected structural deficiencies Phase III remove 5 units and add 3 new EDR	All	2		Enterprise Fund Planned Borrows FY20-FY23 Utility Rates		Sarasota County	88050	Public Utilities	$17.7M	☐	☐	☑	☐	☐		10/18 to 09/2022	E (Existing)	fy19 THRU 2023 CIP\88050.pdf
115	Medium	Carlton WTF Replacement of Final 2 EDR Units	Final Phase will add two units total count to 10 (previous CIP 55983 and 88050 removed all 10 and replaced 8 new EDR units)	All	2		Enterprise Fund Planned Borrows FY20-FY23 Utility Rates		Sarasota County	88051	Public Utilities	$6M	☑	☐	☐	☐	☐		10/2021 to 09/2023	N (New)	fy19 THRU 2023 CIP\88051.pdf
116	Low	East Venice Ave Water Line	Construct 7,400 ft of water linie along E Venice Ave between Wading Bird Dr and Lee Rd	All	2		Utility Rates		Sarasota County	88008	Public Utilities	$2.1M	☐	☐	☑	☐	☐		10/2012 TO 09/2023	E (Existing)	fy19 THRU 2023 CIP\88008.pdf
117	Low	Fruitville Water Reclamation Facility Demolition	Decommission Fruitville WRF removel all equipment buildings tanks infrastructure fencing etc.	All	2		Utility Rates		Sarasota County	88044	Public Utilities	$1.5M	☑	☐	☐	☐	☐		10/2021 to 09/2022	N (New)	fy19 THRU 2023 CIP\88044.pdf
118	Low	Infiltration & Inflow Reduction Program	Replace or rehabilitate beyond routine maintenance existing sewer gravity mains sewer force mains..manholes…terminal sewer connections as necessary	All	2		Utility Rates		Sarasota County	55957	Public Utilities	$39.4M	☐	☐	☑	☐	☐		10/10 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\55957.pdf
119	Low	Interconnect Reuse Main Improvements	Design, Permit, Construct reuse transmission interconnect between Bee Ridge Water Reclamation Facility and Central County Water Reclamation Facility	All	2		Enterprise Fund Planned Borrows FY20-FY23 Utility Revenue Bond Series 2016A/Rates		Sarasota County	88023	Public Utilities	$21.4M	☐	☐	☑	☐	☐		10/15 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88023.pdf
120	Medium	Interconnect Water Main Improvements Peace River	Extend Potable water main along Clark and Proctor from future terminus of Peace River Manasota Regional Water Supply Authority	All	2		Commercial Paper Revenue Bonds Utility Rates		Sarasota County	88024	Public Utilities	$10.9M	☐	☐	☑	☐	☐		10/15 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\88024.pdf
121	Low	Oversizing Reuse Facilities Program	Enlarge extend or oversize reuse water facilities concurrent w/new devleopment to pormote extension of facilities	All	2		Utility Rates		Sarasota County	88022	Public Utilities	$2.6M	☐	☐	☑	☐	☐		10/15 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88022.pdf
122	Low	Radio Telemetry Wastewater Upgrade Program	Current SCADA system requires upgrades and intergration with server hub at Carlton Water Treatment facility to allow system wide monitoring	All	2		Utility Rates		Sarasota County	55998	Public Utilities	$8M	☐	☐	☑	☐	☐		10/10 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\55998.pdf
123	Low	Radio Telemety Water Upgrade Program	Upgrades new instrumentation network and control systems for water distrubiton system Carlton WTF, Venice Gardens WTF all pump stations and water distribution monitoring systems	All	2		Utility Rates		Sarasota County	55962	Public Utilities	$5M	☐	☐	☑	☐	☐		10/06 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\55962.pdf
124	Low	Reuse System Rehabilitation Program	Rehabilitation beyond normal maintenance of existing reuse mains, valves, connections and pumps throughout the County	All	2		Utility Rates		Sarasota County	88021	Public Utilities	$2M	☐	☐	☑	☐	☐		10/15 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88021.pdf
125	Low	South Gate MPS Pumps and Parallel Force Main	Improvements to long term transfer of wastewater flows from South Gate and Siesta Key	All	2		Commercial Paper Utility Rates		Sarasota County	88017	Public Utilities	$11.5M	☐	☐	☑	☐	☐		10/14 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88017.pdf
126	Low	US41 Venice Bypass Water Relocates	Utility relocates associated with FDOT road widening project 12" water main will replace existing water mains along US 41 corridor	All	2		Utility Rates		Sarasota County	88014	Public Utilities	$2.8M	☐	☐	☑	☐	☐		10/14 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\88014.pdf
127	Low	Wastewater System Rehabilitation Program	Rehabilitate beyond normal maaintenance existing wastewater force mains, valves connections and pump stations in County	All	2		Utility Rates		Sarasota County	88020	Public Utilities	$7.8M	☐	☐	☑	☐	☐		10/15 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88020.pdf
128	Low	Waterline extension Area M West	Design and construct a central water distribution system to serve approx 84 cuustomers in Phillippi Creek SSRP Area entire area M ahas approx 1,340 homeowners converting from septic tanks to central sewer	All	2		Utility Rates		Sarasota County	88001	Public Utilities	$1.1M	☐	☐	☑	☐	☐		10/2011 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88001.pdf
129	Low	Bee Ridge WRF Expansion from 9 to 12 MGD	Improvements to expand Bee Ridge Wastewater Reclamation Facility from 9MGD to 12 MGD	All	2		Utility Rates Wastewater Capacity Fees		Sarasota County	88006	Public Utilities	$5.3M	☐	☐	☑	☐	☐		10/2012 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88006.pdf
130	Low	Carlton WTF Design & Replacement of 5 EDR Units	Reha Carlton Water Treatment Facility with current EDR technology Phase I and II will replace 5 of the existing ten equipment trains	All	2		Revenue Bonds Utility Rates Utility Short Term Borrow		Sarasota County	55983	Public Utilities	$25.6M	☐	☐	☑	☐	☐		10/2008 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\55983.pdf
131	Low	Central County WRF Expansion	Expand and Upgrade Central County Wastewater Reclamation Facility from 4.8MGD to 8.0 MGD + construct 10MG effluent storage tank	All	2		Utility Rates Utility Revenue Bond Series 2016A/Rates Wastewater Capacity Fees		Sarasota County	88007	Public Utilities	$16.9M	☐	☐	☑	☐	☐		10/2012 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\88007.pdf
132	Medium	Dona Bay Storage Facility	Multiple Phases including phase II future potable water supply. Construct conveyance system to divert fresh water from Cow Pen Slough to Venice Minerals storage site	All	2		SWFWMD Grants Utility Rates Wastewater Capacity Fees		Sarasota County	55955	Public Utilities	$14.2M	☐	☐	☑	☐	☐		10/2006 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\55955.pdf
133	Medium	Gulf Gate Master Pump Station	Improvements include vehicular access, SCADA upgrades	All	2		Utility Rates		Sarasota County	88016	Public Utilities	$1M	☐	☐	☑	☐	☐		10/2014 to 09/2022	E (Existing)	fy19 THRU 2023 CIP\88016.pdf

	Priority	Name of Project	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments
134	Medium	LWR Blvd Water Improvements	Reimburse Lakewood Rand Stewardship District for 360 lineal feet of 24-inch and 3,400 lineal ft of 16-inch water transmission main	All	2		Utility Rates		Sarasota County	88036	Public Utilities	$880K	☐	☐	☑	☐	☐		10/2015 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\88036.pdf
135	Medium	Nokomis Sewer Main	Extend low pressure wastewater line from exisitng lift station US 41 into a portion ofcommercial area designated in Nokomis Revitalization Plan	All	2		Infrastructure Surtax III Utility Rates		Sarasota County	88011	Public Utilities	$1.1M	☐	☐	☑	☐	☐		10/2013 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\88011.pdf
136	Low	North County ASR Reuse	Multiple long term project to locate design permit construct operationally test an aquifer storage recovery well for under ground storate of relcaimed water during wet weather.	All	2		SWFWMD Grants Utility Rates		Sarasota County	65974	Public Utilities	$4.5M	☐	☐	☑	☐	☐		10/98 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\65974.pdf
137	High	Septic System Replacement Program Area D	Phase 4 planning connection of 118 residences to central sewer via Interlocal Agreement with City of Sarasota estimate 2.2M	All	2		Utility Rates		Sarasota County	88033	Public Utilities	$2.2M	☐	☐	☑	☐	☐		10/16 to 09/2022	E (Existing)	fy19 THRU 2023 CIP\88033.pdf
138	High	Septic System Replacement Program Area D Mineola Dr River Ridge Rd	Total connects 1,162 Phases I, II completed Phase III will Connect 78 residences to central sewer	All	2		Utility Rates		Sarasota County	55904	Public Utilities	$720K	☐	☐	☑	☐	☐		10/2012 To 09/2023	E (Existing)	fy19 THRU 2023 CIP\55904.pdf Is this done? Why no future $ shown
139	High	Septic System Rpl Pgm Area I and J1	Design infrastructure to connect 1,030 residences to central sewers in Areas I and J1 as part of the Phillippi Creek Septic System Replacement Program	All	2		Utility Rates		Sarasota County	55906	Public Utilities	$3.5M	☐	☐	☑	☐	☐		10/06 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\55906.pdf
140	High	Septic System Rpl Pgm Area M West	Infrastructure to connect approx 1,340 residences to central sewer	All	2		Infrastructure Surtax Continuation Rates Revenue Bond and Commercial Paper Repaid by Utility Rates State Revolving Fund		Sarasota County	55908	Public Utilities	$14M	☐	☐	☑	☐	☐		10/06 to 09/2022	E (Existing)	fy19 THRU 2023 CIP\55908.pdf
141	High	Septic System Rpl Pgm Area O and P	Connect 1,185 residences to central sewer No includes 739 connections from Area O and 446 connections from Area P. Area P can be served from one vacuum pump station	All	2		FY11 Revenue Bond Infrastructure Surtax Continuation Rates Infrastructure Surtax III State Revolving Fund Utility Rates		Sarasota County	55910	Public Utilities	$19.4M	☐	☐	☑	☐	☐		10/08 - 09/2019	E (Existing)	fy19 THRU 2023 CIP\55910.pdf
142	High	Siesta Key Intracoastal Water Main	Construct new potable water transmission main under intracoastal waterway to replace aging infrastructure an reconstruct water mains, facilities and service along route of proposed forcemain west of US 41	All	2		Utility Rates		Sarasota County	88019	Public Utilities	$2.8M	☐	☐	☑	☐	☐		10/14 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\88019.pdf
143	High	Siesta Key Master Pump Station and Force Main	Design, permit and construct master pump station located at Siesta Key advanced wastewater trtmt plant	All	2		FY11 Revenue Bond State FDEP Grant Utility Rates		Sarasota County	55995	Public Utilities	$15.9M	☐	☐	☑	☐	☐		10/10 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\55955.pdf
144	Medium	SMR Sewer Telemetry Improvements	Water and Wastewater Sys Utility Agrmt w/Schroeder-Manatee Ranch, SMR 2050, and Lakewood Ranch stewardship district reiumbure for design and installation of 34,00 lineal ft of fiber network infrastructure etc	All	2		Utility Rates		Sarasota County	88037	Public Utilities	$225K	☐	☐	☑	☐	☐		10/15 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\88037.pdf
145	Low	Water Line Extension PCSSRP Area D	Phase 4 planning connect 100 residences to 3,200 LF of water distribution lines via Interlocal Agrmt w/City of Sarasota	All	2		CDBG Funds Infrastructure Surtax III Utility Rates		Sarasota County	55925	Public Utilities	$105K	☐	☐	☑	☐	☐		10/02 to 09/23	E (Existing)	fy19 THRU 2023 CIP\55925.pdf
146	Low	Waterline Extension Area 1 Design	Design central water distribution syst to serve 368 additional customres in Phillippi Creek Septic System Repalcement	All	2		Utility Rates		Sarasota County	55971	Public Utilities	$179K	☐	☐	☑	☐	☐		10/06 to 09/19	E (Existing)	fy19 THRU 2023 CIP\55971.pdf
147	Low	Wendell Kent Master Pump Station	Replace existing water storage tank and high pumping service facility on Siesta Key	All	2		Utility Rates		Sarasota County	88018	Public Utilities	$5.4M	☐	☐	☑	☐	☐		10/18 to 09/2023	E (Existing)	fy19 THRU 2023 CIP\88018.pdf
148	Medium	Bayfront Coastal Stormwater Improvements	Design stormwater improvements in coastal bayfront downtown Sarasota to address flood protection LOS and improve stormwater quality	All	2		Stormwater Assessments		Sarasota County	88072	Public Works	$150K	☐	☐	☑	☐	☐		10/18 to 09/2024	E (Existing)	fy19 THRU 2023 CIP\88072.pdf
149	Medium	Midnight Pass Stormwater Improvements	Design stormwater improvements to address coastal barrier island flooding LOS deficiencies and improve stormwater quality along Midnight Pass Road on Siesta Key	All	2		Stormwater Assessments		Sarasota County	88070	Public Works	$350K	☐	☐	☑	☐	☐		10/18 to 09/2024	E (Existing)	fy19 THRU 2023 CIP\88070.pdf
150	Medium	Whitaker Basin Stormwater Improvements	Design stormwater improvement sin the Whitaker Basin to address flood protection LOS deficiencies and improve stormwater quality	All	2		Stormwater Assessments		Sarasota County	88069	Public Works	$200K	☐	☐	☑	☐	☐		10/18 to 09/2021	E (Existing)	fy19 THRU 2023 CIP\88069.pdf
151	High	Bahia Vista Levee Improvements Design	Evaluation of Bahia Vista Levee system relative to FEMA 44 CFR 65.10 for FEMA accreditation	All	2		Stormwater Assessments		Sarasota County	88042	Public Works	$220K	☐	☐	☑	☐	☐		10/18 to 09/2022	E (Existing)	fy19 THRU 2023 CIP\88042.pdf
152	Medium	Dona Bay Phase 4 & 5 Weir Replacement Design	Preliminary design report replacement of Kingsgate Weir in Cowplen Slough and feasilbity of a low flow weir in Blackburn Canal to reduce voume of fresh water discharging to Dona Bay from Cowpen Slough and Curry Creek.	All	2		Stormwater Assessments		Sarasota County	88043	Public Works	$220K	☐	☐	☑	☐	☐		10/18 to 09/2021	E (Existing)	fy19 THRU 2023 CIP\88043.pdf
153	Medium	River Road Widening	Improve hurricane evacuation of network to provide road capacity for planned growth in Sarasota County and Charlotte County 6 mile north south construct 6 lanes Segment 2 ctr Rd to I-75 4 lanes	All	2		FDOT Grant South County Rd Impact Fees South Mobility Fee District		Sarasota County	95800	Public Works	$8M	☐	☐	☑	☐	☐		10/17 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\95800.pdf
154	Low	Sediment Abatement and Stabilization Program	Program to reshape stormwater conveyance systems to more gentle slopes stabilized with vegetation matting or other material to prevent erosion throughout the County	All	2		Infrastructure Surtax III SWFWMD Grants Stormwater Assessments		Sarasota County	75846	Public Works	$7.7M	☐	☐	☐	☐	☐				fy19 THRU 2023 CIP\75846.pdf
155	Low	Venice East Blvd Improvements	Right of way design permit and construct 1.45 miles of new two-lane road within four lanes of right of way w/medians, sidewalks and bicycle lanes	All	2 3		South County Rd Impact Fees		Sarasota County	95708	Public Works	$620K	☐	☐	☑	☐	☐		10/17 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\95708.pdf
156	High	Casey Key Roadway Improvements	South Casey Key Road Stabilization Project	All	2		HMGP		Sarasota County	N/A	Capital Mgmt.	$1,125,000.00	☑	☐	☐	☐	☑	Funding	9/19 to 9/2020	N (New)	
157	High	Ocean Blvd./Higel Rd.	Design drainage improvements from Ocean, via Higel, though Lotus to the Grand Canal.	All	2		HMGP		Sarasota County	N/A	Public Utilities	$600K	☑	☐	☐	☐	☑	Funding	9/19 to 9/2020	N (New)	
158	Medium	Harbor Acres Analysis	Study, design, permit and construct stormwater improvements	All	2		NA		Sarasota County	N/A	Public Utilities	$5M	☑	☐	☐	☐	☑	Funding		E (Existing)	
159	Low	Indian Beach Sapphire Shores LID	Neighborhood/SBEP initiated bioretention project; Demonstrate replicable LID technique in older urban area.	All	2		NA		Sarasota County	N/A	Public Utilities		☑	☐	☐	☐	☑	Funding		E (Existing)	
160	High	Phillippi Dam Removal	Design and construction to remove historic dam and restore habitat	All	2		NA		Sarasota County	NA	Public Utilities	$2M	☑	☐	☐	☐	☑	Funding		E (Existing)	
161	Low	Sea level rise vulnerability assessment	Assess impact on critical structures, public health and safety, natural systems, and economy from affects of sea level rise	All	2		NA		Sarasota County	N/A	Public Utilities	$250K	☑	☐	☐	☐	☑	Funding		E (Existing)	
162	Medium	Public Utilities D.O.C.	Construct Department Emergency Operation Center for Public Utilities	All	2		NA		Sarasota County	N/A	Public Utilities	$5M	☑	☐	☐	☐	☑	Funding		E (Existing)	
163	High	River Road Regional Interstate Connector	Raise roadbed, add traffic lanes for evacuation route. US41 to West Villages Parkway	All	2				Sarasota County	95760	Capital Mgmt.	$23M	☐	☐	☑	☐	☐		As funding is available	E (Existing)	95760 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH Des
164	Medium	Alligator Creek Phase 1 & 2	Pipe and swale improvements	All	2				Sarasota County	85872	Capital Mgmt.	$3M	☐	☑	☐	☐	☐		FY14	E (Existing)	85872 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH Des

	Priority	Name of Project	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments
165	Medium	Country Woods	Rehabilitate existing drainage	All	2				Sarasota County	75841	Capital Mgmt.	$600K	☐	☑	☐	☐	☐		FY14	E (Existing)	75841 NOT IN CURRENT FY2019 BUDGET NEED FURTHER RESEARCH Des
166	Medium	Stormwater Asset & Infrastructure Mgmt. System	Protect critical infrastructure through technology	All	2				Sarasota County	75832	Public Utilities	$6.9M	☐	☐	☑	☐	☐		As funding is available	E (Existing)	75841 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
167	Medium	Colonial Gables	Rehabilitate existing drainage	All	2				Sarasota County	75843	Capital Mgmt.	$620K	☐	☐	☑	☐	☐		FY14	E (Existing)	75843 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
168	Medium	Beach Road Drainage Improvements	Rehabilitate existing drainage	All	2				Sarasota County	75803	Capital Mgmt.	$2.8M	☐	☐	☑	☐	☐		FY15	E (Existing)	75843 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
169	High	Repetitive Loss Program	Implement RLAA recommendations per FEMA guidelines	All	2				Sarasota County	N/A	Public Utilities	$20M	☐	☐	☑	☐	☐		Continuous	E (Existing)	
170	High	911/EOC Center	Construct new building	All	2				Sarasota County	84330	Capital Mgmt.	$19M	☐	☑	☐	☐	☐		FY14	N (New)	84330 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
171	Medium	Fire Station 12	Remove and replace current fire station	All	2				Sarasota County	84350	Capital Mgmt.	$4M	☐	☐	☑	☐	☐		FY15	E (Existing)	84350 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
172	Medium	Fire Station 14	Remove and replace current fire station	All	2				Sarasota County	84332	Capital Mgmt.	$4M	☐	☑	☐	☐	☐		FY15	E (Existing)	84332 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
173	Medium	Fire Station 19	Remove and replace current fire station	All	2				Sarasota County	84346	Capital Mgmt.	$4M	☐	☐	☐	☐	☑	Funding	As funding is available	E (Existing)	84346 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH
174	Medium	Fire Station 16	Remove and replace current fire station	All	2				Sarasota County	84334	Capital Mgmt.	$7M	☐	☐	☑	☐	☐		FY15	E (Existing)	
175	Medium	Fire Station 17	Construct new building	All	2				Sarasota County	84353	Capital Mgmt.	$4.3M	☐	☐	☑	☐	☐		FY15	N (New)	84353 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH Des
176	Medium	Fire Station 9	Construct new building	All	2				Sarasota County	84340	Capital Mgmt.	$4.5M	☑	☐	☐	☐	☑	Funding	As funding is available	N (New)	84340 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH Des
177	High	North Beach Road	Public Access and Shore Line Protection	All	2				Sarasota County	37340123	Public Works	$2M	☐	☐	☑	☐	☐		2013-2014	N (New)	37340123 BAD NUMBER NEED FURTHER RESEARCH Des
178	Medium	Fire Station 27	Construct new building	All	2				Sarasota County	84340	Capital Mgmt.	$4.5M	☑	☐	☐	☐	☑	Funding	As funding is available	N (New)	84340 NOT IN CURRENT BUDGET FY 2019 TO 2023 NEED FURTHER RESEARCH Des
179	High	Siesta Key Master Pump Station	Master pump station to transfer flow off island	All	2				Sarasota County	55995	Capital Mgmt.	$3M	☐	☐	☑	☐	☐		FY19	N (New)	See Below Des
180	High	Critical Care Tower	hardening of both building and windows (retrofit)	All	All		HMGP	ALL	Sarasota Hospital Board		SMH	$15M	☑	☐	☐	☐	☐		As funding is available	N (New)	
181	High	South, Central & Northwest wings	hardening of windows (retrofit)	All	All		HMGP	ALL	Sarasota Hospital Board		SMH	$3.5M	☑	☐	☐	☐	☐		As funding is available	N (New)	
182	High	North Port Emergency Rm	generator capacity upgrade	All	All		HMGP	ALL	Sarasota Hospital Board		SMH	$300,400.00	☑	☐	☐	☐	☐		As funding is available	N (New)	
183	High	West Bayside Behavioral	generator capacity upgrade	All	All		HMGP	ALL	Sarasota Hospital Board		SMH	$603,357.00	☑	☐	☐	☐	☐		As funding is available	N (New)	
184	High	Public Outreach	Public outreach programs for all jurisdictions	All	All	3	NA	ALL	LBK NP SRQ Sarasota County Sarasota Hospital Board Venice	NA	LMS Work Group	$10K	☐	☐	☑	☐	☐		Continuous	E (Existing)	
185	High	Police Dept. Relocate and EOC construction	Reconstruct PD facility to include City Command EOC	11 12 15 2 7 8 9	2	5	Revenue Bonds	ALL	Venice	1V	Police	$16M	☐	☐	☑	☐	☐		2020	E (Existing)	
186	Medium	Relocate Fire Station #2	Construct new fire station outside flood zone	11 12 15 2 7 8 9	2	5	NA	ALL	Venice	3V	Fire	$5M	☐	☐	☐	☐	☑	Funding		E (Existing)	
187	Medium	Directional signs for island evacuation	Acquire four signs for three bridges and roadways	11 12 15 2 7 8 9	5	4	NA	3 4	Venice	6V	Public Works	$60K	☐	☐	☐	☐	☑	Funding		E (Existing)	
188	High	Fire Station #51 and City Hall generator	Emergency operations for city communications	11 12 15 2 7 8 9	2	5	NA	3 4	Venice	7V	City Hall	$1.175M	☐	☐	☑	☐	☐		Under construction	E (Existing)	
189	High	Radio upgrade for the city department	Provide optimum radio communications	11 12 15 2 7 8 9	5	5	NA	ALL	Venice	21V	Utilities, Police, PW	$490K	☐	☐	☐	☐	☑	Funding		E (Existing)	
190	Low	Second House Program	Partner coastal with inland residents during emergencies	11 12 15 2 7 8 9	5	1	N/A	3	Venice	23V	City Hall	$10K	☐	☐	☐	☐	☑	Funding		E (Existing)	
191	Low	Relocate water plant elevated tank	Upgrade support system to prevent against flood and wind	12 2 7 9	2	5	N/A	ALL	Venice	26V	Utilities	$725K	☐	☐	☐	☐	☑	Funding		E (Existing)	
192	Low	Upgrade Chuck Reiter elevated tank	Upgrade support system to prevent against flood and wind	11 12 15 2 7 9	2	5	N/A	ALL	Venice	27V	Utilities	$76K	☐	☐	☐	☐	☑	Funding		E (Existing)	
193	Low	Modify Pinebrook booster station	Waterproof and upgrade communication system	11 12 15 2 7 8 9	2	5	N/A	ALL	Venice	28V	Utilities	$100K	☐	☐	☐	☐	☑	Funding		E (Existing)	
194	Low	Coastal Area Redevelopment Study	Post disaster study	11 12 15 2 7 8 9	5	2	N/A	ALL	Venice	29V	Dev. Service	$50K	☐	☐	☐	☐	☑	Funding		E (Existing)	
195	Low	Coastal Compliance Program	Public education for retrofit and construction activities	11 12 15 2 7 8 9	5	3	N/A	3	Venice	30V	Building	$30K	☐	☐	☐	☐	☑	Funding		E (Existing)	
196	Medium	Coastal Land Acquisition Program	Purchase properties and preserve for open space	11 2 7 9	1	4	N/A	3	Venice	36V	Engineering	$425K	☐	☐	☐	☐	☑	Funding		E (Existing)	
197	High	Relocate RO Water Plant	Construct facility out of the flood zone	11 2 7 9	2	5	N/A	ALL	Venice	42V	Utilities	$40M	☐	☐	☐	☐	☑	Funding		E (Existing)	
198	High	Ajax property 2.0-3.0MGD booster station	Provide service to east side of town, construct interconnect with county	11 12 15 2 7 9	2	5	SRF/ Revenue	3	Venice	44V	Utilities	$10M	☐	☐	☐	☐	☐		2022	N (New)	
199	Low	Venice Evacuation Study	Study to address the need for hurricane shelters in city	11 12 14 15 2 7 8 9	5	1	N/A	ALL	Venice	50V	Planning	$50K	☐	☐	☐	☐	☑	Funding		N (New)	
200	High	Fire Station 1 Replacement	Upgrade facility to meet current storm criteria	11 12 15 2 7 9	3	5	N/A	ALL	Venice	55V	Fire	$5M	☐	☐	☑	☐	☐		2022	E (Existing)	
201	High	Relocate PW to PD after new PD complete	Harden Structure and retrofit for PW Admin.	11 12 15 2 7 8 9	2	5	N/A	3	Venice	57V	Public Works	$750K	☐	☐	☑	☐	☐	Funding	2021	E (Existing)	
202	Low	Hurricane Tolerant Handbook	Update the 1994 hurricane study	9	5	3	N/A	ALL	Venice	61V	Planning	$15K	☐	☐	☐	☐	☑	Funding		E (Existing)	
203	High	New Solid Waste and Recycling Complex	Relocate facility east and construct to hurricane codes	11 12 15 2 7 8 9	2	5	N/A	ALL	Venice	62V	Public Works	$3M	☐	☐	☐	☐	☑	Funding		E (Existing)	
204	High	Purchase Portable Generators for Lift Station	Provide emergency back up power outage	11 12 15 2 7 8 9	5	1	Utilities Revenue	ALL	Venice	64V	Utilities	$450K	☐	☐	☐	☐	☑	Funding		E (Existing)	
205	Medium	Hurricane Louvers for Water Plant	Secure building for hurricanes	15 9	2	5	N/A	ALL	Venice	65V	Utilities	$32K	☐	☐	☐	☐	☑	Funding		E (Existing)	
206	High	City Hall Reroof	Roof not built to code and condition is deteriorating	11 12 15 2 7 9	2	5	N/A	ALL	Venice	66V	Public Works	$600K	☐	☑	☐	☐	☐			E (Existing)	
207	Medium	2nd sanitary force main under Intracoastal	Add a secondary force main to add to secondary redundancy	2 7 9	5	5	N/A	3	Venice	69V	Utilities	$1M	☐	☐	☑	☐	☐		2022	E (Existing)	
208	High	2nd sanitary force main under I-75	Add a secondary force main to add to secondary redundancy	2 7 9	5	5	Utilities Revenue	3	Venice	70V	Utilities	$3.5M	☐	☐	☑	☐	☐		2021	E (Existing)	
209	High	Reinforce Airport Hangars	Reinforce existing airport to meet hurricane standards	11 12 15 2 7 9	2	2 5	Airport / Grants	3	Venice	75V	Airport	$1M	☐	☐	☐	☐	☐			N (New)	
210	High	Construct New T-Hangars	Construct new T-Hangars meeting hurricane standards	11 12 15 2 7 9	5	2	Airport / Grants	3	Venice	76V	Airport	$1.5M	☐	☐	☐	☐	☐			N (New)	
211	Low	Relocate Airport Maintenance Facility	Relocate existing Airport Maint. Facility to meet hurricane stds.	11 12 15 2 7 9	5	2	Airport / Grants	3	Venice	78V	Airport	$650K	☐	☐	☐	☐	☐			N (New)	
212	High	Airport Avenue Drainage Project	Upgrade existing drainage facilities to mitigate flood in evacuation route	11 2 7 9	6	2	Airport / Grants	3	Venice	79V	Airport	$700K	☐	☐	☐	☐	☑	Funding		N (New)	
213	Medium	Live Oak Dr. Stormwater Improvements	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	SRF	3	Venice	80V	Stormwater	$600K	☐	☐	☑	☐	☐		Under construction	E (Existing)	
214	High	Nokomis Ave. South Stormwater	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	CIP	3	Venice	81V	Stormwater	$1.1M	☐	☑	☐	☐	☐			E (Existing)	
215	Medium	Outfall 9 Improvement	Study the drainage basin and increase the infiltration pond size	11 2 7 9	6	2	CIP Grants	3	Venice	82V	Stormwater	$500K	☐	☐	☐	☐	☑	Funding		E (Existing)	
216	Medium	Golf Dr. Stormwater Improvements	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	CIP Grants	3	Venice	83V	Stormwater	$750K	☐	☐	☐	☐	☑	Funding		E (Existing)	
217	Medium	Beach Erosion Hot Spot Alternatives	Alternate erosion evaluation and construction	1 2 7 9	5	5	Grants	3	Venice	86V	Engineering	$4M	☐	☐	☐	☐	☑	Funding		N (New)	
218	Low	Mobile Command Unit	Design and Purchase a Mobile Command Unit for use during special events and emergencies.	11 12 15 2 7 8 9	2	5	NA	ALL	Venice	87V	Police	$500K	☐	☐	☐	☐	☑	Funding		N (New)	
219	Medium	Valencia Rd. Stormwater Improvements	Upsize existing stormwater pipes to reduce flooding	12 2 7 9	6	2	CIP Grants	3	Venice	88V	Stormwater	$850K	☐	☐	☐	☐	☑	Funding		E (Existing)	
220	Medium	Circle Drive Drainage Improvement	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	CIP Grants	3	Venice	89V	Stormwater	$400K	☐	☐	☐	☐	☑	Funding		E (Existing)	
221	Medium	Church St. Drainage Improvement	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	CIP Grants	3	Venice	90V	Stormwater	$400K	☐	☐	☐	☐	☑	Funding		E (Existing)	
222	Medium	Parkdale & Parkside Dr. Drainage Improvement	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	CIP Grants	3	Venice	91V	Stormwater	$750K	☐	☐	☐	☐	☑	Funding		E (Existing)	
223	Medium	Venice Fire Station 3 EOC	Provide Equipment for Venice EOC at Fire Station 3 to allow for Emergency Management Operations	11 12 14 15 2 7 8 9	5	5	NA	ALL	Venice	92V	Fire	$250K	☐	☐	☐	☐	☑	Funding		E (Existing)	

	Priority	**Name of Project**	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments
224	High	Lightning and Surge Protection	Provide Lightning and Surge Protection to provide protection to City Technology and infrastructure.	11 12 14 15 2 7 8 9	5	5	NA	3 4	Venice	93V	Fire	$105K	☐	☐	☐	☐	☑	Funding		E (Existing)	
225	Medium	Construct 8E production well	Enhance system reliability	2 7 9	5	1 4	CIP	ALL	Venice	94V	Utilities	$1.5M	☐	☐	☑	☐	☐		2021	N (New)	
226	High	Water Plant Generator	Purchase new generator for water plant for backup power	11 12 15 2 7 8 9	2	1	CIP	ALL	Venice	95V	Utilities	$1M	☐	☐	☑	☐	☐		2021	E (Existing)	
227	High	Fire Station #2 Hardening	Harden Facility for Storm Protection	11 12 14 15 2 7 8 9	5	5	NA	ALL	Venice	96V	Fire	$250K	☐	☐	☐	☐	☑	Funding		E (Existing)	

Note 1

Priority- Priority ranking is determined by the Hazard Mitigation Project Evaluation Criteria Worksheet. The project priority is rated in the following table.

Priority	Project Score
High	21 - 28
Medium	11 - 20
Low	0 - 10
N/A	Deferred or Completed

Note 2

Hazard	Number	Hazard	Number
Coastal Erosion	1	Hurricane	9
Coastal Storm	2	Land Subsidence	10
Dam Failure	3	Seasonal Severe Weather	11
Drought	4	Tornado	12
Earthquake	5	Tsunami	13
Levee Failure	6	Wildfire	14
Flood	7	Windstorm	15
Hailstorm	8	Deleted Project	N/A

Note 3

The Hazard Mitigation Strategy is based upon Goal 2, Objective 1 of the Local Hazard Mitigation Goals and is described in the following table.

Hazard Mitigated	Description
1	Acquisition of hazard prone property & conversion to open space
2	Retrofitting existing buildings and facilities
3	Elevation of flood prone structures
4	Vegetative management & soil stabilization
5	Infrastructure protection measures
6	Stormwater management
7	Minor structural flood control projects
8	Post-disaster code enforcement activities

Note 4

The Mitigation Goals Achieved are described in the following table and are based upon Goal 2 and Goal 4 of the Local Hazard Mitigation Goals within the Mitigation Strategy section of the basic plan.

Mitigation Goal Achieved	Description
1	Prevention
2	Property Protection
3	Public Education and Awareness
4	Natural Resource Protection
5	Structural Protection
N/A	Deleted

Note 5

The jurisdiction abbreviation is described in the following table.

Jurisdiction	Abbreviation	Number
City of North Port	NP	1
City of Sarasota	SRQ	2
City of Venice	V	3
Sarasota County Government	SCG	4
Sarasota County Schools	SCS	5
Sarasota Memorial Hospital	SMH	6
Town of Longboat Key	LBK	7
Deleted	N/A	N/A

Note 6

The project status is described in the following table.

Project Status	Description
New	Project added from previous project list submission
Complete	Project completed during period or construction has begun from previous project list submission
In-Progress	Project is in design and no construction has begun
Deleted	Project will be identified as deleted and remain on the project list for one annual cycle of reporting for administrative continuity of project tracking for local, state, and Federal agencies.
Deferred	Project is being deferred by jurisdiction

LMS-Appendix E

LMS Project List

	Priority	Name of Project	Description of Project	Hazards Mitigated	Hazard Mitigation Strategy	Mitigation Goals Achieved	Funding Source	Jurisdiction Project Benefit	Jurisdiction Project Owner	Jurisdiction Project #	Agency Responsible for Implementation	Estimated Cost	Project Status (NEW)	Project Status (COMPLETED)	Project Status (IN PROGRESS)	Project Status (DELETED)	Project Status (DEFERRED)	If Deferred; Why?	Timeframe for Project Completion	Mitigate New or Existing	Comments	Column22	Column23	Column24
10	High	MLK/Central Int.	Replace wire line attachment with mast	11 12 15 2 8 9	2	5	Penny Sales Tax	ALL	SRQ	EN-20.3	Public Works	$350K	☐	☑	☐	☐	☐		FY19	E (Existing)				
27	High	Replacement of shallow depth water and wastewater lines at Lazy River		4	5	1 2 5	User Rates	1 2 4	NP	N/A	Utilities	$150K	☐	☑	☐	☐	☐			E (Existing)				
30	High	Phase 1 Water Treatment Plant rehabilitation of Flocculation #1		All	2 5	2 4 5	User Rates	1 5	NP	N/A	Utilities	$575K	☐	☑	☐	☐	☐		2021	E (Existing)				
35	High	Upgrade the 14 year old control panel at the Wastewater Treatment Plant to improve operational efficiency		All	2	1 2 5	User Rates	1 4 5	NP	N/A	Utilities	$35K	☐	☑	☐	☐	☐			E (Existing)				
47	High	Big Slough Flood Reduction Study	Consultant to recommend solutions to reduce flooding in 2 areas	2 7	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$300K	☐	☑	☐	☐	☐		2020	E (Existing)	Funded by SWFWMD			
48	High	Design replacement for flood control structure #115	Corroded Structure Need to rehab, replace for flood protection	11 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$109K	☐	☑	☐	☐	☐		2017	E (Existing)				
49	High	Construct replacement for flood control structure #115	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$165K	☐	☑	☐	☐	☐		2018	E (Existing)				
50	High	Design replacement for flood control structure #106	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$168K	☐	☑	☐	☐	☐		2018	E (Existing)				
51	High	Construct replacement for flood control structure #106	Corroded Structure Need to rehab, replace for flood protection	10 2 3 6 7 9	2 5 6 7	1 2 5	RDA	1 4	NP	N/A	Public Works	$2.274M	☐	☑	☐	☐	☐		2020	E (Existing)				
71	High	North shore groins	Reduce beach erosion	1	4	4	CIP HMGP	2 3 4 7	LBK	LBK18	Public Works	$2.5M	☐	☑	☐	☐	☐		2015	N (New)				
72	High	North potable water connection	Replace existing potable water connection to community	All	5	All	CIP HMGP	ALL	LBK	LBK19	Public Works	$1.2M	☐	☑	☐	☐	☐		2015	N (New)				
75	High	Lift station E renovations	Upgrade motors, controls, roof, and exterior of building	All	2	5	CIP HMGP	7	LBK	LBK4	Public Works	$700K	☐	☑	☑	☐	☐		2015	E (Existing)	$1.2M Completed 2015; In-progress includes upgrades.			
79	High	Upgrade & Update 800 MHZ Emergency Comm System	Replace countywide public safety mission critical voice system w/regional integrated IP	All	2 3		Commercial Paper Manatee County Stormwater Assessments Surtax III Utility Rates		Sarasota County	84355	Emergency Services	$15.35M	☐	☑	☐	☐	☐		10/10-09/2019	E (Existing)	fy19 THRU 2023 CIP\84355.pdf			
85	Low	GRM Gov't Revenue Mgmt Sys	GRM formerly Prop Appraiser automates operations	All	2		Long Term Bond		Sarasota County	83186	EIT	$3M	☐	☑	☐	☐	☐		10/09 to 09/2020	E (Existing)	fy19 THRU 2023 CIP\83186.pdf			
103	Low	Venice Library	Replace former library facility at 300 S Nokomis Ave site	All	2		Commercial Paper Private Donation Surtax 3 Rev Note FY16 Surtax III		Sarasota County	83190	Libraries and Historical Resources	$12.1M	☐	☑	☐	☐	☐		10/15 to 09/2019	E (Existing)	fy19 THRU 2023 CIP\83190.pdf			
104	Medium	Old Miakka -Davidson ESLPP Parcel Acquisition & Start UP	20 acre parcel within Old Miakka Protection priority site	All	2		ESLPP Funds Transferable Dev Rights		Sarasota County	85645	Parks, Recreation and Natural Resources	$423K	☐	☑	☐	☐	☐		05/18 to 09/2018	E (Existing)	fy19 THRU 2023 CIP\85645.pdf			
164	Medium	Alligator Creek Phase 1 & 2	Pipe and swale improvements	All	2				Sarasota County	85872	Capital Mgmt.	$3M	☐	☑	☐	☐	☐		FY14	E (Existing)	85872 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH Des			
165	Medium	Country Woods	Rehabilitate existing drainage	All	2				Sarasota County	75841	Capital Mgmt.	$600K	☐	☑	☐	☐	☐		FY14	E (Existing)	75841 NOT IN CURRENT FY2019 BUDGET NEED FURTHER RESEARCH Des			
170	High	911/EOC Center	Construct new building	All	2				Sarasota County	84330	Capital Mgmt.	$19M	☐	☑	☐	☐	☐		FY14	N (New)	84330 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH			
172	Medium	Fire Station 14	Remove and replace current fire station	All	2				Sarasota County	84332	Capital Mgmt.	$4M	☐	☑	☐	☐	☐		FY15	E (Existing)	84332 NOT IN CURRENT FY2019 TO 2023 BUDGET NEED FURTHER RESEARCH			
206	High	City Hall Reroof	Roof not built to code and condition is deteriorating	11 12 15 2 7 9	2	5	N/A	ALL	Venice	66V	Public Works	$600K	☐	☑	☐	☐	☐			E (Existing)				
214	High	Nokomis Ave. South Stormwater	Upsize existing stormwater pipes to reduce flooding	11 2 7 9	6	2	CIP	3	Venice	81V	Stormwater	$1.1M	☐	☑	☐	☐	☐			E (Existing)				

LMS-Appendix F

Meeting Notes
Local Mitigation Strategy Work Group

Date: July 21, 2020 from 1:30-3:00pm
Location: ~~Emergency Operations Center, 6050 Porter Way, Room 147, Sarasota, FL 34232 MS~~
MS TEAMS Meeting/Conference Call due to COVID19

Meeting Objectives:
1. Establish Action Items/ deadlines
2. Individual Updates
Group Members & Guests

Ed McCrane	Sarasota County	present
Nicole Double	Sarasota County	present
Ryan Murphy	Sarasota County	present
Steve Hyatt	Sarasota County	present
Lee Prince	Sarasota County	
Charles Walter	Sarasota County	
Donna Bailey	Sarasota County	present
Joe Kraus	Sarasota County	present
Matt Osterhoudt	Sarasota County	
Heather Larson	Sarasota County	
Michele Norton	Sarasota County	
Paul Semenec	Sarasota County	present
Dez Companion	Sarasota County	
Eric Tiefenthaler	City of North Port	present
Elizabeth Wong	City of North Port	present
Valerie Malingowski	City of North Port	
Todd Kerkering	City of Sarasota	present
Cindy Cahill	City of Sarasota	present
James Linkhogle	Town of Longboat Key	
Mika Arnhold	Town of Longboat Key	present
Kathleen Weeden	City of Venice	present
Kathryn Harring	City of Venice	present
Frank Giddens	City of Venice	
Shawn Carvey	City of Venice	
Cindy Emshoff	Sarasota Office of Housing/Community Development	
Todd Underhill	Sarasota Soil and Water Conservation District	
Jody Dumas	Sarasota County School Board	
Craig Gammon	Sarasota Memorial Hospital	present
James Bugyis	Sarasota Memorial Hospital	
Sean Alley	Sarasota Memorial Hospital	
Mike Klosterman	Sarasota Memorial Hospital	present
Karen Silano	Sarasota County Sheriff's Office	
Richard Lyttle	New College of Florida	
Luis Suarez	New College of Florida	
David Bjekle	University of South Florida-Sarasota Manatee	
Cherie Knudson	Ringling College of Art and Design	present

Emergency Management Update-Chief Ed McCrane

- Roll call
- Approved April Meeting minutes
    - Motion to approve-Todd Kerkering
    - Second-Eric Tiefenthaler.
- Introduced Ryan Murphy
    - Shared Smartsheet with the working group
    - Created checklist approach to ensure each section is updated.
    - Goal to finish each section-deliverables, tables etc.
    - Important to update tables as needed, including supporting documentation
    - Benefit-meeting agendas, minutes, public notices can be attached
    - Reviewing LMS update manual-will add checklist
    - Hopes to have draft complete this week
    - Will ask working group for feedback
    - Asked for additional items for checklist; please forward to Ryan.
    - Ed asked Todd for input; Todd offered to meet/assist if needed
    - Ryan mentioned this new tool is a living resource; improvements to the process are welcomed.
    - Donna B-will this include the projects list? Yes, and can be updated as needed.
    - Todd mentioned projects list often changes based on recommendations by commission.
        - Minor changes to LMS do not have to go before commission unless changes strategic vision.
        - Can always add projects throughout the year. Projects List becomes important when we go to the State for grant funding.
- Ed said we will share out smartsheet info to LMS working group.
- Asked Nicole to get with Jody Mann-get public notices for newspaper for last 3 meetings. Get PDF's to Ed and Ryan
- Kathleen-current LMS list is complicated. Suggests breaking into jurisdiction.
- 5-year update to Jurisdictional flood plain plans-will send to Ryan. Flood plain plans will be switched out as they are updated-will go into smartsheet.
- Need to determine a way that when new flood plain plan is received the jurisdiction is notified.
- When will LMS go to the board? Ed-due Spring 2021, goal is for board to have it on winter break. Need to submit to State for approval then goes to board. Demographic, geographic profile, and stat info will be updated first
- Updating FMP to align with LMS-need population and demographics. That info will be on smartsheet.
- Todd-hazard analysis. Have to discuss all hazards in LMS (example volcano, avalanche). Can be same language in FMP and LMS. Would like all hazard analysis across the board to be uniform-all county documents

Post Disaster Redevelopment Plan (PDRP) update

- Joe Krauss
- Adopted in 2015, 5-year update
- Doing evaluation with intent in 2021 taking recommendations back to the board

- Mr. Lewis will send letter inviting municipalities to comment
- In 2015 municipalities chose not to adopt so it is an unincorporated Sarasota County document. Would be more functional if entire county adopted PDRP. Looking for suggestions how to improve. Strategic Plan-comment should be finished by end of September
- If anyone has questions, please reach out to Joe Krauss directly

HMGP Irma Projects

- SMH
    - Generator at Bayside West, complete. North Port generator 85% complete to date
- Venice
    - Generator-under contract, first reimbursement request. In process of preparing to do direct purchase of generator. FYI City Hall fire station has been demolished
- North Port
    - TLC engineering has 90% plan review; received. Project moving on schedule.
- City of Sarasota
    - Grant for generator at Robert L Taylor. In process-ground is broken, take retaining wall down to install conduit. Generator has been purchased; located currently in Tampa. Ready to move forward. Intersections/ pole masks, project moving forward
- LBK
    - Rebuilding South fire station-has been demolished and new construction has begun
- Public Works/Utilities
    - Ocean/Higel drainage improvement project. Received funding agreement from FDEM. Scheduled to go to Board 8/27/20. Providing $512,000 for drainage improvement project north end of Casey Key. Total reimbursable amount is $490,000. FDEM states remaining amount is in contingency line item. Will need to request contingency funding item. One hold up on getting solicitation out-engineer needs to provide new scope and fee to update plans to today's standards. Then hiring can commence. Plans are from 2018.

Hurricane Michael

- North Port
    - Applied for HMGB grant, water control project. Waiting to hear

- City of Sarasota
    - Red cross study, received app. Waiting to hear if accepted

<u>Updates:</u>

- **City of Venice**-Kat leaving City of Venice, going back to school for master's in environmental engineering
- **City of Sarasota**-

- **Town of Longboat Key**-updating Flood Plain Management Plan, should go to Town commission first meeting in September
- **Sarasota County Public Works/Storm Water**-Finished repetitive loss area analysis went to State for courtesy review. Has been approved and will an annex to FMP before end of the year
- **Sarasota Memorial Hospital**-N/A

- **City of North Port**- asked about timing of project list/grant. They can revise project list at any time. How far in advance? Ed says before you submit application must be on the list. Do project worksheet, score it, send to Ed and ask it to be added onto project list. If they want to submit a project for the project list, goes to whole committee for vote. If anything is on CIP project list, or any project that fits HMGP grant-fill out project list worksheet so it can go on list asap. No limit how many projects can be on the list. Elizabeth-dollar amounts change by the time we go for the grant. Does grant amount have to exactly match amount on project list? Todd answered he has not heard of any issue with an amount that does not have to match exactly
    - Ed-we do not get funding often for funding available will notify group asap, will remind to update project list, then group will vote on it. Then letter signed by Chair then submitted to State, like after Irma. Reminded group process is flexible.
    - Elizabeth asked if we would send out new project list out whenever it is updated? Ed said project list will be in smartsheet for review at any time, will give all LMS working group members access. Ryan said there is a report that can be uploaded onto website for ease of use
- **City of Sarasota**-
- **Ringling College of Art and Design**-

Questions/Concerns- none
Meeting ended at 1430 on 072120

Next Meeting-October 20, 2020 1:30pm

Meeting Agenda

Local Mitigation Strategy Work Group

Date: July 16, 2019 from 1:30-3:00pm

Location: Emergency Operations Center, 6050 Porter Way, Room 147, Sarasota, FL 34232

Meeting Objectives:

1. Establish Action Items/ deadlines
2. Individual Updates

Group Members & Guests

Ed McCrane	Sarasota County	Present		Guests	
Nicole Double	Sarasota County	Present			
Spencer Anderson	Sarasota County			Joe Wyatt	CERT
Charles Walter	Sarasota County			Thomas Bloomfield	Sarasota County EM Intern
Donna Bailey	Sarasota County	Present			
Matt Osterhoudt	Sarasota County				
Heather Larson	Sarasota County	Phoned In			
Paul Semenec	Sarasota County	Present			
Eric Tiefenthaler	City of North Port				
Elizabeth Wong	City of North Port	Phoned In			
Valerie Malingowski	City of North Port	Present			
Todd Kerkering	City of Sarasota	Present			
Cindy Cahill	City of Sarasota	Present			
James Linkhogle	Town of Longboat Key	Present			
Kathleen Weeden	City of Venice				
Kathryn Harring	City of Venice	Present			
Cindy Emshoff	Sarasota Office of Housing/Community Development	Present			
Todd Underhill	Sarasota Soil and Water Conservation District				
Jody Dumas	Sarasota County School Board				
James Bugyis	Sarasota Memorial Hospital				
Sean Alley	Sarasota Memorial Hospital	Present			
Mike Klosterman	Sarasota Memorial Hospital	Phoned In			
Karen Silano	Sarasota County Sheriff's Office				
Richard Lyttle	New College of Florida				
Lois Suarez	New College of Florida				
David Bjekle	University of South Florida-Sarasota Manatee	Present			
Cherie Knudson	Ringling School of Art and Design	Present			

1	Review facility layout & safety	
2	Welcome & Introductions	
3	Approval of April 16th minutes	
	Motion to approve mines-Todd Kerkering, Motion Seconded by Donna Bailey	
4		
5	Jurisdictional updates	
	Venice-withdrawn not rejected (make change on minutes). Generator on City Hall/Fire Station 1-approved. Has agreement. Will ask for extension on time (2 yrs.) based on construction schedule. Did quarterly report-up to date. HMPG team comms going well. In design process. Hasn't gone out for contract or bid. Once design plan in place will independently bid	
	North Port-approval from state for generator project, fire dept hired outside contractor to oversee the grant (procurement process)	
	City Sarasota-has contract for Robert Taylor, RFP/invitation to bid. Contractor there this week. Traffic signal-residual money, FDOT requirement but want to do cost benefit analysis (wire vs. mast).	
	LBK-building designed with 1999 standards (115) now 150 windload. Wanted to provide generator and window shutters. Will not by approved until entire building brought up to 150mph code. Working with roofers. Means $950k total project cost. Working with FDEM=tier system or use funds left over from other counties. Asked group if any other facility was required to build up to 150mph. Kathryn said state said ok to request addtl. money due to unforeseen costs. However LBK didn't put roof in budget this year, only generator. State said submit new scope of work. State has been accommodating	
	SMH-have local engineering firm to produce drawings to begin generator project. And local general contractors to provide quote. Scope of work changed slightly, hope to have proposal this week . Waiting on Ring Power for submittals	
	Sarasota County Public Works-Ocean/Higel Ave-drainage project. On 4th RFI. Consultant who produced the modelling unable to produce info FDEM needs, will do inhouse. Casey Key restoration-on 7th RFI. Chief McCrane offered to contact FDEM to help move project. Ed explained constraints of using grant funds. Heather spoke about Casey Key-FDEM determined not good RFI. Larry Mow reworking scope to make RFI. Heather clarified with Paul-keep drainage project on the books.	
	Office of Housing/Community Development-Infrastructure Program- Urgent need program hard to get HUD approved. Have to prove imminent health issue that just occurred and that no other jurisdiction has other program. Use LLMI national objective instead, case by case and proved by income (Example-NP senior home improvement). Referenced scoring material (pg 7). Asked about pg 3 (impacted zip codes) . Can we propose projects that will benefit entire county, not just north port (based on census track)? Ed asked if each city would look at program and determine "shovel ready" project and meets criteria (After Ed clarifies if all jurisdictions can apply). Ed reminded short turnaround time. Ed asked if Heather has additional comments. No-Cindy summed it up. Did say project has to meet national objectives. LBK does not have blocks that would be eligible. Todd-does any of it require fed impact study depends on project. CDGB -environmental reviews must be done- 45-50 days due to citizen comments and other processes. Cindy said grant number assigned then environmental review. Kathryn-CDGB-Venice mobile home park. Will be surprised if areas outside of approved zip code will be accepted. Ed-have between now and 7/29 to determine shovel ready projects. Asked working group to get back to Ed asap. DEO webinar CGDBR review July 22 (last page of document). Listed under hurricane Irma website. At least one rep from each city or county dept should participate. Kathryn asked if community	

	center in MHP could apply for hardening. Cindy=greater than 50% of residents low income. Cindy will research if MHP community center that can serve as a shelter=qualify for infrastructure grant. Kathryn knows may not be acceptable	
	Ringling School of Art and Design-no updates	
	USF-Sarasota Manatee-no updates	
6	Questions/Concerns	
	none	
	Ed-CEMP re-submitted to the state. Lessons learned from Irma, org changes to structure, county admin authority etc. Try to present complete CEMP in August. Once complete LMS working group will receive e copies and hard copies	
	Donna B-maintained class 5-up to 25% discount to residents who have flood insurance policies.	
	Ed mentioned one more year=Code Red. Then switch.	
	Ed working with GIS. Multiple layers of evac levels. Able to share with media, mobile home park red etc. Neighborhoods listed. Donna Bailey-asked for clarification of evacuation level is not a flood zone. But Ed said it is flood zone when storm comes. Ed said we can get with communications for messaging.	

Meeting Agenda

Local Mitigation Strategy Work Group

Date: October 15, 2019 from 1:30-3:00pm

Location: Emergency Operations Center, 6050 Porter Way, Room 147, Sarasota, FL 34232

Meeting Objectives:

1. Establish Action Items/ deadlines
2. Individual Updates

Group Members & Guests

Ed McCrane	Sarasota County	Present		Guests	
Nicole Double	Sarasota County	Present			
Steve Hyatt	Sarasota County	Present			
Charles Walter	Sarasota County				
Donna Bailey	Sarasota County	Present			
Matt Osterhoudt	Sarasota County				
Heather Larson	Sarasota County	Present			
Michele Norton	Sarasota County	Present			
Paul Semenec	Sarasota County	Present			
Eric Tiefenthaler	City of North Port				
Elizabeth Wong	City of North Port	Phoned In			
Valerie Malingowski	City of North Port	Phoned In			
Todd Kerkering	City of Sarasota				
Cindy Cahill	City of Sarasota	Present			
James Linkhogle	Town of Longboat Key				
Kathleen Weeden	City of Venice	Phoned In			
Kathryn Harring	City of Venice	Present			
Cindy Emshoff	Sarasota Office of Housing/Community Development	Present			
Todd Underhill	Sarasota Soil and Water Conservation District	Present			
Jody Dumas	Sarasota County School Board				
Craig Gammon	Sarasota Memorial Hospital	Present			
James Bugyis	Sarasota Memorial Hospital				
Sean Alley	Sarasota Memorial Hospital	Present			
Mike Klosterman	Sarasota Memorial Hospital	Present			
Karen Silano	Sarasota County Sheriff's Office				
Richard Lyttle	New College of Florida				
Lois Suarez	New College of Florida				
David Bjekle	University of South Florida-Sarasota Manatee				

Cherie Knudson	Ringling School of Art and Design	Present			

1	Review facility layout & safety	
2	Welcome & Introductions	
3	Approval of April 16th minutes	
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	Ringling School of Art and Design-no updates	
	USF-Sarasota Manatee-no updates	
6	Questions/Concerns	
	none	
	Ed-CEMP re-submitted to the state. Lessons learned from Irma, org changes to structure, county admin authority etc. Try to present complete CEMP in August. Once complete LMS working group will receive e copies and hard copies	
	Donna B-maintained class 5-up to 25% discount to residents who have flood insurance policies.	
	Ed mentioned one more year=Code Red. Then switch.	
	Ed working with GIS. Multiple layers of evac levels. Able to share with media, mobile home park red etc. Neighborhoods listed. Donna Bailey-asked for clarification of evacuation level is not a flood zone. But Ed said it is flood zone when storm comes. Ed said we can get with communications for messaging.	

Meeting Agenda

Local Mitigation Strategy Work Group

Date: October 15, 2019 from 1:30-3:00pm

Location: Emergency Operations Center, 6050 Porter Way, Room 147, Sarasota, FL 34232

Meeting Objectives:

1. Establish Action Items/ deadlines
2. Individual Updates

Group Members & Guests

Ed McCrane	Sarasota County	Present		Guests	
Nicole Double	Sarasota County	Present			
Steve Hyatt	Sarasota County	Present			
Charles Walter	Sarasota County				
Donna Bailey	Sarasota County	Present			
Matt Osterhoudt	Sarasota County				
Heather Larson	Sarasota County	Present			
Michele Norton	Sarasota County	Present			
Paul Semenec	Sarasota County	Present			
Eric Tiefenthaler	City of North Port				
Elizabeth Wong	City of North Port	Phoned In			
Valerie Malingowski	City of North Port	Phoned In			
Todd Kerkering	City of Sarasota				
Cindy Cahill	City of Sarasota	Present			
James Linkhogle	Town of Longboat Key				
Kathleen Weeden	City of Venice	Phoned In			
Kathryn Harring	City of Venice	Present			
Cindy Emshoff	Sarasota Office of Housing/Community Development	Present			
Todd Underhill	Sarasota Soil and Water Conservation District	Present			
Jody Dumas	Sarasota County School Board				
Craig Gammon	Sarasota Memorial Hospital	Present			
James Bugyis	Sarasota Memorial Hospital				
Sean Alley	Sarasota Memorial Hospital				
Mike Klosterman	Sarasota Memorial Hospital	Present			
Karen Silano	Sarasota County Sheriff's Office				
Richard Lyttle	New College of Florida				
Lois Suarez	New College of Florida				
David Bjekle	University of South Florida-Sarasota Manatee				
Cherie Knudson	Ringling School of Art and Design	Present			

1	Review facility layout & safety
2	Welcome & Introductions
3	Approval of 7/16/19 minutes
	Motion to approve Meeting Minutes-Cheri Knudsen, Motion Seconded by Craig Gammon
4	**Emergency Management Update**-Ed McCrane Plan for LMS update due Spring 2021 Ed went to training re: LMS update. Have the update manual and FL review tool guide. Ed discussed smartsheet. Will break down each step for updating the plan. Will add current document into smartsheet. Ed may call for a phone meeting regarding the Smartsheet update Will determine who is responsible for updating info in smartsheet. Each jurisdiction will have access and ability to update their info in Smartsheet. Flood plain plans, Emergency plans will be uploaded in smartsheet. Ed wants to look at bylaws during the next meeting. Ensure compliance. More citizen involvement in the process would be helpful Ed is going through EM accreditation process. HRA hazard risk assessment-Ed is working on it. Capture all hazards and mitigation and response plans. Kathleen Weeden-will send link to most current plan. Ed asked group to send flood plan link to him so scgov.net will send user directly to link Donna Bailey-FMA evaluation report-updating projects list. Will send to Ed. Flood Mitigation Assistance plan. Let Ed know if anyone wants to submit an application prior to January 29, 2020 (see-attachment)
5	**Status of Irma HMGP funds**-Heather Larson and Steve Hyatt State approved 3 tier 2 projects for city of Sarasota. Heather Larson-summarized HMGP program. State should not approve amounts that exceed LMS recommendations. Also state should not approve any tier 2 until tier 1 projects have been reviewed. There is money left on the table, this LMS group is being asked to determine which projects should be considered for funding. Spreadsheet was distributed. Ed reminded group the goal was to utilize Irma funding so each jurisdiction would receive funding for one project. Paul Semenec-Ocean/Higel. Capped on application $450k, would welcome additional $98k. The rest will come from capital improvement project (storm water pipes). Said any additional money for that project could go to failing pipes. Asks for consideration. Kathleen Weeden-Can grant be amended after approval by the state? Steve Hyatt said will probably issue an amended agreement with increased federal share. Heather Larsen-The State wants to obligate every dollar asap List of available funds spreadsheet was reviewed. Need group vote to approve distribution of funds. Motion to approve recommendations on behalf of LMS working group-Motion approved by Kathleen Weeden, Second by Craig Gammon. Ed McCrane stated a letter will be crafted by Steve Hyatt and Heather Larsen regarding funds distribution. Ed thanked Steve and Heather for all of their additional assistance regarding the grant.

6	Jurisdictional updates
	Venice-No Updates
	North Port-Project goes in front of board in December re: buying undeveloped flooded properties. Group suggests flood mitigation open thru 1/29/20. Donna will send FMA gra test.
	SMH-new generator, waiting for comments from AHCA. Electric contractor cost higher than originally anticipated. Does not have the amount with him. Ed said that project has already been through the system. Craig Gammon will email the additional amount to Ed. Heather Larson-reminded Gammon SMH there is an opportunity to amend the agreement for additional funding for generator
	Sarasota County Public Works-Ocean/Higel Ave-drainage project. On 4th RFI. Consultant who produced the modelling unable to produce info FDEM needs, will do inhouse. contact FDEM to help move project. Ed explained constraints of using grant funds. Heather spoke about Casey Key-FDEM determined not good RFI. Larry Mow reworking scop on the books.
	Office of Housing/Community Development-no updates
	Ringling School of Art and Design-no updates
	Sarasota Soil and Water Conservation District- Discussed workshop with EM at farm bureau. Mass carcass issue in rural sector. Rural response area-development of manual, with Sara Bostick, overall recovery and response. Ed will send link to Ag deputy video to the group. Re: emergency watershed funding, County applied FRCS covered funding. Bank 3. Todd said looks good, Ed said we need to capture the info into the LMS plan. Paul Semenec will send the details to Ed for LMS plan. Donna Bailey asked Ed to alert her when area gets to 18 ft. so she can create messaging.
	Questions/Concerns- none
	Next Meeting-January 21, 2020 1:30pm

Sarasota County
Emergency Management

Local Mitigation Strategy Working Group
April 19, 2019 - 6050 Porter Way Sarasota Room 147
MEETING MINUTES

Item	Presenter	Comment/Follow up	Target Completion Date	Status
Review facility layout and safety	Nicole Double	Provided a briefing on the facility layout including location of exits and restrooms.	N/A	**(a) Complete** (b) Deferred (c) Assigned to:
Welcome and Introductions		Roll call was taken of participants in the room and on conference call. See attached sign in sheet for in person attendees. Conference call participants included: Elizabeth Wong (North Port), Cherie Knudsen (Ringling Museum) and Mike Klosterman (SMH) Absent= SSO, New College, SCSB not on call or present	N/A	**(a) Complete** (b) Deferred (c) Assigned to:
Approval of 1/15/19 meeting minutes	Todd Kerkering	Motion to approve minutes: Sean Alley. Motion seconded: Cherie Knudson		a) Complete b) Deferred c) Assigned to:
Jurisdictional Updates				
City of Sarasota	Todd Kerkering and Paul Semenec	HMGP grant in process for generator Robert Taylor Center-out for bid. Traffic Signal project denied-more info is needed for cost/benefit analysis.		
City of Venice	Kathryn Harring	HMGP grant request to improve drainage denied due to lack of documentation to justify insurable losses.		

Item	Presenter	Comment/Follow up	Target Completion Date	Status
City of North Port	Elizabeth Wong	Working on CRS report. Held workshop for Commission-agreed to apply for consensual ERP for master plan to reduce flooding. Recommended widening culvert to divert storm water.		
Sarasota Memorial Hospital	Sean Alley	Working with the State to purchase 2 generators using HMGP grant.		
Sarasota Soil and Water Conservation District	Todd Underhill	Discussed upcoming SART training. Will continue HAM radio training in rural sector. Hosting HAM radio class in June-will report back to Ed after date/location are finalized.		Assigned to Todd Underhill
USF	David Bjelke	No updates		
Ringling Museum	Cherie Knudsen	No updates		
Other/Open Discussion	Donna Bailey	When are projects updated for LMS? Answer-last working day every January. Projects may be added throughout the year; use scored sheet. If project meets LMS criteria-automatically put on the list. Where are criteria located? Answer-FEMA's Hazard Mitigation Book.		
Next Meeting		Next meeting 3rd Tues, June 18, 2019 1:30pm at EOC		

Sarasota County
Emergency Management

Local Mitigation Strategy Working Group
January 15, 2018 - 6050 Porter Way Sarasota Room 147
MEETING MINUTES

Item	Presenter	Comment/Follow up	Target Completion Date	Status
Review facility layout and safety		Provided a briefing on the facility layout including location of exits and restrooms.	N/A	**(a) Complete** (b) Deferred (c) Assigned to:
Welcome and Introductions		Roll call was taken of participants in the room and on conference call. See attached sign in sheet for in-person attendees. Conference call participants included: Present=Ed McCrane (SRQ), Nicole Double (SQ), Scott Titus (NP), Elizabeth Wong (NP), Todd Kerkering (SA), James Linkogle (LB), Kathleen Weeden (V), Cherie Knudson (RM), Kathryn Harring (V), Paul Semenec (SRQ), Don Herme (MM), Maika Arnold (LB), Des Companion (SRQ), Todd Underhill (SWCD), Sean Alley (SMH), Craig Gammon (SMH). Absent=SSO, New College, USF, SCSB not on call or present	N/A	**(a) Complete** (b) Deferred (c) Assigned to:
Approval of September 25, 2018 Meeting Minutes	All	Motion to approve Minutes-Todd Kerkering approved, Sean Alley seconded motion. Minutes approved.		**(a) Complete** (b) Deferred (c) Assigned to:

Sarasota County
Emergency Management

Item	Presenter	Comment/Follow up	Target Completion Date	Status
LMS Annual Letter	Ed McCrane	Letter to Miles Anderson, Florida Department of Community Affairs, from Sarasota Board of County Commissioners dated 1/25/19 was distributed and discussed. LMS Working Group Membership List was modified based on information from the group. **Action item-Nicole will distribute updated LMS Membership Group the group**		a) Complete b) Deferred **c) Assigned to: Nicole Double**
EMAP Accreditation	Ed McCrane	Goal is to receive accreditation over the next 2 years. Additional information will be emailed to the group. Ed reinforced that the entire group will benefit from EMAP .mitigation. Public Works involvement was discussed. Example, minutes, sign in etc. **Action item-Nicole will compile 2 years of LMS meetings minutes and notes-send to group**		a) Complete b) Deferred **c) Assigned to: Nicole Double**

Sarasota County
Emergency Management

Item	Presenter	Comment/Follow up	Target Completion Date	Status
Jurisdictional updates	All	**HMGP Grants** **City of Sarasota**-approved, waiting for contract for generator. **Venice**-HMDP-approved via emails, State drafting contract, re generator. No response on tier 2 project **North Port**-received approval, generator for City Hall, waiting for contract. **SMH**-not familiar with the approval, Andy Bowdwin on LOA, will check back. **LBK**-has not received approval yet, reached out to state-no response. Ed offered assistance if needed.		a) **Complete** b) Deferred **c)** Assigned to:
Other/Open Discussion	All	**Ed**-27 page requirements-proof of written invitation to participate. Ed will submit. Changes to mitigation plan, make any notes and send back to Ed. **Action-Ed will resend mitigation plans to members. Action-Group will research any changes to risk assessments and get info back to Ed by Friday, 1/21/19** **Ed asked group to make a note of "complete" on the list and email back** City of Sarasota-After potential Bahia Vista levee breach during heavy rains it was suggested impacted residents (approx. 10) receive information about flood insurance availability. **Action: Paul/Stormwater will check status of levee safety and stability.**		(a) Complete (b) Deferred **(c) Assigned to: Ed McCrane, LMS Group, Paul/Stormwater, Dez**

Commented [ND1]: Ed do you want this highlighted part included?

Item	Presenter	Comment/Follow up	Target Completion Date	Status
		Ed- During possible levee breach a Command Post was set up, ready to perform door to door evacs, had busses in place. Sent out Code Red to all affected residents, as a precaution. **North Port**- updating CEMP, should be completed by end of Feb, will send to Ed. Flood risk- between City of North Port, North Port Estates and Woodland Estates (R36 canal). Ed said NP and SCounty stormwater staff needs to meet and discuss. Maybe a future project **Venice**-working on downtown stormwater project, reconstructing entire downtown Venice. No EM issues currently. **LBK**-moving forward with undergrounding power project, sea level rise initiative. Mirroring city of Sarasota's work in that area. Staffing changes. Concerned about traffic issues/evac issues. **SMH**-Mickey retiring 4/1/18, Debbie Duff retiring at undetermined time, finished west campus parking garage (opened Dec, 2018). **Conservation District**- Drafting ag and rural component, recommendations re preparedness and mitigation from LMS group are welcomed.		

Item	Presenter	Comment/Follow up	Target Completion Date	Status
		Ed-In rural areas there are 22 HAM radio operators to assist ranchers, etc. Ability to warn (prevention). Did a You Tube video-farm bureau, that discusses project. Held a lost bicyclist scenario/drill (K-9, SSO, cattlemen). During a recent documented event, found the bicyclist using the methods practiced. **Des**-held 5 workshops, prevent flooding to homes and businesses. Partnered with libraries. **Action-She will send out flyer to group.** Describes diff between evac level and risk. Suggested realtors, ins agents etc. become more educated. Flood plain management Plan pushed to 1/29 or 2/12. **Mote**-attending ICS 300 class, end of Feb. Todd and Scott presenting at the EOC. **Ringling**-no concerns or issues		
Next Meeting		**Next meeting 3rd Tuesday, April 16, 2019 1pm at EOC, Room 147**		

Ed says more funds may available due to Michael, but Sarasota County will probably be way down the list

Commented [ND2]: Let me know if you'd like any/all of this included. Thx

Ed wants to look at updating LMS in 2020-intiatives and goals. ensure we are compliant.
Hazard analysis-Ed will do a matrix (flood plain, CEMP, LMS will be compared). Goal over next couple of years. Do self assessment, then submit documentation for following year. This year CEMP, next year LMS

Any other issues for the good of the order

Elizabeth Wong-slough reduction study, going in front of commission. One of the projects is widening R36 canal. If approved it would double the capacity under dirt road towards woodland. Long way off. Including upsize of culvert and including under I-75. May create by pass canal. Myakkahatchee flows into Myakka River. Flood control project-bid to replace water control structure off Coco Plum. No grant funding as of yet. $2.3M project

FEMA encouraging spending the funds in prevention projects rather than after is cheaper. Ed reminded group to have the info/studies etc ready to go if funds open up. Ed hopeful new FEMA director will provide more funds for County EM projects.

Meeting Notes
Local Mitigation Strategy Work Group

Date: April 21, 2020 from 1:30-3:00pm
Location: ~~Emergency Operations Center, 6050 Porter Way, Room 147, Sarasota, FL 34232~~
Conference Call due to COVID19

Meeting Objectives:
1. Establish Action Items/ deadlines
2. Individual Updates
Group Members & Guests

Ed McCrane	Sarasota County	present
Nicole Double	Sarasota County	present
Steve Hyatt	Sarasota County	present
Lee Prince	Sarasota County	present
Charles Walter	Sarasota County	
Donna Bailey	Sarasota County	present
Joe Kraus	Sarasota County	present
Matt Osterhoudt	Sarasota County	
Heather Larson	Sarasota County	present
Michele Norton	Sarasota County	
Paul Semenec	Sarasota County	present
Dez Companion	Sarasota County	present
Eric Tiefenthaler	City of North Port	present
Elizabeth Wong	City of North Port	present
Valerie Malingowski	City of North Port	present
Todd Kerkering	City of Sarasota	present
Cindy Cahill	City of Sarasota	present
James Linkhogle	Town of Longboat Key	present
Kathleen Weeden	City of Venice	present
Kathryn Harring	City of Venice	present
Frank Giddens	City of Venice	present
Shawn Carvey	City of Venice	present
Cindy Emshoff	Sarasota Office of Housing/Community Development	present
Todd Underhill	Sarasota Soil and Water Conservation District	present
Jody Dumas	Sarasota County School Board	
Craig Gammon	Sarasota Memorial Hospital	present
James Bugyis	Sarasota Memorial Hospital	
Sean Alley	Sarasota Memorial Hospital	present
Mike Klosterman	Sarasota Memorial Hospital	present
Karen Silano	Sarasota County Sheriff's Office	
Richard Lyttle	New College of Florida	
Luis Suarez	New College of Florida	
David Bjekle	University of South Florida-Sarasota Manatee	
Cherie Knudson	Ringling College of Art and Design	present

Emergency Management Update-Chief Ed McCrane
Roll call. Thanked the group for calling in, explained we may do more virtual meetings in the future due to COVID and group availability to attend in person. EM Team busy with COVID response. No LMS extension for updates due to COVID. Updates are not due until Spring, 2021. Ed feels we have good base document to work from. Group should have received SmartSheet invitation, includes a copy of current plan and checklist, guide, manual. More discussion to come. Asked group to let him know if group finds items to update in those documents. Please track changes in SmartSheet; if anyone needs assistance please let us know. Ed asked Joe Kraus for assistance re: stats and data, graphs. Main doc is multijurisdictional. Annexes will be individual flood plans, CRS and LMS information. Ed emailed Critical Facility Hardening Program Grant information to the group. Applications must be returned by June. Asked Lee Prince to review grant and to assist group with questions. Lee said he has read the information and determined there may be some eligible projects for the LMS working group. Opportunities mentioned; utilizing funds for shelters, fire departments, hospitals. Lee said it will take some time to review and get the info out to group. Ed mentioned webinar on 4/22/20. Ed asked if anyone had any COVID concerns, please let him know so they can get info.
Eric/NP-Asked if the CDBG-MIT grant and previously mentioned facility hardening grant are one and the same? Lee replied yes.
Todd/City of Sarasota-spoke earlier with Cindy who confirmed she had spoken with North Port and Venice. Will speak to City of Sarasota. Todd reminded group that the grant will go through Cindy and Heather's teams. Suggested group select a representative from each jurisdiction to communicate needs regarding the grant to Cindy, Heather and Lee to avoid duplication and stay organized. Said Cindy is leaning forward and will communicate with Heather's office.

Updates:

- **City of Venice**-went out for bid, got 3 quotes. GMP evaluating quotes and working with state. May need extension, notified granting agency. Waiting for public comments on flood plain management plan
- **City of Sarasota**-generator has been built, switching being delivered soon. Permit approved. Concrete pad installed next couple weeks. Generator should be operational by middle of August
- **Town of Longboat Key**-design review for roof and window hardening. Has generator info. Charlie Motts reached out to state, may need to do extension. Ed said LBK and Venice received addtl. funding due to turn back of funding from Sarasota County. Flood plain management plan due for update to ISO for CRs for 10/1/20. Manatee County ahead of the sequence for Sarasota. They are in the process of getting complete LMS updates approved by the state.
- **Sarasota county public works/Storm Water**-Ocean/Higel drainage improvement project approved by FEMA. Waiting for funding agreement from FDEM, then will put through e-genda process. Has asked capital projects to work on construction solicitation
- **Sarasota Memorial Hospital**-North Port switch gear. Conduit will be run Monday. Bayside West-generator and switch gear have been installed. Wiring completed, but still on backup gen. Set for commissioning on Monday. Waiting for hurricane screens to protect gen. Should be complete mid-May. Held up due to lack of steel supply due to COVID. New Venice hospital project-proceeding as normal

- **City of North Port**- Re: CDBG mitigation funds. Will those applications go through Sarasota Office of Housing/Community Development? Heather Larsen said that hasn't been determined yet. Because the funds are CDBG mitigation funds they are offering different process than the disaster funding. Heather asked Lee Prince if there will be an upcoming webinar? Lee said yes, he will forward the invite to the group. Ed said he sent the flyer out earlier which includes link to webinar. Ed asked Lee to resend to the group. Re: water control structure project. Group voted to allow. North Port said request was submitted, waiting for response. $4,158,000 City of North Port continues to move forward. TLC engineering study has been reviewed. Will need larger generator. Working with Pegasus to file for extension. Question-feedback on LMS update timeframe? Ed wants input within 30 days to review document. Asked group to track changes, save document. Ed will review. Elizabeth Wong sent Ed edits; he updated. Elizabeth Wong asked FMP annex deadline? Ed said due March,2021 but Ed would like to have it by December, 2020. Newest version of flood management plan will be used as the attachment.
- **City of Sarasota**- Repetitive Loss study. Ed has endorsement letter ready, prepared by Steve Hyatt. Letter will go to Todd Kerkering, he will mail to State ($68k). Ed asked any objections. No objection from group. Will send info to FDEM. Hurricane Michael funding will be used
- **Ringling College of Art and Design**-no updates

Questions/Concerns- none
Meeting ended at 1400 on 042120
Next Meeting-July 21, 2020 1:30pm

Sarasota County Government

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Sarasota County
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Sarasota County
All-America County

COUNTY CALENDAR

Bicycle/Pedestrian/Trails Advisory Committee – Jan. 21, 5:30 p.m., Training Room, First Floor, Administration Center, 1660 Ringling Blvd., Sarasota. Call 941-861-0945

Englewood Community Health Action Team (Englewood CHAT) – Jan. 21, 9:30 -11 a.m., St. David's Episcopal Church, 401 S. Broadway St., Englewood. Call 941-861-2779

Family Safety Alliance – Jan. 23, 3-4:30 p.m., The Twig, 826 Pinebrook Road, Venice. Call 941-861-2578

Historical Commission Nominating Committee – Jan. 22, 4:30 p.m., Historical Resources, 6062 Porter Way, Sarasota. Call 941-861-5481

Local Mitigation Strategy Working Group – Jan. 21, 1:30-3 p.m., Multi-Agency Coordination Center, First Floor, Emergency Operations Center, 6050 Porter Way, Sarasota. Call 941-861-5495 or 941-232-8366

Sarasota County Immunization Coalition – Jan. 23, 1-2:30 p.m., Room 2063, William L. Little Health & Human Services Center, 2200 Ringling Blvd., Sarasota. Call 941-861-2914

Value Adjustment Board (VAB) Petitioner Hearings – Jan. 27, 10 a.m., Administration Center, 1660 Ringling Blvd., Sarasota. All hearing schedules are subject to change. Call 941-861-5279

County government offices to close for Martin Luther King Jr. holiday

Most Sarasota County Government offices, including the Florida Department of Health in Sarasota County, will be closed Monday, Jan. 20, for the national observance celebrating the birthday of Martin Luther King Jr.

Sarasota County Area Transit (SCAT), including the Siesta Key Breeze, will be on a normal bus schedule on Jan. 20. However, the customer service stations at SCAT Administration and the downtown transfer station will be closed for the day.

All Sarasota County recreation centers and the pistol and rifle range at Knight Trail Park will be closed. All Sarasota County libraries will also be closed.

Curbside collection services for trash, recycling and yard waste will not be affected by the holiday and remain on the regular pickup schedule. Because collection times vary, residents should place materials at the curb by 6 a.m. the day of pickup. Residents in unincorporated Sarasota County are reminded to keep a three-foot clearance around recycling carts when placing them at the curb. This helps ensure accessibility for collection.

The administrative offices at the Central County Landfill at 4000 Knights Trail Road and the Chemical Collection Center at 8750 Bee Ridge Road will be closed Jan. 20 for the holiday. Sarasota County's Chemical Collection Center at 250 S. Jackson Road will be closed Jan. 20.

Sarasota County's Chemical Collection Center and Re-Uz-It Shop at 8750 Bee Ridge Road, along with the Citizen's Convenience Center at 4010 Knights Trail Road will be open Jan. 20.

For more information, visit scgov.net.

Sunday hours return at two Sarasota County libraries

Sarasota County Libraries and Historical Resources will reinstate Sunday operating hours at Selby and Frances T. Bourne Jacaranda Public Libraries starting Jan. 26. These libraries will be open from 1-5 p.m. every Sunday.

Sarasota County has not offered Sunday library hours since 2012 when the county had to reduce hours as a cost-saving measure. This reinstatement is aimed at increasing service access to residents and students, following the county commission approval of the program in 2019.

Small celebrations with refreshments are planned at both libraries on Jan. 26 to mark the reinstatement of Sunday hours.

Selby Public Library is located 1331 First St., Sarasota and served by SCAT Route 2. Frances T. Bourne Jacaranda Public Library is located 4143 Woodmere Park Blvd., Venice. For more information call the Sarasota County Contact Center at 941-861-5000 or visit scgov.net.

LOOK

ADVISORY BOARD VACANCIES

Visit **www.scgov.net/advisoryboards** or contact the Sarasota County Call Center at **861-5000** for latest vacancies and information about Sarasota County Advisory Boards.

Sarasota County prohibits discrimination in all services, programs or activities on the basis of race, color, national origin, age, disability, sex, marital status, familial status, religion, or genetic information. Persons with disabilities who require assistance or alternative means for communication of program information (Braille, large print, audiotape, etc.), or who wish to file a complaint, should contact: Sarasota County ADA/ Civil Rights Coordinator, 1660 Ringling Blvd., Sarasota, Florida 34236, Phone: 941-861-5000, TTY: 7-1-1 or 1-800-955-8771. Email: adacoordinator@scgov.net. Persons needing assistance are asked to provide notice as soon as practicable in advance of the event to allow time to accommodate their request.

HELP STOP
the spread of COVID-19

STAY HOME, STAY INFORMED, STAY HEALTHY.

In light of the extraordinary circumstances surrounding the COVID-19 health emergency, and to protect the health and safety of our staff and the general public, health screening procedures are in effect for visitors to county facilities. There will be two public meetings this week.

Board of County Commissioners – April 22, 9 a.m., Commission Chamber, First Floor, Administration Center, 1660 Ringling Blvd., Sarasota. Call 941-861-5344
LIVE TV and Webcast

Consistent with the guidance from CDC and the Executive Orders of the Governor of the State of Florida to limit public interactions, the public is strongly encouraged to submit any comments on matters to be addressed by the commission in advance of the meeting to be included in the official meeting record. Visit scgov.net to access the online public comment form. If you do not have Internet access, please call 941-861-5000 for other options to provide input.

Local Mitigation Strategy Working Group – April 21, 1:30-2:30 p.m., Conference call only due to COVID-19 response. Send email requesting phone number and pin to emccrane@scgov.net.

All Sarasota County advisory council meetings have been suspended for the month of April. The community is urged to take advantage of the county's phone-based and online services whenever possible.

Sarasota County continues to conduct business via online services, email, mail and phone. All in-person services require an appointment.

CONTACT INFORMATION

- For a list of contacts and how to access our online services, visit **scgov.net/COVID-19** or call the Sarasota County Contact Center at **941-861-5000**.
- For digital library resources and to sign up for a card, visit **scgov.net/library**.
- For information about parks, preserves and beach closures, visit **scgov.net/parkstatus**.

Sarasota County prohibits discrimination in all services, programs or activities on the basis of race, color, national origin, age, disability, sex, marital status, familial status, religion, or genetic information. Persons with disabilities who require assistance or alternative means for communication of program information (Braille, large print, audiotape, etc.), or who wish to file a complaint, should contact: Sarasota County ADA/ Civil Rights Coordinator, 1660 Ringling Blvd., Sarasota, Florida 34236, Phone: 941-861-5000, TTY: 7-1-1 or 1-800-955-8771. Email: adacoordinator@scgov.net. Persons needing assistance are asked to provide notice as soon as practicable in advance of the event to allow time to accommodate their request.

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Sarasota County
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Sarasota County
All-America County

COUNTY CALENDAR

Charter Review Board
July 22, 6 p.m.
Commission Chamber, First Floor, Administration Center, 1660 Ringling Blvd., Sarasota. Call 941-861-5279.
LIVE TV and Webcast

Englewood Community Health Action Team (Englewood CHAT)
July 21, 9:30-11 a.m.
REMOTE MEETING
via Zoom. Email Ashley.Spangler@flhealth.gov to join the meeting.

Family Safety Alliance
July 23, 3 p.m.
REMOTE MEETING.
Visit https://us02web.zoom.us/j/83372362658 to join the meeting. Call 941-861-2578.

Local Mitigation Strategy Working Group
July 21, 1:30-3 p.m.
REMOTE MEETING.
Email emccrane@scgov.net to join the meeting.

Planning Commission
July 23, 5 p.m.
REMOTE MEETING.
Visit www.scgov.net/publicinput for viewing/listening options, to provide written testimony, or to register to provide remote testimony, or call 941-861-5244 for assistance.
LIVE TV and Webcast

Consistent with guidance from the Centers for Disease Control and Prevention and executive orders of the governor of the state of Florida to limit public interactions, Sarasota County is providing alternatives to in-person attendance at public meetings.

Visit www.scgov.net/publicinput for more information on how to participate. If you do not have Internet access, please call 941-861-5000 for assistance.

To protect the health and safety of our staff and the general public, health screening procedures are in effect for visitors to county facilities, including public meeting attendees. The community is urged to take advantage of the county's phone-based and online services whenever possible, and in-person services require an appointment.

Sarasota County Commissioners endorse surgeon general's recommendations on masks.

The Sarasota County Commission has endorsed recommendations from the Florida Surgeon General that states all individuals in Florida should wear face coverings in any setting where social distancing is not possible.

In addition, the commissioners support the decisions that businesses make regarding COVID-19 safety measures in their establishments.

The community is also encouraged to continue following health and safety recommendations from the Florida Department of Health and the Centers for Disease Control and Prevention to help stop the spread of COVID-19.

For more information, call the Sarasota County Contact Center at 941-861-5000 or visit www.scgov.net.

LOOK

ADVISORY BOARD VACANCIES

Visit **www.scgov.net/advisoryboards** or contact the Sarasota County Call Center at **861-5000** for latest vacancies and information about Sarasota County Advisory Boards.

Sarasota County prohibits discrimination in all services, programs or activities on the basis of race, color, national origin, age, disability, sex, marital status, familial status, religion, or genetic information. Persons with disabilities who require assistance or alternative means for communication of program information (Braille, large print, audiotape, etc.), or who wish to file a complaint, should contact: Sarasota County ADA/ Civil Rights Coordinator, 1660 Ringling Blvd., Sarasota, Florida 34236, Phone: 941-861-5000, TTY: 7-1-1 or 1-800-955-8771. Email: adacoordinator@scgov.net. Persons needing assistance are asked to provide notice as soon as practicable in advance of the event to allow time to accommodate their request.

Sarasota County Government

Sarasota County Commission meetings are televised by Access Sarasota on Comcast 19 and Verizon 32.
Visit the county website at scgov.net for commission meeting agendas and supporting materials.
This listing is published by Sarasota County Government.

Sarasota County
scgov.net | 941.861.5000

Sarasota County
All-America County

COUNTY CALENDAR

Charter Review Board – Oct. 16, 6 p.m., Commission Chamber, First Floor, Administration Center, 1660 Ringling Blvd., Sarasota. Call 941-861-5279 – **LIVE TV and Webcast**

Charter Review Board Special Committee Meeting – Oct. 16, 4:30 p.m., Press Room, First Floor, Administration Center, 1660 Ringling Blvd., Sarasota. Call 941-861-5279

Coastal Advisory Committee – Oct. 17, 3 p.m., Training Room, First Floor, 1660 Ringling Blvd., Sarasota. Call 941-861-0673

Community Action Agency Board Family Self Sufficiency Program Subcommittee – Oct. 22, 4 p.m., Room 227, William L. Little Health & Human Services Center, 2200 Ringling Blvd., Sarasota. Call 941-861-2877

Early Learning Coalition Board of Directors – Oct. 16, 6 p.m., Conference Room A/B, Brown Awning Building, School Board of Sarasota County, The Landings, 1980 Landings Blvd., Sarasota. Call 941-954-4830, Ext. 115

Englewood Community Health Action Team (Englewood CHAT) – Oct. 15, 9:30-11 a.m., St. David's Episcopal Church, 401 S. Broadway St., Englewood. Call 941-861-2779

Englewood Community Redevelopment Area (CRA) Advisory Board – Oct. 14, 1 p.m., Lemon Bay Park and Environmental Center, 570 Bay Park Blvd., Englewood. Call 941-473-9795

General Contractors Licensing & Examining Board – Oct. 17, 2 p.m., Conference Room 1, Sarasota County Operations Center, 1001 Sarasota Center Blvd., Sarasota. Call 941-861-5214

Juvenile Justice Circuit Advisory Board – Oct. 14, 1:30 p.m., Room 226, William L. Little Health & Human Services Center, 2200 Ringling Blvd., Sarasota. Call 941-861-2877

Legacy Trail Extension North Port Connector Public Meeting – Oct. 15, 5 p.m., Morgan Family Community Center, 6207 W. Price Blvd., North Port. Call 941-861-5000

Local Mitigation Strategy Working Group – Oct. 15, 1:30-3 p.m., Room 147, First Floor, Emergency Operations Center, 6050 Porter Way, Sarasota. Call 941-861-5495 or 941-232-8366

Planning Commission – Oct. 17, 5 p.m., CANCELLED. Call 941-861-5000

Probation Advisory Board – Oct. 16, noon, Small Conference Room, Eighth Floor, Court Administration, Judge Lynn N. Silvertooth Judicial Center, 2002 Ringling Blvd., Sarasota. Call 941-861-2877

Tobacco Free Partnership of Sarasota County – Oct. 18, 3:30-5 p.m., Room 2063, William L. Little Health & Human Services Center, 2200 Ringling Blvd., Sarasota and via videoconference to Conference Room A, North Port Health Center, 6950 Outreach Way, North Port. Call 941-861-2730

LOOK

ADVISORY BOARD VACANCIES

Visit **www.scgov.net/advisoryboards** or contact the Sarasota County Call Center at **861-5000** for latest vacancies and information about Sarasota County Advisory Boards.

Sarasota County announces 2020 'One Book' selection

Sarasota County Libraries and Historical Resources announces the return of the popular One Book, One Community program for 2020 with the selection of Kate Moore's "The Radium Girls: The Dark Story of America's Shining Women."

The book details the true story of unsafe and deadly workplace conditions for female workers during World War I who painted radium on watch dials, and later military equipment at factories in New Jersey and Illinois. Many experienced painful, disfiguring and fatal cancers as a result of their exposure to radium. These young women began a race-against-time fight for justice that would forever change US labor laws.

Sarasota County Libraries and Historical Resources Director Renee Di Pilato said the book was an inspiring choice for the One Book program, because of its honest look at the country's history.

The program has recognized local authors as well as world-renowned writers.

For more information, including information about the author's visit, call the Sarasota County Contact Center at 941-861-5000 or visit scgov.net.

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From:	Nicole Double on behalf of EOC Coordination Center (MACC)
To:	Andy Beaudoin ; Cherie Knudson ; Cindy Emshoff ; Craig Gammon ; Cynthia Cahill; David Bjelke; Desiree Companion ; Don Herme; Donna Bailey ; Ed McCrane; Elane; Elizabeth Wong ; Eric Tiefenthaler ; Heather Larson; James Linkogle ; joseph wyatt ; Kathleen Weeden ; Kathryn Harring; Luanne; Maika Arnold ; Matthew Osterhoudt ; Melissa Heskin ; Mike Klosterman ; Nicole Double; Paul Semenec ; Richard Lyttle; Ron Byers ; Sean Alley ; Steve Hyatt; Todd Kerkering (richard.kerkering@sarasotafl.gov); Todd Underhill; Valerie Malingowski
Subject:	LMS Meeting
Start:	Tuesday, January 21, 2020 1:30:00 PM
End:	Tuesday, January 21, 2020 3:00:00 PM
Location:	EOC Command Room 147
Attachments:	LMS Update Manual 2019.pdf FY 2019 FMA NOFO.pdf FINAL_LMS Meeting Minutes 101519 (002).docx

---

Local Mitigation Strategy Working Group – Tues Jan 21, 1:30-3 p.m., Multi Agency Coordination Center (MACC), First Floor, Emergency Operations Center, 6050 Porter Way, Sarasota. Call 941-861-5495 or 941-232-8366

Good morning-

Please note the meeting room is the MACC (Multi Agency Coordination Center). There is another meeting being held in the usual conference room by the Sarasota County Fire Department. Please follow the signs and proceed to the MACC upon arrival.

Attached you will find documents relevant to the meeting as well the minutes from the 101519 meeting.

If for some reason you cannot make the meeting in person please call in at:

1 800 820 4690

Pin 5635165#

Thank you.

From:	Nicole Double on behalf of EOC Coordination Center (MACC)
To:	Andy Beaudoin ; Cherie Knudson ; Cindy Emshoff ; Craig Gammon ; Cynthia Cahill; David Bjelke; Desiree Companion ; Don Herme; Donna Bailey ; Ed McCrane; Elane; Elizabeth Wong ; Eric Tiefenthaler ; Heather Larson; James Linkogle ; joseph wyatt ; Kathleen Weeden ; Kathryn Harring; Maika Arnold ; Matthew Osterhoudt ; Melissa Heskin ; Mike Klosterman ; Nicole Double; Paul Semenec ; Richard Lyttle; Ron Byers; Sean Alley ; Steve Hyatt; Todd Kerkering (richard.kerkering@sarasotafl.gov); Todd Underhill; Valerie Malingowski (vmalingowski@cityofnorthport.com)
Cc:	Rachel Herman; Joseph Kraus; Kathleen Croteau; Kelly Carothers
Subject:	LMS Meeting
Start:	Tuesday, January 21, 2020 1:30:00 PM
End:	Tuesday, January 21, 2020 3:00:00 PM
Location:	EOC Command Room 147
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Good morning-

Please note the meeting will be held in 147 as usual

Attached you will find documents relevant to the meeting as well the minutes from the 101519 meeting.

If for some reason you cannot make the meeting in person please call in at:

1 800 820 4690

Pin 5635165#

Thank you.

From:	Nicole Double
To:	MSTeams Conference Bridge Emergency Services; Edward McCrane; Nicole Double; Cherie.Knudson@ringling.org; Cindy.Emshoff@sarasotafl.gov; Cynthia.Cahill@sarasotafl.gov; David Bjelke; Donna Bailey; ewong@cityofnorthport.com; Heather Larson; KWeeden@Venicegov.com; KHarring@Venicegov.com; Michael-Klosterman@smh.com; Paul Semenec; Sean Alley; Steve Hyatt; Richard Kerkering; todd; Eric Tiefenthaler; Matthew Osterhoudt; Joseph Kraus; vmalingowski@cityofnorthport.com; jlinkogle@longboatkey.org
Cc:	Ron-Byers@smh.com; marnold@longboatkey.org; Andy-Beaudoin@smh.com; Craig-Gammon@smh.com; Paul Dezzi; Frank Giddens; Bjelke, David; Stan Dinwoodie
Subject:	LMS meeting minutes
Date:	Monday, October 19, 2020 2:00:00 PM
Attachments:	LMS Meeting Minutes 072120.docx

Good afternoon-

Attached please find the minutes from the July LMS meeting.

Thank you.

Nicole M. Double
Emergency Management Coordinator
Emergency Services
Sarasota County Emergency Operations Center
6050 Porter Way
Suite 156
Sarasota, FL 34232

Office: 941-861-5493
Cell: 941-928-3381

ndouble@scgov.net

https://www.scgov.net

All email sent to and from Sarasota County Government is subject to the public record laws of the State of Florida.

From:	Nicole Double
To:	Edward McCrane
Subject:	RE: HMGP Rulemaking Workshop Tomorrow, Friday January 31 at 9:00 am
Date:	Thursday, January 30, 2020 3:18:00 PM

Thank you!

Nicole M. Double
Emergency Management Coordinator
Emergency Services
Sarasota County Emergency Operations Center
6050 Porter Way
Suite 156
Sarasota, FL 34232

Office: 941-861-5493
Cell: 941-928-3381

ndouble@scgov.net

https://www.scgov.net

All email sent to and from Sarasota County Government is subject to the public record laws of the State of Florida.

From: Edward McCrane <emccrane@scgov.net>
Sent: Thursday, January 30, 2020 3:14 PM
To: Kathleen Weeden <kweeden@venicegov.com>; Kathryn Harring <kharring@venicegov.com>; Richard Kerkering <richard.kerkering@sarasotafl.gov>; James Linkogle (jlinkogle@longboatkey.org) <jlinkogle@longboatkey.org>; Cindy Emshoff <Cindy.Emshoff@sarasotafl.gov>; Steve Hyatt <shyatt@scgov.net>; Heather Larson <hlarson@scgov.net>; Frank Giddens <fgiddens@venicegov.com>; Eric Tiefenthaler <etiefenthaler@cityofnorthport.com>; Valerie Malingowski <vmalingowski@cityofnorthport.com>; Sean Alley <Sean-Alley@smh.com>; David Bjelke <dbjelke@sar.usf.edu>; Cherie Knudson <Cherie.Knudson@ringling.org>; todd <todd@underhillranch.com>; Nicole Double <ndouble@scgov.net>
Subject: RE: HMGP Rulemaking Workshop Tomorrow, Friday January 31 at 9:00 am

Importance: High

The Florida Division of Emergency Management Just **cancelled** its 1/31/20 Meeting/Workshop Hearing on the HMGP Rule (Ch. 27P-22, Florida Administrative Code). The Notice will be available at this link. http://www.FLRules.org/gateway/View_Notice.asp?id=22880474

The Division **rescheduled t**he Meeting/Workshop Hearing for **Monday, February 10, 2020 at 3:30pm**. A call-in number will be provided. The Notice will be available at this link. http://www.FLRules.org/gateway/View_Notice.asp?id=22880668

The Agenda for the rescheduled Meeting/Workshop Hearing is attached along with the call-in number for the Hearing. If you have any questions, please contact me.

From: Edward McCrane <emccrane@scgov.net>
Sent: Thursday, January 30, 2020 3:00 PM
To: Kathleen Weeden <kweeden@venicegov.com>; Kathryn Harring <kharring@venicegov.com>; Richard Kerkering <richard.kerkering@sarasotafl.gov>; James Linkogle (jlinkogle@longboatkey.org) <jlinkogle@longboatkey.org>; Cindy Emshoff <Cindy.Emshoff@sarasotafl.gov>; Steve Hyatt <shyatt@scgov.net>; Heather Larson <hlarson@scgov.net>; Edward McCrane <emccrane@scgov.net>; Frank Giddens <fgiddens@venicegov.com>; Eric Tiefenthaler <etiefenthaler@cityofnorthport.com>; Valerie Malingowski <vmalingowski@cityofnorthport.com>; Sean Alley <Sean-Alley@smh.com>; David Bjelke <dbjelke@sar.usf.edu>; Cherie Knudson <Cherie.Knudson@ringling.org>; todd <todd@underhillranch.com>
Subject: FW: HMGP Rulemaking Workshop Tomorrow, Friday January 31 at 9:00 am
Importance: High

Please share this invite with other from your organization who deal who are involved in the HMGP Grant process

---

From: FEPA Secretary <Secretary@fepa.org>
Sent: Thursday, January 30, 2020 2:12 PM

Subject: HMGP Rulemaking Workshop Tomorrow, Friday January 31 at 9:00 am

Caution: This email originated from an external source. **Be Suspicious of Attachments, Links and Requests for Login Information**

Greetings Mitigators,

FDEM will be having a HMGP Workshop regarding proposed changes to Rule Chapter 27-P 22. It is vital LMS Chairs and those involved in mitigation at local level participate in this workshop. You will find the agenda and call-in number below. Please forward this information to anyone involved in Mitigation in the State of Florida that may not be on this email list and I apologize for any duplication.

Florida Division of Emergency Management

HMGP Workshop Agenda

January 31, 2020

09:00 AM

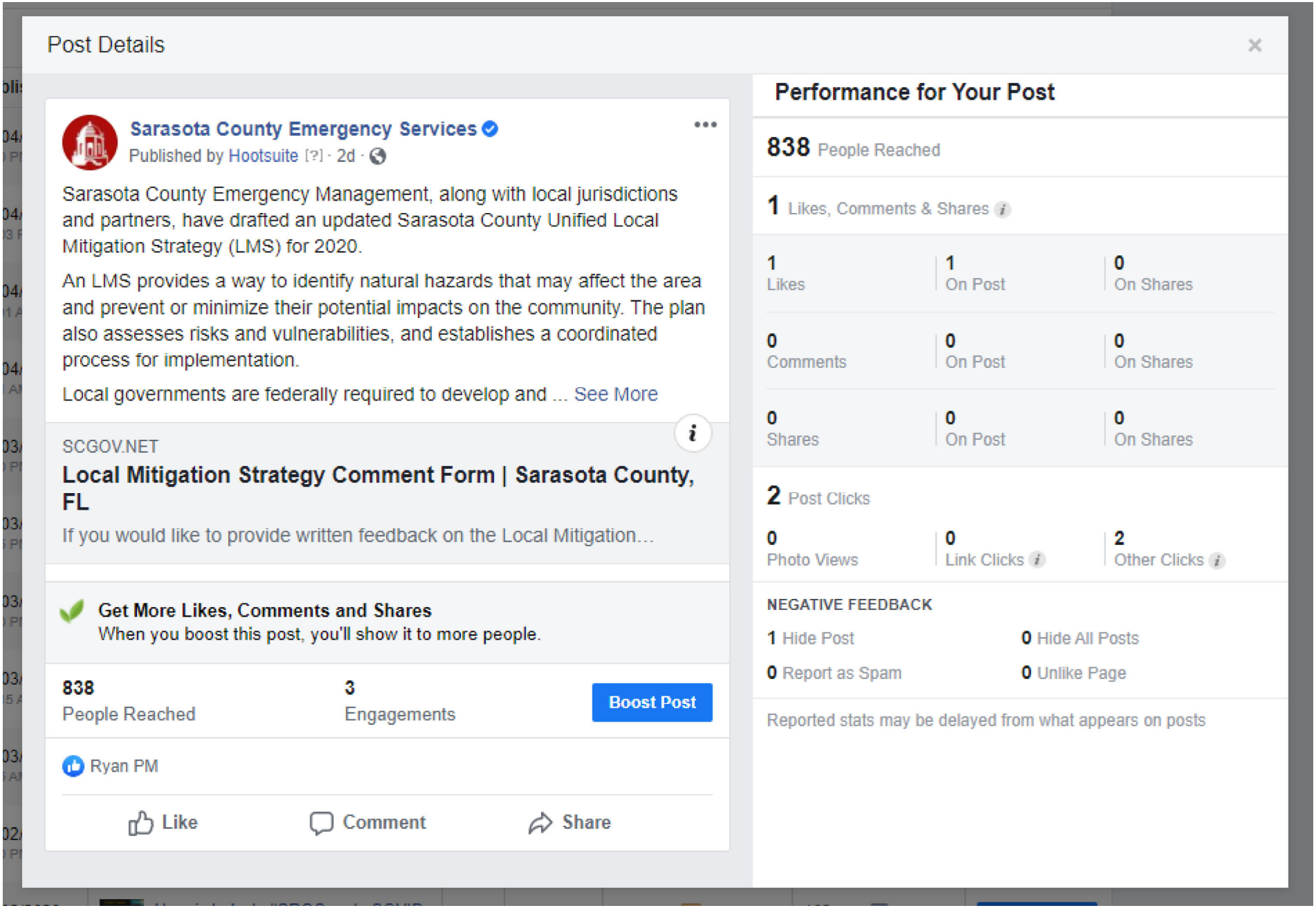
- Read Notice
- Introductions
- Discuss the Rule
- Discuss JAPC letter/comments
- Discuss changes in response to JAPC's letter/comments
- Take additional public comment on any proposed rule changes
- Conclusion

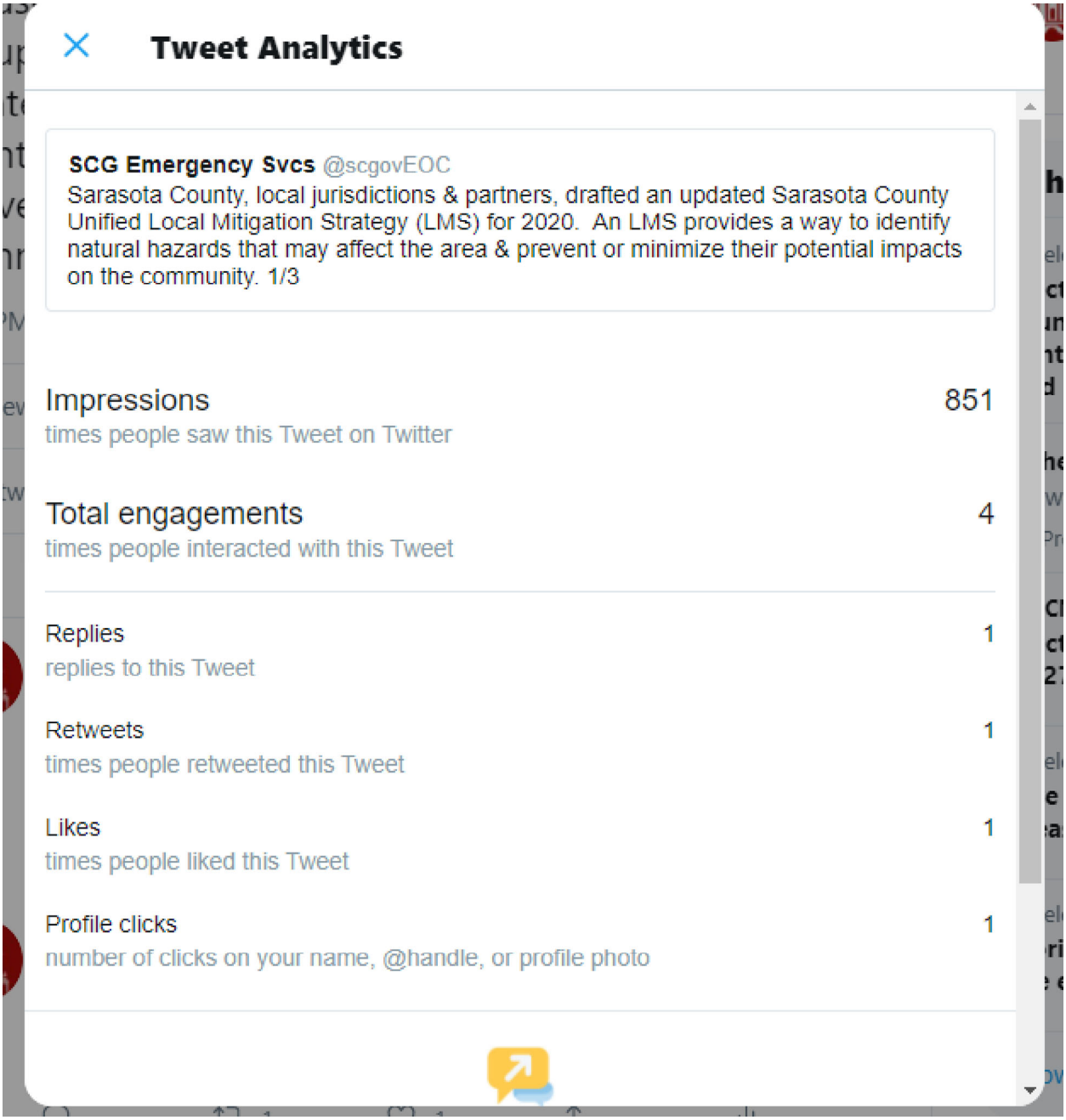
Conference call-in number- 1-888-585-9008

Conference Room- 454 953 84

Thank you all and I hope you can make it on the call tomorrow.

Kelly Wilson
FEPA Mitigation Committee Co-Chairperson


Post Details
Sarasota County Emergency Services
Published by Hootsuite [?] · 2d ·
Sarasota County Emergency Management, along with local jurisdictions and partners, have drafted an updated Sarasota County Unified Local Mitigation Strategy (LMS) for 2020.
An LMS provides a way to identify natural hazards that may affect the area and prevent or minimize their potential impacts on the community. The plan also assesses risks and vulnerabilities, and establishes a coordinated process for implementation.
Local governments are federally required to develop and ... See More
SCGOV.NET
Local Mitigation Strategy Comment Form | Sarasota County, FL
If you would like to provide written feedback on the Local Mitigation...
Get More Likes, Comments and Shares
When you boost this post, you'll show it to more people.
838
People Reached
3
Engagements
Boost Post
Ryan PM
Like
Comment
Share
Performance for Your Post
838 People Reached
1 Likes, Comments & Shares
1 Likes
1 On Post
0 On Shares
0 Comments
0 On Post
0 On Shares
0 Shares
0 On Post
0 On Shares
2 Post Clicks
0 Photo Views
0 Link Clicks
2 Other Clicks
NEGATIVE FEEDBACK
1 Hide Post
0 Hide All Posts
0 Report as Spam
0 Unlike Page
Reported stats may be delayed from what appears on posts


Tweet Analytics
SCG Emergency Svcs @scgovEOC
Sarasota County, local jurisdictions & partners, drafted an updated Sarasota County Unified Local Mitigation Strategy (LMS) for 2020. An LMS provides a way to identify natural hazards that may affect the area & prevent or minimize their potential impacts on the community. 1/3
Impressions
851
times people saw this Tweet on Twitter
Total engagements
4
times people interacted with this Tweet
Replies
1
replies to this Tweet
Retweets
1
times people retweeted this Tweet
Likes
1
times people liked this Tweet
Profile clicks
1
number of clicks on your name, @handle, or profile photo

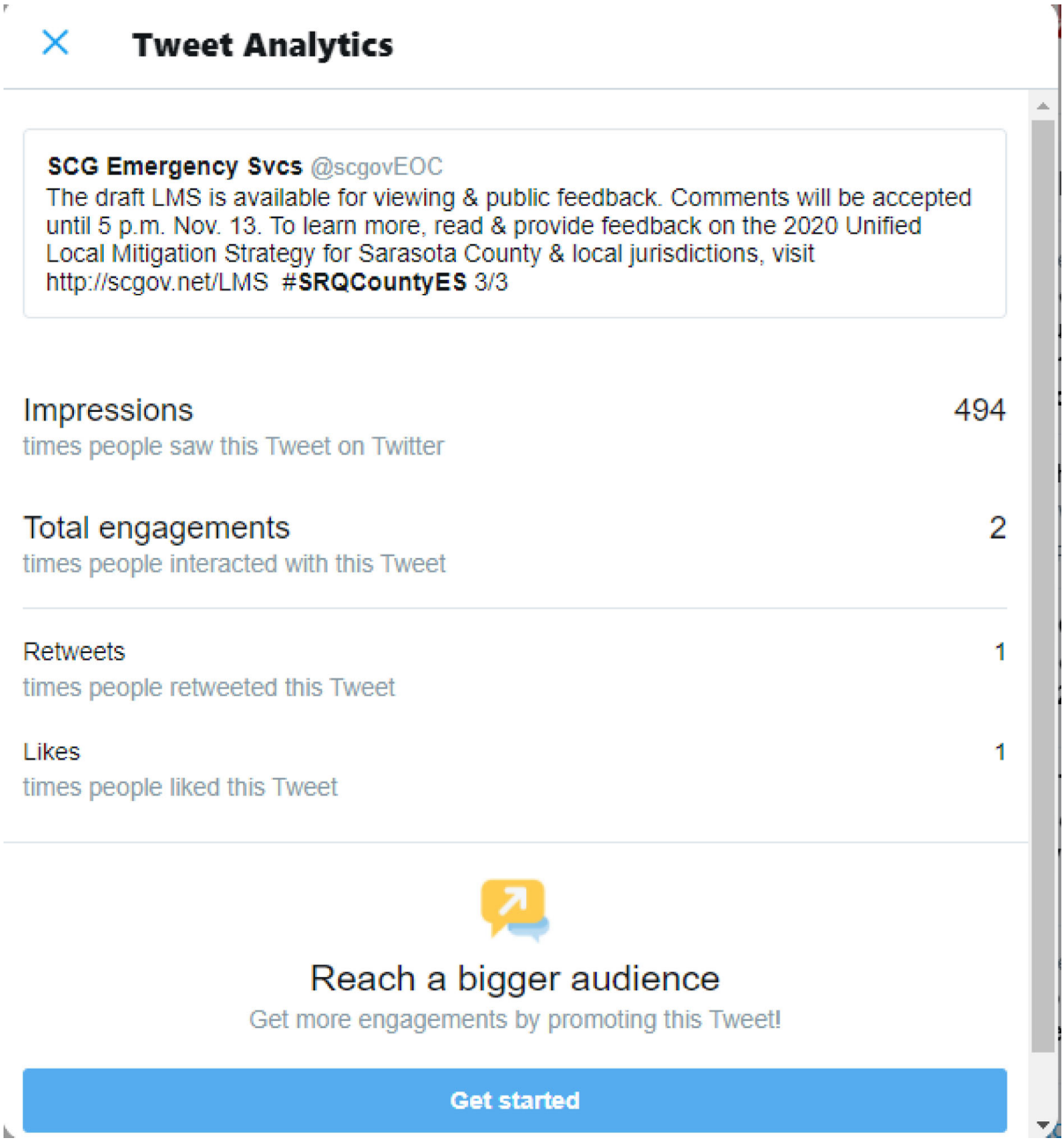
Tweet Analytics

SCG Emergency Svcs @scgovEOC
The LMS assesses risks & vulnerabilities, & establishes a process for implementation. Local governments are federally required to develop & adopt mitigation plans to receive some types of non-emergency disaster assistance. Plans must be updated & re-submitted every 5 years. 2/3

Impressions times people saw this Tweet on Twitter	515
Total engagements times people interacted with this Tweet	3
Replies replies to this Tweet	1
Retweets times people retweeted this Tweet	1
Likes times people liked this Tweet	1

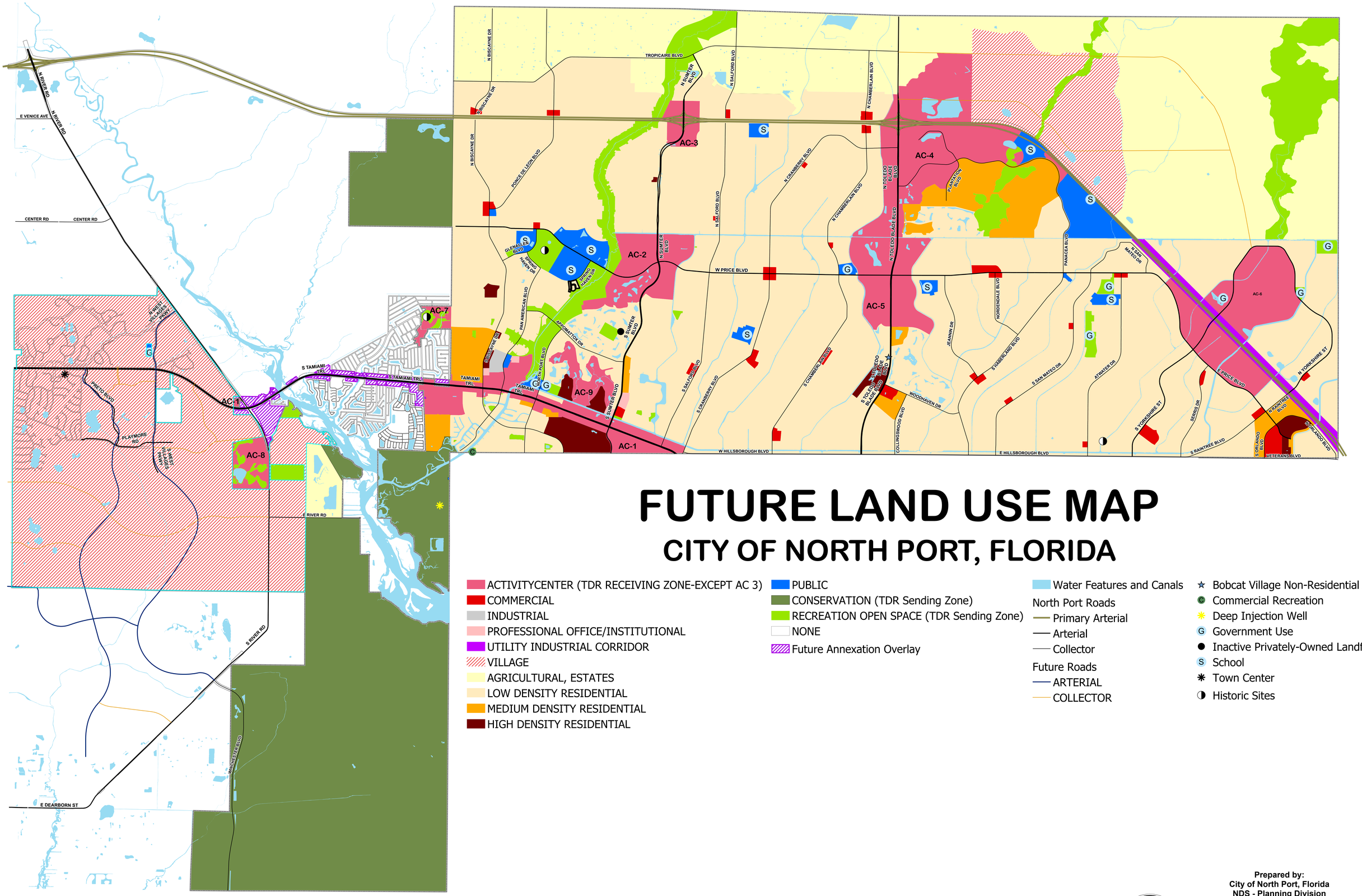
Reach a bigger audience

Get more engagements by promoting this Tweet!


Tweet Analytics
SCG Emergency Svcs @scgovEOC
The draft LMS is available for viewing & public feedback. Comments will be accepted until 5 p.m. Nov. 13. To learn more, read & provide feedback on the 2020 Unified Local Mitigation Strategy for Sarasota County & local jurisdictions, visit http://scgov.net/LMS #SRQCountyES 3/3
Impressions
494
times people saw this Tweet on Twitter
Total engagements
2
times people interacted with this Tweet
Retweets
1
times people retweeted this Tweet
Likes
1
times people liked this Tweet
Reach a bigger audience
Get more engagements by promoting this Tweet!
Get started

LMS-Appendix G

Map 2-7



FUTURE LAND USE MAP

CITY OF NORTH PORT, FLORIDA

- ACTIVITYCENTER (TDR RECEIVING ZONE-EXCEPT AC 3)
- COMMERCIAL
- INDUSTRIAL
- PROFESSIONAL OFFICE/INSTITUTIONAL
- UTILITY INDUSTRIAL CORRIDOR
- VILLAGE
- AGRICULTURAL, ESTATES
- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- PUBLIC
- CONSERVATION (TDR Sending Zone)
- RECREATION OPEN SPACE (TDR Sending Zone)
- NONE
- Future Annexation Overlay
- Water Features and Canals

North Port Roads
- Primary Arterial
- Arterial
- Collector

Future Roads
- ARTERIAL
- COLLECTOR

- Bobcat Village Non-Residential Area
- Commercial Recreation
- Deep Injection Well
- Government Use
- Inactive Privately-Owned Landfill
- School
- Town Center
- Historic Sites

N W E S

0 1 2 4 Miles

Prepared by:
City of North Port, Florida
NDS - Planning Division

September 5, 2019

Disclaimer: This map is for reference purposes only and is not to be construed as a legal document. Any reliance on the information contained herein is at the user's risk. The City of North Port and its agents assume no responsibility for any use of the information contained herein or any loss resulting there from.

M:\Departments\Planning\FutureLandUse

FUTURE LAND USE

PLANNING FOR FUTURE LAND USES IN SARASOTA COUNTY, FLORIDA

LAST UPDATED AUGUST | 2014

QUICK FACTS

THE MODERATE DENSITY RESIDENTIAL FUTURE LAND USE CATEGORY IS THE 3RD LARGEST AREA WITHIN THE URBAN SERVICE BOUNDARY.

3rd

THE FUTURE LAND USE CHAPTER WITHIN THE COMPREHENSIVE PLAN CONTAINS PROVISIONS TO DISCOURAGE SUB-URBAN SPRAWL.

THE URBAN SERVICE BOUNDARY DELINEATES WHERE URBAN LEVEL AND RURAL LEVEL DEVELOPMENT SHOULD OCCUR IN SARASOTA COUNTY.

THERE IS A FUTURE LAND USE MAP SERIES WHICH FURTHER DELINEATES SPECIFIC PLANNING AREAS NOT EASILY SHOWN ON THE FUTURE LAND USE MAP.

HAVE AN IDEA FOR A CUTSHEET? LET US KNOW! EMAIL: **PLANNER@SCGOV.NET**

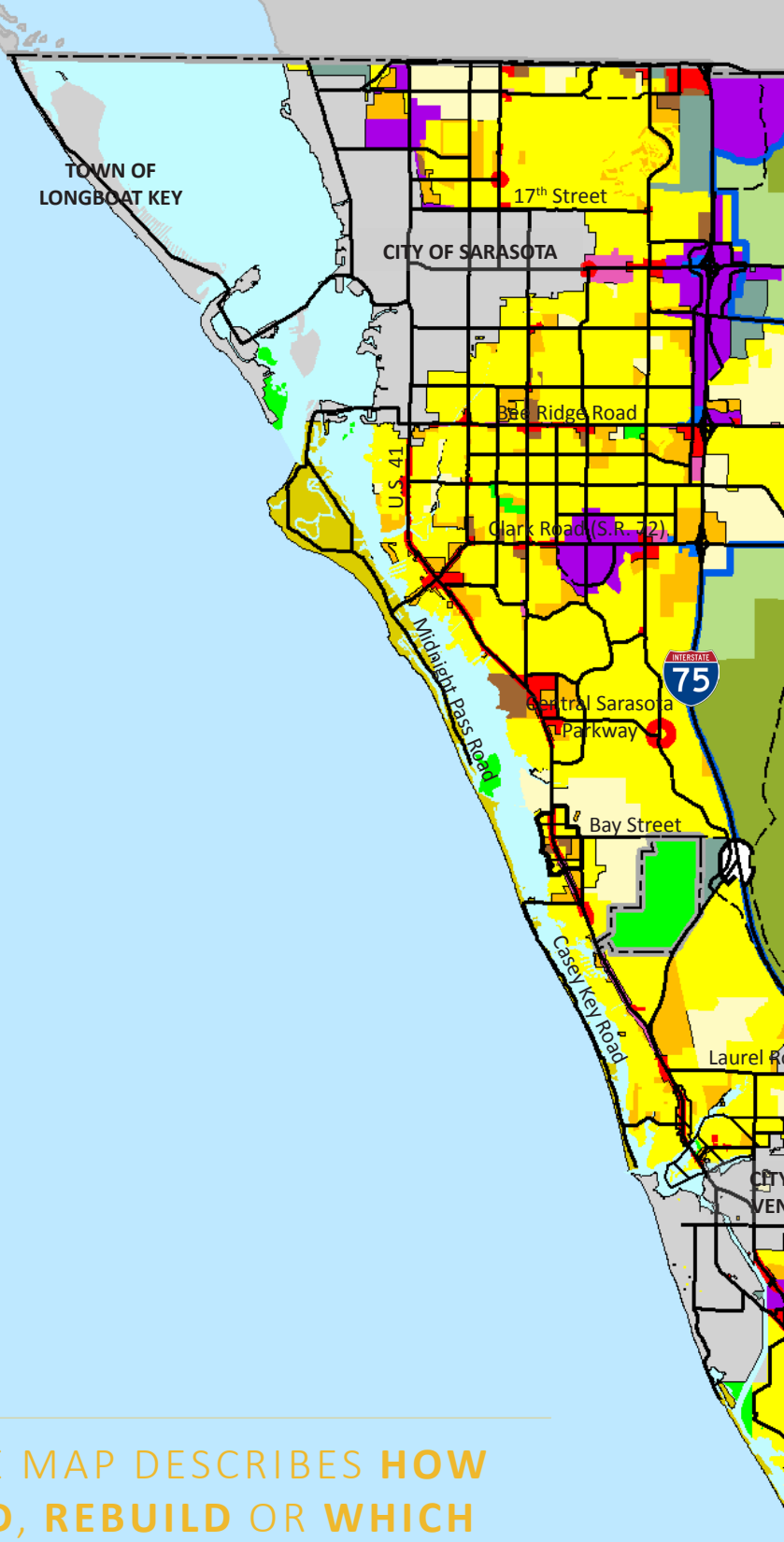
WHAT IS FUTURE LAND USE?

The Sarasota County Future Land Use Plan is a guide to the physical development of the County. It describes how and where to build, rebuild or which areas to preserve; delivering the Community vision for the unincorporated area of Sarasota County. The County's Comprehensive Plan houses the Future Land Use Map and Chapter which includes both text and a series of maps, collectively providing guidance for land use decisions and direction for investments in community infrastructure. The Future Land Use Chapter includes goals, objectives and policies (GOPs) that are to be applied to produce the desired outcomes, and the FLUM illustrates their spatial application.

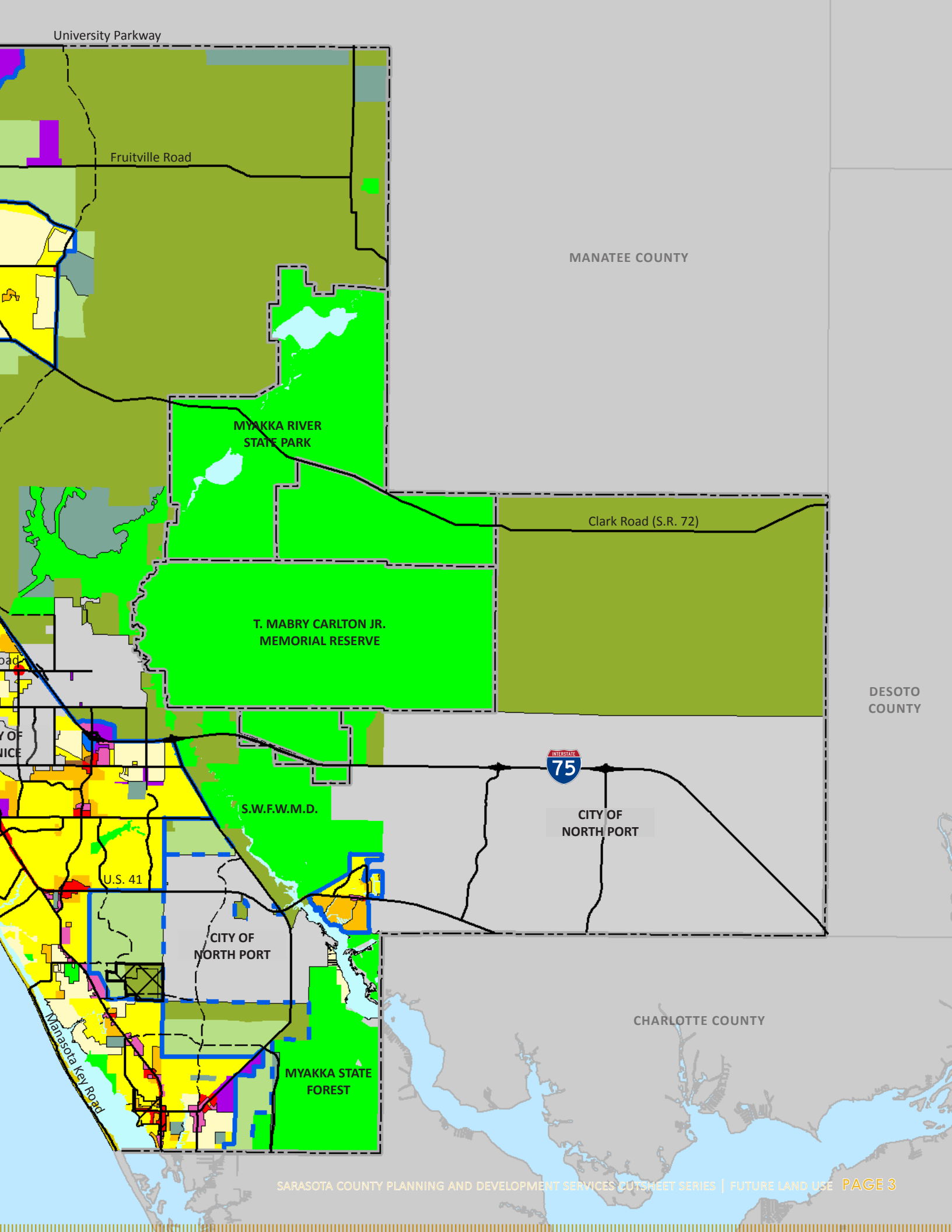
By law, all land use regulations and capital improvements must be consistent with the Future Land Use Map. The FLUM classifies all land within the unincorporated area of the county into general types of land use categories, (i.e., low density residential, medium density residential, commercial center, office, and major employment). The FLUM is color coded with each color assigned to a specific category. These categories are called "Future Land Use Designations." Future Land Use Designations are supported and governed by the GOPs which describe their intended purpose and define allowable densities and intensities of development.

The Future Land Use Designations are primarily implemented through the county's zoning ordinance with each color coded designation having a corresponding set of allowable zoning districts. The corresponding zoning districts identify more specifically the types of uses that are permitted in each zoning district, (e.g., single family home, apartment, hotel, convenience store, restaurant, church, bank, veterinary clinic), and include standards relating to the specific uses, such as, the size of building lots, and the size, height, and placement of structures on those lots.

"THE SARASOTA COUNTY FUTURE LAND USE PLAN IS A **GUIDE TO THE PHYSICAL DEVELOPMENT** OF THE COUNTY."



THE FUTURE LAND USE MAP DESCRIBES **HOW AND WHERE TO BUILD**, **REBUILD** OR **WHICH AREAS TO PRESERVE**; DELIVERING THE COMMUNITY VISION FOR THE UNINCORPORATED AREA OF SARASOTA COUNTY.


University Parkway
Fruitville Road
MANATEE COUNTY
MYAKKA RIVER
STATE PARK
Clark Road (S.R. 72)
T. MABRY CARLTON JR.
MEMORIAL RESERVE
DESOTO
COUNTY
INTERSTATE
75
S.W.F.W.M.D.
CITY OF
NORTH PORT
U.S. 41
CITY OF
NORTH PORT
CHARLOTTE COUNTY
Manasota Key Road
MYAKKA STATE
FOREST

FUTURE LAND USE DESIGNATIONS

There are 17 color-coded Future Land Use Designations on the Future Land Use Map (FLUM). The FLUM includes overlays (or demarcations) for items such as town and village centers, settlement areas, and the identification of the urban service area boundary. The designations provide for a mix of land use types in logical locations to protect the character of existing neighborhoods and provide employment, shopping, recreational and cultural uses close to residents. These designations are also intended to make the most efficient use of infrastructure by guiding uses to locations best suited to serve them, and where they best support the community's long-term goals. The 17 Future Land Use Designations and overlay areas in Sarasota County are described below.

LOW DENSITY RESIDENTIAL

Less than two dwelling units per acre; recognizes established low density subdivisions within the Urban Service Area, and land located within areas of special flood hazard with existing low density development or existing zoning.

Implementing Zoning Districts: RSF-1; RE-1; RE-2; RE-3; OUC; PUD; GU

MODERATE DENSITY RESIDENTIAL

Recognizes existing development between two and less than five dwelling units per acre. The moderate density designation also applies to all vacant residential parcels within the Urban Service Areas that have no special characteristics to qualify them for high density or restrict them to a low density.

Implementing Zoning Districts: RSF-1; RSF-2; RSF-3; RSF-4; RMH; RE-3; OUC; PUD; GU

MEDIUM DENSITY RESIDENTIAL

Recognizes existing development between five and nine dwelling units per acre. Properties with this designation could be rezoned to residential single family and residential multi-family districts. The designation also applies to vacant parcels within the urban service areas that are located close to non-residential development and have frontage on collector or arterial roads.

Implementing Zoning Districts: RSF-4; RMF-1; RMF-2; RMH; OUC; PUD; GU

HIGH DENSITY RESIDENTIAL

Recognizes residential development of nine dwelling units per acre. This designation also identifies locations along major arterials and close to existing, intensive non-residential developments where additional housing of up to 13 dwelling units per acre should be constructed. The designation would make such parcels appropriate for rezoning to residential multi-family districts.

Implementing Zoning Districts: RMF-2; RMF-3; OUC; PUD; GU

BARRIER ISLAND

Recognized as a unique land use category. Development on the barrier islands is of special concern due to problems associated with the hurricane evacuation, potential for storm damage and the sensitive nature of coastal habitats. The barrier islands are represented on the Future Land Use Map as a homogeneous land use classification to underscore these special considerations. Existing development on Manasota Key, Casey Key and Siesta Key is recognized; however, intensity and density of future development may not exceed that allowed by existing zoning.

Implementing Zoning Districts: Those currently existing on the property.

SEMI – RURAL AREA

Provides for residential development at an intensity that serves as a transition between urban and rural uses; protects native habitats and maintains open space; and allows for the continuation of agricultural uses. Residential densities in a semi-rural area are typically limited to a maximum of one dwelling unit per two acres.

Implementing Zoning Districts: RE-1; OUC; PUD; GU

RURAL AREA

Preserves agricultural lands, maintains open spaces and protects native habitats. Residential densities in the rural area are typically limited to a maximum of one dwelling unit per five acres.

Implementing Zoning Districts: OUE; OUR; OUA; OUC; OUM; PUD; GU

COMMERCIAL CORRIDOR

Recognizes areas of historic commercial zoning along major roadways, such as U.S. 41, Bee Ridge Road and Clark Road. While commercial centers are the preferred form of commercial development, in some cases, development within commercial corridors provides more opportunities for owner-occupied buildings than are generally available in commercial centers. They also, provide locations for businesses whose uses are inappropriate for shopping centers, such as automobile dealerships. Additional development within commercial corridors may be permitted on a case-by-case basis through the rezoning process.

Implementing Zoning Districts: CN; CG; CI; CM; OPI; RSF-4*; RMF-1*; RMF-2*; RMF-3*; MP; GU; PED

** The residential zoning districts are permissible in commercial corridors, but are not primary implementary uses.*

COMMERCIAL CENTER

Commercial Centers are categorized into five levels of commercial development by role and function, and are defined by the center size, trade area, and the supporting population base. These centers are (in increasing order of size): Neighborhood, Village I, Village II, Community and Regional.

Neighborhood Centers: Provide the daily convenience goods and other incidental commercial and service uses of the immediately surrounding area.
Implementing Zoning Districts: CN; CM; OPI; MP; GU; RSF-4*; RMF-1*; RMF-2*; RMF-3*

Village Centers: Provide the weekly shopping needs (i.e., grocery store, small general merchandise store) for multiple neighborhoods. The two village center types are defined in terms of size and intensity.
Implementing Zoning Districts: CN; CG; CM; OPI; MP; GU; PED; RSF-4*; RMF-1*; RMF-2*; RMF-3*

Community Centers: Provide greater and a more specialized variety of goods and services than village commercial centers. This type of center may consist of one or two anchor stores, specialty stores, and the kind of stores found in a village commercial center. Community commercial centers require a larger market area and are located at the intersection of major roadways and highways that serve the region.
Implementing Zoning Districts: CN; CG; CI; CM; OPI; MP; GU; PED;RSF-4*; RMF-1*; RMF-2*; RMF-3*

** The residential zoning districts are permissible in commercial corridors, but are not primary implementary uses.*

COMMERCIAL HIGHWAY INTERCHANGE

Designated on properties near interchanges for commercial uses that serve tourists and travelers, (gas stations, motels, restaurants and gift shops). Development at these interchanges should occur in a cohesive manner to ensure that traffic flow will not be impeded, that visual buffers will be adequate, and that development will remain compact.
Implementing Zoning Districts: CHI; CM; MP; GU

MAJOR EMPLOYMENT CENTER (MEC)

Intended to provide locations for employment and economic development opportunities. Typical uses include: light industrial; manufacturing; warehousing and offices; and/or combinations of these uses. Commercial activities are allowed as a supporting use, but are generally limited to the sale of merchandise produced, manufactured or distributed within the center, and the internal retail and service needs of employees and customers. Limited amounts of residential development are also permitted to facilitate access between home and place of work.
Implementing Zoning Districts: CM; PCD; IR; ILW; MP; GU; PED

LIGHT OFFICE

Recognizes existing areas of small scale offices, and identifies additional areas where such offices could be developed. The conversion of existing residential structures for office uses or the redevelopment of properties with new office structures may also be allowed. These areas can serve as transitions between residential areas and major roadways.
Implementing Zoning Districts: CM; OPI/PD; MP; GU

OFFICE/MULTI-FAMILY RESIDENTIAL

Recognizes existing areas of office and multi-family residential uses, and identifies additional areas where such uses would be appropriate. These areas are along major roadways where parcels are deep enough to accommodate development and may be integrated into existing neighborhoods or provide a transition between existing residential neighborhoods and major roadways. Typical uses allowed include office, multi-family residential, public and civic uses, and combinations of these uses.
Implementing Zoning Districts: CM; OPI; RSF-4; RMF-1; RMF-2; RMF-3; MP; GU

MAJOR GOVERNMENT USE

Applies to those lands where national, state, or local government activities are conducted or where governments hold titles to such lands. Properties currently designated major government use include the Sarasota International Airport, Buchan Airport, Sarasota County Landfill, the Celery Fields Regional Stormwater Facility, Sarasota County Annex (R.L. Anderson Building), and the Englewood Community Hospital.
Implemented through a variety of zoning districts determined on a case by case basis.

PUBLIC CONSERVATION/PRESERVATION

Typically used on properties acquired and maintained primarily for environmental protection and that may be dedicated for public open space or outdoor recreation.
Implemented through a variety of zoning districts determined on a case by case basis.

INCORPORATED AREA

Denotes the incorporated cities in Sarasota County (Sarasota, Venice, North Port, Longboat Key). These cities have their own adopted comprehensive plans to guide the growth of each community.
Implementing Zoning District. Not Applicable. The incorporated areas are governed by their own zoning districts.

WATER

Identifies major waterbodies within, or adjacent to, Sarasota County including the Gulf of Mexico, Sarasota Bay, Little Sarasota Bay, and the Myakka River.

Implementing Zoning Districts: Implementing Zoning District. Not Applicable.

COMMERCIAL CENTER UNDEFINED BOUNDARIES

Recognizes areas where future commercial development is expected to occur, with no specific or defined boundary.

ENGLEWOOD TOWN CENTER

Indicates the location of the Revitalization District (CRA) for the South County community of Englewood.

NOKOMIS VILLAGE CENTER

Indicates the Special Planning Overlay for the community of Nokomis.

OSPREY VILLAGE CENTER

Indicates the Special Planning Overlay for the community of Osprey.

SETTLEMENT AREA OVERLAY

Overlay that allows a limited form of development in a manner intended to avoid urban sprawl.

FUTURE FULL ACCESS INTERCHANGE

Recognizes locations where it is anticipated that an I-75 interchange will be developed in the future.

URBAN SERVICE AREA BOUNDARY

Growth boundary established in the Future Land Use Chapter of the Comprehensive Plan. Generally, development to the west of the line is recognized as urban scaled development, while land to the east of the line is considered to be rural.

FUTURE URBAN SERVICE AREA BOUNDARY

Boundary line that indicates an area between the cities of North Port and Venice, and the community of Englewood where future urban level development is expected when appropriate infrastructure and facilities become available to support that level of development.

FUTURE THOROUGHFARES

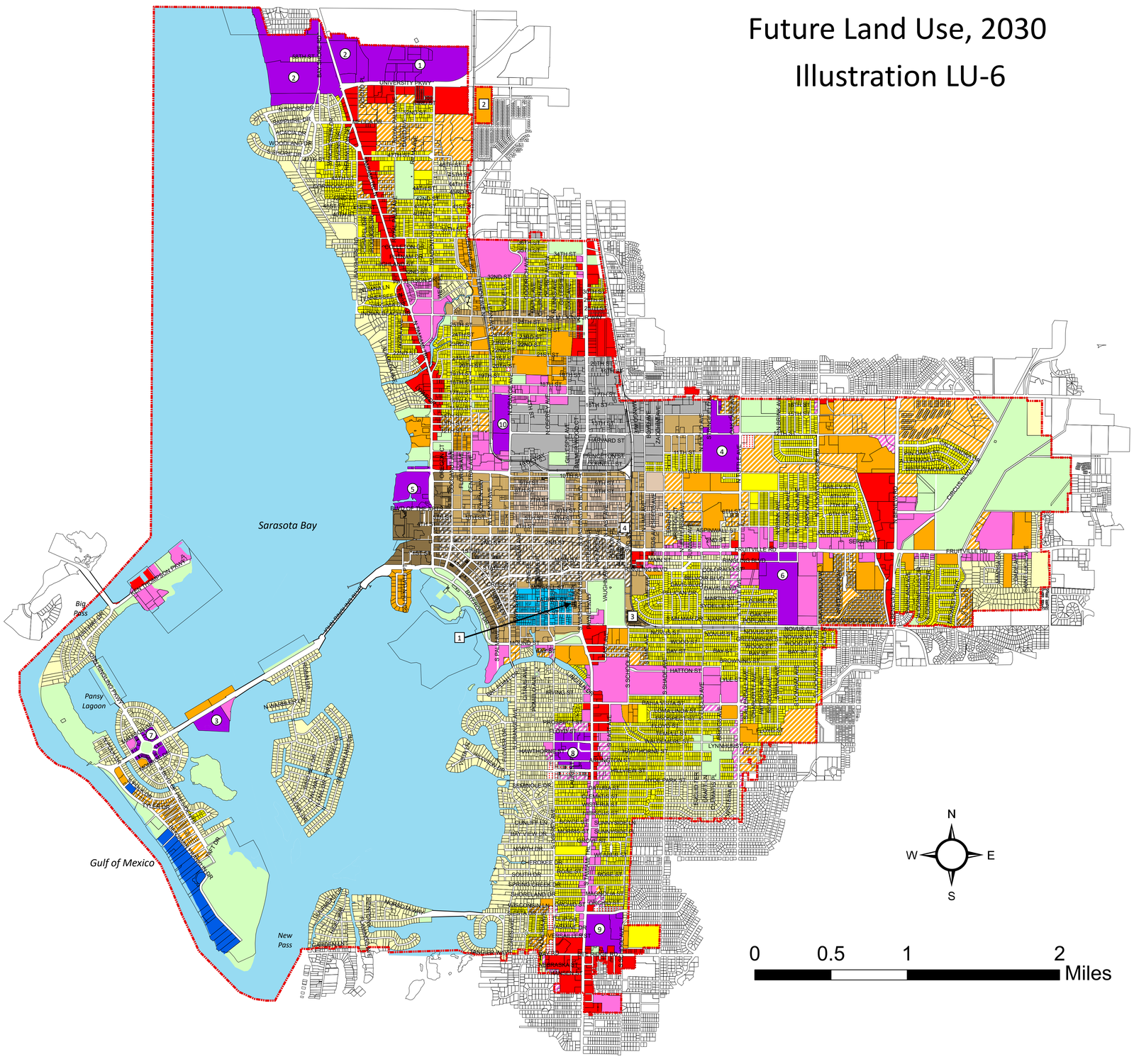
Recognizes certain future roadways that are expected to be built to expand the existing transportation network and provide connectivity as the county grows.

"FUTURE LAND USE DESIGNATIONS ARE SUPPORTED THROUGH THE **GOALS**, **OBJECTIVES** AND **POLICIES** THAT DEFINE THE ALLOWABLE DENSITIES AND INTENSITIES WITHIN EACH DESIGNATION."

PREPARED BY
SARASOTA COUNTY PLANNING AND DEVELOPMENT SERVICES

TO PROVIDE INFORMATION ON PLANNING RELATED TOPICS. THIS CUTSHEET AND ITS ASSOCIATED GRAPHICS ARE TO BE USED AS EDUCATIONAL MATERIALS ONLY. ALL GRAPHICS ARE CONCEPTUAL IN NATURE.

Future Land Use, 2030
Illustration LU-6



Future Land Use Map Classifications

- Single Family (Very Low Density)
- Single Family (Low Density)
- Multiple Family (Moderate Density)
- Multiple Family (Medium Density)
- Mixed Residential
- Urban Neighborhood
- Urban Edge
- Downtown Core
- Downtown Bayfront
- Neighborhood Office
- Community Office / Institutional
- Neighborhood Commercial
- Community Commercial
- Production Intensive Commercial
- Resort Residential
- Metropolitan / Regional
- Open Space-Recreation-Conservation (uplands)
- Open Space-Recreation-Conservation (waterbodies)

Metropolitan Regional Land Uses

(1) Airport activities, Car Rental Agencies, Hotels/Motels, and Development consisting of Office, Entertainment, Education, Commercial Retail, Service, and Church uses
(2) Institution of higher learning, Museum, Entertaining
(3) Retirement Center
(4) Recreation, Entertainment, Residential and Non-Residential Uses
(5) Recreation, Entertainment, Museum, and Cultural Facilities
(6) Fairground activities
(7) Commercial tourist shopping center
(8) Hospital activities, Professional/Medical Offices, Medical Laboratories
(9) Regional shopping center
(10) Downtown Retirement Center

Sites Corresponding to Future Land Use Action Strategy 1.10

[1] Parcel ID 2027-09-0100, Application No. 15-PA-01

[2] Parcel ID 0025-03-0031, Application No. 06-PA-05

[3] Parcel IDs 2029-14-0002, 2029-11-0047
2029-06-0030, 2029-11-0045,
2029-14-0001,
Application No. 05-PA-03

[4] Parcel IDs 2028-06-0107, 2028-14-0001,
Application No. 15-PA-02

Adopted by Ordinance No. 08-4792

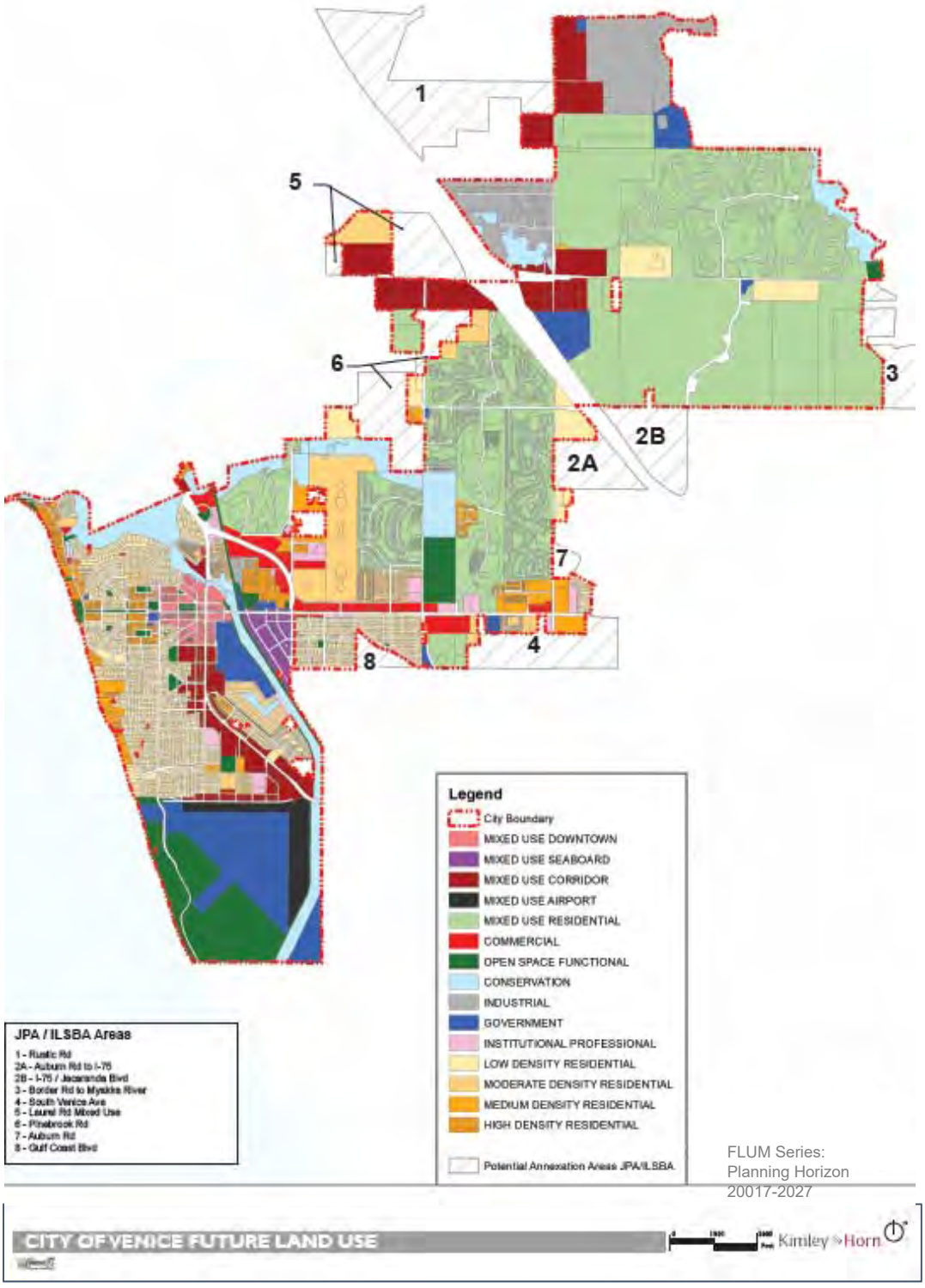
Amended by the following Ordinances

08-4795	12-5017	14-5102	17-5203
10-4907	13-5027	16-5152	18-5237
10-4908	13-5028	16-5153	19-5305
11-4948	13-5031	16-5158	19-5276
11-4949	13-5039	16-5167	
11-4950	13-5069	16-5171	
11-4957	14-5097	16-5172	
12-5014	14-5101	17-5194	

This map cannot be interpreted independent of the *Sarasota City Plan* as the comprehensive plan may be amended from time to time.

Publication date: August 2020

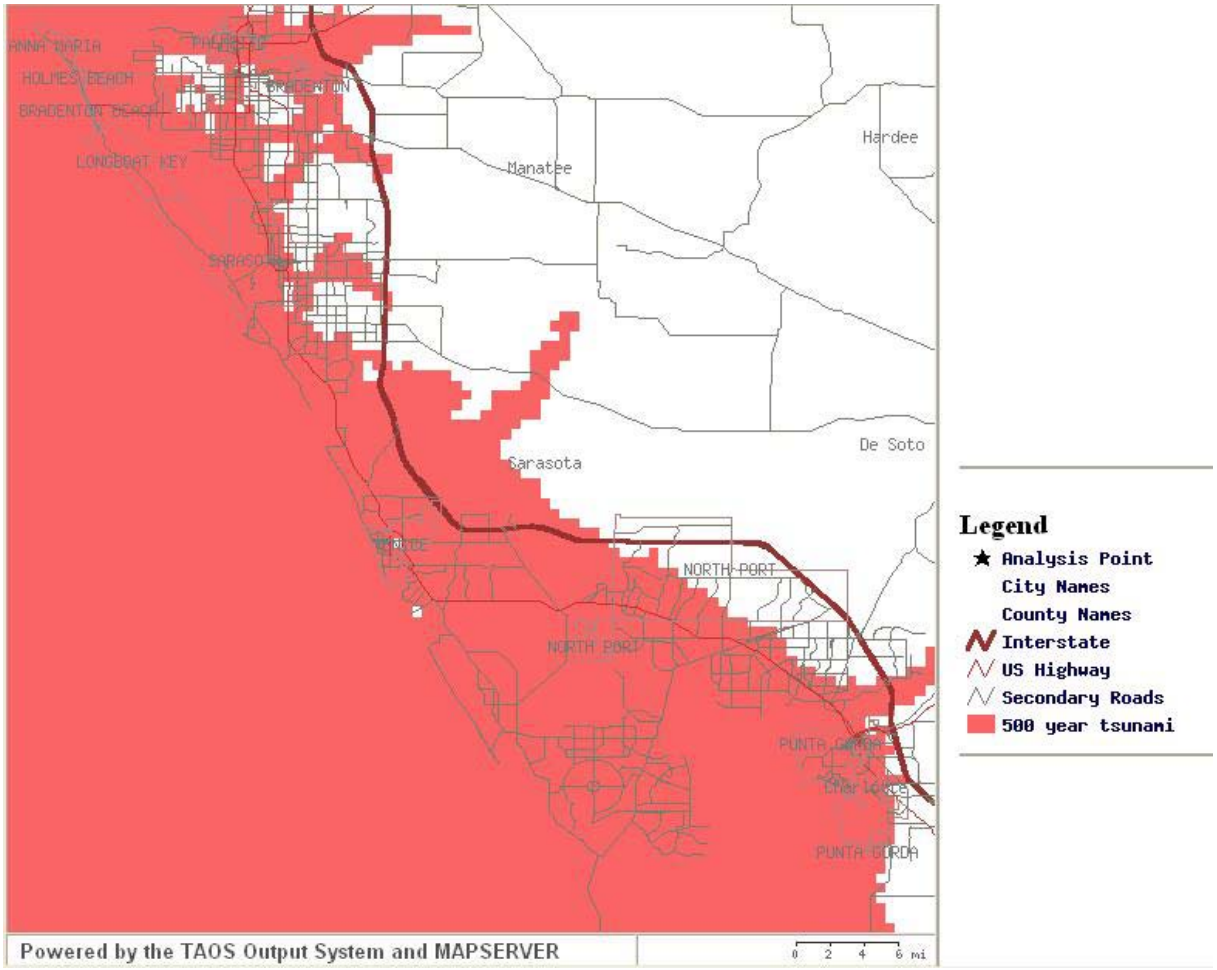
Figure (Map) LU-2: Future Land Use Map (see full size map for additional detail and information)



LMS-Appendix H

Hazard Identification and Vulnerability Analysis

Tsunami Risk Assessment for Sarasota County



Population at risk for KAC Tsunami Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Out of Zone	225380	14569	79598	84555	17039	0	9780
500 yr Tsunami	0	0	0	0	0	0	0

Structures at risk for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	125746	71347	9421	37293	5033	2252	400
500 yr Tsunami	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	$ 69.18 BI	$ 32.18 BI	$ 1.00 BI	$ 24.77 BI	$ 6.18 BI	$ 4.41 BI	$ 631.65 MI
500 yr Tsunami	$ 1.92 MI	$0.00	$0.00	$0.00	$0.00	$ 1.92 MI	$0.00
	$ 249.75 MI	$0.00	$0.00	$0.00	$ 249.75 MI	$0.00	$0.00

Tsunami Risk Assessment for Town of Longboat Key

Population at risk for KAC Tsunami Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Out of Zone	7575	103	4375	1701	216	44	70
500 yr Tsunami	0	0	0	0	0	0	0

Structures at risk for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	8987	1712	176	6902	154	39	4
500 yr Tsunami	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	$ 10.07 BI	$ 1.78 BI	$ 9.94 MI	$ 8.02 BI	$ 203.11 MI	$ 54.26 MI	$ 944.89 TH
500 yr Tsunami	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Tsunami Risk Assessment for City of Northport

Population at risk for KAC Tsunami Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Out of Zone	18311	1285	5007	8598	1518	0	1001
500 yr Tsunami	0	0	0	0	0	0	0

Structures at risk for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	9599	8141	984	240	106	124	4
500 yr Tsunami	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	$ 2.85 BI	$ 2.43 BI	$ 86.68 MI	$ 72.16 MI	$ 113.80 MI	$ 145.28 MI	$ 3.26 MI
500 yr Tsunami	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Tsunami Risk Assessment for City of Sarasota

Population at risk for KAC Tsunami Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Out of Zone	34906	8671	7967	14076	5739	0	2429
500 yr Tsunami	0	0	0	0	0	0	0

Structures at risk for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	18244	10199	420	5710	1371	516	28
500 yr Tsunami	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	$ 11.01 BI	$ 3.97 BI	$ 37.51 MI	$ 3.61 BI	$ 1.99 BI	$ 1.32 BI	$ 80.77 MI
500 yr Tsunami	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Tsunami Risk Assessment for City of Venice

Population at risk for KAC Tsunami Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Out of Zone	17850	350	10248	8306	977	0	519
500 yr Tsunami	0	0	0	0	0	0	0

Structures at risk for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	9684	4083	442	4226	622	287	24
500 yr Tsunami	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tsunami Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	$ 4.84 BI	$ 1.66 BI	$ 34.51 MI	$ 1.86 BI	$ 744.21 MI	$ 524.65 MI	$ 24.06 MI
500 yr Tsunami	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Tsunami Risk Assessment for Sarasota Unincorporated Areas

Population at risk for KAC Tsunami Risk

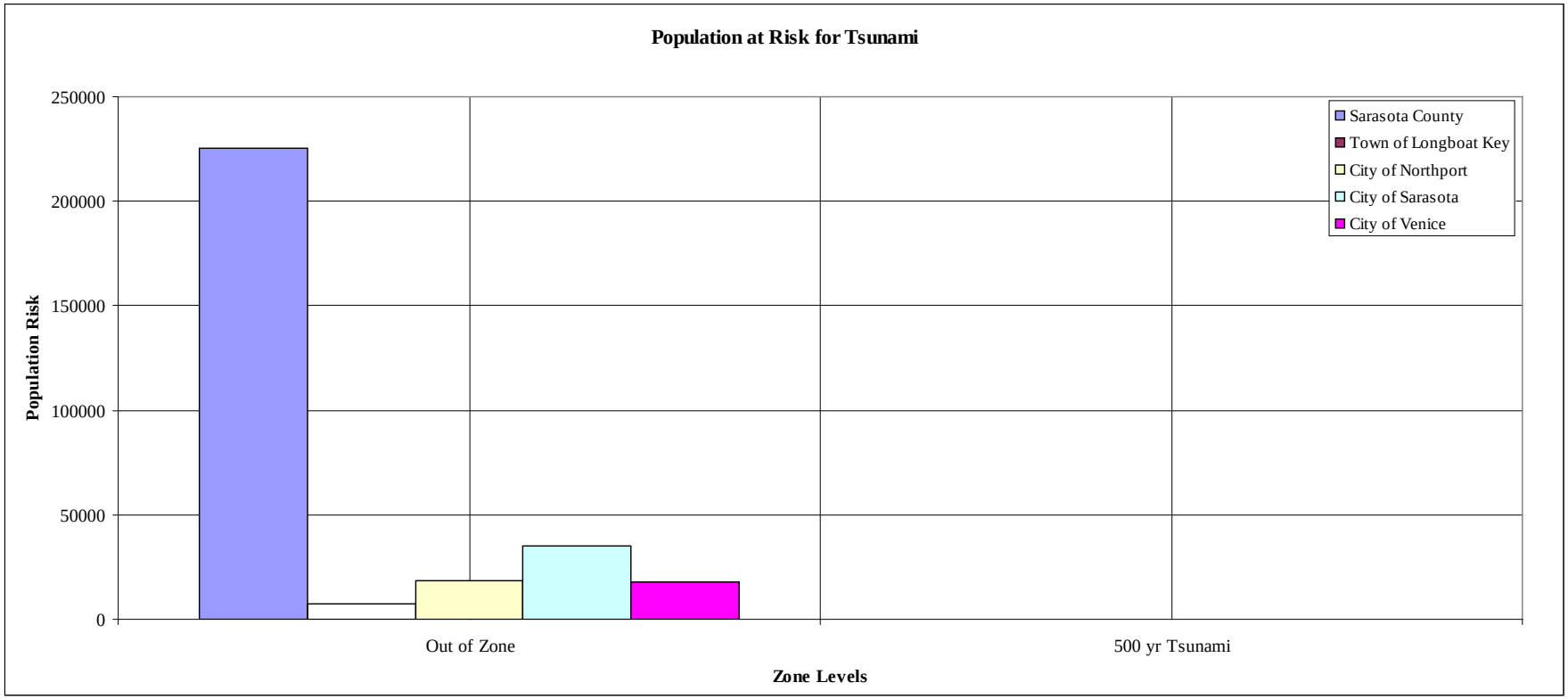
Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Out of Zone	149301	4247	53335	52618	8692	0	5794
500 yr Tsunami	0	0	0	0	0	0	0

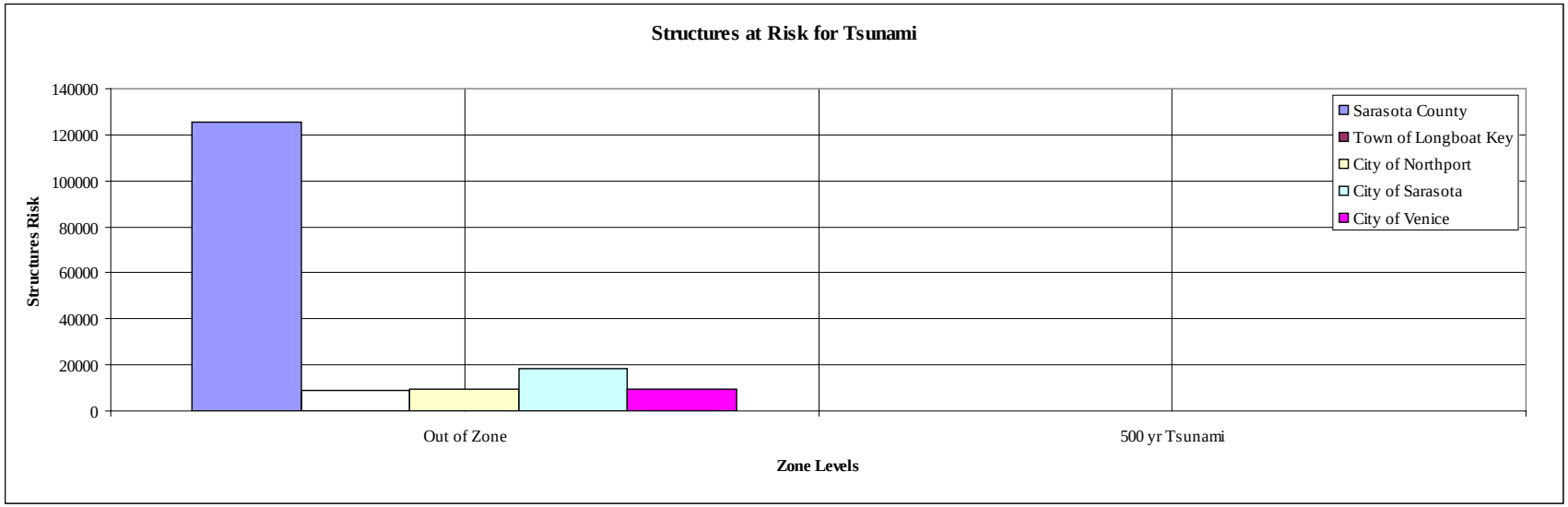
Structures at risk for KAC Tsunami Risk

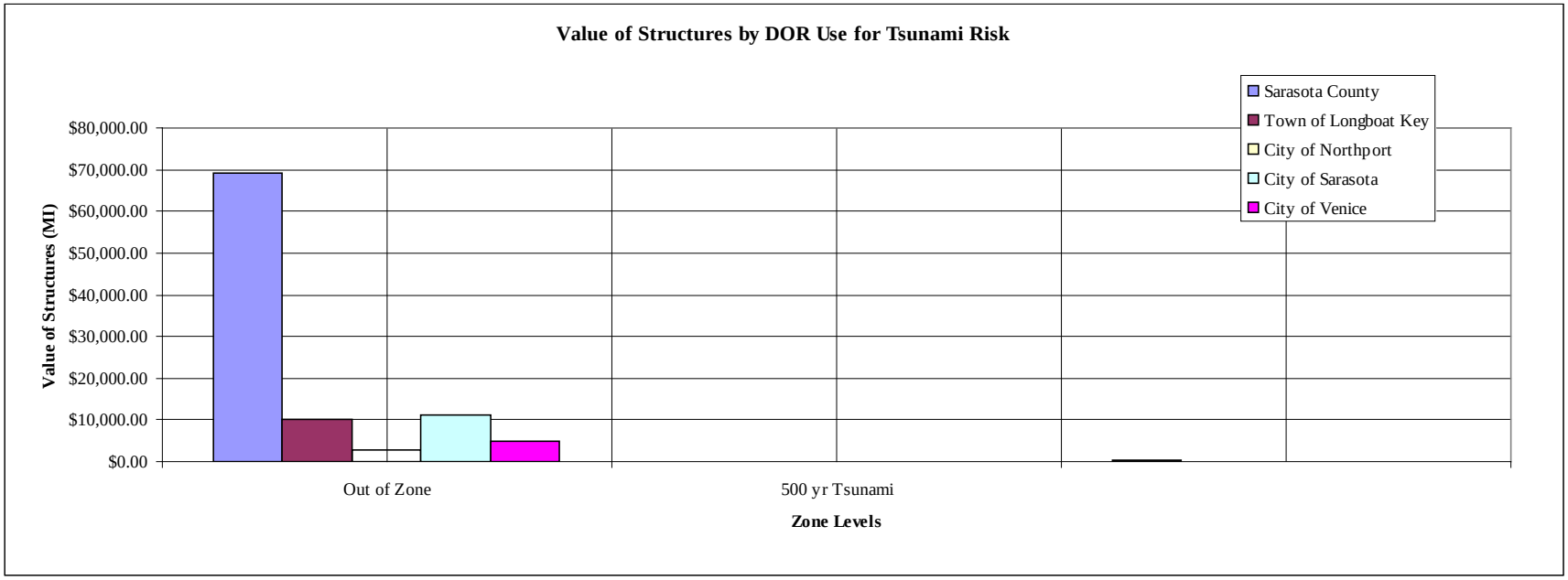
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	83093	48405	7501	22660	2882	1301	344
500 yr Tsunami	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tsunami Risk

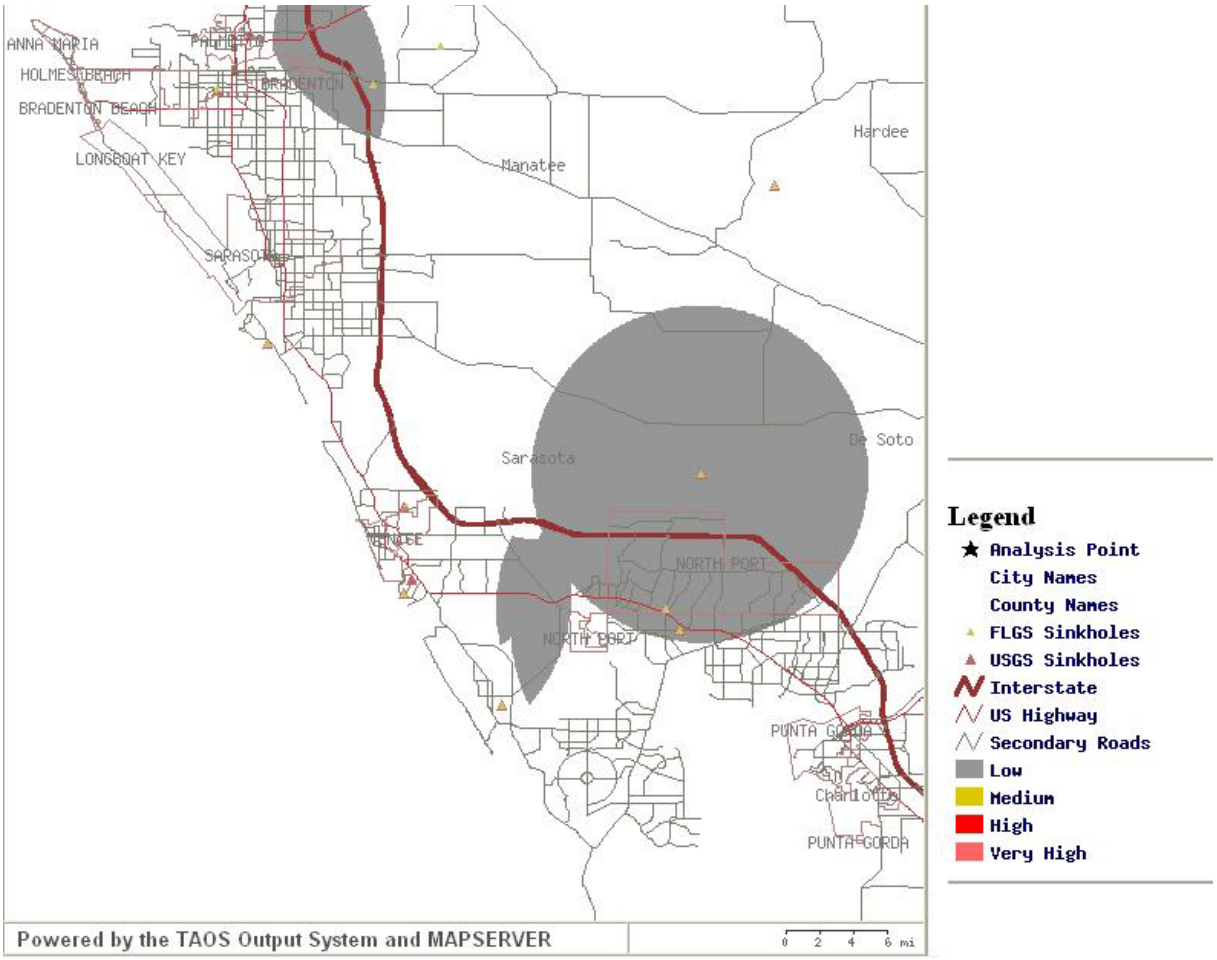
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Out of Zone	$ 42.59 BI	$ 23.07 BI	$ 846.68 MI	$ 12.54 BI	$ 3.24 BI	$ 2.38 BI	$ 523.56 MI
500 yr Tsunami	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00


Population at Risk for Tsunami
250000
200000
150000
100000
50000
0
Population Risk
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Out of Zone
500 yr Tsunami
Zone Levels


Structures at Risk for Tsunami
140000
120000
100000
80000
60000
40000
20000
0
Structures Risk
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Out of Zone
500 yr Tsunami
Zone Levels


Value of Structures by DOR Use for Tsunami Risk
$80,000.00
$70,000.00
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$0.00
Value of Structures (MI)
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Out of Zone
500 yr Tsunami
Zone Levels

Sinkhole Risk Assessment for Sarasota County



Sinkhole Risk Assessment for Sarasota County

Population at risk for KAC Sinkhole Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low	74921	3681	22551	25096	4776	0	3213
Medium	107531	3186	41938	41950	6123	0	4186
High	5710	90	1696	2446	409	0	299
Very High	4108	77	1090	1314	304	0	230
Extreme	2160	55	878	842	213	0	79
Adjacent	0	0	0	0	0	0	0

Structures at risk for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	34135	21610	3064	7674	729	514	544
Medium	57277	35879	4754	13378	2086	922	258
High	4255	2540	110	1498	65	35	7
Very High	1461	671	51	684	32	21	2
Extreme	469	314	95	57	2	0	1
Adjacent	33	30	0	3	0	0	0

Value of Structures by DOR Use for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	$ 16.00 BI	$ 9.95 BI	$ 389.45 MI	$ 3.25 BI	$ 967.63 MI	$ 710.08 MI	$ 733.12 MI
Medium	$ 27.51 BI	$ 15.45 BI	$ 500.83 MI	$ 6.51 BI	$ 2.60 BI	$ 2.09 BI	$ 352.30 MI
High	$ 1.88 BI	$ 821.23 MI	$ 8.22 MI	$ 951.16 MI	$ 33.42 MI	$ 58.19 MI	$ 11.31 MI
Very High	$ 817.85 MI	$ 252.74 MI	$ 3.30 MI	$ 523.77 MI	$ 20.21 MI	$ 17.06 MI	$ 769.40 TH
Extreme	$ 136.13 MI	$ 99.76 MI	$ 6.86 MI	$ 25.09 MI	$ 1.78 MI	$0.00	$ 2.64 MI
Adjacent	$ 9.71 MI	$ 9.05 MI	$0.00	$ 662.06 TH	$0.00	$0.00	$0.00

Sinkhole Risk Assessment for City of Northport

Population at risk for KAC Sinkhole Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low	8421	792	1656	3767	834	0	423
Medium	14296	731	3649	6325	1031	0	731
High	0	0	0	0	0	0	0
Very High	0	0	0	0	0	0	0
Extreme	0	0	0	0	0	0	0
Adjacent	0	0	0	0	0	0	0

Structures at risk for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	2501	2376	4	74	10	32	5
Medium	8383	6969	983	220	103	101	7
High	0	0	0	0	0	0	0
Very High	0	0	0	0	0	0	0
Extreme	0	0	0	0	0	0	0
Adjacent	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	$ 915.27 MI	$ 837.37 MI	$ 359.88 TH	$ 20.91 MI	$ 8.45 MI	$ 37.92 MI	$ 10.26 MI
Medium	$ 2.51 BI	$ 2.12 BI	$ 86.53 MI	$ 62.85 MI	$ 107.83 MI	$ 127.08 MI	$ 6.93 MI
High	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Very High	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Extreme	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Adjacent	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Sinkhole Risk Assessment for City of Sarasota

Population at risk for KAC Sinkhole Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low	7476	681	2380	3658	610	0	544
Medium	1497	65	335	648	176	0	92
High	0	0	0	0	0	0	0
Very High	0	0	0	0	0	0	0
Extreme	0	0	0	0	0	0	0
Adjacent	0	0	0	0	0	0	0

Structures at risk for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	3625	2245	565	622	93	96	4
Medium	831	708	0	89	30	4	0
High	0	0	0	0	0	0	0
Very High	0	0	0	0	0	0	0
Extreme	0	0	0	0	0	0	0
Adjacent	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	$ 1.08 BI	$ 532.98 MI	$ 53.66 MI	$ 199.30 MI	$ 148.12 MI	$ 115.10 MI	$ 30.84 MI
Medium	$ 380.74 MI	$ 259.88 MI	$0.00	$ 55.42 MI	$ 63.05 MI	$ 2.39 MI	$0.00
High	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Very High	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Extreme	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Adjacent	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Sinkhole Risk Assessment for City of Venice

Population at risk for KAC Sinkhole Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low	0	0	0	0	0	0	0
Medium	10095	207	5837	4189	494	0	351
High	0	0	0	0	0	0	0
Very High	0	0	0	0	0	0	0
Extreme	114	0	93	38	10	0	0
Adjacent	0	0	0	0	0	0	0

Structures at risk for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	0	0	0	0	0	0	0
Medium	5024	2354	333	1892	302	127	16
High	53	12	9	32	0	0	0
Very High	47	6	6	33	0	0	2
Extreme	0	0	0	0	0	0	0
Adjacent	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Sinkhole Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Medium	$ 2.34 BI	$ 992.57 MI	$ 25.12 MI	$ 651.91 MI	$ 432.73 MI	$ 233.85 MI	$ 8.33 MI
High	$ 14.94 MI	$ 4.77 MI	$ 478.19 TH	$ 9.70 MI	$0.00	$0.00	$0.00
Very High	$ 13.22 MI	$ 1.84 MI	$ 424.87 TH	$ 10.18 MI	$0.00	$0.00	$ 769.40 TH
Extreme	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Adjacent	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Sinkhole Risk Assessment for Sarasota County-Unincorporated Areas

Population at risk for KAC Sinkhole Risk

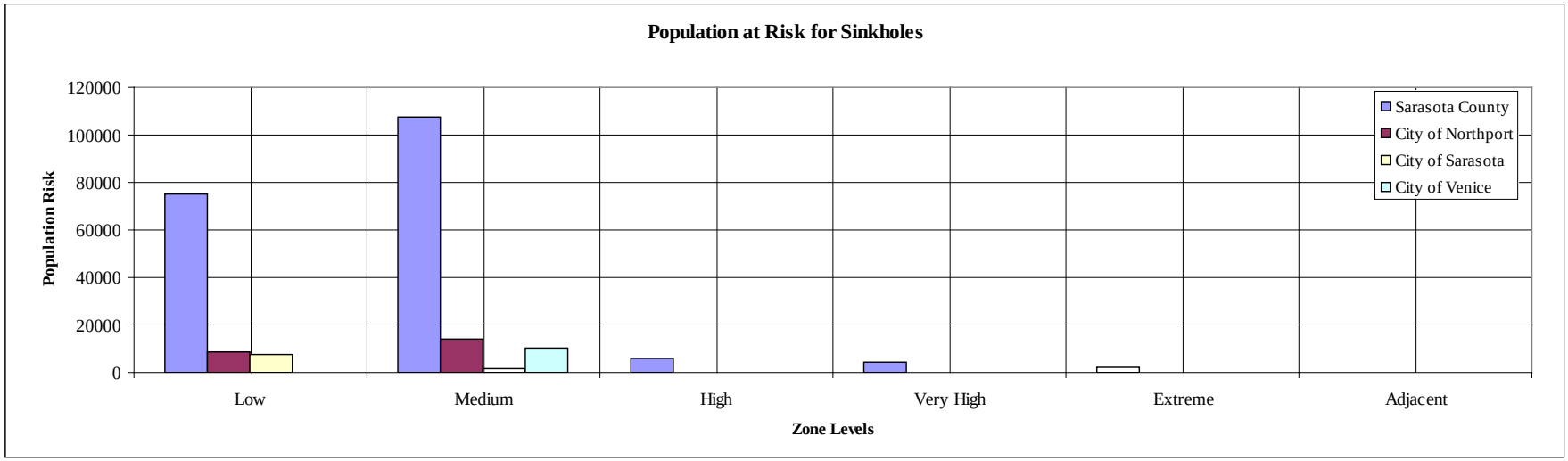
Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low	59024	2208	18515	17671	3332	0	2246
Medium	81643	2183	32117	30788	4422	0	3012
High	5710	90	1696	2446	409	0	299
Very High	4108	77	1090	1314	304	0	230
Extreme	2046	55	785	804	203	0	79
Adjacent	0	0	0	0	0	0	0

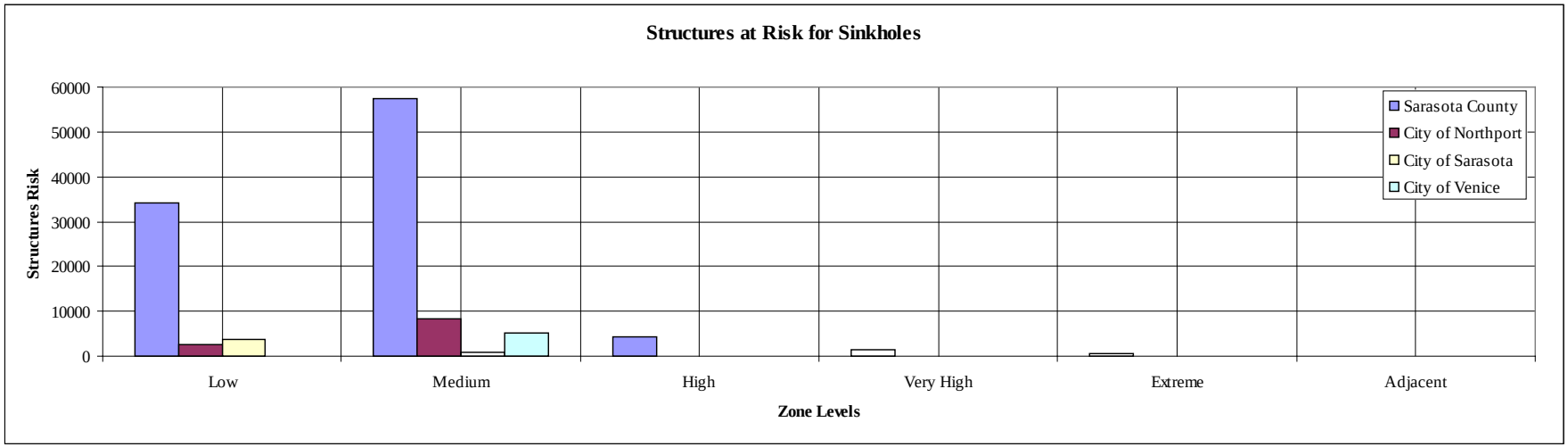
Structures at risk for KAC Sinkhole Risk

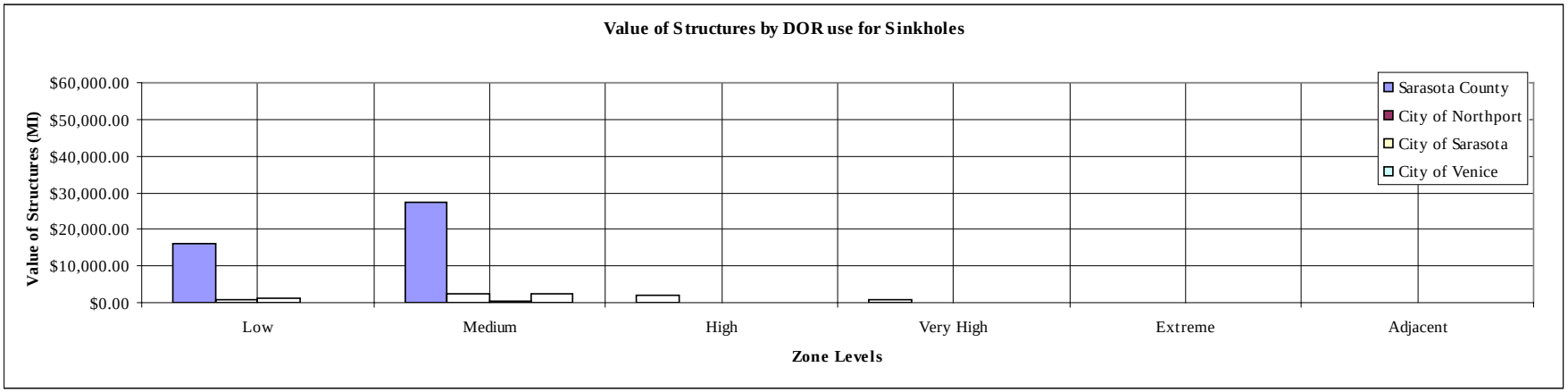
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	28516	17455	2497	7016	627	386	535
Medium	43519	26201	3538	11196	1659	690	235
High	4202	2528	101	1466	65	35	7
Very High	1414	665	45	651	32	21	0
Extreme	469	314	95	57	2	0	1
Adjacent	33	30	0	3	0	0	0

Value of Structures by DOR Use for KAC Sinkhole Risk

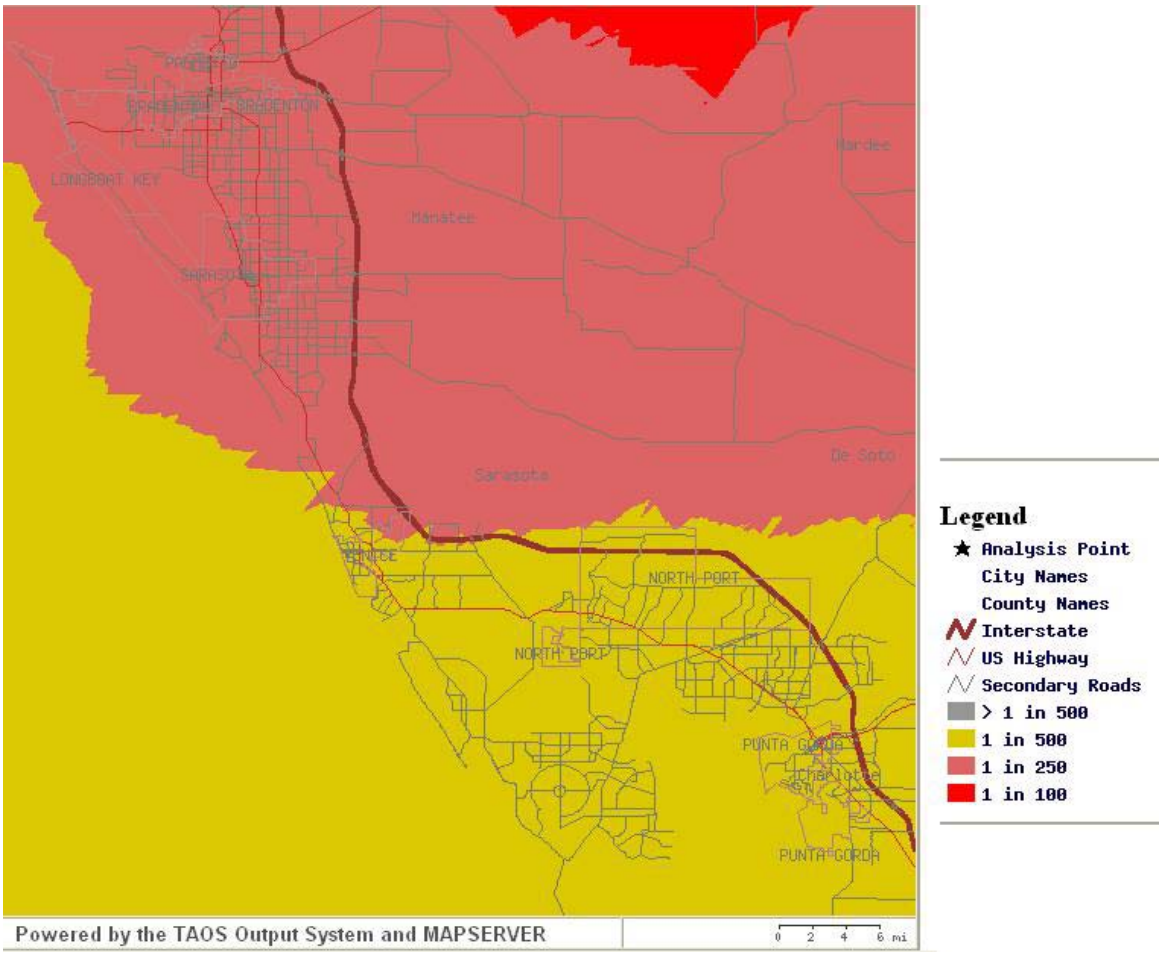
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low	$ 14.21 BI	$ 8.78 BI	$ 335.58 MI	$ 3.03 BI	$ 809.80 MI	$ 557.06 MI	$ 692.02 MI
Medium	$ 22.42 BI	$ 12.20 BI	$ 402.19 MI	$ 5.75 BI	$ 2.00 BI	$ 1.73 BI	$ 337.04 MI
High	$ 1.87 BI	$ 816.47 MI	$ 7.74 MI	$ 941.46 MI	$ 33.42 MI	$ 58.19 MI	$ 11.31 MI
Very High	$ 804.63 MI	$ 250.90 MI	$ 2.88 MI	$ 513.59 MI	$ 20.21 MI	$ 17.06 MI	$0.00
Extreme	$ 136.13 MI	$ 99.76 MI	$ 6.86 MI	$ 25.09 MI	$ 1.78 MI	$0.00	$ 2.64 MI
Adjacent	$ 9.71 MI	$ 9.05 MI	$0.00	$ 662.06 TH	$0.00	$0.00	$0.00

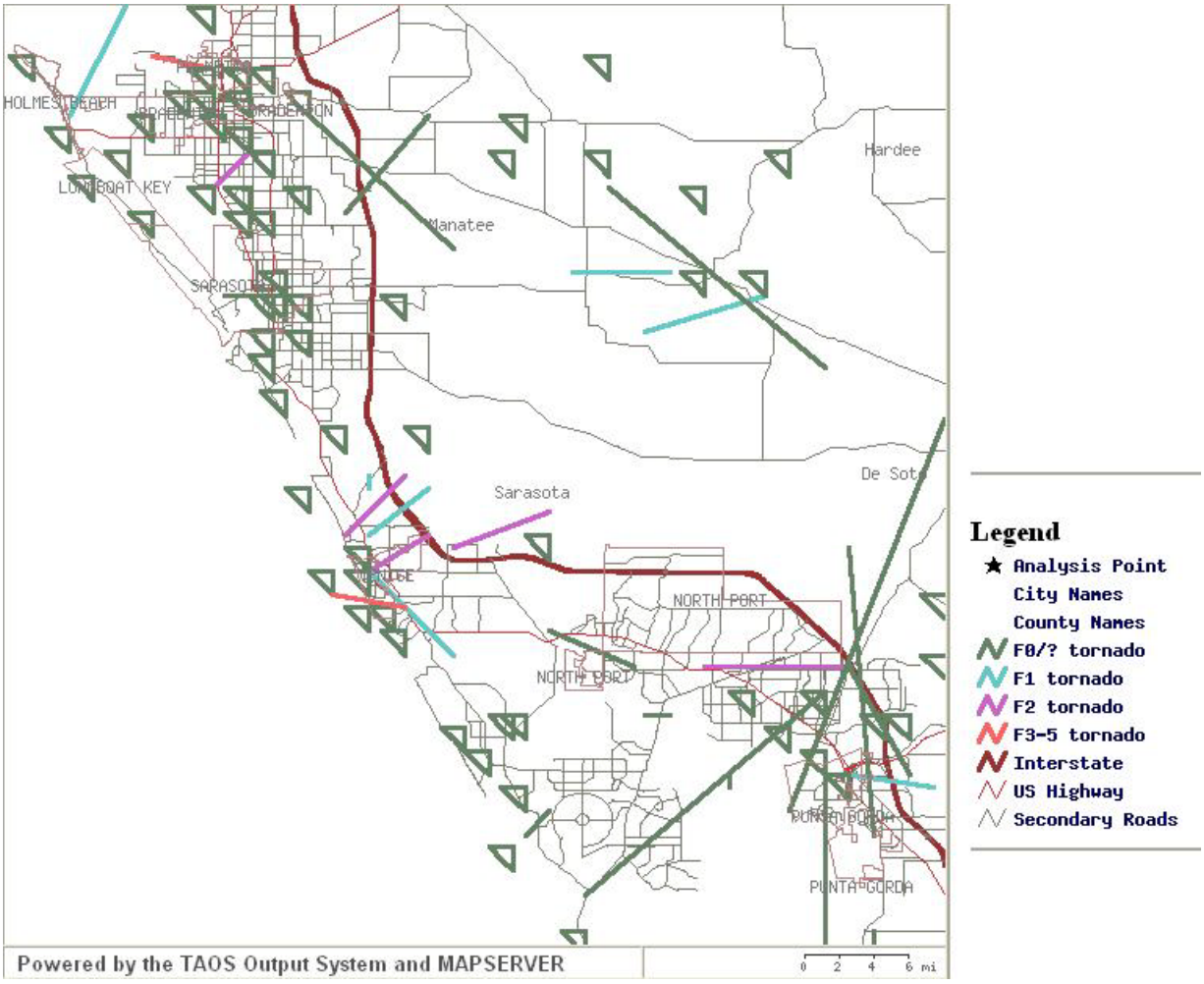

Population at Risk for Sinkholes
120000
100000
80000
60000
40000
20000
0
Population Risk
Low
Medium
High
Very High
Extreme
Adjacent
Zone Levels
Sarasota County
City of Northport
City of Sarasota
City of Venice


Structures at Risk for Sinkholes
60000
50000
40000
30000
20000
10000
0
Structures Risk
Low
Medium
High
Very High
Extreme
Adjacent
Zone Levels
Sarasota County
City of Northport
City of Sarasota
City of Venice


Value of Structures by DOR use for Sinkholes
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$0.00
Value of Structures (MI)
Low
Medium
High
Very High
Extreme
Adjacent
Zone Levels
Sarasota County
City of Northport
City of Sarasota
City of Venice

Tornado Risk Assessment for Sarasota County





Tornado Risk Assessment for Sarasota County

Population at risk for KAC Tornado Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	99792	3363	39856	41304	6435	0	3984
High (1 in 100)	226165	20622	62621	76682	18382	0	11108
Very High (1 in 50))	0	0	0	0	0	0	0

Structures at risk for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	53990	33979	6185	10703	1971	955	197
High (1 in 100)	113491	65165	3934	36514	4894	2149	835
Very High (1 in 50))	1	1	0	0	0	0	0

Value of Structures by DOR Use for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	$ 11.49 MI	0.00	0.00	0.00	0.00	$ 11.49 MI	0.00
Medium (1 in 250)	$ 22.31 BI	$ 13.22 BI	$ 729.44 MI	$ 4.21 BI	$ 1.82 BI	$ 2.04 BI	$ 289.10 MI
High (1 in 100)	$ 67.00 BI	$ 30.07 BI	$ 328.66 MI	$ 24.54 BI	$ 7.13 BI	$ 3.73 BI	$ 1.20 BI
Very High (1 in 50))	$ 2.54 MI	$ 196.89 TH	0.00	0.00	$ 2.35 MI	0.00	0.00

Tornado Risk Assessment for Town of Longboat Key

Population at risk for KAC Tornado Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	0	0	0	0	0	0	0
High (1 in 100)	7575	103	4375	1701	216	44	70
Very High (1 in 50))	0	0	0	0	0	0	0

Structures at risk for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	0	0	0	0	0	0	0
High (1 in 100)	9002	1713	176	6916	154	39	4
Very High (1 in 50))	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium (1 in 250)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High (1 in 100)	$ 10.07 BI	$ 1.78 BI	$ 9.94 MI	$ 8.02 BI	$ 203.11 MI	$ 54.26 MI	$ 944.89 TH
Very High (1 in 50))	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tornado Risk Assessment for City of Northport

Population at risk for KAC Tornado Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	22717	1523	5305	10092	1865	0	1154
High (1 in 100)	0	0	0	0	0	0	0
Very High (1 in 50))	0	0	0	0	0	0	0

Structures at risk for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	10884	9345	987	294	113	133	12
High (1 in 100)	0	0	0	0	0	0	0
Very High (1 in 50))	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium (1 in 250)	$ 3.43 BI	$ 2.96 BI	$ 86.89 MI	$ 83.76 MI	$ 116.29 MI	$ 164.99 MI	$ 17.19 MI
High (1 in 100)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Very High (1 in 50))	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tornado Risk Assessment for City of Sarasota

Population at risk for KAC Tornado Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	0	0	0	0	0	0	0
High (1 in 100)	52537	12044	11691	21477	8271	0	3781
Very High (1 in 50))	0	0	0	0	0	0	0

Structures at risk for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	0	0	0	0	0	0	0
High (1 in 100)	23952	13587	709	7058	1829	739	30
Very High (1 in 50))	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium (1 in 250)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High (1 in 100)	$ 12.95 BI	$ 4.76 BI	$ 64.49 MI	$ 4.10 BI	$ 2.33 BI	$ 1.61 BI	$ 82.24 MI
Very High (1 in 50))	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tornado Risk Assessment for City of Venice

Population at risk for KAC Tornado Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	13103	187	7351	6542	856	0	382
High (1 in 100)	4747	163	2897	1764	121	0	137
Very High (1 in 50))	0	0	0	0	0	0	0

Structures at risk for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	7870	3141	417	3433	575	284	20
High (1 in 100)	1814	942	25	793	47	3	4
Very High (1 in 50))	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Tornado Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium (1 in 250)	$ 3.75 BI	$ 1.10 BI	$ 33.09 MI	$ 1.55 BI	$ 558.90 MI	$ 494.15 MI	$ 19.99 MI
High (1 in 100)	$ 1.09 BI	$ 558.37 MI	$ 1.42 MI	$ 309.57 MI	$ 185.30 MI	$ 30.51 MI	$ 4.07 MI
Very High (1 in 50))	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tornado Risk Assessment for Sarasota County-Unincorporated Areas

Population at risk for KAC Tornado Risk

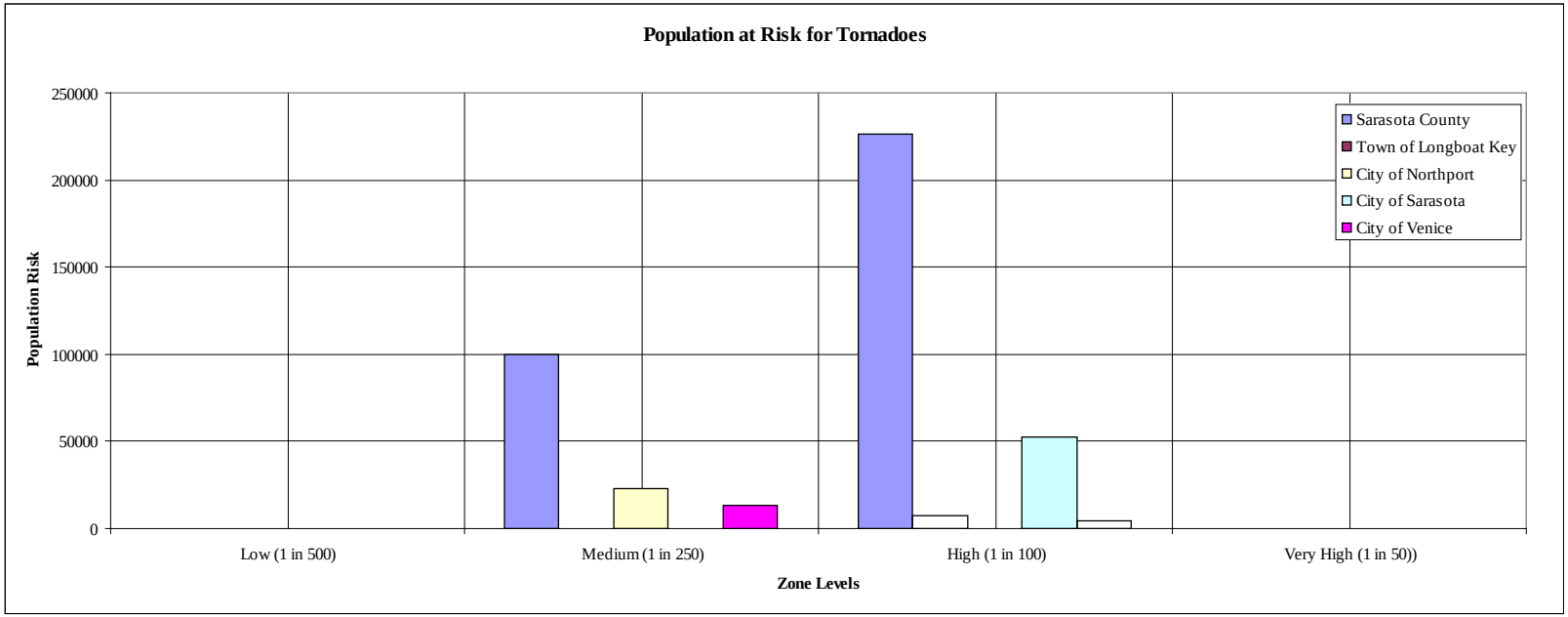
Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	63972	1653	27200	24670	3714	0	2448
High (1 in 100)	163869	8399	44992	52484	9877	0	7153
Very High (1 in 50))	0	0	0	0	0	0	0

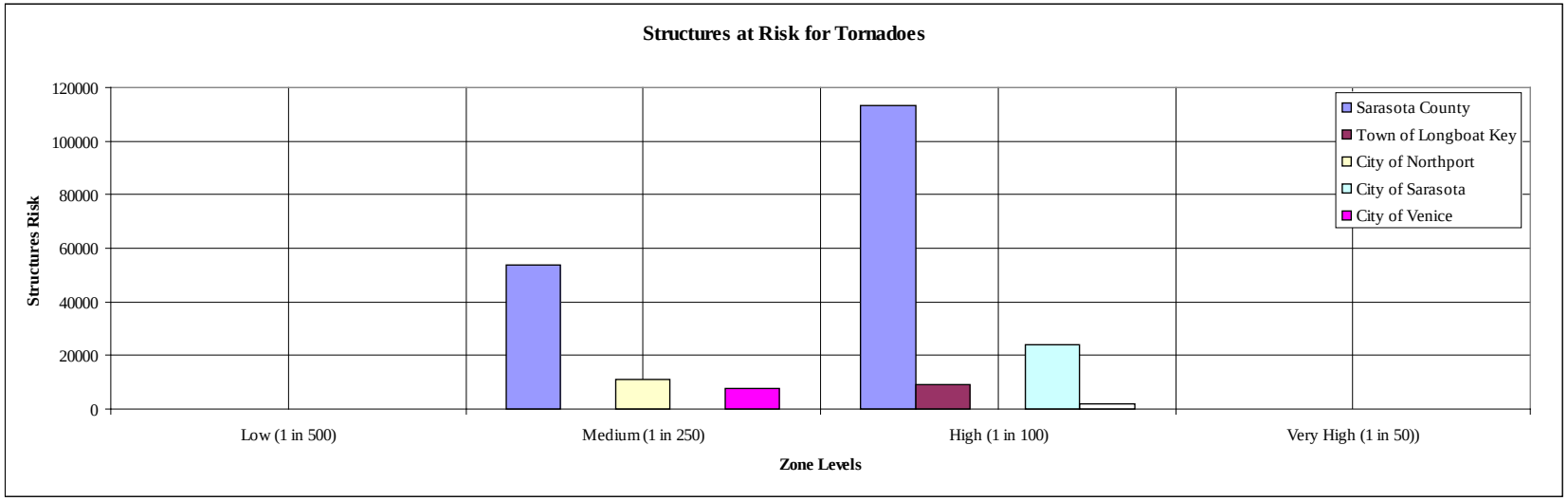
Structures at risk for KAC Tornado Risk

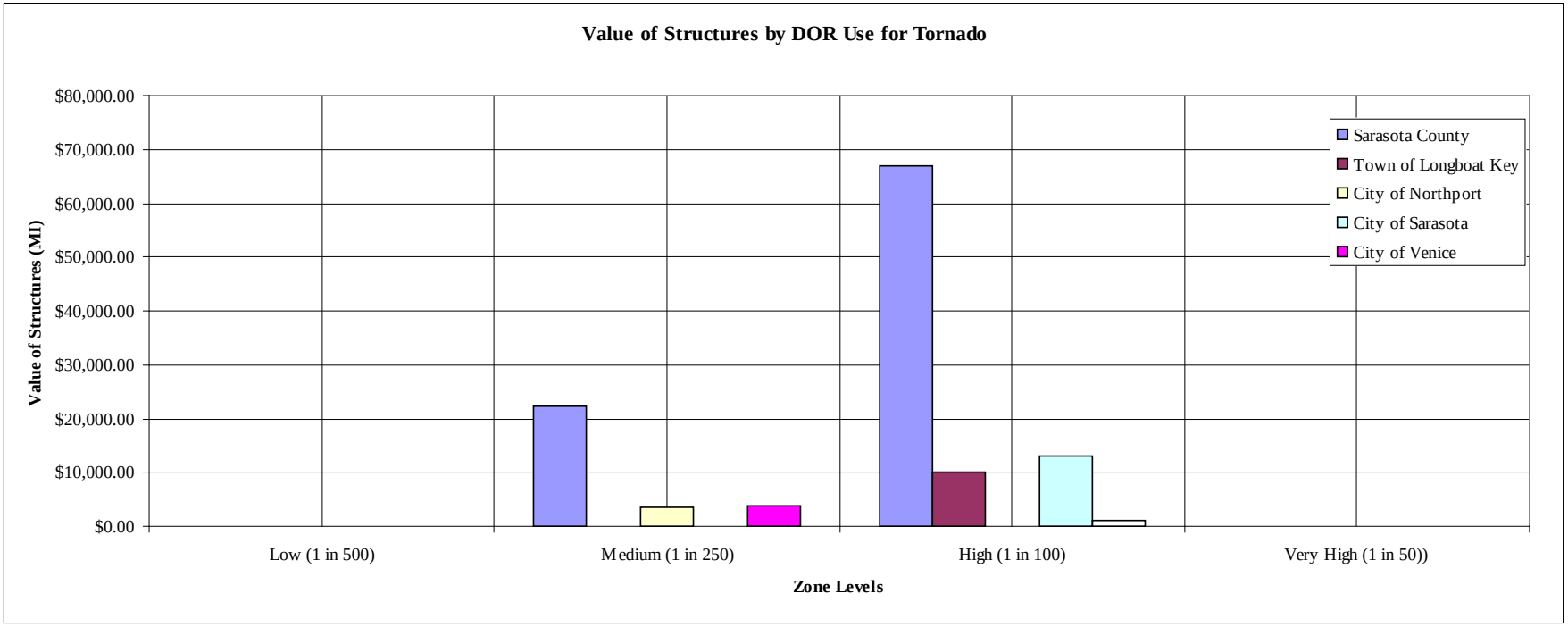
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0	0	0	0	0	0	0
Medium (1 in 250)	36236	22321	4883	7036	1293	538	165
High (1 in 100)	81972	49633	3026	24171	2958	1383	801
Very High (1 in 50))	1	1	0	0	0	0	0

Value of Structures by DOR Use for KAC Tornado Risk

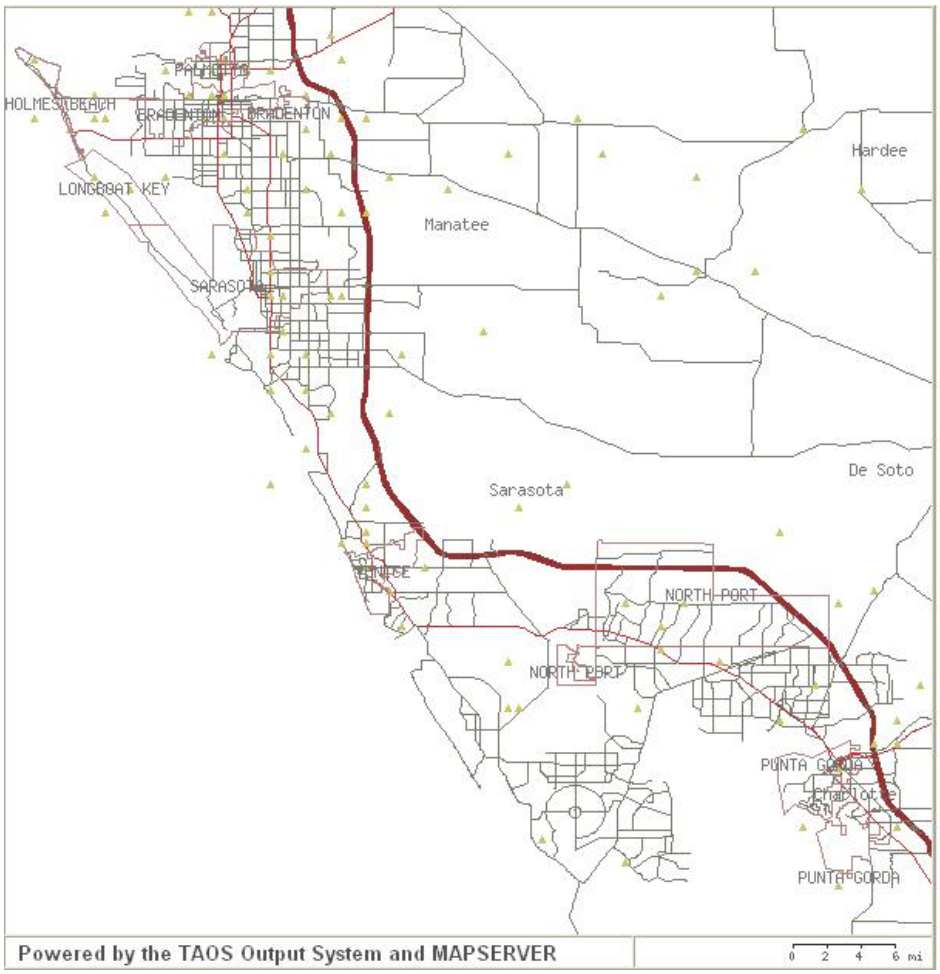
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Low (1 in 500)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium (1 in 250)	$ 15.48 BI	$ 9.50 BI	$ 622.62 MI	$ 2.59 BI	$ 1.15 BI	$ 1.38 BI	$ 251.93 MI
High (1 in 100)	$ 44.21 BI	$ 23.53 BI	$ 253.01 MI	$ 13.43 BI	$ 3.84 BI	$ 2.05 BI	$ 1.11 BI
Very High (1 in 50))	$ 196.89 TH	$ 196.89 TH	0.00	0.00	0.00	0.00	0.00


Population at Risk for Tornadoes
250000
200000
150000
100000
50000
0
Population Risk
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Low (1 in 500)
Medium (1 in 250)
High (1 in 100)
Very High (1 in 50))
Zone Levels


Structures at Risk for Tornadoes
120000
100000
80000
60000
40000
20000
0
Structures Risk
Low (1 in 500)
Medium (1 in 250)
High (1 in 100)
Very High (1 in 50))
Zone Levels
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice

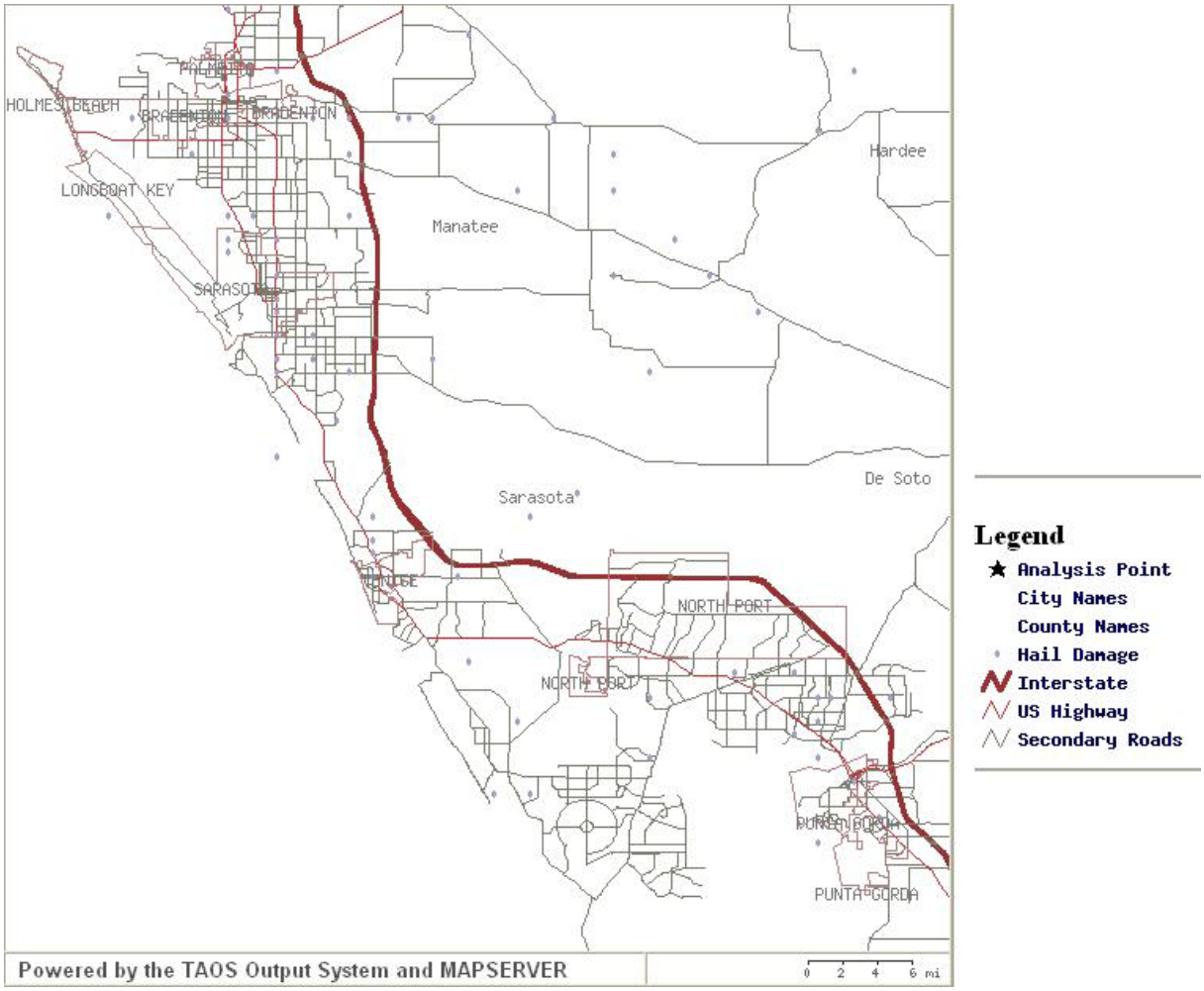

Value of Structures by DOR Use for Tornado
$80,000.00
$70,000.00
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$0.00
Value of Structures (MI)
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Low (1 in 500)
Medium (1 in 250)
High (1 in 100)
Very High (1 in 50))
Zone Levels

Thunderstorm and Hail Damage Risk Assessment for Sarasota County



Legend

- ★ Analysis Point
- City Names
- County Names
- Thunderstorm Damage
- Interstate
- US Highway
- Secondary Roads



Thunderstorm and Hail Damage Risk Assessment for Sarasota County

Population at risk for KAC Thunderstorm Damage Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	325957	23985	102477	117986	24817	0	15092
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Structures at risk for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	0	0	0	0	0	0	0
High (50)	5	2	0	3	0	0	0
Medium (100)	167477	99143	10119	47214	6865	3104	1032
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	$ 11.49 MI	$0.00	$0.00	$0.00	$0.00	$ 11.49 MI	$0.00
High (50)	$ 7.50 MI	$ 418.66 TH	$0.00	$ 1.43 MI	$0.00	$ 5.65 MI	$0.00
Medium (100)	$ 89.31 BI	$ 43.30 BI	$ 1.06 BI	$ 28.75 BI	$ 8.95 BI	$ 5.77 BI	$ 1.49 BI
Low (200)	$ 2.35 MI	$0.00	$0.00	$0.00	$ 2.35 MI	$0.00	$0.00
V. Low (500)	$ 154.65 MI	$0.00	$0.00	$0.00	$ 154.65 MI	$0.00	$0.00

Thunderstorm and Hail Damage Risk Assessment for Town of Longboat Key

Population at risk for KAC Thunderstorm Damage Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	7575	103	4375	1701	216	44	70
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Structures at risk for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	9002	1713	176	6916	154	39	4
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
High (50)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Medium (100)	$ 10.07 BI	$ 1.78 BI	$ 9.94 MI	$ 8.02 BI	$ 203.11 MI	$ 54.26 MI	$ 944.89 TH
Low (200)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
V. Low (500)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Thunderstorm and Hail Damage Risk Assessment for City of Northport

Population at risk for KAC Thunderstorm Damage Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	22717	1523	5305	10092	1865	0	1154
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Structures at risk for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	10884	9345	987	294	113	133	12
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
High (50)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Medium (100)	$ 3.43 BI	$ 2.96 BI	$ 86.89 MI	$ 83.76 MI	$ 116.29 MI	$ 164.99 MI	$ 17.19 MI
Low (200)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
V. Low (500)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Thunderstorm and Hail Damage Risk Assessment for City of Sarasota

Population at risk for KAC Thunderstorm Damage Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	52537	12044	11691	21477	8271	0	3781
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Structures at risk for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	23952	13587	709	7058	1829	739	30
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
High (50)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Medium (100)	$ 12.95 BI	$ 4.76 BI	$ 64.49 MI	$ 4.10 BI	$ 2.33 BI	$ 1.61 BI	$ 82.24 MI
Low (200)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
V. Low (500)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Thunderstorm and Hail Damage Risk Assessment for City of Venice

Population at risk for KAC Thunderstorm Damage Risk

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	17850	350	10248	8306	977	0	519
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Structures at risk for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	9684	4083	442	4226	622	287	24
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
High (50)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Medium (100)	$ 4.84 BI	$ 1.66 BI	$ 34.51 MI	$ 1.86 BI	$ 744.21 MI	$ 524.65 MI	$ 24.06 MI
Low (200)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
V. Low (500)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Thunderstorm and Hail Damage Risk Assessment for Sarasota County - Unincorporated Areas

Population at risk for KAC Thunderstorm Damage Risk

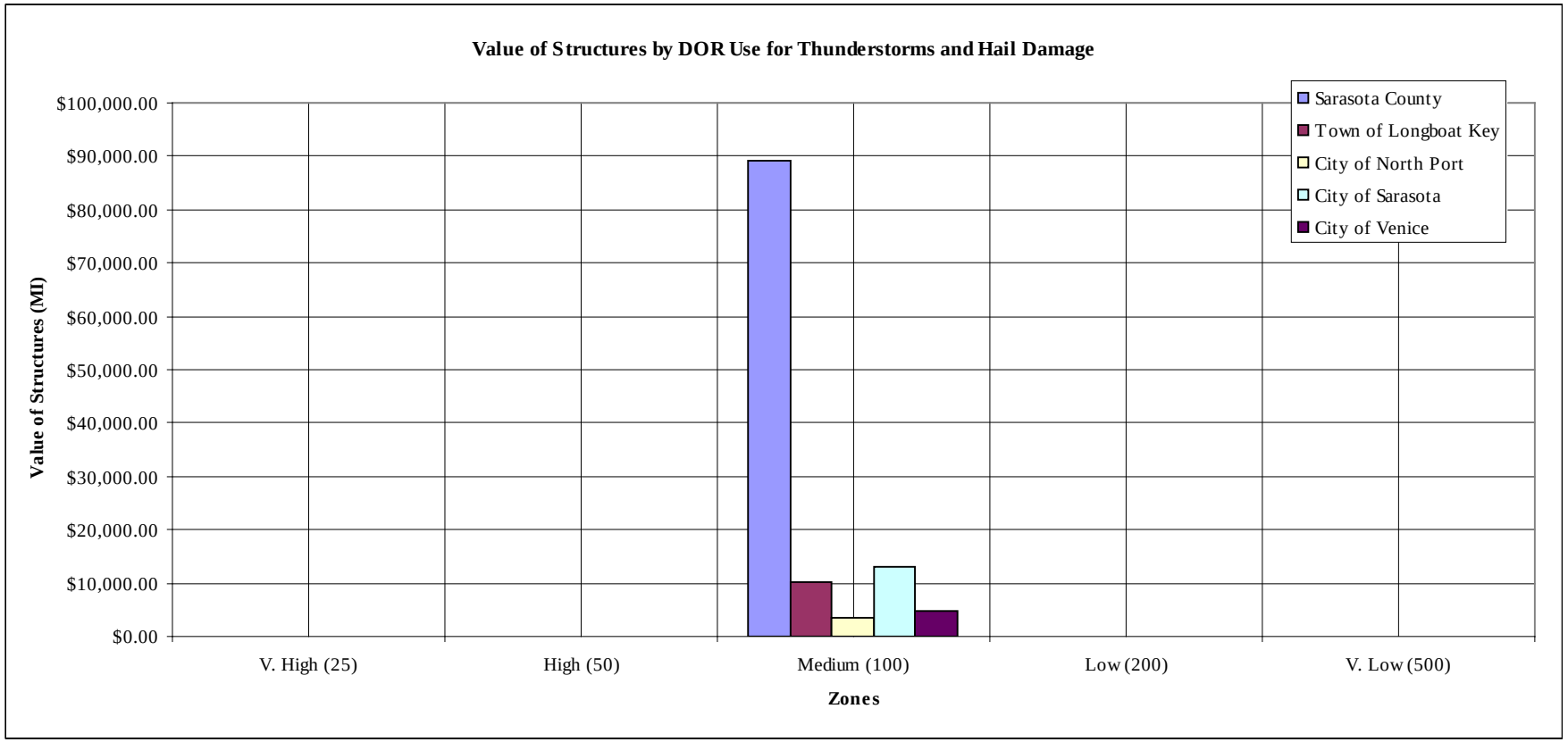
Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
V. High (25)	0	0	0	0	0	0	0
High (50)	0	0	0	0	0	0	0
Medium (100)	227841	10052	72192	77154	13591	0	9601
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Structures at risk for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	0	0	0	0	0	0	0
High (50)	1	1	0	0	0	0	0
Medium (100)	118208	71954	7909	31207	4251	1921	966
Low (200)	0	0	0	0	0	0	0
V. Low (500)	0	0	0	0	0	0	0

Value of Structures by DOR Use for KAC Thunderstorm Damage Risk

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
V. High (25)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
High (50)	$ 196.89 TH	$ 196.89 TH	$0.00	$0.00	$0.00	$0.00	$0.00
Medium (100)	$ 59.69 BI	$ 33.02 BI	$ 875.63 MI	$ 16.02 BI	$ 4.98 BI	$ 3.43 BI	$ 1.36 BI
Low (200)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
V. Low (500)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00


Value of Structures by DOR Use for Thunderstorms and Hail Damage
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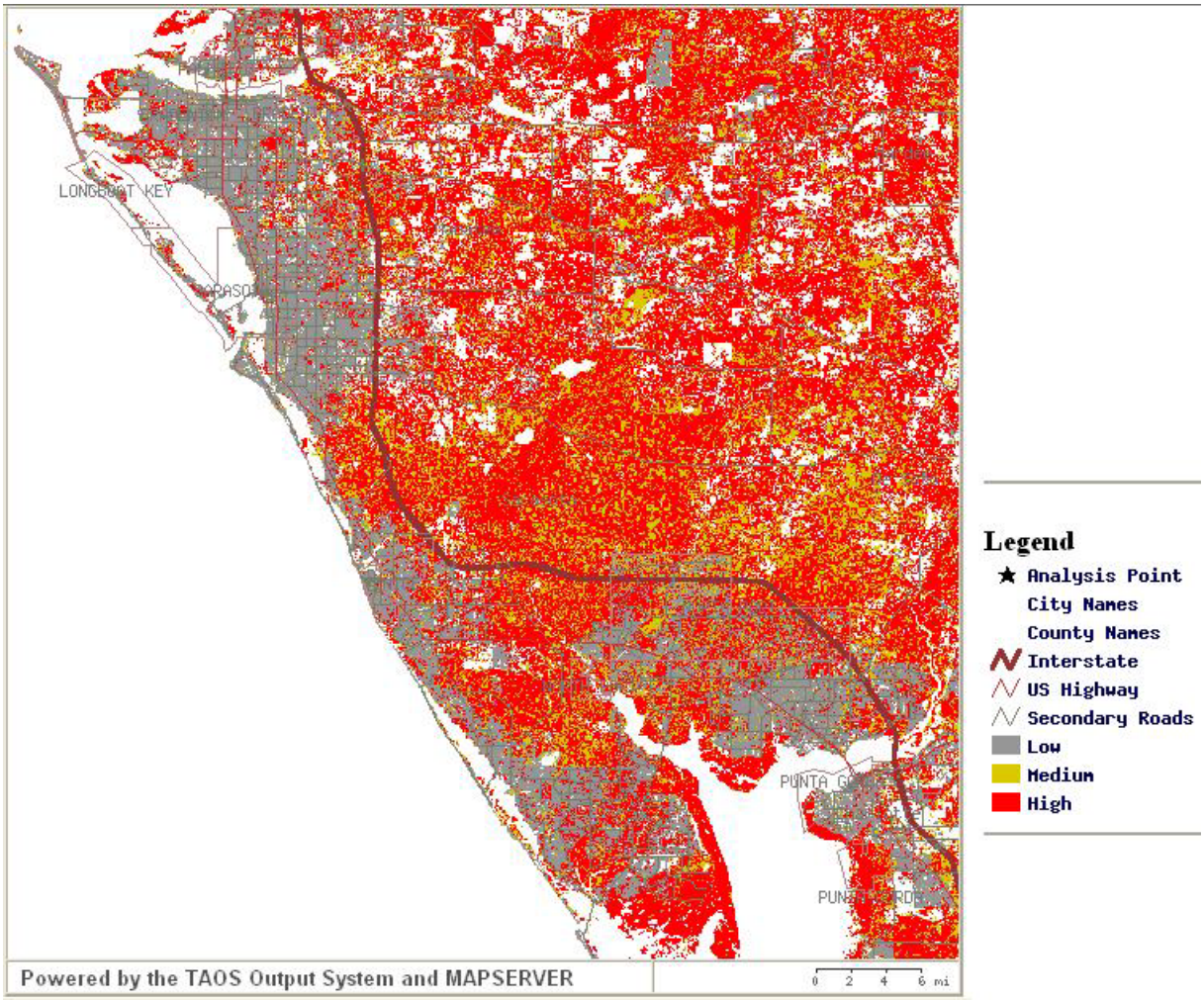
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$0.00
Value of Structures (MI)
V. High (25)
High (50)
Medium (100)
Low (200)
V. Low (500)
Zones
Sarasota County
Town of Longboat Key
City of North Port
City of Sarasota
City of Venice

Wildfire Risk Assessment for Sarasota County



Wildlife Fire Risk Assessment for Sarasota County

Population at risk for FDOF Fire Risk LOC

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	1098	144	226	355	141	0	74
Level 2	8634	290	2013	2191	307	0	282
Level 3	16163	746	5726	5038	895	0	512
Level 4	5131	70	2005	2277	283	0	167
Level 5 (medium)	37950	2410	11605	12780	2517	0	1685
Level 6	18833	1285	6250	6392	1247	0	749
Level 7	76682	6048	22914	26738	5656	0	3689
Level 8	28120	1956	6659	11022	2134	0	1615
Level 9 (high)	12912	942	3468	5621	1128	0	702

Structures at risk for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	36255	250	23287	2125	8433	1337	823
Level 2	13324	1511	7507	1862	1923	335	186
Level 3	12272	3919	4156	2872	867	228	230
Level 4	4539	3009	72	1140	165	85	68
Level 5 (medium)	18936	10778	574	5966	899	557	162
Level 6	10995	7159	391	2511	580	261	93
Level 7	36206	23287	2125	8433	1337	823	201
Level 8	11871	7507	1862	1923	335	186	58
Level 9 (high)	8359	4156	2872	867	228	230	6

Value of Structures by DOR Use for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	$ 16.86 BI	$ 164.42 MI	$ 9.97 BI	$ 481.97 MI	$ 3.63 BI	$ 1.35 BI	$ 1.26 BI
Level 2	$ 6.12 BI	$ 845.54 MI	$ 2.91 BI	$ 668.34 MI	$ 917.46 MI	$ 508.24 MI	$ 277.54 MI
Level 3	$ 6.78 BI	$ 1.91 BI	$ 1.35 BI	$ 1.44 BI	$ 1.29 BI	$ 403.25 MI	$ 387.62 MI
Level 4	$ 2.84 BI	$ 1.49 BI	$ 7.24 MI	$ 727.40 MI	$ 250.48 MI	$ 265.56 MI	$ 96.70 MI
Level 5 (medium)	$ 11.37 BI	$ 4.88 BI	$ 60.90 MI	$ 4.22 BI	$ 1.14 BI	$ 868.94 MI	$ 207.14 MI
Level 6	$ 5.80 BI	$ 3.11 BI	$ 38.11 MI	$ 1.34 BI	$ 747.74 MI	$ 456.06 MI	$ 112.35 MI
Level 7	$ 16.93 BI	$ 9.97 BI	$ 481.97 MI	$ 3.63 BI	$ 1.35 BI	$ 1.26 BI	$ 227.24 MI
Level 8	$ 5.34 BI	$ 2.91 BI	$ 668.34 MI	$ 917.46 MI	$ 508.24 MI	$ 277.54 MI	$ 59.97 MI
Level 9 (high)	$ 4.87 BI	$ 1.35 BI	$ 1.44 BI	$ 1.29 BI	$ 403.25 MI	$ 387.62 MI	$ 5.10 MI

Wildlife Fire Risk Assessment for Town of Longboat Key

Population at risk for FDOF Fire Risk LOC

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	0	0	0	0	0	0	0
Level 2	0	0	0	0	0	0	0
Level 3	831	12	669	230	22	0	0
Level 4	0	0	0	0	0	0	0
Level 5 (medium)	2851	16	1675	621	85	0	37
Level 6	0	0	0	0	0	0	0
Level 7	0	0	0	0	0	0	0
Level 8	0	0	0	0	0	0	0
Level 9 (high)	0	0	0	0	0	0	0

Structures at risk for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	129	25	0	103	1	0	0
Level 2	215	52	2	150	10	1	0
Level 3	299	75	1	221	2	0	0
Level 4	108	12	0	95	0	1	0
Level 5 (medium)	2016	450	36	1493	30	7	0
Level 6	358	92	10	255	1	0	0
Level 7	104	0	103	1	0	0	0
Level 8	163	2	150	10	1	0	0
Level 9 (high)	224	1	221	2	0	0	0

Value of Structures by DOR Use for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	$ 286.93 MI	$ 50.74 MI	$0.00	$ 232.76 MI	$ 3.44 MI	0	$0.00
Level 2	$ 245.99 MI	$ 55.40 MI	$ 139.08 TH	$ 167.58 MI	$ 22.63 MI	$ 235.95 TH	$0.00
Level 3	$ 310.65 MI	$ 52.44 MI	$ 113.83 TH	$ 254.62 MI	$ 3.47 MI	0	$0.00
Level 4	$ 178.56 MI	$ 18.43 MI	$0.00	$ 160.13 MI	0	$814.78	$0.00
Level 5 (medium)	$ 2.36 BI	$ 376.71 MI	$ 1.97 MI	$ 1.91 BI	$ 53.40 MI	$ 25.29 MI	$0.00
Level 6	$ 484.12 MI	$ 139.10 MI	$ 393.56 TH	$ 344.61 MI	$ 16.82 TH	$0.00	$0.00
Level 7	$ 236.19 MI	$0.00	$ 232.76 MI	$ 3.44 MI	$0.00	0	$0.00
Level 8	$ 190.59 MI	$ 139.08 TH	$ 167.58 MI	$ 22.63 MI	$ 235.95 TH	$0.00	$0.00
Level 9 (high)	$ 258.21 MI	$ 113.83 TH	$ 254.62 MI	$ 3.47 MI	$0.00	0	$0.00

Wildlife Fire Risk Assessment for City of Northport

Population at risk for FDOF Fire Risk LOC

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	0	0	0	0	0	0	0
Level 2	0	0	0	0	0	0	0
Level 3	0	0	0	0	0	0	0
Level 4	0	0	0	0	0	0	0
Level 5 (medium)	2321	144	226	569	127	0	165
Level 6	140	23	22	22	0	0	5
Level 7	0	0	0	0	0	0	0
Level 8	11390	878	2537	4741	890	0	567
Level 9 (high)	5785	416	1252	2722	439	0	264

Structures at risk for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	1579	0	1439	75	32	9	24
Level 2	3065	4	2822	129	58	27	25
Level 3	3118	169	2398	361	104	37	49
Level 4	90	80	4	3	1	1	1
Level 5 (medium)	335	297	22	10	1	3	2
Level 6	200	183	11	3	3	0	0
Level 7	1581	1439	75	32	9	24	2
Level 8	3068	2822	129	58	27	25	7
Level 9 (high)	2949	2398	361	104	37	49	0

Value of Structures by DOR Use for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	$ 528.15 MI	$0.00	$ 466.23 MI	$ 7.20 MI	$ 11.09 MI	$ 5.56 MI	$ 38.08 MI
Level 2	$ 1.06 BI	$ 1.30 MI	$ 970.28 MI	$ 12.13 MI	$ 14.85 MI	$ 30.62 MI	$ 28.80 MI
Level 3	$ 936.32 MI	$ 59.83 MI	$ 698.21 MI	$ 31.15 MI	$ 32.37 MI	$ 41.14 MI	$ 73.61 MI
Level 4	$ 34.91 MI	$ 29.71 MI	$ 219.32 TH	$ 426.54 TH	$ 2.56 MI	$ 568.81 TH	$ 1.42 MI
Level 5 (medium)	$ 115.50 MI	$ 103.58 MI	$ 1.89 MI	$ 2.65 MI	$ 700.41 TH	$ 3.52 MI	$ 3.17 MI
Level 6	$ 76.17 MI	$ 68.26 MI	$ 886.14 TH	$ 1.07 MI	$ 5.95 MI	$0.00	$0.00
Level 7	$ 530.77 MI	$ 466.23 MI	$ 7.20 MI	$ 11.09 MI	$ 5.56 MI	$ 38.08 MI	$ 2.62 MI
Level 8	$ 1.07 BI	$ 970.28 MI	$ 12.13 MI	$ 14.85 MI	$ 30.62 MI	$ 28.80 MI	$ 9.98 MI
Level 9 (high)	$ 876.49 MI	$ 698.21 MI	$ 31.15 MI	$ 32.37 MI	$ 41.14 MI	$ 73.61 MI	$0.00

Wildlife Fire Risk Assessment for City of Sarasota

Population at risk for FDOF Fire Risk LOC

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	1098	144	226	355	141	0	74
Level 2	1796	137	544	788	166	0	87
Level 3	1263	394	326	375	296	0	64
Level 4	25	0	16	7	0	0	0
Level 5 (medium)	7843	1438	1094	2593	869	0	373
Level 6	4246	745	1163	1661	408	0	271
Level 7	11250	3633	2374	5422	2306	0	1136
Level 8	0	0	0	0	0	0	0
Level 9 (high)	2056	340	280	847	265	0	188

Structures at risk for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	4331	68	2691	273	863	259	177
Level 2	573	204	179	98	56	27	9
Level 3	1340	762	38	424	85	31	0
Level 4	925	605	8	240	46	26	0
Level 5 (medium)	4340	2663	21	1232	263	159	2
Level 6	1518	972	18	255	189	79	5
Level 7	4267	2691	273	863	259	177	4
Level 8	372	179	98	56	27	9	3
Level 9 (high)	578	38	424	85	31	0	0

Value of Structures by DOR Use for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	$ 1.41 BI	$ 20.14 MI	$ 643.03 MI	$ 26.37 MI	$ 320.51 MI	$ 195.35 MI	$ 201.33 MI
Level 2	$ 260.00 MI	$ 80.27 MI	$ 48.69 MI	$ 35.01 MI	$ 52.20 MI	$ 33.90 MI	$ 9.93 MI
Level 3	$ 709.14 MI	$ 299.38 MI	$ 6.39 MI	$ 190.39 MI	$ 97.03 MI	$ 115.96 MI	$0.00
Level 4	$ 623.29 MI	$ 248.41 MI	$ 529.17 TH	$ 147.67 MI	$ 36.53 MI	$ 190.15 MI	$0.00
Level 5 (medium)	$ 2.63 BI	$ 969.17 MI	$ 1.22 MI	$ 763.35 MI	$ 440.29 MI	$ 448.37 MI	$ 3.59 MI
Level 6	$ 723.43 MI	$ 258.15 MI	$ 1.76 MI	$ 89.02 MI	$ 236.89 MI	$ 131.20 MI	$ 6.41 MI
Level 7	$ 1.39 BI	$ 643.03 MI	$ 26.37 MI	$ 320.51 MI	$ 195.35 MI	$ 201.33 MI	$ 3.13 MI
Level 8	$ 182.08 MI	$ 48.69 MI	$ 35.01 MI	$ 52.20 MI	$ 33.90 MI	$ 9.93 MI	$ 2.35 MI
Level 9 (high)	$ 409.76 MI	$ 6.39 MI	$ 190.39 MI	$ 97.03 MI	$ 115.96 MI	0	$0.00

Wildlife Fire Risk Assessment for City of Venice

Population at risk for FDOF Fire Risk LOC

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	0	0	0	0	0	0	0
Level 2	0	0	0	0	0	0	0
Level 3	2809	47	1601	1001	67	0	51
Level 4	0	0	0	0	0	0	0
Level 5 (medium)	4072	159	2429	1762	172	0	142
Level 6	0	0	0	0	0	0	0
Level 7	2239	21	1636	1052	170	0	62
Level 8	0	0	0	0	0	0	0
Level 9 (high)	0	0	0	0	0	0	0

Structures at risk for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	1738	0	691	119	756	81	91
Level 2	397	5	253	26	81	23	9
Level 3	286	91	86	70	34	3	2
Level 4	226	72	3	138	13	0	0
Level 5 (medium)	1235	352	51	617	97	118	0
Level 6	405	157	22	170	42	14	0
Level 7	1739	691	119	756	81	91	1
Level 8	400	253	26	81	23	9	8
Level 9 (high)	195	86	70	34	3	2	0

Value of Structures by DOR Use for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	$ 847.99 MI	$0.00	$ 322.22 MI	$ 12.10 MI	$ 271.72 MI	$ 91.57 MI	$ 150.39 MI
Level 2	$ 170.57 MI	$ 6.24 MI	$ 97.91 MI	$ 7.97 MI	$ 23.80 MI	$ 30.15 MI	$ 4.50 MI
Level 3	$ 125.61 MI	$ 41.68 MI	$ 31.18 MI	$ 35.65 MI	$ 12.68 MI	$ 3.64 MI	$ 769.40 TH
Level 4	$ 110.35 MI	$ 25.54 MI	$ 372.41 TH	$ 68.95 MI	$ 15.49 MI	$0.00	$0.00
Level 5 (medium)	$ 606.15 MI	$ 167.38 MI	$ 4.59 MI	$ 268.23 MI	$ 91.64 MI	$ 74.31 MI	$0.00
Level 6	$ 367.48 MI	$ 55.38 MI	$ 1.98 MI	$ 92.54 MI	$ 59.71 MI	$ 157.87 MI	$0.00
Level 7	$ 848.32 MI	$ 322.22 MI	$ 12.10 MI	$ 271.72 MI	$ 91.57 MI	$ 150.39 MI	$ 328.05 TH
Level 8	$ 166.81 MI	$ 97.91 MI	$ 7.97 MI	$ 23.80 MI	$ 30.15 MI	$ 4.50 MI	$ 2.48 MI
Level 9 (high)	$ 83.93 MI	$ 31.18 MI	$ 35.65 MI	$ 12.68 MI	$ 3.64 MI	$ 769.40 TH	$0.00

Wildlife Fire Risk Assessment for Sarasota County- Unincorporated Areas

Population at risk for FDOF Fire Risk LOC

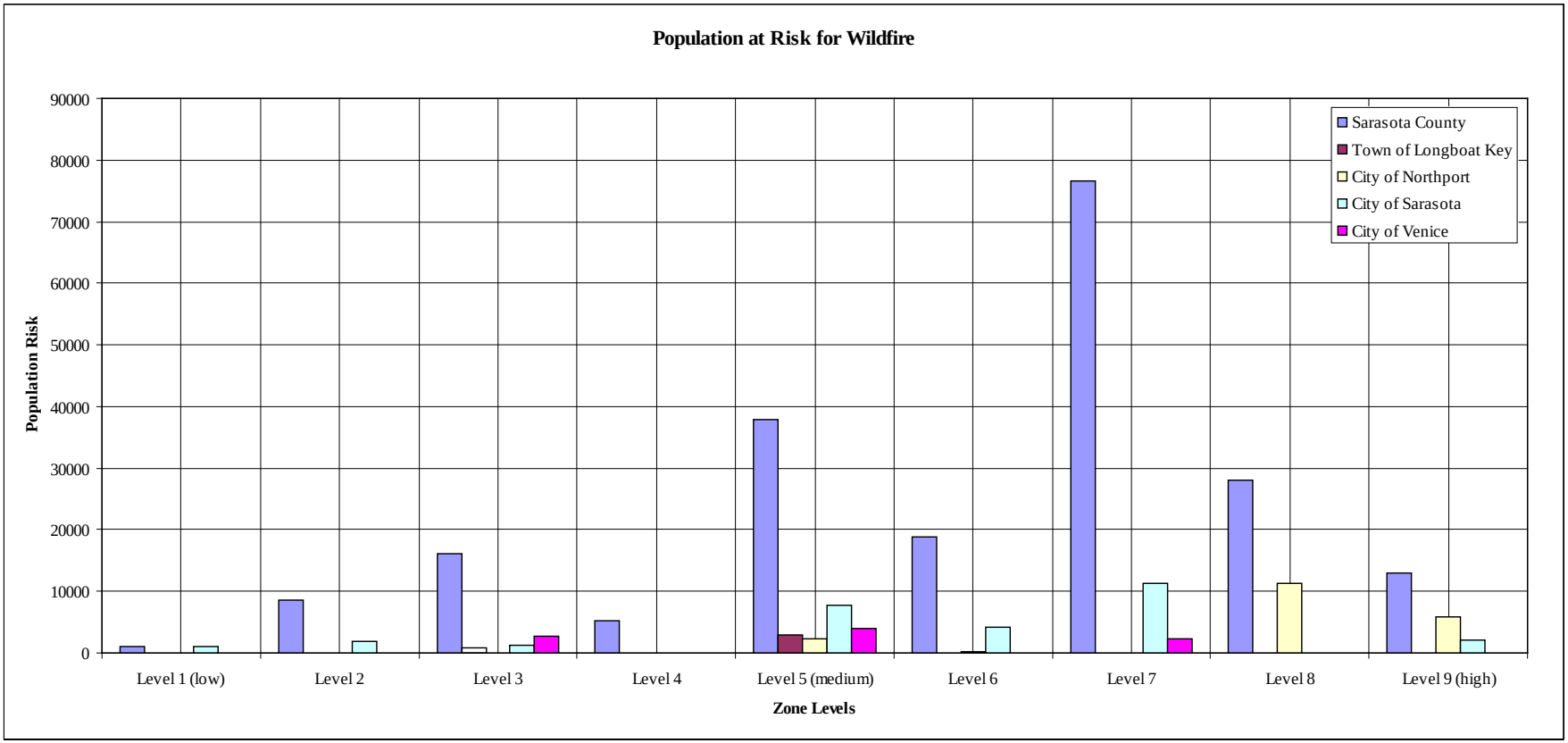
Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
Level 1 (low)	0	0	0	0	0	0	0
Level 2	6838	153	1469	1403	141	0	195
Level 3	12091	305	3799	3662	532	0	397
Level 4	5106	70	1989	2270	283	0	167
Level 5 (medium)	20863	653	6181	7235	1264	0	968
Level 6	14447	517	5065	4709	839	0	473
Level 7	63193	2394	18904	20264	3180	0	2491
Level 8	16730	1078	4122	6281	1244	0	1048
Level 9 (high)	5071	186	1936	2052	424	0	250

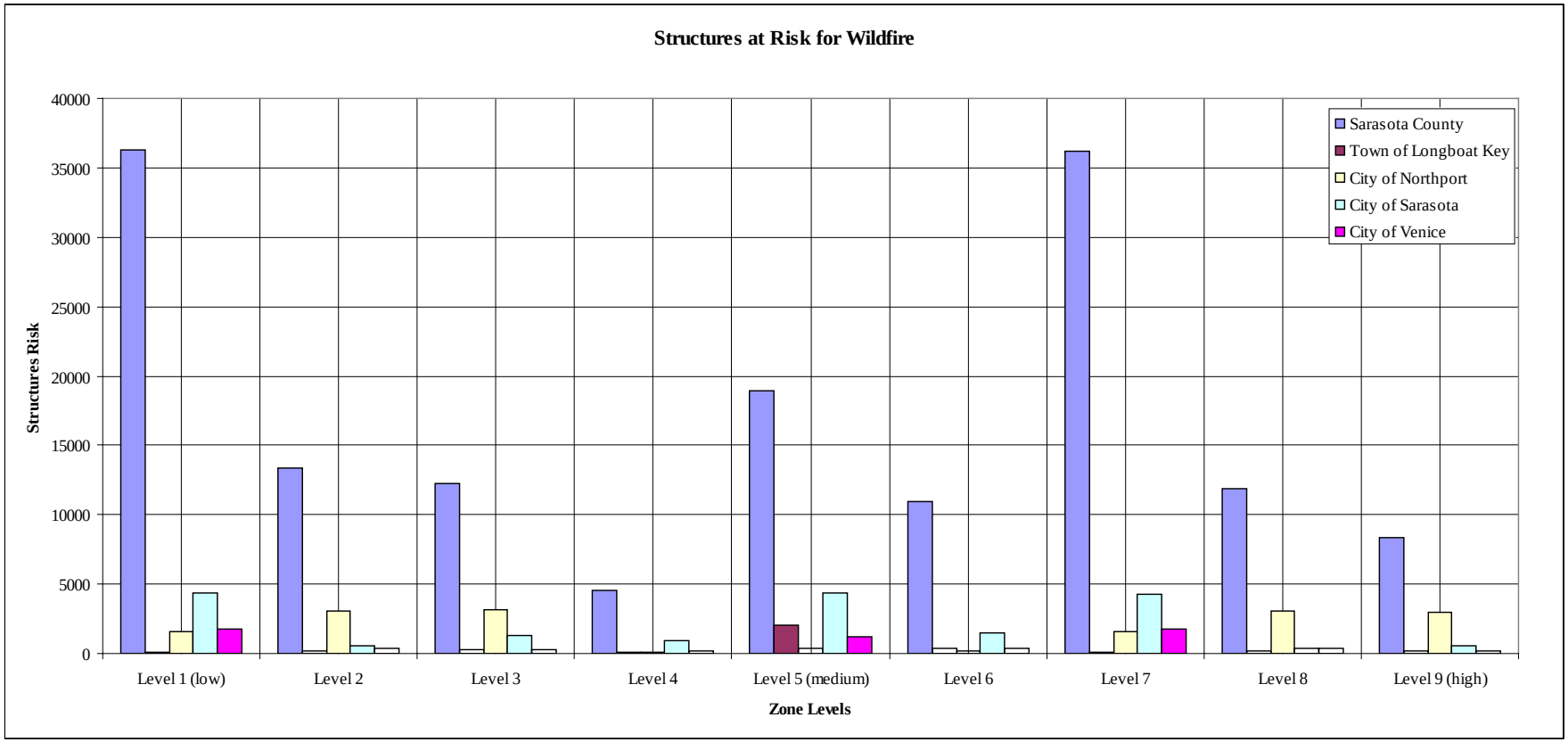
Structures at risk for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	28536	157	18506	1569	6785	988	531
Level 2	9597	1273	4652	1536	1730	263	143
Level 3	7542	2941	1704	1908	653	157	179
Level 4	3212	2244	57	682	105	57	67
Level 5 (medium)	11720	7271	444	3050	524	273	158
Level 6	8556	5794	330	1831	345	168	88
Level 7	28573	18506	1569	6785	988	531	194
Level 8	8364	4652	1536	1730	263	143	40
Level 9 (high)	4607	1704	1908	653	157	179	6

Value of Structures by DOR Use for FDOF Fire Risk LOC

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
Level 1 (low)	$ 13.80 BI	$ 93.54 MI	$ 8.56 BI	$ 206.35 MI	$ 3.02 BI	$ 1.05 BI	$ 875.19 MI
Level 2	$ 4.61 BI	$ 724.78 MI	$ 1.95 BI	$ 480.47 MI	$ 806.98 MI	$ 409.07 MI	$ 234.32 MI
Level 3	$ 4.29 BI	$ 1.52 BI	$ 635.58 MI	$ 974.28 MI	$ 606.97 MI	$ 242.50 MI	$ 313.24 MI
Level 4	$ 1.90 BI	$ 1.17 BI	$ 6.12 MI	$ 360.11 MI	$ 194.23 MI	$ 74.84 MI	$ 95.28 MI
Level 5 (medium)	$ 5.98 BI	$ 3.40 BI	$ 51.24 MI	$ 1.54 BI	$ 468.90 MI	$ 318.91 MI	$ 200.39 MI
Level 6	$ 4.14 BI	$ 2.61 BI	$ 33.09 MI	$ 812.16 MI	$ 419.97 MI	$ 166.99 MI	$ 105.94 MI
Level 7	$ 13.93 BI	$ 8.56 BI	$ 206.35 MI	$ 3.02 BI	$ 1.05 BI	$ 875.19 MI	$ 221.17 MI
Level 8	$ 3.93 BI	$ 1.95 BI	$ 480.47 MI	$ 806.98 MI	$ 409.07 MI	$ 234.32 MI	$ 45.16 MI
Level 9 (high)	$ 2.78 BI	$ 635.58 MI	$ 974.28 MI	$ 606.97 MI	$ 242.50 MI	$ 313.24 MI	$ 5.10 MI


Population at Risk for Wildfire
Population Risk
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Level 1 (low)
Level 2
Level 3
Level 4
Level 5 (medium)
Level 6
Level 7
Level 8
Level 9 (high)
Zone Levels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Structures Risk
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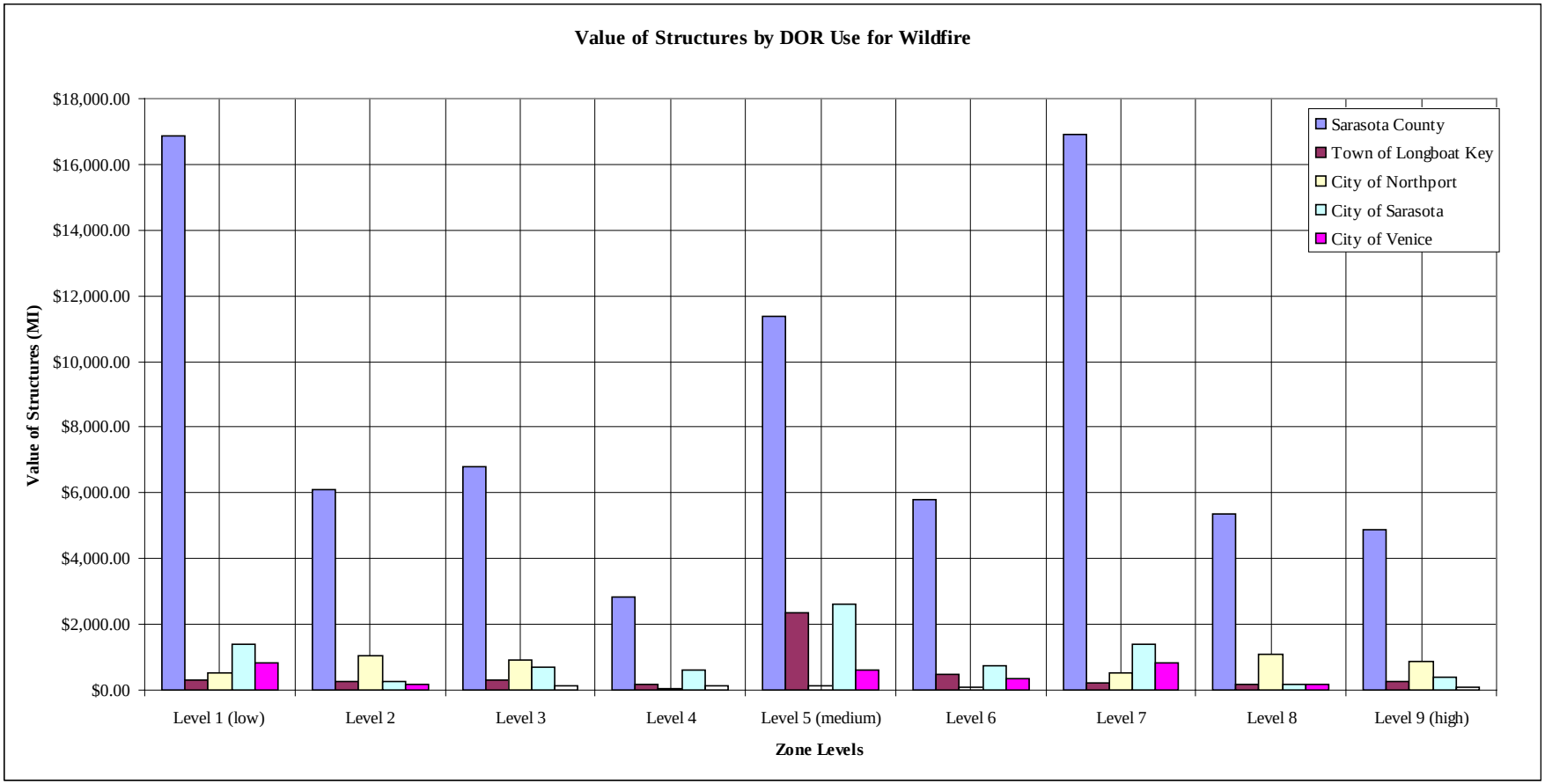
30000
25000
20000
15000
10000
5000
0
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Level 1 (low)
Level 2
Level 3
Level 4
Level 5 (medium)
Level 6
Level 7
Level 8
Level 9 (high)
Zone Levels


Value of Structures by DOR Use for Wildfire
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$10,000.00
$8,000.00
$6,000.00
$4,000.00
$2,000.00
$0.00
Value of Structures (MI)
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice
Level 1 (low)
Level 2
Level 3
Level 4
Level 5 (medium)
Level 6
Level 7
Level 8
Level 9 (high)
Zone Levels

Earthquake Risk Assessment for Sarasota County

Earthquake Risk Assessment for Sarasota County

Population at risk for USGS 50 Year Earthquake

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
ext. low	325957	23985	102477	117986	24817	0	15092
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Structures at risk for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	167479	99145	10119	47214	6865	3104	1032
very low	3	0	0	3	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Value of Structures by DOR Use for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	$ 88.64 BI	$ 43.30 BI	$ 1.06 BI	$ 28.75 BI	$ 8.27 BI	$ 5.78 BI	$ 1.49 BI
very low	$ 7.08 MI	$0.00	$0.00	$ 1.43 MI	$0.00	$ 5.65 MI	$0.00
low	$ 681.19 MI	$0.00	$0.00	$0.00	$ 681.19 MI	$0.00	$0.00
medium	$ 2.35 MI	$0.00	$0.00	$0.00	$ 2.35 MI	$0.00	$0.00

Earthquake Risk Assessment for Town of Longboat Key

Population at risk for USGS 50 Year Earthquake

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
ext. low	7575	103	4375	1701	216	44	70
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Structures at risk for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	9002	1713	176	6916	154	39	4
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Value of Structures by DOR Use for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	$ 10.07 BI	$ 1.78 BI	$ 9.94 MI	$ 8.02 BI	$ 203.11 MI	$ 54.26 MI	$ 944.89 TH
very low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
medium	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Earthquake Risk Assessment for City of Northport

Population at risk for USGS 50 Year Earthquake

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
ext. low	22717	1523	5305	10092	1865	0	1154
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Structures at risk for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	10884	9345	987	294	113	133	12
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Value of Structures by DOR Use for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	$ 3.43 BI	$ 2.96 BI	$ 86.89 MI	$ 83.76 MI	$ 116.29 MI	$ 164.99 MI	$ 17.19 MI
very low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
medium	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Earthquake Risk Assessment for City of Sarasota

Population at risk for USGS 50 Year Earthquake

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
ext. low	52537	12044	11691	21477	8271	0	3781
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Structures at risk for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	23952	13587	709	7058	1829	739	30
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Value of Structures by DOR Use for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	$ 12.95 BI	$ 4.76 BI	$ 64.49 MI	$ 4.10 BI	$ 2.33 BI	$ 1.61 BI	$ 82.24 MI
very low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
medium	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Earthquake Risk Assessment for City of Venice

Population at risk for USGS 50 Year Earthquake

Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
ext. low	17850	350	10248	8306	977	0	519
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Structures at risk for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	9684	4083	442	4226	622	287	24
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Value of Structures by DOR Use for USGS 50 Year Earthquake

Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	$ 4.84 BI	$ 1.66 BI	$ 34.51 MI	$ 1.86 BI	$ 744.21 MI	$ 524.65 MI	$ 24.06 MI
very low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
medium	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Earthquake Risk Assessment for Sarasota County- Unincorporated Areas

Population at risk for USGS 50 Year Earthquake

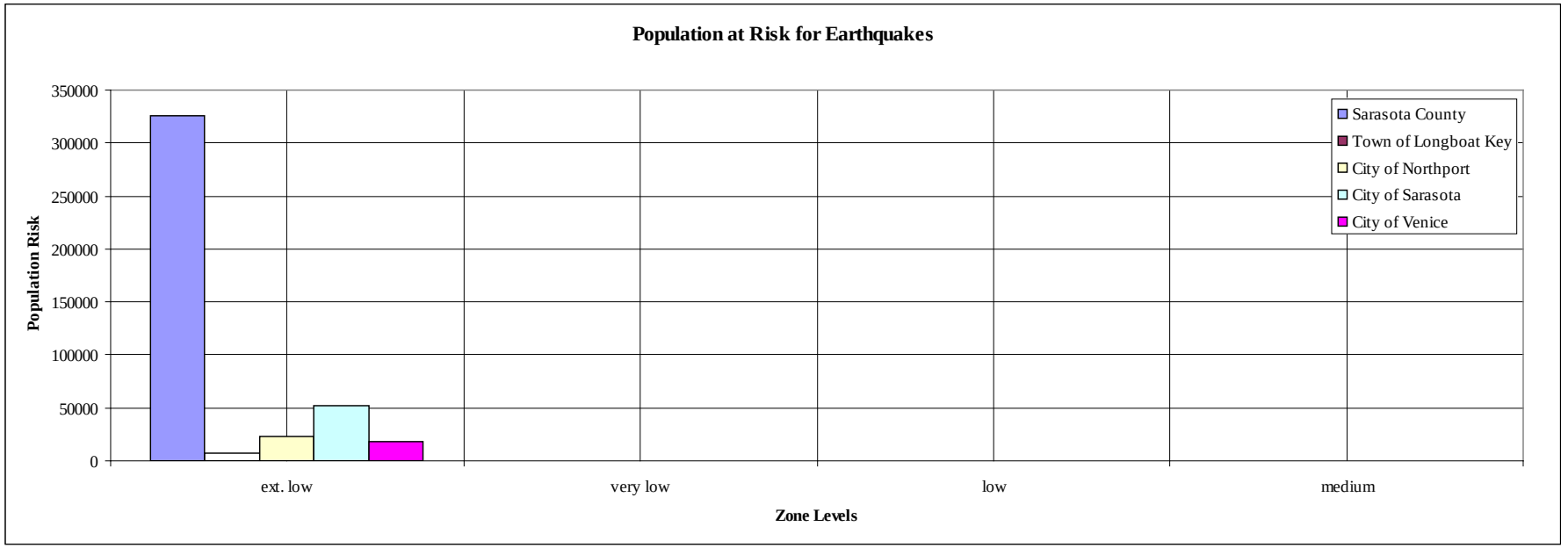
Zone	Total	Minority	Over 65	Disabled	Poverty	Lang Iso	Sing Pnt
ext. low	227841	10052	72192	77154	13591	0	9601
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

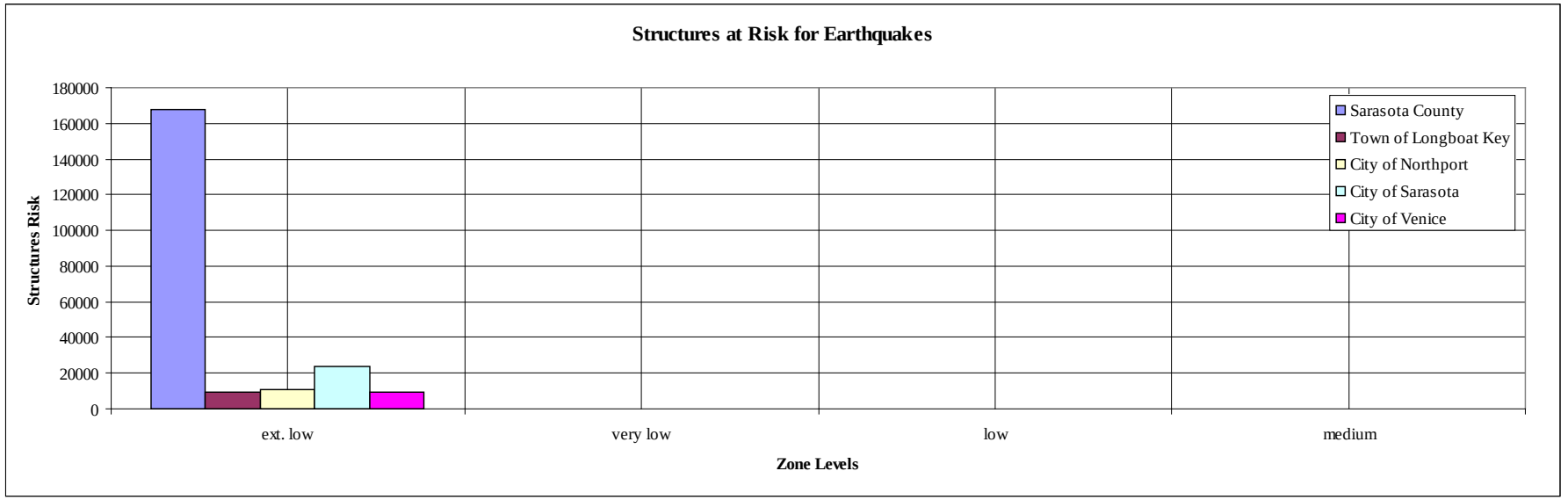
Structures at risk for USGS 50 Year Earthquake

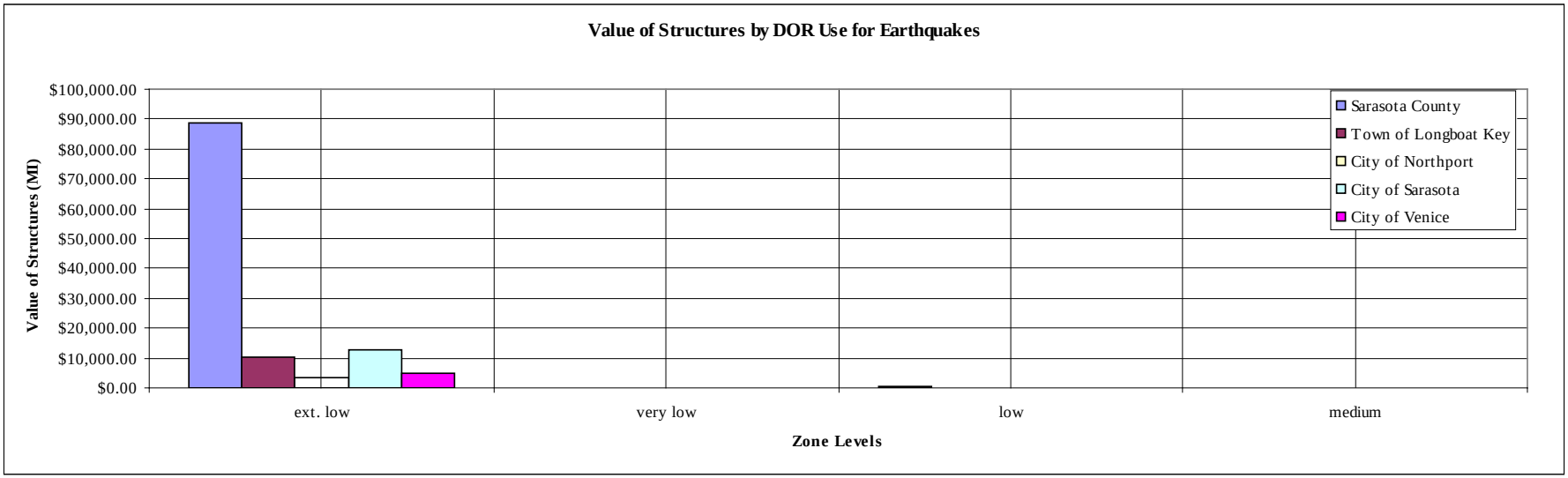
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	118209	71955	7909	31207	4251	1921	966
very low	0	0	0	0	0	0	0
low	0	0	0	0	0	0	0
medium	0	0	0	0	0	0	0

Value of Structures by DOR Use for USGS 50 Year Earthquake

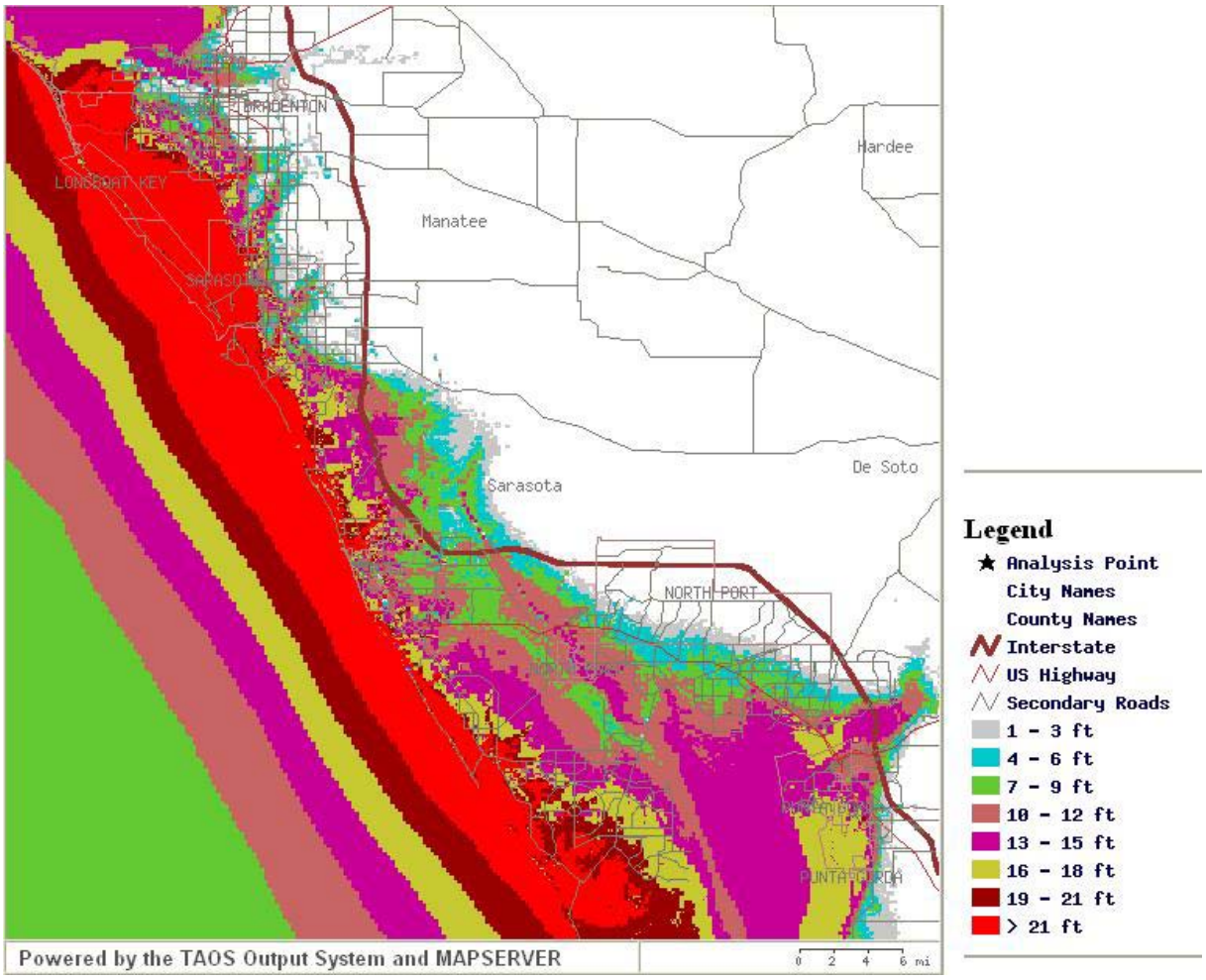
Zone	Total	SF Res	Mob Home	MF Res	Commercial	Agriculture	Gov/Instit
ext. low	$ 59.69 BI	$ 33.02 BI	$ 875.63 MI	$ 16.02 BI	$ 4.98 BI	$ 3.43 BI	$ 1.36 BI
very low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
low	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
medium	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00


Population at Risk for Earthquakes
Population Risk
350000
300000
250000
200000
150000
100000
50000
0
ext. low
very low
low
medium
Zone Levels
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice

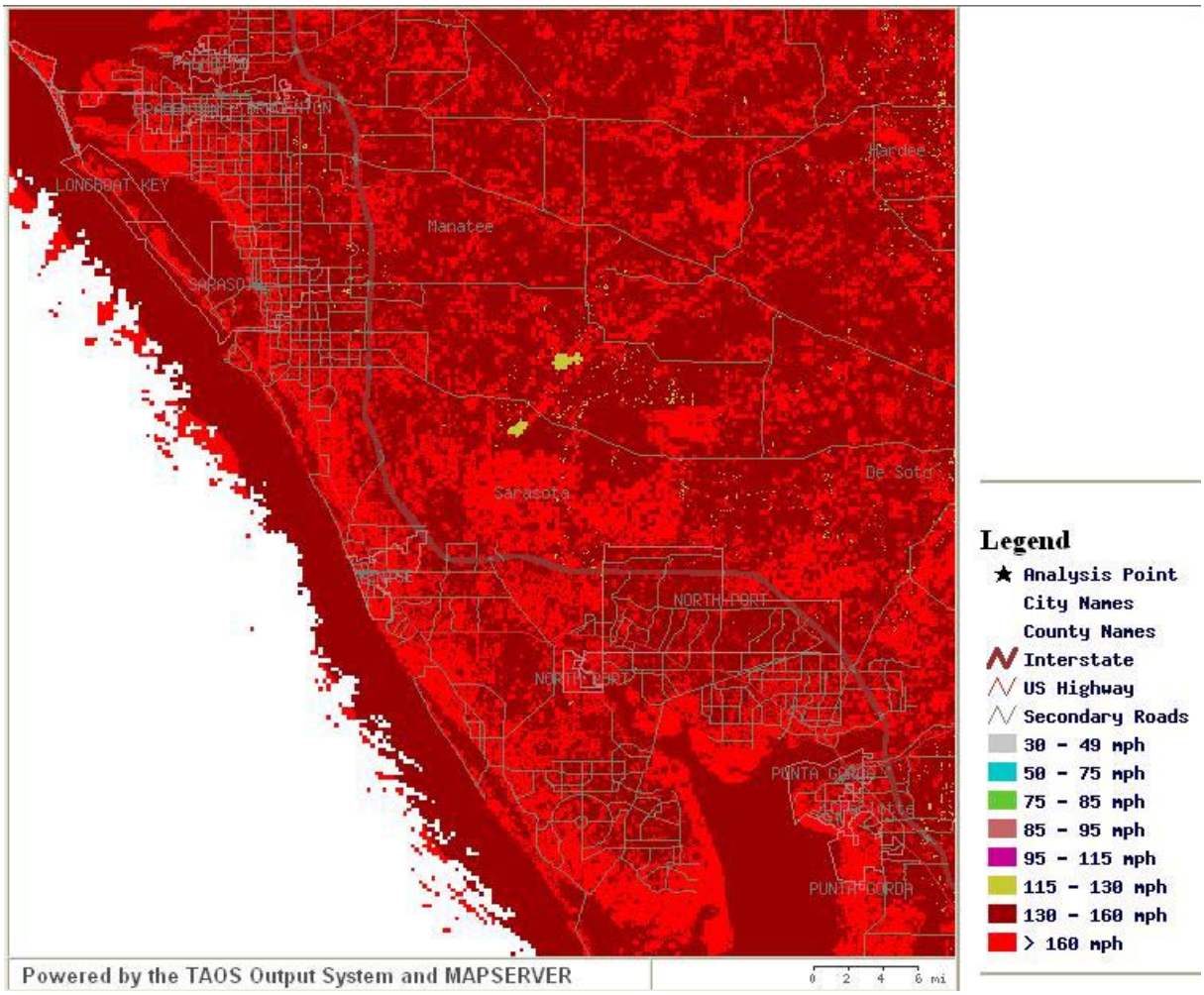

Structures at Risk for Earthquakes
Structures Risk
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
ext. low
very low
low
medium
Zone Levels
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice


Value of Structures by DOR Use for Earthquakes
$100,000.00
$90,000.00
$80,000.00
$70,000.00
$60,000.00
$50,000.00
$40,000.00
$30,000.00
$20,000.00
$10,000.00
$0.00
Value of Structures (MI)
ext. low
very low
low
medium
Zone Levels
Sarasota County
Town of Longboat Key
City of Northport
City of Sarasota
City of Venice

Category 5 Hurricane Hazards for Sarasota County



Category 5 Storm Surge



Category 5 Wind Risk

Category 5 Hurricane Hazards for Sarasota County

Impact Summary

Peak winds 193.mph, peak water depth 32.2ft.

Category 5 Maxima Damage Summary:

Tax Parcel based Wind Damage:	$ 58.90 Billion	
DOR based Flood Damage:	$ 40.98 Billion	
DOR Structures in Flood Zone:	127000	
Census based Wind Damage:	$ 56.66 Billion	
Census based Flood .Damage:	$ 16.62 Billion	
Uninhabitable Housing Units:	36200	19.8% of total HU.

Population at risk for Category 5 Maxima

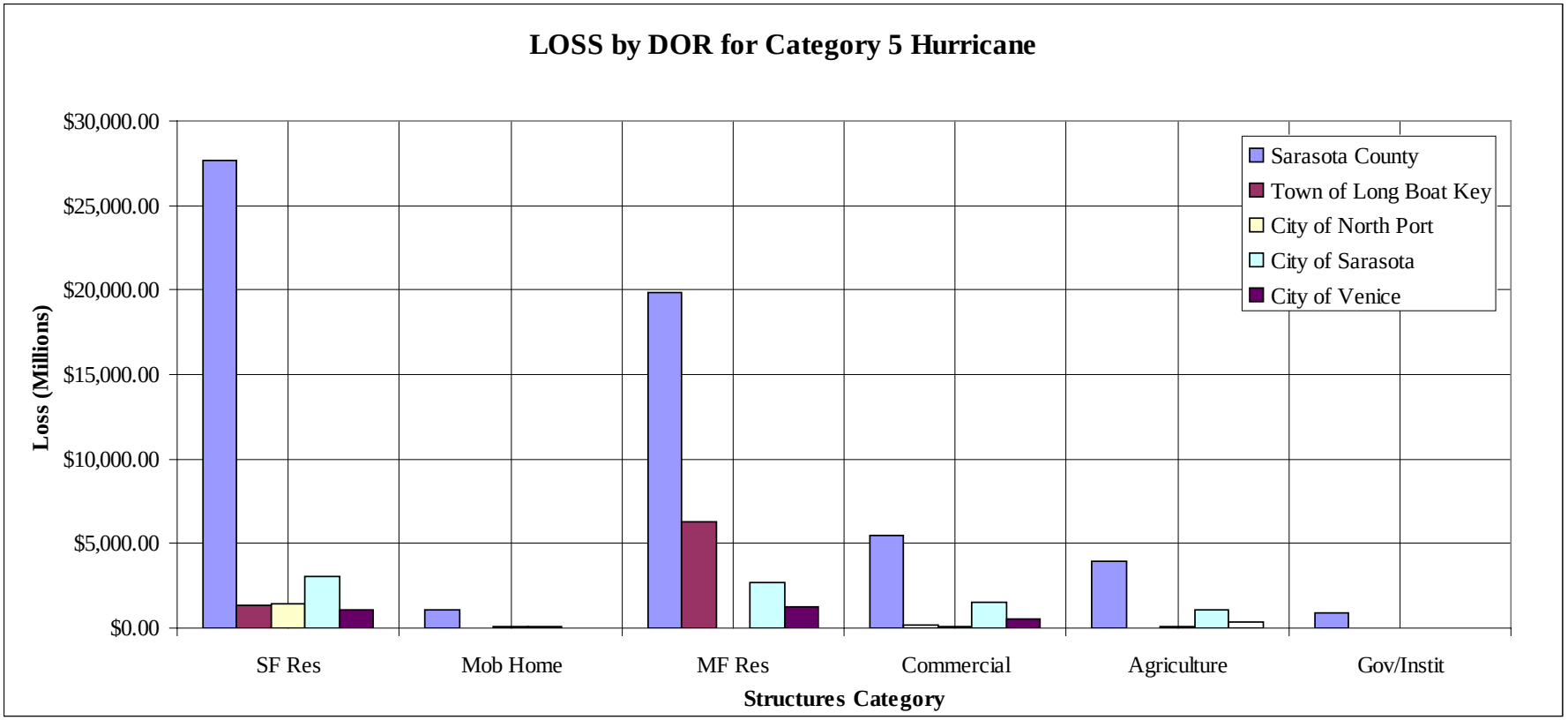
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
Total	325957	325957	325957	325957	230030
Minority	23985	23985	23985	23985	18301
Over 65	102477	102477	102477	102477	80861
Disabled	117986	117986	117986	117986	87787
Poverty	24817	24817	24817	24817	19255
Lang Iso	0	0	0	0	0
Sing Pnt	15092	15092	15092	15092	10669

Structures at risk for Category 5 Maxima

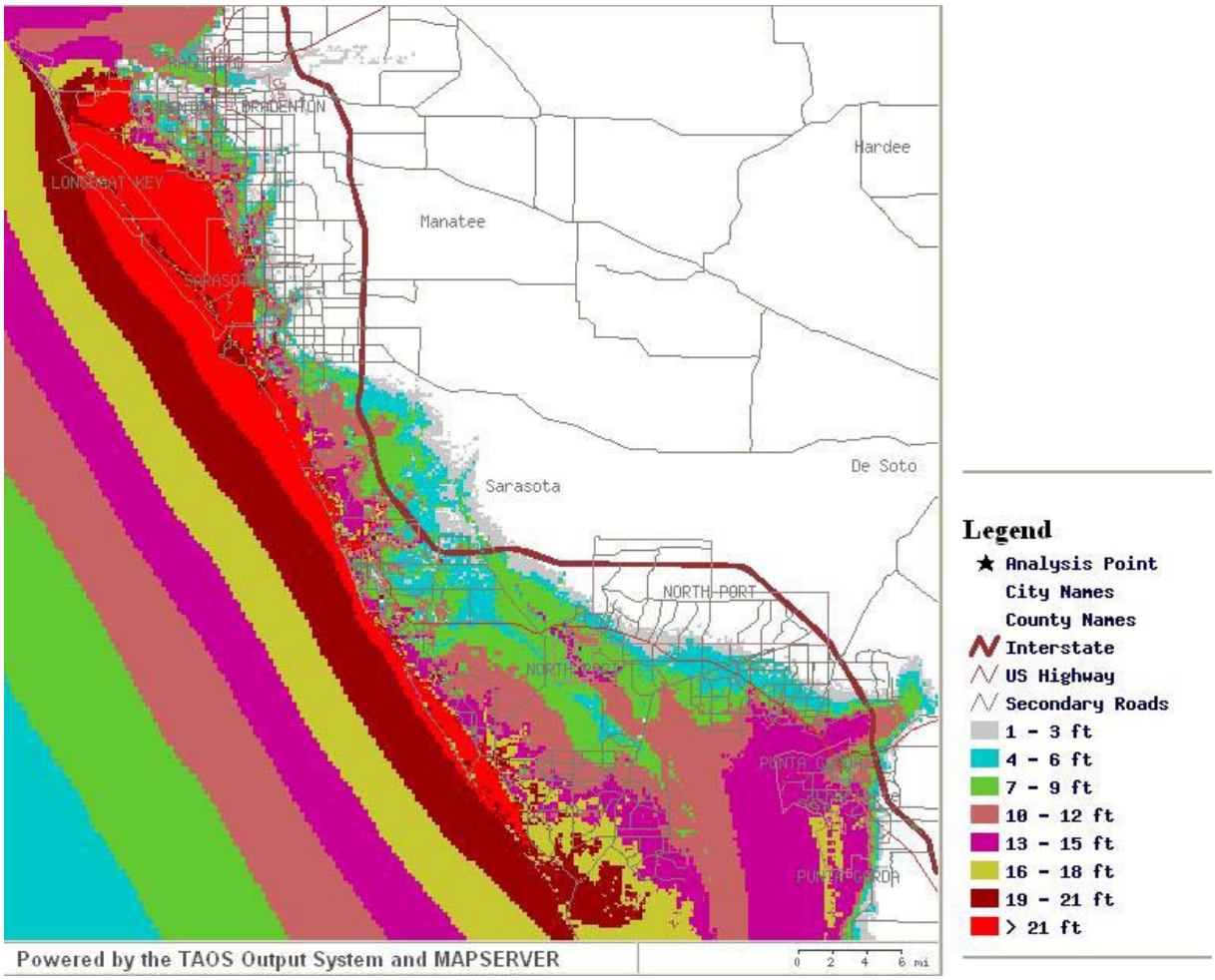
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
SF Res	99145	99145	99145	99145	69866
Mob Home	10119	10119	10119	10119	9635
MF Res	47217	47217	47217	47217	38999
Commercial	6865	6865	6865	6865	5708
Agriculture	1032	1032	1032	1032	410
Gov/Instit	3104	3104	3104	3104	2382

Loss by DOR Use for Category 5 Maxima

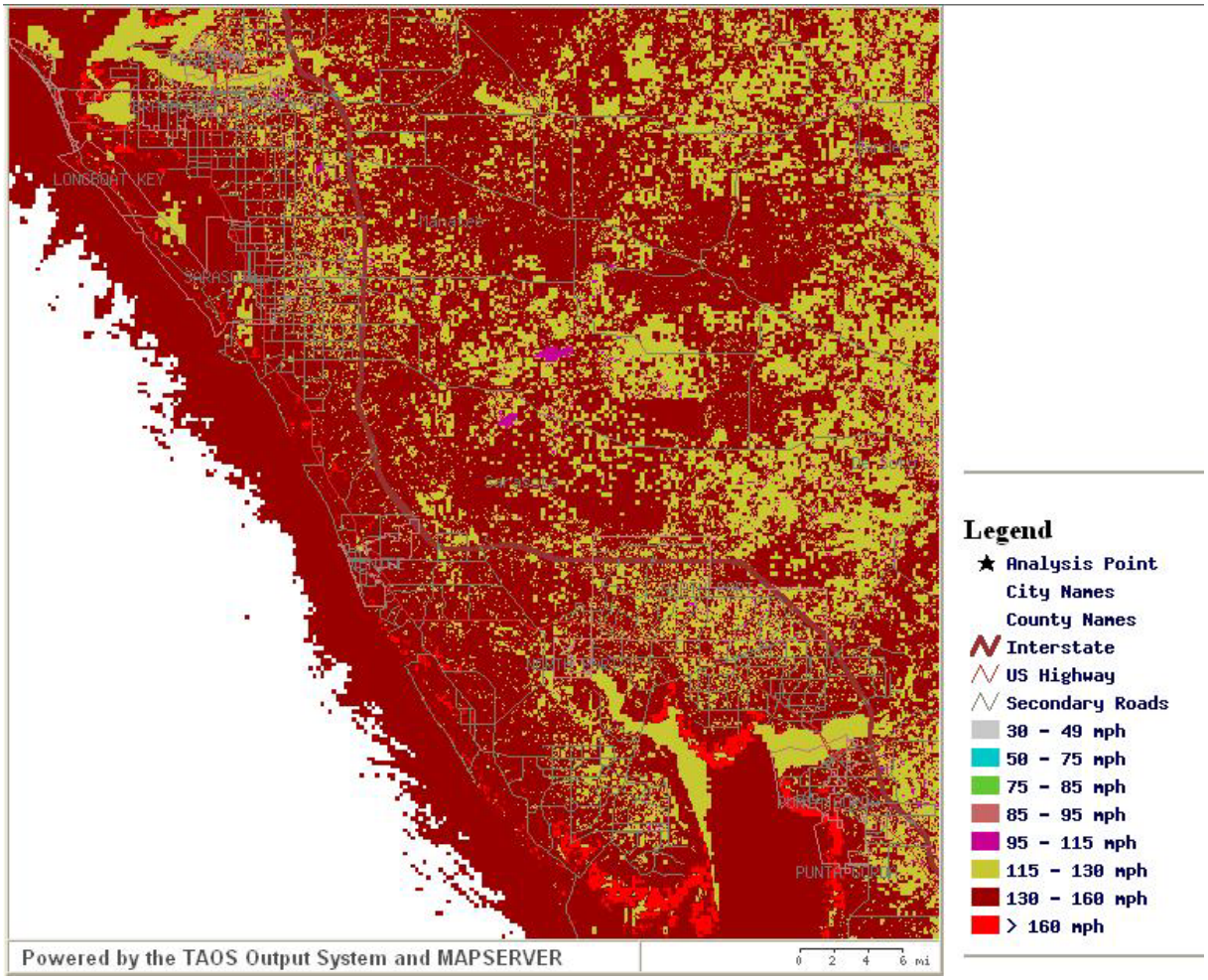
	Exposure	Loss			Percent Loss
SF Res	$ 43.30 Billion	$27.68	Billion	$27,680.00	63.90%
Mob Home	$ 1.06 Billion	$1.06	Billion	$1,060.00	100.00%
MF Res	$ 28.75 Billion	$19.81	Billion	$19,810.00	68.90%
Commercial	$ 8.27 Billion	$5.49	Billion	$5,490.00	66.40%
Agriculture	$ 5.77 Billion	$3.95	Billion	$3,950.00	68.50%
Gov/Instit	$ 1.49 Billion	$903.63	Million	$903.63	60.70%


LOSS by DOR for Category 5 Hurricane
$30,000.00
$25,000.00
$20,000.00
$15,000.00
$10,000.00
$5,000.00
$0.00
Loss (Millions)
Sarasota County
Town of Long Boat Key
City of North Port
City of Sarasota
City of Venice
SF Res
Mob Home
MF Res
Commercial
Agriculture
Gov/Instit
Structures Category

Category 4 Hurricane Hazards for Sarasota County



Category 4 Storm Surge



Category 4 Wind Risk

Category 4 Hurricane Hazards for Sarasota County

Impact Summary

Peak winds 166.mph, peak water depth 29.4ft

Category 4 Maxima Damage Summary:

Tax Parcel based Wind Damage:	$ 33.57 Billion	
DOR based Flood Damage:	$ 33.03 Billion	
DOR Structures in Flood Zone:	114253	
Census based Wind Damage:	$ 32.90 Billion	
Census based Flood .Damage:	$ 14.16 Billion	
Uninhabitable Housing Units:	20541	11.3% of total HU.

Population at risk for Category 4 Maxima

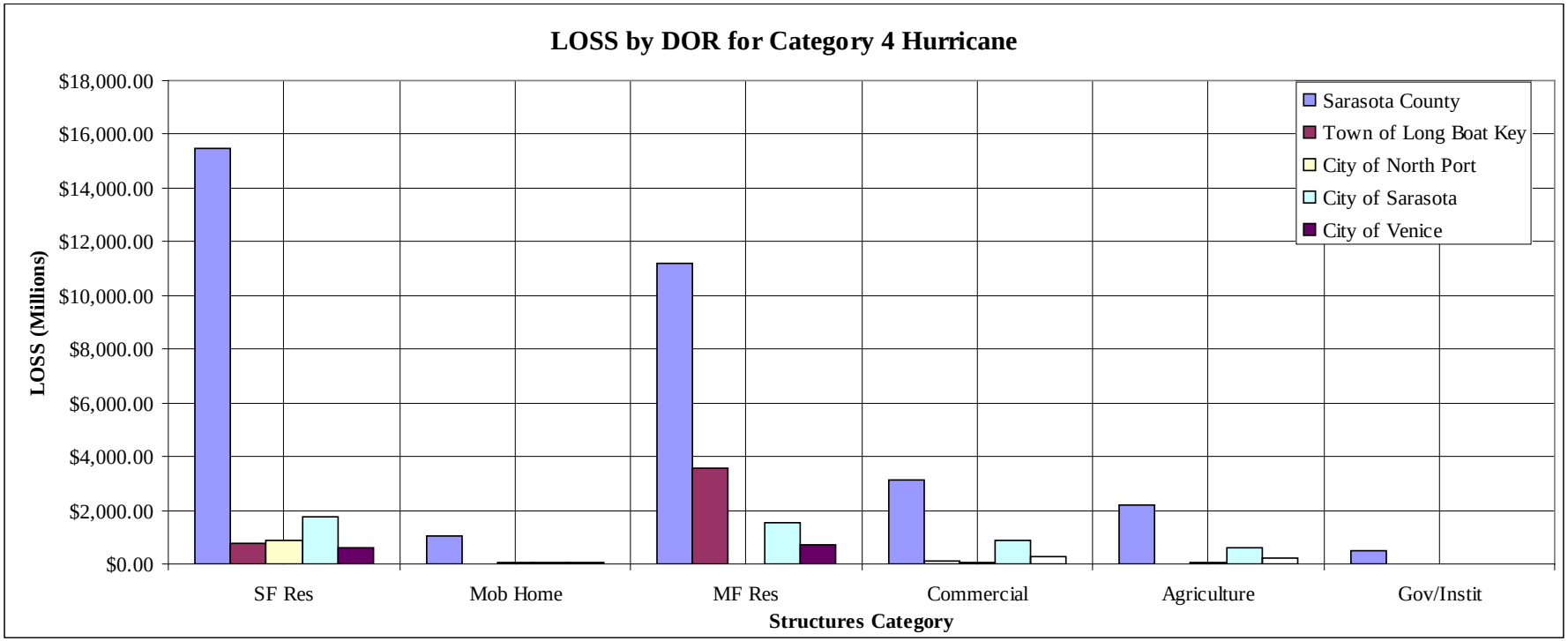
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
Total	325957	325957	325957	325957	202667
Minority	23985	23985	23985	23985	15296
Over 65	102477	102477	102477	102477	74931
Disabled	117986	117986	117986	117986	77137
Poverty	24817	24817	24817	24817	16790
Lang Iso	0	0	0	0	0
Sing Pnt	15092	15092	15092	15092	8861

Structures at risk for Category 4 Maxima

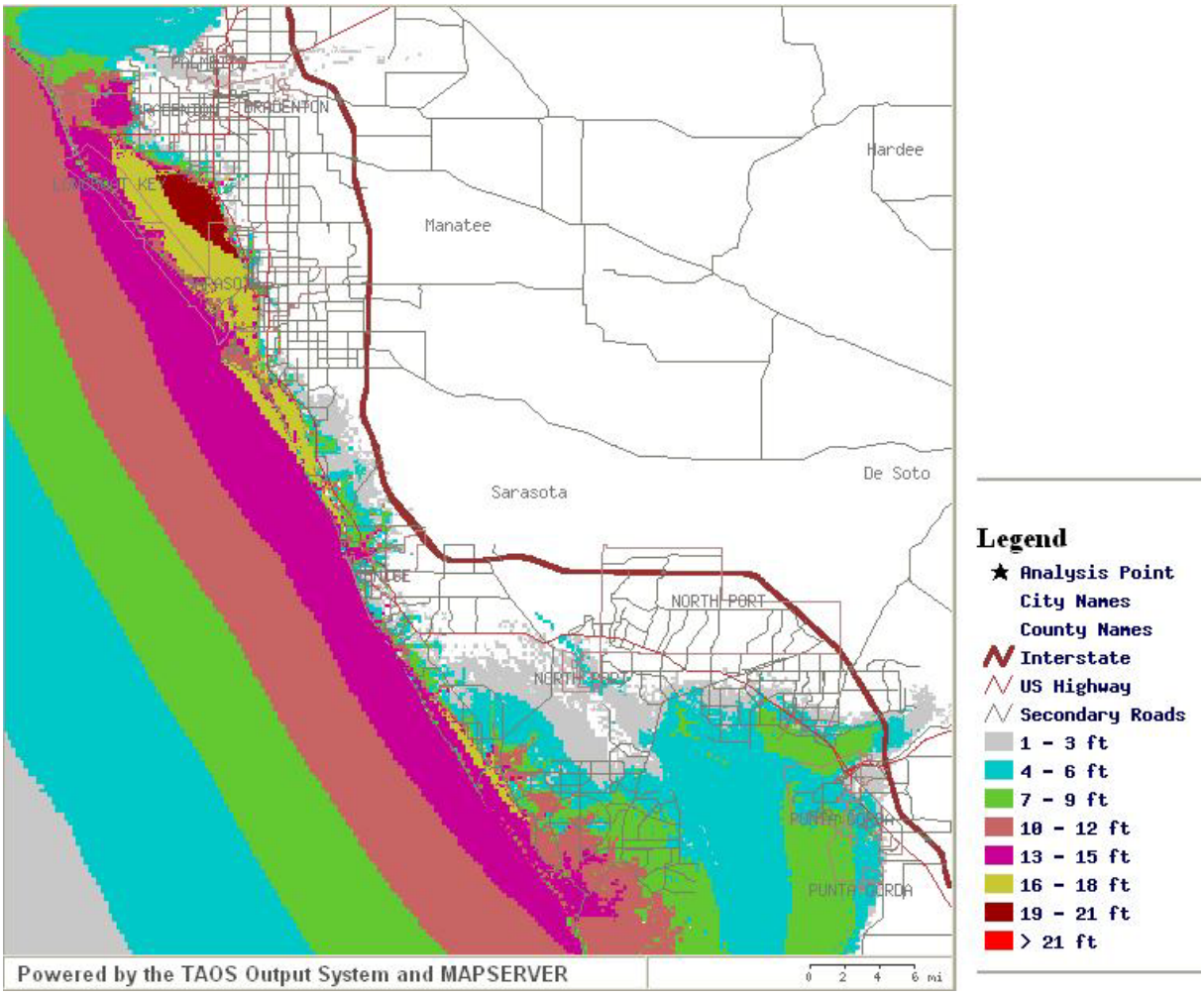
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
SF Res	99145	99145	99145	98740	61614
Mob Home	10119	10119	10119	10118	8682
MF Res	47217	47217	47217	46940	36486
Commercial	6865	6865	6865	6861	5056
Agriculture	1032	1032	1032	1026	367
Gov/Instit	3104	3104	3104	3099	2048

Loss by DOR Use for Category 4 Maxima

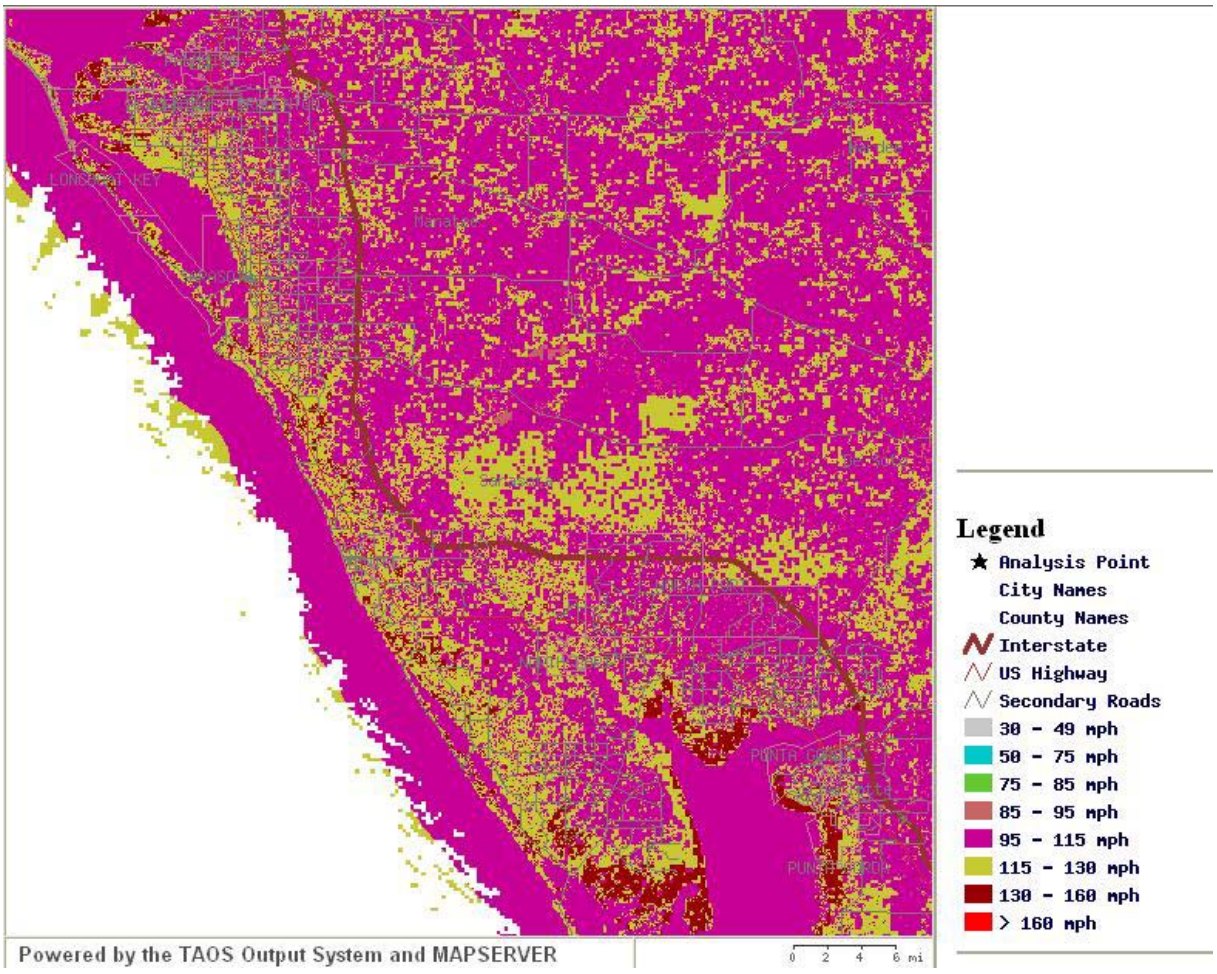
	Exposure	Loss			Percent Loss
SF Res	$ 43.30 Billion	$15.50	Billion	$15,500.00	35.80%
Mob Home	$ 1.06 Billion	$1.02	Billion	$1,020.00	96.10%
MF Res	$ 28.75 Billion	$11.21	Billion	$11,210.00	39.00%
Commercial	$ 8.27 Billion	$3.13	Billion	$3,130.00	37.80%
Agriculture	$ 5.77 Billion	$2.22	Billion	$2,220.00	38.40%
Gov/Instit	$ 1.49 Billion	$494.84	Million	$494.84	33.30%


LOSS by DOR for Category 4 Hurricane
$18,000.00
$16,000.00
$14,000.00
$12,000.00
$10,000.00
$8,000.00
$6,000.00
$4,000.00
$2,000.00
$0.00
LOSS (Millions)
Sarasota County
Town of Long Boat Key
City of North Port
City of Sarasota
City of Venice
SF Res
Mob Home
MF Res
Commercial
Agriculture
Gov/Instit
Structures Category

Category 3 Hurricane Hazards for Sarasota County



Category 3 Storm Surge



Category 3 Wind Risk

Category 3 Hurricane Hazards for Sarasota County

Impact Summary

Peak winds 140.mph, peak water depth 18.8ft.

Category 3 Maxima Damage Summary:

Tax Parcel based Wind Damage:	$ 15.37 Billion	
DOR based Flood Damage:	$ 13.87 Billion	
DOR Structures in Flood Zone:	60679	
Census based Wind Damage:	$ 15.24 Billion	
Census based Flood .Damage:	$ 7.49 Billion	
Uninhabitable Housing Units:	9365	5.1% of total HU.

Population at risk for Category 3 Maxima

	Total	TS Wind	Hur Wind	Ext Wind	Flooded
Total	325957	325957	325957	165063	75793
Minority	23985	23985	23985	14187	4176
Over 65	102477	102477	102477	54095	29340
Disabled	117986	117986	117986	60313	25938
Poverty	24817	24817	24817	13477	5430
Lang Iso	0	0	0	0	0
Sing Pnt	15092	15092	15092	7476	2647

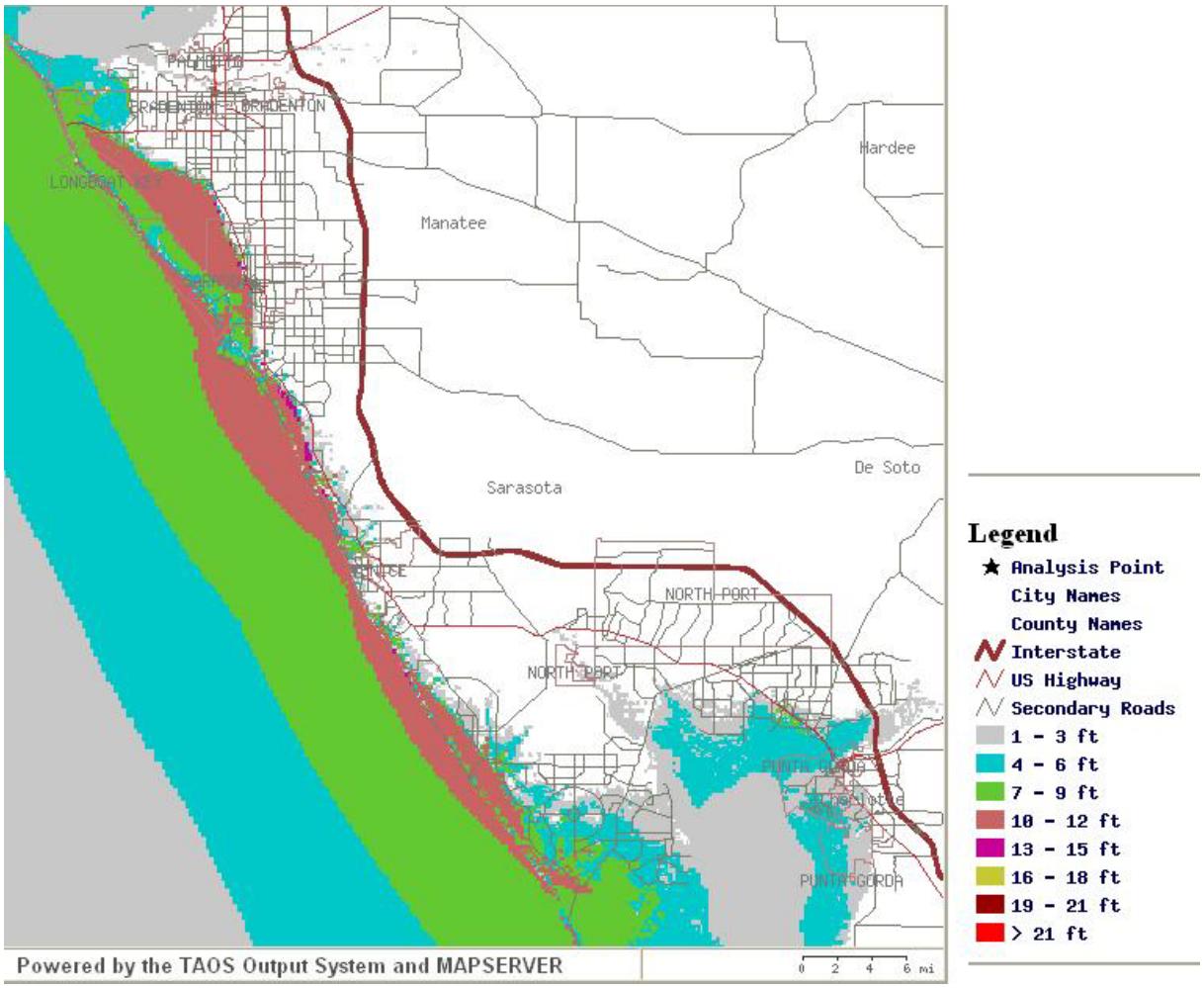
Structures at risk for Category 3 Maxima

	Total	TS Wind	Hur Wind	Ext Wind	Flooded
SF Res	99145	99145	99145	49725	28111
Mob Home	10119	10119	10119	5891	3455
MF Res	47217	47217	47217	28197	25039
Commercial	6865	6865	6865	4001	2849
Agriculture	1032	1032	1032	337	126
Gov/Instit	3104	3104	3104	1673	1099

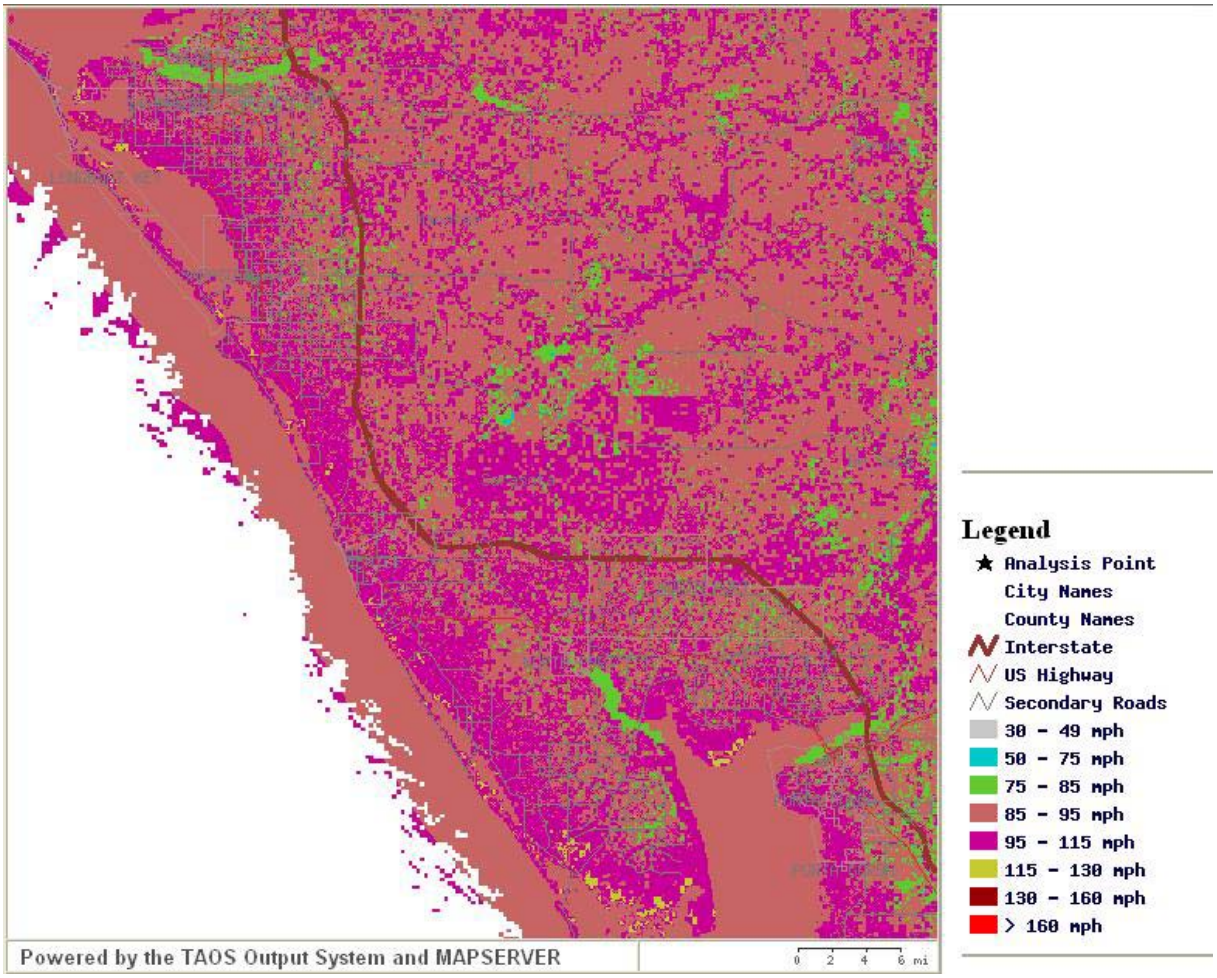
Loss by DOR Use for Category 3 Maxima

	Exposure	Loss			Percent Loss
SF Res	$ 43.30 Billion	$7.01	Billion	$7,010.00	16.20%
Mob Home	$ 1.06 Billion	$603.78	Million	$603.78	57.10%
MF Res	$ 28.75 Billion	$5.12	Billion	$5,120.00	17.80%
Commercial	$ 8.27 Billion	$1.43	Billion	$1,430.00	17.20%
Agriculture	$ 5.77 Billion	$998.17	Million	$998.17	17.30%
Gov/Instit	$ 1.49 Billion	$219.31	Million	$219.31	14.70%

Category 2 Hurricane Hazards for Sarasota County



Category 2 Storm Surge



Category 2 Wind Risk

Category 2 Hurricane Hazards for Sarasota County

Impact Summary

Peak winds 116.mph, peak water depth 13.6ft

Category 2 Maxima Damage Summary:

Tax Parcel based Wind Damage:	$ 6.66 Billion	
DOR based Flood Damage:	$ 5.73 Billion	
DOR Structures in Flood Zone:	35104	
Census based Wind Damage:	$ 6.63 Billion	
Census based Flood .Damage:	$ 3.40 Billion	
Uninhabitable Housing Units:	4046	2.2% of total HU

Population at risk for Category 2 Maxima

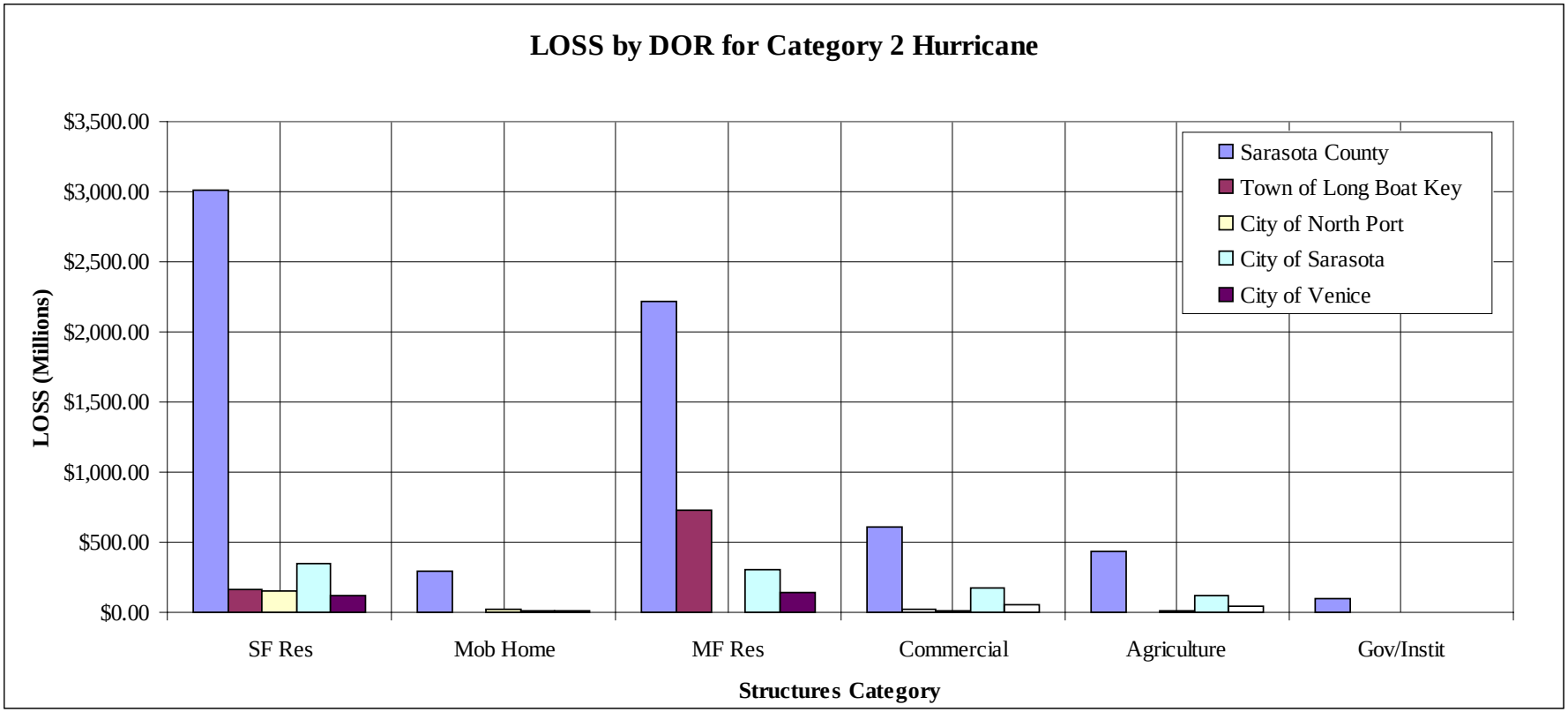
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
Total	325957	325957	325957	1146	36072
Minority	23985	23985	23985	40	975
Over 65	102477	102477	102477	523	15639
Disabled	117986	117986	117986	460	11101
Poverty	24817	24817	24817	58	2191
Lang Iso	0	0	0	0	0
Sing Pnt	15092	15092	15092	16	988

Structures at risk for Category 2 Maxima

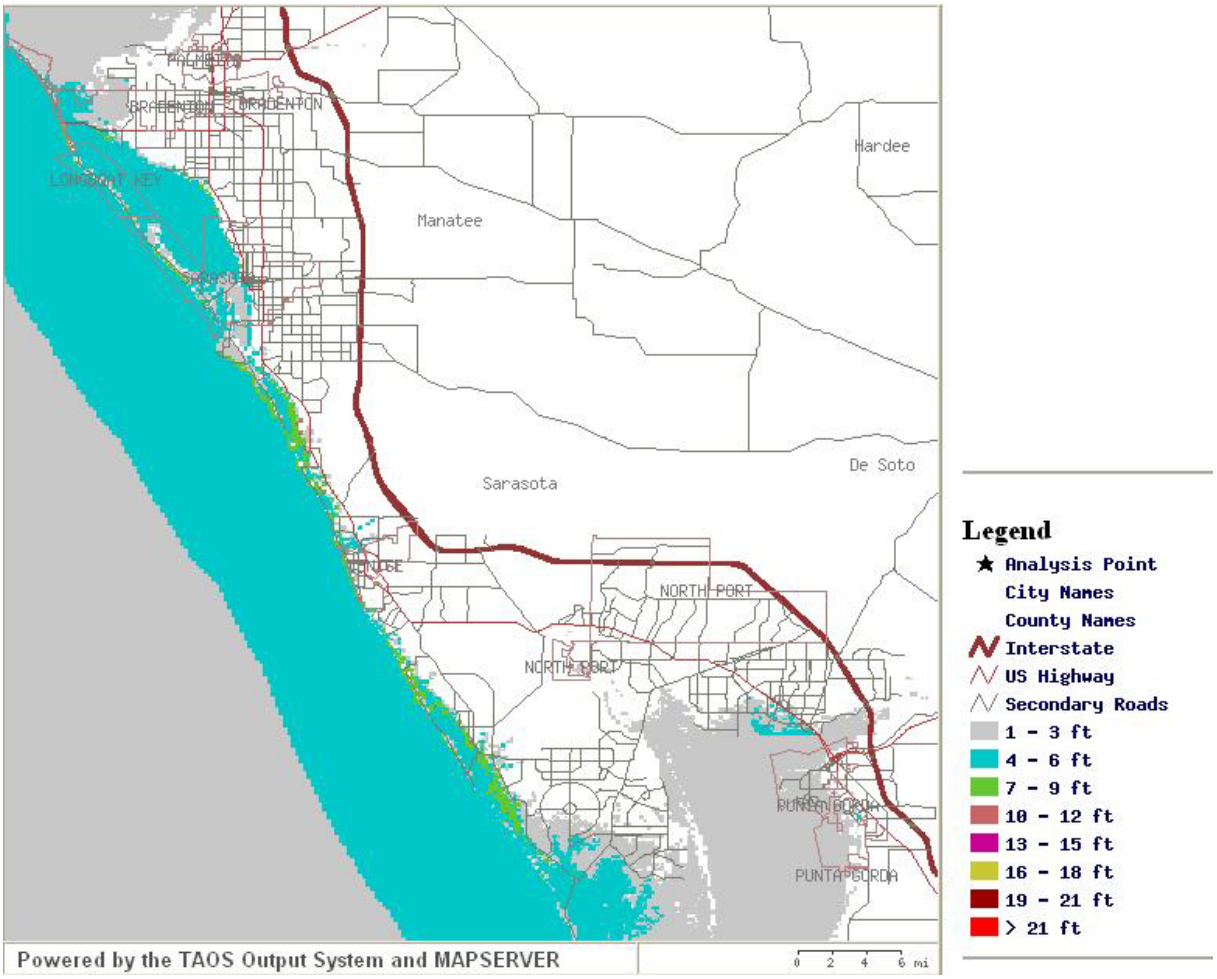
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
SF Res	99145	99145	99145	218	14589
Mob Home	10119	10119	10119	43	514
MF Res	47217	47217	47217	369	17938
Commercial	6865	6865	6865	10	1467
Agriculture	1032	1032	1032	0	66
Gov/Instit	3104	3104	3104	12	530

Loss by DOR Use for Category 2 Maxima

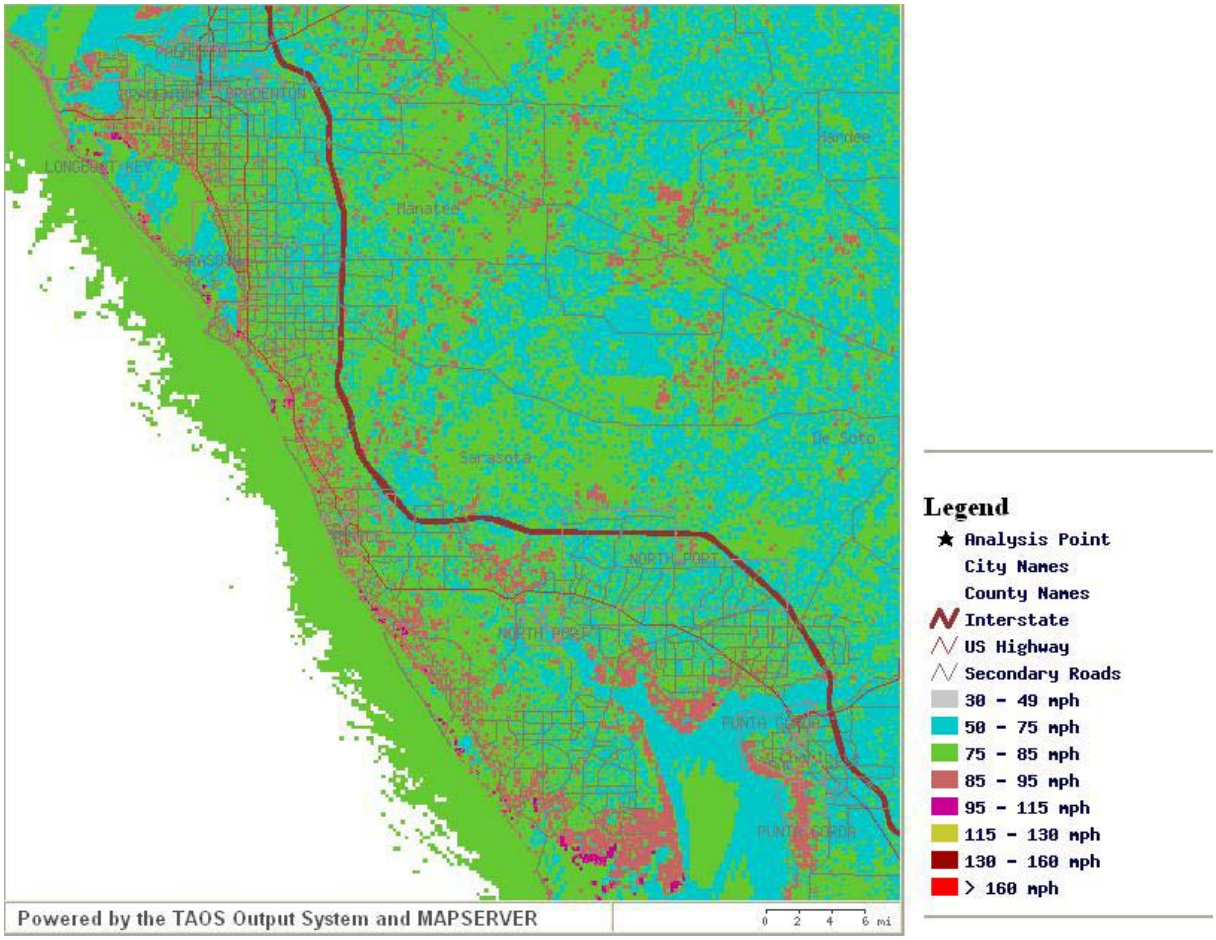
	Exposure	Loss			Percent Loss
SF Res	$ 43.30 Billion	$3.01	Billion	$3,010.00	6.90%
Mob Home	$ 1.06 Billion	$290.11	Million	$290.11	27.40%
MF Res	$ 28.75 Billion	$2.22	Billion	$2,220.00	7.70%
Commercial	$ 8.27 Billion	$606.55	Million	$606.55	7.30%
Agriculture	$ 5.77 Billion	$439.74	Million	$439.74	7.60%
Gov/Instit	$ 1.49 Billion	$93.63	Million	$93.63	6.30%


LOSS by DOR for Category 2 Hurricane
$3,500.00
$3,000.00
$2,500.00
$2,000.00
$1,500.00
$1,000.00
$500.00
$0.00
LOSS (Millions)
SF Res
Mob Home
MF Res
Commercial
Agriculture
Gov/Instit
Structures Category
Sarasota County
Town of Long Boat Key
City of North Port
City of Sarasota
City of Venice

Category 1 Hurricane Hazards for Sarasota County



Category 1 Storm Surge



Category 1 Wind Risk

Category 1 Hurricane Hazards for Sarasota County

Impact Summary

Peak winds 96.mph, peak water depth 9.0ft.

Category 1 Maxima Damage Summary:

Tax Parcel based Wind Damage:	$ 2.26 Billion	
DOR based Flood Damage:	$ 1.56 Billion	
DOR Structures in Flood Zone:	15724	
Census based Wind Damage:	$ 2.29 Billion	
Census based Flood .Damage:	$ 810.74 Million	
Uninhabitable Housing Units:	1334	0.7% of total HU.

Population at risk for Category 1 Maxima

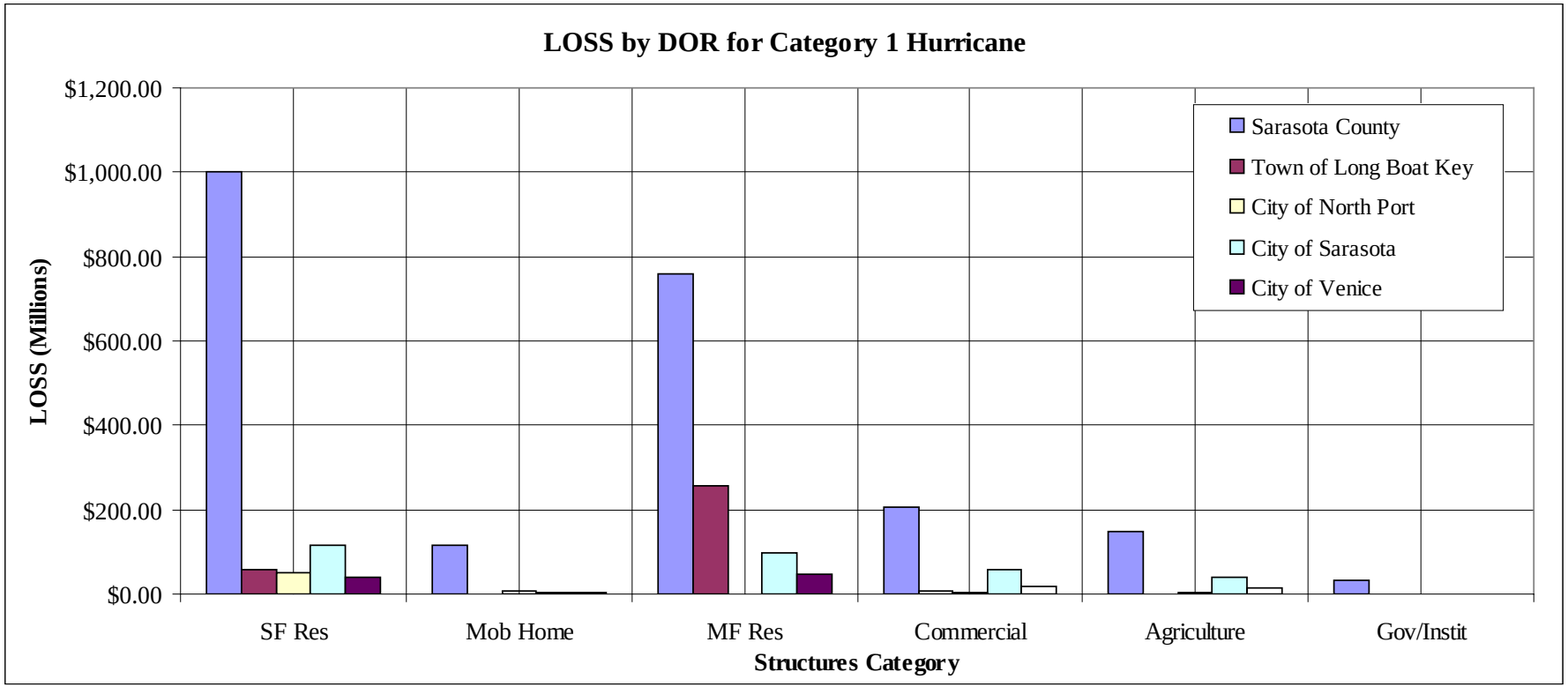
	Total	TS Wind	Hur Wind	Ext Wind	Flooded
Total	325957	325957	268213	0	13251
Minority	23985	23985	20208	0	286
Over 65	102477	102477	87755	0	5817
Disabled	117986	117986	97821	0	4580
Poverty	24817	24817	20268	0	837
Lang Iso	0	0	0	0	0
Sing Pnt	15092	15092	12052	0	352

Structures at risk for Category 1 Maxima

	Total	TS Wind	Hur Wind	Ext Wind	Flooded
SF Res	99145	99145	81435	0	6265
Mob Home	10119	10119	8988	0	179
MF Res	47217	47217	41375	0	8269
Commercial	6865	6865	6236	0	749
Agriculture	1032	1032	802	0	18
Gov/Instit	3104	3104	2695	0	244

Loss by DOR Use for Category 1 Maxima

	Exposure	Loss			Percent Loss
SF Res	$ 43.30 Billion	$1.00	Billion	$1,000.00	2.30%
Mob Home	$ 1.06 Billion	$114.72	Million	$114.72	10.80%
MF Res	$ 28.75 Billion	$759.41	Million	$759.41	2.60%
Commercial	$ 8.27 Billion	$205.62	Million	$205.62	2.50%
Agriculture	$ 5.77 Billion	$147.59	Million	$147.59	2.60%
Gov/Instit	$ 1.49 Billion	$31.58	Million	$31.58	2.10%


LOSS by DOR for Category 1 Hurricane
$1,200.00
$1,000.00
$800.00
$600.00
$400.00
$200.00
$0.00
LOSS (Millions)
Sarasota County
Town of Long Boat Key
City of North Port
City of Sarasota
City of Venice
SF Res
Mob Home
MF Res
Commercial
Agriculture
Gov/Instit
Structures Category

LMS-Appendix I

EVENT_ID	CZ_NAME_BEGIN_LOC	BEGIN_DA	BEGIN_TIM	EVENT_TYI	MAGNITUI	TOR_F_SC/	DEATHS_D	INJURIES_I	DAMAGE_	DAMAGE_I	STATE_ABI	CZ_TIMEZC	MAGNITUI	EPISODE_I	CZ_TYPE	CZ_FIPS	WFO	INJURIES_I	DEATHS_IN	SOURCE	FLOOD_CA	TOR_LENG	TOR_WIDT	BEGIN_RAI	BEGIN_AZI	END_RANG	END_AZIM	END_LOCA	BEGIN_LAT	BEGIN_LOI	END_LAT	END_LON	EVENT_NA	EPISODE_N	ABSOLUTE_	ROWNUMBER
9985760	SARASOTA	########	1700	Tornado	0	F2	0	0	25000	0	FL	CST			C	115		0	0			2	77	0		0			27.1	-82.48						1
9991509	SARASOTA	########	1555	Tornado	0		0	0	0	0	FL	CST			C	115		0	0			0	33	0		0			27.13	-82.3						2
9984943	SARASOTA	########	230	Tornado	0	F1	0	0	25000	0	FL	CST			C	115		0	0			0.3	17	0		0			27.17	-82.5						3
9984947	SARASOTA	########	445	Tornado	0	F1	0	1	25000	0	FL	CST			C	115		0	0			0	33	0		0			27.3	-82.53						4
9986113	SARASOTA	########	1100	Thunderst	62		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.1	-82.4						5
9986423	SARASOTA	########	1510	Thunderst	0		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.28	-82.5						6
9986434	SARASOTA	########	1426	Thunderst	60		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.28	-82.5						7
10001492	SARASOTA	########	1155	Tornado	0	F2	0	2	250000	0	FL	CST			C	115		0	0			4.1	100	0		0			27.1	-82.45	27.13	-82.4				8
10001493	SARASOTA	########	1210	Tornado	0	F1	0	0	250000	0	FL	CST			C	115		0	0			8.7	33	0		0			27.48	-82.7	27.6	-82.65				9
10001510	SARASOTA	########	1110	Thunderst	0		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.28	-82.5						10
10001511	SARASOTA	########	1136	Tornado	0	F2	0	0	25000	0	FL	CST			C	115		0	0			0	17	0		0			26.97	-82.37						11
10001532	SARASOTA	########	1150	Hail	1.75		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.28	-82.4						12
9998107	SARASOTA	########	1930	Thunderst	61		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.28	-82.5						13
9998137	SARASOTA	########	1645	Tornado	0	F2	0	0	2500	0	FL	CST			C	115		0	0			0	33	0		0			27.35	-82.52						14
9999368	SARASOTA	2/3/1970	635	Tornado	0	F2	0	0	250000	0	FL	CST			C	115		0	0			0	33	0		0			27.07	-82.43						15
9998681	SARASOTA	########	1845	Tornado	0	F1	0	0	2500	0	FL	CST			C	115		0	0			0	33	0		0			27.17	-82.5						16
9998722	SARASOTA	########	1245	Tornado	0	F1	0	0	25000	0	FL	CST			C	115		0	0			1	33	0		0			27.5	-82.5						17
9998723	SARASOTA	########	1245	Tornado	0	F1	0	0	0	0	FL	CST			C	115		0	0			1	33	0		0			27.5	-82.5						18
9999830	SARASOTA	3/3/1971	1320	Tornado	0	F1	0	0	0	0	FL	CST			C	115		0	0			0.5	33	0		0			27.3	-82.5						19
9999840	SARASOTA	3/3/1971	1520	Tornado	0	F1	0	0	2500	0	FL	CST			C	115		0	0			1	17	0		0			27.3	-82.5						20
10000461	SARASOTA	7/6/1971	1800	Tornado	0	F1	0	0	250	0	FL	CST			C	115		0	0			0.3	20	0		0			26.97	-82.37						21
10000489	SARASOTA	########	1650	Tornado	0	F1	0	0	250	0	FL	CST			C	115		0	0			0.3	20	0		0			27.33	-82.52						22
10001333	SARASOTA	########	913	Tornado	0	F0	0	0	0	0	FL	CST			C	115		0	0			0.3	20	0		0			27.25	-82.52						23
10001550	SARASOTA	########	900	Tornado	0	F1	0	0	25000	0	FL	CST			C	115		0	0			6.4	100	0		0			27.1	-82.45	27.03	-82.38				24
10001551	SARASOTA	########	1000	Tornado	0	F2	0	3	25000	0	FL	CST			C	115		0	0			4.9	100	0		0			27.13	-82.47	27.18	-82.42				25
10001553	SARASOTA	########	1100	Tornado	0	F2	0	0	25000	0	FL	CST			C	115		0	0			5.9	50	0		0			27.12	-82.38	27.15	-82.3				26
10001554	SARASOTA	########	1245	Tornado	0	F2	0	5	250000	0	FL	CST			C	115		0	0			7.3	100	0		0			27.02	-82.17	27.02	-82.05				27
9998260	SARASOTA	########	1515	Tornado	0	F0	0	0	0	0	FL	CST			C	115		0	0			0.3	10	0		0			27.33	-82.5						28
9999423	SARASOTA	4/7/1973	2301	Tornado	0	F0	0	0	250	0	FL	CST			C	115		0	0			0.2	20	0		0			27.4	-82.53						29
10000525	SARASOTA	########	1412	Tornado	0	F1	0	0	2500000	0	FL	CST			C	115		0	0			0.5	67	0		0			27.1	-82.45						30
10000528	SARASOTA	########	1245	Hail	0.75		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.35	-82.53						31
10000535	SARASOTA	########	1400	Thunderst	50		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.35	-82.53						32
10001616	SARASOTA	########	1600	Thunderst	55		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.33	-82.53						33
9998334	SARASOTA	########	1735	Tornado	0	F0	0	0	25000	0	FL	CST			C	115		0	0			0.5	10	0		0			27.33	-82.53						34
9998380	SARASOTA	########	1310	Tornado	0	F0	0	0	250	0	FL	CST			C	115		0	0			0.1	10	0		0			26.95	-82.35						35
10001701	SARASOTA	8/8/1975	1600	Thunderst	0		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.33	-82.53						36
10001705	SARASOTA	8/9/1975	1630	Thunderst	0		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.33	-82.53						37
10001716	SARASOTA	########	1615	Tornado	0	F1	0	0	25000	0	FL	CST			C	115		0	0			0.1	30	0		0			27.33	-82.42						38
10000681	SARASOTA	########	1230	Tornado	0	F0	0	0	25000	0	FL	CST			C	115		0	0			0.3	10	0		0			27.1	-82.45						39
10000697	SARASOTA	########	1750	Tornado	0	F0	0	0	2500	0	FL	CST			C	115		0	0			0.1	20	0		0			27.33	-82.53						40
10001767	SARASOTA	########	1200	Hail	1.75		0	0	0	0	FL	CST			C	115		0	0			0	0	0		0			27.33	-82.53						41
9998470	SARASOTA	########	1702	Thunderst	0		0	0	0	0	FL	CST			C	115	NG	0	0			0	0	0		0			27.33	-82.53						42
9999607	SARASOTA	########	1545	Tornado	0	F1	0	0	250000	0	FL	CST			C	115		0	0			1	50	0		0			27.12	-82.45						43
9998974	SARASOTA	5/4/1978	1200	Thunderst	0		0	0	0	0	FL	CST			C	115	ONE	0	0			0	0	0		0			27.33	-82.53						44
9998981	SARASOTA	5/4/1978	1400	Thunderst	0		0	0	0	0	FL	CST			C	115	ATA	0	0			0	0	0		0			27.1	-82.45						45
9998993	SARASOTA	########	1520	Tornado	0	F0	0	0	2500	0	FL	CST			C	115		0	0			0.1	10	0		0			27.1	-82.45						46
10000099	SARASOTA	########	1240	Tornado	0	F0	0	0	0	0	FL	CST			C	115		0	0			2.3	10	0		0			27.37	-82.38	27.38	-82.4				47
10000114	SARASOTA	########	1345	Tornado	0	F1	0	1	250000	0	FL	CST			C	115		0	0			0.4	20	0		0			27.28	-82.53						48
9998314	SARASOTA	4/7/1980	1330	Thunderst	0		0	0	0	0	FL	CST			C	115	ATA	0	0			0	0	0		0			27.33	-82.53						49
9999689	SARASOTA	########	1530	Thunderst	0		0	0	0	0	FL	CST			C	115	ATA	0	0			0	0	0		0			27.17	-82.28						50
10000828	SARASOTA	########	1745	Thunderst	52		0	0	0	0	FL	CST			C	115	T	0	0			0	0	0		0			27.4	-82.55						51
10000832	SARASOTA	########	1806	Thunderst	63		0	0	0	0	FL	CST			C	115	S	0	0			0	0	0		0			27.4	-82.55						52
10001923	SARASOTA	########	1320	Tornado	0	F1	0	0	250000	0	FL	CST			C	115		0	0			0.1	50	0		0			27.33	-82.53						53
10001946	SARASOTA	########	645	Thunderst	0		0	0	0	0	FL	CST			C	115	RY	0	0			0	0	0		0			27.33	-82.53						54
9998617	SARASOTA	########	5	Thunderst	70		0	0	0	0	FL	CST			C	115	ATA	0	0			0	0	0		0			27.17	-82.28						55
9999732	SARASOTA	7/2/1982	1300	Thunderst	0		0	0	0	0	FL	CST			C	115	ATA	0	0			0	0	0		0			27.1	-82.45						56
10001965	SARASOTA	########	445	Thunderst	0		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			27.28	-82.53						57
10001967	SARASOTA	########	445	Thunderst	0		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			27.15	-82.32						58
10000918	SARASOTA	########	1400	Thunderst	0		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			27.33	-82.53						59
10000940	SARASOTA	7/7/1983	1557	Tornado	0	F1	0	0	250000	0	FL	CST			C	115		0	0			3	50	0		0			27.13	-82.45	27.17	-82.4				60
10000954	SARASOTA	########	1500	Thunderst	0		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			27.33	-82.53						61
9999905	SARASOTA	########	1300	Thunderst	0		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			27.12	-82.45						62
9999923	SARASOTA	########	330	Tornado	0	F3	2	45	25000000	0	FL	CST			C	115		0	0			3	400	0		0			27.08	-82.48	27.07	-82.42				63
9999021	SARASOTA	5/3/1985	950	Tornado	0	F0	0	0	2500	0	FL	CST			C	115		0	0			1	10	0		0			26.98	-82.33						64
9999299	SARASOTA	########	2020	Thunderst	67		0	0	0	0	FL	CST			C	115	S	0	0			0	0	0		0			27.33	-82.53						65
10001013	SARASOTA	########	1055	Thunderst	52		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			27.4	-82.55						66
10001018	SARASOTA	########	400	Thunderst	0		0	0	0	0	FL	CST			C	115	AT	0	0			0	0	0		0			26.98	-82.33						67
10002124	SARASOTA	########	930	Thunderst	0		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.15	-82.32						68
10001056	SARASOTA	7/1/1987	1600	Thunderst	52		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			26.98	-82.33						69
10001077	SARASOTA	########	1430	Thunderst	50		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.33	-82.53						70
10001092	SARASOTA	########	1625	Tornado	0	F1	0	6	250000	0	FL	EST			C	115		0	0			2	30	0		0			26.98	-82.33						71
10002178	SARASOTA	########	1245	Tornado	0	F1	0	0	250000	0	FL	EST			C	115		0	0			1	50	0		0			27.1	-82.45						72
9998884	SARASOTA	########	1730	Thunderst	55		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27	-82.07						73
9998916	SARASOTA	########	1800	Tornado	0	F0	0	0	25000	0	FL	CST			C	115		0	0			1	30	0		0			27.05	-82.42						74
10000045	SARASOTA	########	1330	Hail	1		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.33	-82.53						75
10000049	SARASOTA	########	1625	Tornado	0	F0	0	0	25000	0	FL	CST			C	115		0	0			0.2	10	0		0			27.1	-82.45						76
10001177	SARASOTA	########	1615	Thunderst	50		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.1	-82.45						77
10001184	SARASOTA	########	1600	Hail	1.75		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.1	-82.45						78
10001199	SARASOTA	########	1645	Thunderst	50		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.03	-82.2						79
10001201	SARASOTA	########	1830	Thunderst	50		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.17	-82.28						80
10001209	SARASOTA	9/5/1989	1430	Thunderst	50		0	0	0	0	FL	CST			C	115	MIA	0	0			0	0	0		0			27.33	-82.53						81
9997915	SARASOTA	########	530	Thunderst	0		0	0	0	0	FL	CST			C	115	TBW	0	0			0	0	0		0			27.25	-82.53						82
9997953	SARASOTA	6/7/1990	1730	Thunderst	0		0	0	0	0	FL	CST			C	115	TBW	0	0			0	0	0		0			27.33	-82.53						83
9999038	SARASOTA	7/1/1990	1200	Thunderst	0		0	0	0	0	FL	CST			C	115	TBW	0	0			0	0	0		0			27.3	-82.35						84

9999039	SARASOTA	7/1/1990	1205	Tornado	0	F0	0	0	0	0	FL	EST		C	115		0	0	0.2	10	0	0		27.1	-82.45						85
9999079	SARASOTA	########	1520	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.33	-82.53						86
9999083	SARASOTA	########	1300	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		26.98	-82.33						87
9998390	SARASOTA	########	830	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.1	-82.45						88
9998394	SARASOTA	########	1515	Tornado	0	F1	0	0	25000	0	FL	CST		C	115		0	0	1	10	0	0		27.22	-82.4						89
9998421	SARASOTA	########	1350	Hail	1.25		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.1	-82.45						90
9999540	SARASOTA	########	1425	Thunderst	52		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.1	-82.45						91
10000145	SARASOTA	########	2246	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.33	-82.48						92
10001282	SARASOTA	########	1400	Hail	0.75		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.2	-82.53						93
10001309	SARASOTA	########	1240	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.33	-82.47						94
10001327	SARASOTA	########	1630	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		26.98	-82.33						95
10001329	SARASOTA	########	1520	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.28	-82.53						96
9999114	SARASOTA	########	1430	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.02	-82.33						97
9999154	SARASOTA	8/6/1991	1733	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.17	-82.53						98
9999158	SARASOTA	8/6/1991	1833	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.2	-82.5						99
10000240	SARASOTA	9/7/1991	1730	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		26.98	-82.33						100
10000242	SARASOTA	9/7/1991	1815	Thunderst	0		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.1	-82.45						101
10000247	SARASOTA	########	1532	Tornado	0	F0	0	0	25000	0	FL	EST		C	115		0	0	0.2	10	0	0		26.98	-82.33						102
10000265	SARASOTA	2/5/1992	436	Thunderst	0		0	0	0	0	FL	PST		C	115	TBW	0	0	0	0	0	0		27.33	-82.53						103
10161857	SARASOTA	2/5/1992	1620	Hail	0.88		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.17	-82.28						104
10000272	SARASOTA	2/5/1992	1625	Tornado	0	F0	0	0	250	0	FL	EST		C	115		0	0	0.2	10	0	0		27.28	-82.53						105
10000274	SARASOTA	2/5/1992	1650	Thunderst	52		0	0	0	0	FL	PST		C	115	TBW	0	0	0	0	0	0		27.17	-82.28						106
10000275	SARASOTA	2/5/1992	1733	Thunderst	0		0	0	0	0	FL	PST		C	115	TBW	0	0	0	0	0	0		27.33	-82.53						107
9997822	SARASOTA	########	1637	Tornado	0	F0	0	0	250	0	FL	EST		C	115		0	0	0.1	10	0	0		26.98	-82.33						108
9997833	SARASOTA	########	906	Tornado	0	F0	0	0	2500	0	FL	EST		C	115		0	0	0.1	10	0	0		27.12	-82.45						109
9997882	SARASOTA	########	1508	Thunderst	0		0	0	0	0	FL	PST		C	115	TBW	0	0	0	0	0	0		27.33	-82.53						110
10154709	SARASOTA	8/6/1992	1510	Hail	0.75		0	0	0	0	FL	CST		C	115	TBW	0	0	0	0	0	0		27.17	-82.28						111
10001360	SARASOTA	9/1/1992	1550	Tornado	0	F0	0	0	0	0	FL	EST		C	115		0	0	0.1	10	0	0		27.22	-82.47						112
10001372	SARASOTA	########	1615	Thunderst	52		0	0	0	0	FL	PST		C	115	TBW	0	0	0	0	0	0		27.1	-82.45						113
10319797	SARASOTA	Sarasota	########	600	Thunderst	0		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Strong thunderstorm	114
10319798	SARASOTA	Old Myakk	########	1645	Hail	1		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Quarter-size hail fell.	115
10319799	SARASOTA	Sarasota	########	20	Thunderst	51		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								A wind gust to 59 mph	116
10319800	SARASOTA	Fruitville	########	47	Thunderst	0		0	0	5000	0	FL	EST		C	115		0	0	0	0	0	0								Strong winds blew a tı	117
10319801	SARASOTA		########	210	Thunderst	71		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0	Englewooc							A storm spotter repor	118
10319802	SARASOTA	Manasota	4/5/1993	130	Tornado	0	F0	0	0	5000	0	FL	EST		C	115		0	0	0.5	200	0	0		26.98	-82.32						A small tornado which	119
10319803	SARASOTA	Venice	4/5/1993	132	Tornado	0	F0	0	0	50000	0	FL	EST		C	115		0	0	0.5	200	0	0		27.1	-82.45						A brief touchdown of	120
10319822	SARASOTA	North Port	4/5/1993	135	Tornado	0	F0	0	0	50000	0	FL	EST		C	115		0	0	0.5	100	0	0		27	-82.07						Four houses received	121
10319823	SARASOTA	North Veni	########	1510	Thunderst	69		0	0	50000	0	FL	EST		C	115		0	0	0	0	0	0								Strong thunderstorm	122
10319824	SARASOTA	Sarasota	8/9/1993	1550	Hail	1		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Quarter-size hail fell.	123
10319825	SARASOTA	Longboat k	8/9/1993	1637	Hail	0.75		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Marble-size hail fell.	124
10319826	SARASOTA	Sarasota	########	1518	Tornado	0	F0	0	0	0	0	FL	EST		C	115		0	0	0.1	10	0	0		27.33	-82.53						A small tornado touch	125
10319827	SARASOTA	Nakomis	########	1527	Hail	1		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Quarter-size hail fell.	126
10319828	SARASOTA	Sarasota	########	1855	Hail	0.75		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Marble-size hail fell.	127
10319829	SARASOTA		########	800	Thunderst	0		0	0	50000	0	FL	EST		C	115		0	0	0	0	0	0								Strong thunderstorm	128
10319830	SARASOTA	South Poin	1/3/1994	1250	Thunderst	0		0	0	500	0	FL	EST		C	115		0	0	0	0	0	0	Shores							Strong wind gusts dan	129
10319831	SARASOTA	Englewooc	########	1820	Hail	1.75		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Public reported golf b	130
10319832	SARASOTA	Osprey	########	1915	Thunderst	0		0	0	500000	0	FL	EST		C	115		0	0	0	0	0	0								Thunderstorm winds c	131
10319833	SARASOTA	TPA	########	1605	Tornado	0	F0	0	0	50000	0	FL	EST		C	115		0	0	0.1	10	38	S	0							A waterspout moved	132
10319834	SARASOTA	Warm Min	8/1/1994	1602	Thunderst	0		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								A tree was blown dow	133
10319835	SARASOTA	Gulf Gate	8/1/1994	1604	Thunderst	0		0	0	5000	0	FL	EST		C	115		0	0	0	0	0	0								Two trees and power	134
10319836	SARASOTA		8/2/1994	1643	Thunderst	0		0	0	500	0	FL	EST		C	115		0	0	0	0	0	0								Thunderstorm winds l	135
10319837	SARASOTA		########	1430	Hail	1.75		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Golf ball-size hail repc	136
10319838	SARASOTA		########	1546	Thunderst	0		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								A tree was blown ove	137
10319839	SARASOTA		########	1623	Thunderst	0		0	0	0	0	FL	EST		C	115		0	0	0	0	0	0								Heavy rain caused urb	138
10319868	SARASOTA	Sarasota	########	1045	Tornado	0	F0	0	0	50000	0	FL	EST		C	115		0	0	0.1	10	0	0		27.33	-82.53						A tornado touched do	139
10319869	SARASOTA	E Coral Cov	########	1040	Hail	0.88		0	0	0	0	FL	EST		C	115		0	0	0	0	39	S	TPA							Nickel-size hail was re	140
10319870	SARASOTA	Sarasota	########	1920	Thunderst	0		0	0	5000	0	FL	EST		C	115		0	0	0	0	0		0							Severe thunderstorm	141
10319871	SARASOTA	Sarasota	########	1559	Thunderst	0		0	0	1000	0	FL	EST		C	115		0	0	0	0	8	SE	0							Thunderstorm winds c	142
10319872	SARASOTA	Sarasota	########	1559	Thunderst	0		0	0	0	0	FL	EST		C	115		0	0	0	0	8	SE	13	SSE	SRQ					Trees and power lines	143
10319873	SARASOTA	W Sarasot	########	1805	Hail	0.75		0	0	0	0	FL	EST		C	115		0	0	0	0	0		0							Dime-size hail reporte	144
10319874	SARASOTA	Venice	########	1810	Hail	1.75		0	0	0	0	FL	EST		C	115		0	0	0	0	5	NW	0							Golf ball-size hail fell c	145
10319875	SARASOTA	Englewooc	########	1635	Thunderst	69		0	0	0	0	FL	EST		C	115		0	0	0	0	0		0							A 79 mph wind gust w	146
10319876	SARASOTA	S Venice	########	1700	Thunderst	58		0	0	0	0	FL	EST		C	115		0	0	0	0	0		0							A 67 mph wind gust w	147
5574245	SARASOTA	SARASOTA	########	1441	Thunderst			0	0	10000	0	FL	EST	2050116	C	115	TBW	0	0					SARASOTA	27.33	-82.53	27.33	-82.53		Downburst	148
5571038	SARASOTA	SARASOTA	7/6/1996	1445	Waterspou			0	0	0	0	FL	EST	2051378	C	115	TBW	0	0			11	W	11	W	SARASOTA					A short-live	149
5571049	SARASOTA	VENICE	########	1600	Hail	0.75		0	0	0	0	FL	EST	2051389	C	115	TBW	0	0			3	N	3	N	VENICE	27.15	-82.45	27.15	-82.45			150
5571051	SARASOTA	VENICE	########	1600	Thunderst	66		0	0	20000	0	FL	EST	2051391	C	115	TBW	0	0							VENICE	27.1	-82.45	27.1	-82.45		Thunderst	151
5571050	SARASOTA	VENICE	########	1600	Thunderst			0	0	10000	0	FL	EST	2051390	C	115	TBW	0	0			3	N	3	N	VENICE	27.15	-82.45	27.15	-82.45		Thunderst	152
5571718	SARASOTA	SARASOTA	8/5/1996	1540	Hail	0.88		0	0	0	0	FL	EST	2052429	C	115	TBW	0	0							SARASOTA	27.33	-82.53	27.33	-82.53			153
5571719	SARASOTA	SARASOTA	8/5/1996	1545	Lightning			0	1	0	0	FL	EST	2052430	C	115	TBW	0	0							SARASOTA					A 22 year c	154
5571895	SARASOTA	VENICE	########	1435	Heavy Rair			0	0	2000	0	FL	EST	2052462	C	115	TBW	0	0							VENICE					Heavy rain	155
5571897	SARASOTA	VENICE	########	1530	Thunderst	52		0	0	0	0	FL	EST	2052464	C	115	TBW	0	0							VENICE	27.1	-82.45	27.1	-82.45		A 60 mph v	156
5571898	SARASOTA	VENICE	########	1545	Hail	0.75		0	0	0	0	FL	EST	2052465	C	115	TBW	0	0							VENICE	27.1	-82.45	27.1	-82.45			157
5571899	SARASOTA	VENICE	########	1554	Tornado		F0	0	0	0	0	FL	EST	2052466	C	115	TBW	0	0	0.2	5	2	E	2	E	VENICE	27.1	-82.42	27.1	-82.42		A short-live	158
5571900	SARASOTA	SARASOTA	########	1619	Hail	0.88		0	0	0	0	FL	EST	2052467	C	115	TBW	0	0			2	S	2	S	SARASOTA	27.3	-82.53	27.3	-82.53			159
5571903	SARASOTA	VENICE	########	1705	Lightning			0	0	5000	0	FL	EST	2052469	C	115	TBW	0	0							VENICE					Lightning s	160
5612240	SARASOTA	SARASOTA	1/9/1997	1612	Tornado		F0	0	0	0	0	FL	EST	2066893	C	115	TBW	0	0	0.1	5					SARASOTA	27.33	-82.53	27.33	-82.53	A brief short-lived tor	161
5611249	SARASOTA	SARASOTA	########	849	Tornado	0	F0	0	0	10000	0	FL	EST	2067031	C	115	TBW	0	0	0.1	5	3	E	3	E	SARASOTA	27.33	-82.48	27.33	-82.48	A short-lived tornado	162
5609543	SARASOTA	SARASOTA	########	1220	Flood			0	0	0	0	FL	EST	2067075	C	115	TBW	0	0			10	NW	4	W	SARASOTA					Very heavy rain cause	163
5609625	SARASOTA	SARASOTA	########	1331	Thunderst	52		0	0	0	0	FL	EST	2067077	C	115	TBW	0	0							SARASOTA	27.33	-82.53	27.33	-82.53	A thunderstorm wind	164
5609626	SARASOTA	SARASOTA	########	1335	Thunderst			0	0	125000	0	FL	EST	1045593	C	115	TBW	0	0			3	N	3	N	SARASOTA	27.38	-82.53	27.38	-82.53	Thunderstorm winds c	165
5609628	SARASOTA	SARASOTA	########	1410	Tornado		F0	0	0	25000	0	FL	EST	2067079	C	115	TBW	0	0	0.1	5	3	NNE	3	NNE	SARASOTA	27.37	-82.52	27.37	-82.52	A short-lived tornado	166
5609629	SARASOTA	SARASOTA	########	1410	Thunderst			0	0	1000	0	FL	EST	2067080	C	115	TBW	0	0			5	E	5	E	SARASOTA	27.33	-82.45	27.33	-82.45	Thunderstorm winds c	167
5609632	SARASOTA	SARASOTA	########	1430	Flood			0	0	0	0	FL	EST	2067083	C	115	TBW	0	0			4	E	4	E	SARASOTA					Heavy rain of 2.41 inc	168
5609633	SARASOTA	SARASOTA	########	1445	Thunderst			0	0	150000	0	FL	EST	1045600	C	115	TBW	0	0							SARASOTA	27.33	-82.53	27.33	-82.53	Thunderstorm winds s	169

5609637	SARASOTA	SARASOTA	########	1535	Thunderst		0	0	50000	0	FL	EST	2067087	C	115	TBW	0	0				26	SE	26	SE	SARASOTA	27.07	-82.23	27.07	-82.23	Thunderstorm winds t	170
5610357	SARASOTA	SARASOTA	########	1615	Hail	0.75	0	0	1000	0	FL	EST	2067741	C	115	TBW	0	0								SARASOTA	27.33	-82.53	27.33	-82.53	Dime sized hail was re	171
5610358	SARASOTA	NORTH PO	########	1630	Thunderst		0	0	1000	0	FL	EST	2067742	C	115	TBW	0	0								NORTH PO	27	-82.07	27	-82.07	Thunderstorm wind tc	172
5616314	SARASOTA	SARASOTA	########	1900	Lightning		0	0	185000	0	FL	EST	2067915	C	115	TBW	0	0				30	S	30	S	SARASOTA					Lightning ignited a fire	173
5616319	SARASOTA	SARASOTA	########	1440	Hail	0.75	0	0	0	0	FL	EST	2067920	C	115	TBW	0	0				5	S	5	S	SARASOTA	27.27	-82.53	27.27	-82.53		174
5615720	SARASOTA	SARASOTA	########	1600	Hail	0.75	0	0	0	0	FL	EST	2067953	C	115	TBW	0	0				8	SSE	8	SSE	SARASOTA	27.23	-82.48	27.23	-82.48	Dime sized hail was re	175
5622752	SARASOTA	SARASOTA	########	1530	Flood		0	0	20000	0	FL	EST	2070365	C	115	TBW	0	0								VENICE						176
5622837	SARASOTA	SARASOTA	########	1030	Flash Flooc		0	0	250000	0	FL	EST	2070370	C	115	TBW	0	0								NORTH PO					Heavy	177
5620540	SARASOTA	SARASOTA	########	1200	Tornado	F0	0	0	0	0	FL	EST	2070785	C	115	TBW	0	0	0.1	5		4	W	4	W	SARASOTA	27.33	-82.6	27.33	-82.6	A brief tornado touch	178
5620542	SARASOTA	SARASOTA	########	1205	Waterspou		0	0	0	0	FL	EST	2070787	C	115	TBW	0	0				3	NW	3	NW	SARASOTA					A waterspout was obs	179
5620664	SARASOTA	SARASOTA	########	1730	Waterspou		0	0	0	0	FL	EST	2070800	C	115	TBW	0	0				4	W	4	W	SARASOTA					A waterspout was obs	180
5619603	SARASOTA	SARASOTA	########	1300	Flood		0	0	100000	0	FL	EST	2070978	C	115	TBW	0	0								SARASOTA					Four to six	181
5619599	SARASOTA	SARASOTA	########	1800	Flash Flooc		0	0	2300000	0	FL	EST	2070977	C	115	TBW	0	0								OSPREY					Average	182
5623476	SARASOTA	SARASOTA	########	800	Flood		0	0	0	0	FL	EST	2071820	C	115	TBW	0	0				27	E	27	E	SARASOTA					The Myakka River at M	183
5623519	SARASOTA	SARASOTA	########	800	Flood		0	0	20000	0	FL	EST	2071828	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	184
5623378	SARASOTA	SARASOTA	########	1300	Flash Flooc		0	0	80000	0	FL	EST	2071804	C	115	TBW	0	0								SARASOTA					Heavy	185
5634219	SARASOTA	SARASOTA	1/1/1998	0	Flood		0	0	0	0	FL	EST	2073667	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	186
5634333	SARASOTA	SARASOTA	########	800	Flood		0	0	5000	0	FL	EST	2073680	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	187
5634342	SARASOTA	NORTH PO	########	915	Tornado	F0	0	0	5000	0	FL	EST	2073689	C	115	TBW	0	0	0.1	5						NORTH PO	27	-82.07	27	-82.07	A short lived tornado	188
5634553	SARASOTA	COUNTYW	########	1000	Flood		0	0	250000	0	FL	EST	2073693	C	115	TBW	0	0								COUNTYW					Heavy rains of four to	189
5638640	SARASOTA	SARASOTA	2/1/1998	0	Flood		0	0	10000	0	FL	EST	2074722	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	190
5638646	SARASOTA	VENICE	2/2/1998	1915	Thunderst		0	0	5000	0	FL	EST	2074727	C	115	TBW	0	0								VENICE					Thunderstorm winds c	191
5639890	SARASOTA	VENICE	########	425	Waterspou		0	0	0	0	FL	EST	2074763	C	115	TBW	0	0				5	N	5	N	VENICE						192
5639965	SARASOTA	VENICE	########	426	Tornado	F1	0	0	200000	0	FL	EST	2074764	C	115	TBW	0	0	0.2	10		5	N	6	N	VENICE	27.17	-82.45	27.18	-82.45	A tornado	193
5639889	SARASOTA	SARASOTA	########	430	Thunderst		0	0	4000	0	FL	EST	2074762	C	115	TBW	0	0								SARASOTA	27.33	-82.53	27.33	-82.53	Thunderstorm winds c	194
5639967	SARASOTA	COUNTYW	########	500	Flood		0	0	40000	0	FL	EST	2074766	C	115	TBW	0	0								COUNTYW					Heavy rain	195
5639980	SARASOTA	SARASOTA	########	800	Flood		0	0	200000	0	FL	EST	2074774	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	196
5649092	SARASOTA	SARASOTA	3/1/1998	0	Flood		0	0	0	0	FL	EST	2078899	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	197
5649178	SARASOTA	SARASOTA	3/1/1998	520	Hail	0.75	0	0	0	0	FL	EST	2078909	C	115	TBW	0	0	EMERGEN(							SARASOTA	27.33	-82.53	27.33	-82.53	Dime sized hail was re	198
5649180	SARASOTA	SARASOTA	3/1/1998	545	Thunderst		0	0	5000	0	FL	EST	2078911	C	115	TBW	0	0								SARASOTA	27.33	-82.53	27.33	-82.53	Thunderstorm winds c	199
5649181	SARASOTA	SARASOTA	3/1/1998	600	Tornado	F1	0	0	500000	0	FL	EST	2078912	C	115	TBW	0	0	0.4	20		2	ENE	2	ENE	SARASOTA	27.35	-82.5	27.35	-82.5	A tornado touched do	200
5649270	SARASOTA	SARASOTA	3/9/1998	20	Thunderst		0	0	60000	0	FL	EST	2078921	C	115	TBW	0	0								SARASOTA	27.4	-82.55	27.4	-82.55	Thunderstorm winds c	201
5649274	SARASOTA	NORTH PO	3/9/1998	35	Thunderst		0	0	42000	0	FL	EST	2078925	C	115	TBW	0	0								NORTH PO	27	-82.07	27	-82.07	Thunderstorm winds c	202
5649275	SARASOTA	SARASOTA	3/9/1998	40	Thunderst		0	0	5000	0	FL	EST	2078926	C	115	TBW	0	0								SARASOTA	27.33	-82.53	27.33	-82.53	Thunderstorm winds c	203
5649349	SARASOTA	OSPREY	3/9/1998	115	Thunderst		0	0	25000	0	FL	EST	2078932	C	115	TBW	0	0								OSPREY	27.2	-82.5	27.2	-82.5	Thunderstorm winds c	204
5649354	SARASOTA	MANASOT.	3/9/1998	130	Thunderst		0	0	75000	0	FL	EST	2078936	C	115	TBW	0	0								MANASOT.	26.98	-82.32	26.98	-82.32	Thunderstorm winds c	205
5647726	SARASOTA	SARASOTA	########	800	Flood		0	0	200000	0	FL	EST	1062535	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	206
5647821	SARASOTA	SARASOTA	########	2330	Flash Flooc		0	0	500000	0	FL	EST	2078950	C	115	TBW	0	0				3	ESE	3	ESE	SARASOTA					Three to six inches of	207
5647826	SARASOTA	OSPREY	########	1235	Hail	0.88	0	0	0	0	FL	EST	1062544	C	115	TBW	0	0				6	N	6	N	OSPREY	27.28	-82.5	27.28	-82.5	Nickel sized hail was r	208
5647827	SARASOTA	SARASOTA	########	1303	Thunderst		0	0	60000	0	FL	EST	2078955	C	115	TBW	0	0				7	SSE	7	SSE	SARASOTA	27.23	-82.48	27.23	-82.48	Thunderstorm winds c	209
5652908	SARASOTA	SARASOTA	4/1/1998	0	Flood		0	0	0	0	FL	EST	2079239	C	115	TBW	0	0				25	SE	25	SE	SARASOTA					The Myakka River at M	210
5652923	SARASOTA	SARASOTA	########	1335	Rip Curren		0	1	0	0	FL	EST	2079245	C	115	TBW	0	0				6	SSW	6	SSW	SARASOTA					A 21 year-old male ne	211
5653306	SARASOTA	SARASOTA	5/4/1998	1430	Hail	0.75	0	0	0	0	FL	EST	2079273	C	115	TBW	0	0								SARASOTA	27.33	-82.53	27.33	-82.53		212
5653305	SARASOTA	SARASOTA	5/4/1998	1430	Thunderst		0	0	0	0	FL	EST	2079272	C	115	TBW	0	0				5	SE	5	SE	SARASOTA	27.28	-82.48	27.28	-82.48	A 65 mph wind gust w	213
5653309	SARASOTA	SOUTH VEI	5/4/1998	1500	Thunderst		0	1	10000	0	FL	EST	2079276	C	115	TBW	0	0								SOUTH VEI	27.05	-82.42	27.05	-82.42	A 23 year-	214
5653310	SARASOTA	ENGLEWO	5/4/1998	1520	Thunderst		0	1	12000	0	FL	EST	2079277	C	115	TBW	0	0								ENGLEWO					Thunderstorm winds c	215
5666549	SARASOTA	VENICE	7/9/1998	744	Waterspou		0	0	0	0	FL	EST	2083769	C	115	TBW	0	0	AIRPLANE			1	W	1	W	VENICE					An aircraft reported a	216
5666695	SARASOTA	SARASOTA	########	1630	Flood		0	0	15000	0	FL	EST	2083783	C	115	TBW	0	0	NEWSPAPE							SARASOTA					Heavy rain of five to s	217
5664074	SARASOTA	SARASOTA	8/9/1998	1630	Lightning		0	0	100000	0	FL	EST	2148954	C	115	TBW	0	0	NEWSPAPE			6	SE	6	SE	SARASOTA					Lightning struck and c	218
5664243	SARASOTA	SARASOTA	########	1615	Heavy Rair		0	0	5000	0	FL	EST	2084389	C	115	TBW	0	0	TRAINED S			2	W	2	W	SARASOTA					Heavy rain of 2.8 inch	219
5668521	SARASOTA	SARASOTA	########	800	Flood		0	0	1000	0	FL	EST	2149391	C	115	TBW	0	0	OTHER FEI			27	E			SARASOTA					The Myakka River at M	220
5668610	SARASOTA	SARASOTA	########	1345	Thunderst		0	0	5000	0	FL	EST	2149402	C	115	TBW	0	0	NEWSPAPE			2	NE	2	NE	SARASOTA					Thunderstorm winds,	221
5670460	SARASOTA	SARASOTA	########	0	Flood		0	0	1000	0	FL	EST	2150639	C	115	TBW	0	0	OTHER FEI			27	E	27	E	SARASOTA					The Myakka River at M	222
5673861	SARASOTA	VENICE	########	1105	Thunderst		1	0	30000	0	FL	EST	2151640	C	115	TBW	0	0	NEWSPAPE			10	SW	10	SW	VENICE					A 77 year-old male die	223
5683996	SARASOTA	SARASOTA	1/2/1999	2310	Tornado	F0	0	0	250000	0	FL	EST	1502804	C	115	TBW	0	0	NWS STOR	2.3	20	3	W	1	N	SARASOTA	27.33	-82.57	27.33	-82.53	A National Weather Se	224
5683997	SARASOTA	SARASOTA	1/2/1999	2311	Waterspou		0	0	0	0	FL	EST	1502381	C	115	TBW	0	0	NWS STOR			2	W	1	NW	SARASOTA					The tornado that touc	225
5684070	SARASOTA	VENICE	1/2/1999	2358	Tornado	F0	0	0	350000	0	FL	EST	1502805	C	115	TBW	0	0	NWS STOR	3.9	33	11	ESE	14	ESE	VENICE	27.05	-82.3	27.02	-82.23	A	226
5690353	SARASOTA	NOKOMIS	3/1/1999	800	Wildfire		0	0	10000	0	FL	EST	1502143	C	115	TBW	0	0	NEWSPAPE							NOKOMIS					A wildfire burned nea	227
5690342	SARASOTA	VENICE	########	1330	Thunderst		0	0	80000	0	FL	EST	1502578	C	115	TBW	0	0	NEWSPAPE			1	SE	1	SE	VENICE	27.08	-82.43	27.08	-82.43	Thunderstorm winds c	228
5697475	SARASOTA	VENICE	########	1430	Lightning		0	0	0	0	FL	EST	2407992	C	115	TBW	0	0	NEWSPAPE			3	E	8	SE	VENICE					Lightning ignited and l	229
5697481	SARASOTA	VENICE	########	1600	Lightning		0	0	0	0	FL	EST	2408730	C	115	TBW	0	0	NEWSPAPE			10	E	10	E	VENICE					Lightning struck and b	230
5707421	SARASOTA	NORTH PO	6/3/1999	1606	Hail	1	0	0	0	0	FL	EST	2410975	C	115	TBW	0	0	LAW ENFO							NORTH PO	27	-82.07	27	-82.07	Quarter sized hail was	231
5707827	SARASOTA	SARASOTA	6/5/1999	1500	Lightning		0	0	20000	0	FL	EST	2410428	C	115	TBW	0	0	NEWSPAPE			2	NNE	2	NNE	SARASOTA					Lightning struck and c	232
5707642	SARASOTA	SARASOTA	6/5/1999	1507	Thunderst		0	0	5000	0	FL	EST	2410984	C	115	TBW	0	0	EMERGEN(			3	N	3	N	SARASOTA					Sarasota County Emer	233
5707908	SARASOTA	SARASOTA	########	818	Waterspou		0	0	0	0	FL	EST	2409395	C	115	TBW	0	0	AIRPLANE			15	WNW	15	WNW	SARASOTA					A pilot reported a wat	234
5715398	SARASOTA	SARASOTA	7/2/1999	1545	Flood		0	0	25000	0	FL	EST	1085954	C	115	TBW	0	0	NEWSPAPE							NORTH PO					Localized h	235
5714997	SARASOTA	SARASOTA	########	1430	Lightning		0	1	0	0	FL	EST	2411456	C	115	TBW	0	0	BROADCAS			6	SE	6	SE	SARASOTA					An adult male was str	236
5715085	SARASOTA	VENICE	########	1635	Thunderst		0	0	5000	0	FL	EST	2413248	C	115	TBW	0	0	LAW ENFO							VENICE	27.1	-82.45	27.1	-82.45	The Venice Police Dep	237
5715179	SARASOTA	VENICE	########	816	Waterspou		0	0	0	0	FL	EST	2410143	C	115	TBW	0	0	AIRPLANE			2	S	2	S	VENICE					A waterspout was rep	238
5719407	SARASOTA	VENICE	########	625	Thunderst		0	0	40000	0	FL	EST	2412554	C	115	TBW	0	0	EMERGEN(			5	N	5	N	VENICE	27.17	-82.45	27.17	-82.45	The Sarasota County E	239
5719490	SARASOTA	VENICE	########	1830	Thunderst		0	0	5000	0	FL	EST	2411760	C	115	TBW	0	0	EMERGEN(			2	NW	2	NW	VENICE	27.12	-82.47	27.12	-82.47	The Sarasota Emerger	240
5719489	SARASOTA	SARASOTA	########	2002	Tornado	F0	0	0	5000	0	FL	EST	2414221	C	115	TBW	0	0	EMERGEN(	0.1	10	7	E	7	E	SARASOTA	27.33	-82.42	27.33	-82.42	A short lived tornado	241
5719491	SARASOTA	NOKOMIS	########	1515	Thunderst		0	0	20000	0	FL	EST	2411761	C	115	TBW	0	0	LAW ENFO							ENGLEWO	27.12	-82.45	26.98	-82.33	The Sarasota Sheriffs I	242
5717187	SARASOTA	SARASOTA	9/8/1999	700	Flood		0	0	25000	0	FL	EST	2414274	C	115	TBW	0	0	EMERGEN(							SARASOTA					Three to four inches o	243
5717077	SARASOTA	SARASOTA	########	1730	Waterspou		0	0	0	0	FL	EST	2413535	C	115	TBW	0	0	OTHER FEI			10	S	10	S	SARASOTA					Sarasota airport towe	244
5139963	SARASOTA	NORTH PO	########	1300	Wildfire		0	0	250000	0	FL	EST	1093367	C	115	TBW	0	0	EMERGEN(			3	W	3	W	NORTH PO					Wildfires destroyed a	245
5146833	SARASOTA	VENICE	########	2000	Wildfire		0	0	0	0	FL	EST	1095552	C	115	TBW	0	0	NEWSPAPE			6	ENE	14	E	VENICE					Lightning ignited a wil	246
5146831	SARASOTA	SARASOTA	########	2200	Wildfire		0	0	0	0	FL	EST	1095550	C	115	TBW	0	0	NEWSPAPE			16	ESE	18	ESE	SARASOTA					Lightning ignited and l	247
5162468	SARASOTA	SARASOTA	########	1105	Waterspou		0	0	0	0	FL	EST	1100026	C	115	TBW	0	0	GENERAL F			3	SW	3	SW	SARASOTA					The public reported, t	248
5173963	SARASOTA	NORTH PO	8/3/2000	1633	Hail	0.75	0	0	0	0	FL	EST	1102677	C	115	TBW	0	0	TRAINED S			3	E			NORTH PO	27	-82.02	27	-82.07	A Skywarn Spotter rep	249
5173965	SARASOTA	NORTH PO	8/3/2000	1700	Hail	1.75	0	0	50000	0	FL	EST	1102679	C	115	TBW	0	0	LAW ENFO							NORTH PO	27	-82.07	27	-82.07	The North Port Police	250
5174665	SARASOTA	SIESTA KEY	8/9/2000	1530	Thunderst		0	0	100000	0	FL	EST	1102699	C	115	TBW	0	0	UTILITY CO					6	E	SARASOTA	27.28	-82.53	27.33	-82.43	The Florida Power & L	251
5173982	SARASOTA	SARASOTA	8/9/2000	1540	Thunderst		0	0	75000	0	FL	EST	1102735	C	115	TBW	0	0	FIRE DEPT/			1	E	3	S	SARASOTA	27.33	-82.52	27.28	-82.53	The Sarasota Fire Dep	252
5157100	SARASOTA	NOKOMIS	########	800	Flood		0	0	75000	0	FL	EST	1102739	C	115	TBW	0	0	AWOS	ASOS	MESONET	ETC							ENGLEWO			Heavy rainfall of four t	253
5174920	SARASOTA	VENICE	########	1640	Hail	0.75	0	0	0	0	FL	EST	1102716	C	115	TBW	0	0	TRAINED S							VENICE	27.1	-82.45	27.1	-82.45	A Skywarn Spotter rep	254

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521230	SARASOTA	SOUTH SAI	########	1600	Lightning			1	0	0	0	FL	EST-5		86151	C	115	TBW	0	0	Newspape				1	SSE	1	SSE	SOUTH SAI	27.267	-82.522	27.267	-82.522	A 39 year c	An upper l	340
538711	SARASOTA	GULF GATE	########	800	Heavy Rair			0	0	0	0	FL	EST-5		89429	C	115	TBW	0	0	CoCoRaHS				1	NE	1	NE	GULF GATE	27.261	-82.4885	27.261	-82.4885	A CoCoRaH	A stalled fr	341
538802	SARASOTA	GATOR CRI	########	800	Heavy Rair			0	0	0	0	FL	EST-5		89429	C	115	TBW	0	0	CoCoRaHS				0	ENE	0	ENE	GATOR CRI	27.2615	-82.3834	27.2615	-82.3834	A CoCoRaH	A stalled fr	342
550096	SARASOTA	MANASOT.	########	342	Tornado		EF0	0	0	20000	0	FL	EST-5		91782	C	115	TBW	0	0	NWS Storn		2.38	50	2	ENE	3	SSE	WARM MI	26.989	-82.2878	27.0079	-82.2554	A Myakka '	A line of th	343
572564	SARASOTA	VENICE GA	########	1505	Thunderst	39		0	0	2000	0	FL	EST-5	EG	95281	C	115	TBW	0	0	Trained Sp				0	N	0	N	VENICE GA	27.07	-82.41	27.07	-82.41	A trained s	Southwest	344
572568	SARASOTA	BAYSHORE	########	1505	Thunderst	35		0	0	3000	0	FL	EST-5	EG	95281	C	115	TBW	0	0	Broadcast				1	N	1	N	BAYSHORE	27.0873	-82.4296	27.0873	-82.4296	Broadcast	Southwest	345
572646	SARASOTA	LAUREL	########	1200	Thunderst	55		0	0	7000	0	FL	EST-5	EG	95305	C	115	TBW	0	0	Broadcast				2	NNW	2	NNW	LAUREL	27.1609	-82.4668	27.1609	-82.4668	Broadcast	Thunderst	346
609052	SARASOTA	GULF SHRS	########	1100	Thunderst	50		0	0	50000	0	FL	EST-5	EG	101853	C	115	TBW	0	0	Broadcast				1	NE	1	NE	GULF SHRS	27.0586	-82.4134	27.0586	-82.4134	Broadcast	A low pres	347
609339	SARASOTA	PINE SHRS	########	310	Tornado		EF2	0	2	12000000	0	FL	EST-5		101881	C	115	TBW	0	0	NWS Storn		1.15	350	1	WNW	1	S	SOUTH SAI	27.253	-82.5396	27.2663	-82.5284	An NWS St	A strong ar	348
617194	SARASOTA	ENGLEWO	########	1330	Hail	1		0	0	0	0	FL	EST-5		103267	C	115	TBW	0	0	Public				0	N	0	N	ENGLEWO	26.98	-82.37	26.98	-82.37	Hail the siz	A large me	349
633957	COASTAL S		6/6/2016	0	Storm Surg			0	0	300000	0	FL	EST-5		105339	Z	160	TBW	0	0	Emergency													Storm surg	Tropical St	350
633033	COASTAL S		6/6/2016	0	Tropical St			0	0	5000	0	FL	EST-5		105339	Z	160	TBW	0	0	Emergency													Tropical St	Tropical St	351
643204	SARASOTA	BEE RIDGE	########	1530	Thunderst	40		0	0	50000	0	FL	EST-5	EG	107200	C	115	TBW	0	0	Broadcast				1	SW	1	SW	BEE RIDGE	27.2692	-82.4806	27.2692	-82.4806	Broadcast	Abundant	352
646102	SARASOTA	NEWTON F	########	1549	Lightning			1	0	0	0	FL	EST-5		107815	C	115	TBW	0	0	Broadcast				1	SW	1	SW	NEWTON F	27.36	-82.54	27.36	-82.54	A 50 year c	Easterly flc	353
648970	SARASOTA	NEWTON F	########	1515	Flood			0	0	0	0	FL	EST-5		108036	C	115	TBW	0	0	Broadcast	Heavy Rair			2	WNW	1	WSW	NEWTON F	27.3744	-82.5545	27.3599	-82.5498	Excessive r	Deep mois	354
657046	SARASOTA	LONGBOAT	9/1/2016	1100	Flood			0	0	250000	0	FL	EST-5		108576	C	115	TBW	0	0	Emergency	Heavy Rair			2	NW	1	SW	SIESTA KEY	27.3891	-82.6426	27.2637	-82.5625	Heavy rain	Hermine fc	355
651757	COASTAL S		9/1/2016	1100	Tropical St			0	0	500000	0	FL	EST-5		108576	Z	160	TBW	0	0	C-MAN Sta													Hermine fc	Hermine fc	356
657047	COASTAL S		9/1/2016	2000	Storm Surg			0	0	4000000	0	FL	EST-5		108576	Z	160	TBW	0	0	Emergency													Storm surg	Hermine fc	357
655897	SARASOTA	BEE RIDGE	########	1730	Hail	0.88		0	0	0	0	FL	EST-5		109632	C	115	TBW	0	0	Public				1	NW	1	NW	BEE RIDGE	27.29	-82.48	27.29	-82.48	A caller rep	Afternoon	358
674663	SARASOTA	OSPREY	########	1938	Thunderst	40		0	0	150000	0	FL	EST-5	EG	112925	C	115	TBW	0	0	Emergency				1	ENE	0	NW	SARABAY A	27.205	-82.4878	27.2043	-82.4742	Power line	An area of	359
687159	INLAND SA		########	1243	Wildfire			0	0	0	0	FL	EST-5		114575	Z	260	TBW	0	0	Emergency													Florida em	A wildfire s	360
701836	SARASOTA	MANASOT.	########	1525	Hail	0.88		0	0	0	0	FL	EST-5		116709	C	115	TBW	0	0	Public				1	S	1	S	MANASOT.	26.96	-82.35	26.96	-82.35		Scattered a	361
705837	COASTAL S		########	1200	Tropical St			0	0	0	0	FL	EST-5		117337	Z	160	TBW	0	0	ASOS													Tropical St	Tropical St	362
705566	SARASOTA	BEE RIDGE	8/2/2017	1330	Thunderst	40		0	0	2000	0	FL	EST-5	EG	117312	C	115	TBW	0	0	Broadcast				1	W	1	W	BEE RIDGE	27.2804	-82.4811	27.2804	-82.4811	A tree was	Deep mois	363
710655	SARASOTA	LONGBOAT	########	900	Flood			1	0	50000	0	FL	EST-5		118236	C	115	TBW	0	0	Emergency	Heavy Rair			2	NW	2	NW	MANASOT.	27.3889	-82.6429	26.9466	-82.3769	Heavy rain	A trough o	364
721803	INLAND SA		########	700	Hurricane			0	0	8000000	2200000	FL	EST-5		119520	Z	260	TBW	0	0	Emergency													In inland p	Monetary	365
721791	COASTAL S		########	700	Hurricane			0	0	2730000	0	FL	EST-5		119520	Z	160	TBW	0	0	Emergency													In coastal p	Monetary	366
729642	INLAND SA		########	0	Frost/Free			0	0	0	0	FL	EST-5		121834	Z	260	TBW	0	0	Mesonet													Temperatu	A strong co	367
742448	SARASOTA	GOLDEN B	########	1521	Thunderst	56		0	0	0	0	FL	EST-5	MG	123764	C	115	TBW	0	0	AWOS				0	NW	0	NW	GOLDEN B	27.0725	-82.4528	27.0725	-82.4528	The AWOS	A strong sc	368
753109	COASTAL S		########	2000	Rip Curren			1	0	0	0	FL	EST-5		125503	Z	160	TBW	0	0	Broadcast													A man and	A man got	369
753814	SARASOTA	PINE SHRS	########	1315	Lightning			1	1	0	0	FL	EST-5		125691	C	115	TBW	0	0	Law Enforc				1	NW	1	NW	PINE SHRS	27.26	-82.54	27.26	-82.54	A man and	Scattered t	370
771099	SARASOTA	BAYSHORE	########	1553	Thunderst	45		0	0	50000	0	FL	EST-5	EG	128525	C	115	TBW	0	0	Law Enforc				1	WNW	1	WNW	BAYSHORE	27.0841	-82.4392	27.0841	-82.4392	A mobile h	Easterly flc	371
782633	SARASOTA	SIESTA KEY	########	1735	Tornado		EF0	0	0	0	0	FL	EST-5		130734	C	115	TBW	0	0	Social Med		0.02	20	3	NW	3	NW	SIESTA KEY	27.31	-82.5767	27.31	-82.5765	A social me	Hurricane I	372
790676	SARASOTA	SIESTA KEY	########	1104	Thunderst	45		0	0	2000	0	FL	EST-5	EG	132120	C	115	TBW	0	0	Social Med				0	SSW	0	SSW	SIESTA KEY	27.2786	-82.5503	27.2786	-82.5503	A public so	A strong co	373
794932	SARASOTA	BELSPUR	########	550	Thunderst	52		0	0	0	0	FL	EST-5	EG	132692	C	115	TBW	0	0	Amateur R				1	S	1	S	BELSPUR	27.3	-82.45	27.3	-82.45	At amateu	A squall lin	374
808369	SARASOTA	MANASOT.	########	1430	Thunderst	50		0	0	40000	0	FL	EST-5	EG	134872	C	115	TBW	0	0	Public				2	NNE	2	NNE	MANASOT.	26.95	-82.35	26.95	-82.35	A large tre	A cold fron	375
829235	SARASOTA	NOKOMIS	########	1740	Lightning			0	0	50000	0	FL	EST-5		137983	C	115	TBW	0	0	Broadcast				4	ENE	4	ENE	NOKOMIS	27.1378	-82.3682	27.1378	-82.3682	Lightning v	Easterly flc	376
883963	COASTAL S		########	1723	Wildfire			0	0	0	0	FL	EST-5		147053	Z	160	TBW	0	0	Amateur R													Ham radio	Squall line	377
892120	SARASOTA	VENICE	6/1/2020	1639	Tornado		EF0	0	0	0	0	FL	EST-5		148149	C	115	TBW	0	0	Public		0.62	75	1	ENE	1	E	VENICE	27.1077	-82.4161	27.0988	-82.4149	A short live	A brief torr	378
892158	SARASOTA	SUNNYLAN	6/6/2020	1758	Flood			0	0	0	0	FL	EST-5		147241	C	115	TBW	0	0	Public	Heavy Rair			1	SW	1	SW	SUNNYLAN	27.27	-82.51	27.2694	-82.5085	Street and	Tropical St	379
892159	SARASOTA	BELSPUR	6/6/2020	1807	Flood			0	0	0	0	FL	EST-5		147241	C	115	TBW	0	0	Public	Heavy Rair			2	WSW	2	WSW	BELSPUR	27.31	-82.48	27.3083	-82.4793	Street floo	Tropical St	380
892160	SARASOTA	OSPREY	6/6/2020	1901	Flood			0	0	0	0	FL	EST-5		147241	C	115	TBW	0	0	Public	Heavy Rair			1	SE	1	SE	OSPREY	27.19	-82.49	27.19	-82.4888	River overf	Tropical St	381
892513	SARASOTA	VAMO	########	1845	Tornado		EF0	0	0	0	0	FL	EST-5		148243	C	115	TBW	0	0	Broadcast		0.4	75	3	ENE	3	NE	SARABAY A	27.24	-82.44	27.2343	-82.4402	A brief torr	A strong th	382

LMS-Appendix J
CROSSWALK to be ADDED ONCE FINAL REVIEW RECEIVED

LMS-Appendix K

CONSERVATION AND COASTAL MANAGEMENT ELEMENT

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CONSERVATION AND COASTAL MANAGEMENT

I. NATURAL RESOURCES

A. INVENTORY AND ANALYSIS

The entire eastern shoreline of Longboat Key (Figure 1) lies along Sarasota Bay, with its western shoreline consisting entirely of gulf frontage. Longboat Pass defines the northern limits of the Town, while New Pass is considered the southern limits. Prior to development, Longboat Key was an overwash barrier island consisting of a fore and back beach, and a coastal ridge. Many of the typical estuarine communities were in evidence, yet due to extreme development pressures, very little, if any, of the natural ecosystems of Longboat Key remain today. Longboat Key has essentially reached build-out in terms of future development opportunities. Open Space and Conservation Areas on, or adjacent to, Longboat Key have been designated previously in past planning efforts. These Conservation Areas are limited to the following:

1. All tidally influenced water bodies connected to and including Sarasota Bay, along the eastern, northern and southern shorelines of Longboat Key; Sarasota Bay, classified by the Florida Department of Environmental Protection (FDEP) as an Outstanding Florida Water (OFW), consisting of Class II and Class III areas;

2. Gulf of Mexico beach areas, along the western shoreline of Longboat Key, waterward of the designated Erosion Control Line (ECL);

3. Longboat Key named features including Buttonwood Harbor and Millar Bay areas;

4. Sarasota Bay island preserves known as the Town Islands (State Wilderness Area);

5. Joan M. Durante Park;

6. Quick Point Nature Preserve;

7. Sister Keys; and,

8. Greer Island Beach Park.

These areas are depicted in Figure 2, Environmental Features, along with remnant wetland fringes (designated as Open Space) and constitute the last remaining non-developed areas of Longboat Key (see Recreation and Open Space Element). There are no significant riverine systems existing on the barrier island that delineates Longboat Key. The only lakes existing are small stormwater treatment systems that were co-utilized for fill purposes in order to raise the building pad elevations for flood protection.

The Town has adopted Conservation-Coastal Policy 1.7.3 (and Transportation Policy 1.9.3), which directs that exotics, specifically, Australian Pines (*Casuarina equisetifolia*) be removed where they threaten evacuation routes or utility locations. Further, the Town has adopted a local ordinance that refunds homeowner's for the removal of up to three Australian Pines annually. The Australian Pine habitats shown on Figure 2 are depicted to indicate the concentration of seed sources which must be removed.

Longboat Key is considered an urban setting with limited natural ecosystems. From this perspective, environmental impact assessments for those remaining natural systems should primarily focus on urban stormwater runoff quality and, to a lesser extent, on associated water quality impacts from ongoing recreational boating activity. These will be further discussed in the following sections.

B. COMMERCIAL MINERAL EXTRACTION

There are no known commercial mineral mining or extraction activities presently underway on Longboat Key. No future related activity is expected to occur.

C. SOIL EROSION PROBLEMS

The principal soil erosion issue in the Town of Longboat Key is beach movement typical of a barrier island. The degree of past upland development has generally precluded significant other surface soil erosion, although localized silt transport into canals and other surface water does occur. The entire gulf shoreline of the Town has been designated as critically eroded by the FDEP. Fore beach movement, by means of longshore and off-shore sand transport, is a natural process caused by seasonal changes in winds and currents, exacerbated during time of storms. On many developed barrier islands such as Longboat Key, this natural sand accretion and erosion process was altered by human intervention in the form of shoreline armoring (e.g., revetments, seawalls, rip-rap, etc.). Current scientific opinion points to these armoring attempts as the cause for accelerated erosion along barrier island shorelines. While armoring a section of shoreline may temporarily alleviate erosion in that particular area, the natural longshore transport process is interrupted, thus causing erosional imbalances along the coastline.

Numerous armoring structures were built over the years, on both the gulf and Sarasota Bay sides of Longboat Key, resulting in varying levels of success. Residents, particularly those living along the gulf were greatly concerned with beach erosion and storm vulnerability. This concern prompted the establishment of a Beach Renourishment Funding Committee, studies assessing beach erosion (1982, USACE), an Erosion Prevention District (1987), and two special taxing districts to address beach erosion (1992). The resulting initial restoration and continued maintenance renourishment of the gulf beach is more fully described in Section IX. Stormwater run-off as a result of island development has not caused chronic erosional problems.

D. FLORA AND FAUNA HABITATS

Given the known habitats existing on Longboat Key, while taking into account the degree to which the barrier island has been developed, a comprehensive listing of flora and fauna species occurring or likely to occur on Longboat Key was developed. On Table 1, each species is listed with the expected habitat in which it can be found. The following existing habitats of Longboat Key were utilized:

FB	Fore Beach
BB	Back Beach
CR	Coastal Ridge
NEC	Naturalized Exotic Community
PF	Pine Forest
HF	Hardwood Forest
TM	Tidal Marsh/Flats
TS	Tidal Swamps
GBW	Gulf / Bay Waters
SG	Seagrass Beds

TABLE 1
STATE AND FEDERALLY LISTED SPECIES OF THE LONGBOAT KEY AREA

Common Name	Scientific Name	Habitat(s)	FNAI	FWCC	USFWS
REPTILES AND AMPHIBIANS					
American alligator	*Alligator mississippiensis*	TM/TS		SSC	T
Loggerhead Turtle	*Caretta caretta*	FB/BB	S3[1]	T	T
Green turtle	*Chelonia mydas*	FB/BB	S2[1]	E	E
American crocodile	*Crocodylus acutus*	TM/TS/SG		E	T[4]
Leatherback turtle	*Dermochelys coriacea*	FB/BB	S3[1]	E	E
Hawksbill Turtle	*Eretmochelys imbricata*	FB/BB	S1[3]	E	E
Gopher tortoise	*Gopherus polyphemus*	CR/NEC/PF/HF	S3[3]	SSC	
Kemp's Ridley turtle	*Lepidochelys kempii*	FB/BB	S3[2]	E	E
Gopher frog	*Rana capito*	CR/NEC/PF/HF		SSC	
Eastern Indigo Snake	*Drymarchon corais couperi*	CR/NEC/PF/HF	S2[3]	T	T
FISH					
Smalltooth sawfish	*Pristis pectinata*	GBW			E
Gulf Sturgeon	*Acipenser oxyrinchus desotoi*	GBW	S2[3]	SSC	T
MAMMALS					
West Indian Manatee	*Trichechus manatus latirostris*	GBW/SG	S2[1]	E	E/CH
Florida Mouse	*Peromyscus floridanus*	CR/NEC/PF/HF		SSC	
BIRDS					
Roseate spoonbill	*Platalea ajaja*	TM/TS		SSC	
Snowy Plover	*Charadrius alexandrinus*	TM/FB		T	
Piping Plover	*Charadrius melodus*	TM/FB	S2[3]	T	T
Little blue heron	*Egretta caerulea*	TM/TS		SSC	
Snowy egret	*Egretta thula*	TM/TS		SSC	
Tricolored heron	*Egretta tricolor*	TM/TS		SSC	
Arctic peregrine falcon	*Falco peregrinus tundrius*	All*		E	
Southeastern American Kestrel	*Falco sparverius paulus*	All*		T	
American oystercatcher	*Haematopus palliatus*	TM/FB/BB		SSC	
Bald Eagle	*Haliaetus leucocephalus*	All*	S3[2]	T	
Brown Pelican	*Pelecanus occidentalis*	TM/TS/GBW/SG		SSC	
Black Skimmer	*Rynchops niger*	GBW/FB/BB	S3[1]	SSC	
Least Tern	*Sterna antillarum*	GBW/FB/BB	S3[1]	T	
Roseate Tern	*Sterna dougallii*	GBW/FB/BB		T	
Wood Stork	*Mycteria americana*	TM/TS	S2[2]	E	E
Reddish Egret	*Egretta refescens*	TM/TS		SSC	

			Status		
Common Name	**Scientific Name**	**Habitat(s)**	**FNAI**	**FDACS**	**USFWS**
PLANTS					
Aboriginal Prickly Apple	*Harrisia aboriginum*	TS/CR/BB	S1[3]	E	
Sanibel lovegrass	*Eragrostis pectinacea var. tracyi*	BB/CR	S1[2]	E	
Nodding Pinweed	*Lechea cernua*	BB/CR/NEC	S3[3]	T	
Beach-creeper	*Emodea littoralis*	BB/CR/NEC		T	
Florida coontie	*Zamia floridana*	PF/HF/NEC/CR		CE	

Sources: Florida Natural Areas Inventory (FNAI) http://www.fnai.org. Query results obtained August 23, 2007. *Florida's Endangered Species, Threatened Species, and Species of Special Concern*. Florida Fish and Wildlife Conservation Commission (FWC), June 2006. *Federally Listed & Candidate Species in Sarasota and Manatee Counties, Florida*. http://www.fws.gov. Updated July 18, 2007. *Notes on Florida's Endangered and Threatened Plants*. FDACS, 2003.

Key:

[1] Observation record from Florida Natural Areas Inventory (documented on LBK).
[2] Observation record from Florida Natural Areas Inventory (likely on LBK).
[3] Observation record from Florida Natural Areas Inventory (potentially on LBK).
[4] Last documented in 1953 (FWS, 2007)
***** Winter visitor

E	Endangered	**T**	Threatened
T	Threatened	**FWCC**	Florida Fish and Wildlife Conservation Commission
SSC	Species of Special Concern	**USFWS**	U.S. Fish & Wildlife Service
CE	Commercially Exploited	**FDACS**	FL Department of Agriculture and Consumer Services
S1	Critically Imperiled in Florida (<1000)	**S2**	Imperiled in Florida (< 3000)
		S3	Either very rare or found in a restricted range in Florida

II. KNOWN POLLUTION PROBLEMS

Several factors dictate the nature of potential estuarine pollution on Longboat Key. Future construction is limited primarily to residential development. Many of the earlier residential developments on Longboat Key (prior to 1970) were constructed at a period in time when stormwater quality treatment controls were not required to be incorporated into a project's overall design. Thus, on the island urban stormwater run-off controls were not developed to optimal conditions. It is not known what percentage of the island was developed without stormwater quality controls. In the mid-1970's, the entire island was placed under a central sewage collection system, with treatment taking place on mainland Manatee County. Additionally, it was during this period of time that water quality and quantity controls were beginning to become required of Longboat Key development.

Along with the residential component of Longboat Key, tourism and recreation make up another major segment of island development. Figure 3 depicts three commercial marinas, one public mooring area, and four private marinas. Other than urban stormwater run-off, boating related pollution rates highly in terms of threatening estuarine health and productivity, providing a persistent threat to the surrounding water bodies' flora and fauna species. Boat densities, compounded by poor bay circulatory patterns, can lead to a build up of pollutants over time. A key to correcting these problems is the utilization of best management practices at the boat harborages. For example, strict rules and ordinances need to be implemented for prohibiting the discharge of any wastes into the waters of a facility. Sewage pump-out stations should be required for all in-water moorings. Additionally, any required maintenance dredging of canals or similar areas for navigational purposes should include the use of turbidity screens in order to keep sediments from unnecessarily fouling ambient water quality.

In addition to water quality controls, adverse flora and fauna impacts can result from boating. Seagrass bed prop dredging can occur as a result of taking boats over the shallower grass flats, along with the potential damage of boating impacts on manatees. The manatee "boat kills" in the bay waters off of Longboat Key have not occurred to the same degree as areas to the south. The potential remains great if education and boater caution are not exercised. Sarasota County and Longboat Key recently adopted manatee protection plan ordinances to further protect the manatees.

Longboat Key continues to concentrate on urban stormwater run-off and boating-induced water quality programs as primary areas of concern. Future adverse environmental impacts may be held to a minimum if proper water quality best management practices are applied to the Town's designated conservation areas. Current state water quality controls and strict maintenance and monitoring programs should continue to be utilized for all future Longboat Key development.

In addition to pollution, a phenomenon that continues to adversely affect Longboat Key is red tide. Red tide is the result of massive multiplication (or "bloom") of tiny, single-celled algae called *Karenia brevis* (K. brevis) usually found in warm saltwater, but which can exist at lower temperatures. It is a natural phenomenon. In high concentrations, K. brevis may create a brownish-red sheen on the surface of the water; in other instances, it may look yellow-green, or may not be visible at all. Although not scientifically confirmed as the cause, a red tide event in 2005 is thought to have contributed to a 'dead zone' in the Gulf of Mexico that encompassed an

estimated 2,500 square miles (State of the Bay 2006, Sarasota Bay Estuary Program, 2006). No one has been able to predict with accuracy when or where red tide will appear or how long it will last as it is affected by many variables such as weather and other factors.

K. brevis blooms are initiated miles offshore of the Florida gulf coast, moving onshore with winds and ocean currents. Scientists believe that K. brevis algae may enter a dormant state at some point in their life cycle, forming cysts that settle miles off the west coast of Florida in ocean bottom sediments creating a "seed bed" effect. They think that strong flows of warm water from the Gulf Stream have carried the algae up the East Coast and inshore to the Carolinas.

Irritations of the eyes, nose, throat, tingling lips and tongue are common symptoms that often occur during red tides. Waves, wind and boat propellers in high concentrations of red tides disperse toxin particles into the air causing problems for people along the shoreline and on the gulf beaches. People suffering from severe or chronic respiratory conditions such as emphysema or asthma should avoid red tide areas. Symptoms usually disappear within 24 hours once the exposure is discontinued. Ingestion of water containing toxins produced by K. brevis may result in more severe complications to mammals.

K. brevis produces a poison, or toxin. Filter-feeding shellfish, oysters, clams, mussels and other bivalve mollusks that consume K. brevis concentrate the toxin in various organs. Red tide toxins can be deadly to finfish. These toxins also are incorporated into the marine aerosol, which causes the respiratory irritation to people along the shore. The Town of Longboat Key financially supports S.T.A.R.T. (Solutions to Avoid Red Tide, Inc.), which is dedicated to promoting efforts for control and mitigation of red tide in an environmentally responsible manner and is committed to education outreach as its primary mitigation strategy. START is a partnership composed of the Florida Department of Health in Tallahassee, Mote Marine Laboratory in Sarasota, and the FWCC-Florida Fish & Wildlife Research Institute in St. Petersburg (http://www.start1.com/).

III. SHORELINE USE CONFLICT

The land use element does not depict present or future conflicts between "shoreline" uses. The major issues discussed in that section are related to intensity differences, primarily resulting from the Town's efforts to reduce its build out potential to levels manageable by its infrastructure and its exposed location. Specific coastal related issues that can be considered conflicts are these:

- Water Recreation versus Drainage
- Urbanization versus the Natural Setting
- Privatization versus Public Access
- Active Recreation versus Passive Recreation

A. WATER RECREATION VERSUS DRAINAGE

The basis for Longboat Key's visual, scenic, recreational, and boating amenities is the water. All aspects of this amenity can become lost through extreme pollution. Longboat Key, however, benefits from a relatively clean Gulf of Mexico setting and from Sarasota Bay, which has moderate pollution problems. Sheet flow from Gulf of Mexico Drive, along with other drainage

systems on Longboat Key, contributes to Sarasota Bay problems. Older areas of the Town have direct non-point stormwater discharge from suburban areas, which washes accrued contaminants from parking lots into the Bay or into drainage structures that also directly discharge into the Bay. This is a lesser problem for the gulf, with only one known outfall (see Stormwater Sub-Element).

The gulf's water quality allows unlimited recreation opportunities and the Bay's water quality is still generally safe for human contact notwithstanding frequent shellfish bans. Therefore, the Town continues to enjoy the Bay's amenities.

B. URBANIZATION VERSUS THE NATURAL SETTING

The Town's existing urban structure has displaced the greater part of the Town's natural setting. A large part of the remaining undeveloped portion of the Town has been invaded by exotic vegetation, notably Brazilian Peppers (*Schinus terebinthifolius*) and Australian Pines (*Casuarina equisetifolia*). Development has altered substantial parts of the Town's Bay and gulf shoreline. Much of the island's bayfront has been dredged or filled, resulting in loss of much of the bayside fringing vegetation. Gulfside development has displaced the greatest part of the natural dune system, although beach and dune restoration has become a condition of development approval. Storms and erosion have caused parts of the beach to retreat to gulfside structures. Some structures have been lost through time. Elsewhere, many owners historically resorted to seawalls, revetments, riprap, and groins for protection.

Future growth has absorbed the majority of upland areas not already in public ownership. Greater setbacks exercised on the gulfside and passes, and prohibitions against further significant dredging and filling activities or armoring of the shoreline should result in fewer future impacts on the natural shoreline. Exceptions for beach renourishment, however, are clearly needed as discussed in succeeding sections.

C. PRIVATIZATION VERSUS PUBLIC ACCESS

The Town has limited public access, in that the greatest part of the Town's shoreline above mean high water is held in private ownership. This is common for Florida communities. The remaining parts of the Town's shoreline have access in one of two ways: free or commercial.

Free public access to the beach and bay is spaced at irregular intervals along the shoreline. One relatively large area, the Greer Island Beach Park, located on the gulfside on the island's northern end, has three separate parking areas, two with improvements. Smaller unimproved areas exist near mid-key and on the island's southern end, providing parking and access to the New Pass areas. There are other sites with small shore side parking areas near the access points. The Town's public access facilities are further discussed in Section X and mapped in the Appendix.

Beach access is available through tourism establishments located on the gulf and includes all hotel, motel and temporary rental space. This commercial access is a large part of the Town's economic base, and meets what may be considered its share of the State's tourism goal for public access.

Commercial public bay access is very limited. There are only one public mooring area, three commercial marinas, five restaurants with docks, and residential development with associated boat slips. The Longboat Key Moorings is one of the largest on the west coast of Florida and contains 278 boat slips.

A listing of the three commercial marinas, with slip counts of each, follows:

	Wet Slips	Dry Slips	Total Slips
Cannons	27	8	35
The Boathouse	11	194	205
Longboat Key Moorings	278	0	278
Total Slips:	**316**	**202**	**518**

The currently limited free access to the beach and the similarly limited free and commercial access to the bay results from the Town's urbanization pattern. Future growth will virtually ensure that existing access sites will serve as the upper limit of access in the Town. This may intensify as the smaller, older, commercial beach access accommodations may transfer ownership or redevelop as residential units or similar private restricted land uses.

The amount of public beach available has been dramatically enhanced by the adoption and recordation of an Erosion Control Line (ECL), pursuant to State Statutes in 1993. Although a small portion of island had established an ECL prior to the beach restoration project of 1993, the establishment of the 1993 ECL, together with the deposition of almost 6.26 million cubic yards of sand during various beach nourishment events has dramatically increased the public portion of the beach on Longboat Key.

In 2005, the Florida Legislature approved House Bill 955, which focuses on the preservation of recreational and commercial working waterfronts. By definition, recreational and commercial working waterfronts include wet and dry storage marinas. The legislation requires local governments to include strategies for preservation of such facilities that provide public access to navigable waters.

The marinas located within the Town (identified above) fit the definition and the Town has adopted policies that encourage their preservation. The Longboat Key Moorings is part of the Bay Isles Planned Development (PD), which does not include underlying residential density. The Boathouse and Cannon's are zoned M-1, a commercial zoning category that also does not include underlying residential density. To provide flexibility for non-residential redevelopment, outside of PDs, but including the M-1 zone district, the Town adopted Ordinance 02-19, Commercial Revitalization (Town Code, Section 158.175). The intent recognizes that non-residential development is important to the Town and that flexibility is available for parking requirements, minor building expansions and upgrades, landscaping and ADA compliance.

D. ACTIVE RECREATION VERSUS PASSIVE RECREATION

The intensity of use of the coastal resource is an issue that has been relevant for the Town since its inception. Active recreation in its various components (most commonly intense beach use at resorts, and boating at public and private marinas) has the side effects of noise, trash, pollution, and often, social discord. Passive recreation (quiet enjoyment of scenic amenities) has few side effects. However, to achieve the goals of passive recreation, greater management and enforcement of regulations is necessary in order to prevent the intrusion of the more disturbing active recreational activities, such as motorized vehicles on the beach or in the waters (boats, jet skis).

IV. NEED FOR WATER-DEPENDENT AND WATER-RELATED SITES

The Town is a water-oriented community that is largely built out. The redevelopment that is expected will primarily be driven by the tourism to residential conversions. Given the nature of the Town's development, its location in regard to the state and the nation, and the regional and state goals in support of tourism, it would be proper to consider the tourist facilities to be water dependent, but by state definition, these tourist-resort uses are water-related uses. Water-dependent uses would be marinas and public recreation areas. There are approximately 41 tourist or seasonal residential complexes in the Town with the majority of the facilities located on the gulf.

Water-related uses are also found in connection with virtually all housing on the island. These uses are primarily the extensive private dockage found on the bayside. Additionally water-related uses may also include waterfront restaurants, where the amenity attracts the facility's clientele. Water-dependent and water-related uses are depicted on Figures 3 and 4.

Future redevelopment within the Town will not generate a demand for more water-dependent and water-related facilities. With an approximate ratio of 1 boat for every 16 residents in the two-county area, and the current trend of population stability or slight decreases within the Town, there should be sufficient wet and dry slip availability to fulfill anticipated demand.

V. THE ECONOMIC BASE

Longboat Key is a coastal residential community with no industrial development and limited commercial activity. The Town's general operating revenues are largely derived from property taxes with the balance being comprised of franchise fees, utility service taxes, licenses and permits, intergovernmental revenues, charges for services, fines and forfeits, and miscellaneous revenues.

Although the Town's businesses are predominantly related to supporting residential activities, the tourist trade that makes an important contribution to the Town's economic base. There are approximately 41 establishments providing temporary housing to tourists or seasonal residents. Based on the Town's list of tourist related establishments, the Town provides 1,408 units. Of these 41 complexes, 25 would be classified as hotel/motel appealing to visitors seeking one-night lodging. These 25 complexes provide a total of 916 units/rooms. Using the Florida Division of

Hotels and Restaurant's list of Manatee and Sarasota County hotels/motels, the Town accounts for about 15% of the two counties' tourist related accommodations. The commercial business economy is dependent on both the private residential community and the tourist trade. The attractions for both private residents and tourists to live on or to visit Longboat Key are its bay and gulf coasts. The two coasts are vital bases for the island's economy.

VI. HISTORIC RESOURCES

Summarized from the Land Use Element, the Town has very few national registry sites. There is also one archaeological site. Future development in the coastal zone as forecasted in the Future Land Use Element is not expected to affect these sites.

VII. INVENTORY AND ANALYSIS OF ESTUARINE POLLUTION CONDITIONS

Estuarine pollution from Longboat Key has only been closely viewed in terms of protection measures dedicated to maintaining the environmental values of Sarasota Bay. Seagrass community habitat loss is difficult to measure due to a poor data base inventory of pre-development conditions. Boating impacts (e.g., water quality degradation from petroleum products, prop damage from shallow water vessel operation, etc.), have historically contributed to a reduction in bay productivity and health.

Water quality data collection on Longboat Key was virtually non-existent until recently. Residential areas and golf courses, no matter how well maintained, are generally considered non-point sources of nutrients in receiving waters. Surface water management systems for individual development parcels also tend to operate at less than appropriate efficiency levels if not maintained or constructed properly.

The Sarasota Bay Estuary Program (SBEP), in conjunction with the FDEP, has analyzed available water quality data and determined that all main portions of Sarasota Bay meet state water quality standards (State of the Bay 2006, SBEP, 2006). Yet, several sampling stations near developed portions of the Key have historically shown less than optimal conditions as a result of stormwater runoff.

Five water quality indices (nitrogen, phosphorus, chlorophyll; a, water clarity, and dissolved oxygen) were evaluated as part of the June 2007 National Estuary Program Coastal Condition Report (USEPA 2007). These five indices were used to assign water quality ratings for Sarasota Bay as a whole as well as smaller subsets of the entire waterbody. Approximately 40% of Sarasota Bay was rated as having good water quality, while a fair rating was assigned to 55% of the region; and, the remaining five percent was classified as poor. Station monitoring results in the vicinity of Longboat Key were rated as good with the exception of fair ratings at a single station in the central portion of the island and one near New Pass at the southern end of the island. The 2007 USEPA report concludes that:

SBEP analyses have shown that although temporal trends by segment indicate that water quality in Sarasota Bay is improving, water quality problems still exist in the (mainland) tributaries and the Bay segments receiving water from the tributaries. Seagrass coverage in Sarasota Bay has improved substantially in the past few years, with declines in submerged aquatic vegetation occurring at a much slower rate.

In terms of man-made impacts to the remaining natural resources of Longboat Key, there are no functioning septic tanks on Longboat Key. There are septic tanks located on Jewfish Key, which is a separate island located within the territorial limits of the Town, and which is not served by central a wastewater collection system.

As with wastewater, solid waste generated on Longboat Key is not believed to cause any substantial problems to the natural resources of the Key; as it is collected twice a week and hauled to an FDEP approved landfill facility on the mainland. No known landfills or dump sites exist on the Key that could adversely impact the estuarine community.

Longboat Key is served by the Manatee County Southwest Sub-Regional Wastewater Treatment Plant located on the mainland. The wastewater system consists only of a collection system, with no treatment facilities on the Key. The Town's wastewater system is currently in good working order, with no cited outstanding problems. Assuming that the wastewater transmission lines stay in good working condition, estuarine impacts should remain non-existent as a result. The Town is currently undertaking a 7-year capital improvement plan to rehabilitate and replace the existing wastewater system. System upgrades are scheduled to be completed in near future.

According to the Stormwater Sub-Element of the Infrastructure Element, a review of existing stormwater systems has been conducted. Within this Sub-Element, it is noted that there is one grandfathered condominium that has an outfall discharging directly into the Gulf of Mexico, while all others drain to either Sarasota Bay directly, or to interior retention areas. The Town of Longboat Key has sought to remedy this potentially adverse situation by disallowing any future stormwater management systems from directly discharging into Sarasota Bay or the gulf. In order to meet state water quality criteria, new developments and applicable redevelopments are required to develop drainage systems that concentrate on retention of stormwater and have no detrimental impact on surrounding areas. In 1986, the State of Florida designated Sarasota Bay as an Outstanding Florida Water (OFW). This designation essentially requires all new development (with outfall to the Bay), to limit discharge so that water quality of the Bay will not be lowered as a result of that development's runoff. In other words, it is required that the post-development water quality shall meet or exceed the pre-development water quality at the point of outfall.

Local researchers have indicated bay management must be viewed in its entirety, with each affected local government's comprehensive land use plan adopting similar language. Consequently, an intergovernmental coordination effort was initiated in 1986 for the development of goals, objectives and policies for the management of Sarasota Bay. The Town of Longboat Key will continue to play a vital role in the future preparation of a resource management plan for Sarasota Bay. This effort was reinforced in 1987 when the 100th Congress

reauthorized the Water Quality Act, which contained a part (Section 317. National Estuary Program) instructing the U. S. Environmental Protection Agency (EPA) to identify and protect nationally significant estuaries and to encourage development of comprehensive conservation and management plans. The Act states that the Administrator of the EPA is to give priority consideration to 12 coastal systems including Sarasota Bay. The Governor of Florida formally nominated Sarasota Bay to the EPA in May 1987. Thereafter, Sarasota Bay was formally included in the National Estuary program.

Since the Sarasota Bay Estuary Program's (SBEP) initiation, numerous technical studies of the Bay and surrounding areas have been completed, a summarization, which is included in the program's publication 1995 Comprehensive Conservation and Management Plan, The Voyage to Paradise Reclaimed. Supplemental information on the status and management of the Bay is provided in the SBEP State of the Bay 2006 report, and USEPA (2007) National Estuary Program Coastal Condition Report. The Town will continue to provide on-going assistance and participation in furthering the goals of the SBEP.

Due to limited pre-development environmental data, it is difficult to ascertain the degree to which Longboat Key has lost its natural systems. Man-induced landform alterations, whether direct or indirect, has resulted in nearly a total loss of the Key's gulfside natural ecosystems. Currently, local, state, and federal regulations have focused preservation efforts on those remaining natural systems, which are associated with and contribute to the Sarasota Bay side of Longboat Key. Remaining are small fringes of wetland ecosystems primarily on the bayside of the Key. These have been designated as Open Space (OS) on the Town's comprehensive land use maps.

Overall, water quality of Sarasota Bay is considered "good." Only in recent years, have researchers begun to measure and assess the direct and indirect impacts of the Key's widespread residential and commercial dredging and filling. These development activities, along with navigational pass and Intracoastal Waterway dredging, have prompted concern over the health, integrity and productivity of the bay system. Due to the very limited development opportunities available on Longboat Key, future Town planning emphasis should be directed towards participation in the implementation of the aforementioned bay management plan's goals, objectives, and policies. Longboat Key should take an active approach in local estuarine pollution control through the following methods:

- Strict adherence to current water quality regulations and standards;
- Application of water quality best management practices;
- Maintain remaining natural ecosystems, as designated; and,
- Active participation in present and future Sarasota Bay Management planning activities.

The Town has been an active interagency participant in SBEP activities to date, including the 34-acre wetland habitat restoration project at Quick Point Nature Preserve located on the southeastern tip of Longboat Key, just north of New Pass. A second interagency project implemented the Florida Yard Program guidelines at the Town's Bicentennial Park, where landscaping to reduce stormwater runoff pollution and conserve water is shown. A third site for

the Town's interagency action with SBEP, FDEP, and USFWS is the Town's Joan M. Durante Park. A current restoration area under construction for the Town is on Sister Keys.

Considering the extent to which Longboat Key is built out, primary actions on the part of the political decision makers of the Town of Longboat Key should be to direct local staff to coordinate and lend technical assistance in the implementation of the Sarasota Bay Comprehensive Management Plan whenever practicable. Future Longboat Key development, though limited, should be reflective of those goals, objectives and policies that are in the management plan. Close cooperation with Sarasota and Manatee Counties, as well as all state and federal environmental regulatory agencies, is imperative to making any bay management plan successful.

VIII. EMERGENCY MANAGEMENT

In response to the effects of several hurricanes impacting the Florida since 2004, the Federal Emergency Management Agency (FEMA) and State of Florida Division of Emergency Management have cooperatively funded a program to comprehensively update regional hurricane evacuation studies. Due to the nature and extent of this effort, the Regional Planning Councils have been tasked with coordinating the evacuation studies on a state-wide basis in order to integrate newly collected data and computer modeling into the regional plans, the findings of which will be coordinated with local county and municipal governments over the next two years (Southwest Florida Regional Planning Council 2006 Annual Report, 2006). Planning activities related to the performance of data collection, computer modeling, and development of updated programs is scheduled to be completed in late 2008. The Town of Longboat Key should closely coordinate with the Tampa Bay and Southwest Florida Regional Planning Councils as well as Manatee and Sarasota Counties to assure that the Town's emergency management needs are satisfied by the updated hurricane evacuation studies.

A. NATURAL DISASTER PLANNING

The entire Town is subject to hurricane inundation. It is unlikely that, given the nature of hurricane warnings, only part of the Town will be required to evacuate due to a storm. Because the Town is a barrier island exposed to all the forces of the storm, and only accessible by road routes (Figure 5) that go through other barrier islands before reaching the mainland, any hurricane warning should require the Town to evacuate. This element begins with that initial assumption. In recognition that a comprehensive update to the regional hurricane evacuation plan is underway, the Town of Longboat Key has updated the findings of the previous study prepared by the Southwest Florida Regional Planning Council. When the regional plan is completed in late 2008, the Town will update the appropriate sections of the comprehensive plan.

1. Hurricane Vulnerability Zone

   The Tampa Bay Regional Planning Council (TBRPC) and Southwest Florida Regional Planning Council (SWFRPC) Hurricane Studies, initially undertaken in 1981, state that the Town is in the Category 1 (Saffir-Simpson Scale) zone. Sarasota County's computer modeling of storm surge indicates that a landfalling Category 1 hurricane will have an

accompanying storm surge of four to seven feet, and a Category 3 hurricane will generate a nine to fourteen foot storm surge without wave action or tidal influence. This means that the lowest intensity storm classified as a hurricane has the potential for inundating the natural parts of the island. Greater intensity storms generate similar results with higher potential water levels due to storm surge with greater potential for erosion or breach.

Both Manatee and Sarasota County Natural Disaster Plans recognize this problem for the Town. Each County expects to assume approximately one-half of the responsibility for managing the Town's evacuation, following county line boundaries.

2. Hurricane Evacuation

The SWFRPC has a lead role in the area of natural disaster planning in relation to hurricane vulnerability, and therefore the Town requested that the SWFRPC originally provide the hurricane evacuation analysis for this section of the Comprehensive Plan. Shelter and special needs analysis was originally prepared by the Town.

According to the SWFRPC, the Town will be within the 18-hour SWFRPC standard for time of evacuation. SWFRPC staff has prepared evacuation and clearance time estimates for Longboat Key, based upon information on residential unit types. It was necessary to review information from the Sarasota County Planning Department regarding the "Lido Key 1" Hurricane Evacuation Zone in order to examine the impacts of a Longboat Key evacuation. It was also necessary to obtain information from the 1990 U.S. Census, the Florida Statistical Abstract, and the Florida Department of Business & Professional Regulation, regarding residential unit types in Bradenton Beach. The need for information on these two areas derives from the fact that their evacuation traffic streams will mix with Longboat Key evacuation traffic during any evacuation event. Thus, evacuation impacts for these communities were calculated as well.

In the Town's original request for evacuation information, it indicated that the Manatee County portion of Longboat Key would evacuate into Manatee County (to the north), and that the Sarasota County portion of the island would evacuate into Sarasota County (to the south). Thus, two entirely separate evacuation streams would be generated in any evacuation event. Therefore, the SWFRPC provided separate analyses of both the southern and northern evacuation streams.

All three island areas would be expected to receive storm surge during a landfalling Category 1 Hurricane. Therefore, the SWFRPC considered this the worst case evacuation scenario for all three islands. Typically, SWFRPC staff utilizes two "seasons" for hurricane evacuation purposes: "July" and "November." The July season represents a hurricane that occurs during the early part of hurricane season (June through August). The November season represents a hurricane that occurs late in the season (September to December 1). The July season analysis assume a smaller population than the November analysis, as will be shown in Tables 2A and 2B.

Previous SWFRPC evacuation studies have utilized 1.1 as the average number of evacuating vehicles per household. Therefore, the SWFRPC utilized this figure as a multiplier to arrive at the number of evacuating vehicles. The recently approved 2006 Tampa Bay Regional Hurricane Evacuation Update bases hurricane evacuation time estimates on the assumption that only 70% to 80% of the area vehicles will be utilized for evacuation purposes. By assuming that a larger number of vehicles will be utilized in evacuating the residents and visitors from the Town, the conservative nature of the study is further demonstrated.

The Town of Longboat Key also utilized standard "Household Size" or "Persons-Per-Household" estimate from the 1994 Florida Statistical Abstract, in order to develop the number of evacuating people for each scenario. In Sarasota County, household size is 2.17; while in Manatee County it is 2.27. The 2000 U. S Census Bureau data indicates that the average household size in the Town is 1.89.

Current estimates of population based on the U. S. Census Bureau Community Survey Current Population Survey indicates that the Towns of Longboat Key (-2.60%) and Bradenton Beach (-0.70%) have experienced a net decrease in population recently. Alternatively, Lido Key has experienced a net increase (0.60%) in population over the same period. Based on this information, the assumptions on which the SWFRPC conservative estimates of evacuating populations and time for evacuation are considered representative of actual conditions and will therefore be utilized in the following assessment. As noted previously, upon completion of the regional hurricane evacuation plan in 2008, this section of the comprehensive plan should be updated to reflect current conditions.

In preparing this evacuation estimate, the SWFRPC utilized the residential unit types as included in the Town's EAR of the Future Land Use Element, as well as similar information for the Lido Key 1 Evacuation Zone and for Bradenton Beach. However, they included the Town's category "Accessory to Churches" in "Single-Family" and "Accessory to Commercial in "Multi-Family." The unit types used in this analysis were "Single-Family", "Mobile Home" (including Manufactured Homes), "Multi-Family" (including apartments, condominiums, and "Accessory to Commercial"), "Duplex" (including other types of "-plexes"), and "Hotel/Motel" (the Town's "Tourist Category").

Each of these unit types has a different occupancy (or vacancy) rate as well as a different rate for each of the two "seasons." The number of people residing in a particular type of unit is derived from the following formula:

# of Units x Seasonal Occupancy Rate x County Household Size = # of Residents.

A similar formula is utilized for determining the traffic generated by a particular type of residential unit. This formula is as follows:

# of Units x Seasonal Occupancy Rate x 1.1 = Traffic Generated by Units.

TABLE 2A

ESTIMATED CLEARANCE TIME AND EVACUATION TIME FOR LONGBOAT KEY 1 (SARASOTA) AND LIDO KEY 1 SOUTHERN ROUTE

Based on these assumptions, the calculated evacuation and clearance times for a Category 1 Hurricane for Longboat Key and adjacent areas were as follows:

YEAR	SEASON	TOTAL POPULATION	TOTAL VEHICLES	CLEARANCE TIME	TOTAL EVACUATION TIME**
1995	July	9,219	4,673	6.7 Hours	14.7 Hours
1995	November	11,124	5,640	8.1 Hours	16.1 Hours
2001	July	9,649	4,893	7.0 Hours*	15.0 Hours
2001	November	11,583	5,872	8.4 Hours*	16.4 Hours

* Assumes current 50/50 capacity of 700 vehicles per hour
** Assumes an 8-hour pre-landfall hazard time

Household Assumptions
1995 Longboat Key (Sarasota County) - 5,392 Households
1995 Lido Key 1 Zone - 2,288 Households
2001 Longboat Key (Sarasota County) - 5,592 Households
2001 Lido Key 1 Zone - 2,311 Households

TABLE 2B

ESTIMATED CLEARANCE TIME AND EVACUATION TIME FOR LONGBOAT KEY 1 (MANATEE) AND BRADENTON BEACH NORTHERN ROUTE

YEAR	SEASON	TOTAL POPULATION	TOTAL VEHICLES	CLEARANCE TIME	TOTAL EVACUATION TIME**
1995	July	7,495	3,633	5.3 Hours	13.3 Hours
1995	November	8,822	4,275	6.2 Hours	14.2 Hours
2001	July	7,856	3,808	5.5 Hours	13.5 Hours
2001	November	9,211	4,464	6.5 Hours	14.5 Hours

Household Assumptions
1995 Longboat Key (Manatee County) - 3,611 Households
1995 Bradenton Beach - 1,885 Households
2001 Longboat Key (Manatee County) - 3,773 Households
2001 Bradenton Beach - 1,906 Households

The results for each type of unit are totaled separately, and are then added together to derive the total evacuating population or the total number of evacuating vehicles. All evacuation analyses assume some restrictive portion of the appropriate evacuation route, where capacity problems are likely to slow evacuation traffic. This portion of the evacuation route is known as the "Restrictive Link." The Southwest Florida Regional Planning Council's 1991 Hurricane Evacuation Study Update utilized the Causeway between St. Armand's Key and Bird Key as the Restrictive Link for the southern (Sarasota County) Hurricane Evacuation route. In its 1992 Tampa Bay Regional Hurricane Evacuation Study Update, the TBRPC utilized the Cortez Bridge as the Restrictive Link for the northern (Manatee County) evacuation route. The SWFRPC utilized these two Restrictive Links in the analyses.

Normally, staff would analyze the two evacuation routes under various evacuation scenarios involving Category 1, Category 2, Category 3 and Categories 4/5 Storm Surge flooding areas based upon the SWFRPC and TBRPC Sea, Lake and Overland Surges from Hurricanes (SLOSH) Model Maps. This would involve the selection of different critical links for each route as the hurricane category increased, and more and more evacuation zones were added to the traffic stream. However, the areas incrementally added for successive storm categories (up to Categories 4/5) in northern Sarasota and Manatee Counties are so narrow that such an analysis is not necessary. Island evacuees can be considered safe from flood danger upon reaching the mainland. Thus, only Category 1 Hurricane Evacuations need to be examined. All evacuation times discussed in this study utilize "Slow" or worst case conditions. A Slow evacuation time assumes that evacuation begins during a normal workday. Parents must leave work, remove children from school, and hurriedly make family preparations for the storm and evacuation. Some normal daily traffic continues while the evacuation is in process, thus presenting evacuees with competing traffic. Normally, TBRPC staff performs "Intermediate" and "Fast" evacuation time analyses for evacuation zones. However, the capacity information necessary to perform these analyses was not available for the Cortez Road Bridge. TBRPC staff arrived at the listed evacuation times by simply dividing the number of vehicles on a given evacuation route by the road capacity at the Restrictive Link for that route. The resulting number represents the time (expressed in hours) required to evacuate all vehicles past the Restrictive Link, from "first on" to "last off."

In the Regional Evacuation Study, as well as in both the currently adopted and proposed Regional Plans, the SWFRPC has advocated the use, as a planning tool, of an 18-hour maximum evacuation time for hurricane-threatened areas. The 18-hour time period is derived from tolerances associated with hurricane movement and directional forecasts. At 18-hours prior to projected land fall, a hurricane is considered, by meteorologists, to have a 50/50 chance of either making landfall near the projected point, or veering away in another direction. Thus, this time period seems to represent the earliest point in time at which landfall can be reasonably projected for any given location. Thus, 18-hours would seem to be the maximum time available for evacuation.

Since safe evacuation can only be carried out prior to arrival of sustained tropical storm force winds (39 mph) and/or flooding in any area, the actual evacuation time available is likely to be less than 18 hours. However, any evacuation plan that exceeds 18 hours can be considered unsafe, and mitigation to lower the evacuation time is advised. Mitigation may consist of any combination of road improvements, manual traffic control plans, land use regulations and shelter requirements, as may be necessary.

An additional time-related factor considered by Emergency Management Officials during hurricane events is "Pre-Eye Landfall Hazard Time." Tropical storm force winds, storm surge and/or rainfall flooding can precede the arrival of the eye of the hurricane in a given location by as much as eight to twelve hours. Pre-Eye Landfall Hazard Time is merely the time interval between the arrival of tropical storm force winds and actual landfall (the point in time at which the landward edge of the hurricane's eye, or center, touches the shoreline). In order for the evacuation to be successfully undertaken, it must be completed before the arrival of tropical storm force winds. Thus, the estimated Pre-Eye Landfall Hazard Time should be added to the estimated evacuation times in order to arrive at an estimate of the time actually available for evacuation. This time is now calculated by each county based on the specific characteristics of each hurricane as stated within the tropical cyclone advisory. The total time period resulting from this addition is known as Total Evacuation Time. In the tables presented below, the SWFRPC has utilized a standard Pre-Eye Landfall Hazard Time of eight hours to arrive at estimated Total Evacuation Times.

Finally, each calculation in the SWFRPC study assumed that evacuees would only be able to utilize one lane of any two-lane road. The remaining lane would carry normal daily traffic for a time, and might later be closed to all but official and emergency vehicle use as the evacuation progressed. Thus, traffic capacities utilized in these calculations only allowed evacuating vehicles to line up in one lane. In some instances, evacuation times could be decreased by utilizing both lanes.

CONCLUSIONS REGARDING THE SOUTHERN ROUTE

1) The Causeway between St. Armand's Circle and Bird Key Drive (Causeway).
Bird Key is part of Sarasota County's Lido Key 1 Hurricane Evacuation Zone. However, most evacuees from Bird Key would enter the evacuation traffic stream after the actual Restrictive Link, the Causeway, had been passed by the remainder of the evacuation traffic. Because SWFRPC staff did not have sufficient information to separate Bird Key traffic from the remainder of the evacuation traffic, they have included traffic generated by the entire Lido Key 1 Zone in their calculations. Thus, the actual evacuation and clearance times could be somewhat less than shown in Table 2A.

2) Significance of the Causeway.
The Town of Longboat Key should keep itself very much aware of proposed development, road construction, or other factors which could result in a slowing of evacuation traffic along the southern causeway. The Clearance Times shown in Table 2A are close enough to the 18-hour evacuation time limit that any disturbance or alteration to normal traffic flows could prevent a successful completion of the Town's

evacuation plan. At the same time, any road improvements which would result in an increase in Causeway traffic capacity should be welcome at least from the public safety standpoint.

3) Limitations of the Analysis.
The analysis conducted for Table 2A assumes a "Slow" evacuation time based on a capacity (of the Causeway) of 700 vehicles per hour. This capacity assumes that evacuation traffic will be limited to the eastbound (mainland-directed) lane, with either normal daily traffic, and/or official vehicles, utilizing the westbound lane. Additionally, the rate of 700 vehicles per hour was taken from a 1995 projection of capacities which was contained in the SWFRPC's 1991 Hurricane Evacuation Study Update. Three factors could act to change staff's assumptions about the southern evacuation route.

First, SWFRPC staff is currently in the process of preparing an updated evacuation study for Sarasota County. The current actual road capacities for the County's evacuation routes have not yet been determined. This would cause a corresponding lowering or raising of evacuation times. Second, the Florida Department of Transportation (FDOT) has recently changed the method it uses to calculate road capacities. Since the 1991 Study used the old FDOT method, it may now be inaccurate. Actual road capacity for the Causeway could be higher or lower than projected. Finally, the Sarasota County and Town of Longboat Key Emergency Management Officials could decide to allow evacuation traffic to use both lanes of the Causeway. This would significantly reduce evacuation times along the southern route.

CONCLUSIONS REGARDING THE NORTHERN ROUTE

1) Effects on Buildout on Bradenton Beach.
TBRPC information was derived from several sources and should be considered accurate for current conditions. However, buildout projections were derived solely from Florida Statistical Abstract data on issued building permits between 1989 and 1993. This data indicates solely "Single-Family" and "Multi-Family" categories. TBRPC thus were able to estimate a projected buildout total for single-family and multi-family structures, but had to leave mobile homes and hotel/motels at the 1995 levels. No significant increase in the number of units has occurred since 1995 and, therefore, evacuation and clearance times are considered to be in the range of those presented.

2) Significance of the Cortez Bridge.
It appears that a smaller number of evacuees will utilize the northern route than will utilize the southern route. Given the indication that evacuation times and clearance times are greater for the southern route than for the northern route. Longboat Key, Sarasota County, and Manatee County should consider shifting some Sarasota County evacuees to the northern route. Also, the Town of Longboat Key needs to keep the same degree of watchfulness over the Cortez Bridge area as was recommended above for the southern causeway.

3) Limitations of the Analysis.
The analysis conducted for Table 2B assumes an "Hourly Capacity" of the Cortez Bridge of 690 vehicles per hour. This rate is derived from 1995 projections of capacity contained in the Tampa Bay Region Hurricane Evacuation Study Update. It should be noted that TBRPC's analysis was performed in a different manner and indicates slightly higher evacuation and clearance times. The 2006 Tampa Bay Region Hurricane Evacuation Study Update has maintained this expected capacity for the bridge. Concerns discussed under Conclusion 3 for the southern route regarding road capacities also apply to the analysis of the northern route.

3. Hurricane Shelter Needs

All persons evacuating will, of course, need shelter. This shelter will be provided from a variety of sources: public shelters, commercial shelter (hotels), friends, and relatives. In addition, a large portion of the Town's seasonal population has primary or secondary homes elsewhere to which they will go. Surveys performed by SWFRPC and TBRPC demonstrated comparable results in shelter demand. For purposes of this Plan, SWFRPC estimates will be used. In their 1982 Plan, SWFRPC assumed that 24 percent of the population will leave the vicinity, 21 percent responded "don't know," and the remainder will seek commercial or private shelter locally. The 2006 Tampa Bay Region Hurricane Evacuation Study Update has determined that the vase majority (50% to 60%) of evacuees will go the homes of friends or relatives during a hurricane; and approximately 20% will seek a hotel or motel for refuge

Using the SWFRPC assumption, the Town's shelter distribution is shown in Table 3. The "don't knows" will be assumed to seek public shelter for shelter planning purposes in a worse case scenario.

TABLE 3
SHELTER DISTRIBUTION FOR
THE TOWN OF LONGBOAT KEY

DISTRIBUTION				
SHELTER TYPE	1995 June	1995 November	2001 June	2001 November
Public Shelter	2,664	3,206	2,834	3,388
Out of Area	3,773	4,541	4,016	4,800
Friends, Hotels, etc.	2,331	2,805	2,480	2,965
Don't Know	2,331	2,805	2,480	2,965
TOTAL	11,099	13,357	11,810	14,118

4. Shelter Space Available

   The Town's residents have access to shelters in both Manatee and Sarasota Counties. However, so do the remainder of the residents of the two counties. Consequently, the availability of shelter must be considered in light of comparable evacuations simultaneously in both counties.

   The Town has no shelters, public or private. In the event of a hurricane, the entire Town will need to evacuate to Sarasota and Manatee Counties. Manatee County has about 33,000 identified hurricane spaces in 23 locations (Tampa Bay Region Hurricane Evacuation Plan, Update, 2006). Shelter capacity in Manatee County is expected to be satisfactory for all evacuees up to a Category 5 storm.

   Sarasota has 44,000 spaces in 21 shelters (Sarasota County Emergency Operations Center 2004). Sarasota County has adequate space to handle public shelter bound evacuees (24 percent of all evacuees) up to and including Category 1 storms. Evacuees from other parts of the County for Category 2 and above storms are predicted to use public shelters and will lead to either congested shelters or an inability for some evacuees to find space. If significant numbers of "don't know" evacuees decide to go to public shelters, only Category 1 storm evacuations will have adequate space. Manatee County, with less population and almost twice the Sarasota evacuation space, can handle significantly greater storm evacuation needs.

   As the State's, Region's, and Town's hurricane evacuation policies have matured over the last several years, the concept of limited vertical evacuation to reliable structures in the event of a hurricane situation has evolved. The Town's current policy reflects the encouragement of limited vertical evacuation to certain buildings only as a last recourse.

5. Specialized Population Needs

   A survey referenced by the Town's Evacuation Plan (Adley 1983) indicated 9.2 percent of the households had members handicapped due to infirm age or physical disability. By 2001, this would total 862 households in peak hurricane season. The agency charged with assisting such households is the Town's Fire-Rescue Department. Florida Statute 252.355 requires each local emergency management agency to maintain a registry of persons with special needs and who would like to register. The local emergency management agency is responsible for identifying those persons in need of assistance and plan for resource allocation to meet those needs. They are also charged with notifying residential customers in its jurisdiction of the availability of the registration program at least twice annually via public outreach programs. The Town's Fire-Rescue Department receives the information for the individual registrants on Longboat Key, and utilizing its fire-rescue personnel, coordinates with both county emergency management agencies and their respective support agencies to evacuate residents requiring such assistance. As of October 1, 2007, nearly 1,200 were registered with Manatee County, with approximately 25 residing on Longboat Key; Sarasota County reported nearly 2,600 registrants, with approximately 75 residing on Longboat Key.

It should be noted that more in-depth direction regarding the Town's hurricane evacuation needs are contained in the Hurricane Evacuation Plan, 1983, prepared for the Town by Adley and Associates. When the regional hurricane evacuation plan is completed in late 2008, the Town will update the appropriate sections of the comprehensive plan to reflect the applicable findings and recommendations.

B. POST DISASTER REDEVELOPMENT

Under the present definition of Coastal High Hazard Area (CHHA), as contained in the Florida Administrative Code (FAC) 9J-5.003, the entire Town, for planning purposes, is located within a CHHA because the SWFRPC designated Longboat Key as an evacuation zone for a Category 1 hurricane. This definition conflicts somewhat with the Town's traditional policies and practices related to planning and growth management in the coastal planning area. In addition, the inclusion of the *entire* Town within a CHHA (Figure 6) creates a number of challenges for public infrastructure siting and maintenance.

A recently proposed revision to the FAC definition of the CHHA (2006; effective 2008), calls for the CHHA to be that area predicted by the SLOSH model to be inundated by a Category 1 storm surge. This revised definition will likely result in the delineation of a number of small, non-contiguous areas on the Key that would not fall within the new literal definition of the CHHA because they are of sufficient topographic elevation that they are not shown as inundated by the model. The new definition does not solve the planning, growth management, and infrastructure challenges associated with the previous definition.

It is Town policy and practice to treat the entire Town as a high hazard area for evacuation purposes. However, for construction related issues, generally only the Town's gulfside is treated as a high hazard area. This approach generally follows the historical practice of the Federal Emergency Management Agency's (FEMA) mapping of flood prone areas (flood insurance rate maps (FIRM)). These maps were prepared from site-specific analyses and divided the Town into flood hazard zones. Velocity Zones (V-Zones) are considered the high hazard areas for flood insurance purposes. The Florida Department of Environmental Protection's (FDEP) Coastal Construction Control Line (CCCL) is considered the high hazard area for purposes of concurrence with FDEP's coastal construction siting policies. These areas are summarized on Figure 6. It should be noted that only the official FIRM maps prepared through FEMA should be used for all flood determinations.

V-Zones are normally the near gulf shore parts of the island. The exception is the Greer Island area, which has a V-Zone along the island's northern shore along Longboat Pass. In addition, the Town's uninhabited outer islands (Jewfish Key, Sister Keys, and Town Islands) are to a great extent in V-Zones. The remaining upland of the island is typically included in FEMA A-Zones. A-Zone designation presumes the likelihood of high flood waters but not necessarily a more damaging vertical surge with high velocity currents and wave action expected along the gulfside V-Zones. A review of flood maps, however, indicates three potential storm breach areas (Figure 6). These are in the vicinity of Harris Bayou, the Sarasota-Manatee County line, and Crane's Bayou. The last two are the islands narrowest points.

The majority of the property within the Town that lies west of Gulf of Mexico Drive is also seaward of the CCCL and under the jurisdiction of the FDEP. In such areas, concurrence with FDEP is required before (or if) building permits are issued. The FEMA V-Zones are typically defined along the western, gulfward edge of the CCCL jurisdiction.

The Town clearly meets the growth management intent of the Florida Administrative Code (FAC) Rule for the CHHA. Accordingly, and based upon the evaluation and appraisal of this current local practice which was recently completed within the Town's Evaluation and Appraisal Report (EAR), Longboat Key will continue to define and plan for its CHHA as currently described. In addition, development, redevelopment and public expenditures within these areas will continue consistent with the goals, objectives and policies contained within this plan with specific reference to Goals 2 and 3 of the Coastal Management Element.

Generally, described, new development and redevelopment is required to occur in a manner that does not change the character, intensity of use, or demand upon existing infrastructure. Infill lots must be developed under zoning identical or similar to existing zoning. Development that adversely impacts hurricane evacuation times is prohibited. At the same time, public expenditures are made, and will continue to be made, on infrastructure in the CHHA as currently defined as required to correct deficiencies, and provide and maintain a level of service equal to that of the remainder of the Town.

1. Existing Land Uses

   The existing and future urban uses found in the V-Zones are residential or tourist accommodations. The same uses generally exist in those portions of the FDEP's CCCL that are landward of the V-Zone. The CCCL crosses Gulf of Mexico Drive and encompasses portions of commercial properties, as well as the Town's manufactured home parks. In addition, along the island's northern and southern extremity there are boat docks associated with residential uses. The potential breach areas (not V-Zones) include some strip commercial and marine uses. There are some small quantity hazardous waste generators in these areas but no large quantity generators.

2. Structures with a History of Repeated Damage

   Longboat Key's shoreline is constantly changing, particularly along the passes and gulf. Each change increases or decreases the threat of damage to structures. Past storms have destroyed homes and businesses. This is true particularly in the Town's northern end, where Gulfside Road ends at the beach, which was once the site of single-family homes since lost to storms. Remnants of seawalls provide mute testimony to the change. The worst loss due to storms was the island's bridge to the north. Lost in 1932, it was not replaced until 1957. Repeatedly damaged properties will be required to be redeveloped to existing codes that would minimize damage potential in the future.

3. Coastal Shore Protection Structures

The historic threat of damage to the upland from flooding and erosion was defined by the pattern of intermittent seawalls, riprap, and groins. This historic pattern is depicted on Figure 7, which also depicts standardized bayside shoreline and private beach crossovers. The most concentrated stretch of groins, or vertical shoreline armoring was in the Town's center. The nearness of the road and the shallowness of the lots demonstrate that further loss could have, in effect, cut the island in half.

Bulkheads and other armoring structures were also common in the island's interior center along the back bays and canals. They are also concentrated along the north central gulf-front shoreline and the passes. Gulf-front areas where sand has accreted and eroded over multiple cycles, such as the northern end, also have seawalls inland from the present waterline that serve no function. These structures could provide protection to upland properties in the event of accelerated erosion or a significant storm event, but in general, their current location, away from the waterline, limits their need to actively protect gulf shorelines in the Town.

The majority of the historical gulf-fronting coastal armoring, groins, and similar structures were proactively removed by the Town as a condition of the FDEP permit for the 1992-93 beach restoration project. Where it was not practical and/or cost-effective to remove the armoring structures, their potential negative impacts still have been largely negated by the buffering effect of the substantial width of sand fill maintained as part of the beach restoration.

C. INFRASTRUCTURE IN COASTAL HIGH HAZARD AREAS

Using only the V-Zone as the first tier of a high hazard or storm vulnerability area, very little of the Town's capital infrastructure is exposed. Exceptions are water and wastewater domestic lines, trunk lines at potential storm breach points, the Town's existing bridges, and the Town's roads at similar places. Maintenance yards, Town Hall, fire and police facilities, and most water, wastewater, and road structures are located outside of the V-Zone. Using the CCCL as a second tier of the high hazard area, a number of public facilities are at risk. These include additional lengths of water and wastewater domestic lines, Town roads, portions of Gulf of Mexico Drive, and trunk lines along Gulf of Mexico Drive. In addition, sewer lift stations (6); the master lift station (1); the water booster station (1); and, all beach access points with unimproved parking are vulnerable.

IX. BEACH AND DUNE SYSTEMS

A. BACKGROUND

Beach and dune conditions on Longboat Key can best be viewed in two distinct periods: before the 1992-1993 beach restoration project and the period after that project. Prior to the 1993 restoration project, the natural beach and dune system gradually was altered largely by individual property owners' attempts to mitigate the effects of ongoing erosion on a property-by-property

basis. These approaches typically used conventional shoreline armoring and other structural solutions such as groins. Responses occurred piecemeal over several decades, and using varying degrees of engineering sophistication depending on regulations at the time, the criticality of each situation, and the monetary resources available to property owners. This type of effort tended to be more reactive, with little coordination or consideration of adjacent areas and long-term needs. The 1993 public project represents a shift to a "softer" stabilization alternative, but perhaps more importantly, it also represents a move toward a Town-wide, integrated erosion response. The approach has become one of pro-actively managing one of the Town's major assets, the beach.

Longboat Key's baseline beach and dune conditions were surveyed in 1987 in two separate studies: Sarasota County Beach Management Plan (Coastal Engineering Consultants, Inc.) and Manatee County Beach Management Plan (Coastal Planning and Engineering, Inc.); both studies were co-funded by FDEP. Both also used as a basis "An Assessment of Beach Erosion, Outline of Management Alternatives," (Harvey 1982). Subsequent surveys were conducted in 1989/90 by Applied Technology & Management, Inc., and in 1991 by Dr. Robert Dean of the University of Florida.

As previously described, much of the beach shoreline had been stabilized by seawalls and groins. However, even upland areas without such structures have been developed within 100 feet of the mean high water line. Consequently, there was not much dune system left and the beach was often artificially narrowed by the effects of protruding seawalls. Due to these activities, the island's beach and dune system did not provide much protection against storm activity. Extensive erosion after 1987 led to the studies cited and their conclusions determined that the Town's beach system was at serious risk. An immediate need for restoration was identified by the Town and specific measures were implemented to fund and manage the Town's comprehensive shore protection program. This crisis condition resulted in decision by residents of the shoreline area to create the Longboat Key Beach Erosion Control District as a Dependent Municipal Taxing District of the Town of Longboat Key, and to proceed with beach restoration financed largely on their own as rapidly as possible.

B. EROSION CONTROL ALTERNATIVES

At its most basic level, erosion control (and storm protection) alternatives available to the Town and its residents may be categorized as either non-structural or structural. Non-structural approaches generally include those measures taken to place upland development or vulnerable resources out of the path of the erosion or storm impact. Structural solutions, on the other hand, seek to interpose some type of structure between the upland and the active energy zone. Beach fill alternatives such as restoration and renourishment can be considered as hybrids because they have characteristics of both approaches. Frequently, however, beach fills are treated as a structural solution, although a "softer" one, because such projects are designed using engineering procedures analogous to those for other structures.

Retreat from the shoreline is a non-structural, overall strategy comprised of several sub-elements. One common definition includes three sub-elements: dynamic setbacks, relocation, and abandonment.

Town codes and the Florida Building Code have been revised to reflect the state of art in shoreline building construction design and siting. This has been encouraged by both Federal and State law affecting construction and setbacks. This new code system immediately affects the few new coastal structures expected; its long-term impacts will be felt through structural reconstruction and site redevelopment. Common traits of new construction are increased elevation of bottom floors above storm surge levels, ability to withstand 130 MPH wind velocities (seaward of the CCCL), and increased setbacks from the beach shoreline.

Relocation is an aspect of the new code. Relocation, however, is still primarily considered within the original structures' parcel. For areas where parcels are small, relocation cannot be pursued. The only options are reconstruction according to the new code, or acquisition.

The Town does not have a program to encourage abandonment by acquisition of properties that are storm damaged. Even though the Town is relatively affluent, it does not have the tax base to pursue a program of any magnitude of acquisition, particularly for multifamily/tourist structures. Any such program of acquisition would need substantial Federal or State fiscal support and the acquisition of a repeatedly damaged structure(s) without significant state and federal funding assistance is not economically feasible.

Structural approaches to erosion also are often grouped into sub-categories based on how they are intended to accomplish their purpose. Shoreline armoring includes seawalls, bulkheads, revetments, and similar structures intended to block wave energy directly at the water line or on the active beach. It should be noted that by their location armoring structures do not protect the beach; they can, at best, only offer protection to the upland. Even their effectiveness in providing upland protection can be questioned for most of the armoring typical on the Key. The average single-lot revetment or bulkhead from the pre-1980's period was not adequately designed, either in cross-section or in height, for its purpose and may not have been properly maintained since initial construction. Relatively few properly engineered seawalls can be found on the island. The FDOT walls protecting SR 789 (the only storm evacuation route) at mid-key are substantial in design and represent an installation where structural armoring is appropriate as a long-term upland protection method within the Town.

A second group of structures includes various forms of breakwaters and groins. These structures function by modifying the coastal processes in some way and at some distance offshore from the upland and, thereby, causing a (positive, stabilizing) response to the adjoining beach. When not properly designed, maintained and monitored, these types of structures have the potential for producing a negative effect on other sections of the shoreline. The many years of experience with the adverse impacts of abandoned, derelict concrete groins on the Key suggest that such structures should be used with caution and careful planning. Furthermore, state and federal regulatory agencies extensively evaluate individual property owner or governmental requests for structural shoreline protection solutions due to concern of potential detrimental impacts to adjacent properties. The more appropriate types of installations would be those that are integrated into sand fill programs so that potential downdrift erosion is mitigated in advance, and those designs, which allow for easy adjustment or removal if adverse effects are more severe than predicted. A rigorous monitoring program should be part of all such projects to document effects and suggest corrective action.

Beach fills using beach compatible sand borrowed from some off-Key source are another alternative for erosion control. For the purposes of this document, the term "Beach Restoration" is taken to mean a major fill project, engineered to replace the sand deficit in an area, restoring the historic beach width, and providing sufficient volume to maintain an initial restoration project over a period of years. The purpose of a beach nourishment program is to provide a 'soft' solution to shoreline erosion by periodically replacing sand that is lost from the system through natural processes and episodic events such as storms.

Once an initial restoration has been implemented, such as the Town's project in 1993, subsequent sand placement activities are typically referred to as nourishment projects. The timeframe between nourishment projects is referred to as the design life of a project, and considers previous project performance, storm impacts and numerous environmental factors. Nourishment activities are typically undertaken on a smaller scale and may target sections of the project differently depending on past performance. Nourishment projects also may use more opportunistic borrow sources including compatible sand from maintenance dredging of the Federal channels in the adjacent passes.

Beach restoration, as completed in 1993 with long-term maintenance nourishment, seems to be the more practical option available to the Town, if environmental concerns can continue to be addressed through avoidance, minimization or mitigation of direct, secondary and cumulative effects. Beach restoration and nourishment provides more distance between structures and the water, consequently damage would only result from more severe storms. It is, however, a major public infrastructure effort, and like all capital projects, requires a long-term financing program for maintenance.

C. RESTORATION AND RENOURISHMENT ACTIVITIES

The engineering analysis and initial restoration/renourishment program, was developed by Applied Technology & Management, Inc. in 1989-90, amended by Dr. Dean (1991), and permitted by State and Federal agencies in 1991. These reports are made a part of this Plan by reference and incorporated herewith. The 1993 project and subsequent nourishment event project areas and offshore sand resource areas are shown on Figures 8 and 9, respectively.

The 1993 Longboat Key Beach Restoration Project was constructed between February 12, 1993, and August 12, 1993, nourishing 9.3 miles of shoreline with 3,336,000 cubic yards of fill from the ebb shoals of Longboat Pass and New Pass. Approximately 5,751 tons of derelict shoreline protection structures were removed during the project.

During and after construction of the 1993 project, much of the dry beach width was lost during the March 1993 "Storm of the Century" and the subsequent adjustment of the beach profile, which was larger than anticipated. Although the overall, average performance of the 1993 restoration project was within the predictions of the engineers, certain specific areas, notably the mid-key segment, did not perform as well as anticipated. An independent review of beach conditions by Dr. Cliff Truitt at Mote Marine Laboratory in 1994, one year following the initial restoration project, identified several erosional "hot spots" and suggested the need for additional planning leading to an interim maintenance project sooner than the originally envisioned 5 to 8 year interval.

The Town Commission subsequently adopted the Town of Longboat Key Comprehensive Beach Management Plan (November 1995). This plan affirmed the need for interim maintenance and developed conceptual plans for an interim mid-key renourishment project which was built in the fall of 1996 using sand from a borrow area identified and studied several miles off the north end of the Key. The plan also proposed a schedule for future maintenance using both pass dredging and/or substantial sand reserves in the 1996 borrow area.

To rebuild and maintain the dry beach, the 1997 Mid-Key interim beach project was constructed from January 26 to February 3, 1997, placing 891,000 cubic yards along shoreline in southern Manatee County and northern Sarasota County. Four additional fill operations have taken place since February 1997 (Table 4). The April 24, 2001, to May 2, 2001, project mitigated sand losses from Hurricane Gordon, with a fill volume of 105,280 cubic yards, over approximately 4,000 feet of beach. The 1996 interim maintenance, followed by the smaller FEMA funded storm damage recovery fill project in 2001, largely kept the Town's beaches in reasonable condition to provide the desired storm protection and recreational benefits through the originally planned maintenance interval and further. Continuing background erosion at the hot spots and the effects of the unusually severe storms of the 2004 and 2005 seasons re-affirmed the need to move ahead with the scheduled maintenance project that took place during 2005 and 2006. The April 2005 to August 2006 beach nourishment project resulted in the placement of approximately 1,700,000 cubic yards of beach compatible sand along nearly 10 miles of Longboat Key shoreline. Material for the project was acquired from an offshore sand source, and transported to the project site using a hopper dredge.

D. FUTURE MAINTENANCE

Pre-1993 renourishment efforts were a result of only pass dredging activities of Longboat Pass and New Pass Federal navigation channels. Following the 1992-1993 initial maintenance project, the Town committed to a comprehensive on-going annual beach monitoring program consisting of surveys, aerial photography, and similar data acquisition. After the 1995 Beach Management Plan was adopted, the results of the annual monitoring data collection effort have been used to prepare an annual report to the Town Commission, which serves to update the plan. These updates not only provide a "snapshot" of beach conditions, but also continually revise the preliminary design of any needed fill projects so that the Town can effectively manage future projects from a planning, regulatory, and fiscal perspective to respond to needed maintenance.

It is the intent and policy of the Town to support Pass maintenance and to continue to use sand from future Pass dredging wherever needed to control erosion hot spots along the beach system to prevent the type of massive island-wide erosion deficit that existed prior to 1993. Such maintenance dredging will continue to be augmented by other fill projects and borrow sources. Maintenance projects will be financed by the Town, the two Counties' Tourist Development Tax (TDT) funds, the State and other agencies, and the Erosion Control District through bond sources. Beach maintenance funds received by the Town of Longboat Key from and Infrastructure Sales Tax levies in Sarasota and Manatee Counties are applied toward beach restoration and renourishment activities. The Town's contribution to the program is projected at $600,000 per year over a seven-year period although the actual amount per Interlocal Agreement is a percentage and therefore may vary.

In summary, as stated by the Town's Coastal Management Citizen's Advisory Committee, "The beach is the Key's most valuable asset. It has been experiencing rapid and dramatic shoreline changes with dangerous erosion in many places. Unless this is controlled, the very feature that made this island our chosen community will be destroyed."

TABLE 4
LONGBOAT KEY BEACH CONSTRUCTION PROJECTS SINCE FEBRUARY 1993

PROJECT NAME	CONSTRUCTION DATE	PROJECT LENGTH	FDEP MONUMENT RANGE	PLACED FILL VOLUME (cubic yards)
1993 LONGBOAT KEY BEACH RESTORATION PROJECT	FEBRUARY 28 - AUGUST 12,1993	9.3 MILES (49,000 FT)	R-47 THROUGH R-29	3,336,000
TOWN OF LONGBOAT KEY MID-KEY INTERIM NOURISHMENT PROJECT	OCTOBER 21, 1996 - FEBRUARY 3,1997	3.1 MILES (17,000 FT)	R-65 THROUGH R-14	891,000
LONGBOAT PASS MAINTENANCE DREDGING PROJECT	JULY 1997	1.0 MILE (5,500 FT)	R-45 AND R-48 THROUGH R-51	109,000
NEW PASS MAINTENANCE DREDGING PROJECT	AUGUST - SEPTEMBER 1997	0.8 MILES (4,300 FT)	R-25 THROUGH R-29	171,000
BEER CAN ISLAND CHANNEL DREDGING	EARLY 1998	N/A	NORTH OF NORTH SHORE DRIVE (near R-45)	2000 cubic yards placed on dry beach
APRIL 2001 BEACH NOURISHMENT PROJECT	APRIL 24 - MAY 2, 2001	0.7 MILES (3,500 FT)	R-10.5 THROUGH R-14	105,280
2005/2006 BEACH NOURISHMENT PROJECT	APRIL 2005 - AUGUST 2006	9.9 MILES (52,000 FT)	R-44 THROUGH R-29	1,789,332
TOTAL FILL PLACED AS OF AUGUST 2006 =				**6,403,612**

Source:
Town of Longboat Key Beach Restoration Project 2001 Annual Beach Survey and Analysis. Coastal Planning & Engineering, Inc. Boca Raton, 2001.
Town of Longboat Key 2005-2006 Beach Nourishment Project, Project Completion Report. Coastal Planning & Engineering, Inc. Boca Raton, 2006.

X. PUBLIC ACCESS FACILITIES

Beach and bay access facilities and other public amenities have in part been inventoried and mapped on Figure 10. Table 1 in the Recreation and Open Space Element identifies many bay access locations, however, not all are improved for public access. Only the improved accesses are mapped on Figure 10. The unimproved lands are generally environmentally sensitive lands, such a mangroves, which are not intended at this time for public use. Other types of access beyond those previously listed include: scenic access; public docks; fishing piers; and, traditional shoreline fishing areas.

There are eight beach access points located between R46A and New Pass (R29). These access points provide 14,900 feet of publicly accessible beach eligible for State funding under the FDEP Beach Erosion Control Program that provides cost sharing opportunities for shore protection project sponsors such as the Town of Longboat Key. Hotels, motels, resorts, and inns with 6 or more units provide an additional 3,700 feet of beach eligible for State project funding. The combined length of beach eligible for State project funding is 18,600 feet, or 37% of the project length.

Access provided in the Town appears to adequately serve the island, but could be improved. Consequently, all residents should be provided with beach access, secured bicycle racks, and parking where possible. In places where passage to the beach or walking along the beach is hampered by revetments or seawalls that are seaward of the mean high water line, mandatory walkways should be provided.

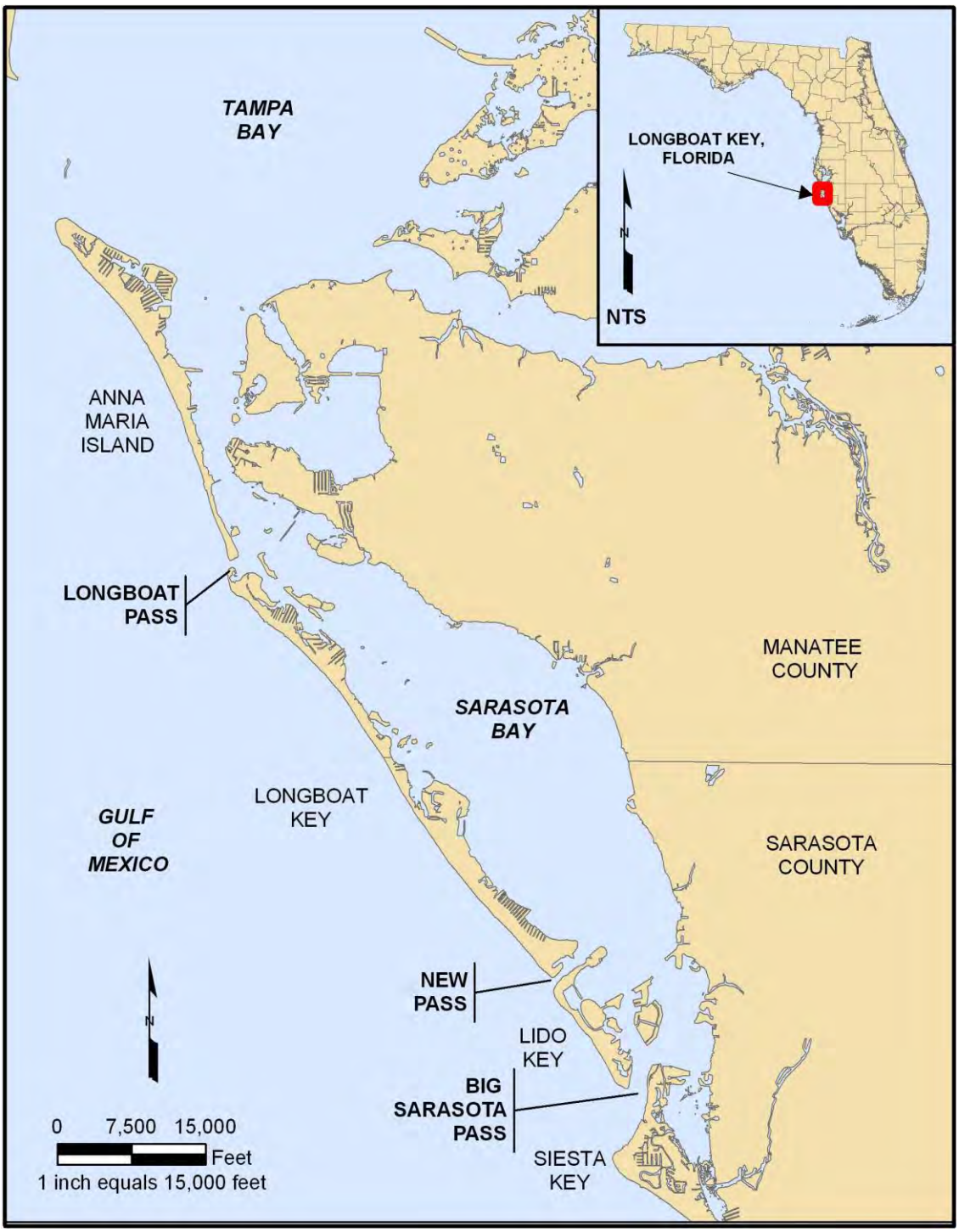

FIGURE 1: LOCATION

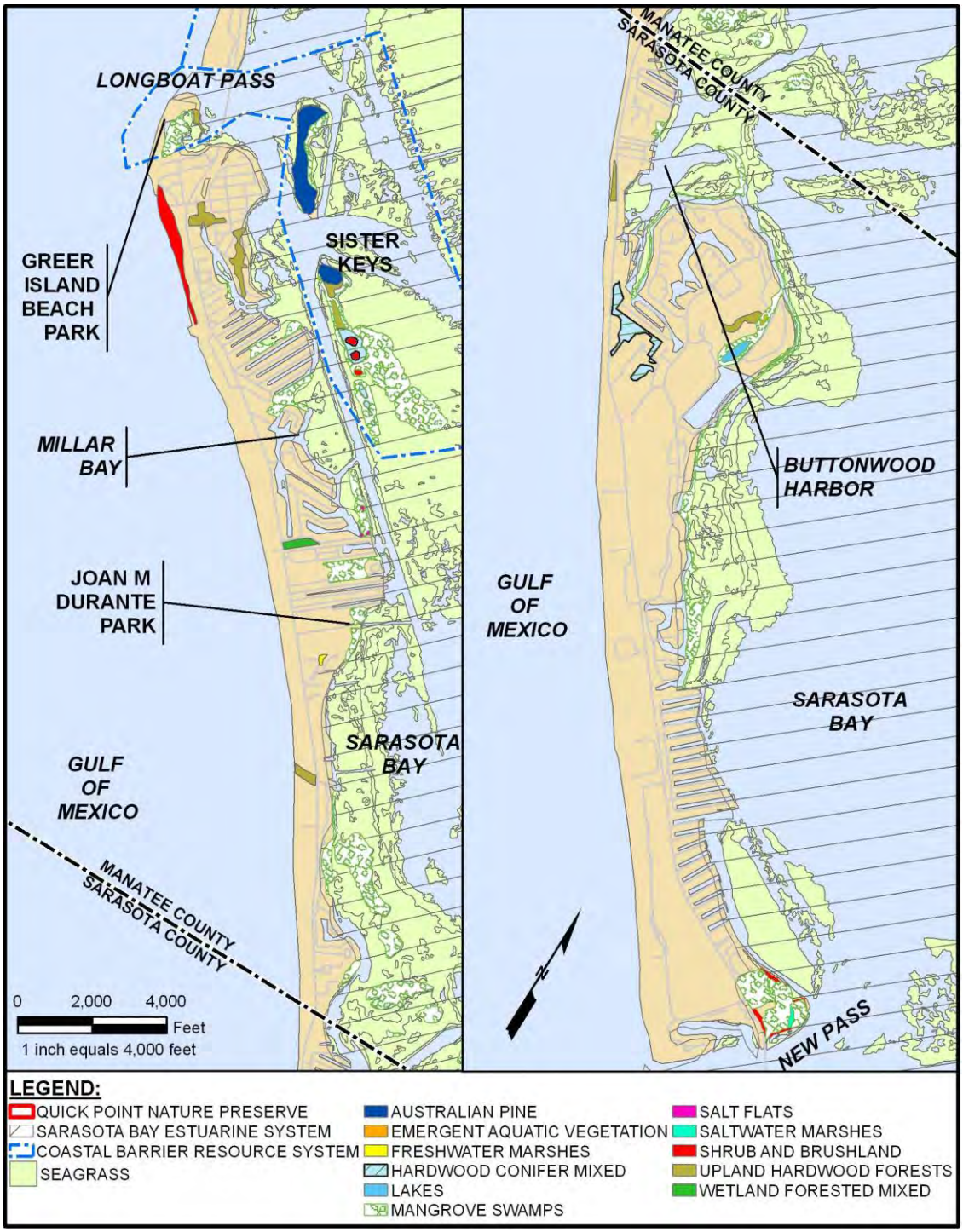

FIGURE 2: ENVIRONMENTAL FEATURES

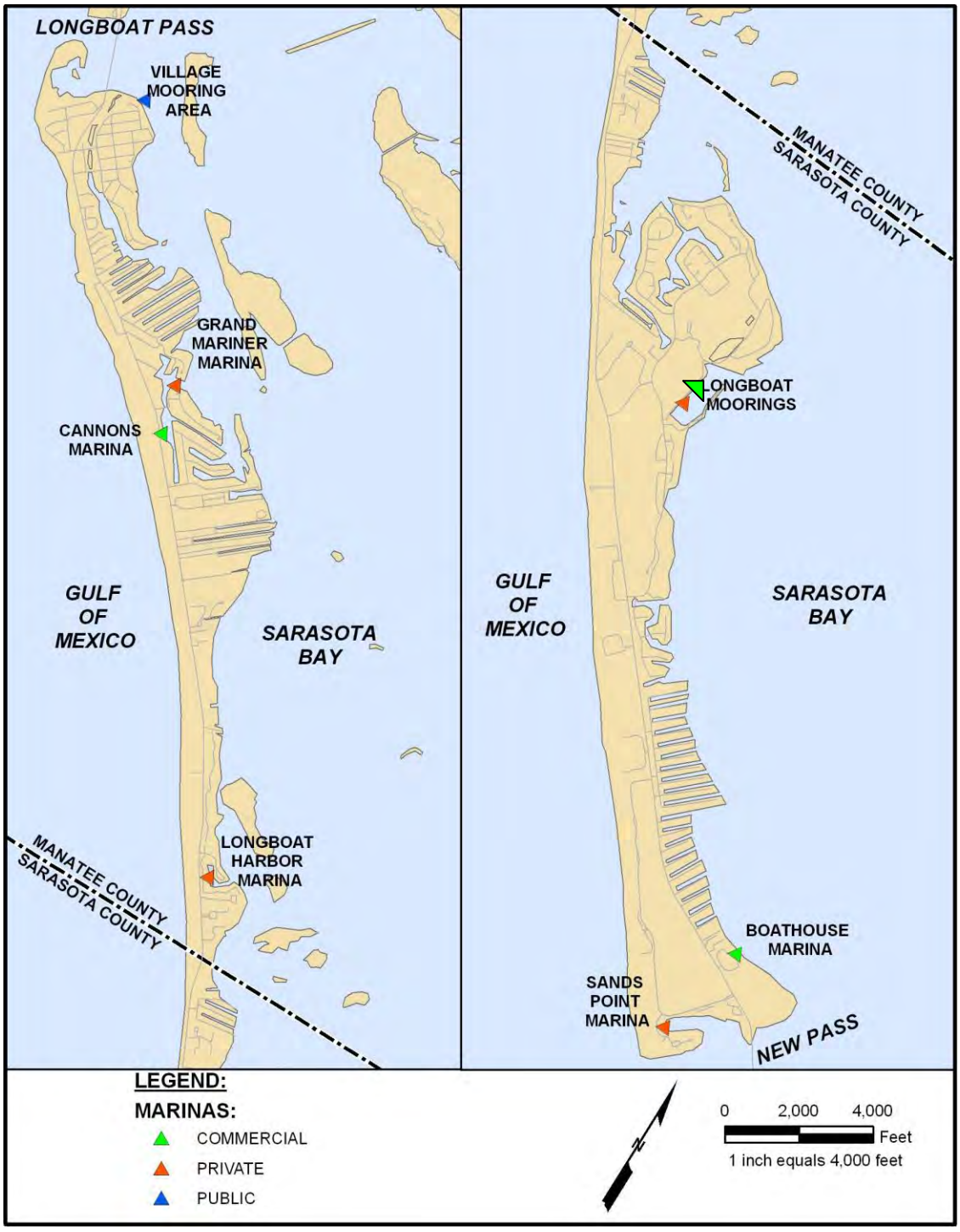

FIGURE 3: WATER-DEPENDENT USES

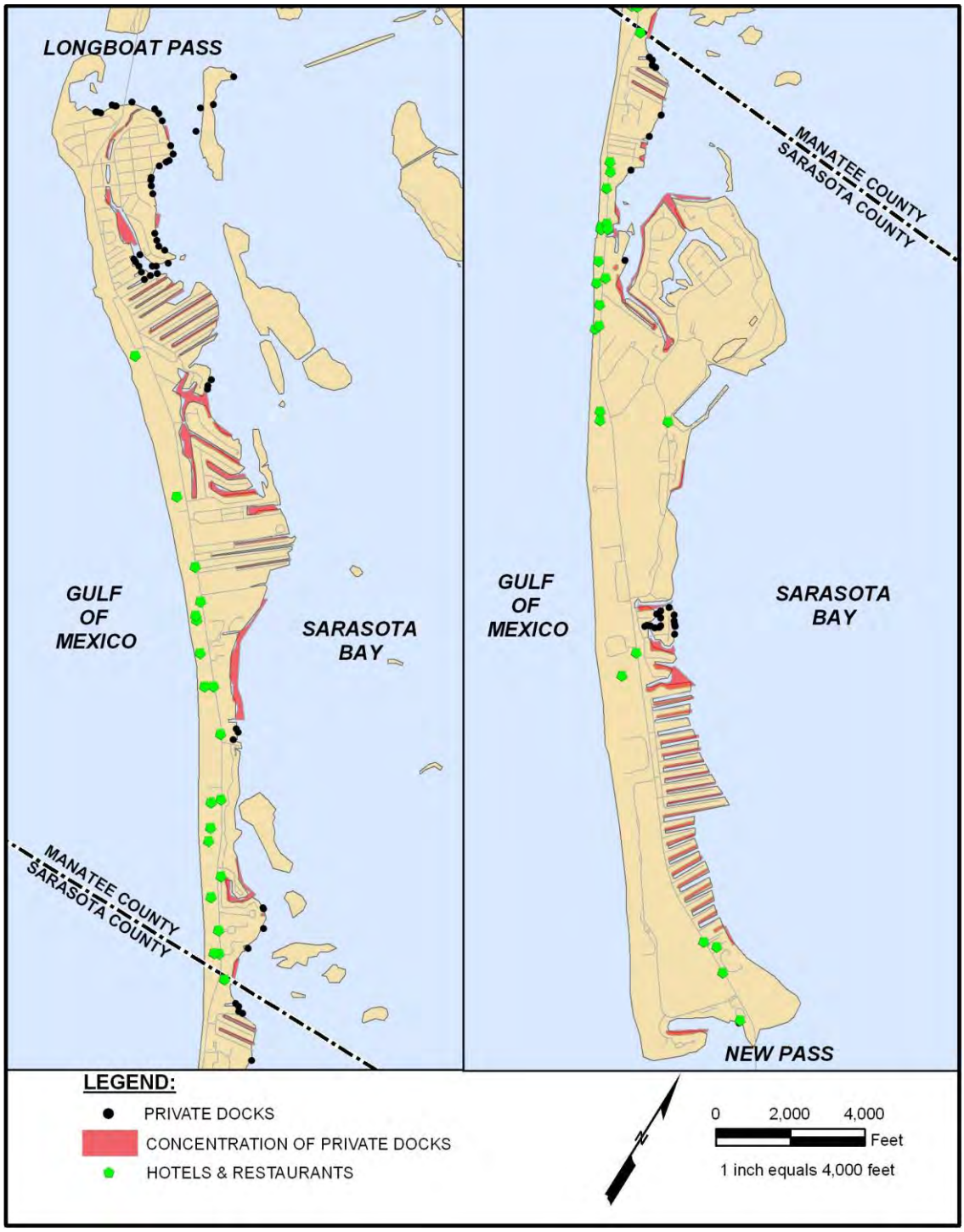

FIGURE 4: WATER-RELATED USES

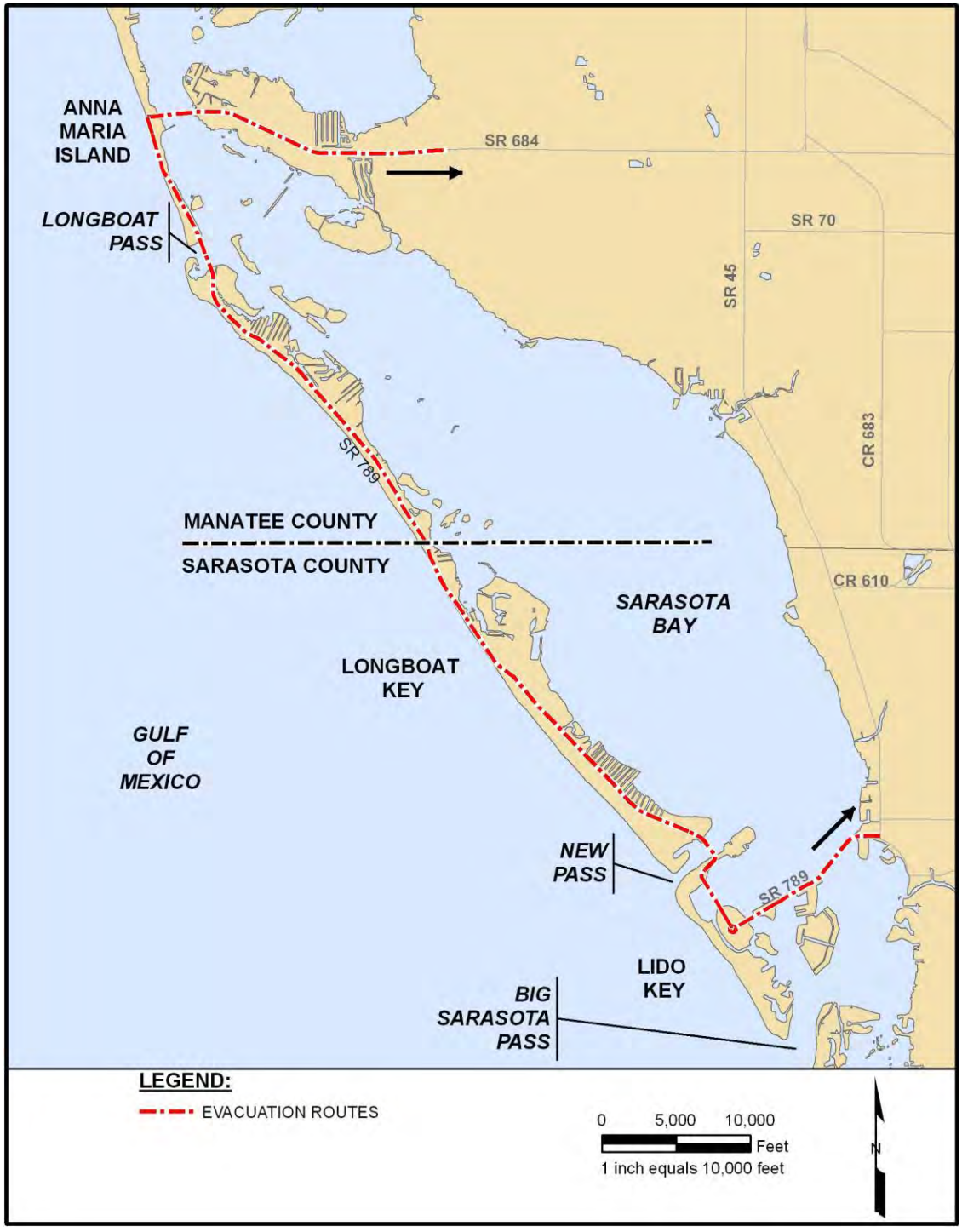

FIGURE 5: EVACUATION ROUTES

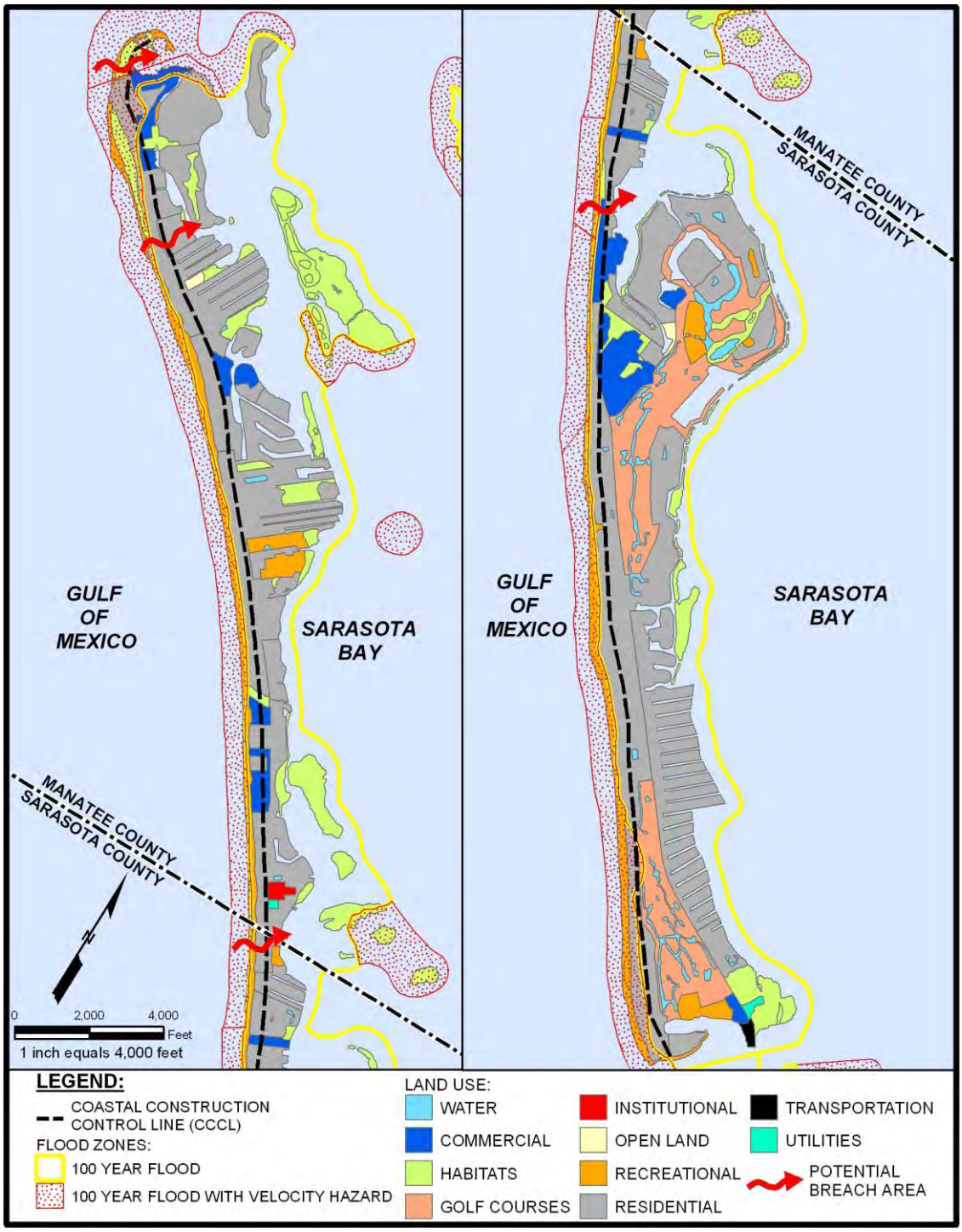

FIGURE 6: HIGH HAZARD ZONES

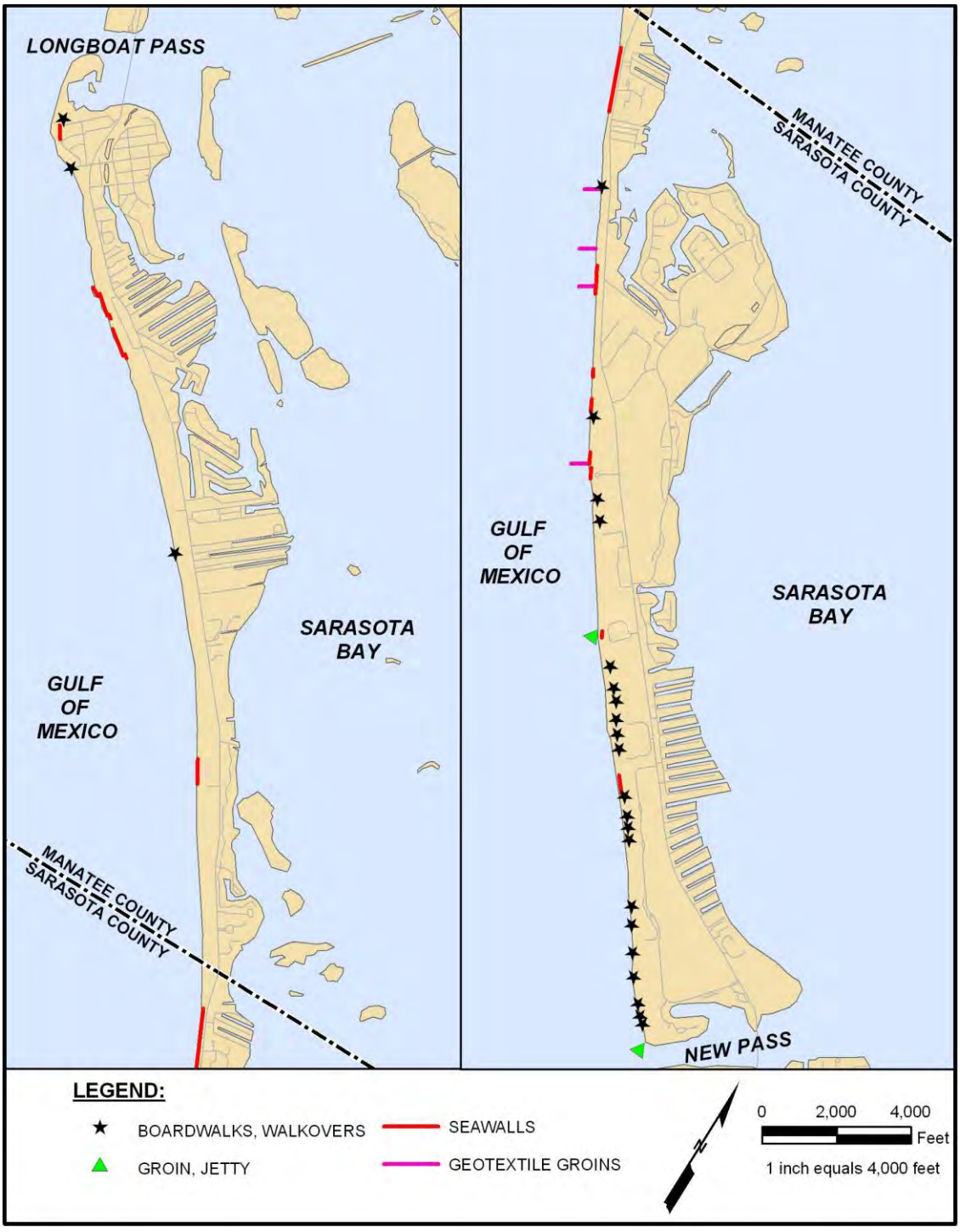

FIGURE 7: SHORELINE STRUCTURES

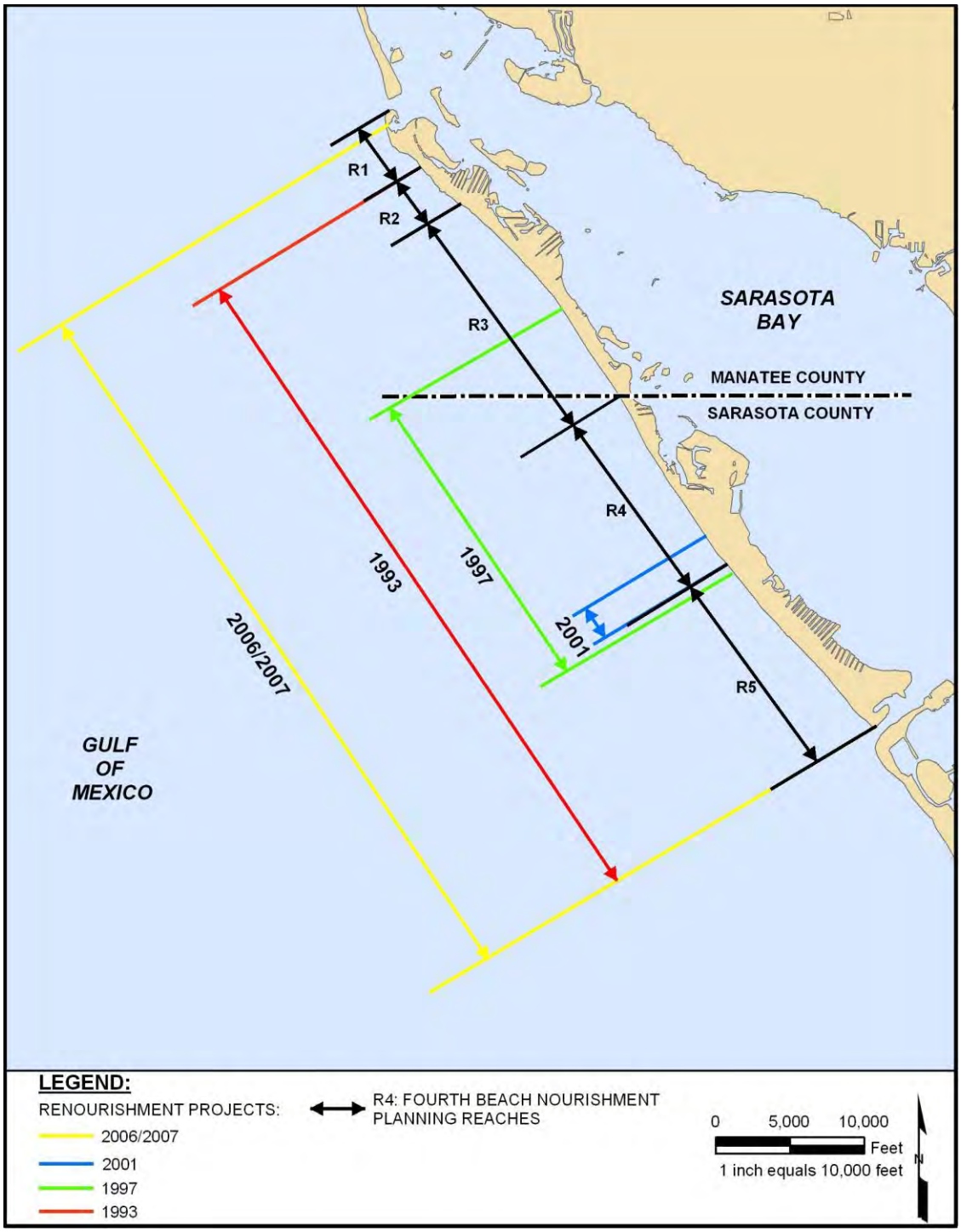

FIGURE 8: BEACH NOURISHMENT AREAS

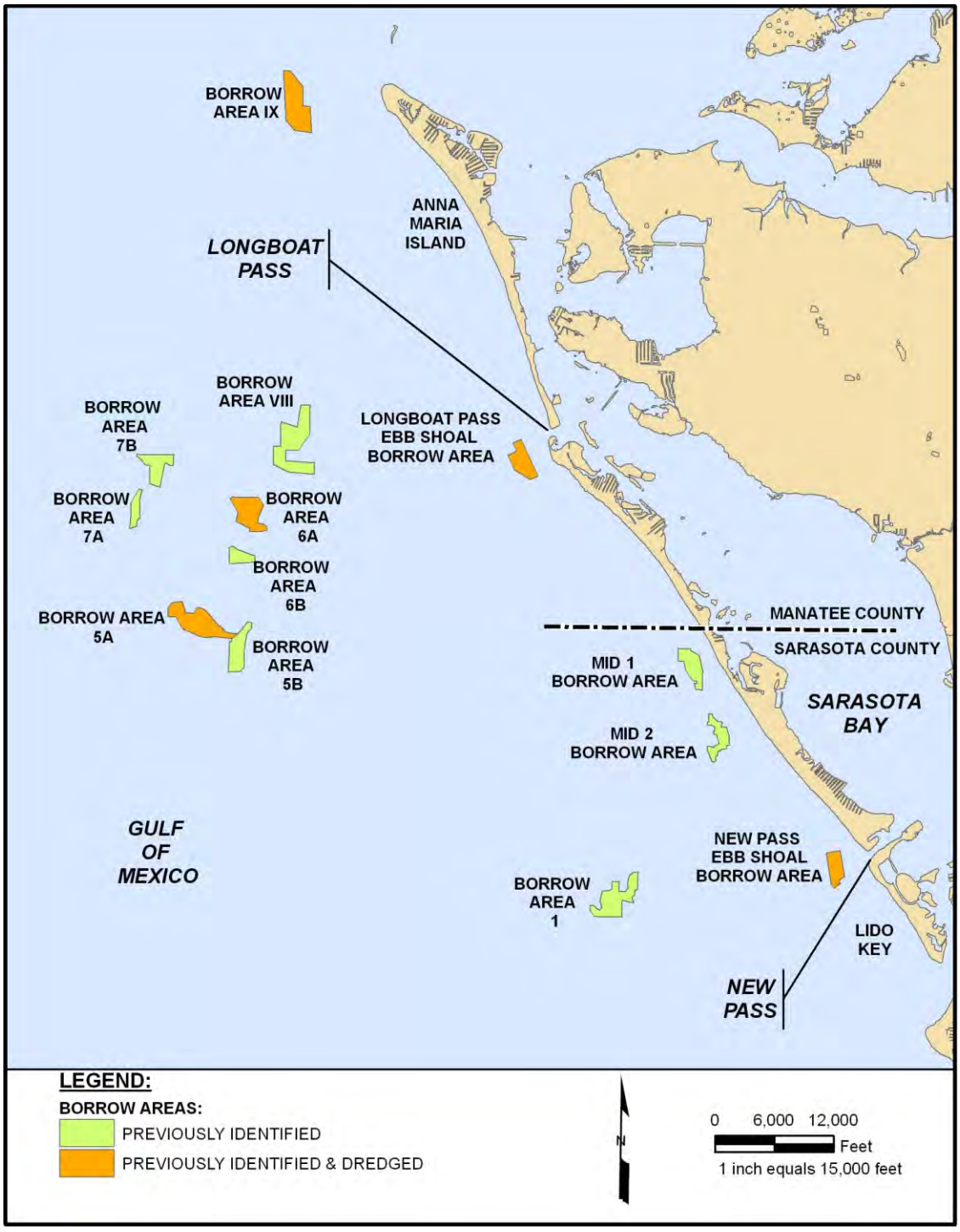

FIGURE 9: BORROW AREAS

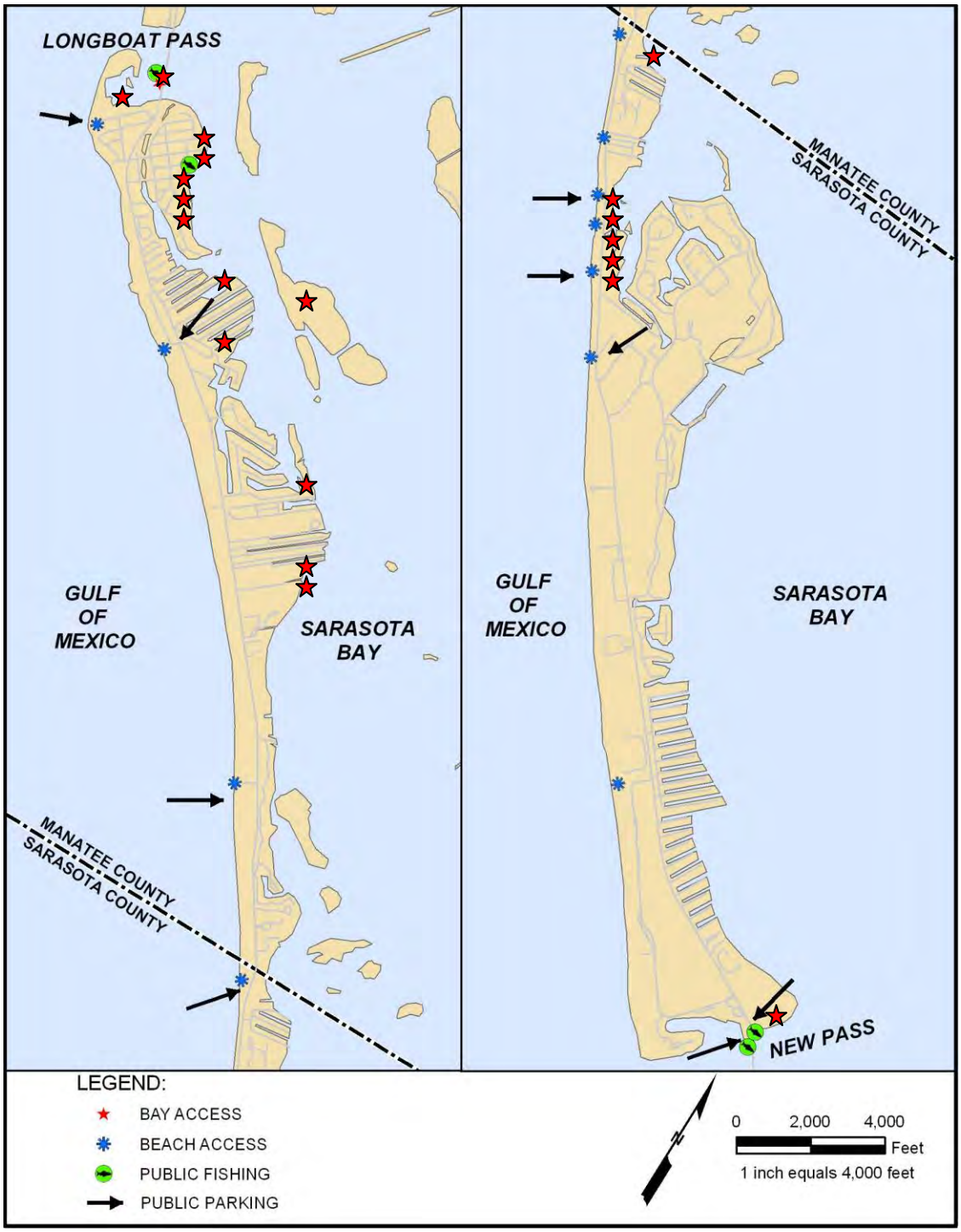

FIGURE 10: PUBLIC ACCESS

CONSERVATION & COASTAL ZONE MANAGEMENT ELEMENT GOALS, OBJECTIVES, & POLICIES

GOAL 1: The City of North Port shall protect, conserve and enhance its natural, environmental and historic resources to ensure sustainable environmental quality for the future.

-Natural Communities and Wildlife-

Objective 1: Upon adoption of the Comprehensive Plan, the City will review all applicable ordinances which provide for the protection and enhancement of its critical water resources and biologically productive flora and fauna, and wildlife habitats and initiate the deletion, revision or adoption of ordinances, based upon supporting data and analysis, which shall include state and federal regulations and guidelines.

Policy 1.1: The City shall, through implementation of the Land Development Code, ~~to~~ require that for all future land use map change proposals, the applicant submit supporting data and analysis pertaining to rare, endangered and threatened species and species of special concern. Prior to issuance of development permits, including land clearing, the applicant shall provide proof of compliance with appropriate state and federal regulations.

Policy 1.2: The City shall consult with the Florida Fish and Wildlife Conservation Commission and the U.S. Fish and Wildlife Service, as applicable, prior to the issuance of a land use approval that would result in an adverse impact to any rare, endangered threatened species, and species of special concern, as shown on the Environmental Assessment for all proposed Future Land Use Map amendments and major development submittals.

Policy 1.3: The City shall make available conservation easements, transfer of development rights, and fee simple acquisition or other appropriate techniques, for the protection of rare, endangered and threatened species and species of special concern, when the City, through consultation with appropriate state and/or federal agencies, determines that an action will impact an environmentally significant site.

Policy 1.4: The City shall continue to coordinate with the Florida Fish and Wildlife Conservation Commission and U.S. Fish and Wildlife Service in the identification and monitoring of known Southern Bald Eagle nests and creation and implementation of nest protection plans for development proposals.

Policy 1.5: The City shall continue to cooperate with Desoto, Charlotte, and Sarasota Counties, the SWFRPC, and other local, regional, state, and federal agencies, as applicable, in order to conserve, appropriately use, or protect unique vegetative communities located within more than one of these local jurisdictions.

Policy 1.6: The City shall continue to work with the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish and Wildlife Conservation Commission to identify occupied

Florida Scrub Jay areas in North Port, and will coordinate with USFWS to work with property owners who are affected by Florida Scrub Jay issues.

Policy 1.7: If determined necessary through coordination with the USFWS and the Florida Fish and Wildlife Conservation Commission, the City shall consider developing a Scrub Jay Habitat Conservation Plan (HCP) specific to the City of North Port, or may develop a North Port specific component to be included as part of the proposed Sarasota County HCP.

Policy 1.8: The City shall work with developers and land owners to preserve natural wetlands to the greatest extent possible in order to preserve wetland habitat vital to wading birds and wildlife, especially listed species, and to maintain natural surface water levels in wetland systems and associated habitat. Where appropriate and feasible, the City shall support the acquisition of important wetland habitats/systems, and it is also preferred that mitigation for any wetlands that are taken due to development activity be located within the City of North Port or in mitigation banks adjacent to the City.

Policy 1.9: Per the revised State requirements regarding the protection of gopher tortoises, the City shall coordinate with the Florida Fish and Wildlife Conservation Commission and the USFWS, as applicable, to develop a program for protection of tortoises, protection of tortoise habitat, and mitigation for any takings.

Policy 1.10: The City shall coordinate with the Florida Department of Environmental Protection, the Florida Fish and Wildlife Conservation Commission, the USFWS, the West Coast Inland Navigation District (WCIND), and other local, state, and federal agencies, as applicable, to maintain and enhance manatee populations throughout the region. Coordination activities may include, but shall not be limited to, development review, enforcement of manatee protection zones, and public education.

Policy 1.11: By 2012, the City shall amend its Land Development Regulations to include design components that enhance the movement of wildlife through the maintenance or creation of wildlife corridors. Such corridors may include, but not be limited to, preservation of identified natural wildlife corridors such as the Myakkahatchee Creek greenway or similar systems, or may include components such as animal underpasses.

Policy 1.12: Consistent with Policy 9.20 in the Future Land Use Element, the City shall amend the land development code by 2012, where applicable, and utilize the site and development review process to encourage the use of "green" design practices in public and private developments.

Objective 2: The City shall strive to identify all sustainable native vegetative communities and conserve and maintain these communities as balanced, biologically productive ecosystems while allowing appropriate development.

Policy 2.1: The City shall seek assistance from the Florida Fish and Wildlife Conservation Commission, FDEP, and other local, state, and federal environmental agencies in identifying

sustainable flora and fauna habitats, including the protection and conservation of the natural functions of existing soils.

Policy 2.2: The City shall seek assistance from the Florida Fish and Wildlife Conservation Commission, FDEP, and other local, state, and federal environmental agencies in the protection and conservation of its fisheries, rivers, bays, lakes, floodplains, harbors, wetlands including estuarine marshes, freshwater beaches and shores, marine habitats, backyard wildlife habitats and boater awareness of manatees.

Policy 2.3: By 2012, the City shall conduct an inventory analysis of areas containing critical wildlife and upland habitat in conjunction with the Florida Fish and Wildlife Conservation Commission and other stakeholders. This information shall be made available to the public and utilized by staff in the development review process.

Policy 2.4: The City shall continue to seek local, state, and federal funding sources in the protection, restoration, and management of critical environmental systems including uplands, wetlands, and habitats critical to identified listed species.

Objective 3: The City shall encourage the preservation of existing native vegetation, the creation of an urban forest, and the use of xeriscape methods for landscaping public and private development. Tree preservation activities and the planting of trees shall result in an overall, citywide, phased-in, tree canopy no later than build-out that ranges from 35% to 80% of the tree canopy that existed at the time of adoption of this Comprehensive Plan in 1997.

Policy 3.1: Every three to five years the City shall review, and amend as applicable, the Land Development Regulations applying to tree protection and landscaping guidelines for development to promote the preservation and use of native and drought tolerant species in landscaping in order to reduce the depletion of the surficial aquifer.

Policy 3.2: The City will continue to review landscape/tree ordinances from other communities and, further, review tree protection/preservation initiatives that would benefit the City. Based upon these reviews, revisions to the tree protection and landscape code shall be implemented.

Policy 3.3: The Land Development Regulations shall continue to prohibit the planting of exotic noxious vegetation such as Melaleuca quinquenervia, Brazilian Pepper (Schinus terebinthifolius), and Australian Pine (Casurina) as listed by State authorities.

Policy 3.4: The City shall utilize the incentive program provided in the Land Development Code for developers/builders to provide appropriate trees to the City when a lot is cleared for development and the developer/builder removes existing native trees. Further, the City shall be aggressive in its enforcement of violations to the tree and landscape code.

Policy 3.5: The City shall plant trees, on City property only, according to the following priorities:

1. In existing neighborhoods to replace dead or dying street trees.

2. In existing neighborhoods to complete existing street tree patterns.
3. On park sites, open space areas, or other appropriate public areas to provide shaded picnic or pedestrian walkways.
4. In gateway areas, as defined in the Future Land Use Element. Upon adoption of this policy, the City shall prioritize this sub-policy by planting a maximum of 25% of developer/builder-provided trees to gateway areas for a two year period.
5. On sites containing public buildings frequented by citizens such as City Hall, Multi-purpose building, etc.
6. Along arterial and collector roadways that traverse the City.

Policy 3.6: Recognizing that factors, both natural and man induced, will result in the diminution of the City's natural forest/tree canopy as the City continues to grow, the City shall, through policies, regulations, and programs strive to develop an urban forest comprised of a mix of native forest land and planted trees which maintains or enhances the City's tree canopy to levels equivalent to 35% - 80% of the tree canopy that existed at the time of adoption of this Plan in 1997.

Policy 3.7: Prior to 2011, the City shall conduct a study to determine the approximate percentage of coverage offered by the City's tree canopy at the time of adoption of this Plan in 1997.

Policy 3.8: Management activities for all City-owned lands shall include, where appropriate and feasible, removal of exotic and invasive vegetation and re-planting with native vegetation.

Policy 3.9: Management activities for all City-owned outdoor recreation parks and facilities shall include, where appropriate and feasible, measures to restore and enhance degraded natural plant communities, habitat and natural hydrology.

Policy 3.10: The City shall encourage the preservation of existing native vegetation, the planting of native vegetation, and the use of xeriscape methods for landscaping public and private development. Examples of plants and planting methods can be found in documents including but not limited to *Florida Friendly Landscaping*, and the *University of Florida's Friendly Yards and Neighborhood Handbook.*

Policy 3.11: The City shall encourage the use of Integrated Pest Management (IPM) methods as an environmentally sound way to control pests.

Objective 4: The surface waters and groundwater resources of the City shall be protected to ensure that their biological, ecological and hydrological functions are maintained, conserved, or improved.

Policy 4.1: All protected wetlands shall include upland buffers, pursuant to State and Federal requirements, adjacent to these wetlands for habitat diversity, edge enhancement, and the promotion of wildlife conservation.

Policy 4.2: The City shall continue the water quality monitoring and maintenance program for its canal system to ensure adequate protection of its potable water and recreational resources.

Policy 4.3: To maintain or enhance water quality in area waterways, the City shall amend the Land Development Code prior to 2010 to require appropriate landscaping, including natural materials and amounts to be installed or retained, at the waterline of canals and waterways for new development.

Policy 4.4: Protection of wetland quality and function will be prioritized as follows:

- Avoidance of impacts
- Minimization of impacts
- Mitigation of impacts

Policy 4.5: The City shall continue to work closely, and coordinate with, the Southwest Florida Water Management District and the Federal Army Corps of Engineers (ACOE) in the enforcement of state regulations regarding mitigation of wetland degradation and/or destruction.

Policy 4.6: No issuance of land clearing or other development permits shall occur until all necessary SWFWMD Environmental Resource Permits have been presented to the City for review and acceptance.

Policy 4.7: Land use development activities in important groundwater recharge areas, individual wellheads, and well fields, when identified, shall be consistent with water resources protection. To better protect these areas the City, consistent with Policy 6.9 of the Potable Water Element, shall through ordinance develop a new section of the Unified Land Development Code to address wellhead protection. The section will identify inappropriate land uses and facilities and shall be consistent with State legislation.

Policy 4.8: The City of North Port will coordinate with other governmental and private entities to protect water resources.

Policy 4.9: Consistent with City utility master planning initiatives, the City shall continue to expand its system of municipal potable water, sanitary sewer, and reclaimed water service in order to decrease the number of private water wells and septic systems that impact surface waters, aquifers, and the natural environment.

Policy 4.10: The City shall continue to enforce its earthmoving ordinance in order to conserve and protect the natural resources within the City of North Port, while also promoting opportunities for responsible development.

Policy 4.11: Consistent with Objective 7 of the Potable Water section of this Comprehensive Plan, the City shall continue to implement and enforce its water conservation code, and will modify restrictions whenever called upon by SWFWMD consistent with the SWFWMD Water Shortage Plan.

Objective 5: The City shall continue management and protection programs and procedures to preserve and enhance the Myakkahatchee Creek as a Class I potable water supply and natural resource amenity.

Policy 5.1: For those lots along the Myakkahatchee Creek where buy-back purchase or TDR programs may not be feasible, strict local ordinances shall continue regulating stormwater runoff, the handling and storage of hazardous and special wastes, and native vegetation removal. Accordingly, the Future Land Use Map shall designate this area as Recreation/Open Space, which will provide strict regulations to mitigate the impacts of future development. These ordinances and regulations shall provide for incorporation of upland buffers adjacent to wetlands, identifying and remedying artesian wells, remedying any point sources of inadequately treated stormwater which may be identified, strict land development regulations, stringent regulations regarding sewage disposal methods appropriate to the area, and other restrictions as deemed appropriate.

Policy 5.2: The City shall seek the assistance and advice of the Southwest Florida Water Management District (SWFWMD) and other appropriate agencies, in order to achieve the nomination and eventual purchase of lands bordering the Myakkahatchee Creek under the Save Our Rivers program, SWIM and other appropriate grant programs.

Policy 5.3: Consistent with the Myakkahatchee Creek Greenway Master Plan, protection and preservation of valuable plant and wildlife resources along the Myakkahatchee Creek shall remain a high priority.

Policy 5.4: In protection of the Myakkahatchee Creek as a Class 1 potable water supply source, the City shall continue efforts toward the completion of acquiring Tier 1 and 2 properties along each side of the creek and, further, shall support the acquisition of other environmentally significant properties within the watershed.

Objective 6: The City of North Port shall continue to enforce the City's wetland ordinance that conserves and protects the health, function and biological integrity of all remaining viable wetland systems as defined by State agencies in order to prevent the violation of State water quality standards; maintain freshwater storage capabilities; reduce damage to property and loss of life due to flooding; maintain the viability and diversity of native plants and animals and their habitats; and assure the continued conservation of irreplaceable natural resources.

Policy 6.1: No wetland alteration or removal shall be permitted, unless reasonable use of the property is dependent upon said alteration or removal. Appropriate, equitable and compensating mitigation or restoration shall be required for all wetland disturbances, pursuant to State and Federal guidelines. Consistent with Policy 1.8 and Policy 4.4 of this Element, the City shall work with developers to minimize the impacts of developments upon wetland systems. It is also preferred that mitigation for any wetlands that are taken due to development activity be located within the City of North Port or in mitigation banks adjacent to the City.

Policy 6.2: All necessary state and federal permit approvals shall be obtained prior to permitting an activity that impacts existing wetland areas. Prior to the next Evaluation and Appraisal Report, the City shall evaluate all applicable sections of the Unified Land Development Code to ensure that they are consistent with any revisions to applicable State or Federal wetland regulations.

Policy 6.3: In order to preserve and enhance the function of the 100-year floodplain and associated habitats, including wetlands, the City shall utilize the use of Transfer of Development Rights, or other techniques, and appropriate construction methods within the FEMA FIRM 100-year floodplain. Further, prior to the next Evaluation and Appraisal Report (EAR) deadline, the City shall review applicable sections of the City Land Development Code to determine whether amendments will be necessary to strengthen the City's ability to protect the floodplain, and associated habitats.

Policy 6.4: The dredging or filling of the Myakkahatchee Creek shall be prohibited, except for that required for canal maintenance, public recreation, improvements to the drainage system, navigation in the tidal portion of the creek, or potable water supply requirements. Any such activities shall be coordinated with the appropriate local, state, or federal agencies.

Policy 6.5: The City, by the year 2010, shall amend the Wetlands Protection Ordinance to include provisions for development density/intensity in close proximity to jurisdictional wetland areas. Such provisions shall be based on State and Federal wetland protection regulations. The City shall continue to require adherence to Southwest Florida Water Management District regulations, as well as other appropriate State, Federal, or County wetland enforcement agencies.

Objective 7: Prior to 2010, the City will implement programs and procedures for the protection, preservation and conservation of coastal water resources and fresh water resources, including, but not limited to waterways and canals.

Policy 7.1: The City, which has representation on the Charlotte Harbor National Estuary Program, shall continue to coordinate with this body by participating in its resource planning and management activities, as directed by the Southwest Florida Regional Planning Council. The City shall also attempt to take advantage of the resource protection activities and measures provided by the Surface Water Improvement and Management (SWIM) program legislated by the State of Florida. The various elements of these programs will be considered for incorporation into the City's Comprehensive Plan.

Policy 7.2: Recognizing that the City of North Port lies within the Charlotte Harbor drainage basin, the City will support, and where applicable, participate in the resource management activities directed by the Charlotte Harbor National Estuary Program in their implementation of the regional Comprehensive Conservation and Management Plan (CCMP).

Policy 7.3: The City shall maintain staff representation to the Charlotte Harbor National Estuary Program.

Policy 7.4: Development which affects the designated "Wild and Scenic Protection Zone" of the Myakka River shall meet standards which conform to, or are more stringent than, standards developed pursuant to Section 258.501, Florida Statutes, the "Myakka River Wild and Scenic Designation and Preservation Act," including standards found in the Myakka Wild and Scenic Management Plan as adopted and amended. All necessary "Myakka River Permits" shall be secured from the Florida Department of Environmental Protection prior to the approval of development by the City of North Port, as applicable.

Policy 7.5: The City shall abide by the 2007 "State-Local Agreement for Administering the Myakka River Wild and Scenic Protection Zone" between the City, FDEP, and FDCA regarding the administration of the Myakka River Wild and Scenic Protection Zone, as established in Section 258.501, Florida Statutes.

Policy 7.6: By November 13, 2008, the City shall amend its Land Development Regulations to include the Myakka River Protection Zone Ordinance in accordance with the "State-Local Agreement for Administering the Myakka River Wild and Scenic Protection Zone" between the Florida Department of Environmental Protection (FDEP), Florida Department of Community Affairs (FDCA), and the City of North Port. This ordinance shall set forth the City's legal responsibilities, activities that will be regulated, and procedures for regulating activities within the Protection Zone.

Policy 7.7: Consistent with protection of the Myakka Wild and Scenic River, shoreline hardening shall be prohibited on the Myakka River.

Policy 7.8: Support the efforts and consider recommendations from intergovernmental organizations concerning the Myakka River Watershed.

Policy 7.9: Enforce the Myakka River Protection Zone regulations and all City regulations designed to protect the Myakka River and the wild and scenic nature of the River.

Policy 7.10: The City will support protection of the Myakka River corridor through the implementation of the City Myakka River Wild and Scenic protection requirements. Buffers for all development within the Myakka River protection zone shall be a minimum of 220 feet.

Objective 8: The City shall increase protection of the natural functions of the FEMA - FIRM 100-year floodplain through the establishment of revised land development regulations so that the flood-carrying and flood-storage capacity are maintained.

Policy 8.1: The City shall review and update appropriate flood damage prevention ordinances to ensure compatibility with all current state and federal water management regulatory controls, recommendations from the Big Slough Watershed Study, and consistency with the policies of this Plan.

Policy 8.2: Prior to the next Evaluation and Appraisal Report (EAR), the City shall review land development regulations affecting land development activities within designated

"Conservation" areas, and designated "Recreation and Open Space" corridors on the Future Land Use Map for consistency with new and modified policies that are the result of City, State, or Federal studies, guidelines, or laws.

Policy 8.3: The City shall continue its participation in the National Flood Insurance Program's Community Rating System and will undertake those activities necessary to maintain or enhance its rating in order to provide increased awareness of flood protection, reduce damage from floods, and to provide reduced flood insurance premiums for residents of the City.

Objective 9: The City of North Port shall meet or exceed the minimum air quality levels established by the FDEP.

Policy 9.1: The City shall continue to cooperate with the County's air quality monitoring program as delineated in County Ordinance 85-63 (Sarasota County Air Pollution Control Code).

Policy 9.2: Industrial land uses shall be located where they minimize the impact on current air quality standards.

Policy 9.3: The City shall reduce the potential for automobile emissions pollution by amending the Land Development Code where appropriate and by reviewing the following:

- developments such as Activity Centers;
- require vegetative buffer strips, including street trees and native plants, between arterial and collector roadways and residential development; and
- promote alternative transportation modes such as car-pooling, public transit and bicycle and pedestrian paths.

Policy 9.4: The City shall encourage "green development" which reduces the overall impact to the natural and human environment, including air quality.

Objective 10: Consistent with the City's Archaeological Resource Protection Ordinance, the City shall take action to preserve and protect all significant historic and archaeological sites, as they become known, located within the City of North Port. Such actions may include partnerships with other government agencies, colleges/universities, or private organizations.

Policy 10.1: Per the City's Land Development Code, including the Archaeological Protection Ordinance, the City shall consider the utilization of transfer of development rights as a means of preserving those platted lots in the Archaic Indian Midden and the burial area in the associated slough located near Little Salt Spring, Atwater site, and other sites as they become known.

Policy 10.2: The City shall support establishing the extent of the Little Salt Spring Indian settlement by working with the known American Indian tribes and descendants of this settlement, Florida Department of State's Division of Historical Resources, Sarasota County and the University of Miami. Agreements between the City and owners of the platted

properties in question shall allow for research in order to further scientific knowledge of the settlement area.

Policy 10.3: The City shall abide by and enforce its Archaeological Resource Protection Ordinance to protect significant archaeological and historic sites.

Policy 10.4: The City shall support the acquisition and preservation of historic or archaeologically sensitive sites. These actions may include partnerships with other government agencies, academic institutions, or private organizations.

-Soils-

Objective 11: The City of North Port shall protect and maintain its soils as an integral part of the City's natural resources and economy.

Policy 11.1: To preserve and protect native soils, the City will continue to implement the erosion control guidelines stipulated in the Land Development Code.

Policy 11.2: To preserve and protect native soils, the City shall encourage alternatives to the utilization of fill for flood protection of buildings including the construction of stem walls and piling supported structures.

-Public Awareness-

Objective 12: The City will continue programs to enhance public awareness of natural resources in order to better understand the importance of these resources and the need for their proper management and conservation. Methods for increasing public awareness may include, but not necessarily be limited to, public presentations, education programs, and publications.

Policy 12.1: The City shall develop education materials concerning sound environmental practices to be distributed to builders, developers and property owners.

Policy 12.2: The City will educate the public on the value of natural resources, especially threatened and endangered species through interpretive displays and trails at recreation sites and parks.

Policy 12.3: The City shall establish guidelines, recommendations, and incentives encouraging private landowners to use good management practices to protect the habitats of rare, endangered and threatened species and species of special concern, based on existing supporting data and analysis.

Policy 12.4: The City shall maintain, or create, partnerships with local, state, and federal regulatory agencies to provide educational materials, conduct public information workshops, speak with local service clubs, special interest groups, schools, and other stakeholders.

Policy 12.5: To promote "green development" within North Port, the City shall provide educational materials created in-house or by other applicable local, state, federal, or private agencies to increase the awareness of such practices to the general public and the development industry. The City shall also support presentations and workshops that accomplish this educational goal.

COASTAL ZONE MANAGEMENT GOALS, OBJECTIVES, & POLICIES

Goal 1: Lessen the impact of a destructive storm or other natural or man-induced event on human life, public facilities, private structures, infrastructure, and coastal natural resources in the City of North Port.

Objective 1: The City shall continue to require infrastructure necessary to meet its future land use demand for coastal infrastructure consistent with public safety, to maintain Levels of Service as described in the various elements of this Comprehensive Plan, while limiting impacts to natural and historic resources.

Policy 1.1: The City will continue to regulate development throughout the planning period to ensure that public facilities are provided concurrent with need and to maintain Levels of Service as described in the various elements of this Comprehensive Plan.

Policy 1.2: Man-made structures shall meet all applicable height and set-back requirements when constructed within the FEMA "A" zones or SLOSH Category 1 zones of the City of North Port. This policy shall continue to be reflected in the City's Building Code.

Policy 1.3: The City shall minimize the addition of road, water, sewer, or drainage infrastructure in the "A" Zone, or Category 1 SLOSH Zone, and shall limit the building of public infrastructure, except in the form of passive recreational facilities that provide public access to creeks, rivers, bays and harbors, as coordinated with the proper local, state, or federal agencies.

Policy 1.4: The City, through implementation of its Unified Land Development Code and Comprehensive Plan, master planning processes, and support of local, state, or federal initiatives or agreements, shall limit impacts related to development or redevelopment activities which could have negative impacts upon wetlands, water quality, water quantity, wildlife habitat, living marine resources, shorelines, and historic resources within the coastal area.

Policy 1.5: The City shall continue to apply for grants, implement projects (such as the Myakkahatchee Creek initiative) and support local, state, or federal initiatives aimed at the restoration or enhancement of disturbed or degraded natural resources including shorelines, estuaries, wetlands, and drainage systems. The City shall also support programs aimed at mitigating future disruptions or degradations of significant natural systems in our region.

Policy 1.6: The City shall support initiatives such as the acquisition of lots and parcels along creeks, rivers, bays and harbors, which decrease the number of residents, and their associated impacts, living within FEMA designated "A" Zones and Category 1 SLOSH Zones.

Policy 1.7: Consistent with Policies 7.4 and 7.5 in the "Conservation" section of this Comprehensive Plan, the City shall abide by its "State – Local Agreement for Administering the Myakka River Wild and Scenic Protection Zone" with FDEP and FDCA regarding the "Wild and Scenic" Myakka River, and shall coordinate development proposals of any type that would have an impact upon the shoreline, the River, and the plant and wildlife that are dependent upon the River with all applicable agencies.

Policy 1.8: The City hereby defines its "Coastal High Hazard Area" as the Category 1 Sea, Lake, and Overland Surges From Hurricanes (SLOSH) Zones as indicated in the Southwest Florida Regional Planning Council's "Hurricane Storm Tide Atlas For Sarasota County (1991)."

Objective 2: The City shall continue to utilize, and amend when necessary, land development regulations which establish standards for types, sizes, densities, and intensities of all land use categories, minimize development within the established "Coastal High Hazard Area," aid in the provision of emergency shelters for current and future residents, and enhance the City and regional hurricane evacuation network, consistent with the County and Regional Hurricane Evacuation Plans

Policy 2.1: The City will continue to provide staff support and assistance to aid the Southwest Florida Regional Planning Council, Sarasota and Charlotte Counties, and other appropriate local governments and agencies, in the identification of public and private shelter, including rental space, for all City residents, consistent with the Southwest Florida Regional Planning Council's Hurricane Evacuation Plan.

Policy 2.2: The City will participate in all transportation planning efforts to ensure that minimum evacuation times can be maintained during an evacuation on the City's evacuation routes consistent with the Southwest Florida Regional Strategic Plan.

Policy 2.3: The City shall continue to work with the Sarasota-Manatee MPO, the Charlotte County-Punta Gorda MPO, FDOT, and other applicable local, state, and federal agencies to seek funding for additional capacity to be added to the Sumter Boulevard, Toledo Blade Boulevard, and River Road Hurricane Evacuation Routes in order to decrease evacuation times for residents and visitors if the region is threatened by tropical systems, or other forms of disaster.

Policy 2.4: The City will continue to participate in erosion-prevention and flood-prevention programs for those areas along the City's evacuation routes where erosion and flooding are potential problems.

Policy 2.5: The City shall continue to cooperate with local, state and regional agencies, including the School Board of Sarasota County, to ensure that safe shelter is available for the City's at-risk populace.

Policy 2.6: Consistent with the Southwest Florida Regional Planning Council's Hurricane Evacuation Plan the City shall continue to fulfill its assigned role as specified within the Sarasota County Peacetime Emergency Plan and its policies regarding hurricane evacuation and sheltering.

Policy 2.7: The City will continue to meet and coordinate annually with Charlotte and Sarasota County Disaster Preparedness and local Red Cross officials, as well as other local, state, and federal agencies as applicable, for the purpose of identifying and designating additional public and private structures, both inside and outside the City, as hurricane evacuation shelters, consistent with the Regional Hurricane Evacuation Plan.

Policy 2.8: The City will encourage new developments to provide for the shelter needs of their residents or employees.

Objective 3: In order to limit public expenditures that may be construed as subsidizing development and post-disaster redevelopment in coastal high-hazard areas, the City of North Port will continue to regulate the number and type of structures subject to damage in FEMA "A" Zones, or the designated Coastal High Hazard Area. Post-disaster redevelopment plans shall take into consideration the need to limit densities within these zones in order to protect life, property, and limit future public infrastructure needs in those areas, with the exception of the provision of passive recreational access to the water.

Policy 3.1: The City will continue to promote the relocation of repeatedly-damaged structures in FEMA "A" zones, or the designated Coastal High Hazard Area, to safe locations.

Policy 3.2: The City will continue to enforce FEMA, DEP, and local setback and height requirements for the safety of structures, especially those located along the Myakkahatchee Creek, and other similar waterbodies which are in FEMA "A" zones or the designated "Coastal High Hazard Area." Further, the City shall make all efforts to discourage further development, or redevelopment, in such areas, with the exception of providing passive recreational access to these areas.

Policy 3.3: In the event a hurricane strikes, the recovery effort will be accelerated by the immediate distribution of free emergency permits by the appropriate authority for repair and clean up of damage to private and public structures and utilities, to the extent such situations are still marginally usable without such repair.

Policy 3.4: Structures in the FEMA "A" zone, the Category 1 SLOSH zone or in areas subject to severe erosion or flooding which are determined to be in excess of 50% damaged, shall not be permitted to be redeveloped to original design specifications.

Policy 3.5: The City shall continue to utilize its Operational Guidelines for emergency management procedures for the periods before, during, and after natural or man-induced disasters impact or threaten the City.

Policy 3.6: Coordinate research and planning efforts between the City, the Southwest Florida Regional Planning Council, and other appropriate agencies in order to update pertinent sections of the City Emergency Management Plan, the Sarasota County Emergency Management Plan, and the Local Mitigation Strategy (LMS), as applicable, to develop a post-hurricane disaster plan that addresses long term repair and redevelopment activities.

Policy 3.7: Consistent with SARA Title III, the North Port Fire Rescue Department and the City Police Department, in conjunction with the Sarasota County Division of Emergency Management, shall continue to cooperate in the preparation of an inventory of hazardous materials generators in the City of North Port, or in unincorporated areas where the City Fire and Police Departments have responsibility. This shall be inclusive of areas both within and outside of the "coastal zone."

Policy 3.8: For those portions of the City within the Category 1 hurricane zone, the City will investigate limiting the types of development that may occur and requiring structural design elements that lessen potential damage to structures and allow freer flow of water, such as elevation of structures on stilts, stem-wall construction and location of parking areas on the ground floor of commercial buildings.

Objective 4: The City will educate the public about the dangers associated with tropical systems, floods, fires, and other natural or man-made disasters and emergencies.

Policy 4.1: The City shall continue its programs to educate the public regarding disasters, disaster preparedness, disaster response, and post-disaster redevelopment and assistance. Such programs include, but are not limited to, public presentations, television and radio programs or advertisements, and publications.

Policy 4.2: The City shall continue to coordinate with other local, state, and federal governments and other public or private agencies, as applicable, to coordinate public education regarding emergency preparedness.

Policy 4.3: The City shall require, through its Development Order processes, that all major new residential and non-residential developments in the City develop educational programs regarding preparation for, and actions to be taken, if the City is threatened by natural or man- induced emergencies including, but not limited to, tropical systems, floods, fires, and hazardous material issues.

Chapter 2

Environment

Sarasota County Comprehensive Plan

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The Environmental Protection and Coastal Islands Plan

INTENT AND PURPOSE

The City of Sarasota has an abundance of natural resources, including Sarasota Bay, and a diversity of associated habitats and species. Since the early 1970's, there has been increasing interest both nationally and locally about preserving and protecting the environment. The intent of the Environmental Protection and Coastal Islands Chapter is to maintain and enhance the environment in the City of Sarasota, seek a balance between man-made and natural systems, and provide adequate measures to protect life and property from natural disasters. The foundation for this Chapter is **Sarasota's Strategic Plan** and Florida statutory requirements.

Sarasota's Strategic Plan Goals

In 2004, the City Commission adopted "Sarasota's Approach to Strategic Planning", which provides the foundation for the Strategic Plan and six Strategic Goals that have particular relevance to this Chapter:

"An attractive, environmentally-friendly community that is safe and livable and provides an array of cultural and aesthetic enjoyments."

Viable, safe and diverse neighborhoods and businesses that work together

The natural environment is one of the City's greatest assets and its protection is vitally important. In the short and medium-term the section in this chapter on Hurricane Vulnerability and Disaster Preparedness has relevance to City residents' safety. From a long-term, global perspective, all of the issues of this chapter may be the most important to our safety and survival.

It is the intent of the Environmental Protection and Coastal Islands Plan to pursue actions that further **Sarasota's Strategic Plan**.

Florida Statutory Requirements

The Environmental Protection and Coastal Islands Chapter is also intended to meet the requirements as outlined in Chapter 9J-5 of the State of Florida Administrative Code. This chapter addresses the issues and recommendations contained in the Evaluation and Appraisal Report (EAR), in accordance with State requirements, and which was adopted by the City Commission on October 11, 2005.

Organization of the Environmental Protection and Coastal Islands Plan

Since the coastal and inland environmental systems are closely related, the City has combined the Coastal Management Chapter and Conservation Chapter, both required by the Local Government Comprehensive Planning and Land Development Regulation Act, into this Chapter titled "Environmental Protection and Coastal Islands". This Chapter addresses those State planning requirements and also focuses on specific issues relative to the City's coastal islands. The Environmental Protection and Coastal Islands Plan consists of two goals followed by objectives and action strategies pursuant to these goals.

The Environmental Protection and Coastal Islands Plan is organized around objectives addressing the following topics:

Objective 1. Compliance with Existing Regulations;

Objective 2. Historic and Archeological Resources in the Coastal Area;

Objective 3. Land Uses Compatible with Coastal Resources;

Objective 4. Reduction of Exposure to Natural Disasters; and,

Objective 5. Safe Evacuation and Adequate Shelter during Natural Disasters.

The Environmental Protection and Coastal Islands Plan is one of the eleven plans which collectively represent the *Sarasota City Plan*. This Plan can neither stand alone nor be interpreted independent of the others.

Implementation of the *Sarasota City Plan*

Implementation of the *Sarasota City Plan* will require actions by both the public and private sectors. In this regard many of the plan components speak to "the City" pursuing certain actions to:

promote, provide, consider, identify, enhance, create, maintain, conserve, support, reduce discourage, coordinate, and employ.

While these actions may be initiated by City government itself, City government will also be expecting applicants seeking development approvals to pursue these same type of actions as part of their applications.

GOALS, OBJECTIVES AND ACTION STRATEGIES

Goal 1

It shall be the goal of the City of Sarasota to protect, maintain, enhance, and, where appropriate, restore its natural environment.

Objective 1 - Compliance with Existing Regulations

The City shall continue the administration, enforcement, and compliance with existing regulations and policies.

Action Strategies

1.1 **Requests for Development Approval:** During the review of requests for both public and private development approval, the City shall ensure that applications are consistent with the relevant environmental components of this comprehensive plan, and the most recently adopted and applicable local, regional, state, and federal plans and regulations. These shall include, but are not limited to, the City's Land Development Regulations including:

- Tree Protection regulations in Article VII, Division 3.1 of the Zoning Code;
- Engineering Design Criteria Manual;
- Storm Water Basin Master Plan (1987);
- Sarasota County Sea Turtle Protection Ordinance;
- Sarasota County Manatee Protection Plan that is applicable within the City;
- the City Code; and,
- other plans and regulations, such as:

    ◊ Sarasota Bay Estuary Program's "Comprehensive Conservation and Management Program for Sarasota Bay" (1995);
    ◊ Charlotte Harbor National Estuary Program;
    ◊ Tampa Bay National Estuary Program;

- ◊ Southwest Florida Water Management District's "Water Shortage Plan." (Chapter 40D-21, Florida Administrative Code); and
- ◊ Environmental Resource Permitting of Surface Water Management Systems, administered by the Southwest Florida Water Management District, (Chapters 40D-4, 40D-40, 40D-45 and 40D-400, Florida Administrative Code). These permitting requirements address but are not limited to construction, alteration, or operation of surface water management systems, including tidal and freshwater wetlands.

This Plan recognizes that each request for development approval is unique in terms of location, use, intensity and, therefore, its potential impact upon natural resources. Since approval of some required permits occurs at various stages a finding of consistency with some regulations may occur after site and/or subdivision planning is complete. However, in no instance shall an occupancy permit be issued until all relevant environmental permits and approvals have been granted.

"Development approval" means approval of rezonings, conditional uses, site plans, and subdivision plats.

1.2 **Coordination with Public Agencies:** The City shall coordinate its activities with other relevant public agencies in the protection, enhancement, and restoration of natural resources.

1.3 **Specific Natural Resource Protection Initiatives - Water:**

In addition to regulations listed in this action strategy, the City will continue to support and comply with all applicable county, state and federal laws to protect water.

Water Resources: The quality of water resources shall continue to be protected in accordance with the Sarasota City Code.

Wellfield Protection: All development shall demonstrate that it will not pose a pollution hazard to potable water well fields pursuant to any applicable federal, state, county or city regulations.

Potable Water Protection: The City shall coordinate with Sarasota and Manatee Counties to ensure protection of the City's potable water sources and groundwater recharge areas pursuant to the Sarasota County Wellhead Protection Ordinance #92-079, or Manatee County Zoning Ordinance Section 738 (Groundwater/ Wellhead Protection), and the Florida Department of Environmental Protection

Rule 62-521 that became effective in July of 1995. The purpose of these regulations includes, but is not limited to, the following:

- Establishment of wellhead protection areas around the wellheads; and
- Restriction and regulation of activities within the wellhead protection areas which could contaminate the wellfield such as:

    ◊ wastewater treatment facilities,
    ◊ phosphate mining,
    ◊ solid waste facilities,
    ◊ uses that generate or store hazardous materials, and
    ◊ uses which employ chemical storage tanks above or below ground.

Bay Restoration: The City shall continue to conserve and protect the quality of water resources including the restoration of Sarasota Bay and its tributaries to comply with applicable state and federal water quality standards by 2010. This will be accomplished through the application and enforcement of the local, state and federal plans and regulations listed in Action Strategy 1.1 of this Chapter and compliance with U.S. Environmental Protection Agency, National Pollutant Discharge Elimination System Permit No. FLS000004. The provisions of this permit address but are not limited to the following:

- litter control and disposal;
- street sweeping;
- construction, operations and maintenance of storm water facilities;
- operations and maintenance of solid waste transfer facilities;
- employee training and licensing programs related to herbicides, pesticides and fertilizers;
- inspections for illegal dumping;
- programs related to oil recycling and the proper disposal of hazardous waste; and
- public education.

The City shall also comply with the Environmental Resource Permitting of Surface Water Management Systems, administered by the Southwest Florida Water Management District, (Chapters 40D-4, 40D-40, 40D-45 and 40D-400, Florida Administrative Code). These permitting requirements address but are not limited to construction, alteration, or operation of surface water management systems.

Reclaimed Water: The City shall continue to pursue urban and agricultural reuse of reclaimed domestic wastewater as the City's primary method of wastewater disposal.

Wastewater Discharge: The City shall operate the City Wastewater Treatment Plant in accordance with any permits required for its operation.

Stormwater Runoff: The quality and quantity of storm water runoff shall continue to be regulated in accordance with the "Engineering Design Criteria Manual" in order to protect the quality of receiving water bodies.

Water Conservation: The City shall cooperate with the Southwest Florida Water Management District in water conservation programs developed through the water use permit process.

Water Shortage Plan: The City shall support the Southwest Florida Water Management District Water Shortage Plan pursuant to Chapter 40D-21, Florida Administrative Code (F.A.C.), as may be amended, in the event a water shortage is declared.

Water Planning Alliance: The City will coordinate its water supply planning efforts with the Water Planning Alliance, which has been formed in the four county area of the Peace River/Manasota Regional Water Supply Authority.

National Estuary Program: The City shall continue to support the Sarasota Bay Estuary Program and the implementation of the Sarasota Bay Comprehensive Conservation and Management Plan.

Stormwater Utility: The City shall continue to participate in the Sarasota County Stormwater and Environmental Utility.

Charlotte Harbor: The City shall support the Charlotte Harbor National Estuary Program and the Charlotte Harbor Comprehensive Conservation and Management Plan.

Sarasota County Manatee Protection Plan: The City shall enforce the provisions of the Sarasota County Manatee Protection Plan (dated September 24, 2003) that are applicable within the City in order to protect water resources.

1.4 **Specific Natural Resource Protection Initiatives - Vegetation:**

Tree Protection: Trees, including mangrove stands, shall be protected with the exception of certain exotic pest species identified pursuant to the Tree Protection regulations contained within Article VII, Division 3.1 of the Zoning Code.

Nuisance Trees and Vegetation: The City will continue to identify nuisance trees and vegetation and will describe criteria and measures for their removal. The City will pursue a program of removing nuisance trees and vegetation from

City-owned public lands and encourages their removal from other public and private property.

Tree Protection Ordinance: The City shall periodically review the Tree Protection ordinance and make necessary revisions to insure it is achieving the intended purpose. Reviews shall consider best management practices for tree protection.

Green Canopy Program: To support the "Green Canopy Program" as a means of urban beautification, the Public Works Department shall:

- Inventory the need for urban trees;
- Prepare a guide for selection, planting procedures, and care for urban trees; and,
- Allow for the private contribution of funds into a program that increases the number of trees in public spaces.

The City shall work toward achieving and maintaining Sarasota County's tree canopy coverage goal of 40%.

Florida Friendly Landscapes Program: The City shall promote the Florida Friendly Landscapes Program and shall utilize Florida Friendly Landscape techniques and plants for city-owned property. Florida friendly landscapes use native vegetation that require low levels of irrigation and fertilization.

Fertilizer Ordinance: In accordance with Ordinance 07R-1973, the City shall regulate the application of fertilizer consistent with Sarasota County Ordinance No. 2007-053.

Mangrove Protection: The protection of mangroves shall comply with the Mangrove Trimming and Preservation Act, Sections 403.9321 through 403.93333, Florida Statutes.

Native Habitat Restoration and Management: The City will explore the creation of a native habitat restoration and management strategy. This strategy may include coordination with Sarasota County's Environmentally Sensitive Lands Protection Program, development of a habitat and natural resources inventory, and acquisition of property through various methods, including the use of Florida Forever funds, to restore damaged environmental systems, manage and protect natural resources, and to increase public access to natural resources.

1.5 **Specific Natural Resource Protection Initiatives - Wetlands:** The City will continue to support and comply with applicable regulations which protect wetlands. The applicable regulations shall include, but not be limited to, the most recently adopted and applicable documents, as may be amended, listed in Action Strategy 1.1 of this Environmental Protection Plan; Chapter 373, Florida Statutes;

and Chapters 62-4, 62-40, 62-302, 62-340, and 62-342, Florida Administrative Code.

1.6 **Specific Natural Resource Protection Initiatives - Wildlife/Wildlife Habitats:** The City will continue to support and comply with applicable regulations which protect fisheries, wildlife and wildlife habitats.

1.7 **Sea Turtle Protection:** The City shall continue to coordinate with Sarasota County in regards to enforcement of the "Sarasota County Sea Turtle Protection Ordinance" within the City limits.

1.8 **Specific Natural Resource Protection Initiatives - Hazardous Wastes:**

Hazardous Wastes: The City will continue to support and comply with regulations applicable to the collection and disposal of hazardous waste.

Hazardous Wastes: The City will cooperate with Sarasota County in the Amnesty Days program to collect and safely dispose of hazardous wastes.

Underground Storage Tanks: The City will cooperate with Sarasota County in the Underground Storage Tank Program, which provides for annual inspections of regulated storage tanks and provides technical and fiscal oversight of site assessment and cleanup.

1.9 **Specific Natural Resource Protection Initiatives - Air:** Activities which generate air contaminants shall be regulated pursuant to the Sarasota City Code. The City shall continue to support and comply with all applicable county, state and federal laws to protect air quality. This City will also support Sarasota County's efforts to monitor ambient air quality.

1.10 **Specific Natural Resource Protection Initiatives - Aircraft Noise:** The City shall continue to coordinate with and monitor the Sarasota-Bradenton Airport Noise Compatibility Program and its recommended land use strategies. The City will support the establishment of a new noise monitoring station in Newtown if, in the future, the Newtown community becomes included in the airport's 65+ DNL noise contour. In that event, the City and Airport Authority will jointly develop a noise mitigation strategy.

1.11 **Specific Natural Resource Protection Initiatives - Dredging:**

Dredge Spoil Sites within the City: The City will allow the disposal of dredge material within the City limits for the renourishment of Lido Beach, subject to approval by the City.

Dredge Spoil Sites Outside the City: The City shall coordinate with appropriate state and federal agencies, nearby local governments and counties, and the public in identifying dredge spoil disposal sites.

Whitaker Bayou Dredging: To mitigate potential environmental impacts and prevent the dispersion of existing sediments and any possible deposits of heavy metals in Whitaker Bayou, the City or other applying agency will secure all required permits prior to any potential dredging for navigation or flood control purposes.

1.12 **Specific Natural Resource Protection Initiatives – Manatees:**

Manatee Protection Plan: The City hereby adopts the **Sarasota County Manatee Protection Plan**, dated September 24, 2003, as a component of the *Sarasota City Plan* in order to reduce human-related threats to manatees and their habitat. The City shall follow and implement the resource protection strategies in the **Sarasota County Manatee Protection Plan** aimed at protecting manatees. The City shall amend its land development regulations to include a requirement that development proposals be consistent with and further the **Sarasota County Manatee Protection Plan**.

Boat Facility Siting Plan: The development of new and/or expansion of existing boat facilities of five or more wet or dry marine slips shall be consistent with the Boat Facility Siting Plan component of the **Sarasota County Manatee Protection Plan**. The City shall amend its land development regulations to include a requirement that the location of all boat facility development proposals be consistent with the Boat Facility Siting Plan.

The **Sarasota County Manatee Protection Plan** shall not be interpreted or applied within the City exclusive of other provisions of the *Sarasota City Plan* and the City Land Development Regulations which identify and determine allowable land uses.

1.13 **Specific Natural Resource Protection Initiatives – Bayfront Mooring Field:** A bayfront mooring field shall be developed and maintained in the vicinity of Bayfront Park in an environmentally responsible manner in accordance with permits issued by the State of Florida and Federal agencies.

1.14 **City Coordination with County Environmental Programs:** The City shall review and coordinate with Sarasota County regarding programs and policies that protect the environment, and will consider adopting County environmental protection ordinances on a case-by-case basis.

Objective 2 - Historical and Archeological Resources in the Coastal Area

The City's Historic Preservation program shall continue to identify historic and archeological resources in the coastal area and to promote the conservation and restoration of said resources through site plan review.

Objective 3 - Land Uses Compatible with Coastal Resources

The City shall continue to provide for land uses that are compatible with coastal resources.

Action Strategies

3.1 **Water-Dependent Uses:** Water-dependent uses which are consistent with the Future Land Use Map shall be given priority in the development/redevelopment of land adjacent to the coastline. The maintaining of existing waterfront land for water-dependent land uses shall be a priority for the City.

3.2 **Shorelines:** The City shall coordinate with the appropriate federal, state, and county agencies to retain primary authority over private docks, seawalls, and shoreline alteration, pursuant to the Land Development Regulations. Appropriate members of City staff will communicate as necessary with officials from federal, state, and local agencies as needed to determine whether Land Development Regulations should be revised in order to retain the primary authority.

3.3 **Shoreline Land Use:** Recognizing that the City of Sarasota is a nearly built-out city and that it is not a port city, the Future Land Use Map, related Future Land Use Plan action strategies, and other relevant action strategies contained in this *Sarasota City Plan* will guide shoreline land use decisions.

3.4 **Pedestrian Access Along Shoreline:** The City encourages property owners to provide for public, pedestrian access parallel to the shore (through easements and appropriate walkway structures), in the event that shore hardening is permitted and constructed along the shore. In the event that public access is not provided, the City may consider acquisition of property(s) or easement(s) in order to provide access.

3.5 **Beach Protection:** The City shall continue to protect beaches, dunes, and coastal vegetation from vehicular traffic and dunes and coastal vegetation from pedestrian traffic. The City shall continue to prohibit the operation and parking of motor

vehicles upon public beaches except in locations specifically designated for such driving and by government employees on official business. Dune walkover structures shall be required at all beaches to prevent impacts to native vegetation and dune systems.

3.6 **Impervious Surface Area:** The City shall continue to explore reducing the amount of existing impervious surface in the Sarasota Bay watershed and seek alternatives for reducing impervious surface area in future development.

3.7 **Coastal Islands Maximum Impervious Surface Overlay Map:** The maximum impervious surface coverage for parcels located on the coastal islands are displayed on Illustration EP-16, Coastal Islands Maximum Impervious Surface Overlay Map.

3.8 **Impervious Surfaces on Coastal Islands:** The City shall further evaluate the reduction of impervious surfaces for sites located on the coastal islands. Impervious surfaces shall be minimized to the maximum extent feasible, especially for parking surfaces.

3.9 **Resource Preservation:** The City will continue to preserve and protect naturally occurring habitats, such as beaches, dunes, seagrass beds and coastal vegetation.

3.10 **Coastal Islands Design Guidelines:** The City will evaluate the development and use of design guidelines for structures located on the coastal islands in order to protect the coastal islands historical legacy, integrity of the environment, and character of its neighborhoods. The focal point of the design guidelines, if pursued, shall be on compatibility of infill development with existing structures.

3.11 **Traffic Calming:** The City will develop and maintain a traffic calming program for the coastal islands that will reduce vehicle speeds, improve safety, and enhance the quality of life.

3.12 **No Expansion of Resort Residential Classification:** In order to promote neighborhood compatibility, the Resort Residential Future Land Use Map classification shall not be expanded on Lido Key.

3.13 **Coastal Islands Maximum Building Height Overlay Map:** The maximum building height for parcels located on the coastal islands are displayed on Illustration EP-15, Coastal Islands Maximum Building Height Overlay Map.

3.14 **Variances:** Due to the dynamic and fragile environment of coastal islands, variances from minimum zoning lot size requirements and from maximum building coverage limitations shall be prohibited on coastal islands

3.15 **Locations where a Marina or Mooring Field shall be Excluded:** No marina or boat mooring field shall be developed in the waters in the vicinity of southern Lido Key, Otter Key, or St. Armands Key.

3.16 **Prohibition of Shoreline Hardening:** Except in the case of emergency as provided in Chapter 161, Florida Statutes, the construction of new artificial shoreline hardening structures shall be prohibited. This action strategy does not preclude the maintenance or replacement of existing shoreline hardening structures.

Goal 2

It shall be the goal of the City of Sarasota to protect life and property in the coastal area from destruction by natural disasters.

Objective 4 - Reduction of Exposure to Natural Disasters

The City, working in cooperation with the Sarasota County Department of Emergency Management, shall continue to reduce the exposure of life and property to natural disasters and discourage population concentrations in the coastal high hazard area.

Action Strategies

4.1 **Development and Evacuation:** The City shall ensure that future development within the Coastal High Hazard Area does not occur in amounts, types, or locations that would cause total evacuation time to exceed those established by the City's "Peacetime Emergency Plan" which shall not exceed more than 16 hours.

4.2 **Storm Damage Minimization:** The potential for storm damage shall be minimized through compliance with applicable Land Development Regulations including but not limited to:

- Florida Building Code (2004);
- Coastal Construction Code;
- Sarasota Zoning Code, which:

    ◊ regulates construction in the high wind areas using the standard for hurricane resistant construction SSTD 10-93;
    ◊ regulates areas of special flood hazard;

- ◊ regulates properties in the Marine Park zone, by requiring special approvals for any use which could have any negative impact or cause erosion or environmental damage, such as flooding; protects beach and dune alteration through regulations requiring special permitting procedures for properties within the 150 foot gulf-front setback. These regulations require property owners to establish that proposed changes:

  - ⇒ will not endanger the stability of the beach-dune system;
  - ⇒ will not accelerate erosion;
  - ⇒ obtain advance approval from the Florida Department of Environmental Protection;

- ◊ encourages the use of dune walk-over systems to preserve vegetation and the dunes;
- ◊ uses conservation districts as overlay zones to protect land uses in certain environmentally sensitive areas including coastal areas, beaches, dunes and marshes;

- Engineering Design Criteria Manual, which mandates stormwater attenuation and requires that external drainage systems shall be built to the 25-year/24-hour storm event; and,

- Operational provisions to recover from damage caused to the sanitary sewer system caused by severe storms.

4.3 **Federal Emergency Management Act (FEMA):** The City will continue to participate in the Federal Emergency Management Act Community Rating Systems (CRS) Program, which involves meeting higher than minimum FEMA standards. The CRS program includes but is not limited to:

- the City's adopted flood plain management program which deals with strategies to lessen flooding and respond to emergencies; and
- annual reports to the CRS Program on the City's progress, and effects of any storms.

4.4 **Neighborhood and Development Services Department Procedures:** The City shall consider procedures recommended by the Insurance Service Organization, which reviews and rates Neighborhood and Development Services Department procedures. If recommendations are found to be feasible, the Neighborhood and Development Services Department will develop strategies for implementation.

4.5 **Peacetime Emergency Plan:** The City shall employ the hazard mitigation annex of the Peacetime Emergency Plan, the purpose of which includes, but is not limited to:

- assigning responsibilities and establishing procedures for governmental agencies, volunteer agencies, and individuals, in preparing for and executing evacuation of designated areas of Sarasota;
- relocation of coastal residents, residents of mobile home parks, and residents of low-lying areas subject to flooding; and
- providing maximum warning time possible to residents of those areas which are deemed to be in danger.

4.6 **Coastal Property Acquisition:** The City will consider measures, including the acquisition of coastal property subject to frequent damage during natural disasters, to reduce the exposure of life and property to future disasters.

4.7 **Post-Disaster Redevelopment Plan:** Immediately following each major disaster, the City shall evaluate the Damage Assessment Team and Damage Survey Team reports (as required by the Peacetime Emergency Plan) and develop a specific post-disaster redevelopment plan in coordination with the Sarasota County Department of Emergency Management. The intent of the post-disaster redevelopment plan will be to repair damaged infrastructure needed for health and safety; to coordinate long term recovery operations to City infrastructure and public structures; and aid the City's economy to return to pre-disaster competitive status. The plan will include funding and staffing estimates, set priorities for post disaster efforts, and develop criteria for deciding the order of importance in which the elements of the City's economy are to be aided.

4.8 **Public Fund Expenditures in Coastal High Hazard Area:** Prior to locating new public facilities or public infrastructure in the coastal high hazard area (CHHA), alternative locations outside of the CHHA shall be explored and evaluated. The expenditure of public funds on infrastructure in the CHHA shall be limited to:

- New public facilities and public infrastructure which can not feasibly be located outside of the CHHA;
- Restoration, maintenance, enhancement, relocation, mitigation, or replacement of the following;

    ◊ Natural resources;
    ◊ Passive recreation facilities;
    ◊ Facilities and uses which further the land uses on the Future Land Use Map;
    ◊ Facilities necessary to ensure the health, safety, and welfare of the public or sustain the financial integrity of the City. Examples of such facilities include, but are

not limited to: Police stations, fire stations, medical facilities, bridges, roads, public rest rooms, performing arts centers, and auditoriums.

4.9 **Limitations on Rebuilding:** The City will define in the Land Development Regulations provisions that limit and/or prohibit the reconstruction of certain non-conforming structures or nonconforming portions of structures in the event that they are destroyed to an extent of more than seventy-five percent of their replacement value at the time of destruction.

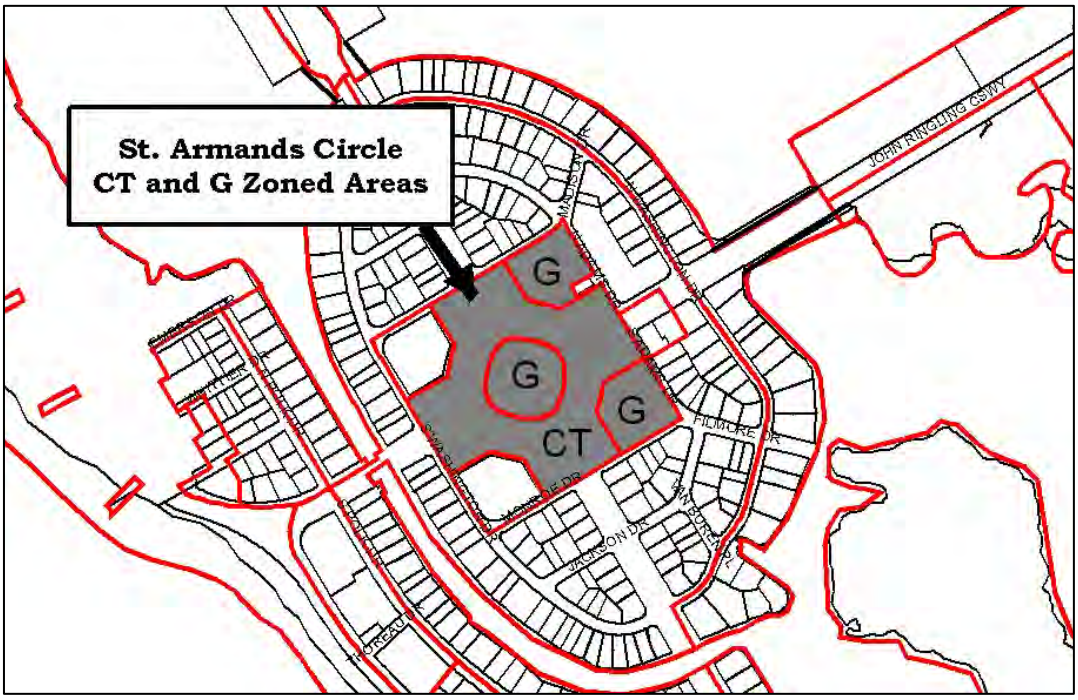
4.10 **Minimizing the Risks of Natural Disasters:** The City will coordinate with Sarasota County in utilizing the Local Mitigation Strategy (LMS) for the purpose of minimizing the risks of natural disasters. The LMS includes an assessment of vulnerabilities to natural disasters and mitigate initiatives to minimize risks.

4.11 **Renourishment of the City's Beaches:** The City shall continue its program of periodic beach renourishment in order to protect upland property and to support the economic benefits of tourism. The City shall pursue grants and other funding sources to assist in the renourishment of the City's beaches for the protection of public and private property.

4.12 **Passive Recreation:** The City encourages that recreational activities on and adjacent to beaches minimize impacts to natural resources and the environment.

4.13 **Coastal Construction Control Line:** The City shall not issue permits for structures seaward of the Coastal Construction Control Line (CCCL) that do not have the appropriate permit(s) issued by the Florida Department of Environmental Protection unless the structure is exempt from the requirements of Chapter 62B-33, Florida Administrative Code.

4.14 **No Increase in Future Land Use Map or Zoning Density:** The City shall not approve amendments to the Future Land Use Map (LU-6), Zoning Atlas, or zoning text that increase residential density on the coastal islands as identified on Illustration EP-14. However, as an exception to this action strategy, the City may allow for an increase in residential density within the CT or G zoned sites located within the St. Armands Circle commercial shopping area for the purpose of creating residential liner buildings that screen non-residential uses from residential uses as determined through a master planning process. The CT and G zoned areas are delineated in the illustration below.



Objective 5 - Safe Evacuation and Adequate Shelter during Natural Disasters

The City shall continue to provide for safe evacuation and adequate shelter during natural disasters.

Action Strategies

5.1 **Evacuation:** The City shall coordinate with Sarasota County through the Peacetime Emergency Plan to:

- ensure orderly evacuation of coastal areas in the event of a natural disaster consistent with evacuation orders issued by the Office of Emergency Management;
- reduce evacuation times in conjunction with the Sarasota County comprehensive plan; and
- increase the amount of shelter space available;
- periodically review the city-wide Emergency Plan.

5.2 **Law Enforcement After Storm Events:** After passage of a storm event, the City's Police Department shall provide sufficient law enforcement patrols to safeguard property in evacuated locations.

Goal 3

It shall be the goal of the City of Sarasota to reduce greenhouse gas emissions by implementing more sustainable practices, including green building technologies.

Objective 6 - Sustainability

The City shall implement policies and programs that further sustainable development practices.

Action Strategies

6.1 **Kyoto Protocol:** The City will work toward achieving the Kyoto Protocol targets for reduction of greenhouse gas emissions. Actions pursued by the city shall include, but not be limited to, anti-sprawl land-use policies, urban forest restoration projects, public information campaigns, energy efficient building designs, recycling programs, and environmentally friendly procurement.

6.2 **Florida Green Local Government:** The City will pursue steps toward becoming a Florida Green Local Government using the Green Local Government Standard developed by the Florida Green Building Coalition, Inc.

6.3 **Sustainable Building:** To achieve more sustainable building practices, the City shall use sustainable building measures for new buildings and major renovation projects for City facilities as outlined in the U.S. Green Building Council's document "LEED-NC: Green Building Rating System for New Construction and Major Renovations."

6.4 **Reduction of Greenhouse Gas Emission:** The City encourages the State and Federal Governments to enact policies and programs for achieving the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol – a 7% reduction from 1990 levels by 2012.

6.5 **Greenhouse Gas Legislation:** The City encourages the U.S. Congress to pass bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system.

6.6 **LEED or FGBC Certified Development:** To encourage reduction of greenhouse gas emissions, the City shall develop and implement incentives for LEED or Florida Green Building Coalition, Inc. certified development proposals. Such incentives may include a formal expedited review process or a fee reduction schedule.

6.7 **Coordination with Sarasota County:** The City shall coordinate with the Sarasota County Sustainability Office to better realize and implement efficiencies and coordination in environmental legislation throughout Sarasota County.

6.8 **Water Conserving and Energy Efficient Appliances:** The City encourages the use of water conserving appliances and cisterns in order to reduce the per capita consumption of potable water and the increased use of energy efficient appliances to reduce energy consumption and the carbon footprint of the city.

ATTACHMENT 1

Environmental Protection and Coastal Islands Illustrations

The following Environmental Protection and Coastal Islands Illustrations, which may be consolidated or reformatted by resolution of the City Commission, are part of the Future Land Use Map Series:

EP-2 Major Wetlands Map;

EP-3 Soil Map;

EP-4 Floodplains Map;

EP-5 Natural Habitats and Systems Map;

EP-6 Threatened and Endangered Species (table);

EP-7 Important Seagrasses, Green Algae and Endangered Plants (table);

EP-10 Shoreline Conditions;

EP-11 Hurricane Storm Categories;

EP-14 Coastal Islands Map;

EP-15 Coastal Islands Maximum Building Height Overlay Map; and

EP-16 Coastal Islands Maximum Impervious Surface Overlay Map.

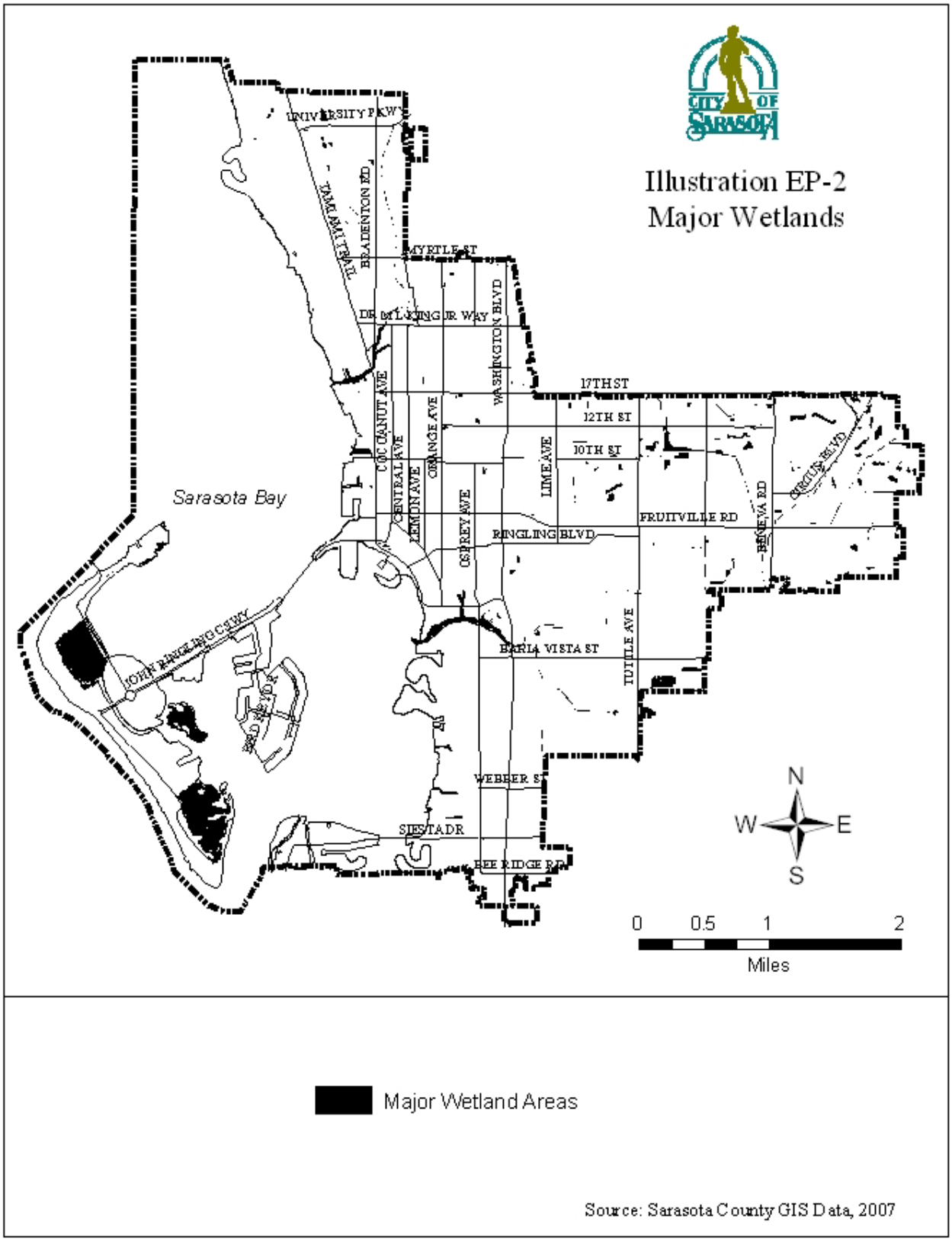


Illustration EP-2
Major Wetlands
Sarasota Bay
UNIVERSITY PKWY
BRADENTON RD
MYRTLE ST
WASHINGTON BLVD
17TH ST
12TH ST
10TH ST
COCONUT AVE
CENTRAL AVE
LEMON AVE
ORANGE AVE
LIME AVE
OSPREY AVE
CIRCUS BLVD
GENEVA RD
FRUITVILLE RD
RINGLING BLVD
JOHN RINGLING CSWY
BAHIA VISTA ST
TUTTLE AVE
WEBBER ST
SIESTA DR
BEE RIDGE RD
N
W
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S
0
0.5
1
2
Miles
Major Wetland Areas
Source: Sarasota County GIS Data, 2007

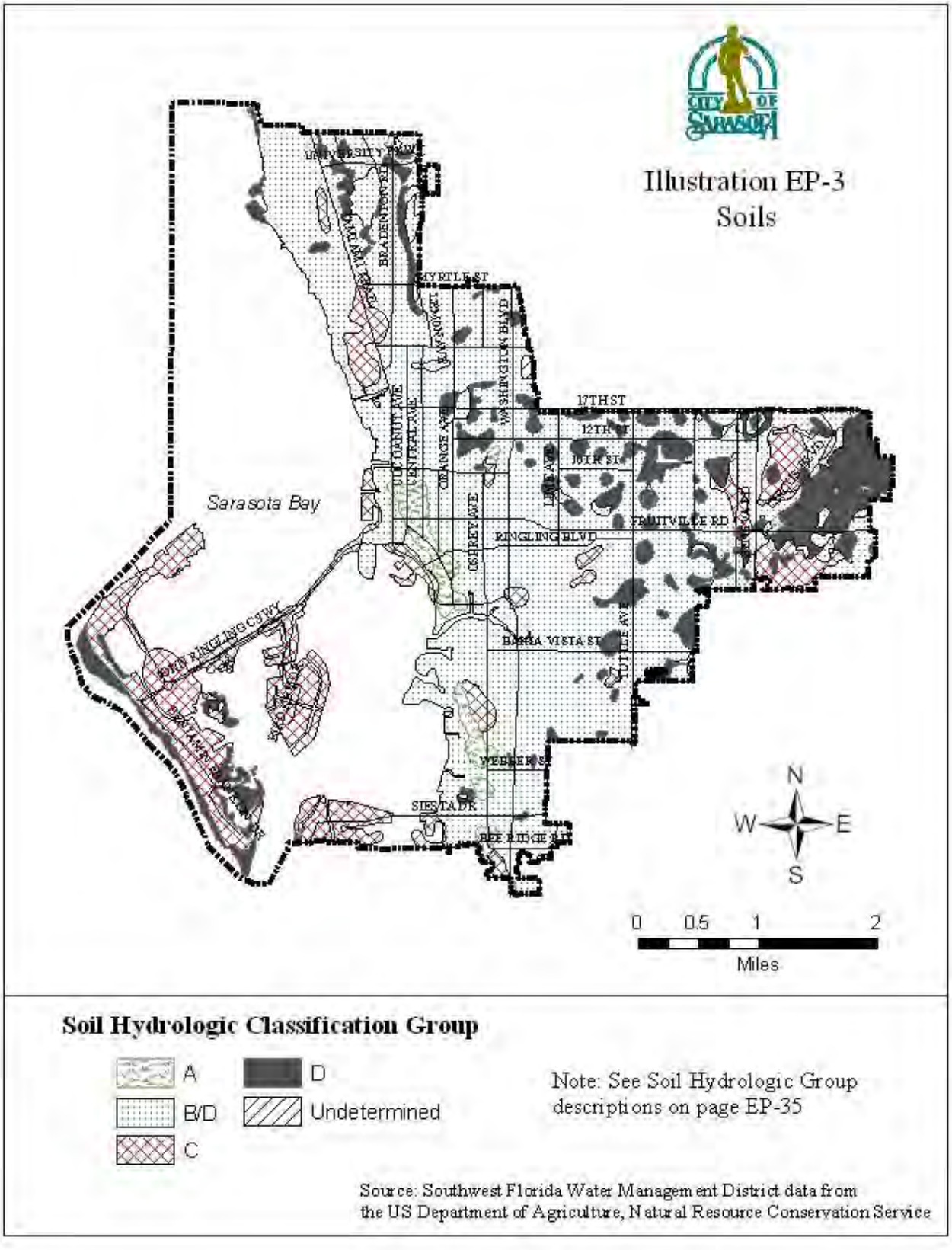
Illustration EP-3
Soils
Sarasota Bay
N
W
E
S
0
0.5
1
2
Miles
Soil Hydrologic Classification Group
A
B/D
C
D
Undetermined
Note: See Soil Hydrologic Group descriptions on page EP-35
Source: Southwest Florida Water Management District data from the US Department of Agriculture, Natural Resource Conservation Service

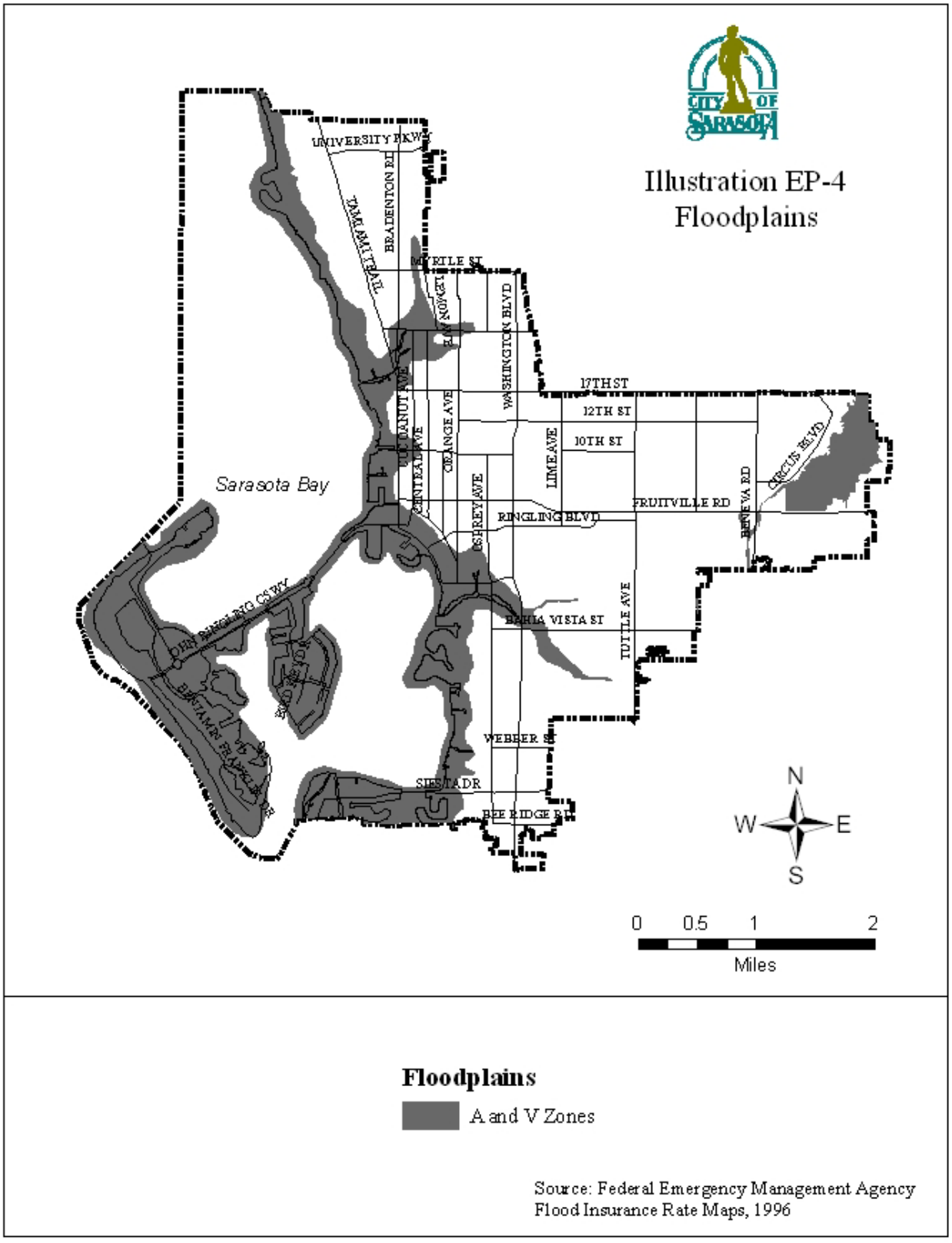
Illustration EP-4
Floodplains
Sarasota Bay
UNIVERSITY PKWY
BRADENTON RD
TAMIAMI TRAIL
MYRTLE ST
LAUREL ST
WASHINGTON BLVD
17TH ST
12TH ST
10TH ST
ORANGE AVE
LIME AVE
CIRCUS BLVD
FRUITVILLE RD
RINGLING BLVD
BENEVA RD
BAHIA VISTA ST
TUTTLE AVE
WEBBER ST
SIESTA DR
BEE RIDGE RD
JOHN RINGLING CSWY
BENJAMIN FRANKLIN DR
N
W
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S
0
0.5
1
2
Miles
Floodplains
A and V Zones
Source: Federal Emergency Management Agency
Flood Insurance Rate Maps, 1996

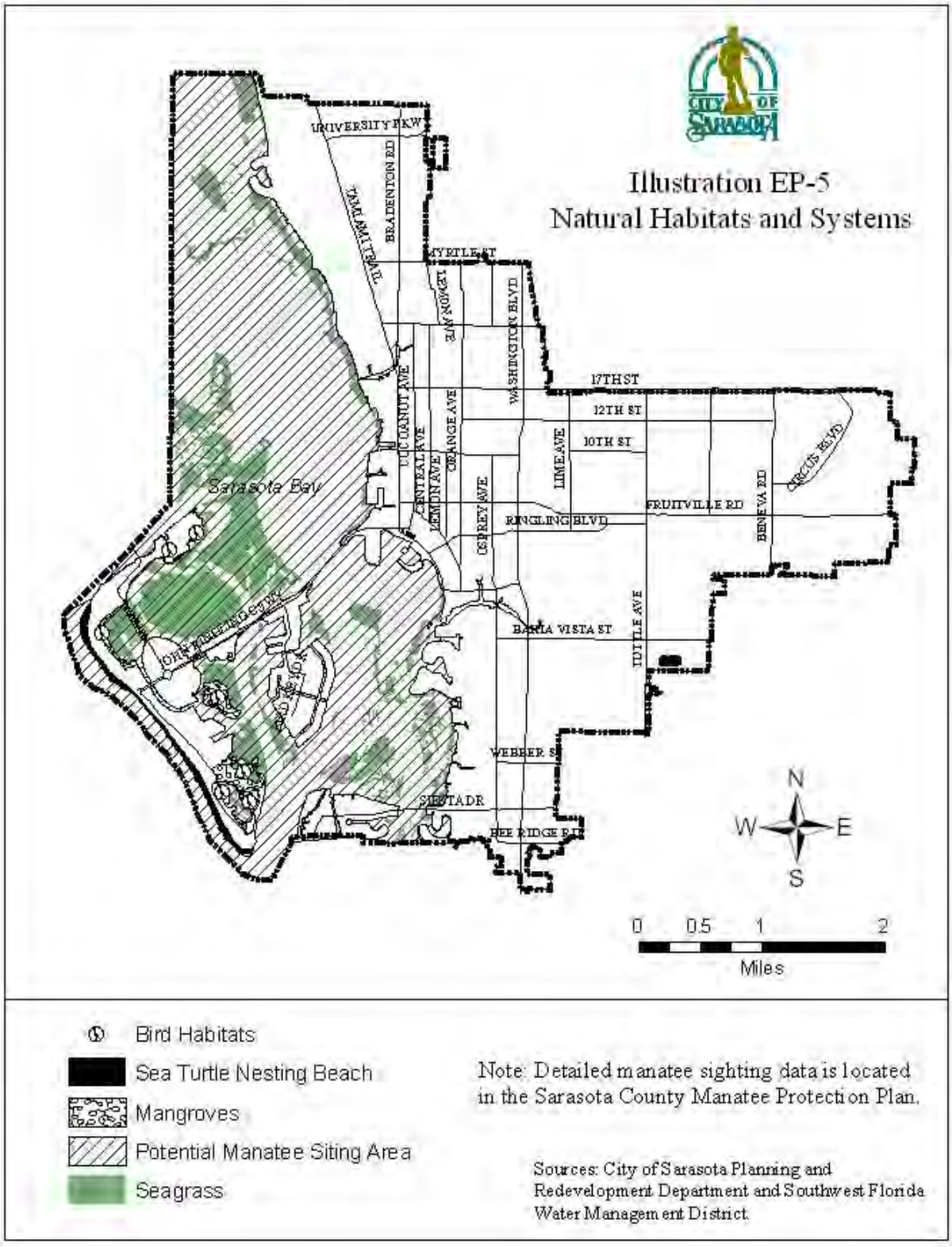
Illustration EP-5
Natural Habitats and Systems
UNIVERSITY PKWY
BRADENTON RD
TAMIAMI TRAIL
MYRTLE ST
LEMON AVE
WASHINGTON BLVD
17TH ST
12TH ST
10TH ST
COCONUT AVE
CENTRAL AVE
LEMON AVE
ORANGE AVE
LIME AVE
CIRCUS BLVD
Sarasota Bay
FRUITVILLE RD
BENEVA RD
OSPREY AVE
RINGLING BLVD
JOHN RINGLING CSWY
BAHIA VISTA ST
TUTTLE AVE
WEBBER ST
SIESTA DR
BEE RIDGE RD
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Miles
Bird Habitats
Sea Turtle Nesting Beach
Mangroves
Potential Manatee Siting Area
Seagrass
Note: Detailed manatee sighting data is located in the Sarasota County Manatee Protection Plan.
Sources: City of Sarasota Planning and Redevelopment Department and Southwest Florida Water Management District.

Illustration EP-6. Threatened and Endangered Species

Common Name	Scientific Name	USFWS Status	FGFWFC Status
West Indian manatee	Trichechus manatus	E	E
Arctic peregrine falcon	Falco peregrinus tundrius		E
Wood stork	Mycteria americana	E	E
American alligator	Alligator mississippiensis	TSA	SSC
Atlantic Loggerhead turtle	Caretta caretta	T	T
Eastern indigo snake	Drymarchon corais couperi	T	T
Piping plover	Charadrius melodus	T	T
Bachman's warbler	Vermivora bachmanii	E	E
Bald eagle	Haliaeetus leucocephalus	T	T
Florida scrub jay	Aphelocoma coerulescens coerulescens	T	T
Green turtle	Chelonia mydas mydas	E	E
Atlantic ridley turtle	Lepidochelys kempi	E	E
Gopher Tortoise	Gopherus polyphemus		SSC

Notes:

USFWS = United States Fish and Wildlife Service
FGFWFC = Florida Game and Fresh Water Fish Commission
E = endangered
T = Threatened
TSA = Threatened due to similarity in appearance
SSC = Species of special concern

Source: Florida's Endangered Species, Threatened Species and Species of Special Concern, Official Lists. Published by the Bureau of Nongame Wildlife, Division of Wildlife, Florida Game and Fresh Water Fish Commission. April 1996.

Illustration EP-7. Important Seagrasses, Green Algae, and Endangered Plants

	Scientific Name	Common Name
Seagrasses:	Thalassia testudinum	turtle-grass
	Syringodium filiforme	manatee-grass
	Ruppia maritima	widgeon-grass
	Halophila engelmannii	star-grass
	Halophila decipiens	paddle-grass
	Halophila wrightii	shoal-grass
Green Algae:	Caulerpa prolifera	
	Caulerpa ashmeadii	
	Caulerpa mexicana	
	Caulerpa recemofa	
	Caulerpa cupressoides	
	Halimeda opuntia	
Endangered Plants:	Suriana maritima	bay cedar, thatch leaf; a beach shrub
	Ernodea littoralis	beachcreeper, common ernodea
	Opuntia stricta	shell mound prickly-pear, common prickly-pear
	Scaevola plumieri	inkberry

Source: Mote Marine Laboratory, 1997, which also referenced the following publications:

Rare and Endangered Biota of Florida, multiple volumes published by the University Press of Florida.

Florida's Endangered Species, Threatened Species and Species of Special Concern, Bureau of Nongame Wildlife, Division of Wildlife, Florida Game and Fresh Water Fish Commission (FGFWFC).

Notes on Florida's Endangered and Threatened Plants, Bureau of Entomology, Nematology and Plant Pathology-Botany Section, Contribution No. 39. Florida Department of Agriculture and Consumer Services.

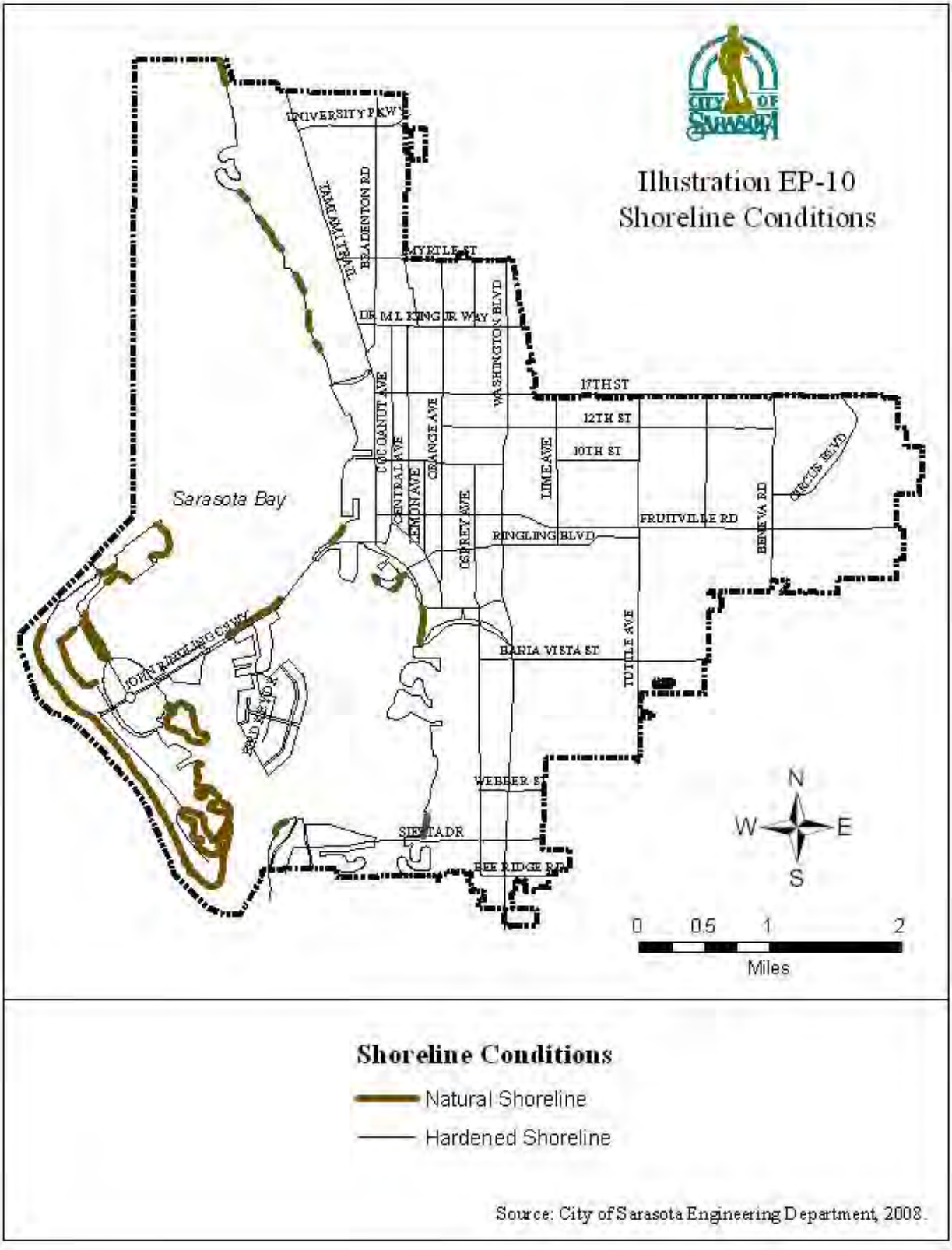


Illustration EP-10
Shoreline Conditions
UNIVERSITY PKWY
TAMIAMI TRAIL
BRADENTON RD
FAYETTE ST
DR M L KING JR WAY
WASHINGTON BLVD
17TH ST
12TH ST
10TH ST
COCOANUT AVE
CENTRAL AVE
LEMON AVE
ORANGE AVE
OSPREY AVE
LIME AVE
FRUITVILLE RD
RINGLING BLVD
BENEVA RD
CIRCUS BLVD
TUTTLE AVE
BAHIA VISTA ST
JOHN RINGLING CSWY
WEBBER ST
SIESTA DR
BEE RIDGE RD
Sarasota Bay
N
W
E
S
0
0.5
1
2
Miles
Shoreline Conditions
Natural Shoreline
Hardened Shoreline
Source: City of Sarasota Engineering Department, 2008.

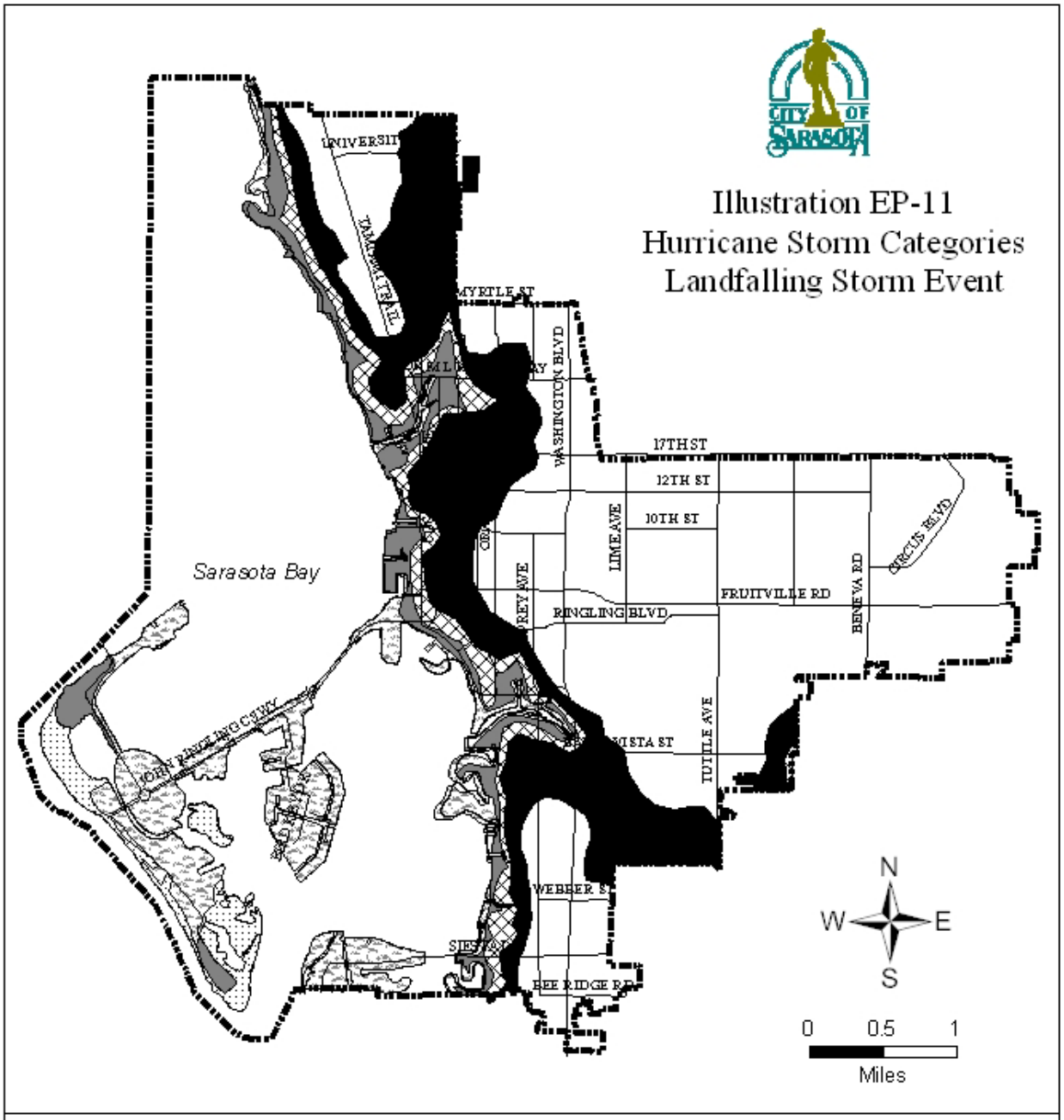
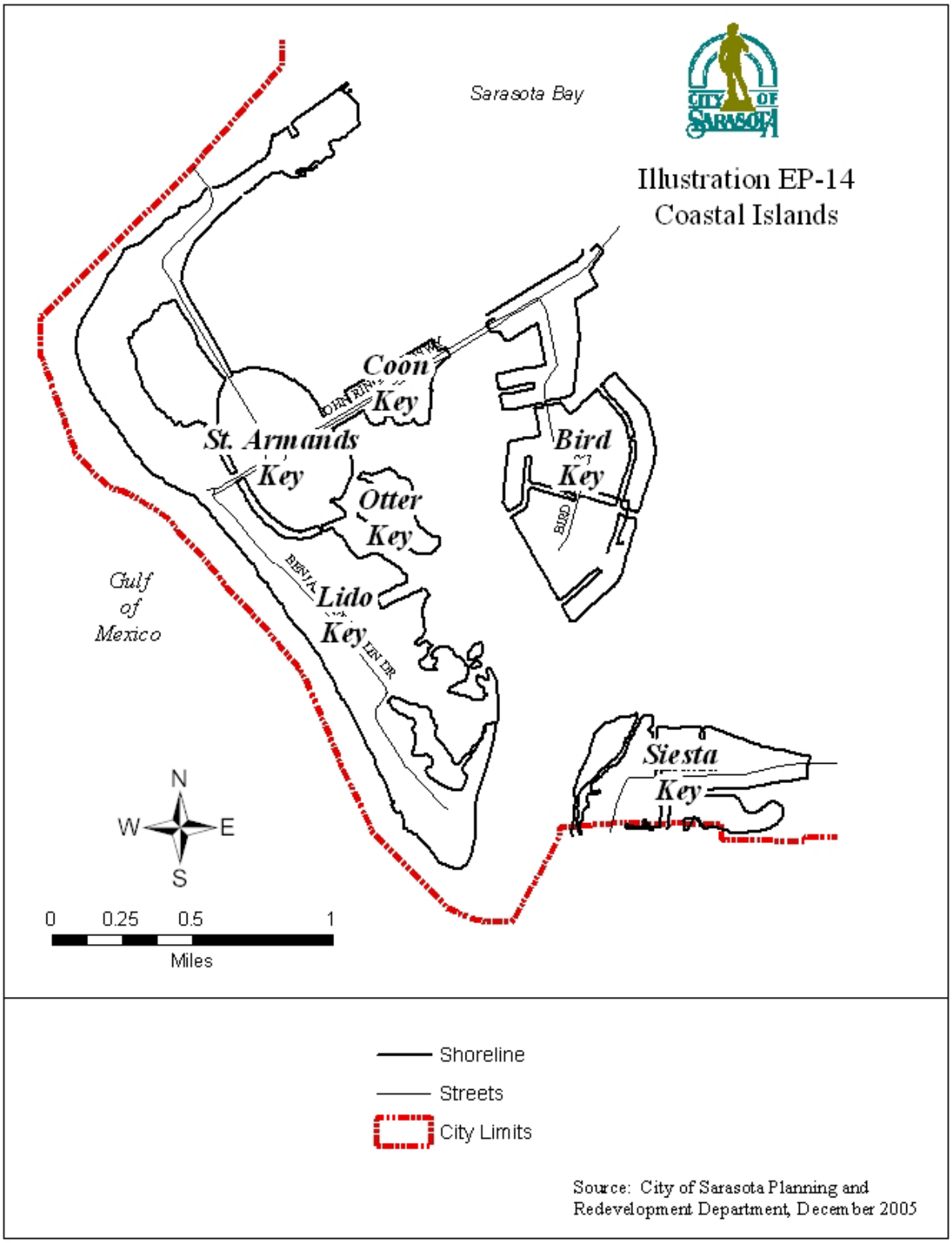
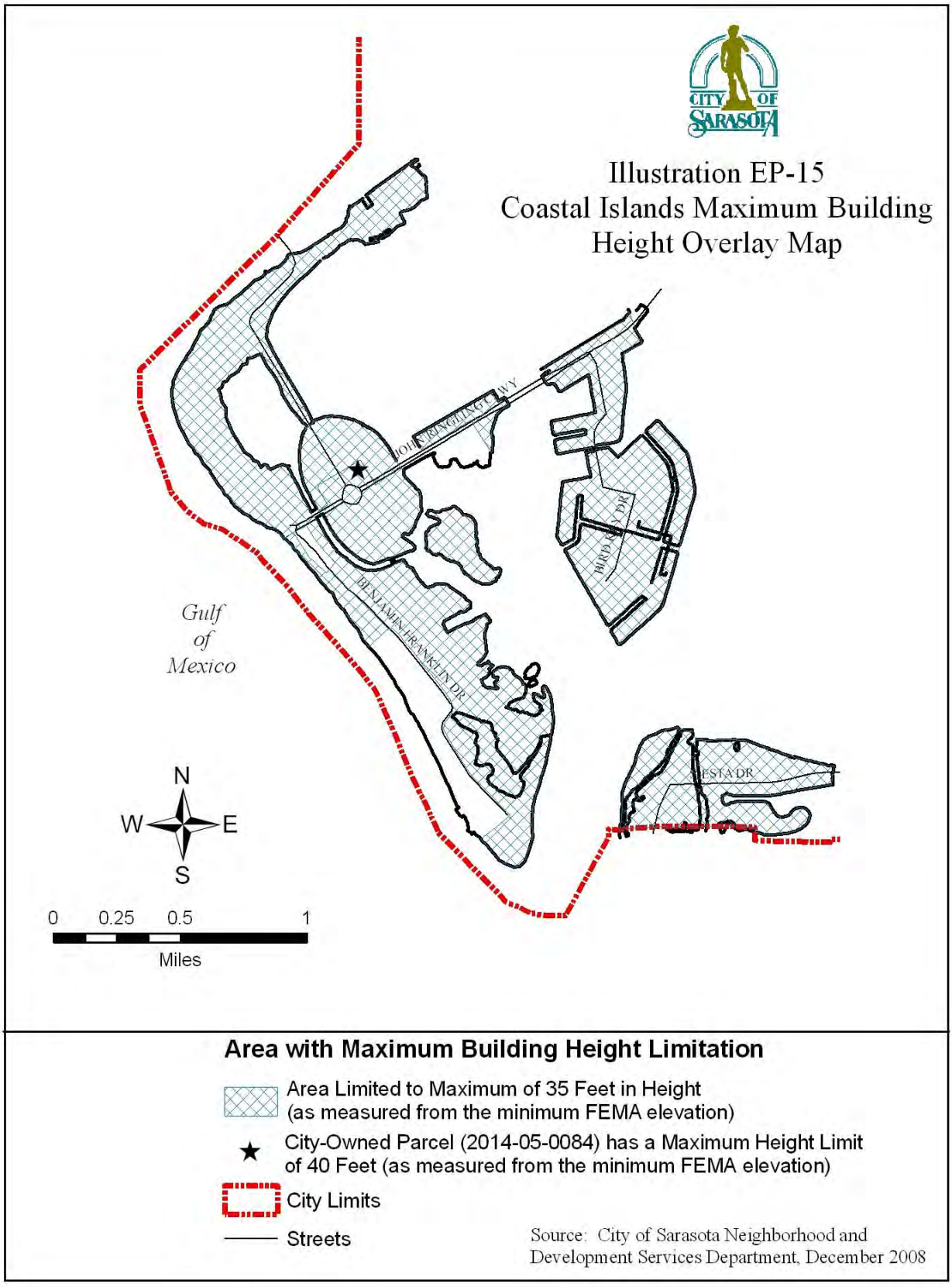


Illustration EP-11
Hurricane Storm Categories
Landfalling Storm Event
Sarasota Bay
MYRTLE ST
17TH ST
12TH ST
10TH ST
LIME AVE
FRUITVILLE RD
RINGLING BLVD
BENEVA RD
CIRCUS BLVD
WASHINGTON BLVD
TUTTLE AVE
WEBBER ST
SIESTA
N
W
E
S
0
0.5
1
Miles
Storm Category
Tropical Storm
Category 1
Category 2
Category 3
Category 4/5
Coastal High Hazard Area (CHHA)
The Coastal High Hazard Area consists of the Tropical Storm and Category 1 Areas.
Source: Sarasota County GIS (2005) and
Southwest Florida Regional Planning Council and (1991)


Sarasota Bay
Illustration EP-14
Coastal Islands
Coon Key
St. Armands Key
Otter Key
Bird Key
Lido Key
Siesta Key
Gulf of Mexico
N
W
E
S
0
0.25
0.5
1
Miles
Shoreline
Streets
City Limits
Source: City of Sarasota Planning and Redevelopment Department, December 2005


CITY OF SARASOTA
Illustration EP-15
Coastal Islands Maximum Building Height Overlay Map
JOHN RINGLING CSWY
BIRD KEY DR
BENJAMIN FRANKLIN DR
SIESTA DR
Gulf of Mexico
N
W
E
S
0
0.25
0.5
1
Miles
Area with Maximum Building Height Limitation
Area Limited to Maximum of 35 Feet in Height (as measured from the minimum FEMA elevation)
City-Owned Parcel (2014-05-0084) has a Maximum Height Limit of 40 Feet (as measured from the minimum FEMA elevation)
City Limits
Streets
Source: City of Sarasota Neighborhood and Development Services Department, December 2008

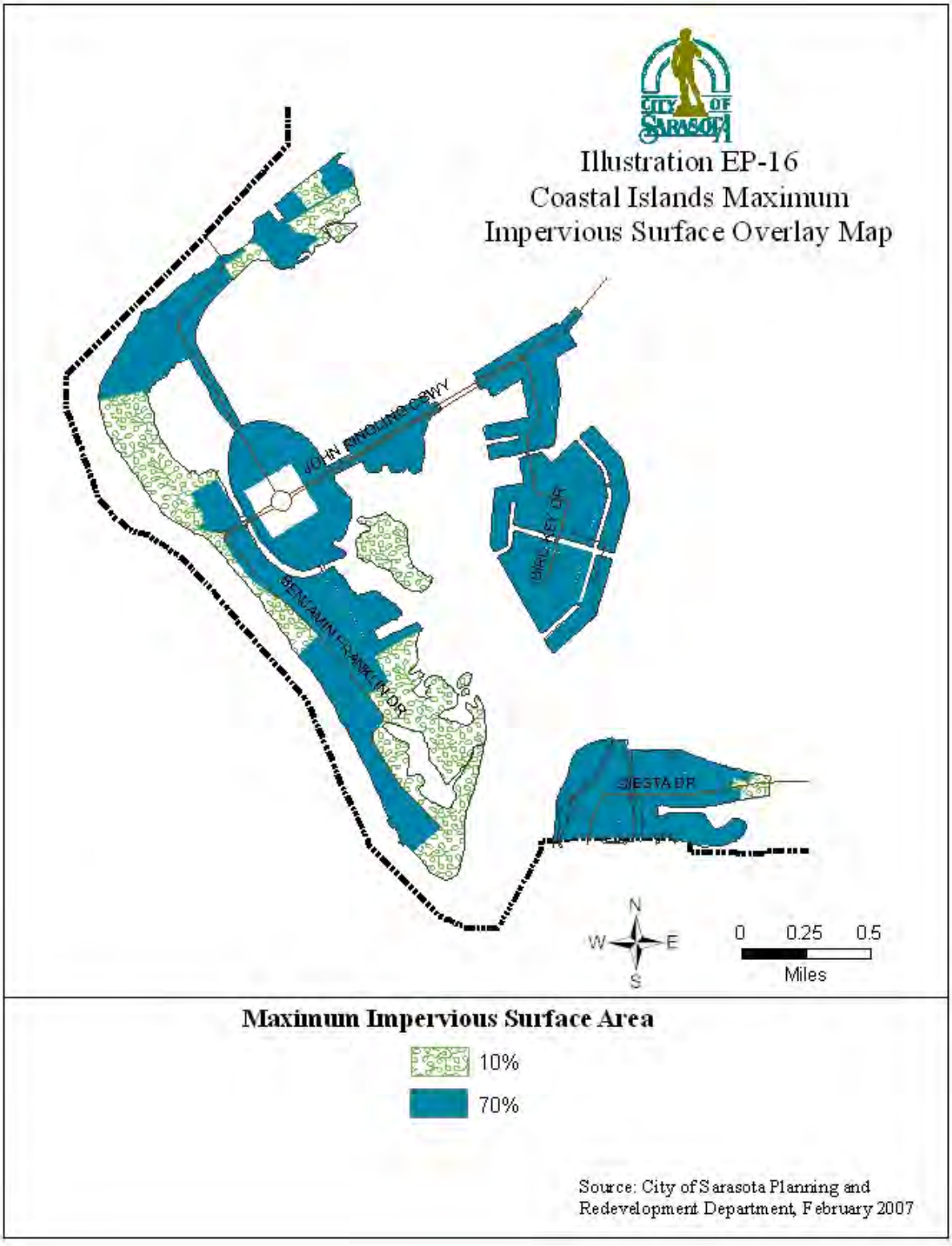


Illustration EP-16
Coastal Islands Maximum
Impervious Surface Overlay Map
JOHN RINGLING CSWY
BENJAMIN FRANKLIN DR
SIESTA DR
N
W
E
S
0
0.25
0.5
Miles
Maximum Impervious Surface Area
10%
70%
Source: City of Sarasota Planning and
Redevelopment Department, February 2007

SARASOTA COUNTY SCHOOLS

DEPARTMENT OF SAFETY & SECURITY
1960 Landings Blvd., Sarasota, FL 34231
941-927-9000, ext 31128 ▪ Fax 941-927-4061
Web site: www.SarasotaCountySchools.net

October 2, 2015

Mr. Ed McCrane,
Emergency Management Chief
Sarasota County, Florida
6050 Porter Way
Sarasota, Florida 34232

Dear Chief McCrane:

The Sarasota County School District values its partnership in the updated Unified Local Mitigation Strategy. Our goals and objectives associated with providing a safe learning environment for the community includes multi-jurisdictional, multi-hazard strategies to assess hazards, identify risks, determine vulnerabilities, establish mitigation activities, and plan for natural and manmade hazards.

Our policies and procedures reflect our commitment to current and future initiatives of the updated 2015 Local Mitigation Strategy.

Goal: Assess vulnerabilities and identify mitigation models for natural hazards relevant to Sarasota County.
The school district will continue to work closely with local and state emergency management officials, local first responders, and the local private sector to monitor and continually assess risks and vulnerabilities - incorporating best practice mitigation models in business continuity of operations planning and school based emergency planning.

Goal: Identify, prioritize, and achieve cost-effective mitigation projects for the prevention and protection of lives, property, and natural resources within Sarasota County.
The school district will continue to collaborate with local and state emergency management officials, other local government officials, and community developers on future site development and site upgrades ensuring school infrastructure provides cost-effective community resources.

Goal: Promote the continued participation in the National Flood Insurance Program and Community Rating System.
The school district will continue to collaborate with local officials on floodplain ordinances and regulations.

Goal: Maintain and develop effective "Public Outreach" activities.
The school district will continue to work closely with local emergency management officials to disseminate information as appropriate to the community.

Goal: Maintain and increase participation in the Sarasota County Local Mitigation Strategy Work Group.
The school district plans to continue its relationship as a participating jurisdiction in the multi-jurisdictional planning process.

Goal: Support mitigation activities and research projects with Sarasota County and the surrounding local, State of Florida and Federal jurisdictions.
The school district plans to continue working with governmental agencies in surrounding communities to assess risks and share mitigation activities.

Respectfully,

Darrell C. Reyka
Director, Safety and Security

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Respectfully,

Darrell C. Reyka
Director, Safety and Security

SARASOTA MEMORIAL
HEALTH CARE SYSTEM

September 30, 2015

Sarasota County Emergency Management
6050 Porter Way, Suite 165
Sarasota, FL 34232

Chief McCrane,

Please accept this letter on behalf of the Sarasota County Public Hospital District, as our commitment to continue to support and participate in the Local Mitigation Strategy. I cite the following examples of how we currently embrace the LMS:

- All new project construction and renovation of current buildings take into account the community wide vulnerability analysis, and builds hurricane and storm protection features into all new buildings and renovation of current facilities throughout Sarasota County.
- SMH actively participates in the LMS meetings and planning sessions hosted by Sarasota County.
- Future mitigation strategies for specific hazards are always a component of our After Action Report/Improvement Plans following each drill or actual activation of our Emergency Response Plan.
- SMH has historically applied for and received LMS Grants for hurricane/storm hardening projects on existing facilities. SMH Public Safety/Emergency Management plans to continue application for mitigation grants to further enhance the storm readiness of our critical healthcare infrastructure.

Respectfully submitted,

Robert "Mickey" Watson, CHPA, CHEP
Chief of Public Safety/Emergency Management
Sarasota County Hospital District
Sarasota, FL

Emergency Management Element

GOAL PROTECT THE PUBLIC AND THEIR PROPERTY FROM THE IMPACT OF A PUBLIC EMERGENCY OR NATURAL EVENT.

Objective 1 Emergency and Disaster Planning. Protect the community from the impact of emergency and disaster events through event planning and awareness.

Policy 1.1 Timing of Facilities and Services. Ensure all existing public emergency services are maintained, improved, or expanded in coordination with the development of properties and capital improvements schedule.

Policy 1.2 New Development Expansions. Require new development to pay its fair share for public safety, shelter, recovery and emergency service expansions related to additional equipment, personnel, and facility needs.

Policy 1.3 Emergency Preparedness Plans. The City shall annually evaluate and update, as necessary, the Comprehensive Emergency Management Plan, Sarasota County Local Mitigation Strategy, Floodplain Management Plan, and National Flood Insurance Program (NFIP) Community Rating System (CRS).

Policy 1.4 Development Planning Practices. The City shall continue to evaluate the potential impact of tropical events on its buildings and land areas and update its planning practices and report its findings. Areas to focus on include:

A. State Coastal Planning Area.
B. Coastal Construction Control Line.
C. Gulf Front Setback Line.
D. Erosion Control Line.
E. Special Flood Hazard Areas.
F. Likely evacuation areas and ability of evacuation routes to serve demand.
G. Need for additional hurricane shelters.

Policy 1.5 Emergency Responder Accessibility. Utilize the site and development process to ensure that new developments provide adequate accessibility for emergency vehicles by establishing:

A. An interconnected road system.
B. Secondary emergency access points.

C. Access to water lines, fire hydrants, and other public safety infrastructure systems.

Policy 1.6 Fire Facility Planning. The City shall continue to evaluate the relocation of fire station no. 2 in order to improve distribution of services throughout the community. Issues to be addressed include:
A. Determination of the optimal location based upon LOS standards.
B. Funding through the capital improvements schedule.
C. Design and construction of facility based upon criteria established in the Public Facilities and Properties Element.

Policy 1.7 Continuity of Operations Planning. Continue to develop, maintain, and implement a plan for the daily operations of the City in emergency or disaster event situations.

Policy 1.8 NIMS and ICS Coordination. Utilize the National Incident Management System (NIMS) and Incident Command Systems (ICS) programs to prepare for emergency and disaster events.

Policy 1.9 Public Awareness and Education. Maintain public education efforts regarding awareness and preparation for disaster and emergency events including: community awareness presentations, the annual hurricane workshop, City website, and newsletters. Education efforts should include information about:
A. Distinction between hurricane categories and evacuation zones
B. Evacuation routes
C. Public and private shelter options
D Home preparedness planning
E. Flood insurance

Policy 1.10 Community Hurricane Planning. Continue to pursue funding for the implementation of the hurricane mitigation projects listed in *Creating a Hurricane Tolerant Community*. Annually update the plan based on most current best management practices, community needs, and City goals.

Objective 2 Emergency Services and Post-Disaster Response. Provide an effective and efficient response to all public emergency and natural disaster events.

Policy 2.1 Operation and Service Standards. By December 2011, establish operation and service standards that ensure the City has the emergency management resources it needs to respond to emergency events. Standards shall use the following criteria to evaluate needed resources:

A. Response time.
B. Distance from station to emergency event.
C. Ability to access major roadways and community connectors.

Policy 2.2 Staff Training and Procedure Planning. Prepare to respond to emergency situations and disasters through staff training and procedure planning. Staff should be trained according to their level of responsibility:
A. Emergency Responders – lead role. Includes Police, Fire, and City Manager personnel.
B. Non-Essential Responder – support role. Includes NPOD volunteers and others, as assigned by City Manager.

Policy 2.3 NPODS Coordination. Coordinate with Sarasota County on the use of the Neighborhood Points of Distribution System to ensure the public's basic needs are provided for after a disaster event.

Policy 2.4 Evacuation Notification. Utilize the City's Code-Red system to notify the public about evacuation procedures.

Objective 3 Disaster Evacuation and Sheltering. Maintain or reduce evacuation times and increase shelter capacity in the local area.

Policy 3.1 Second Option Shelters. Provide information about second option shelter alternatives through enhanced public education to allow those without special needs to remain within their neighborhoods.

Policy 3.2 Neighborhood Shelters. Utilize the site and development process to encourage major developments to harden their community buildings for use as shelters for their residents.

Policy 3.3 Shelter Building Standards. Utilize the site and development review process to ensure shelters meet and/or exceed approved shelter design standards including windows and structure strength.

Policy 3.4 Pet Friendly Shelters. Coordinate with Sarasota County Emergency Management, Red Cross, and private developments to ensure that appropriate shelter space is available for pets.

Policy 3.5 Shelter Coordination. Continue to coordinate with Sarasota County Emergency Management and Red Cross in the identification and operation of shelters within the Venice community. Ensure that there are appropriate shelter types for the various levels of storms and emergency

events from minor to severe.

Policy 3.6 Shelter Co-location. Identify and expand opportunities to develop new shelter facilities as part of construction projects at schools, community agencies, and other local, regional, and state facilities.

Policy 3.7 Community Organization Shelter Facilities. Coordinate with Sarasota County Emergency Management, the State of Florida, and the Federal Emergency Management Agency (FEMA) to identify funding for private community organizations to upgrade facilities to shelters.

Policy 3.8 Evacuation Planning. Coordinate evacuation routes and timing with local, regional, and state partners. Ensure that residents have time and transportation resources to evacuate safely. Provide residents maps and other information needed.

Policy 3.9 Family Response Planning. Educate the public about the need for developing a family evacuation/shelter plan including:
A. Storm evacuation category.
B. Evacuation routes.
C. Shelter options.
D. Family/friends notification about evacuation plans.
E. Development of hurricane kit.
F. House preparation needs.

Objective 4 Disaster Management and Emergency Services Coordination. Coordinate emergency services and disaster management efforts with local, regional, state, and federal government agencies and private organizations.

Policy 4.1 Emergency Management Coordination. Coordinate with Sarasota County, State of Florida, FEMA, Red Cross, and other emergency management partners on all aspects of emergency management preparedness, mitigation, and response.

Policy 4.2 Emergency Planning and Response. Coordinate with local, state, and regional organizations including Sarasota County and the Southwest Florida Regional Planning Council on the assessment of storm surge impacts and evacuation planning.

Policy 4.3 Emergency Event Regulations. Uphold all City of Venice, Sarasota County, State of Florida, and United States regulations that address issues related to emergency preparedness and planning.

Policy 4.4 Response Recovery Agreements. Continue to participate as a member in the Statewide Mutual Aid Agreement (SMAA) between the State of Florida and the City of Venice.

Policy 4.5 Special Needs Coordination. Coordinate with Sarasota County on the identification of special needs individuals to assure that they receive transportation to a shelter in case of a disaster event.

Policy 4.6 Red Cross Coordination. Continue to coordinate with the Red Cross on all public sheltering issues:
A. Location of shelters in community.
B. Construction of new public and private shelter space.
C. Operation of shelters during an emergency event.
D. Provision of pet friendly shelter space.

Policy 4.7 Medical and Health Care Coordination. Coordinate emergency and health care medical needs of the community's residents with local hospitals, clinics, and other health care providers. Ensure that a variety of health care services are provided to meet Venice's multi-generational population.

LMS-Appendix L

2020

SARASOTA COUNTY UNIFIED PROGRAM FOR PUBLIC INFORMATION (PPI) ANNUAL EVALUATION REPORT

Unincorporated Sarasota County, the City of Sarasota, the Town of Longboat Key, the City of North Port, the City of Venice

Prepared by the Sarasota County Unified PPI Committee

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MISSION STATEMENT

To promote public education and awareness of flood hazards, increase knowledge of flood risk, proper building techniques for floodplains, the importance of preserving floodplain functions, provide flood protection methods, promote flood insurance availability, and assist citizens with accurate flood zone maps and map updates, thus creating a safer community and a higher quality of life for all.

BACKGROUND

Sarasota County is located in southwest Florida with approximately 37 miles of open shoreline along the Gulf of Mexico. This area is prone to flooding caused by heavy rains or from storm surge that may be associated with tropical storms and hurricanes. The county contains more than 420 miles of tidally influenced rivers, streams, and canals. In addition, there are 43 named lakes covering 2,091 acres, and over 70 square miles of estuaries and bays that support diverse habitats for plants and animals.

Unincorporated Sarasota County and the cities of Sarasota, North Port, Venice, and the Town of Longboat Key make up Sarasota County. The Town of Longboat Key is uniquely located in both Sarasota and Manatee County. All are impacted by some form of flooding. All participate in the Community Rating System (CRS) and all make up this multi-jurisdictional Unified Program for Public Information (PPI). Collectively, there are numerous ongoing outreach efforts with goals to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and to protect the natural functions of floodplains.

The PPI plan was developed over several years, finalized in December 2018 and formally adopted in January 2019. The benefits of a unified PPI plan include a more comprehensive outreach approach to provide communities and residents with clear, coordinated messages that are delivered in a cost-effective and consistent manner. This program helps coordinate community messaging to improve resource efficiency and message recognition. It's noted that flood-prone residents with better access to flooding information, such as their vulnerability to the flood risk and impacts, have a higher likelihood of being prepared to reduce their risk. The result is a well-informed public, a safer living environment and lower costs associated with flood loss.

PPI COMMITTEE

To reduce insurance cost to the residents in a more substantial manner and to reach more property owners through a more aggressive outreach program, Sarasota County along with the City of Sarasota, and The Town of Longboat Key formed the PPI committee in 2016. The City of Venice and the City of North Port joined in 2018 making all communities within Sarasota County participants in the PPI plan. The PPI committee also includes stakeholders such as the Sarasota Bay Estuary Program (SBEP), Mote Marine Institute, insurance agents, realtors, lenders, and contractors.

The PPI committee is tasked with evaluating the PPI plan each year to ensure the projects maintain their relevance and feasibility and to track progress and outcomes. An annual evaluation report is required to ensure the committee reviews and evaluates each of the projects and makes recommendations. The PPI committee met on December 11, 2019 to work through this evaluation process. The Sarasota County CRS Specialist is acting as the facilitator of this plan to track, implement, and manage the program.

Each year, the PPI committee considers the flood problems throughout the county and associated communities, evaluates who needs to be informed about flood related topics and how that information should be transmitted, and reviews the inventory of projects that are already underway. Formation of the committee and preparation of the PPI plan followed the steps outlined in the 2013 CRS Coordinators Manual, Section 330, Developing a Program for Public Information. The current updated committee members are shown in Figure 1 on the following page. The list includes their affiliations and their current position.

COMMITTEE MEMBERS

FIGURE 1: 2019 PPI Committee Members, Affiliations and Departments

NAME	AFFILIATION	DEPARTMENT
Donna Bailey	Sarasota County	Public Works
Ed McCrane	Sarasota County	Emergency Services
Steve Hardy	Sarasota County	Public Works
Robert Laura	Sarasota County	Public Works
James Linkogle	Town of Longboat Key	Public Works
Todd Kerkering	City of Sarasota	Emergency Services
Cindy Cahill	City of Sarasota	Stormwater
Kathryn Harring	City of Venice	Stormwater
Elizabeth Wong	City of North Port	Stormwater
Katherine Howington	Sarasota County / Bankers Ins	Insurance Agency
Sherry Bitner	Sarasota County / RE Financial Services	Mortgage Broker
Darcy Young	Sarasota County / SBEP	Director Planning/Comm
Neil Fleet	Town of Longboat Key/AMI-Bay Isles	Property Mgmt
Don Hermey	City of Sarasota/Mote Marine	Env Health & Safety
Christina Pitchford	Sarasota County/RASM	Realtor
Carl Shoffstall	Sarasota County/CCNA	Coalition Chair
Dean McConville	City of North Port/State Farm Insurance	Insurance Agency
Mary Elizabeth Petty	City of Venice/AAA Insurance	Insurance Agency
Mark Hawkins	City of Venice/Hawks Nest Const	Contractor
Paul Semenec	Sarasota County	Additional Staff Resources
Des Companion	Sarasota County	Additional Staff Resources
Claire Aronson	Sarasota County	Additional Staff Resources
Thomas Sacharski	City of North Port	Alternate
Mary Foster	City of North Port/State Farm Ins	Alternate
Alan Fish	City of North Port/VBF Surveying	Alternate
Barbara Lockhart	City of North Port/Advisory Board	Alternate
Pete Travis	Sarasota County/Torrent Corp	Alternate
Jessica Williams	Sarasota County/We Are Floods Ins	Alternate
Sharon Gould	Sarasota County/Realtor	Alternate
Kathy Kelly Ohlrich	Sarasota County/CCNA	Alternate
Michael Dexter	Sarasota County / SBEP	Alternate

THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP):

The CRS program is part of the NFIP and is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum requirements of the NFIP. Activities implemented through the CRS program provide credit scores, which are summarized through a regular audit process. Scores are formally accepted by FEMA and, when compared to prerequisites, are used to give a community their classification. The possible classifications range from Class 10 with the least credit points to Class 1 with the most credit points.

UNINCORPORATED SARASOTA COUNTY:

Sarasota County has participated in the CRS program since 1992. By implementing comprehensive floodplain management activities, Sarasota County has been rated as a Class 5 community since 2007. The result of this classification means NFIP insurance for Sarasota County property owners is discounted annually by 25% for high risk properties and 10% for medium to low risk policies, representing a savings of just over $7 million dollars to residents of Sarasota County annually.

THE CITY OF SARASOTA:

The City of Sarasota has participated in the CRS (Community Rating System) program since 1992 to reduce flood insurance rates for the residents of the City. The City is rated a Class 6 community in the CRS program and that represents almost $2 million dollars in savings to the City of Sarasota's jurisdiction NFIP (National Flood Insurance Policy) holders annually. This classification reduces NFIP flood insurance policies in special flood hazard areas (VE, AE, AH, A) by 20% and other (X500/X) hazard areas 10%. The City encourages everyone to have flood insurance, even in non-flood areas. Always remember: Flood water has no boundary!

THE TOWN OF LONGBOAT KEY:

The Town of Longboat Key has participated in the Regulatory phase of the National Flood Insurance program since July 30, 1971. The Town entered the CRS program in October 1991 and began receiving insurance discounts as a Class 9 Community, upgraded three times during the Town's history in the program to a current status of a Class 5 Community in May 2016. The Town will be retrograded to a Class 6 in May of 2020 due to FEMA and Insurance Service Office policy regulating the program, in regards, to Coastal Barrier Islands without rivers or streams. However, as a Class 6 Community, residents receive an average discount of $208 per policy for an annual community savings of $2, 056,792.

THE CITY OF NORTH PORT:

The City of North Port has participated in CRS since 1992 North Port is currently a Class 6 community as of September 1, 2018. A CRS Class 6 allows residents to be eligible for discounts on their flood insurance, 20% in high risk areas and 10% in low risk areas. This represents a current savings of $62,922 to North Port residents every year. Through a rerating process, North Port will be improving from a CRS Class 6 to a CRS Class 5 effective May 1, 2020. A CRS Class 5 will allow residents to be eligible for discounts on their flood insurance, 25% in high risk areas and 10% in low risk areas. This will represent a savings of $76,458 to North Port residents every year.

THE CITY OF VENICE:

The City of Venice has participated in CRS since 1991. Venice is currently a class 6 as of 2005. A 6 allows the residents to be eligible for discounts on their flood insurance, 20% in high risk areas and 10% in low risk areas. This represents a current savings of $627,592 to Venice residents every year.

FEDERAL FLOOD INSURANCE ASSESSMENT REVIEW:

One of the goals of the Unified PPI is to increase flood insurance coverage across all jurisdictions. Flood insurance is a requirement for structures located in the SFHA. Although we have identified CFHA, structures located solely in the CFHA are not required to purchase flood insurance, but it is recommended. Federal flood insurance data is provided to communities annually. Private flood insurance data is not provided and is therefore not a part of our review or assessment.

As part of the annual evaluation, the PPI committee reviewed the 2019Federal NFIP flood insurance data. This data will be compared to future annual NFIP policy data to gauge if completed projects had a positive effect on the flood insurance policy count.

During this annual evaluation of the PPI, the committee assessed the flood coverage for each of their communities. One readily available source of information on flood hazards is federal flood insurance data. The following two statistics from the National Flood Insurance Program (NFIP) ask the questions.

1. Where do people have flood insurance policies?
2. Where have flood insurance claims been paid?

The areas of concentrated claims have been found to have storm surge and stormwater drainage issues associated with coastal, low lying areas and Pre-FIRM structures throughout the county.

The following tables 1 - 3, display the Federal flood insurance data as of December 2019. Combined, there are currently **64,510** policies in force with **23,288** or **36%** of those policies located in non-SFHAs.

Flood insurance is required as a condition of federally backed mortgages or loans for structures located in a high-risk A, AE, or VE zones. Therefore, one would expect most policies to be in the A, AE, and VE zones.

Federal aid is contingent upon a community being a member of the NFIP. With flood insurance, Federal aid to private individuals is available through low interest loans after a declared disaster. If a homeowner does not have flood insurance, then those loans may not be available to them.

Our next PPI evaluation report or update will have a comparison of policies from 2019 vs 2020 and will delve deeper into flood insurance data in our communities and how we can focus on areas where flood insurance may be deficient.

As noted earlier, flood insurance data is only available for Federal flood insurance. Private insurers do not share their data with communities so their data is not reflected in the following tables.

Table 1 provides an overview of the Federal flood insurance policy count by flood zone. Properties in Zone D, A/AE, AH, AO, V/VE are required to carry flood insurance if there is a federally backed mortgage on the property. Zone X properties are not required by law to have a flood insurance policy, but it is recommended. Group policy information is only noted where indicated.

TABLE 1. 2019 Policy Count and Coverage Amount (Rounded to nearest dollar)

Zone	Community	Policies 2019	$ of Insurance In-Force Pre and Post	$ of Closed Paid Losses Pre-FIRM	$ of Closed Paid Losses Post-FIRM
	Sarasota County	21,039	4,913,088,000	16,278,730	3,939,776
	City of Sarasota	6,192	1,490,722,600	3,318,072	165,207
	*Town of Longboat Key	*9,598	*2,211,093,900	*4,825,015	*261,348
	City of North Port	195	48,050,800	88,192	717,562
A/AE/AO/AH	City of Venice	3,045	555,609,600	1,455,453	15,778
	Sarasota County	642	110,722,300	2,137,250	121,673
	City of Sarasota	195	46,830,400	751,131	1,635
	*Town of Longboat Key	*310	*54,943,600	*902,164	*30,391
	City of North Port	0	0	0	0
V/VE	City of Venice	6	395,100	316,233	0
	Sarasota County	23	4,759,500	405,490	77,032
	City of Sarasota	0	0	136,561	13,488
	*Town of Longboat Key	*0	*0	*0	*0
	City of North Port	0	0	0	0
D	City of Venice	0	0	0	0
	Sarasota County	912	244,862,700	1,956,308	846,290
	City of Sarasota	332	89,105,700	761,640	201,366
	*Town of Longboat Key	*0	*0	*0	*0
X (Standard)	City of North Port	71	19,231,500	31,883	1,675
	City of Venice	576	120,593,200	193,761	11,213
	Sarasota County	15,149	4,716,758,000	2,514,051	899,207
	City of Sarasota	1,377	431,268,000	1,644,016	85,185
	*Town of Longboat Key	*0	*0	*0	*0
X	City of North Port	2,505	761,318,000	147,953	7,850
(Preferred)	City of Venice	2,323	727,700,000	278,288	34,598
	Sarasota County	18	663,100	0	0
Group Policies	City of Sarasota	2	$69,800	0	0
Totals	All Communities	64,510	16,547,785,800	38,142,191	7,431,274

*It is important to note the Town of Longboat Key lies both in Sarasota and Manatee County. The data received by the Town of Longboat Key is not broken down by county and as such will reflect the whole values.

The total losses from all flood zones on Post-FIRM structures is approximately 19% of the losses on Pre-FIRM structures. This illustrates the impact sound floodplain regulations have for construction and how these regulations not only save money on insurance claims but also create a safer community.

A comparison of the low-risk, X-Zone (Pre-FIRM and Post-FIRM) paid losses compared to other zone losses, shows approximately 20% of paid losses are in the lowest risk zone. This statistic compares with National statistics.

Table 2 provides the insurance data for the different types of structures located within each community in the county.

TABLE 2. 2019 NFIP Insured Structures Breakdown by Building Type (Reported 12/31/2019)

Sarasota County & All Municipalities					
Unincorporated Sarasota County	Policies In-Force	$ Premium	$ Insurance In-Force	# of Closed Paid Losses	$ of Closed Paid Losses
Single Family	25,114	18,640,274	7,346,505,200	1,865	23,332,877.33
2-4 Family	2,345	1,682,263	466,929,700	173	1,113,452.43
All other Residential	9,492	5,436,285	1,847,646,200	118	1,210,115.02
Non-Residential	832	28,089,177	9,990,853,600	126	1,782,212.31
City of Sarasota					
Single Family	2,746	3,684,419	822,298,500	415	5,257,940.78
2-4 Family	224	182,970	41,930,900	27	115,780.33
All other Residential	4,771	2,299,2235	1,021,866,800	84	1,085,386.02
Non-Residential	357	1,412,956	171,880,300	57	470,571.98
City of Venice					
Single Family	2,523	1,375,983	772,390,300	87	1,123,434.02
2-4 Family	348	268,834	58,728,500	30	510,970.40
All other Residential	2,893	1,480,556	492,440,000	82	501,509.63
Non-Residential	186	486,137	80,739,100	24	2,272,549.18
City of North Port					
Single Family	2,704	990,259	811,225,000	42	992,284.74
2-4 Family	38	12,902	8,077,000	0	0
All other Residential	13	3,638	2,128,000	0	0
Non-Residential	16	28,272	7,170,300	0	0
Town of Longboat Key					
Single Family	1,712	2,594,958	476,755,200	565	4,655,342.68
2-4 Family	784	717,423	155,019,200	61	392,374.39
All other Residential	7,231	3,784,754	1,571,875,300	116	677,003.15
Non-Residential	181	615,864	62,387,800	40	294,558.85

Approximately 64% of all (64,510) policies are within the moderate and high-risk SFHA and 36% are within the low-risk SFHA.

These statistics underscore two things:

1. The entire county is subject to flooding and the PPI should strive to reach all residents and businesses.
2. We should continue to review floodplain regulations for higher regulatory standards.

This PPI committee will strive to achieve 100% insurance coverage for all properties within the moderate and high-risk SFHA. Statistics show that many of the houses are pre-FIRM structures and insurance will help rebuild houses to current code when substantially damaged by flood events.

Table 3 below gives the final policy count (all policy types) county-wide. The next evaluation/update will give a comparison of 2019 vs 2020 data illustrating the number of policy changes within each municipality in the county.

TABLE 3. Policy Count

Community	2019	2020	Count Difference	%
Sarasota County	37,783			
City of Sarasota	8,098			
Town of Longboat Key	9,908			
City of Venice	5,950			
City of North Port	2,771			
Grand Total	64,510			

FLOOD MAP UPDATES:

Preliminary Flood Insurance Rate Maps (FIRMs) as part of the FEMA Risk Mapping, Assessment, and Planning (Risk MAP) program for Sarasota County were received December 2019. These preliminary FIRM updates include panels in coastal areas, as well as in the Phillippi Creek Watershed, Little Sarasota Bay Watershed, and the Lemon Bay Watershed. Based on these updated preliminary FIRMs, properties may move in and out of special flood hazard zones when the FIRM becomes effective. Our next Flood Insurance Assessment will reflect these map changes and will strive to determine what areas and targets we should focus on for future outreach projects or which current projects will include these areas.

Unincorporated Sarasota County has digitized, detailed flood studies not shown on the current FEMA flood maps. County staff determined these detailed flood studies using the criteria outlined by FEMA to establish the limits of the 1 % (percent) or Special Flood Hazard Area. These areas are included in our outreach efforts. Shown as the Community Flood Hazard Area (CFHA) on our online flood maps, they can be found at: https://www.scgov.net/government/public-works/flood-maps.

These flood studies were submitted to and accepted by FEMA in 2018 and 2019. They are incorporated into the preliminary FEMA RISK-Map received by all the communities within Sarasota County this last December 31, 2019. These preliminary maps are anticipated to become effective within the next 18-24 months.

PROJECTS REVIEW:

Through the process of developing the PPI, the committee developed projects aligned with the six required CRS topics, as well as three additional topics outlined as goals. It identified twenty (20) target audiences to whom the outreach messages should be delivered.

The following are the nine goals and key messages of the PPI. The first six goals are a requirement of the CRS program. Initiating the PPI program allows us to implement additional goals which are shown as seven through nine.

1. Increase flood hazard awareness
    - Discover flood risks in your area
2. Encourage flood insurance coverage
    - Purchase flood insurance for your home or business
    - Purchase renters flood insurance
3. Protect people from flood hazards
    - Turn around don't drown
    - Stay connected by signing up for the County's CodeRED system
    - Make a plan for emergencies, be prepared
4. Protect property
    - Keep debris out of driveway culverts and ditches and maintain your drainage swales (Only rain down the drain!)
5. Build responsibly
    - Obtain required permits before starting any home repair, improvement or construction
    - Be aware of substantial improvements rule.
6. Protect the natural functions of floodplains
    - Use low impact development (LID) such as rain barrels, bioretention systems, green roofs, pervious materials, and non-invasive vegetation on your property.
7. Encourage hurricane preparations
    - Make a plan and know your evacuation level
8. Educate people about flood economics
    - Build with the future in mind
9. Inform people about how sea level rise will affect our community
    - Reduce your exposure to the effects of sea level rise

Key Sheet – Target Audiences:

	Audience	Description
A	Residents and businesses in Repetitive Loss Areas	This audience should understand their surroundings and the likelihood of floods. Insurance is strongly recommended.
B	Residents and businesses in the Special Flood Hazard Area	This audience should become aware of their high risk. Insurance is strongly recommended and often required (with a mortgage).
C	Residents and businesses in flood-prone areas	This audience should become aware of their high risk and insurance is strongly recommended.
D	Residents and businesses in the storm surge area	This audience should become aware of their high risk and insurance is strongly recommended.
E	Residents and businesses in moderate- to low-risk flood areas (Shaded X zones)	This audience should understand that although they are not in high risk areas, there is still a potential to flood, and insurance is recommended. These areas submit over 20 percent of NFIP claims and receive one-third of disaster assistance for flooding.
F	Community Association Institute (SWFL Chapter)	Membership includes condominium, cooperative and homeowner associations. The association can disseminate flood hazard information to their members.
G	Homeowners associations	Associations can education their constituents about flood risk, building properly and insurance.
H	Mobile homes associations	Associations can education their constituents about flood risk, building properly and insurance.
I	Condo Owners associations	Associations can education their constituents about flood risk, building properly and insurance.
J	Real estate professionals	These professionals are in contact with clients that are purchasing or renting properties. They will benefit from flood-related outreach and may relay information to their clients.
K	Real estate buyers	Individuals purchasing or renting property should be made aware of their flood risk and insurance options.
L	Insurance agents	These professionals are in contact with clients that are purchasing or renting properties. They will benefit from flood-related outreach and may relay information to their clients.
M	Lenders	These professionals are in contact with clients that are purchasing or renting properties. They will benefit from flood-related outreach and may relay information to their clients.
N	Mortgage Brokers	These professionals have direct contact with homebuyers.
O	Speakers of other languages	Informational material should be made available in languages other than English.
P	Building contractors and developers	This audience should be kept appraised of floodplain regulations and available county services. They are also in the position to communication information about building with flood risk in mind to their clients.
Q	Architects and/or designers, engineers	Professions responsible for design of homes should be aware of flood risks and insurance requirements.
R	Surveyors	Surveyors need to provide updated information for elevation certificates.
S	County leaders and/or commissioners; Barrier island elected officials	Leaders that can champion the outreach efforts and may have direct input for funding projects.
T	Youths in grades K-8	This sector provides educational opportunities about flood risks.

Key Sheet – Messages and Outcomes:

	Topic	Message		Outcome	
1	Know your flood hazard	A1	Find out your flood risk.	a1	Better prepared and informed resident and businesses
2	Insure your property for your flood hazard	B1	Purchase flood insurance for your home, business or rental.	b1	Increased number of flood insurance policies.
3	Protect people from the flood hazard	C1	Turn around, don't drown.	c1	Saves lives
		C2	Stay connected. Subscribe to County services and social media to receive alerts. Stay tuned to local news channels and radio stations.		
4	Protect your property from the flood hazard	D1	Keep debris out of driveway culverts and ditches and maintain your drainage swales (Only rain down the drain).	d1	Reduced localized flooding.
		D2	Elevate your equipment/utilities	d2	Reduced loss of property and flood insurance claims.
5	Build responsibly	E1	Obtain required permits before starting any home repair, improvement or construction.	e1	Increased compliance and reduced flood loss.
		E2	Be aware of substantial improvement rule.		
6	Protect natural floodplain functions	F1	Keep our waters clean.	f1	Improvement in water quality and natural storage capacity.
		F2	Use Low Impact Development (LID) such as rain barrels, bioretention systems, green roofs, pervious materials, and non-invasive vegetation on your property.		
		F3	Build with conservation in mind; incorporate natural systems into designs.		
7	Hurricane preparedness	G1	Know your evacuation level.	g1	More residents evacuating when necessary.
		G2	Have a plan.	g2	Minimized damage and injury.
		G3	Storm surge can occur without hurricane force winds.		
8	Flood economics	H1	Floods can be costly to individuals, families and communities.	h1	Improvement in building standards.
		H2	Build with the future in mind.	h2	Reduced loss of property.
		H3	Insurance rates are not static.	h3	Reduced number of claims.
9	Sea level rise	I1	Plan for sea level rise	i1	Increased awareness and planning.
				i2	Reduced impact to life, property, health and safety.
				i3	Reduced impact to economy.

ADDITIONAL PROJECTS INFORMATION:

The committee recommends continuing the outreach projects as well as adding the following new project(s):

Floody the Frog Children's Outreach Initiative with the current activities:

- Environmental Stewardship Team (NEST) Annual Calendar Coloring Contest. This year's (2020) theme was flooding and water quality.
- Three outreach posters on flood safety and protection were developed to target children with messages about flood safety. These posters have been distributed to elementary school libraries and public libraries.
- A mascot costume was purchased for Floody the Frog and the mascot attends various events throughout the county.
- An interactive webpage is currently being developed for children. This webpage will be located on scgov.net and mirrored on the Water Atlas website as well. We expect the website to be 'live' by March 2020.

This project continues to be developed.

OUTREACH PROJECTS:

No outreach projects were discontinued because they were determined to be ineffective or not feasible to implement.

The PPI Committee will continue to implement and refine the PPI so that flood insurance is seen as a necessity and the efforts put forth by the committee will help keep it affordable.

APPENDIX A: Project List and Recommendations

The current project list was reviewed by the PPI Committee and the recommendations and/or changes for 2020 are noted in red.

APPENDIX B: Committee Meetings

Quarterly meetings summary and attendees.

This evaluation report was submitted to the Sarasota County BCC on _____, 2020.

APPENDIX A

2019
PROJECT LIST
REVIEW
AND
RECOMMENDATIONS

Project Number	Project Description	Audiences	Messages	Anticipated Outcomes	Jurisdictions	Distribution	Stakeholders	Related CRS Activities	Recommendations (changes in red)
1	Flood Protection Website – Water-Atlas	All	All	All	Sarasota County	Online	N/A	310, 320, 330, 340, 350	Created, continue updating content when needed.
2	Flood Protection Social Media	All			All	Social Media Blasts, 4 X year	N/A	330	Continue social media blasts. Recommend increasing to 6 X year.
3	Flood flyer	All	A1, B1, C1, C2, D1, D2, E1, E2, F1, G1, G2	a1, b1, c1, d1, d2, e1, f1, g1, g2	All	Advertise in phone book, once/year	N/A	540	Continue to advertise annually.
						Publish in Herald Tribune, once/year			Continue to advertise annually.
						Send to Municipalities, once/year	N/A		Continue to send updated flyers when appropriate.
4	Flood Information Workshops	All			All	Public workshops, 10 times/year. Increased to 30+ per year.	N/A	330	Recommend keeping 30+ per year. We added Grant Workshops to the schedule. Continue to schedule workshops.
5	Online Flood Zone Locator Application	All			All	Online	N/A	320, 350	Continue to keep online and add updates when needed.
6	Flood Response Preparation Media release messages	All	A1, B1, C1, C2, D1, D2, G1, G2, J1, J2	a1, b1, c1, d1, d2, g1, g2, j1, j2, j3	All	TV and Radio, once/year	N/A	332.b	We continue to have media release messages for FRP tied to Hurricane Season.
7	Flood Response Preparation Access Sarasota TV Crawls					TV, 4 X year	N/A	330, 600	We continue to have TV crawls for FRP tied to Hurricane Season.
8	Flood Response Preparation Social Media					Social Media Blasts, once/year	N/A	330, 600	We continue to have social media blasts for FRP tied to Hurricane Season.

Project Number	Project Description	Audiences	Messages	Anticipated Outcomes	Jurisdictions	Distribution	Stakeholders	Related CRS Activities	Recommendations (changes in red)
9	Add flood risk information to property appraiser records	All	A2	a2	All	Online	Property Appraiser	330, 442	Added in 2018. We continue to update flood data to property records.
10	Newsletter from elected officials	All	All	All	LBK, Venice, North Port	Newsletter, once/year	Elected officials		Discuss feasibility to implement this project community-wide in 2021.
11	Property Protection Advice	All	D1, D2, E1, E2	d1, d2, e1	Sarasota County	Flyer, once/year		360	We continue to advertise staff visits available to citizens for flood mitigation options.
12	Parks flyers	Targeted	F1, F2	f1	LBK, North Port	flyer, 4 times/year			Discuss feasibility to implement this project county-wide in 2021.
13	Repetitive Loss Areas Letter	Targeted	A1, B1, C1, C2, D1, D2, E1, E2, G1, G2, H1, H2, J1, J2, J3, J4	a1, b1, c1, d1, d2, e1, g1, g2, h1, h2, h3, j1, j2, j3	All	Mailout, once/year		330, 512	We continue to send notification letters to our RL areas promoting methods of mitigation.
14	CCNA presentation given by EOC	Targeted	All	All	Sarasota County	Presentation, once/year		330	Continue to give annually.
15	Neighbor-hood Environ-mental Stewardship Team Presentation	Targeted	All	All	Sarasota County	Presentation, once/year		330	Continue to give annually.
16	Educate real estate agents about flood zones and resources available at the County	Targeted	A1, B1	a1, b1	Sarasota County	Newsletter, once/year	Real Estate Professionals	330	We continue to reach out to Real Estate Agents through Newsletters sent through email.
17	RASM on the Road	Targeted	A1, B2	a1, b2	Sarasota County	Community Meetings, once/year	Real Estate Professionals	330	We will continue to give a presentation to RASM annually.

Project Number	Project Description	Audiences	Messages	Anticipated Outcomes	Jurisdictions	Distribution	Stakeholders	Related CRS Activities	Recommendations (changes in red)
18	Educate real estate agents about appropriate types/levels of insurance	Targeted	A1, B2, H1, H2, H3	a1, b2, h1, h2, h3	Sarasota County	Annual Workshop	Insurance Professionals	330	We will schedule the first workshop later this year.
19	Flood Disclosure and Information Brochure	All	A1, B1, F1, F2, G1, G2	a1, b1, f1, g1, g2	Venice, North Port	Brochure, 4 times/year	Real Estate Professionals; Insurance Professionals; Lenders	340	Recommend developing this brochure community-wide by 2021-2022.
20	Training for Online Map Services	All	A1, B1	a1, b1	Sarasota County	Annual Workshop	Real Estate Professionals; Insurance Professionals	330, 350	This is included in our regular workshops. Recommend creating a workshop dedicated to just training for the online map
21	Flood Brochure and information for savings in flood insurance	All	A1, D2, E1, E2, F1, F2, F3, H1, H2, H3	, d2, e1, f1, h1, h2, h3	LBK, Venice, North Port	Newsletter, once/year	Insurance Professionals	370	Recommend implementing this project community-wide by 2021-2022.
22	Encourage elevation certificates	Targeted	A1, D2, E1, E2, F1, F2	a1, d2, e1, f1	All	Newsletter, once/year		330	We give recommendations through our phone logs.
23	Flood Insurance Improvement Plan	All	B1	b1	All	Mailout, once/year	Insurance Professionals	370	Recommend the committee implement an insurance plan by late 2021.
24	Flood Insurance Promotion	All	B1	b1	All	Mailout, once/year	Insurance Professionals	330,370	Sent with our annual RL notification letters.
25	Educate elected officials about flood topics	Targeted	All	All	LBK, Venice, North Port	Annual Workshop		330	Recommend implementing this project community-wide by 2021.
26	Host FFMA Elevation Certificate Workshops	Targeted	D2, E1	d2, e1	Sarasota County	Annual Workshop		330	Scheduled for October 2020.

Project Number	Project Description	Audiences	Messages	Anticipated Outcomes	Jurisdictions	Distribution	Stakeholders	Related CRS Activities	Recommendations
27	Floody The Frog, Flood Mascot - Children's Initiative	Targeted	A1, C1, G2	c1, g2	All	Local Libraries, Elementary School Libraries	Teachers, parents	330	We continue to promote Floody the Frog and flood protection for children.
28	Flood Zone Determination Letter	Targeted			Sarasota County	Individually, via email or postal		330, 340	We continue to provide this service to citizens on request.

APPENDIX B

2019
UNIFIED PPI
COMMITTEE MEETINGS

1ST Meeting – February 20, 2019

The Facilitator called the meeting to order. Introductions were given of participants (old and new), and we reviewed the purpose of the meeting. The City of North Port and the City of Venice joined us as permanent members. We discussed PPI Report Local Adoption requirements; Filling out blank Project Sheets using the key code; Upcoming outreach initiatives; Vote on quarterly meeting dates for the remainder of the year.

Committee Members in attendance:

MEMBER	REPRESENTING
Donna Bailey, CRS Specialist and Meeting Facilitator	Sarasota County
Ed McCrane, Manager Emergency Services	Sarasota County
James Linkogle, Public Works	Town of Longboat Key
Todd Kerkering, Emergency Services	City of Sarasota
Kathryn Harring, Stormwater	City of Venice
Elizabeth Wong, PE, Stormwater	City of North Port
Sherry Bitner, RE Financial Services	Sarasota County
Darcy Young, Manager, Sarasota Bay Estuary Program	Sarasota County
Don Hermey, Maintenance, Mote Marine	City of Sarasota
Khansith Boupha, Jones Edmunds Associates	Sarasota County
Mary Foster, State Farm Insurance	City of North Port
Barbara Lockhart, North Port Canal Watch Group Environmental Advisory Board	City of North Port
Alan Fish, VBF Surveying	City of North Port
Bob Laura, Manager, Stormwater	Sarasota County
Paul Semenec, Manager, Stormwater	Sarasota County

1:00 PM – Call meeting to order – introduction/welcome participants (new and old), review purpose of meeting.

- Meeting called and introductions were made. The City of Venice and the City of North Port joins us as permanent members.
- 1:10 PM – Review PPI Report adoption and discuss dates for additional local adoption
- We reviewed the PPI report and discussed what other municipalities need to do to get the PPI adopted locally. Todd Kerkering with the City of Sarasota noted they have auto-adopt for all elements of the LMS and with the PPI being an annex to the LMS it should auto-adopt for them.
- 1:20 PM – Review blank Project Sheets, key code from PPI and discuss
- We reviewed blank project sheets and the key code from the PPI that includes target audiences and messages. Elizabeth Wong asked for a digital copy. All other municipalities asked for copies as well.
- 1:45 PM – Review upcoming outreach initiatives
    - Flood Awareness Week coordinated messaging with the FFMA

        - Flood Awareness Week proclamation
        - Flood Awareness Week Herald Tribune ad
        - Earth Day Celebration at Oscar Scherer State Park, April 20th? and flood protection handouts review
        - Any other initiatives coming up?
- We reviewed the upcoming outreach and discussed materials each community will contribute for the Earth Day initiative. Each community will need to print 250 copies. Once they have their items printed, they will contact Donna and she will pick them up. Each community will resend their logos for us to include on the artwork for Earth Day.
- Elizabeth Wong discussed the flood display on the property appraiser record cards. She suggested placing the sentence guiding readers to the flood map, be placed on top and the font enlarged. She states readers often miss it or disregard it.
- We discussed the real estate brochure that Kathryn Harring has created. It was suggested that the brochures direct the reader to the FEMA Map Center but it was noted that single properties are not shown on a Firmette, only an entire area. This may make it difficult for the reader to locate their own property. Kathryn has also included updates to their outreach and media (memes) and has them on the City of Venice website.
- Elizabeth Wong asked for a copy of the message that is going out in our utility bills promoting Flood Awareness Week.
- Sherry Bitner discussed videotaping and suggested 2-3-minute videos of maybe reading the messaging for our Flood Awareness Week. We briefly discussed the current project our CRS Coordinator Des is working on for possibly filming a workshop. Sherry also noted TV station could push the flood messaging out and we could work on YouTube videos.
- We discussed the Flood Response packages – Todd Kerkering offered space at the City of Sarasota if needed to store the documents while we work on the project.
- The committee discussed elevation certificates and a disconnect between our CRS program and the FEMA regulations. We also discussed elevation certificates being available online. James Linkogle noted the pdfs need to be ADA compliant. We need to review whether ours meet this requirement.
- Elizabeth asked about Elevation Certificate training in North Port. They have a venue that would support 45-50 people. I will reach out to Marty Duran to discuss this possibility.
- 2:50 PM – Vote on quarterly meetings for remainder of the year
    - Future dates for meetings were discussed and agreed upon. Donna will send out an invitation to get these dates on everyone's calendars.
- ACTION ITEMS:
    - Donna will send out a copy of the utility bill messaging to North Port for their review.
    - Donna will send out the Flood Awareness Week messaging to all members for their review.
    - Donna will send out the digital project worksheets and key codes.
    - All communities will submit their logos to include on our Earth Day artwork
    - All communities will notify Donna when they have their materials printed and ready to pick up.

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
Committee Meeting
February 20, 2019 - 1:00 p.m. - 3:00 p.m.
Sarasota County Operations Center, BOB, Conference Room 1
1001 Sarasota Center Blvd., Sarasota, FL 34240

Sarasota County

PPI COMMITTEE SIGN-IN SHEET

MEMBER OR ALTERNATE	REPRESENTING	SIGNATURE
Donna Bailey	Public Works, Sarasota County	
Ed McCrane	Emergency Services, Sarasota County	
Pat Haire	Communications, Sarasota County	
James Linkogle	Public Works, Town of Longboat Key	
Todd Kerkering	Emergency Services, City of Sarasota	
Kathryn Harring	Stomrwater, City of Venice	
Elizabeth Wong	Stormwater, City of North Port	
Katherine Howington	Bankers Insurance	
Sherry Bitner	RE Financial Service, Inc, Sarasota County	
Darcy Young	Sarasota Bay Estuary Program	
Neil Fleet	AMI-Bay Isles, Town of Longboat Key	
Don Hermey	Mote Marine, City of Sarasota	
Christina Pitchford	Realtor Association of Sarasota & Manatee, Sarasota County	
Pete Travis	Torrent Corporation, Sarasota County	
Jessica Williams	Wright Flood, Sarasota County	
Sharon Gould	Florida Moves, Sarasota County	
Kirsten Pedersen	Sarasota County Citizen Stakeholder	

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
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Sarasota County

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Carl Shoffstall	CCNA, Sarasota County	
Dean McConville	State Farm Insurance, City of North Port	
Mary Elizabeth Petty	AAA Insurance, City of Venice	
Mark Hawkins	Hawks Nest Construction, City of Venice	
Paul Semenec	Public Works, Sarasota County	
Khansith Boupha	Jones Edmunds & Associates	
Heather Hansen	City of North Port	
Mary Foster	State Farm Insurance, City of North Port	
Alan Fish	VBF Surveying, City of North Port	
Barbara Lockhart	North Port Canal Watch Group & Environmental Advisory Board, City of North Port	
Brice Ferguson	City of Venice	
Claire Aronson	Communications, Sarasota County	
Bob Laura	stormwater	Robert Laura

2nd Meeting – April 10, 2019

The Facilitator called the meeting to order. Introductions were given and we reviewed the purpose of the meeting. Upcoming Preliminary Coastal Map updates were discussed; Hazard Disclosure; Earth Day Promotion outreach initiative.

Committee Members in attendance:

MEMBER	REPRESENTING
Donna Bailey, CRS Specialist and Meeting Facilitator	Sarasota County
Des Companion, CRS Coordinator	Sarasota County
Ed McCrane, Manager Emergency Services	Sarasota County
James Linkogle, Public Works	Town of Longboat Key
Todd Kerkering, Emergency Services	City of Sarasota
Kathryn Harring, Stormwater	City of Venice
Heather Hansen for Elizabeth Wong, PE, Stormwater	City of North Port
Sherry Bitner, RE Financial Services	Sarasota County
Christina Pitchford, Realtor	Realtors Assoc. of Sarasota & Manatee (RASM)
Pete Travis, Torrent Corporation	Sarasota County
Jessica Williams, Wright Flood	Sarasota County
Khansith Boupha, Jones Edmunds Associates	Sarasota County
Alan Fish, VBF Surveying	City of North Port
Bob Laura, Manager, Stormwater	Sarasota County
Paul Semenec, Manager, Stormwater	Sarasota County

2:00 PM – Call meeting to order – introduction of participants and purpose of meeting.

2:10 PM - Coastal Map Updates – Des Companion

- Current timeline for completion
- Coordinate and schedule meetings within jurisdictions (2 each?)
  - *Des Companion with Sarasota County discussed the FEMA Risk MAP updates: A handout for the process and legal requirements for preliminary maps was reviewed. This FEMA Risk MAP update will be a combination of the FEMA Coastal study and Sarasota County's Physical Map Revision (PMR) studies of Phillippi Creek, Lemon Bay and Little Sarasota.*
  - *According to FEMA's Mark Vieira, whom Des spoke with, Congress is expecting Sarasota County preliminary maps under the Risk MAP program at the end of December 2019, with FEMA Region IV outreach occurring sometime in February or March.*
  - *The following activities are suggested for each community to begin preparation, such as:*

- *Reservations for 2 public meetings beginning the end of February or March/April 2020;*

- *Preparation to handle additional outreach, appeals and comments and phone calls,*
- *Draft media releases and postcard for mailing etc.*
    - *Since Longboat Key has its community split by Sarasota County and Manatee County, they should only need to provide one public meeting. Also recommended, we hold some at night and/or on the weekend so working residents can attend.*
    - *A LiMWA (Limit of Moderate Wave Action) line will be shown on the map. This will introduce the new flood zone in Sarasota county, "Coastal AE Zone" on maps. This flood zone is already part of the Florida Building Code.*
    - *Bob Laura with Sarasota County stated FEMA will provide a 'Changes since last effective FIRM' product that will outline those properties and areas that will change in both the FEMA Coastal study and the County updates we applied for. That is a new Risk MAP product that FEMA produces.*
    - *There is generally 90 days for comments and appeals, and 180 days for compliance and adoption. Bob noted historically FEMA makes the maps effective 12-18 months after the preliminary maps but with coastal areas that can be even longer, depending on the number of appeals received. Coastal map updates typically get more appeals and comments than other areas.*
    - *James Linkogle of Longboat Key discussed some changes in the Coastal Risk maps for his portion of Longboat Key located in Manatee county. He states the entire island was previously in the Special Flood Hazard Area (SFHA) and now has pockets of 500-year flood (0.2% annual chance) that show up and noted there is some concern as some parts of buildings now show the 0.2% annual chance flood while others remain in the SFHA.*
    - *Pete Travis with Torrent Corp. states FEMA will send a letter next year to all policy holders with new rates. All residential structures will have rating scores in the letter. The LiMWA line is a non-regulatory line that may be used for insurance rating as well.*
    - *Kat Harring with the City of Venice noted the LiMWA line is the extent of the 1.5' – 3' wave action.*

- **2:30 PM – Hazard Disclosure – CRS Activity**
    - Sarasota/Manatee Board of Realtors, other groups for outreach
    - Map update – disseminating hazard disclosure
    - Realtor Brochure review / handout
        - *Donna Bailey with Sarasota County spoke about the invitation to speak at the Realtors of Sarasota and Manatee (RASM) meeting in June set up by Christina Pitchford with RASM. A discussion was made about increasing presentations/speaking at Realtor Boards and other groups to quarterly to help get the word out. These groups are great at sharing this information.*
        - *The Real Estate brochure was reviewed and discussed. Christina noted there may be some reluctance from realtors to use it. We further discussed how we might be able to incorporate additional information the realtors may like and where we might be able to link this document online.*

- *Kat noted the real estate brochure she developed, and we discussed how we could blend both brochures together.*
- *Christina Pitchford asked Kat if she would send her a copy of the brochure – Kat will send it to Donna and Donna will distribute it.*
- *Donna asked everyone to please send their comments on the real estate brochure so they can be incorporated and reviewed at the next meeting.*

- **2:55 PM – Earth Day Promotion – April 27th at Oscar Scherer Park 10:00 a.m. – 4:00 p.m.**
  - *We quickly reminded everyone of our Earth Day promotion and that we still need flood literature from North Port and Longboat Key. Todd Kerkering with City of Sarasota suggested the literature from Longboat Key could be dropped off in the City and he could deliver to us. Great idea!*
    We quickly went over next meeting discussion shown below.
- **3:00 PM – Meeting adjourned**

- **Next Meeting Discussion:**
- PPI Committee webpage development and review
- Flood Insurance Promotion –
  - Target audience and messaging: Coastline
  - Develop promotional literature
    Where to leave promotional literature

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
Committee Meeting
April 10, 2019 - 2:00 p.m. - 3:00 p.m.
Sarasota County Operations Center, BOB, Conference Room 1
1001 Sarasota Center Blvd., Sarasota, FL 34240

Sarasota County

PPI COMMITTEE SIGN-IN SHEET

MEMBER OR ALTERNATE	REPRESENTING	SIGNATURE
Donna Bailey	Public Works, Sarasota County	
Des Companion	Public Works, Sarasota County	
Ed McCrane	Emergency Services, Sarasota County	on telephone - conference call
Pat Haire	Communications, Sarasota County	
James Linkogle	Public Works, Town of Longboat Key	on telephone - conference call
Todd Kerkering	Emergency Services, City of Sarasota	
Kathryn Harring	Stomrwater, City of Venice	
~~Elizabeth Wong~~ HEATHER HANSEN	Stormwater, City of North Port	
Katherine Howington	Bankers Insurance	
Sherry Bitner	RE Financial Service, Inc, Sarasota County	
Darcy Young	Sarasota Bay Estuary Program	
Neil Fleet	AMI-Bay Isles, Town of Longboat Key	
Don Hermey	Mote Marine, City of Sarasota	
Christina Pitchford	Realtor Association of Sarasota & Manatee, Sarasota County	
Pete Travis	Torrent Corporation, Sarasota County	
Jessica Williams	Wright Flood, Sarasota County	on telephone - Conference Call
Sharon Gould	Florida Moves, Sarasota County	

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
Committee Meeting
April 10, 2019 - 2:00 p.m. - 3:00 p.m.
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Sarasota County

PPI COMMITTEE SIGN-IN SHEET

MEMBER OR ALTERNATE	REPRESENTING	SIGNATURE
Kathy Kelley Ohlrich	CCNA, Sarasota County	
Carl Shoffstall	CCNA, Sarasota County	
Dean McConville	State Farm Insurance, City of North Port	
Mary Elizabeth Petty	AAA Insurance, City of Venice	
Mark Hawkins	Hawks Nest Construction, City of Venice	
Paul Semenec	Public Works, Sarasota County	
Khansith Boupha	Jones Edmunds & Associates	Khansith Boupha
Heather Hansen	City of North Port	
Mary Foster	State Farm Insurance, City of North Port	
Alan Fish	VBF Surveying, City of North Port	
Barbara Lockhart	North Port Canal Watch Group & Environmental Advisory Board, City of North Port	
Brice Ferguson	City of Venice	
Claire Aronson	Communications, Sarasota County	
Bob Laura	Public Works, Sarasota County	Robert Laura
Paul Semenec	Public Works Stormwater	

3rd Meeting – August 14, 2019

The Facilitator called the meeting to order. Introductions were given and we reviewed the purpose of the meeting. A new children's outreach 'Floody the Frog' initiative was discussed; more discussion of the upcoming Preliminary Flood Maps; Additional Flood Information Workshops; Flood Insurance Promotion; Flood and Hurricane Awareness Newsletter; Flood zones vs Evacuation Levels; and RLAA Notification Letter mail-out; NOAA Green Infrastructure Initiative.

Committee Members in attendance:

MEMBER	REPRESENTING
Donna Bailey, CRS Specialist and Meeting Facilitator	Sarasota County
Des Companion, CRS Coordinator	Sarasota County
Ed McCrane, Manager Emergency Services	Sarasota County
James Linkogle, Public Works	Town of Longboat Key
Todd Kerkering, Emergency Services	City of Sarasota
Kathryn Harring, Stormwater	City of Venice
Elizabeth Wong, PE, Stormwater	City of North Port
Sherry Bitner, RE Financial Services	Sarasota County
Darcy Young, Manager, Sarasota Bay Estuary Program	Sarasota County
Christina Pitchford, Realtor	Realtors Assoc. of Sarasota & Manatee (RASM)
Pete Travis, Torrent Corporation	Sarasota County
Jessica Williams, Wright Flood	Sarasota County
Khansith Boupha, Jones Edmunds Associates	Sarasota County
Alan Fish, VBF Surveying	City of North Port
Bob Laura, Manager, Stormwater	Sarasota County
Don Hermey, Maintenance, Mote Marine	City of Sarasota
Neil Fleet, AMI-Bay Isles, HOA	Town of Longboat Key
Mary Foster, State Farm Insurance	City of North Port

2:00 PM – Call meeting to order – introduction/welcome participants review purpose of meeting.

Sarasota County:

- **RLAA notification letter mail-out:** Move from November to February
    - *Donna Bailey discussed moving the RLAA notification letter mail-out from November this year to February next year. With our snow-bird population, it makes better sense and will ensure most residents are here for the letter.*
- **Floody the Frog initiative:** NEST calendar; Posters in all elementary school libraries and public libraries
    - *We all reviewed the Floody the Frog draft poster and initiative. Elizabeth Wong suggested using her resources to make a PSA video. Their community has a great viral video history.*

- *Don Hermey with Mote Marine stated they have a home school program and they may want posters for their program.*
- *Des Companion suggested reaching out to the Florida House for additional exposure.*
- *Todd Kerkering suggested the Education Foundation*
- *Is there a way to create a phone app since children spend time on their phones? We will look at that possibility as we get further into the initiative.*

***All Communities*:**

- F**lood Zone vs Evacuation Level**: Messaging and artwork - City of Venice
  - *We reviewed the artwork for the flood zone vs evacuation level by Kat with the City of Venice.*
  - *Ed McCrane is working on creating a new web application for the evacuation levels.*
- **Flood and Hurricane Awareness Newsletter:** Review content - Town of Longboat Key
  - *We reviewed the newsletter James Linkogle puts out for the Town of Longboat Key with updates to their FMP. They are currently updating their FMP and will survey their citizens.*
  - *We talked about tailoring the letter to our community for next year's mail-out.*
  - *Mary suggested looking into the Post Office "Every Door Direct Mail" process for sending the letter. She believes the cost is approximately .18 per letter.*
  - *Elizabeth Wong states they send a newsletter to all of their residents at 2 x year.*
- **Flood Map & Risk Map update:** Follow up/continue discussion on plan for outreach
  - *We briefly spoke about follow up for the upcoming flood map & Risk Map updates.*
  - *They are still expected at the end of December this year, per Bob Laura.*
  - *Elizabeth Wong asked if she could get a list from us for the communities to perform a notification mail-out. Bob stated yes.*
- **Flood Insurance Promotion Discussion:** What communities already have it
  - *We spoke briefly about the Flood Insurance Promotion and how we might be able to initiate the process. Des Companion discussed bringing back cumulative substantial improvement/damage repair.*
  - *We discussed private insurance vs NFIP.*
- **Additional Flood Information Workshops**: Coordination with other communities – City of North Port
  - *Christina Pitchford states the annual meeting for RASM (Realtor Association of Sarasota & Manatee) is coming up. We can see about collaborating for a workshop.*

FOR OUR NEXT MEETING IN DECEMBER: NOAA Green Infrastructure - review and discuss at our next meeting
https://coast.noaa.gov/data/docs/digitalcoast/gi-cost-benefit.pdf

- **Darcy spoke briefly about the NOAA green infrastructure initiative.**
  - *Of interest is a program to address downspout flooding.*
  - *We will review the attached link for more information and discuss this at the next meeting.*

THE NEXT PPI COMMITTEE MEETING IS SCHEDULED FOR DECEMBER 11, 2019. An agenda and will be sent out the Friday before (December 6, 2019).

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
Committee Meeting
August 14, 2019 - 2:00 p.m. - 3:00 p.m.
Sarasota County Operations Center, BOB, Conference Room 2
1001 Sarasota Center Blvd., Sarasota, FL 34240

Sarasota County

PPI COMMITTEE SIGN-IN SHEET

MEMBER OR ALTERNATE	REPRESENTING	SIGNATURE
Donna Bailey	Public Works, Sarasota County	
Des Companion	Public Works, Sarasota County	Des Companion
Ed McCrane	Emergency Services, Sarasota County	on telephone
Pat Haire	Communications, Sarasota County	
James Linkogle	Public Works, Town of Longboat Key	
Cindy Cahill	Flood Zone Specialist, City of Sarasota	
Todd Kerkering	Emergency Services, City of Sarasota	
Kathryn Harring	Stomrwater, City of Venice	
Elizabeth Wong	Stormwater, City of North Port	
Katherine Howington	Bankers Insurance	
Sherry Bitner	RE Financial Service, Inc, Sarasota County	
Darcy Young	Sarasota Bay Estuary Program	present — forgot to sign
Neil Fleet	AMI-Bay Isles, Town of Longboat Key	
Don Hermey	Mote Marine, City of Sarasota	
Christina Pitchford	Sarasota County	
Pete Travis	Torrent Corporation, Sarasota County	present - forgot to sign
Jessica Williams	Wright Flood, Sarasota County	

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
Committee Meeting
August 14, 2019 - 2:00 p.m. - 3:00 p.m.
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Sarasota County

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Kathy Kelley Ohlrich	CCNA, Sarasota County	
Carl Shoffstall	CCNA, Sarasota County	
Dean McConville	State Farm Insurance, City of North Port	
Mary Elizabeth Petty	AAA Insurance, City of Venice	
Mark Hawkins	Hawks Nest Construction, City of Venice	
Paul Semenec	Public Works, Sarasota County	
Khansith Boupha	Jones Edmunds & Associates	
Heather Hansen	City of North Port	
Mary Foster	State Farm Insurance, City of North Port	on telephone
Alan Fish	VBF Surveying, City of North Port	
Barbara Lockhart	North Port Canal Watch Group & Environmental Advisory Board, City of North Port	
Brice Ferguson	City of Venice	
Claire Aronson	Communications, Sarasota County	
Sharon Gould	Florida Moves, Sarasota County	
Robert Laura	Public Works, Sarasota County	

4TH Meeting – December 11, 2019

The Facilitator called the meeting to order. Introductions were given and we reviewed the purpose of the meeting. We discussed the addition of a flood survey to the website; Questions on the survey were reviewed and revised; Additional outreach initiatives including video; Flood messaging on Utility bills; Annual Evaluation Report review.

Committee Members in attendance:

MEMBER	REPRESENTING
Donna Bailey, CRS Specialist and Meeting Facilitator	Sarasota County
Ed McCrane, Manager Emergency Services	Sarasota County
James Linkogle, Public Works	Town of Longboat Key
Todd Kerkering, Emergency Services	City of Sarasota
Cyndi Cahill, Stormwater	City of Sarasota
Kathryn Harring, Stormwater	City of Venice
Sherry Bitner, RE Financial Services	Sarasota County
Darcy Young, Manager, Sarasota Bay Estuary Program	Sarasota County
Christina Pitchford, Realtor	Realtors Assoc. of Sarasota & Manatee (RASM)
Pete Travis, Torrent Corporation	Sarasota County
Jessica Williams, Wright Flood	Sarasota County
Khansith Boupha, Jones Edmunds Associates	Sarasota County
Bob Laura, Manager, Stormwater	Sarasota County
Michael Dexter, Sarasota Bay Estuary Program	Sarasota County
Don Hermey, Maintenance, Mote Marine	City of Sarasota
Neil Fleet, AMI-Bay Isles, HOA	Town of Longboat Key
Thomas Sacharski, City of North Port	City of North Port
Marty Foster, State Farm Insurance	City of North Port

2:00 PM – Call meeting to order – introduction/welcome participants review purpose of meeting

SARASOTA COUNTY:

1. **Add flood survey**: Add to the website for next year's evaluation report data
    - The committee reviewed the FMP flood survey. It was suggested to add a disclaimer at the top of the survey stating the information will be used for no other purpose then tracking flood issues throughout Sarasota County.
    - The following FMP Survey question revisions were suggested:

        1: Consider not using the full address so there are no privacy issues.
        7: Include month of storm and whether or not it was a named storm
        9: Add examples of flood protection in case they don't know
        13: Also ask if NFIP or Private insurance
        14: Add the question "Was it useful?"
        15: Add the question "Was it useful?"
        16: Ask where they attended the workshop and add website link to workshops

17: Add website for evacuation levels
20: Add whether their property is affected by tides (king tides)
21: Ask what jurisdiction they live in

- It was also discussed to consider making a podcast or video for the flood zone workshops.
- The committee also discussed the preliminary RISK maps we are expecting at the end of this year. They thought it would be useful to include a link to other municipalities on the mapping page.

2. **Floody the Frog Initiative:** Posters, Costume, Events
    - The committee discussed the debut of Floody the Frog, the posters and upcoming events such as the annual Earth Day celebration at Oscar Scherer State Park in April.
3. **Flood Messaging on Utility Bills:** Scheduled March 2020 to coincide with Flood Awareness Week

    2019 Utility Bill Message for Sarasota County:
    Be prepared this year!
    Buy flood insurance for peace of mind because it only takes one storm.
    Flood Awareness Week March 11-17
    For more information, visit scgov.net (keyword flood protection
    Or call 941-861-5000
    - The committee reviewed the message from last year's utility bill. We discussed the flood messaging for Flood Awareness Week 2020. The dates will be March 9-16. The committee suggested adding Floody to the printed utility bill message.
    - It was also suggested to see if we can add a link to the website for bill pay that will allow the user to fill out a FMP flood survey.

4. **Evaluation Report Review:** Comments are due by February 12, 2020.
    - The committee briefly reviewed the evaluation report. Municipalities that haven't provided flood insurance data for the evaluation report will request that information.

HANDOUTS: Flood Survey; Evaluation Report

NEXT MEETING:
March 11, 2020 – finalize the PPI Evaluation Report

ACTION ITEMS:

- Each municipality that didn't provide flood insurance data will request it from ISO and email it to Donna Bailey to incorporate into the report.
- Comments to the report are due by February 12th

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
Committee Meeting
December 11, 2019 - 2:00 p.m. - 3:00 p.m.
Sarasota County Operations Center, BOB, Conference Room 1
1001 Sarasota Center Blvd., Sarasota, FL 34240

Sarasota County

PPI COMMITTEE SIGN-IN SHEET

MEMBER OR ALTERNATE	REPRESENTING	SIGNATURE
Donna Bailey	Public Works, Sarasota County	
Steve Hardy	Communications, Sarasota County	
Des Companion	Public Works, Sarasota County	
Ed McCrane	Emergency Services, Sarasota County	
James Linkogle	Public Works, Town of Longboat Key	
Cindy Cahill	Flood Zone Specialist, City of Sarasota	
Todd Kerkering	Emergency Services, City of Sarasota	
Kathryn Harring	Engineering, City of Venice	
Elizabeth Wong	Stormwater, City of North Port	
Katherine Howington	Bankers Insurance	
Sherry Bitner	RE Financial Service, Inc, Sarasota County	
Darcy Young	Sarasota Bay Estuary Program	
Micheal Dexter	Sarasota Bay Estuary Program	
Neil Fleet	AMI-Bay Isles, Town of Longboat Key	
Don Hermey	Mote Marine, City of Sarasota	
Christina Pitchford	Sarasota County	
Pete Travis	Torrent Corporation, Sarasota County	on phone
Jessica Williams	Wright Flood, Sarasota County	

SARASOTA COUNTY PROGRAM FOR PUBLIC INFORMATION (PPI)
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Sarasota County

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Mary Elizabeth Petty	AAA Insurance, City of Venice	
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Paul Semenec	Public Works, Sarasota County	
Khansith Boupha	Jones Edmunds & Associates	
Thomas Sacharski	City of North Port	on phone
Mary Foster	State Farm Insurance, City of North Port	on phone
Alan Fish	VBF Surveying, City of North Port	
Barbara Lockhart	North Port Canal Watch Group & Environmental Advisory Board, City of North Port	
Claire Aronson	Communications, Sarasota County	
Sharon Gould	Florida Moves, Sarasota County	
Robert Laura	Public Works, Sarasota County	Robert Laura

SARASOTA COUNTY
MULTI-JURISDICTIONAL
PROGRAM FOR PUBLIC INFORMATION

Sarasota County | October, 2018

SARASOTA COUNTY
MULTI-JURISDICTIONAL
PROGRAM FOR PUBLIC INFORMATION

Prepared for:

Sarasota County

1001 Sarasota Center Blvd.

Sarasota, Florida 34240

Prepared by:

Jones Edmunds & Associates, Inc.

7230 Kyle Court

Sarasota, Florida 34240

October, 2018

REVISIONS

Date	Revision

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APPENDIX A – PPI PROJECTS

ATTACHMENT 1 – PPI MEETING MINUTES

ATTACHMENT 2 – FLOOD WARNING AND RESPONSE MESSAGES

1 INTRODUCTION

PURPOSE

The Sarasota PPI is multi-jurisdictional and includes all areas of Sarasota County including unincorporated Sarasota, the City of Sarasota, Town of Longboat Key, the City of North Port, and the City of Venice. Sarasota County is a Gulf Coast community located on the west coast of Florida that encompasses approximately 590 square miles of land, with 37 miles of open shoreline along the Gulf of Mexico. There are more than 420 miles of rivers, streams, and canals within the county. In addition, there are 43 named lakes covering 2,091 acres, and over 70 square miles of estuaries and bays that support diverse habitats for plants and animals. The sub-tropical weather pattern in this region provides frequent extreme weather events including flooding from tropical depressions and hurricanes. Extreme and severe summer rains can cause flooding in various locations throughout the County. These events may pose a significant threat to life and property. As such, Sarasota County has a number of ongoing outreach efforts with goals to increase flood hazard awareness, encourage flood insurance coverage, protect people from the flood hazard, protect property, build responsibly, protect the natural functions of floodplains, encourage hurricane preparations, educate people about flood economics, and inform people about how sea level rise will affect the community.

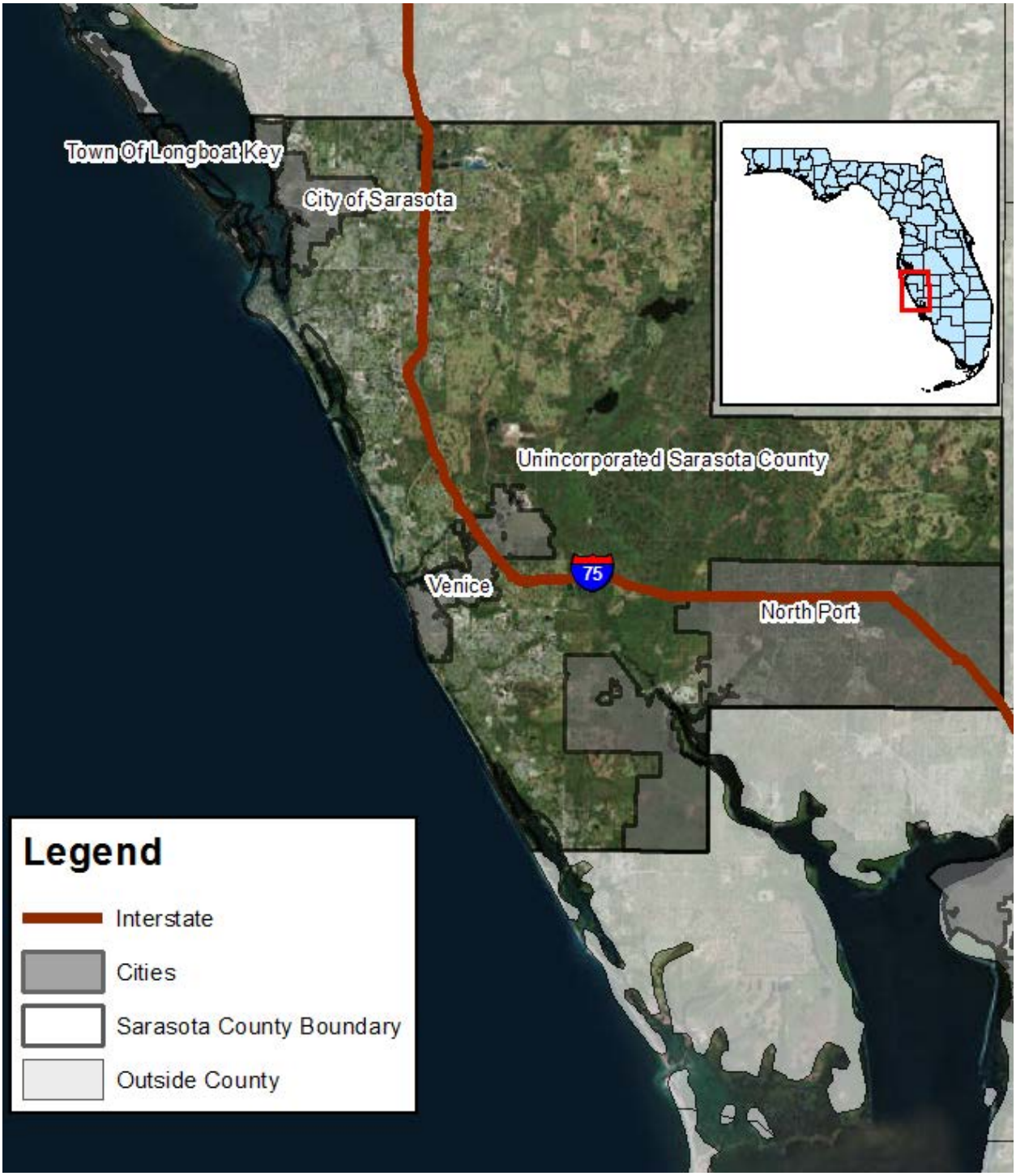
The County has been actively participating in the National Flood Insurance Program's (NFIP) Community Rating System (CRS) since 1992. The CRS program provides flood insurance premium reductions to participating communities. The reductions are based on the community's floodplain management programs, which include the public information outreach activities. The County initiated the Program for Public Information (PPI), a Federal Emergency Management Agency (FEMA) planning tool, to coordinate outreach efforts. The County's purpose in developing this plan is to improve communication and coordination of outreach efforts, and provide information about flood hazards and ways to protect people, property and natural floodplain functions to residents.

There are seven steps to prepare the PPI, which include:

1. Establish a PPI committee
2. Assess the community's public information needs, including identifying target audiences
3. Formulate outreach messages
4. Identify outreach projects to convey the messages
5. Examine other public information initiatives by the County and other agencies
6. Prepare the PPI document and adopt the PPI
7. Implement, monitor and evaluate the PPI

This PPI is part of Sarasota County's overall Floodplain Management Plan (FMP), which is an appendix to Sarasota County's Local Mitigation Strategy (LMS). The LMS is a state-approved multi-jurisdictional, multi-hazard plan that serves not only unincorporated Sarasota County, but also the City of Sarasota, City of Venice, City of North Port and the Town of Longboat Key. The geographic and jurisdictional scope of the Sarasota PPI includes all areas of Sarasota County including the City of Sarasota, Town of Longboat Key, the City of North Port, and the City of Venice (Figure 1-1). This PPI offers a structure in line with the Program for Public Information activity of the CRS.

Figure 1-1 Sarasota County



2 PLANNING COMMITTEE

The current plan was created and continues to be updated by a committee (Figure 2-1) consisting of Sarasota County staff as well as public stakeholders. The plan represents a collaboration of representatives from planning and development, emergency, public works and engineering services; public and private sector agencies; and residents. Committee members also include representation from real estate, mortgage and insurance industries, as well as neighborhood associations. Each year the PPI committee will evaluate the County's flooding issues and existing outreach projects, and will update and/or develop new projects.

Table 2-1 describes the committee members.

Table 2-1 Program for Public Information Committee Members

Government Members	Representing
Donna Bailey, dabailey@scgov.net	Floodplain Manager, Sarasota County
Ed McCrane, emccrane@scgov.net	Emer. Services, Sarasota County
Claire Aronson, caronson@scgov.net	Public Information Officer, Sarasota County
James Linkogle, jlinkogle@longboatkey.org	Floodplain Manager, Town of Longboat Key
Todd Kerkering, Richard.Kerkering@sarasotaFL.gov	Floodplain Manager, City of Sarasota
Non-Government Stakeholder Members	**Representing**
Neil Fleet, nfleet@amiwra.com (Stakeholder for Town of Longboat Key)	AMI-Bay Isles
Don Hermey, dhermey@mote.org (Stakeholder for City of Sarasota)	Mote Marine
Katherine Howington, katherine.howington@bankersinsurance.com	Bankers Insurance
Sherry Bitner, sherryb@verizon.net	Solutions First Mortgage
Darcy Young, darcy@sarasotabay.org	Sarasota Bay Estuary Program
Christina Pitchford, christina@yourhometownconsultant.com	Your Hometown
Pete Travis, pete.travis@torrentcorp.com	Torrent Corporation
Jessica Williams, jessica.williams@weareflood.com	Wright Flood
Sharon Gould, sharon.gould@floridamoves.com	Florida Moves
Kirsten Pedersen, kpedersen01@gmail.com	Citizen Stakeholder
Kathy Kelley Ohlrich, kkohlrich@gmail.com	Coalition of City Neighborhood Associations (CCNA)
Carl Shoffstall, carlS@Floridaplaystructures.com	Coalition of City Neighborhood Associations (CCNA)

The committee meets regularly to develop and update the plan. Table 2-2 describes the committee meetings. Key topics during the committee meetings include:

- Plan organization
- Identify priority areas for outreach
- Assessment of flood insurance coverage
- Determination of priority audiences for outreach activities
- Inventory and evaluation of other public information initiatives at the County as well as other agencies
- Development of outreach messages
- Review of possible outreach activities
- Plan implementation and update

Figure 2-1 PPI Committee

Table 2-2 PPI Committee Meetings

Date	Discussion Topics
May 24, 2017	Organized the committee members; discussed goals and objectives for the PPI; discussed current Community Rating System status; reviewed PPI requirements and committee responsibilities; discussed current outreach efforts and ideas.
August 15, 2017	Committee discussed target audiences and areas for outreach as well as the messages to convey; Reviewed progress of current outreach activities and provided input on new ways to reach target audiences through activities that can be initiated by the stakeholders.
November 28, 2017	Committee reviewed the PPI messages and outcomes. The committee reviewed the projects list along with the messages and made suggestions to improve certain projects. The committee also discussed the upcoming Flood Awareness Week and how the PPI can coordinate with FFMA, FDEM, FEMA, insurance agents and realtors to deliver consistent messaging.
February 13, 2018	Committee reviewed the projects list and the status of each project. Committee members will be reviewing the draft report documenting the overall PPI process.
May 14, 2018	The committee reviewed the draft PPI report, the messages for the Flood Awareness Week initiative, and discussed additional outreach project ideas.

Agendas, sign-in sheets, and meeting notes for the above meetings and subsequent meetings to update the plan are provided in the attachments that accompany this PPI (Attachment 1). PPI committee meetings are advertised in newspapers and on the County's website, and are open to the public.

3 ASSESSMENT OF PUBLIC INFORMATION NEEDS

Over 30,000 structures in Sarasota County are within FEMA's Special Flood Hazard Areas (SFHA). The County is exposed to flooding from hurricanes, tropical storms, storm surges, as well as stormwater runoff resulting from heavy rainfall. Watershed management plans cover all of Sarasota County and provide an excellent means to identify priority areas for floodplain management activities and areas where the buildings should carry flood insurance.

PRIORITY AREAS

Sarasota County is mostly flat, and due to its geographic location in the subtropics, the entire county is vulnerable to damage caused by flooding from tropical storms, hurricanes and heavy rainfall. As an example of this widespread issue, nearly 17% of paid losses for Sarasota County are for structures located outside of the SFHA. In order to identify priority areas of concern, the County has been tracking historical flooding issues using Geographic Information Systems (GIS) and is performing a Repetitive Loss Areas Analysis (RLAA) (see FMP Section 3, Historical Claims and Repetitive Loss Areas). In addition, Sarasota County has developed and maintained a comprehensive Watershed Management Plan for all watersheds within the County. These plans include stormwater models developed to describe the flooding potential for areas within the County. The results of these plans help to identify those areas that are vulnerable to flooding from small storms or less frequent, larger storms.

Areas susceptible to flood hazards include the SFHA (Figure 3-1) and the Sarasota County Community Flood Hazard Areas (CFHA) identified through the County's watershed management plans (Figure 3-2). Other areas can also be significantly impacted by storm surge as depicted by the County's hurricane evacuation zones (Figure 3-3), with Zone A being the most vulnerable. Based on the County's assessment of flood hazards, priority areas within the community include the following:

- Coastal lands – These areas have experienced flooding and erosion resulting from severe weather systems such as hurricanes, tropical storms, intense rainfall and surge. During several hurricanes, high tides and surge have caused damage to many homes, seawalls, and roads along the Sarasota coastline.

- Phillippi Creek – This creek is one of the County's major drainage systems. The system ultimately discharges into Sarasota Bay, and is therefore tidally influenced. The area draining to this system is approximately 57 square miles and represents the most populous basin in the County. This area consists of residential, commercial and agricultural land uses. The flat topography of this drainage basin makes this area highly susceptible to flooding as well as storm surge.

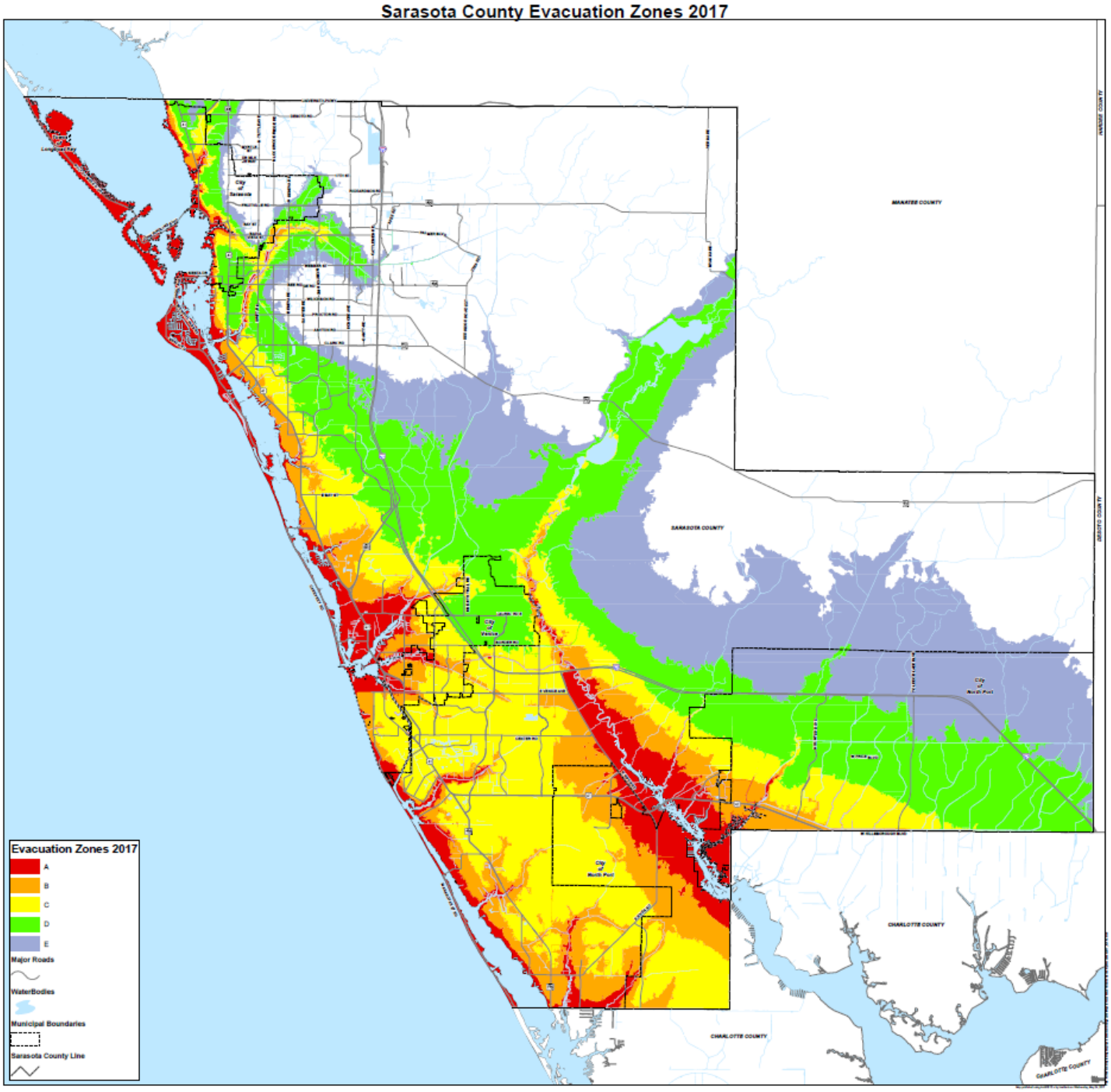
- Myakka River – This river is a major drainage system within the county. Along with its tributaries, the area that drains to this system represents approximately 75% of the lands in the county. This river ultimately discharges to the Charlotte Harbor Estuary. The area is predominantly undeveloped, providing natural floodplain functions and habitat for a diversity of wildlife and other natural functions. Although most of the area is undeveloped, there are pockets of homes adjacent to the main river that are prone to flooding. Some of the most vulnerable areas for coastal flooding and storm surge are areas along the Myakka River in the southern portion of the county.

- Localized flooding areas of concern throughout the county were also identified through the County's watershed management plans and RLAA. These areas have been delineated in GIS (see Figures 3-3 through 3-5, and Figure 3-8 of the FMP).

Figure 3-1 Sarasota County Special Flood Hazard Areas

Figure 3-2 Sarasota County Community Flood Hazard Areas

Figure 3-3 Sarasota County Hurricane Evacuation Zones



REPETITIVE LOSS AREAS

Sarasota County performed a repetitive loss areas analysis using the most recent repetitive loss properties data from FEMA, with the goal of reducing the number of repetitive loss properties (RLPs) within Sarasota County. A Repetitive Loss Structure is an NFIP-insured structure that has had at least two paid flood losses of more than $1,000 each in any 10-year period since 1978. There are currently 253 RLPs for Sarasota County. A Severe Repetitive Loss (SRL) Structure is defined as a residential property that is covered under an NFIP flood insurance policy and (a) has at least four NFIP claim payments (including building and contents) over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or (b) at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. For both (a) and (b) above, at least two of the referenced claims must have occurred within any 10-year period, and must be more than 10 days apart. Sarasota County has twenty SRL properties. Eleven of these properties have since been mitigated either by demolition or by providing flood protection.

Sarasota County is deemed a Class C community in the Community Rating System program and is required to have a floodplain management plan or area analyses for its repetitive loss areas.

Stormwater Utility and the CRS Coordinator adhere to the data pertaining to SRLs and RLPs as protected under the Federal Privacy Act of 1974.

Sarasota County mapped the RLPs and evaluated nearby properties with the same potential for flooding. The repetitive loss areas include the properties on the repetitive loss list and all nearby properties that may experience similar flooding conditions. The repetitive loss areas were delineated based on compilation of the following data:

- Repetitive loss properties and data (e.g., number of losses and associated cost).
- LiDAR (elevation data, land slope).
- Conveyance system components (e.g., location and size of stormwater pipes, ditches, storage basins, work requests).
- Floodplains (e.g., WMP studies and FIRMs).
- Storm surge areas.
- Streetview.
- Historical flooding complaints.

Figure 3-4 illustrates the repetitive loss areas identified by the analysis. Flooding occurrences in these areas were due to significant storm events combined with structures located in or around water bodies. The terrain characteristics with respect to these structures can be described as low-lying areas with a high depth to the water table. Table 3-1 describes the causes of flooding for these repetitive loss areas as they relate to significant storms.

Sarasota County continually evaluates the repetitive loss areas, with the most recent evaluation and major update conducted in 2016/2017. The update consisted of a desktop evaluation of existing and potential new repetitive loss areas, and a field investigation of the properties.

Figure 3-4 Repetitive Loss Areas Analysis

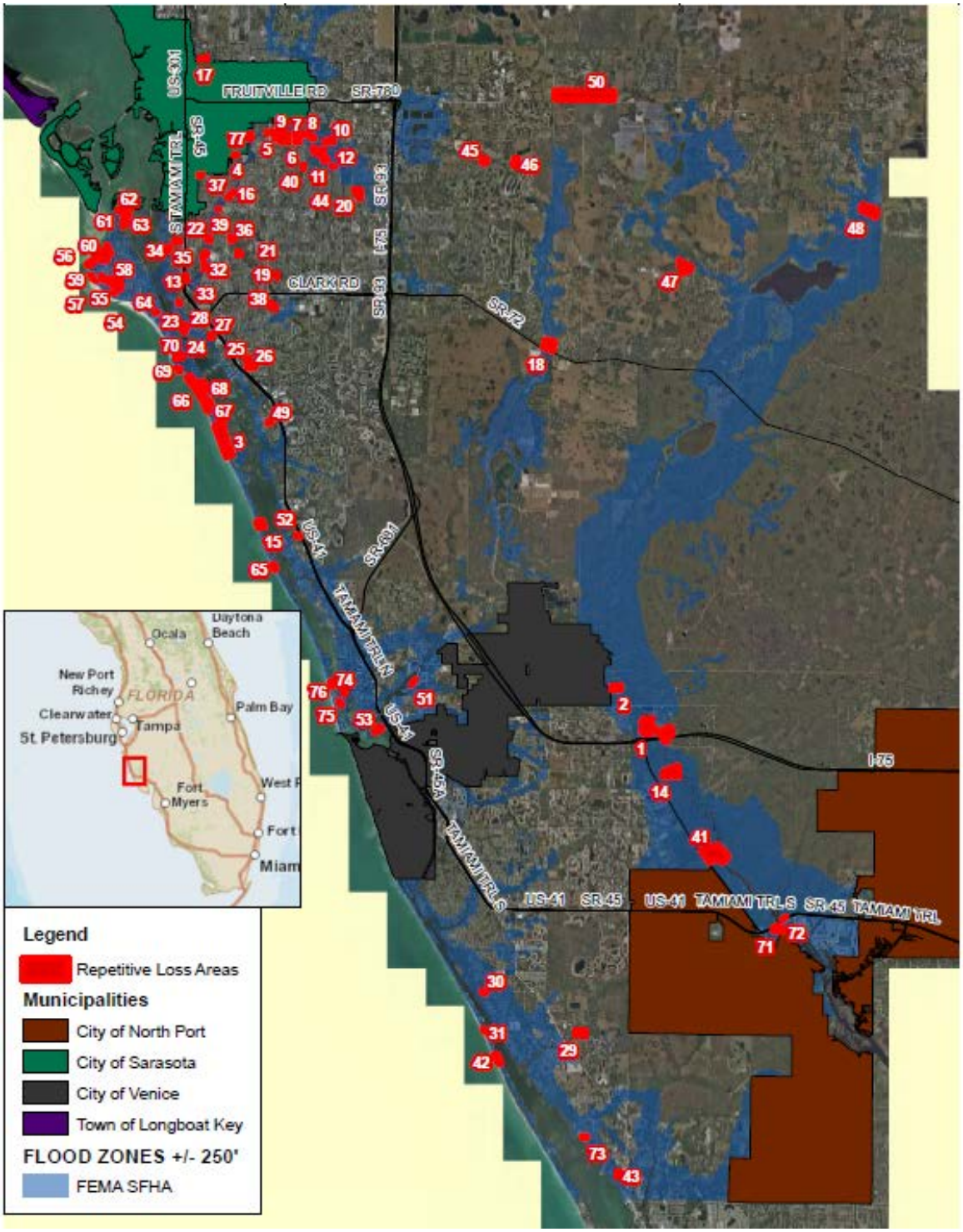


Table 3-1 Causes of Repetitive Flooding

Repetitive Loss Area Map ID	Building Count	Causes of Repetitive Flooding
1	61	Hurricane Gabrielle (2001): 5 to 10 inches of rainfall, storm surge, and wave action. Storms April through July (2003): 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County. Tropical Depression One (1992): Excess of 20 inches of rainfall.
2	49	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Tropical Depression One: Excess of 20 inches of rainfall.
3	171	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Tropical Storm Josephine
4	15	Tropical Depression One: Excess of 20 inches of rainfall.
5	42	Tropical Depression One: Excess of 20 inches of rainfall.
6	257	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County.
7	14	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County.
8	24	Tropical Depression One: Excess of 20 inches of rainfall.
9	11	Tropical Depression One: Excess of 20 inches of rainfall.
10	19	Tropical Depression One: Excess of 20 inches of rainfall.
11	38	Tropical Depression One: Excess of 20 inches of rainfall.
12	24	Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Dean (1995): 9 to 11 inches of rainfall.
13	13	Subtropical Storm One (1982): Approximately 6 inches of rainfall, storm surge, and wave action.
14	36	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County.
15	21	Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action.
16	14	Tropical Depression One: Excess of 20 inches of rainfall.
17	13	Tropical Depression One: Excess of 20 inches of rainfall.
18	13	Tropical Storm Dean: 9 to 11 inches of rainfall.
19	14	Tropical Storm Dean: 9 to 11 inches of rainfall.
20	108	Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Dean: 9 to 11 inches of rainfall.
21	23	Tropical Storm Dean: 9 to 11 inches of rainfall.
22	14	Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Dean: 9 to 11 inches of rainfall.
23	13	Tropical Storm Dean: 9 to 11 inches of rainfall.
24	8	Tropical Depression One: Excess of 20 inches of rainfall.
25	9	Tropical Depression One: Excess of 20 inches of rainfall.
26	50	Tropical Depression One: Excess of 20 inches of rainfall.
27	9	Tropical Depression One: Excess of 20 inches of rainfall.

Repetitive Loss Area Map ID	Building Count	Causes of Repetitive Flooding
28	12	Tropical Storm Dean: 9 to 11 inches of rainfall.
29	12	
30	11	Tropical Depression One: Excess of 20 inches of rainfall.
31	10	
32	12	Tropical Storm Dean: 9 to 11 inches of rainfall.
33	18	Tropical Storm Dean: 9 to 11 inches of rainfall.
34	15	Tropical Depression One: Excess of 20 inches of rainfall.
35	21	Tropical Storm Dean: 9 to 11 inches of rainfall.
36	14	Tropical Storm Dean: 9 to 11 inches of rainfall.
37	15	Tropical Storm Dean: 9 to 11 inches of rainfall.
38	17	Tropical Storm Dean: 9 to 11 inches of rainfall.
39	5	Tropical Depression One: Excess of 20 inches of rainfall.
40	18	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County.
41	658	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County.
42	31	
43	21	
44	12	Tropical Depression One: Excess of 20 inches of rainfall.
45	16	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action.
46	15	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action.
47	14	
48	10	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County.
49	16	Tropical Storm Dean: 9 to 11 inches of rainfall.
50	60	
51	16	Tropical Depression One: Excess of 20 inches of rainfall.
52	16	Tropical Storm Dean: 9 to 11 inches of rainfall.
53	28	Tropical Depression One: Excess of 20 inches of rainfall.
54	10	Hurricane Elena (1985): Approximately 3 inches of rainfall, storm surge, and wave action.
55	156	Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action. Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action. Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Tropical Storm Dean: 9 to 11 inches of rainfall. Tropical Storm Josephine (1996)
56	8	Tropical Depression One: Excess of 20 inches of rainfall.
57	16	Tropical Depression One: Excess of 20 inches of rainfall.
58	17	Tropical Depression One: Excess of 20 inches of rainfall.
59	27	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action.

Repetitive Loss Area Map ID	Building Count	Causes of Repetitive Flooding
60	111	Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Dean: 9 to 11 inches of rainfall.
61	36	Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action.
62	11	Tropical Storm Dean: 9 to 11 inches of rainfall.
63	40	Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action. Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action. Tropical Storm Dean: 9 to 11 inches of rainfall. Tropical Storm Josephine
64	10	Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action. Tropical Depression One: Excess of 20 inches of rainfall.
65	17	Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action.
66	54	Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action. Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action. Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Josephine
67	13	Tropical Depression One: Excess of 20 inches of rainfall. Un-named storm (1997): 10 inches of rainfall.
68	33	Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action.
69	11	Subtropical Storm One: Approximately 6 inches of rainfall, storm surge, and wave action.
70	51	Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Dean: 9 to 11 inches of rainfall.
71	53	Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action. Hurricane Frances (2004): County experienced four back-to-back hurricanes between August and September 2004. Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Tropical Storm Josephine Tropical Storm Keith (1988): 1 to 3 inches of rainfall, storm surge, and wave action.
72	4	Hurricane Elena: Approximately 3 inches of rainfall, storm surge, and wave action. Hurricane Frances: County experienced four back-to-back hurricanes between August and September 2004. Hurricane Gabrielle: 5 to 10 inches of rainfall, storm surge, and wave action. Tropical Storm Josephine Tropical Storm Keith: 1 to 3 inches of rainfall, storm surge, and wave action.

Repetitive Loss Area Map ID	Building Count	Causes of Repetitive Flooding
73	16	Tropical Depression One: Excess of 20 inches of rainfall.
74	17	Tropical Depression One: Excess of 20 inches of rainfall.
75	14	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County. Tropical Storm Dean: 9 to 11 inches of rainfall.
76	19	Storms April through July: 8 to 10 inches of rainfall. Waters did not recede for over 30 days in some parts of the County. Tropical Storm Dean: 9 to 11 inches of rainfall.
77	27	Tropical Depression One: Excess of 20 inches of rainfall. Tropical Storm Dean: 9 to 11 inches of rainfall.

FLOOD INSURANCE COVERAGE ASSESSMENT

There are approximately 40,000 policies currently in-force for Sarasota County. About 24,000 of those policies are for structures within the SFHA, indicating that there is a significant number of homeowners that opted to carry flood insurance even though they may not be required to. However, there are approximately 30,000 structures located in the SFHA. The larger number of structures in the SFHA as compared to the number of policies in the SFHA may indicate that there are many homes that do not have a federally backed mortgage and are not required to carry a NFIP flood insurance policy. It should be noted that policies from private flood insurance companies are not reported to the County. Overall, most of the policies in force are for single-family homes (26,146 policies). Most of the claims come from this group, representing approximately $21.9 million in paid losses from 1,799 claims. Overall, there have been approximately $25.6 million in paid losses for the County. Table 3-2 and Table 3-3 describe the policy and claim statistics for Sarasota County.

Table 3-2 Policy and Claim Statistics for Pre-FIRM Structures

Zone	Policies*	Number of Closed Paid Losses*	Closed Paid Losses*
A01-30, AE	9,644	1,069	$11,740,220
A	242	207	$3,425,560
AO	0	0	$0
AH	0	0	$0
AR	0	0	$0
A99	0	0	$0
V01-30, VE	528	173	$2,137,250
V01-30, VE	0	0	$0
D	2	42	$405,490
B, C, X	2,548	169	$2,222,122
Total	**12,964**	**1,660**	**$19,930,642**

*As of 3/31/2017

Table 3-3 Policy and Claim Statistics for Post-FIRM Structures

Zone	Policies*	Number of Closed Paid Losses*	Closed Paid Losses*
A01-30, AE	12,392	211	$1,894,063
A	789	199	$1,984,073
AO	0	0	$0
AH	0	0	$0
AR	0	0	$0
A99	0	0	$0
V01-30, VE	301	11	$121,673
V01-30, VE	0	0	$0
D	36	2	$77,032
B, C, X	13,503	125	$1,609,642
Total	**27021**	**548**	**$5,686,483**

*As of 3/31/2017

The County maintains insurance for facilities that it owns, including flood insurance for facilities that are shown to be at risk for flooding.

As described by Table 3-4, there are approximately forty thousand policies compared to the approximately thirty-seven thousand structures that are located in the SFHA (see Section 6 for an analysis of the residential and commercial buildings located in the SFHA). This high percentage is thanks to the outreach efforts and regular flood information workshops that the County conducts every year. As illustrated in Figure 3-5, the flood insurance policies cover more than just buildings along the coastal areas, but also cover much of the inland areas. Sarasota County is proactive in identifying areas with flooding issues by conducting watershed management plans throughout the County, and by conducting public meetings and workshops to educate residents about their risks.

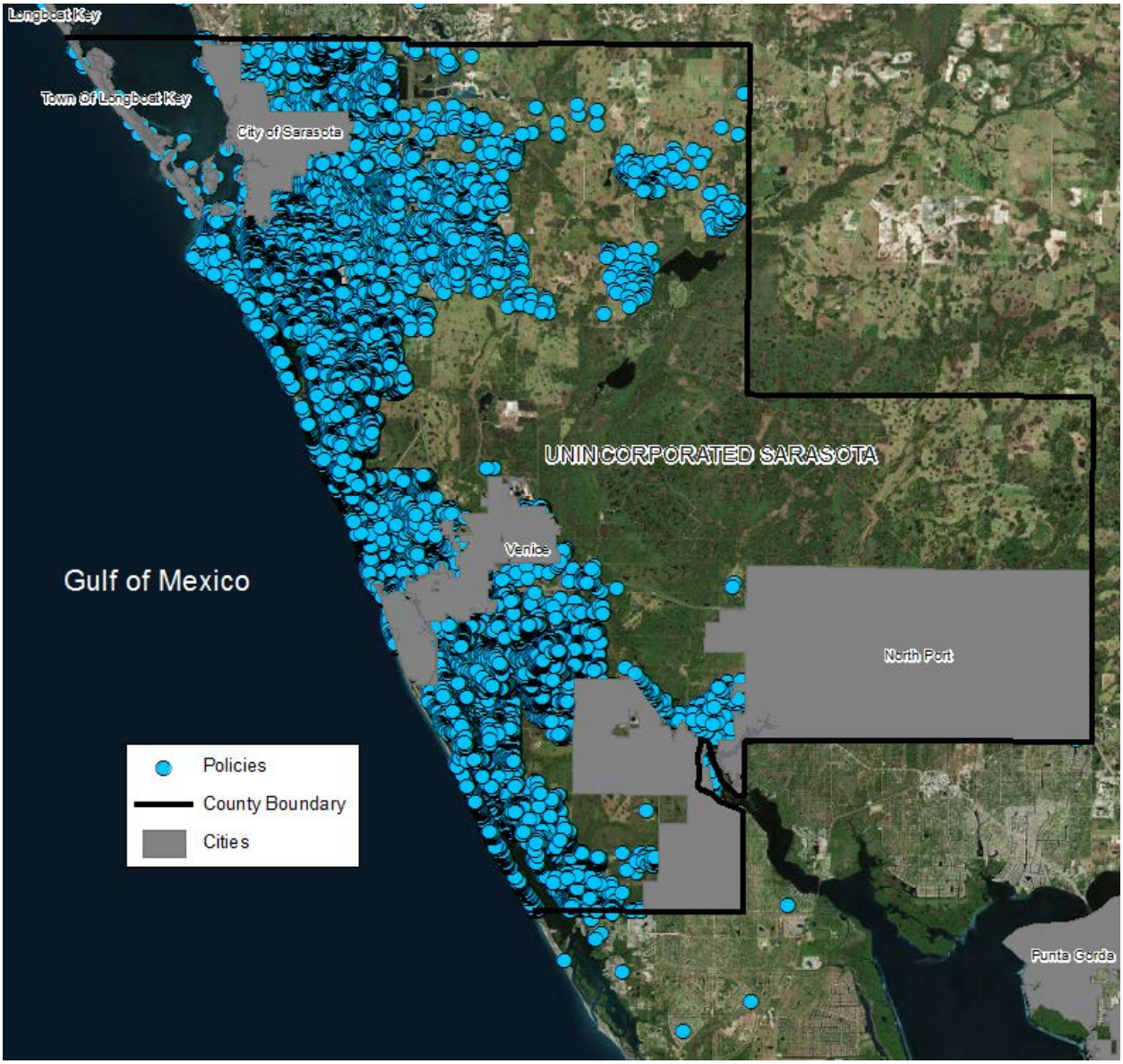
Structures in the community are at risk for flooding whether or not structures are located within a designated SFHA. As illustrated by Table 3-2 and Table 3-3, nearly 17% of paid losses for Sarasota County are for structures outside of the SFHA. Overall, most of the policies in force are for single-family homes (26,146 policies). Most of the claims come from this group, representing approximately $21.9 million in paid losses from 1,799 claims.

Table 3-4 Policy and Claim Statistics by Occupancy Type

Occupancy Type	Policies*	Closed Paid Losses*
Single-Family	26,146	$21,881,591
2-4 Family	2,625	$1,091,672
All Other Residential	10,310	$1,210,115
Non-Residential	904	$1,441,914
Total	**39,985**	**$25,625,292**

*As of 3/31/2017

Figure 3-5 Flood Insurance Policies in Unincorporated Sarasota County



Sarasota County geocoded the historical claims data (Figure 3-6). This data was overlaid with other data, such as topographic information, FEMA flood zones, historical flooding complaints, and other information to identify areas within the County that are at risk for flooding. The combination of policies and claims information that the County geocoded can help the County determine, not only where flood risk exists, but also where residents do not currently have flood insurance and are in high risk areas. Section 6 illustrates the use of this data to determine homes that the County can target for outreach.

The county is in the process of improving the information that is currently in the flood insurance coverage assessment to delineate additional target audiences that will benefit from outreach relating to flood insurance. These may include homes in the SFHA that may not have flood insurance in place, homes located in the CFHA, or additional homes in areas identified to have historical flooding complaints. **A review of damaged buildings / historical claims indicate that there are areas that have potential to improve flood insurance coverage.** This data provided valuable information about which structures had flood insurance claims, as well as whether structures in the area had NFIP flood insurance policies in place or not. Figures Figure 3-7 through Figure 3-12 illustrate examples of areas that may benefit from additional outreach regarding flood insurance. These areas are in or close to floodplains and contain buildings that may not carry flood insurance. Some of these areas had previous flood insurance claims and therefore, there exists a real risk of flooding for buildings in the same area without flood insurance. Using this information the County can determine which addresses may be at risk of flooding and may not have flood insurance.

Figure 3-6 Flood Insurance Claims in Unincorporated Sarasota County

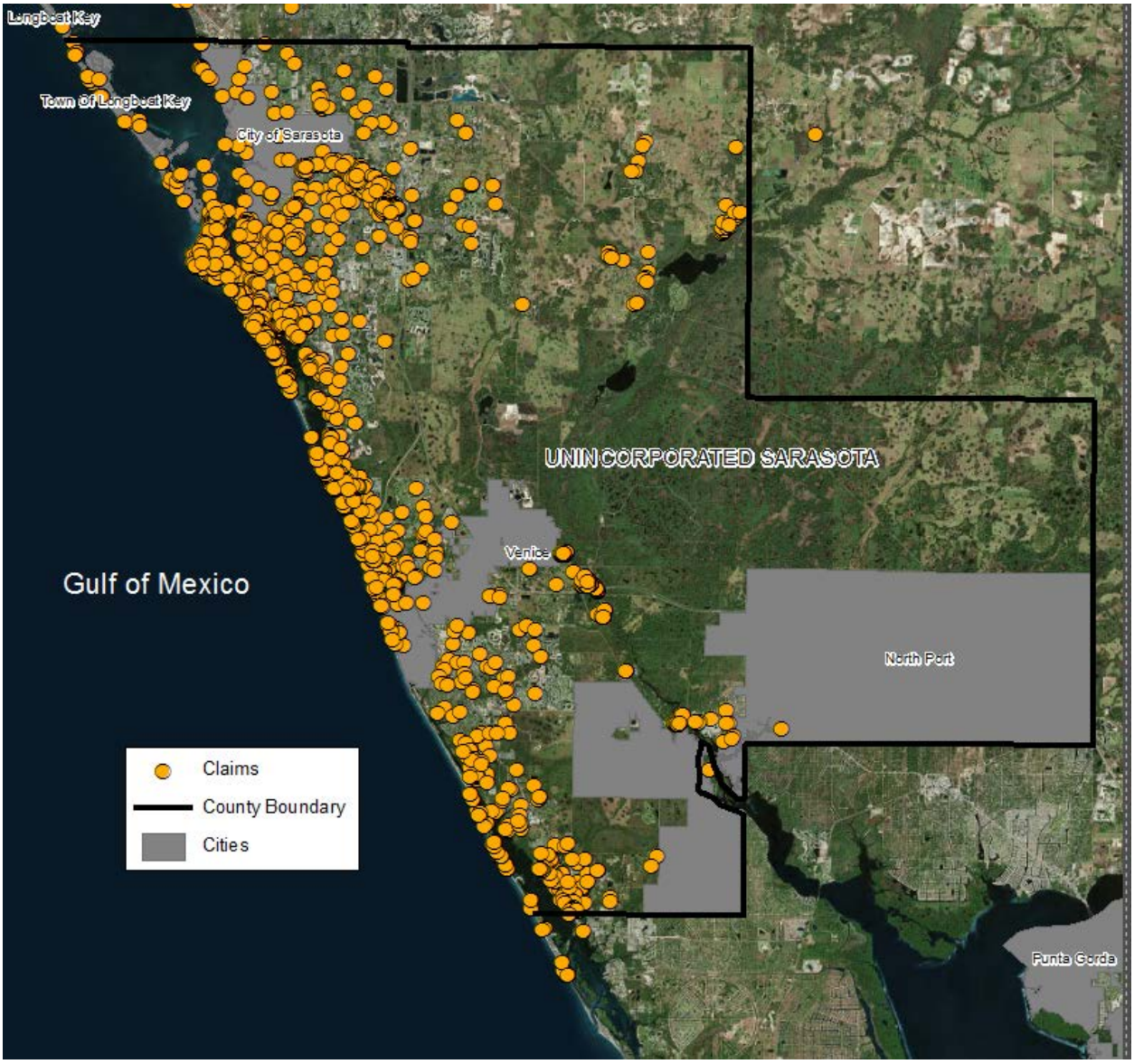


Figure 3-7 Potential Flood Insurance Coverage Improvement for Buildings - Area 1

Figure 3-8 Potential Flood Insurance Coverage Improvement for Buildings - Area 2

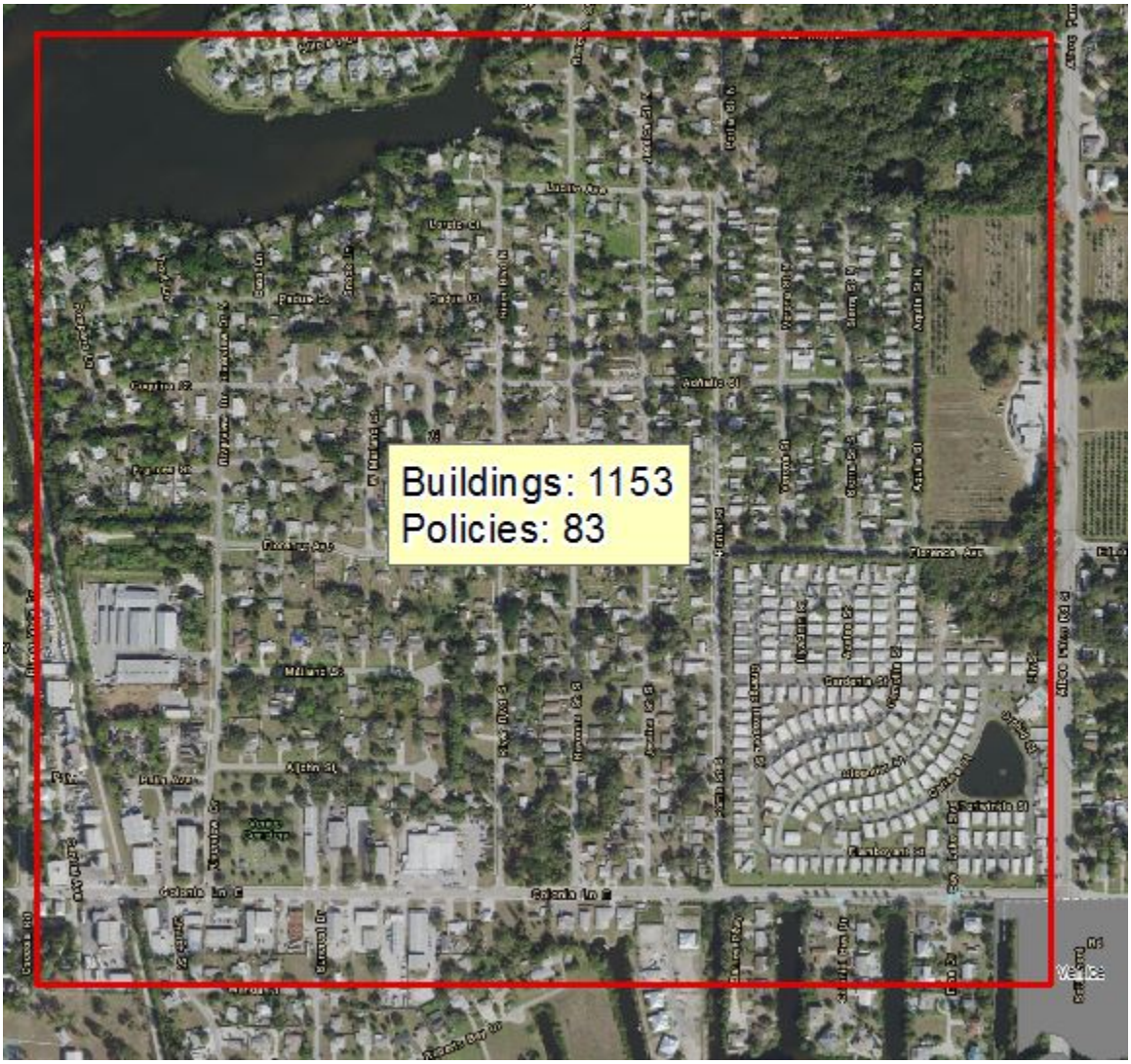


Figure 3-9 Potential Flood Insurance Coverage Improvement for Buildings - Area 3

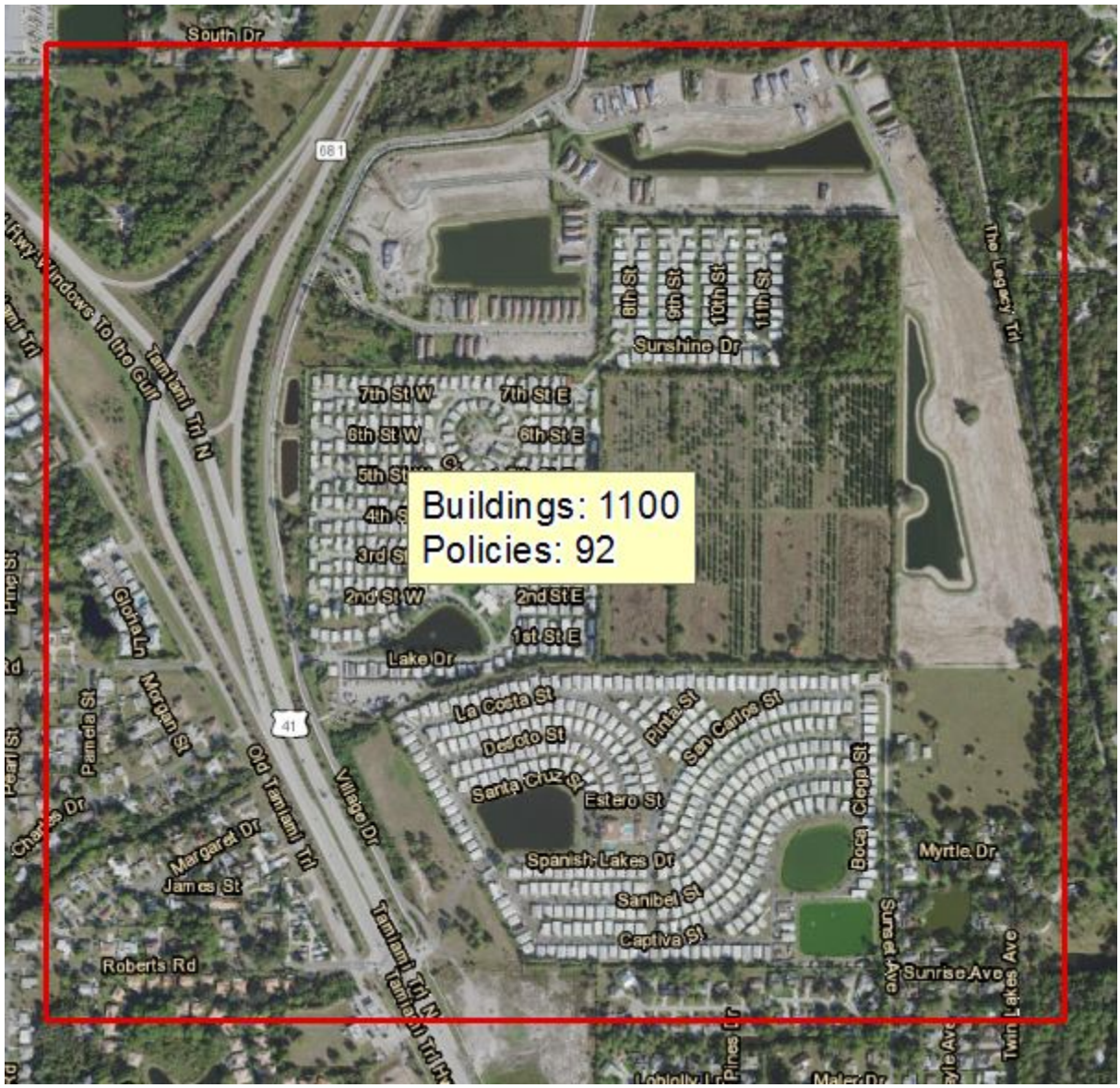


Figure 3-10 Potential Flood Insurance Coverage Improvement for Buildings - Area 4

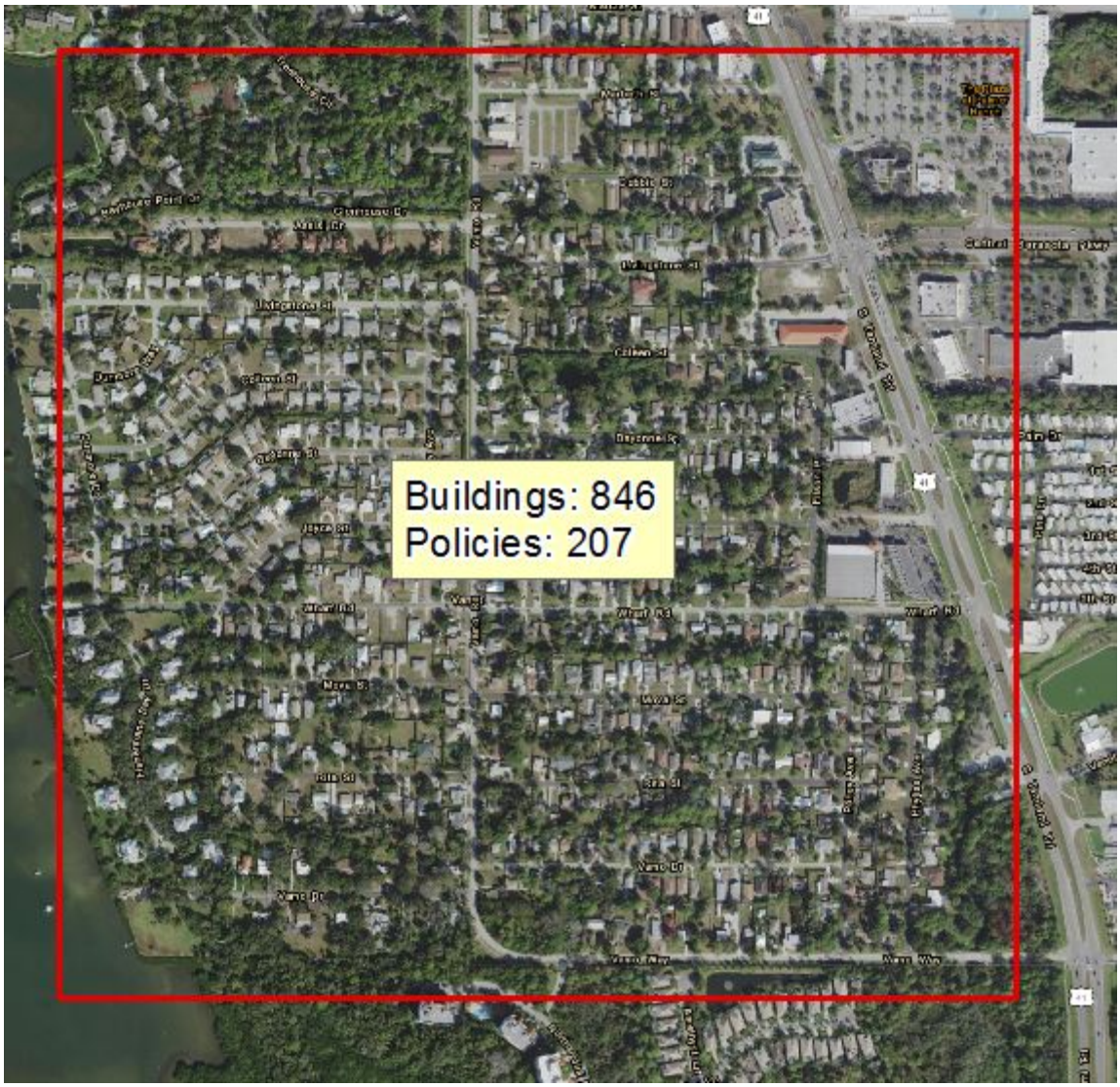


Figure 3-11 Potential Flood Insurance Coverage Improvement for Buildings - Area 5

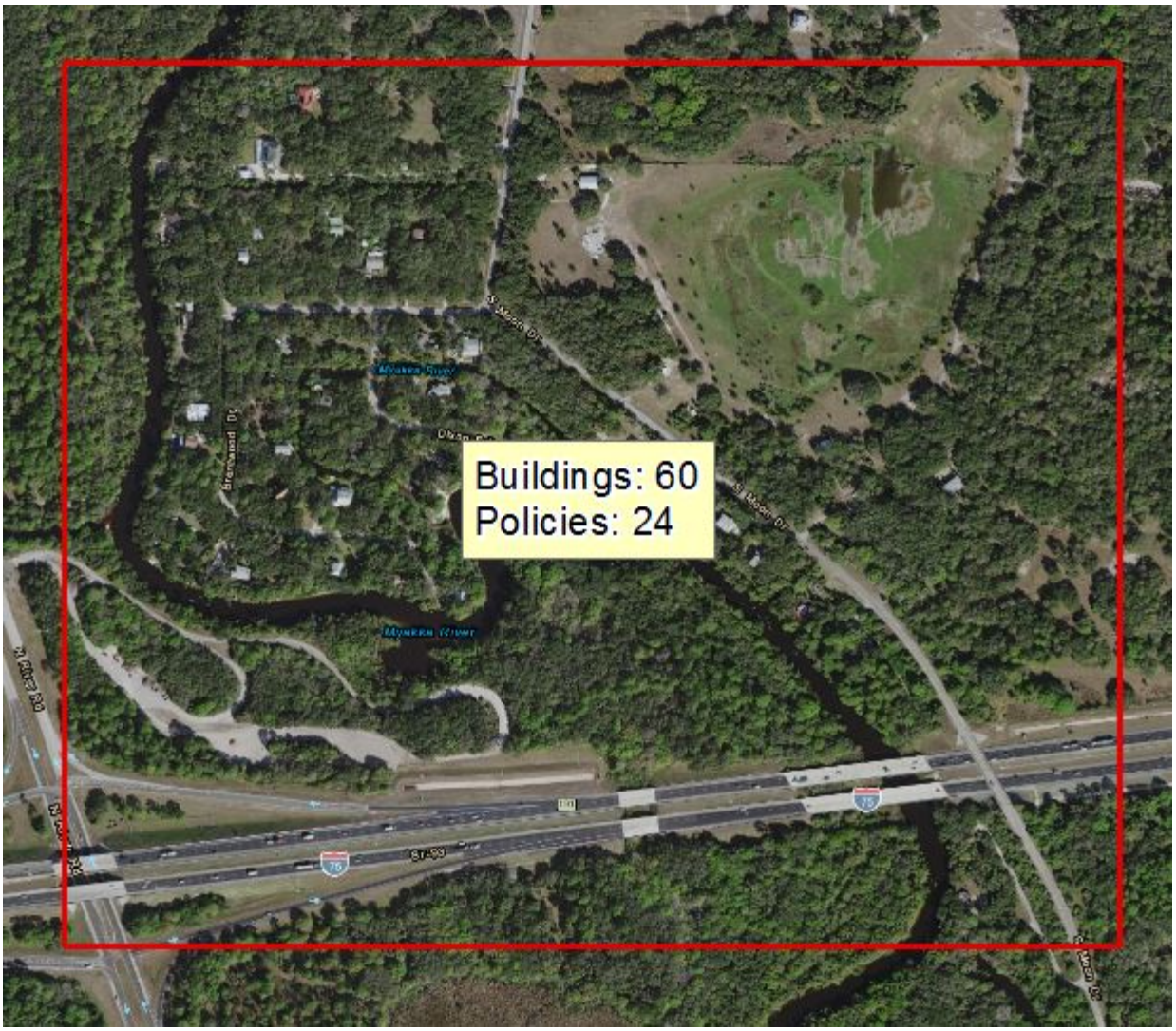


Figure 3-12 Potential Flood Insurance Coverage Improvement for Buildings - Area 6

CURRENT PUBLIC INFORMATION EFFORTS

The PPI committee discussed ongoing efforts to prepare, implement and monitor a range of flood related public information activities. The PPI committee reviewed these projects to assess potential revisions to improve the messaging and its reach to the intended audiences. These activities included efforts initiated by the County as well as other agencies. These projects are described below.

FLOOD FLYER

The Communications Department developed a flood flyer to highlight the CRS topics. The flyer was developed with the objective of remaining simple, providing concise messaging and showing available resources and contact information. The flood flyer was previously advertised in the phone book, the Herald Tribune, and sent to municipalities within Sarasota County. Subjects covered in the flyer include flood risk information, building responsibly, flood insurance, flood safety, flood protection, and natural floodplain functions. The flood flyer was also translated into Spanish.

PROPERTY APPRAISER RECORDS

Committee members worked with the Property Appraiser to add flood information on the parcel records online. Users are now able to view their FIRM information, such as FIRM panel, Flood Zone, Floodway, Base Flood Elevation as well as other flood hazard areas identified through the County's watershed management plans. Property records also provide a link to the County's Flood Zone Locator website as well as contact information for the municipality in which the parcel is located.

FLOOD INFORMATION WORKSHOPS

Sarasota County currently conducts regular workshops throughout the County. These are general presentations with Q&A sessions for the public. The committee suggested that new locations should be identified for next year. In addition, there may be an opportunity for this committee to develop and incorporate more CRS messages. Subjects covered in the workshops include flood risk information and flood insurance.

PARKS FLYER

The County maintains over 140 parks throughout the county. They manage these natural resources to preserve the beneficial functions for the community, including natural floodplain functions, wildlife protection, water quality improvement and recreation. A listing of the County's parks is included in the Section 7 of the FMP (Natural Floodplain Functions). Flyers distributed for the County parks will contain flood-related information and messages. Subjects covered in the flyer include natural floodplain functions.

Flood Protection Website

Sarasota County developed a flood protection website to provide valuable information to the public about their flood risk, ways to protect themselves, flood insurance, and resources that are available at the County. The website was recently revised to be consistent with the CRS priority subjects, including knowing your flood risk, building responsibly, buying flood insurance, flood safety, flood protection, and natural floodplain functions.

Flood Zone Locator Website

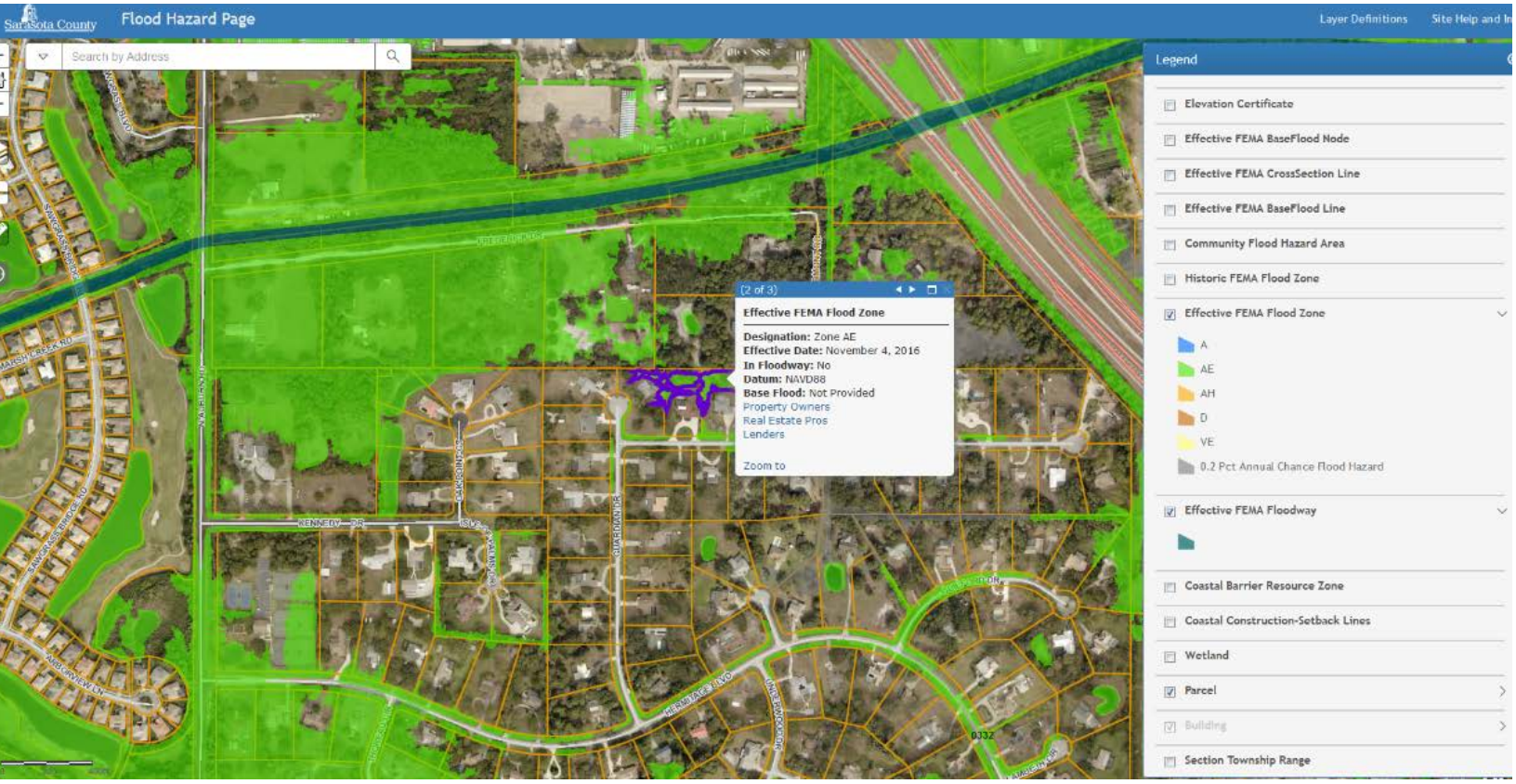
Sarasota County recently developed a web map application to provide flood risk information to users (Figure 3-13). The web map application allows users to search for their property using the map or by entering their address. The service provides the following information:

- Effective FEMA flood information (flood zone, floodway, FIRM panel, base flood elevation, etc.)
- Community Flood Hazard Areas –Flood risk areas identified by the watershed management plans
- Wetlands
- Parcel information
- Elevation certificates

Flood Information Call Center

Sarasota County has a call center that serves as a clearinghouse for public inquiry, including questions about flood risk. Staff provides inquirers with FIRM information as well as direct callers to the right resources at the County, such as building officials, engineering or the CRS coordinator for flood insurance information.

Figure 3-13Sarasota County Online Flood Map



Real Estate Disclosure

The Florida Realtors organization has developed a Flood Insurance Notice notifying buyers about potential insurance requirements and encouraging them to consult with a flood insurance carrier to learn more about the flood risk for the property, availability of flood insurance, and current and future anticipated cost of flood insurance. Subjects covered in the notice include flood insurance.

Another initiative in this region is a project by Pinellas County who recently developed a real estate disclosure brochure and training program that informs potential buyers about what flood zone the property is in and if flood insurance is required. Realtor workshops were developed to train agents on using the online flood map information service and provide valuable information to their buyers. This same concept can be used to augment the information and services that the Florida Realtors organization already provides to their customers within Sarasota County and surrounding communities. Subjects covered in the brochure and training program include flood risk information, building responsibly, flood insurance, and flood protection.

Coalition of City Neighborhood Associations

There is an annual presentation, usually in early May, given by the County's Emergency Operations Center. This year, notices were sent out to 43 neighborhood associations. Ed McCrane, who is a member of this PPI committee, usually presents on topics of emergency preparedness and can include flood-related topics in future presentations. Subjects covered in the presentations include flood safety and emergency preparedness.

4 TARGET AUDIENCES

The PPI committee identified target audiences, including residents and businesses for which outreach projects can be developed. Over 30,000 buildings are currently in the SFHA and more if we account for the flood risks identified through the County's watershed management plans and Repetitive Loss Areas Analysis. Residents and businesses in these areas should be aware of the flood risks and insurance options. In addition to the general residents identified for at-risk areas, each of the stakeholders also identified specific audiences they had direct contact with, and can provide valuable assistance for reaching those audiences. Table 4-1 describes the target audiences.

Table 4-1 Target Audiences

Audience		Description
A	Residents and businesses in Repetitive Loss Areas	This audience should understand their surroundings and the likelihood of flood and insurance is strongly recommended.
B	Residents and businesses in the Special Flood Hazard Area	This audience should become aware of their high risk and insurance is strongly recommended and often required.
C	Residents and businesses in flood-prone areas	This audience should become aware of their high risk and insurance is strongly recommended.
D	Residents and businesses in the storm surge area	This audience should become aware of their high risk and insurance is strongly recommended.
E	Residents and businesses in moderate to low risk flood areas (Shaded X zones)	This audience should understand that although they are not in high-risk areas, there is still a potential to flood and insurance is recommended. These areas submit over 20% of NFIP claims and receive one-third of disaster assistance for flooding.
F	Community Association Institute (SWFL Chapter)	Membership includes condominium, cooperative, and homeowner associations.
G	Home Owners Associations	Associations can educate their constituents about flood risk, building properly and insurance.
H	Mobile Homes Associations	Associations can educate their constituents about flood risk and insurance.
I	Condo Owners Associations	Associations can educate their constituents about flood risk and insurance.
J	Real Estate Professionals	These professionals are in contact with clients that are purchasing or renting properties. They will benefit from flood related outreach, and may relay information to their clients.
K	Real Estate Buyers	Individuals purchasing or renting property should be made aware of their flood risk and insurance options.
L	Insurance Agents	These professionals are in contact with clients that are purchasing or renting properties. They will benefit from flood related outreach, and may relay information to their clients.
M	Lenders	These professionals are in contact with clients that are purchasing or renting properties. They will benefit from flood related outreach, and may relay information to their clients.
N	Mortgage Brokers Association	These professionals have direct contact with homebuyers.

O	Speakers of Other Languages	Informational material should be made available in languages other than English.
P	Building Contractors and Developers	This audience should be kept apprised of floodplain regulations and available County Services. They are also in the position to communicate information about building with flood risk in mind to their clients.
Q	Surveyors	Surveyors need to receive updated information about elevation certificates.
R	Architects and/or Designers	Professions responsible for design of homes should be aware of flood risks and insurance requirements.
S	County leaders and/or Commissioners; Barrier Island Elected Officials	Leaders that can champion the outreach efforts and may have direct input for funding projects.
T	Youth Ages K-8	This sector provides educational opportunities about flood risks.

5 MESSAGES AND OUTCOMES

The PPI committee developed key messages and intended outcomes consistent with the CRS topics, as well as additional specific messages tailored to certain audiences. Topics included the six themes that recur throughout the CRS manual: know your flood hazard; insure your property for your flood hazard; protect people from the hazard; protect your property from the hazard; build responsibly; and protect natural floodplain functions. The committee also identified additional topics that are specific to the needs of the communities in this region. These additional topics include hurricane preparedness, flood economics, and sea level rise.

Specific objectives were also developed for certain audiences. These objectives were identified as unmet needs by the stakeholders as they relate to their respective professions. The objectives address issues often encountered during their interactions with clients, organizations, consumers and others. Specific objectives included:

- Architects and designers – Educate buyers about designs that will not increase insurance costs.
- County leaders and/or Commissioners; Barrier Island Elected Officials – Educate this audience about flood risks and encourage flood insurance; Encourage consistent and programmatic approach to educate residents about flood risks.
- Home builders/developers –Think about long-term costs - why build low instead of high?; Educate this audience about code requirements (including zoning) vs FEMA requirements vs risk; Look at rating class options.
- Community Association Institute (West Florida Chapter) – Provide information about flood risk topics and resources available at the county.
- Mortgage brokers association – Provide information about flood risk topics and resources available at the county.
- Chamber of Commerce – Provide information about flood risk topics and resources available at the county.
- Schools – Provide education materials about flood risk.
- Consumers – Educate consumers to ask the right questions of builders. Know that savings may offset extra construction costs; Do not let flood insurance policy lapse; Understand map changes before they happen and save; Risk is not ID'ed on a map; Know the sources of information related to flood risk, including existing highwater marks.
- Homebuyers and realtors – Educate buyers and realtors to ask or relay information about flood risk.
- Homeowners associations – Use Email lists to relay information about flood risk topics.
- Utility customers – Provide information about flood risk topics and available resources in utility bill inserts. Information should be short and concise.
- Mobile homes and condominium owners associations – Often, these audiences are at increased risk. Email and/or provide informational brochures to educate these audiences about flood risk topics.

Guided by the topics and objectives above, the PPI committee developed the following key messages and outcomes.

TOPIC 1: KNOW YOUR FLOOD HAZARD

In Sarasota County, flooding and other drainage problems can result after several inches of rain in a short period of time or after several days of continued rain. Certain areas within Sarasota County are classified as high flood risk areas. In addition to the flood risk areas identified on the FEMA maps, Sarasota County has also delineated other areas that are at risk for flooding that were identified through their watershed management plans. Residents and property owners need to be aware of the flood risks in their area.

KEY MESSAGES

"Find out what flood risks are in your area."

OUTCOMES

- Better prepared and informed residents and businesses.
- Informed property owners and buyers.

TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD

Property owners in Sarasota County should take measures to protect their investment, including purchasing flood insurance. For some homeowners, flood insurance may be required if the property is located in a Special Flood Hazard Area (SFHA) and they have a government-backed loan such as a Federal Housing Administration (FHA) or Department of Veterans Affairs (VA) loan. Property owners should also be aware that even though their property may not be in a SFHA, it may still be subject to flooding and that most homeowner's insurance do not cover flood. Homeowners who have flood insurance often recover quicker from a flooding event than those without flood insurance.

KEY MESSAGES

"Purchase flood insurance for your home or business." Even if your home is not located in a designated SFHA that may require flood insurance, you may still be at risk for flooding.

"Purchase flood insurance for your rental." Most renter's insurance policies do not cover damage caused by floods. Flood insurance is available for your valuables even if you rent.

OUTCOMES

- Increased number of flood insurance policies.
- Faster recovery from flooding event.

TOPIC 3: PROTECT PEOPLE FROM FLOOD HAZARD

Floods can occur quickly and people should be prepared. There are certain steps that people can take before, during and after a storm that will help protect themselves and their family, and minimize damage to their properties. Several resources can help them prepare, including preparation guides and automated alert systems.

KEY MESSAGES

"Turn around, don't drown." Avoid areas already flooded, especially if the water is flowing fast. Do not attempt to cross flowing streams or flooded roadways.

"Stay connected." Sign up for the County's CodeRED notification system, social media and be aware of the local news channel and radio stations for weather related emergencies.

"Get a plan." Make a plan for emergencies involving floods, hurricanes and other natural disasters. Plan for evacuation routes, locations for high ground, food, water, shelter, and emergency supplies. Include preparations for pets.

OUTCOMES

- Save lives.

TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD

Approximately 30,000 structures in Sarasota County were built before there were flood regulations or flood maps (prior to December 1971, these structures are called "Pre-FIRM"). If they are in a high-risk flood zone, these structures are the most vulnerable to flood risks. There are certain measures that can be taken when constructing or improving a home to reduce the risk of flood damage. They include modifications to the structures themselves as well as other types of activities that do not include the structure, such as keeping drainage ditches clean and inlets clear of debris.

KEY MESSAGES

"Keep debris out of driveway culverts and ditches, and maintain your drainage swales (Only Rain Down the Drain)."

"Elevate your equipment and/or utilities."

OUTCOMES

- Reduced localized flooding.
- Reduced flood insurance claims.

TOPIC 5: BUILD RESPONSIBLY

Sarasota County enforces specific building regulations in the SFHA to protect people and buildings from flooding while maintaining natural floodplain functions. In addition to these areas, the County also enforces certain regulations in Community Flood Hazard Areas (CFHA) that they have identified through their own watershed management plans and field investigations. Builders should contact Sarasota County to find out what permits are required before starting the project.

KEY MESSAGES

"Get required permits before you start any home repair, improvement, or construction."

"Be aware of substantial improvements rule."

OUTCOMES

- Increased compliance

- Reduced flood losses.

TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS

Increased development has led to increased stormwater runoff and resulted in flooding in many areas. However, there are areas that naturally flood and benefit our community. Areas such as wetlands, preserves, and other types of floodplains perform many natural functions and provide recreational benefits in the community. Residents and developers should be aware of these benefits and are encouraged to protect these resources and incorporate natural designs.

KEY MESSAGES

"Use Low Impact Development (LID), such as rain barrels, bioretention systems, green roofs, pervious materials, and non-invasive vegetation on your property."

"Build with conservation in mind; incorporate natural systems into designs."

OUTCOMES

- Improvement in water quality.
- Improvement in natural storage capacity.

TOPIC 7: HURRICANE PREPAREDNESS

Hurricane season starts in June and runs through November with the worst months being from late August until October. Residents should assess their risks and know their home's vulnerability to storm surge, flooding and wind. People should develop a plan for protecting themselves, their pets and their homes. Residents need to be aware of the evacuation zones and heed evacuation orders.

KEY MESSAGES

"Make a plan."

OUTCOMES

- More residents evacuating when necessary.
- Minimized loss of life and injury.
- Minimized damage to property and belongings.

TOPIC 8: FLOOD ECONOMICS

Making homes and infrastructure more flood-proof provides positive economic, environmental, and social benefits for communities. Residents should be aware of the potential costs related to damage from flood. Communities should build with the future in mind, providing benefits that include minimizing loss of property and infrastructure, enhancing the natural systems and improving public spaces to attract businesses and recreational enthusiasts.

KEY MESSAGES

"Build with the future in mind." Consider projects that take into account the future flood conditions and enhance the natural systems.

OUTCOMES

- Improvement in building standards.
- Reduced loss of property.
- Reduced number of claims.

TOPIC 9: SEA LEVEL RISE

Being on the coast of the Gulf of Mexico, Sarasota County is very susceptible to the potential impacts of Sea Level Rise (SLR). Not only will projected increases in sea level affect homes and infrastructure along the coast of Sarasota County, but more frequent inland flooding can occur due to high tailwater conditions that can diminish the stormwater system capacity to send runoff to the Gulf.

KEY MESSAGES

"Reduce your exposure to effects of SLR." Increased exposure to flooding in our low-lying coastal and inland areas may threaten our quality of life.

OUTCOMES

- Increased awareness and planning.
- Reduced impact to life, property, health and safety.
- Reduced impact to economy.

6 PROGRAM FOR PUBLIC INFORMATION (PPI) PROJECTS

The PPI committee evaluated existing outreach projects to determine whether they can be improved as well as identified new projects to increase flood awareness and educate residents about the resources available at the County. The committee reviewed the following projects, and the list will continue to grow with future meetings and stakeholder input.

OUTREACH PROJECTS

Flood Flyer – The committee continues to evaluate and refine the flood flyer that is distributed to the public via print and online.

Property Appraiser Flood Information – Sarasota County GIS staff worked with the Property Appraiser to develop GIS information that can be queried through the property appraiser website. The flood risk information is part of the parcel data that is available to the public.

Flood Information Storymap – Sarasota County is currently developing an Esri Storymap as a resource for the public to be able to find information relating to flood risks in their area, download Elevation Certificates, learn about natural floodplain functions, and other information that will help them better prepare for flood hazards.

Repetitive Loss Property / Repetitive Loss Area Letter – Sarasota County sends out letters to repetitive loss properties and other properties located in a repetitive loss area (as determined from analysis of repetitive loss properties) to inform homeowners about flood risks. The letter also informs residents about what they can do to protect themselves and minimize property damage, and the resources that are available from the County, state, and federal agencies.

Flood Awareness Week – Sarasota County and the PPI committee are coordinating with the Florida Floodplain Managers Association, local municipalities, the Sarasota Bay Estuary Program, and FEMA to formulate consistent messages to educate the public about flood risks and ways to protect themselves and their property. These messages will go out to conference attendees, social media and other media outlets during Flood Awareness Week.

Flood Information Workshops – Sarasota County conducts regular workshops throughout the County. There is an opportunity for the PPI committee to develop and incorporate more CRS messages. Subjects covered in the workshops include flood risk information and flood insurance.

Hazard Disclosure - Real estate agencies are represented on the committee and their disclosure practice and information brochures are reviewed by the PPI committee. The real estate agents will disseminate the messages developed through this committee, including providing a brochure or the flood flyer to potential buyers.

Flood Protection Information – The PPI committee will review the County's website to be sure additional messages (above the six general topics) and flood warning messages are coordinated with other warning messages. This project will also add specific pages regarding flood-related hazards for Sea Level Rise and flood economics. **The PPI committee discussed additional messages, including topics for hurricane preparedness, flood economics, and sea level rise.**

Coastal Erosion Map – Sarasota County developed a coastal erosion map that will be published on their flood map website. The information will be used to disclosed coastal erosion hazards to the public and planning agencies.

Flood Protection Assistance – The PPI committee will review the County's property protection advice (PPA), property advice provided after a site visit (PPV), and financial assistance advice (FAA) procedures. The committee will also review ways to publicize the County's services for PPA, PPV and FAA.

Open Space Preservation – The PPI committee will review educational materials (brochures, signs, field trips, etc.) in open space areas that also have identified natural floodplain functions.

Drainage System Maintenance – The PPI committee will review the messages for regulations prohibiting dumping in streams and ditches currently on the County's website and flood flyer.

Social Media – Sarasota County maintains Facebook, Twitter and Instagram pages to inform the public about various topics, including flood related issues. These platforms present a great opportunity to relay information about flood risks and get the messages out. These platforms can be used during regular operations as well as distribute important safety information during a hazard event.

Each of the projects above were developed to deliver messages associated with one or more of the flood topics identified in Section 5 (Messages and Outcomes). Table 6-1 describes the flood topics that are covered by each project.

Table 6-1 Flood Topics Covered by PPI Projects

Project	Know your flood hazard	Insure your property for your flood hazard	Protect people from the flood hazard	Protect your property from flood hazard	Build responsibly	Protect natural floodplain functions	Hurricane preparedness	Flood Economics	Sea Level Rise
Flood Flyer	✓	✓	✓	✓	✓	✓	✓		
Property Appraiser Flood Information	✓								
Flood Information Storymap	✓	✓	✓	✓	✓	✓			
Repetitive Loss Property / Repetitive Loss Area Letter	✓	✓	✓	✓	✓	✓			
Coastal Erosion Map	✓				✓	✓		✓	
Flood Awareness Week	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flood Information Workshops	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hazard Disclosure	✓	✓	✓	✓	✓				
Flood Protection Information	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flood Protection Assistance	✓	✓		✓	✓	✓			

Open Space Preservation						✓			
Drainage System Maintenance				✓					
Social Media	✓	✓	✓	✓	✓	✓	✓	✓	✓

Specific information about each project, including the audience, specific messages and outcomes, distribution methods, stakeholders, and assigned staff are provided in Appendix A. In addition to the messages and outcomes, the committee also recognized that there needs to be a way to measure the success of these projects and came up with possible indicators for the effectiveness of these messages. These indicators are also included in the project descriptions in Appendix A.

DISTRIBUTION METHODS

Sarasota County uses several methods to publicize the flood information and the services that the County offers. These methods include advertising in newspapers, websites, social media, utility bill inserts, flyers and brochures, and presentations to the public. Certain methods are more costly than others, while others may be more effective in publicizing the information. The publicity and distribution methods for each project will depend on the type of project, how much information needs to be included, cost of implementation, and target audience. Direct mail that includes too much information can be lost to the audience and ultimately thrown in the trash – especially if that mail is accompanied by other advertisements and clippings often included in our daily mail these days. This method is also costly.

Today, most people are using the internet get their news. Traditional sources of information like newspapers or magazines have declined in use over the last decade. According to a recent article by Aaron Smith (*Older Adults and Technology Use*, 2014) describing the recent study by the Pew Research Center, even the older population (i.e., seniors) are increasingly turning to the internet for information. Other studies have shown that the internet is more popular than newspapers and radio as a news source, ranking just behind TV. Americans today routinely get their news from multiple sources and a mix of platforms. Nine in ten American adults (92%) get news from multiple platforms on a typical day, with half of those using four to six platforms daily according to a 2010 article by Kristen Purcell, Lee Rainie, Amy Mitchell, Tom Rosenstiel and Kenneth Olmstead titled *Understanding the Participatory News Consumer*.

Although Sarasota County does use the direct mail method, the preferred method would:

- minimize the probability of information being discarded
- increase the frequency of distribution
- minimize cost so that resources can be used to increase frequency of distribution and/or provide for multiple distribution methods instead

Based on the criteria above and recent trends in technologies, the PPI committee concluded that the most effective way to reach the community is through a combination of communication tools, including:

- Sarasota County Flood Information Website
- Sarasota County Social Media (Facebook and Twitter)
- Email blasts to neighborhood associations
- Utility bill newsletter

- Informational kiosks and events throughout the County
- Direct mail to select target audiences
- Flood and hurricane information events
- Newspaper advertising
- Television crawls

FLOOD RESPONSE PROJECTS

The Sarasota County Flood Warning and Response Plan (FWRP) establishes a framework through which Sarasota County may prepare for, respond to, and recover from saltwater or freshwater flooding conditions. Part of the FWRP's goal is to develop messages and dissemination tools centered on flood warning and response. They were prepared in advance, and will not be delivered until a flood is impending or occurs. The PPI committee has reviewed several of the flood response messages as part of developing the Flood Information Storymap outreach project. The committee will continue to review the other flood response messages and dissemination methods to ensure that the messages are concise and delivered in the most effective and efficient manner. Dissemination methods include:

- Media releases
- Access Sarasota TV Crawls
- Web / Social Media
- Contact Center
- Email/Constant Contact
- Sarasota County Website
- CodeRed
- Emergency Alert System (EAS)
- Wireless Emergency Alerts (WEA)
- Door Hangers
- FEMA Flood Insurance Claims Handbook
- Build Back Safer and Stronger brochure
- FEMA After the Flood Flyer
- ICC Flood Cleanup Brochure
- Filing Your Flood Insurance Claim Flyer

Attachment 2 contains the Flood Warning and Response messages reviewed.

EXAMINATION OF OTHER PUBLIC INFORMATION INITIATIVES

The PPI committee looked at other public information activities in addition to outreach projects. This included how best to set up a website on flood protection (CRS Activity 350). In addition to the six priority CRS topics, Sarasota County will include on their flood protection website information relating to hurricane preparedness, flood economics and Sea Level Rise. The County will also provide links to real-time gage data and post elevation certificates on their website.

The PPI committee also examined the types of technical assistance that are needed throughout the community and the best ways to publicize these flood protection services (CRS Activities 320, 350 and 360). As a result, the County's flood protection website will list specific methods that can be used to protect a property or home. In addition, these services and contact information for these services will be listed on the flood flyers, county websites and advertisements in newspapers, television crawls, and social media. Resources for technical assistance will also be described and listed in letters sent to repetitive loss properties and other properties located in repetitive loss areas.

Projects developed through the PPI committee will ultimately enhance the County's CRS. Projects that can be related back to creditable activities in the CRS include:

ACTIVITY 320 – MAP INFORMATION SERVICE

Property Appraiser Flood Information – This project provides valuable FIRM information to the public pertaining to the parcel of interest. This service is made available online and links to the County's web map service, which is publicized on a brochure. The brochure will be distributed annually through several media outlets.

Flood Information Storymap – The Storymap provides FIRM information, access to available elevation certificates, and other hazard information. This will improve the County's ability to query and distribute the information the public. This service will be made available online and will be linked to the County's web map service, which is publicized on a brochure will be distributed annually through several media outlets.

ACTIVITY 340 – HAZARD DISCLOSURE

Hazard Disclosure Project – Real estate professionals will have access to the County's flood information tools and provide valuable FIRM information to potential buyers. The committee discussed ways to disseminate the flood risks to potential buyers and reviewed several disclosure forms and brochures, which realtors will provide to potential buyers. The committee reviewed a brochure developed and used by other communities that may be used to help develop a similar one for Sarasota County. Outreach can also be performed through realtor organizations for training on what resources are available at the county. Real estate professionals are contacted at least annually and representatives are members of this PPI committee.

ACTIVITY 350 – FLOOD PROTECTION INFORMATION

Flood Protection Information Website – The PPI committee will review the County's website to be sure additional messages (above the six general topics) and flood warning messages are coordinated with other warning messages. The committee decided to add 3 additional topics. These topics included:

- Hurricane preparedness
- Flood economics
- Sea Level Rise

The committee discussed several messages to convey to the public with regards to the three topics and decided on the appropriate messages as discussed in Section 5. The flood protection website will be publicized via a brochure that will be distributed annually through several media outlets.

Flood Information Storymap – The Storymap enhances the County's existing flood protection information website by providing FIRM information, access to available elevation certificates, and other hazard information that is much easier to understand. This service will be made available online and will be linked to the County's web map service, which is publicized on a brochure. The brochure will be distributed annually through several media outlets.

ACTIVITY 360 – FLOOD PROTECTION ASSISTANCE

Flood Protection Assistance – The PPI committee will review the County's property protection advice (PPA), property advice provided after a site visit (PPV), and financial assistance advice (FAA) procedures. The committee will also review ways to publicize the County's services for PPA, PPV and FAA on an annual basis.

Repetitive Loss Property / Repetitive Loss Area Letter – The committee will review the current repetitive loss property/areas letters to identify improvements that can be made to disseminate information about flood protection assistance services that the County offers. The letter is sent out annually to property owners.

ACTIVITY 370 – FLOOD INSURANCE PROMOTION

Flood Information Storymap – Sarasota County performed a flood insurance coverage assessment to determine the level of coverage and needs. The County promotes flood insurance through its flood workshops. The PPI committee also developed messages to promote flood insurance and these messages were incorporated into the County's Flood Information Storymap.

ACTIVITY 540 – DRAINAGE SYSTEM MAINTENANCE

Drainage System Maintenance – The PPI committee will review and suggest improvements to the messages for regulations prohibiting dumping in streams and ditches currently on the County's website and flood flyer that is distributed annually to media outlets and at events.

7 IMPLEMENTATION, MONITORING AND EVALUATION

The PPI committee meets quarterly to implement, monitor and evaluate the progress of the projects. The committee evaluates each project's effectiveness and revises the project as necessary to achieve the desired goals. The project sheets (Appendix A) are updated as necessary to reflect changes to the status or implementation of the projects. The PPI committee develops an annual evaluation noting the status of existing projects and/or provide information on new initiatives. The annual evaluation will be incorporated into the PPI report, which will serve as a living document that is updated on an annual basis. Table 7-1 summarizes the status of the PPI projects.

Each year the updated PPI is approved by the committee and submitted to the Sarasota County Board of Commissioners.

Table 7-1 Status of PPI Projects

Project	Status	Last Updated
Flood Flyer	Completed; Developed in both English and Spanish.	October 2017
Property Appraiser Flood Information	Completed; Under review for possible revisions to include link to the appropriate sections of the flood protection information website.	January 2018
Flood Information Storymap	In-progress; Site developed in testing environment; Currently being reviewed by the PPI committee.	May 2018
Repetitive Loss Property / Repetitive Loss Area Letter	In-progress; Will be reviewed by the PPI committee.	May 2018
Coastal Erosion Map	Completed coastal erosion mapping that will be published on the flood map website.	May 2018
Flood Awareness Week	In-progress; Coordinating with FFMA and FEMA for consistent messaging.	May 2018
Flood Information Workshops	On-going; PPI committee will review additional information to present at workshops.	May 2018
Hazard Disclosure	On-going. Reviewing disclosure brochures and other ways to disseminate information to potential buyers.	May 2018
Flood Protection Information	Complete; Site currently under development by USF.	July 2018
Flood Protection Assistance	In-progress; Messages and contact information being incorporated into flood	May 2018

Project	Status	Last Updated
	flyer, Storymap and flood protection website; PPI committee will review target audience for messaging (i.e., Repetitive loss properties and areas). Committee will review procedures for providing services for property protection and financial assistance advisory.	
Open Space Preservation	Not started	May 2018
Drainage System Maintenance	In-progress; Messages incorporated into other project initiatives.	May 2018
Social Media	On-going; Will review messages for Flood Awareness Week.	May 2018

8 PPI ADOPTION

The Sarasota County PPI was adopted by the Sarasota County Board of Commissioners on MMMM D, YYYY. The PPI committee submits an annual update to the board.

APPENDIX A

PPI Projects

ATTACHMENT 1

PPI Meeting Minutes

ATTACHMENT 2

Flood Warning and Response Messages

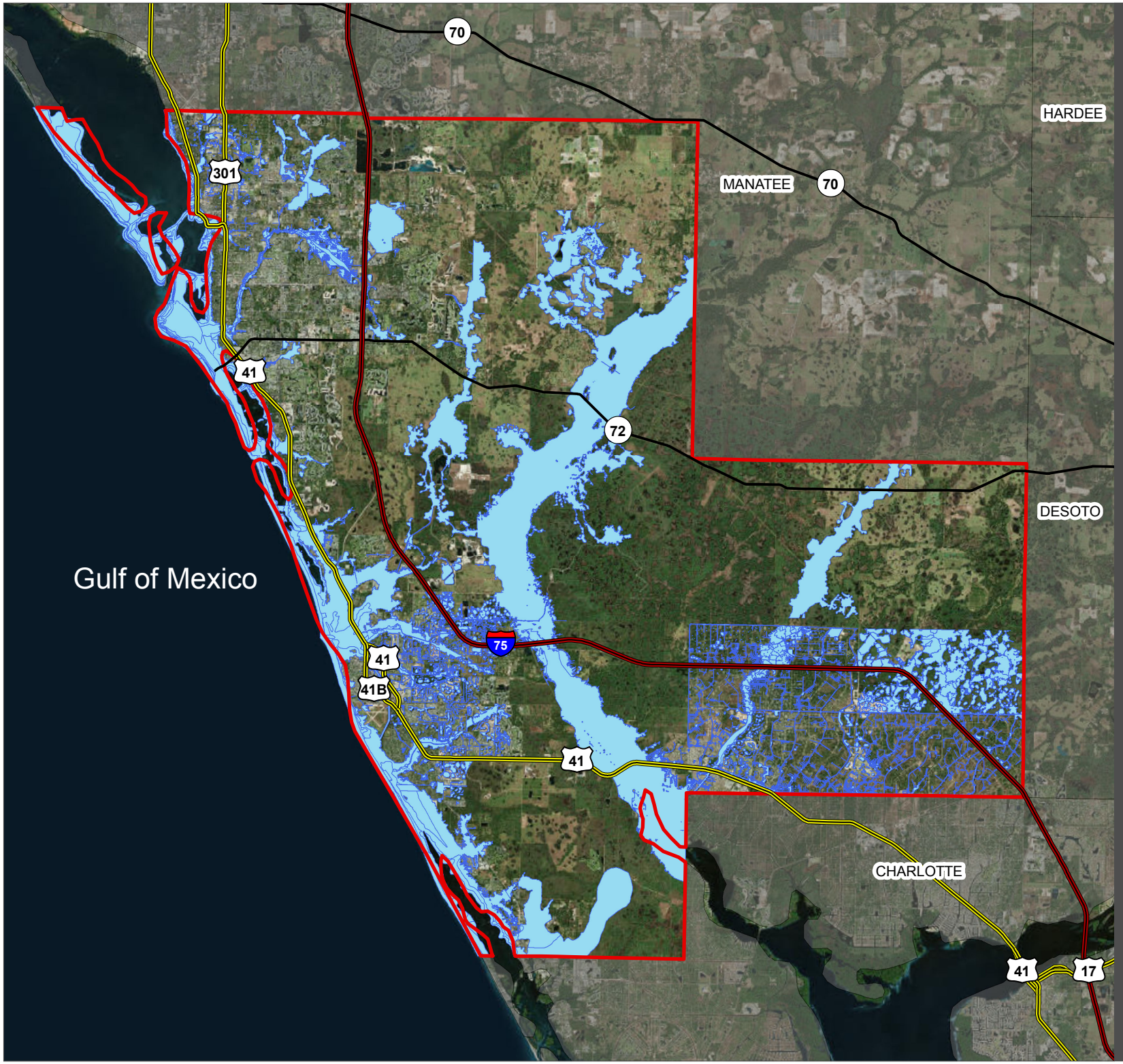
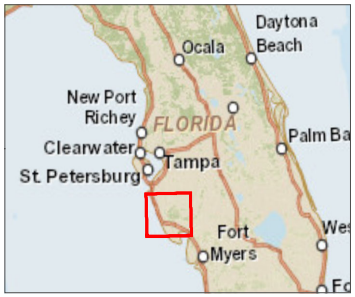


Figure 3-1

Special Flood Hazard Areas within Sarasota County

Sarasota County Program for Public Information



Sarasota Boundary

Special Flood Hazard Area

0 12,000 24,000

Feet

1:300,000

Sarasota County

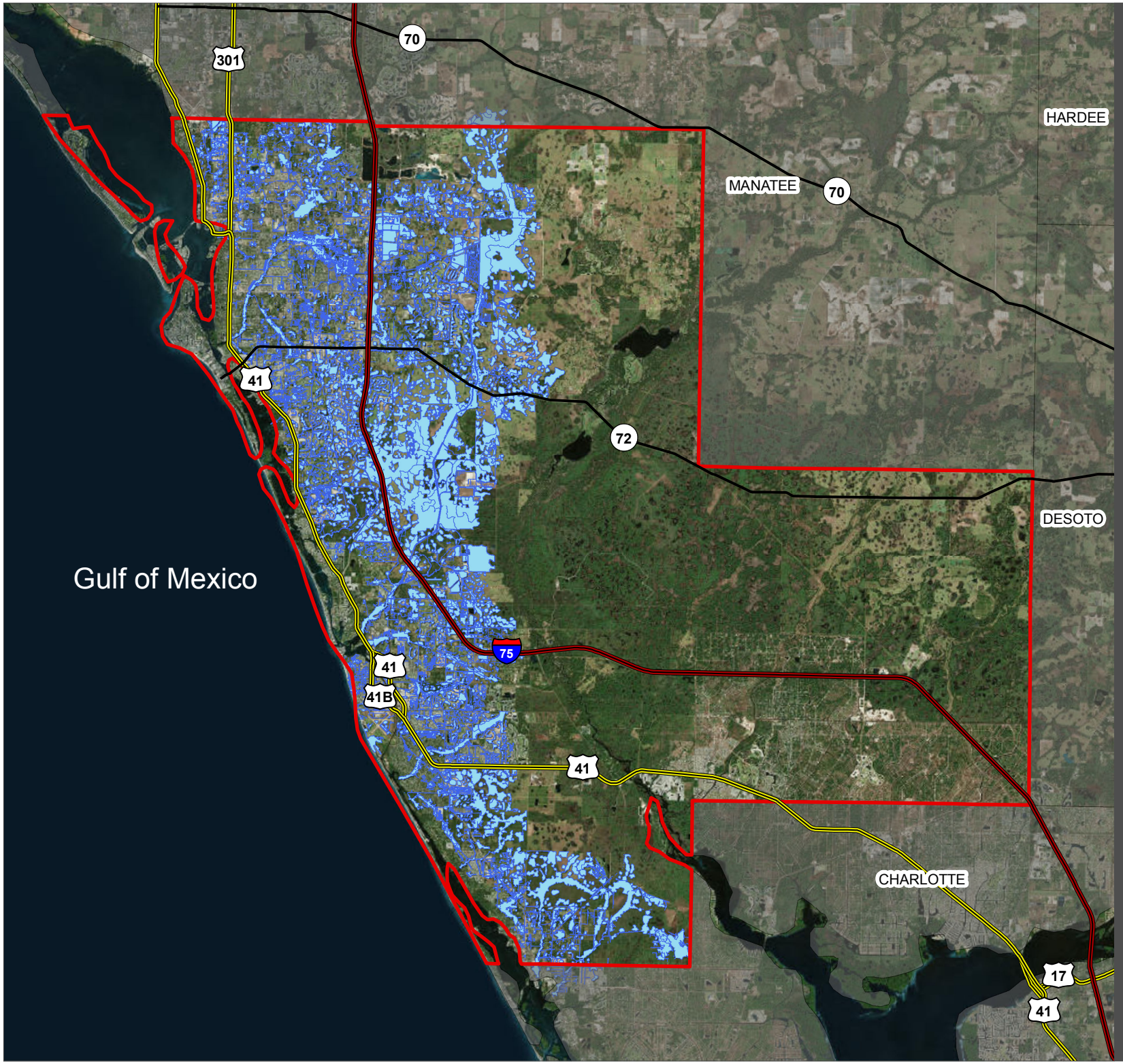
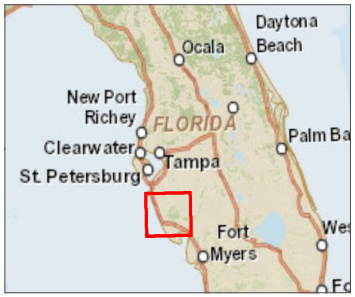


Figure 3-2

Sarasota County Community Flood Hazard Areas

Sarasota County Program for Public Information



Sarasota Boundary

Community Flood Hazard Area

0 12,000 24,000

Feet

1:300,000

Sarasota County

OUTREACH PROJECT - SARASOTA COUNTY COASTAL EROSION MAPPING

PROJECT DESCRIPTION	Coastal Erosion / Mean High Water Mark Mapping Application.
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** 08/2016 **End Date:** April 2018
WHO IS THE TARGET AUDIENCE?	Coastal Residential & Commercial Property Owners, Buyers, Developers
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☐ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☑ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☑ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☑ TOPIC 5: BUILD RESPONSIBLY ☑ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☐ TOPIC 7: HURRICANE PREPAREDNESS ☐ TOPIC 8: FLOOD ECONOMICS ☐ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1; E1; E2; F3; H2
WHAT ARE THE OUTCOMES?	A1; c1; d2; e1; h1; h2; h3; i1; i2; i3
WHO IS RESPONSIBLE FOR THE PROJECT?	Donna Bailey, CFM CRS Specialist Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0917 (office); 941-525-8915 (cell) Email: dabailey@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	Website – GIS maps
ARE THERE RELATED CRS ACTIVITIES?	320 – MI5

WHAT STAKEHOLDERS ARE INVOLVED?	
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - Town of Longboat Key - City of Venice
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Reduced loss of property - Reduced number of claims - Reduced compliance issues -
WHAT IS THE PROJECT STATUS?	**2018** Ongoing

OUTREACH PROJECT - SARASOTA COUNTY FLOOD AWARENESS WEEK

PROJECT DESCRIPTION	Sarasota County Flood Awareness Week
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** April 2018 **End Date:** Annually
WHO IS THE TARGET AUDIENCE?	ALL residents
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☑ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☑ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☑ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☑ TOPIC 5: BUILD RESPONSIBLY ☑ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☑ TOPIC 7: HURRICANE PREPAREDNESS ☑ TOPIC 8: FLOOD ECONOMICS ☑ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1, B1, C1, C2, D1, D2, E1, E2, F1, F2, F3, G1, G2, G3, H1, H2, H3, I1
WHAT ARE THE OUTCOMES?	A1, b1, c1, d1, d2, e1, f1, g1, g2, h1, h2, h3, i1, i2, i3
WHO IS RESPONSIBLE FOR THE PROJECT?	Donna Bailey, CFM CRS Specialist Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0917 (office); 941-525-8915 (cell) Email: dabailey@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	- Through social media online, through local events
ARE THERE RELATED CRS ACTIVITIES?	330 – outreach 540 – Publicity 610 - Publicity

WHAT STAKEHOLDERS ARE INVOLVED?	
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - Town of Longboat Key - City of North Port - City of Venice
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Increased number of FEMA policies - Better prepared and informed residents and businesses - Reduced loss of property - Reduced number of claims - Better water quality
WHAT IS THE PROJECT STATUS?	**MAY 2018** The project is complete

OUTREACH PROJECT - SARASOTA COUNTY FLOOD FLYER ENGLISH

PROJECT DESCRIPTION	The Communications Department developed a flood flyer to highlight the CRS topics. The flyer was developed with the objective of remaining simple, providing concise messaging and showing available resources and contact information. The flood flyer was previously advertised in the phone book, the Herald Tribune, and sent to municipalities within Sarasota County. Subjects covered in the flyer include flood risk information, building responsibly, flood insurance, flood safety, flood protection, and natural floodplain functions.
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** October, 2017 **End Date:** Ongoing
WHO IS THE TARGET AUDIENCE?	All residents
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☑ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☑ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☑ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☑ TOPIC 5: BUILD RESPONSIBLY ☑ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☐ TOPIC 7: HURRICANE PREPAREDNESS ☐ TOPIC 8: FLOOD ECONOMICS ☐ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1, B1, C1, C2, D1, D2, E1, E2, F1, G1, G2
WHAT ARE THE OUTCOMES?	a1, b1, c1, d1, d2, e1, f1, g1, g2
WHO IS RESPONSIBLE FOR THE PROJECT?	Donna Bailey, CFM CRS Specialist Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0917 (office); 941-525-8915 (cell) Email: dabailey@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	- Advertise in phone book, once/year - Publish in Herald Tribune, once/year - Send to municipalities, once/year - Online

ARE THERE RELATED CRS ACTIVITIES?	320 – This flyer helps to publicize the County's Map Information Service in which the committee determined what map information to provide. 360 – Flyer publicizes the County's flood protection services, including providing property protection advice (PPA) and site visits (PPV). 370 – Flyer advises people to buy flood insurance. 540 – Flyer encourages residents to keep swales and drainage ditches clear of debris to ensure water flow, and publicizes the County's flood protection website to learn more about maintaining drainage systems. 610 – Flyer publicizes the radio stations for emergency content and encourages residents to stay safe. Publicizes and reinforce the Turn around, don't drown campaign.
WHAT STAKEHOLDERS ARE INVOLVED?	Lenders, Realtors, Insurance Agents
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - Town of Longboat Key - City of North Port - City of Venice
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Increased web traffic - Increased number of FEMA policies - Increased subscribers to County's alert system and social media
WHAT IS THE PROJECT STATUS?	**OCTOBER 2017** Flyer completed.

OUTREACH PROJECT - SARASOTA COUNTY FLOOD FLYER SPANISH

PROJECT DESCRIPTION	The Communications Department developed a flood flyer to highlight the CRS topics. The flyer was developed with the objective of remaining simple, providing concise messaging and showing available resources and contact information. The flood flyer was previously advertised in the phone book, the Herald Tribune, and sent to municipalities within Sarasota County. Subjects covered in the flyer include flood risk information, building responsibly, flood insurance, flood safety, flood protection, and natural floodplain functions. A large segment of the population speaks Spanish. The flyer was translated into Spanish.
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** October, 2017 **End Date:** Ongoing
WHO IS THE TARGET AUDIENCE?	Spanish speaking population
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☑ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☑ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☑ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☑ TOPIC 5: BUILD RESPONSIBLY ☑ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☐ TOPIC 7: HURRICANE PREPAREDNESS ☐ TOPIC 8: FLOOD ECONOMICS ☐ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1, B1, C1, C2, D1, D2, E1, E2, F1, G1, G2
WHAT ARE THE OUTCOMES?	a1, b1, c1, d1, d2, e1, f1, g1, g2
WHO IS RESPONSIBLE FOR THE PROJECT?	Donna Bailey, CFM CRS Specialist Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0917 (office); 941-525-8915 (cell) Email: dabailey@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	- Advertise in phone book, once/year - Publish in Herald Tribune, once/year - Send to municipalities, once/year

	- Online
ARE THERE RELATED CRS ACTIVITIES?	320 – This flyer helps to publicize the County's Map Information Service in which the committee determined what map information to provide. 360 – Flyer publicizes the County's flood protection services, including providing property protection advice (PPA) and site visits (PPV). 370 – Flyer advises people to buy flood insurance. 540 – Flyer encourages residents to keep swales and drainage ditches clear of debris to ensure water flow, and publicizes the County's flood protection website to learn more about maintaining drainage systems. 610 – Flyer publicizes the radio stations for emergency content and encourages residents to stay safe. Publicizes and reinforces the Turn around, don't drown campaign.
WHAT STAKEHOLDERS ARE INVOLVED?	Lenders, Realtors, Insurance Agents
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - Town of Longboat Key - City of North Port - City of Venice
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Increased web traffic - Increased number of FEMA policies - Increased subscribers to County's alert system and social media
WHAT IS THE PROJECT STATUS?	**OCTOBER 2017** Flyer completed.

OUTREACH PROJECT - SARASOTA COUNTY FLOOD ZONE WORKSHOPS

PROJECT DESCRIPTION	Public Flood Zone Workshops
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** 2015 **End Date:** ongoing –
WHO IS THE TARGET AUDIENCE?	ALL
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☑ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☑ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☑ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☑ TOPIC 5: BUILD RESPONSIBLY ☑ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☑ TOPIC 7: HURRICANE PREPAREDNESS ☑ TOPIC 8: FLOOD ECONOMICS ☑ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1, B1, C1, C2, D1, D2, E1, E2, F1, F2, F3, G1, G2, G3, H1, H2, H3, I1
WHAT ARE THE OUTCOMES?	A1, b1, c1, d1, d2, e1, f1, g1, g2, h1, h2, h3, i1, i2, i3
WHO IS RESPONSIBLE FOR THE PROJECT?	Des Companion CFM CRS Coordinator Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0802 (office) Email: dcompani@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	- Through Various Libraries, HOAs, Interest Groups

ARE THERE RELATED CRS ACTIVITIES?	330 - outreach 320 – Map Information Service 350 – Flood Protection Information 360 – Publicity 540 – Publicity 610 - Publicity
WHAT STAKEHOLDERS ARE INVOLVED?	Lenders, Realtors, Insurance Agents
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - City of North Port
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Reduced loss of property - Reduced number of claims - Reduced compliance issues - Increased FEMA flood policies - Water quality - Safer community
WHAT IS THE PROJECT STATUS?	**2018** Ongoing

RESOLUTION NO. 2019 - 016

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA, ADOPTING THE REVISED FLOODPLAIN MANAGEMENT PLAN, AND THE MULTI-JURISDICTIONAL PROGRAM FOR PUBLIC INFORMATION AS THE FORMAL GUIDES FOR SARASOTA COUNTY'S FLOODPLAIN MANAGEMENT ACTIVITIES IN ACCORDANCE WITH 42 U.S.C. §5165, 44. C.F.R. §201.6, Part 1 of Chapter 252, Florida Statutes, and Florida Administrative Code Chapter 27P-22.

WHEREAS, the revised Sarasota County Floodplain Management Plan (FMP) and the Multi-Jurisdictional Program for Public Information Plan (PPI) is the representation of Sarasota County's commitment to reduce vulnerability and risks from flooding, and to inform the public of the hazards of flood, serving as a policy guide as resources are committed toward reducing the effects of flooding, and as a guide to increase public safety through outreach; and

WHEREAS, Sarasota County is subject to flooding from severe weather with potential damage to life, property, natural resources and the local economy; and

WHEREAS, the FMP Committee is comprised of Sarasota County Government staff and stakeholders from the City of Sarasota, the City of Venice, the City of North Port, the Town of Longboat Key, Sarasota County School Board, Southwest Florida Water Management District, WRA Engineering, and local citizens. The committee is open for participation to all interested parties and is chaired by the Stormwater Department Director, or his designee, and

BOARD RECORDS
FILED FOR THE RECORD
CLERK OF THE CIRCUIT COURT
SARASOTA COUNTY, FL
2019 MAR 18 AM 8:18

WHEREAS, the revised FMP Plan, is required of all communities participating in the National Flood Insurance Program and will be used as the guide for sound floodplain management; and

WHEREAS, the PPI Committee is comprised of a cross-section of employees and community stakeholder members from Sarasota County Government, the City of Sarasota, the City of Venice, the city of North Port, the Town of Longboat Key, the Sarasota Bay Estuary Program, and a cross-section of stakeholders including Mote Marine representation, Realtor, Insurance Agent, Mortgage Lender, and private citizens, and is open for participation to any and all interested parties, and is chaired by the Stormwater Department Director, or his designee, and

WHEREAS, the PPI Plan will be used as the formal outreach guide for floodplain management; and

WHEREAS, both the revised FMP Plan and the PPI Plan have been reviewed by FEMA and meet the requirements of the Community Rating System and the National Flood Insurance Program; and

WHEREAS, the Unified Multi-Jurisdictional Local Mitigation Strategy (LMS) will include as an annex, the Sarasota County revised FMP Plan, and the PPI Plan, and these plans will serve as a guide for best management floodplain activities; and

R2019-016

WHEREAS, the Sarasota County revised FMP Plan and the PPI Plan will continue to be updated to meet the requirements of the Community Rating System program with updates automatically incorporated with the LMS.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA, FLORIDA:

SECTION 1. The Sarasota County revised FMP Plan, attached as Exhibit A, replaces the current 2016 FMP Plan and is adopted as the formal guide for Sarasota County's floodplain management.

SECTION 2. The PPI Plan, attached as Exhibit B, is adopted as the formal guide for public outreach to educate about flood hazards and flooding.

SECTION 3. This resolution shall supersede Resolution No. 2016-001.

SECTION 4. EFFECTIVE DATE. This resolution shall take effect immediately upon adoption as required by law.

PASSED AND DULY ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF SARASOTA COUNTY, FLORIDA, this 29th **day of** January **, 2019.**

BOARD OF COUNTY COMMISSIONERS
OF SARASOTA COUNTY, FLORIDA

By: _____
Chair

ATTEST:

KAREN E. RUSHING, Clerk of Circuit Court and Ex-Officio Clerk of the Board of County Commissioners of Sarasota County, Florida

By: _____
Deputy Clerk

R2019-016

OUTREACH PROJECT - SARASOTA COUNTY HAZARD DISCLOSURE

PROJECT DESCRIPTION	Hazard Disclosure / Special Flood Hazard Area (SFHA) with a direct link to the Flood Protection Webpages.
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** 2016 **End Date:** ongoing – maps updated as necessary
WHO IS THE TARGET AUDIENCE?	All residents
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☑ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☑ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☑ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☑ TOPIC 5: BUILD RESPONSIBLY ☑ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☑ TOPIC 7: HURRICANE PREPAREDNESS ☑ TOPIC 8: FLOOD ECONOMICS ☑ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1, B1, C1, C2, D1, D2, E1, E2, F1, G1, G2, G3, H1, H2, H3, I1
WHAT ARE THE OUTCOMES?	A1, b1, c1, d2, e1, g1, g2, h1, h2, h3, i1, i2, i3
WHO IS RESPONSIBLE FOR THE PROJECT?	Donna Bailey, CFM CRS Specialist Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0917 (office); 941-525-8915 (cell) Email: dabailey@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	- Part of our flood zone locator application
ARE THERE RELATED CRS ACTIVITIES?	322 - MI5 400 – Flood Mapping

WHAT STAKEHOLDERS ARE INVOLVED?	
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - Town of Longboat Key - City of North Port - City of Venice
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Reduced loss of property - Reduced number of claims - Reduced compliance issues - Increased FEMA flood policies
WHAT IS THE PROJECT STATUS?	**2017** The project is complete

Stop by for a hot dog with all the dressings!

COME MEET THE TOWN'S EMPLOYEES AND LEARN WHAT EACH DEPARTMENT CAN DO FOR YOU!

Town of Longboat Key Community Open House

Saturday - March 3, 2018 - 10:00 a.m. to 1:00 p.m.

5490 Gulf of Mexico Drive • Longboat Key

FREE ** ON-SITE Document Shredding
10:00 a.m. to 12:00 p.m.

March 2018 General Election Information

Office of the Town Clerk

YOUR DOORWAY To Local Government

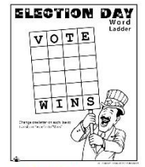
Water Conservation Information

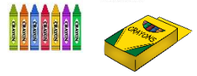
Every DROP Counts

Fire Station Tours
Paramedic Demonstrations
Firefighter Demonstrations

Fun To Make Sand

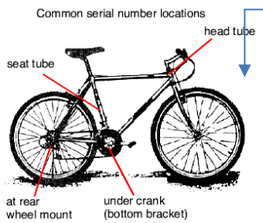
Kid's Activities





CodeRED Registration ☎
Hurricane Preparedness
Email Notification Sign Up
Recreation Center Activities Schedule
Solid Waste & Recycling Information
National Flood Insurance Program

Inspect Emergency Equipment
Bicycle Registration Program



Police Department Tours

Beach Renourishment Information

LONGBOAT KEY TENNIS CENTER

Membership Information

A LOOK at the BUDGET

FY 2018 Budget Information

Information Technology
Website
Demonstrations

Florida HEALTH Sarasota County

Blood Pressure Readings
Blood Sugar Checks
Health Education

Sarasota Co. Special Operations

APPROVED CONCEPT PLAN

- Recreation Center Building Future Expansion Area Designated
- Paddle Sport Launch & Storage

Bayfront Park Recreation Center

- Nature Walk with Education Signage
- Tennis, Basketball, Pickleball, & Shuffleboard
- Bocce Ball
- Fishing Piers
- Beach Access

TOWN OF LONGBOAT KEY

2018 FLOOD AND HURRICANE AWARENESS NEWSLETTER

Flood Hazards – How to protect yourself and your property

Flood Hazard Area

Longboat Key residents live within a floodplain. Additionally, all of Longboat Key is designated as a Special Flood Hazard Area since our community is subject to a one percent or greater chance of flooding in any year. Your property may be vulnerable to flooding from heavy storms. Contact the Longboat Key Planning, Zoning & Building Department (941-316-1966) or the Public Works Department (941-316-1988) to find out which flood zone your property is in according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMS).

Flood Warning

Longboat Key, Manatee, and Sarasota

Warnings are issued via television and radio. Tune in to these media for instructions during times of possible severe weather. The Town of Longboat Key CodeRED Emergency Notification System provider delivers automated telephone notifications to registered participants.

Register your information for the CodeRED Emergency Notification System online at www.longboatkey.org (click on Residents, CodeRED). RE-REGISTER to update your settings if you initially registered prior to March 2016.

Hurricane evacuation maps are printed in the Sarasota and Bradenton phone books. Sarasota and Manatee County Hurricane Evacuation Maps are also available at the Police Department at 5460 Gulf of Mexico Drive, Fire Department at 5490 Gulf of Mexico Drive, Town Hall and Building Department at 501 Bay Isles Road, and at the Public Works Department located at 600 General Harris Street.

Flood Safety

Being aware of what steps you can take to minimize your loss prior to a flood is the first step to safety.

- Listen for weather updates and stay informed.
- Keep portable radio, flashlight and fresh batteries on hand.
- Turn off gas and electricity. (Call service provider for assistance.)
- Clear your yard, porch or patio of all loose objects.
- Moor your boat securely.
- Store enough drinking water for 5 days in clean containers.
- Know your evacuation route; know where to go.
- Have a backup plan if the storm track changes.

Caution: Do not drive or walk through a flooded area. Drowning is the number one cause of flood related deaths. Statistically, more people drown in their cars than any place else during flood events. Currents can be deceptive; six inches of moving water can sweep you off your feet. Don't drive around road barriers, the road may be washed out or there may be downed power lines. The number two killer during flood events is electrocution. Electrical current can flow through water. Report downed power lines to FPL (1-800-4-OUTAGE or 1-800-468-8243).

Don't Forget Your Pets!

If you must evacuate do not leave your animals behind. Evacuate them to a pre-arranged safe location if they cannot stay with you during the evacuation period. (Remember, pets are only allowed at pet friendly designated shelters.) If there is a possibility that disaster may strike while you are away from home, there are precautions you can take to increase your pet's chance of survival but they are not a substitute for evacuating with your pets. For more information, contact the Humane Society of the United States, Disaster Services, 2100 L Street NW, Washington DC 20037 (www.hsus.org), 202-452-1100.

Hurricane Evacuation

You may be advised to leave the island between 30 and 72 hours before a hurricane strikes. Because of expected off island heavy rains and gale force wind conditions, evacuation during daylight hours is strongly recommended. Evacuation routes may be flooded 24 hours before a hurricane hits. Although forcible evacuation is legal, Longboat Key Public Safety Departments will not force you to evacuate against your will. Any person who wishes to remain on the Key after evacuation has been ordered will be asked to give the Police Department the name of their next of kin. After Town Staff evacuates the Key and flooding begins, there may be no water and sewer service, nor telephone or electric power service. All buildings, regardless of height, will be subject to severe damage and, quite possibly, total destruction. Persons residing in condominiums above the first floor are advised that they are just as much at risk as are those residing in single family homes. Please note that elevators in multi-floor buildings may not function. By calling one number, 511, motorists everywhere in the State can find out about construction updates, lane closures, traffic incidents, severe weather reports and Amber and Silver Alerts. For more information about this new Statewide service, please visit: http://www.fl511.com/.

Property Protection

Moving outdoor furniture and relocating downstairs furniture to upper stories or higher locations may minimize loss. Sandbags can be placed to help slow down flood waters reaching your possessions. Retrofitting is a way to minimize loss prior to floods occurring. This involves building flood walls, elevating structures, etc. The Longboat Key Planning, Zoning & Building Department can assist property owners in retrofitting techniques and in how to select a contractor.

Flood Insurance

Regular homeowner insurance policies do not cover losses due to flooding. The Federal Insurance Administration (FIA) makes flood insurance available to everyone in the Town through private insurance agents. This is because the Town of Longboat Key participates in the National Flood Insurance Program (NFIP) which is administered by the FIA. For most individuals a home and its contents are their greatest investments. More information is available at http://www.floodsmart.gov/floodsmart/ .

We strongly urge you to buy flood insurance to protect yourself from a devastating loss. Through the efforts of Town staff participating in the Community Rating System (CRS) Programs, citizens are eligible for up to a 25% discount on flood insurance rates. Continued citizen support of these programs and their requirements will help mitigate against future loss as well. Information about Federally backed flood policies is available to everyone in the Town through private insurance agents. Property owners can insure their buildings and contents, and renters can insure their possessions.

Further Information and Flood Zone Determination

As a public service, the Town of Longboat Key will provide you with the following information upon request:

- Where your property on Longboat Key lies within one of the respective Manatee or Sarasota County maps within the Special Flood Hazard Area (SFHA) as shown on the current Flood Insurance Rate Map (FIRM).
- Additional flood insurance risk data for a site, such as the FIRM zone and the base flood elevation requirements, including any additional freeboard requirement above the Base Flood Elevation (BFE) shown on the FIRM.
- We have a handout on the flood insurance purchase requirement that can help people who need a mortgage or loan for a property in the SFHA.
- The Town maintains elevation certificates for new and substantially improved structures in the SFHA.
- The Town updates the Flood Insurance Rate Maps as needed when revisions are made to the maps.
- The Town also has information in addition to the FIRM information, problems not shown on the FIRM, special flood related hazards, historical flood information, and natural floodplain functions.
- To obtain flood zone and flood protection assistance information, please contact the Planning, Zoning & Building Department (941-316-1966) located at 501 Bay Isles Road on Longboat Key from 8:00 am to 5:00 pm, Monday through Friday. There is no charge for this service.

A variety of pamphlets and other information are available, as well as copies of the Flood Insurance Rate Maps. Realtors, Insurance Agents or property owners can also obtain copies of Elevation Certificates on file for Longboat Key properties. When available, Flood Elevation certificates for a particular address are accessible at www.longboatkey.org/Planning Zoning & Building Department/Elevation Certificates. Additionally, the Manatee County Central Library (941-748-5555) and

Sarasota County Selby Public Library (941-861-1100) have reference sections devoted to floodplain management, protection and information.

Disaster Mitigation Efforts

The Town participates with both Sarasota and Manatee County Local Mitigation Strategy (LMS) groups. These groups are designed to insure our municipality is prepared for all types of disasters. The LMS insures the Town is eligible for disaster mitigation funding after a declared event. The LMS also includes the Town's primary Floodplain Management Plan. Both the LMS document and the Annual Report on the Town's Floodplain Management Plan are available at Town Hall for review. Please take an opportunity to visit, and/or call the Public Works Department at (941) 361-6411, ext. 2213 for additional information.

How Can I Help Our Community?

Do your part in helping to preserve the storm drainage systems. Do not throw anything into drainage structures, ditches, swales, or streams. This is a violation of Town Ordinances. Often grass clippings, mulches, branches and debris can accumulate and clog or plug storm water flow through the system and potentially contribute to flooding.

Who Can I Call If I See:

- Illegal dumping? (941) 316-1976 Police Community Services
- Debris or blockages in a drainage system? (941) 316-1988 Public Works
- Construction work without a permit? (941) 316-1966 Planning, Zoning & Building

Home Improvements

Be aware that for any structure in the Town of Longboat Key, local ordinances, as well as Federal and State Laws and Codes, require that:

- Any structure that is damaged to more than 50% of its market value, OR
- Any structure where improvements are planned where the cost of improvements to the structure is more than 50% of its market value, OR
- Any combination of the two above; then, ...

The repair or improvements must be built to meet current floodplain Codes including, in some cases, elevation of the structure to the required flood elevation. These requirements will be explained to you when you apply for building permits. Contact the Planning, Zoning & Building Department (941-316-1966) for more information.

Repetitive Loss Properties

For the purposes of identifying properties facing significant risk of flooding, the NFIP defines a Repetitive Loss Property as "one that has had two or more losses of greater than $1,000 each within any 10-year period."

Compared to the occurrence of a fire, people in floodplains are 27 times more likely to experience a flood during a 30-year mortgage.

Some repetitive loss buildings have been replaced or properly elevated. Some owners of repetitive loss properties have simply dropped National Flood Insurance coverage for economic or coverage limitation reasons.

If you want more information regarding aspects of owning a repetitive loss property, what measures can be taken to help prevent loss, or retrofitting and mitigation efforts to bring your property into compliance, please contact the Planning, Zoning & Building Department at (941) 316-1966.

Town staff members are available to conduct site visits, when requested, to discuss flooding, drainage problems and retrofitting options. You can also contact Florida Division of Emergency Management (FDEM), or State Floodplain Management Office (floods@em.myflorida.com, 850-413-9960), or the FDEM Website: www.floridadisaster.org.

TOWN OF LONGBOAT KEY
2018 SUMMER EDITION

Public Works Department
600 General Harris Street
Longboat Key, FL 34228
Phone: 941-361-6411, ext. 2213
Email: jlinkogle@longboatkey.org
www.longboatkey.org

TOWN COMMISSION

George Spoll, Mayor
Ed Zunz, Vice Mayor
Randy Clair, District 1
Ken Schneier, District 3
Jack Daly, District 4
Jim Brown, At Large
Irwin Pastor, At Large

Tom Harmer, Town Manager

Register your CodeRED Emergency Notification information online at www.longboatkey.org (Click on Residents, CodeRED). Did you register PRIOR to March 2016? You should RE-REGISTER to opt-in for Severe Weather Warnings. The additional service warns residents by cell phone, text, and/or email when the National Weather Service issues tornado, flooding, or other severe weather warnings.

2018 FLOOD-HURRICANE AND DISASTER AWARENESS SEMINAR

"The Aftermath of "IRMA-Geddon"

The annual disaster preparedness seminar is to be held on Thursday, May 31 from 3:15pm to 6:00pm at the Longboat Key Club Harbourside Ballroom, 3000 Harbourside Drive, Longboat Key. The keynote speaker is Elizabeth Cuevas-Neunder, President of the Puerto Rican Chamber of Commerce of Florida. Invited speakers are Bob Harrigan, ABC7 News Chief Meteorologist, and Sarasota and Manatee County Emergency Managers. RSVP required to the Chamber of Commerce at 383-2466. First 125 pre-registered attendees will receive a giveaway bag with a ticket for a door prize and a virgin Hurricane drink. Light appetizers served, compliments of The Resort at Longboat Key Club. Disaster Preparedness Seminar is sponsored by Aqua Plumbing & Air.

Longboat Key Receives Deeper Discount for Community Rating System

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages Community Floodplain management activities that exceed the minimum NFIP requirements. For CRS participating communities, flood insurance premium rates are discounted in increments of 5% (i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount). Longboat Key is now a Class 5 CRS participating community with a 25% premium discount. Check with your insurance agent at renewal time to insure you are getting the proper discount. CRS Coordinator James Linkogle will be happy to answer any of your questions and is available at (941) 361-6411, ext. 2213.

TOWN OF
Longboat Key
Incorporated November 14, 1955

Public Works Department
600 General Harris Street
Longboat Key FL 34228
(941) 316-1988
FAX (941) 316-1984
www.longboatkey.org

May 24, 2018

Address field
Proper Owner
Property Address

Re: Property Address

Dear Resident,

You have received this letter because as coastal barrier island, the Town of Longboat Key is subject to flooding during any storm event that coincides with an extreme high tide. The Town is especially vulnerable to flooding related to tropical storms and hurricanes. The potential to suffer property damage from floods increases with the intensity and duration of the storm as well as the impacts of any storm surge and intense prolonged rains. The Town of Longboat Key lies in what is termed a "Special Flood Hazard Area" (SFHA) according to the Flood Insurance Rate Maps (FIRM) distributed by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program (NFIP).

If you experience flooding during any tropical storm event, please contact your insurance agent to make sure to file claims for any damage to your property, home and contents. Any repairs performed as a result of the flood damages may require permits. Please contact the Planning, Zoning and Building Department (941-316-1966) for information.

You may live in or own a building that existed before the Town entered the NFIP and adopted FEMA maps and the Special Flood Hazard Area requirements. As an owner of one of these structures (known as a Pre-FIRM property) it did not have to meet the elevation standards required by FEMA and has received subsidized insurance rates that have not reflected the true risk of flooding.

You may also own a property that has been flooded several times and is included on the "Repetitive Loss Property List" distributed by FEMA. The definition used by NFIP of a Repetitive Loss Property is one that has suffered two or more NFIP losses of at least $1,000 in any ten-year period since 1978.

The Town is concerned about Repetitive Loss Properties and has access to and information on various programs and grants to help you protect your property from the potential of future flooding.

Your property may also be identified by FEMA as a "Severe Repetitive Loss Property." Congress defined this subset of properties when it passed the Flood Insurance Reform Act of 2004, and the most current re-authorization of the NFIP program under the 2014 Homeowners Flood Insurance Affordability Act. Severe repetitive loss properties are those one-to-four family dwelling properties that have had four or more claims of more than $5,000 each, or two claims that cumulatively exceeded the building's value.

Mitigation action is one process available to reduce or eliminate future flood losses to a property by lessening the impact of storm related flooding. Flood related disasters are very costly to citizens and government. Studies conducted by the National Institute of Building Sciences report that, on average, every dollar spent on mitigation yields $4 in future benefits; and may even approach as much as $8 in future savings per dollar of mitigation.

The State of Florida Bureau of Mitigation administers several federal mitigation grant programs including:

Hazard Mitigation Grant Program
Pre-Disaster Mitigation Program
Flood Mitigation Assistance Program
Severe Repetitive Loss Program
Repetitive Flood Claims Program
Residential Construction Mitigation Program

In addition, to comply with federal regulations, the Bureau of Mitigation routinely updates the State Hazard Mitigation Plan and supports local communities with their mitigation planning efforts.

FEMA generally announces the Flood Mitigation Assistance Application cycle in mid-July. The application period typically runs from mid-August through mid-November. The Notice of Funding Opportunity (NOFO) will be posted on www.Grants.gov. Once made available, the FY 2018 FMA Fact Sheet shall provide an overview of the agency's priorities for this year.

For more information please visit:

https://www.fema.gov/flood-mitigation-assistance-grant-program

https://www.floridadisaster.org/dem/mitigation/

Homeowners and business owners are encouraged to learn their flood risk and talk to their insurance agents to determine how recent changes in federal law have affected their policies with new and associated adjustments to rates. Property owners who face increased premiums should discuss options such as verifying the accuracy of the rate determination, increasing the deductible, or consider retrofitting or rebuilding at a higher elevation. Additional information is available at the following website:

https://www.floodsmart.gov/

Meanwhile, here are some things you can do:

1. Request the assistance of James Linkogle, the Town's Community Rating System Coordinator, by calling (941) 316-1988. He can tell you about the information available on what would be an appropriate flood protection level of elevation for your property. He can also discuss types of flood protection and or construction alternatives with you.

2. Prepare for flooding by doing the following:

   - Know when and where to evacuate before the flood comes.

   - Know how to shut off the electricity and gas to your house before the flood comes. Mark your fuse or breaker box to show the circuits to the floodable areas of your property. Turning off the power to these areas can reduce damage to the electrical system.

   - Make a list of emergency numbers and identify a safe place to go.

   - Make a household inventory.

   - Put insurance policies, valuable papers, medicine, etc. in a safe place, or take them with you if you evacuate.

   - Develop a disaster preparedness and response plan – Visit the Town of Longboat Key website at www.longboatkey.org, then click on the Hurricane Information page.

   - Register for CodeRED Emergency Notification to receive messages regarding severe weather events, water service outages, hurricane evacuations and re-entry, and emergency messaging from public safety officials.

3. Consider some permanent flood protection measures.

   - Consider elevating your house above flood levels.

   - Check your building for water entry points.

   - Install a sewer backup valve to prevent sewer backup flooding.

   - More information is available at the FEMA website,

     https://www.fema.gov/national-flood-insurance-program

4. Check the status of your flood insurance policy.

   - Homeowner's insurance policies do not cover damage from floods. However, because the Town of Longboat Key participates in the National Flood Insurance Program, you can purchase a separate flood insurance policy. This insurance, administered by the Federal government, is available to everyone even properties

that have been previously flooded. Because the Town participates in the Community Rating System, eligible properties should be receiving a 25% reduction in the insurance premium. If your premium does not include the 25% discount, contact your agent to find out why.

- Some people have purchased flood insurance because the bank required it when they applied for a mortgage or home improvement loan. Usually these policies just cover the building's structure but not its contents. During the kind of flooding that can happen in your area, there is usually as much or more damage to the furniture and contents as there is to the structure. Be sure you have insurance with contents coverage.

- Don't wait for the next flood to check on or buy insurance protection. In most cases, there is a 30-day waiting period before the National Flood Insurance Program coverage takes effect.

- Contact your insurance agent for more information on rates and coverage.

Again, do not hesitate to contact James Linkogle, the Town's Community Rating System Coordinator, in the Public Works Department at 316-1988 for assistance. James will be pleased to discuss flood protection alternatives with you and help in any way possible.

My best regards,

Tom Harmer
Town Manager

cc. James Linkogle, Community Rating System Coordinator
Isaac Brownman, Public Works Director
Allen Parsons, Planning Zoning and Building Director

6

PRIORITY TOPICS ABOUT FLOODS AND PROTECTION
For the TOWN OF LONGBOAT KEY

*Register for **CodeRED** / Severe Weather Warning to stay informed when severe weather threatens or is imminent. This provides advance warning if residents need to take protective measures for their personal safety and property protection.*

1. KNOW YOUR FLOOD HAZARD

- Your property is subject to flooding.
- 100% of the Town of Longboat Key lies within the Special Flood Hazard Area, the 1% annual chance of flooding.
- You may own property in a repetitive flooded area.

2. INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD

NATIONAL FLOOD INSURANCE PROGRAM

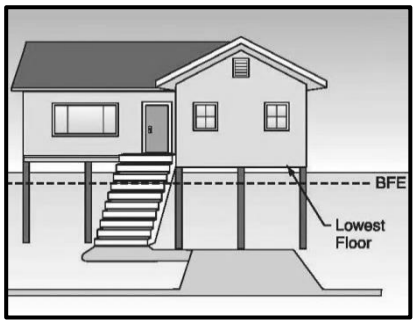
- You need flood insurance.
- Renters should buy flood insurance for their contents.
- You may be able to take advantage of a low-cost Preferred Risk Policy.

Check with your insurance agent.

3. PROTECT PEOPLE FROM HAZARD

- Do not drive through flooded streets, turn around, don't drown.
- Know the flood warning information process, pay attention to warnings.
- Designate a place where your family can rendezvous after an evacuation order is issued.

4. PROTECT YOUR PROPERTY FROM HAZARD



- Relocate your HVAC, electrical equipment, elevated above the flood level.
- Keep debris and trash out of the drains and ditches.
- We may be able to help you get a grant to elevate your home.

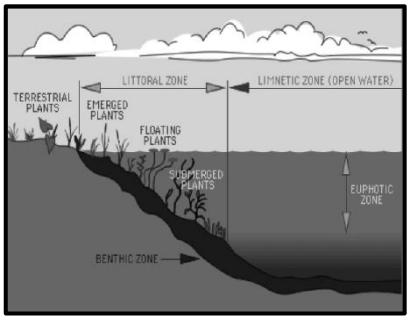
For more info call 941-316-1966 or 316-1988

5. BUILD RESPONSIBLY

- Get a permit from Planning Zoning Building Dept. before you build.
- Know the substantial damage and improvement rules (and the ICC benefits).
- Be aware of the new Chapter 154 Flood Code and Building Code updates.

For more info call 941-316-1966

6. PROTECT NATURAL FLOODPLAIN FUNCTIONS



Help keep our bay waters clean.

- Don't dump in storm drains; they drain to the bays.
- Properly dispose of Household chemicals, oils and hazardous materials.
- Report any illicit discharges in storm drains or illegal dumping to the non-emergency Police number : 941-316-1977

For more info call 941-316-1988

Press Release
Town of Longboat Key

Public Works Department
(941) 316-1988
August 1, 2018

Annual Report on the Floodplain Management Plan

As part of the Community Rating System (CRS) Annual Recertification associated with the National Flood Insurance Program (NFIP), the Town must provide an Annual Report for its Floodplain Management Plan.

Adopted by Resolution 2015-23 on September 21, 2015, the plan contains six (6) Key Elements:

1. Organize, Involve Public, Coordinate Activities
2. Assess Flood Hazards and Problem Areas
3. Set Goals, Review Activities
4. Create an Action Plan
5. Adopt, Implement, Evaluate and Revise
6. Appendices (Related to Elements)

In order to maximize credit for maintaining discounts on NFIP Flood Insurance policies, the Town formed a committee that included appropriate department staff and the public. At least one-half of the members needed to be representatives of the public or community stakeholders.

The committee was chaired by Steve Schield, Town of Longboat Key Planner, and committee members were Steve Carr, contractor; Sandra Ceshker, insurance agent; Michael Drake, real estate representative; Neil Fleet, property management representative; and James Linkogle, Town of Longboat Key Public Works Project Manager, served as staff liaison to the committee. The committee has been meeting quarterly from and through 2015-2018. The committee reviewed and prepared a summary of updates incorporated herein to activities integrated in the current plan.

Attached:
Annual Report on the Floodplain Management Plan, Dated July 23, 2018

Annual Report on the Floodplain Management Plan
July 23, 2018

ADOPT, IMPLEMENT, EVALUATE AND REVISE

- **Summary: Monitoring and Evaluation**

PLAN MAINTENANCE

The Floodplain Management Plan will be monitored by the Public Works and Planning, Zoning and Building Departments as part of the regular status report procedures. The Departments will also be responsible for overseeing the implementation of the action plan activities in regards to developing and monitoring necessary budgets, developing and monitoring potential structural mitigation projects, and monitoring the progress of the Floodplain Management Plan Committee.

The Floodplain Management Plan Committee will meet quarterly to review, monitor and evaluate implementation of the Plan. As a result the Floodplain Management Plan will be updated annually by the Town Planner, CRS Coordinator, Building official, and the Floodplain Management Plan Committee Members. The Plan will be submitted and reviewed by appropriate Town departments and corresponding County Local Mitigation Strategy Working Group Committee members. The update will include an overview of this original plan, and provide status reports on projects and any revisions to the plan. Any recommendations or changes will be included in an annual update to Town Commission and made available to the public prior to October 1st of each year. The annual report will be available to the public and released to the media. The overall plan will be updated every five years in concurrence with the Community Rating System recertification process.

ACTION PLAN

The Floodplain Management Plan contains an Action Plan that identifies those mitigation actions appropriate to the community's resources, flood hazards, and vulnerable infrastructure and properties. These are incorporated with the goals and initiatives supplementary with the Local Mitigation Strategy relating to flood hazards.

- **Current Activities**

These activities were initially reported to the Town Commission September 15, 2014 Regular Workshop Meeting and have been updated through the Floodplain Management Plan Committee process in 2015-2016 and through 2018.

Due to the September 2017 Hurricane Irma impact to the Town, staff delayed submission of the annual report and update to follow final assessments of those impacts. Additionally, staff has recently included a Work Assignment to a Coastal Engineering firm to conduct an Initial Assessment to address Sea Level Rise and Recurrent Flooding. Subsequently staff is submitting the report at this time.

- **Preventive Strategies**

  - Development Review - Planning Zoning Building Department (PZB): The Town continues to enforce FEMA regulations and standards through its building and zoning departments and local ordinances.

- STATUS: The Town adopted a revised Flood Ordinance recommended by the State of Florida for concurrence with the 2010 Florida Building Code. This Town Ordinance, No. 2013-25, replaced the Town Code Chapter 154, Flood Protection Ordinance in entirety and was adopted taking effect March 17, 2014. This adoption process was concurrent with the NFIP compliance review and formal adoption of the FEMA Digital Flood Insurance Rate Map for the Manatee County portion of the island effective the same date. Per Town Code of Ordinances Chapter 150.01, the current version of the 2017 Florida Building Code is auto-adopted per the Ordinances and includes provisions for compliance with the National Flood Insurance Program (NFIP).

- The Town adopted Ordinance 06-09, Reconstruction of Non-conformities, to require that all structures be brought into compliance with the State of Florida Building Code, FEMA requirements, and local flood control regulations.

- RECOMMENDATIONS: Monitor status of Florida Building Codes and potential changes, (FBC 2017 effective December 31, 2017), and potential adoption of International Codes. Continue with the annual public outreach and education programs for understanding of all applicable local, state and federal codes as they pertain to floodplain management principals.

Long Range Planning PZB: The Town has adopted by Resolution 2011-13 a Vision Plan. The following are specific goals relating to floodplain management.

- Develop and participate in sustained policy efforts at state and federal levels to develop property and disaster insurance alternatives for coastal communities that help those communities remain economically viable.
- Increase public education and information on public safety, particularly disaster issues
- Maintain the high level of readiness for disaster response
- Continue to participate with other governments in cooperative efforts to protect and restore Sarasota Bay
- Periodically examine the beach management program as needed, including regional cooperation
- Seek opportunities to purchase open space for public use, with public input, as to features, uses, and costs

- STATUS: The Town's plan is in process, including potential amendments to the Towns Comprehensive Plan.

  In October 2013 the Town had a community study done by the Urban Land Institute (ULI). The ULI Advisory Services Panel report did an analysis of the existing conditions in the Town and its future. The ULI study made the following specific listed recommendations in regards to climate adaptation and coastal resiliency:
  - Research and understand new flood insurance.
  - Reestablish, maintain, and promote native vegetation along the coastline.
  - Implement planning management tools such as setbacks and buffers, and zoning plus development regulations and incentives.
  - Improve access to education and information, particularly through coastal monitoring systems, advisory notice, and evacuation plans.
  - Coordinate neighborhood plans with city and regional strategies.
  - Link outcomes of site analysis, vulnerability assessment, and resilience enhancement to the waterfront planning process.

- RECOMMENDATIONS:
  - Follow through with the adopted Vision Plan and recommendations of the ULI Study.
  - Track progress for opportunities to conserve open space within the Town's boundaries through its land use and zoning regulations.

- Adopted revisions to the Comprehensive Plan including Coastal Conservation Elements, Recreational Open Space and new Sustainability Elements to be accomplished by the spring of 2020.

- Local Mitigation Strategy (LMS) All Participating Town Departments: The Town continues to participate in the LMS process for hazard mitigation initiatives and projects.

  - STATUS: Staff continues participation in scheduled LMS Workgroup meetings with both Sarasota and Manatee counties. The LMS Working Group includes the area jurisdictions of the cities of Sarasota, Northport, Venice, The Town of Longboat Key, Sarasota County, and the Tampa Bay Regional and Southwest Regional Planning Councils. One purpose of the LMS is to provide consistency of flood-plain management issues within participating communities. Additionally the LMS provides participating communities in the Community Rating System a platform for coordinating the updating of the FEMA Flood Insurance Rate Maps and Risk Map Analysis initiative.

  - RECOMMENDATIONS: Continue involvement with coordination between the Town and the two county LMS plans. Continued participation in LMS Working Group with reaching goals and objectives identified by the group. The process of updating each county LMS is scheduled to be completed every 5 years.

- Community Rating System (CRS) PZB – Public Works Dept. (PW): The Town continues to participate in the NFIP/CRS program.

  - STATUS: Staff completed the 5-Year CRS Verification process in November, 2015.
  - As of the May, 2016 confirmation letter from FEMA the Town is currently rated a Class 5 community. This provides for a total 25% discount to NFIP flood insurance policy holders.

  - RECOMMENDATIONS: Staff continue to work with Insurance Service Office and FEMA Region IV to maintain Town's CRS rating and required activities. A notice from ISO and FEMA for the next cycle verification visit is anticipated in the Summer/Fall of 2018.

- Coastal Resiliency - Intergovernmental Climate Working Group
  Town Participation with City of Sarasota and other local governmental agencies.

  - STATUS: Participation with stakeholder groups like the City of Sarasota, the other Barrier Islands, Sarasota Bay Watch, Sarasota Bay Estuary Program as well as participating with public outreach.

  - RECOMMENDATIONS: A regional effort underway through the Tampa Bay Regional Planning Council to join a formed; "Tampa Bay Resiliency Coalition." Manatee County is a member of the Tampa Bay Regional Planning Council and they have invited Sarasota County and their municipalities to participate in this coalition. They are asking each of the local governments to sign off on a Memorandum of Understanding. Staff is attending scheduled meetings and will provide additional background and updates regarding this effort.

- Initial Assessment to Address Sea Level Rise and Recurrent Flooding
  Town of Longboat Key Work Assignment 2018-01 to APTIM Environmental & Infrastructure Inc.

  - STATUS: Perform Key Elements:
    Review existing data and identify gaps (water levels, rainfall, topographic, etc.)
    As a follow-up to the Commission discussion on shoreline protection, sea level rise, flood protection, sea wall heights, etc.

- ✓ Establish local water level projections for planning and infrastructure time horizons
- ✓ Collect input from Town staff and Conduct field observation to identify areas of concern
- ✓ Engage public via information and discussion session
- ✓ Identify infrastructure and assets at the highest risk
- ✓ Outline potential adaptation strategies to be considered
- ✓ Identify future work and next steps required to develop a comprehensive adaptation plan

➢ RECOMMENDATION: Staff is working on a vulnerability assessment specific to the Town as a first step towards a long range plan/roadmap. Some research and data collection is underway and there will be follow-up reports later during regular public meetings.

■ **Property Protection**

- Education of Repetitive Loss Property Owners PW-PZB: Annual outreach through Town newsletters.

  - STATUS: An educational outreach letter to each repetitive loss property is mailed annually. The mailing for 2018 will be completed by June. Included are changes in Homeowners Flood Insurance Affordability Reform Act of 2014/15 and notice of current funding for Grant programs for Repetitive Loss and Severe Repetitive Loss properties.

  The 2018 Annual Summer Hurricane / Flood Newsletter was mailed the second week of May, 2018 to all addresses within the Town Zip Code. Information included the CRS 6 topic flood awareness, flood safety, property protection methods, and hurricane preparedness and response information, including advertisement for the annual Disaster Preparedness seminar held on May 31st.

  - RECOMMENDATIONS: Continue to improve the Town's formal outreach program to inform Repetitive Loss property owners of options for mitigation and funding. Continue to include updated information about the Homeowners Flood Insurance Affordability Reform Act of 2014/15, and policy changes that become effective.

- Enforcing New Construction and Renovation Standards - PZB
  Continuously enforce the current 2017 Florida Building Code edition as adopted by State Statute.

  - STATUS: Building inspectors and plans examiners continue their review of the current Florida Building Code (FBC) and any Amendments. Staff attends scheduled opportunities to maintain Continuing Education requirements for Building Officials, Building Inspectors, Plans Examiners, Code Enforcement and Certified Floodplain Managers.

  - RECOMMENDATIONS: Educate contractors and the public as to any changes in the FBC and Amendments with emphasis on flood protection techniques and requirements by including in annual outreach meetings.

- Conduct public outreach programs: PZB – PW.

    - STATUS: The Town held a public forum on June 8, 2017, at Harborside Clubhouse to discuss flood protection at the Hurricane Awareness Seminar.

    - RECOMMENDATIONS: Continue to hold at minimum annual basis public forums and investigate opportunities for additional public outreach and utilize the local press to educate the public. Support the required maintenance of the Floodplain Management Plan Committee (Quarterly).

- **Natural Resource Protection**

    - Sarasota Bay Estuary Program – PZB-PW
      The Town is a member and provides financial support to the Sarasota Bay Estuary Program to enhance the preservation and/or creation of the local floodplains and wetlands.

        - STATUS: Continuing to support wetland protection in Sarasota Bay.

        - RECOMMENDATIONS: Continue current support, investigate opportunity for restoration and protection of wetlands, Natural Beneficial Functions of the Floodplains and preservation of Open Space. Continue Town representation at regularly scheduled meetings on the Policy, Technical and Citizen Committees for the Sarasota Bay Estuary Program.

    - Town Wetlands Protection and Restoration - PZB-PW

        - Durante Park, Phase Four project
        - Sisters Key Restoration Project
        - Lyons Lane Restoration Project
        - Quick Point Nature Preserve
        - Greer Island

        - STATUS: The wetland mitigation project on Sister Keys Completed in August 2008 has completed the five-year permit required monitoring and maintenance program.

        - RECOMMENDATIONS: Continue to monitor restoration projects efforts in all Parks and on Sisters Key. Investigate additional opportunities for Public Outreach and Education as to Natural and Beneficial Functions of the floodplain and preservation of open space at minimum on an annual basis, or at quarterly Floodplain Management Plan committee meetings.

    - Beach Renourishment Projects - PW
        - In the summer of 2006, the Town completed an island-wide major beach renourishment project, which provided additional shoreline and dune protection.

            - STATUS:

        ♦ Most recent island wide Beach Restoration was completed in July 2006. Two Permeable Adjustable Groins were constructed at the Islander Club in 2009-10. An Interim renourishment was completed for the North end, Reach 1, of the island in July of 2011.
        ♦ Another interim Emergency Fill project on the North end was completed in June of 2014 as a result of a WCIND Sand Shoal Dredging project in Longboat Pass.
        ♦ A project to construct two Permeable Adjustable Groins and place 9300 cubic yards of sand on the North End for the protection of adjacent beach front properties, public access and marine habitat in 2015.

- ♦ The most recent renourishment projects were completed by way of two inlet pass dredging and one upland sand source via truck haul renourishment in 2016.

- RECOMMENDATIONS: Continue to maintain and monitor existing beach conditions and plan for future renourishment projects and sand sources. Provide recommendations to update the 2008 Beach Comprehensive Management Plan. Investigate additional opportunities for Public Outreach and Education on Natural and Beneficial Functions of beach renourishment and protection of marine species (Turtles, Shore Birds).
    - Conduct an Emergency Sand Placement on the North Shore Rd. Beach access. Submit permit application for additional permeable groin structures under the North End Stabilization Project format.

■ **Police and Fire Departments Emergency Services**

- Enhance the early-warning systems - Police (PD) and Fire (FD) Departments
    - To provide the earliest warning of weather conditions to all residents, commercial owners, and Town employees.

    - STATUS: The Town updates on an annual basis the comprehensive Town of Longboat Key Hurricane Plan as well as inter-departmental, local and State agency coordination. Installation was completed in July 2006 of the "Code Red" automatic phone notification system, and the Town is now updating staff training and promoting participation through the Town's website and local newspapers.

    - RECOMMENDATIONS: Investigate further opportunities for improvements to and use of latest technologies for communications and early warning coordination. Coordinate with Sarasota and Manatee Counties' EOC communication systems and insure requirements can be met to provide for opportunity to continue eligibility for CRS Activity 610 reporting. Insure participation on Early Flood Warning during annually scheduled Hurricane Exercises, preparation for and actual response to storm events and critique of effectiveness of plans and actions.

- Enhancement of the evacuation program for residents including Special Needs residents. - FD

    - STATUS: The Special Needs Evacuation lists are updated annually on the county and local levels.

    - RECOMMENDATIONS: Monitor progress of improvements and maintenance of evacuation routes through participation in the monthly Metropolitan Planning Organization and Fla. Dept. of Transportation. Maintain lists on an annual basis.

- Continued Participation in Manatee County Disaster Preparedness Planning Committee (DPPC) – All participating Town Departments

    - STATUS: Participation is ongoing.

    - RECOMMENDATIONS: Attend regularly scheduled monthly meetings and provide input through the committee process to include available information to improve public outreach and education for floodplain management programs.

■ **Structural Projects/Capital Improvements**

- Town-wide storm water system improvements - PW
    - STATUS: The Town has included in the 2017-18 budget year a review and analysis of storm water system conditions in the Village area. A subsequent report will provide

information and recommendations to move forward with design and potential future projects for improved storm water services in the 2018-19 and 2020 budget years.

- RECOMMENDATIONS: Continue permitted maintenance requirements.

- Continue comprehensive 5-year Public Works projects for Water and Wastewater facilities. - PW

  - STATUS: Construction process underway for improvements to harden water and sewer plants. A new sub-aqueous water main crossing of Longboat Pass for insurance of maintained water supply from Manatee County was completed in April 2015.

  - RECOMMENDATIONS: Complete improvements as identified through the design phase. Continue to fund and complete projects in annual budget cycle process.

- Continue with Public Works Canal Dredging project for Vessel Waterway and drainage maintenance.

  - STATUS: Project is in final permitting phases inclusive of designing mitigation and permitting of Subaqueous Vegetation Impacts

  - RECOMMENDATIONS: Continue investigating ways to use dredged materials for upland beneficial uses. Investigate opportunities to incorporate GIS database into storm water outfall inventory and improved maintenance activities.

- **Public Information**

  - Floodplain Management Plan (FPMP) Updates and Evaluations - PZB, PW

    - STATUS: In progress.

    - RECOMMENDATIONS: Completed the process by of the current Floodplain Management Plan Committee review for the required modification and adoption the end of October, 2015. Coordinate Completing process for scoring under the current version of the CRS Coordinator Manual implemented in 2017. Participate with Sarasota County Floodplain Management Plan Committee, Program for Public Information (PPI), and identify and participate for potential additional CRS Activity credits. Continue participation of the Town FPMP committee for the effective application of the adopted plan for the 3 Year Cycle Verification visit and continue to schedule quarterly meetings in the future to maintain current CRS Class 5 status and prepare for the next 5th year updates to current 2015 plan.

  - Public Education Program: PW – PZB

    - STATUS: Ongoing.

    - RECOMMENDATIONS: Maintain current activities and investigate other venues for educating the public and construction industry. Continue with the development of a permanent Floodplain Management Plan Committee and schedule quarterly meetings. Participate with Sarasota County PPI and Floodplain Management Plan Committee. Consider additional collaboration with Manatee County. Include regularly scheduled presentations on a minimum annual basis at various town Homeowners/Condominium Association meetings.

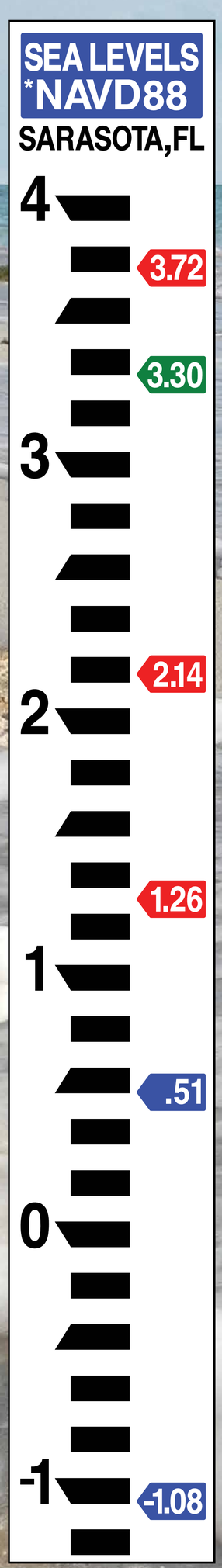
OUTREACH PROJECT - SARASOTA COUNTY PROPERTY APPRAISER FLOOD DISPLAY

PROJECT DESCRIPTION	Flood information displayed on the Tax Assessor database/Property Appraiser online records.
WHEN WILL THIS PROJECT BE IMPLEMENTED?	**Begin Date:** September 2017 **End Date:** Ongoing / data is updated and uploaded daily
WHO IS THE TARGET AUDIENCE?	All residents and non-residents
WHAT CRS TOPICS ARE COVERED?	☑ TOPIC 1: KNOW YOUR FLOOD HAZARD ☐ TOPIC 2: INSURE YOUR PROPERTY FOR YOUR FLOOD HAZARD ☐ TOPIC 3: PROTECT PEOPLE FROM THE FLOOD HAZARD ☐ TOPIC 4: PROTECT YOUR PROPERTY FROM FLOOD HAZARD ☐ TOPIC 5: BUILD RESPONSIBLY ☐ TOPIC 6: PROTECT NATURAL FLOODPLAIN FUNCTIONS ☐ TOPIC 7: HURRICANE PREPAREDNESS ☐ TOPIC 8: FLOOD ECONOMICS ☐ TOPIC 9: SEA LEVEL RISE
WHAT ARE THE MESSAGES?	A1
WHAT ARE THE OUTCOMES?	A1
WHO IS RESPONSIBLE FOR THE PROJECT?	Donna Bailey, CFM CRS Specialist Sarasota County Government 1001 Sarasota Center Blvd. Sarasota, FL 34240 941-861-0917 (office); 941-525-8915 (cell) Email: dabailey@scgov.net
HOW WILL THIS PROJECT BE DISTRIBRUTED?	- Online through the Property Appraiser's website

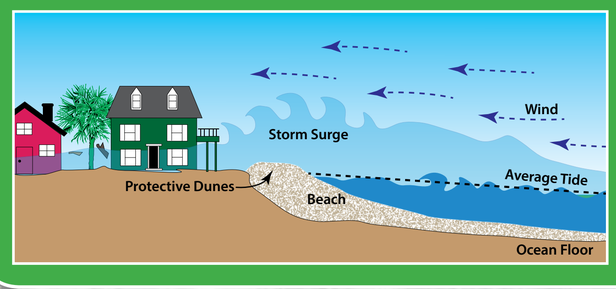
ARE THERE RELATED CRS ACTIVITIES?	310 – Elevation Certificates are available on the direct link to the flood zone locator program. 320 - Map Information Service 340 – Hazard Disclosure – Realtors use this service to advise their clients. 410 – Flood Hazard Mapping. 440 – This flood display links directly to the County's Map flood zone locator program. The committee determined what map information to display on the property appraiser website.
WHAT STAKEHOLDERS ARE INVOLVED?	Realtors, Lenders, Insurance Agents
WHICH JURISDICTIONS ARE INVOLVED IN THIS PROJECT?	- Sarasota County - City of Sarasota - Town of Longboat Key - City of Venice - City of North Port
WHAT ARE THE POSSIBLE SUCCESS INDICATORS?	- Increased web traffic - Increased number of FEMA policies
WHAT IS THE PROJECT STATUS?	**SEPTEMBER 2017** Project completed.

What Factors Influence Sea Levels?

The City of Sarasota has installed the tidal marker in the water to show tidal variations and educate on various factors that can influence water levels now and into the future.



Storms

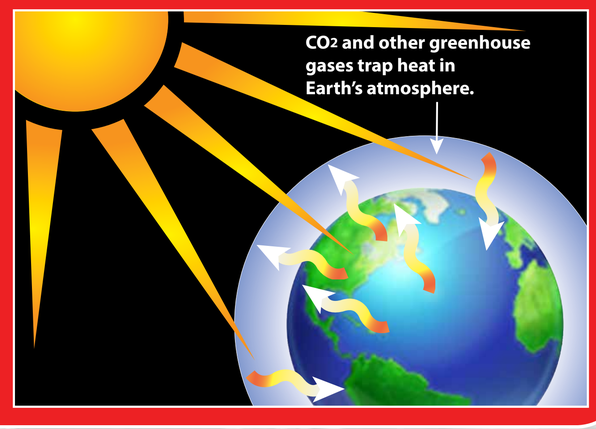


Storm-related winds and pressure changes can push water from the ocean toward shore, causing storm surge.

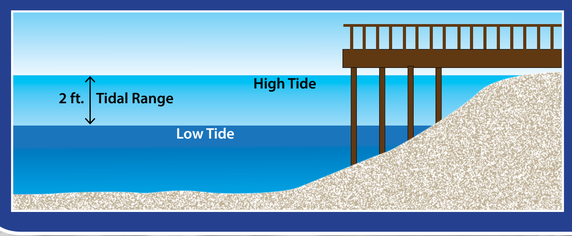
The green 3.30 ft. line on the marker is the storm surge associated with a typical category 1 hurricane at normal tide. A category 5 hurricane could possibly bring more than 20 feet of storm surge. Regardless of the hurricane category, storm surge can be unpredictable and can vary storm to storm.

Climate Change

Scientific consensus shows that when we burn fossil fuels, carbon dioxide is pumped into the atmosphere. This creates a blanket effect, trapping in heat around the world. This heat causes land ice to melt and ocean water to expand resulting in sea level rise and ocean acidification. As indicated by the red lines on the marker, the National Oceanic and Atmospheric Administration (NOAA) projects that the sea levels in Sarasota Bay will rise by 1.26 feet by 2050, 2.14 feet by 2070 and 3.72 feet by 2100. These are compared to 2000 sea levels and based on NOAA's intermediate projections. NOAA's highest prediction is an 8.3 ft. rise in sea levels by 2100.



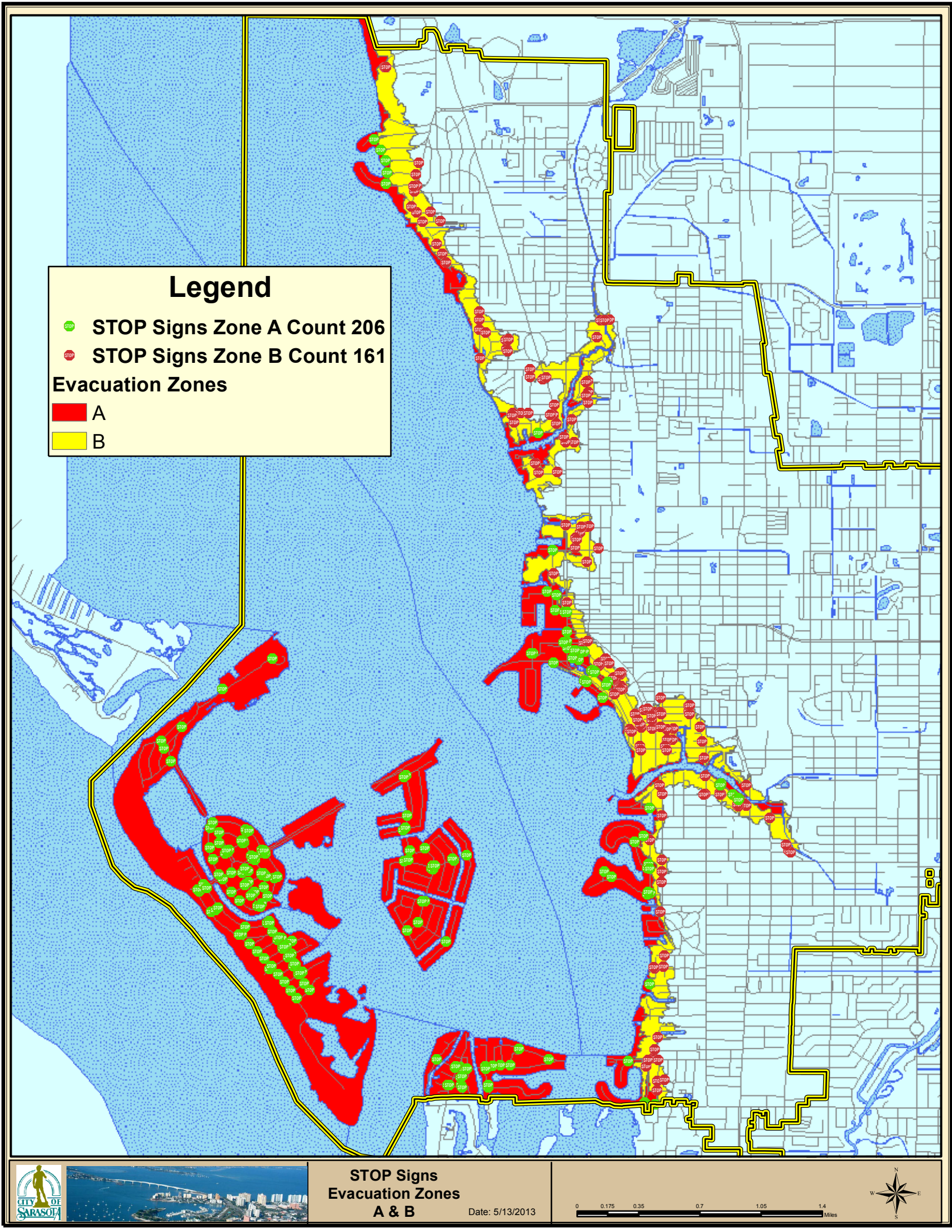
Tides



Tides are the daily rise and fall of sea levels caused by the combined effects of the gravitational forces of the moon, sun and rotation of the earth. Along Florida's west coast, tides currently rise and fall about 2 feet each day. The blue lines on the marker indicate the average high tide and average low tide levels.

For more information visit the City of Sarasota Sustainability Program at www.sarasotafl.gov or call 941-365-2200

* The North American Vertical Datum of 1988 (NAVD88) establishes a consistent zero point to measure all elevations from, even if the measurements are taken at different times or in different locations. NAVD88 is the respected system of constants for comparing elevations and was used in creating this marker.


Legend
STOP Signs Zone A Count 206
STOP Signs Zone B Count 161
Evacuation Zones
A
B
CITY OF SARASOTA
STOP Signs
Evacuation Zones
A & B
Date: 5/13/2013
0
0.175
0.35
0.7
1.05
1.4
Miles
N
W
E
S

The National Ready, Set, Go! Program

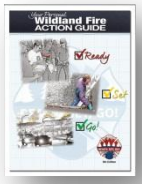
www.wildlandfireRSG.org

Powered by the IAFC

The Ready, Set, Go! Program, managed by the International Association of Fire Chiefs (IAFC), seeks to develop and improve the dialogue between the fire service and the residents they serve. The program helps the fire service to reach individuals who live in high risk wildland fire areas – and the wildland urban interface (WUI) – how to best prepare themselves, their families, and their properties against outdoor fire threats.

- **Ready – Be ready.** Take personal responsibility and prepare long before the threat of a wildland fire so your home is ready in case of a fire. Create defensible space by clearing brush away from your home. Use fire-resistant landscaping and harden your home with fire-safe construction measures. Create your Personal Wildland Fire Action Plan:
  - Assemble emergency supplies and belongings in a safe place.
  - Plan escape routes and make sure all those residing within the home know the plan of action and practice it regularly.
- **Set – Situational awareness.** Pack your emergency items. Know how to receive and stay aware of the latest news and information on the fire from local media, your local fire department, and public safety.
- **Go – Act early!** Follow your Personal Wildland Fire Action Plan. Doing so will not only support your safety, but will allow firefighters to best maneuver resources to combat the fire.

Program Resources at your fingertips! Upon joining the RSG! Program, you will receive a toolkit of resources and have access to the program's documents from the website. The tools provide ways to better understand preparedness techniques; identify local partners and audiences; and help with public outreach. The resources are customizable and include:



- **The Ready, Set, Go! Personal Wildland Fire Action Guide** (English and Spanish-languages) – Copies for distribution to your residents are available at no charge.
- **RSG National Video** – Available in English and Spanish-languages.
- **RSG Implementation Guide** – Provides background and steps to consider for easy program execution.
- **Presentation tools, local print media articles, civic group/HOA meeting invite letter, PowerPoint for local presentations, feedback forms, frequently-asked-questions** and more…

Resources free of charge to members

Join the Program!

Take advantage of all the resources available. Visit www.wildlandfireRSG.org and click the join icon to get signed up today!

Updated 111014

The National Ready, Set, Go! Program

www.wildlandfireRSG.org

Powered by the IAFC

Outreach Each member will approach outreach differently based on their ability, their location, and needs of residents. The RSG! Program implementation and outreach guides provide examples to consider. Engaging with the residents you serve will spread the wildland fire safety message and gain beneficial connections before a fire event occurs.

It is important to localize the program message so residents see their fire department, their community, and themselves in its message. The program's outreach tools will greatly assist your efforts. The program encourages the outreach to help deliver the preparedness message and make connections with individuals before a fire event, such as:

- Door-to-Door Outreach
- Tying into an existing department open house event
- Utilizing local print, radio, television, and social media
- Presenting to Homeowner Associations and Civic Groups
- Educating schools and other groups
- Connecting with other preparedness programs

Fire Adapted Communities (FAC) This brings together the federal land management agencies with national organizations and state and local interests to stress that with proper community-wide preparation, human populations and infrastructure can withstand the devastating effects of a wildland fire. The RSG! Program is a national tool for this cohesive effort.

FAC articulates the collaborative community-wide effort message, where all parties, citizens and government, are involved in successfully adapting to their wildland fire challenge. The fire service, local decision makers, the public, and land managers each have an important role to play. IAFC FAC's website, www.iafc.org/fac, provides beneficial resources and information to each group.

❖ **General Staff Information: Email RSG@iafc.org, Phone 703.273.0911, Fax 703.273.0920**

Partners