## **Town of Melbourne Beach**

# TOWN COMMISSION WORKSHOP WEDNESDAY FEBRUARY 5, 2020 at 6:00 p.m. MASNY ROOM – 507 OCEAN AVENUE

### **AGENDA**

#### PUBLIC NOTICE

The Town Commission will conduct a Town Commission Workshop on Wednesday February 5, 2020 in the Masny Room to address the items below.

#### **Commission Members:**

Mayor Jim Simmons Vice Mayor Wyatt Hoover Commissioner Steve Walters Commissioner Sherrie Quarrie Commissioner Corey Runte

#### **Staff Members:**

Town Manager Elizabeth Mascaro Town Clerk Nancy Wilson

Notice: Commission discussion and possible action may occur during any Commissioner Meeting. The following sections of the Agenda are always subject to such discussion and possible action without further motion by the Commission: Changes to the Agenda, Public Hearings, Old Business, and New Business.

The public is advised that members of the Town Commission may be in attendance and participate in proceedings of the board. Attorney General Opinions (AGO) AGO 91-95, AGO 98-14, AGO 2000-68.

PURSUANT TO SECTION 286.0105, FLORIDA STATUTES, THE TOWN HEREBY ADVISES THE PUBLIC THAT: In order to appeal any decision made at this meeting, you will need a verbatim transcript of the proceedings. It will be your responsibility to ensure such a record is made. Such person must provide a method for recording the proceedings verbatim as the Town does not do so.

In accordance with the Americans with Disability Act and Section 286.26, Florida Statutes, persons needing special accommodations for this meeting shall, at least 5 days prior to the meeting, contact the Office of the Town Clerk at (321) 724-5860 or Florida Relay System at 711.

- I. Call to Order Led by Mayor Simmons
- II. Roll Call
- III. Pledge of Allegiance and Moment of Silence
- IV. Presentation

#### V. Public Comment

After being acknowledged by the Mayor, members of the public should state their name and address for the record. The Commission encourages citizens to prepare their comments in advance. Each individual will have three (3) minutes to address the Commission on any topic(s) related to Town business not on the Agenda. Please remember to sign the sign-in sheet provided if you will be speaking at the meeting.

#### VI. New Business

- A. Consideration of verbiage for the short term rental ordinance Town Attorney Repperger
- B. Discussion and possible action imposing a fire tax to support the Fire Department Town Manager Mascaro
- C. Discussion regarding amendments to the Comprehensive Plan Town Manager Mascaro

#### VII. Adjournment

Attachments:	Minutes excerpt from June 26, 2019 meeting; Action Item on subject of fire tax
Date Prepared:	January 27, 2020
Prepared By:	Town Manager Mascaro
Meeting Date:	February 5, 2020

**Agenda Category:** 

Proclamations & Awards		Public Hearings
Presentations	х	Old Business
Boards & Committees		New Business
Consent		Other:

Subject:	Imposing a fire tax
Recommended Action:	Discuss for viability
Background Information:	At the June 5, 2019 Workshop, Commissioner Walters suggested that the entire Fire Department budget of \$468,849 be included in the proposed fire tax that would be put on the ballot in November.  The Commission consented to paying the requested stipend amount of \$100,000 for FY19-20 but not to pay for the requested new employees and to go to referendum in November to impose a fire tax for the entire FD budget.

### Excerpt from June 26, 2019 meeting minutes

A. Discussion regarding fire tax referendum as discussed at the June 5, 2019 Workshop – Town Manager Mascaro (00:34:09)

At the June  $5^{\rm th}$  Workshop, Commissioner Walters suggested the Commission approve a ballot referendum (to go before the voters this November) to remove the entire Fire Department budget of \$468,849 from the General Fund and that it be funded by a special fire tax . The Commission consented to paying the requested stipend amount of \$100,000 for FY19-20 but not to fund the requested new employees. It also agreed to discuss (and possibly approve) the writing of the proposed referendum at the June RTCM..

Interim Town Manager Mascaro reached out to other local municipalities who have fire assessments and the County Appraisers Office to get an explanation of the difference between ad valorem assessments and special assessments. Brevard County levies assessments based on square footage. There is also the issue of how long the assessment would last.

Mayor Simmons explained that the Town is struggling to pay for the Fire Department. Fewer and fewer residents are volunteering and it's becoming harder to recruit volunteers who aren't residents. The question is, how do we keep the Fire Department affordable for residents? Commissioner Walters suggested that instead of having Fire Department expenses paid out of the General Fund, we assess a special tax. The residents would have to be sold on this idea by determining how much value the Fire Department brings to the Town. Property taxes are substantially reduced by having a FD close by; we're charged substantially less than other communities. This would be a "new" tax with all proceeds going into their own discreet budget and in order to do that, a referendum would be required.

Town Attorney Repperger said the Town doesn't necessarily need to have a referendum; that it can levy a special assessment. There are a couple municipal jurisdictions that opt into County services by levying a special assessment and paying for that. That may be an option if the Commission wants to consider it.

Commissioner Runte asked if the Town has a referendum and the citizens voted against the new tax, would that prohibit the Town from then imposing a special assessment? The Town Attorney said that would depend on how the referendum was formulated. He suggested that community sentiment regarding a fire tax be gauged; however, if a referendum is decided upon, there is a time crunch. The discussion ranged from holding a referendum election, to having public meetings to get feedback, to taking an incremental approach, to simply levying a special assessment. Commissioner Runte wanted to know what each household would have to pay in additional taxes for fire services and what the savings are from having our Fire Department vs. relying on County services. Interim Town Manager Mascaro gave a

ballpark figure of under \$300 in additional taxes per household for houses under 2,000 square feet.

The Town Attorney said there are more questions that need to be answered before determining what path to take adding that given the time frame, there's not adequate time to craft a referendum to handle all parameters by the August deadline. Vice Mayor Hoover said we need to hear from the taxpayers.

Dave Micka, Fire Chief Fire Department

Chief Micka said he talked to the Chief of Malabar who just went from volunteers to paid employees. He got quotes from Palm Bay and the County to provide the support of 1 engine to Malabar and the fees per year were 1.1 million and 1.3 million respectively.

Mayor Simmons said if the Commission agrees, they need to think through this issue, come up with a good plan and sell it to the residents. Interim Town Manager Mascaro said the Commission needs to decide if they want the tax to be based on square footage or be a set fee and decide on a term or have it be indefinite; parameters need to be determined. The Town Attorney said the Commission must come up with a methodology for apportionment. In order for the assessment to withstand challenges, it has to be based proportionally on something which would be determined by a methodology.

Vice Mayor Hoover asked the Interim Town Manager to send to the Commission in the next couple of weeks, a bullet style list outlining key considerations and options for each one so they can begin their analysis.

By consensus, the Commission decided to discuss this matter further at the August 7<sup>th</sup> Workshop utilizing input gathered by the Interim Town Manager.

NOTE: The fire tax matter was put off until more stipend information was received.

Fire Tax briefings	6/26/2019	2/5/2020	Commission	Town Manager

6/26/2019: Town Manager to get information regarding fire taxes in order for the Town Commission to make an educated decision on how best to fund the Fire Department. Commission to decide whether to develop separate fund and how to gather citizen input (referendum or public meetings or commission action only)

8/21/2019: Fire department to present options to the Commission at the September Workshop. Commission to also discuss fire tax/dedicated department fund.

10/21/2019: A survey regarding fire services and a possible referendum on the 2020 ballot to be discussed at the December workshop. Decide on new date to discuss.

12/18/2019: The Commission decided this should be discussed at the February 2020 Workshop.

Attachments:	EAR final report; proposed new coastal management goal
Date Prepared:	January 27, 2020
Prepared By:	Town Manager Mascaro
Meeting Date:	February 5, 2020

**Agenda Category:** 

Proclamations & Awards		Public Hearings
Presentations	х	Old Business
Boards & Committees		New Business
Consent		Other:

Subject:	Comprehensive Plan updates
Recommended Action:	Review and comment
Background Information:	The Melbourne Beach Evaluation and Appraisal Report comprehensive plan amendments are submitted in response to the provisions of Section 163.31 91, Florida Statutes, which require that the planning program be an ongoing process. This necessitates the preparation of a formal evaluation of local governments' comprehensive plans every seven years followed by notifying the state land planning agency of the results. The purpose of the evaluation is to identify amendments to the comprehensive plan necessary to reflect changes in state requirements since the last update.

# Town of Melbourne Beach Florida Evaluation and Appraisal Report (EAR)

### **FINAL REPORT**

August 2019

Prepared for the Town of Melbourne Beach
Prepared by Place Planning and Design

### **TABLE OF CONTENTS**

Section	Page
I. Introduction	1
A. State Comprehensive Planning Requirements     B. Changes in Local Conditions	1 1
II. Florida Statutes Based Amendments	2
A. Reduction of Flood Risk	
<ol> <li>Vulnerability Assessment</li> <li>Strategies and Tools Recommendations</li> <li>County and Regional Programs Summary</li> <li>Public Meetings and Online survey Results</li> <li>Review of Flood-Resistant Codes and Recommendations.</li> <li>Review of Town's NFIP Rating &amp; Recommendations.</li> <li>Proposed EAR Comprehensive Plan Recommendations.</li> </ol>	
C. Current Comprehensive Plan Policies	5
<ol> <li>Future Land Use Element.</li> <li>Housing Element.</li> <li>Coastal Management Element.</li> <li>Intergovernmental Coordination Element.</li> <li>Capital Improvements Element.</li> </ol>	6 6
D. Current Town Programs	10
<ol> <li>44 CFR Part 60, Criteria for Land Management</li> <li>Florida Building Codes for Flood-Resistant Cons</li> <li>Town of Melbourne Beach Land Development C</li> <li>Melbourne Beach Vulnerability Analysis and Re</li> <li>Other Related Documents and Information</li> </ol>	struction11 Code12 siliency Plan13
E. Regional and County Programs	16
<ol> <li>East Central Florida Regional Planning Council.</li> <li>Brevard County 2015 Local Mitigation Strategy.</li> <li>Brevard County Emergency Management (BRE)</li> </ol>	18

F. National Flood Insurance Program (NFIP)	22
G. Analysis of Notification Issues	23
H. Proposed Comprehensive Plan Amendments	24
III. Five-Year Schedule of Improvements Amendments	24
IV. Updates Related to Changes in Local Conditions	25
A. Ten-Year Water Supply Facilities Work Plan Updates	25
Support Documentation.     Ten-Year Water Supply Facilities work Plan Amendments	
B. Future Land Use Map Series Amendments	. 27
LIST OF TABLES	
Table Pa	ge
1 - Melbourne Beach Vulnerability Matrix	20
2 - City of Melbourne Potable Water Service Area Population and Potable Water Consumption Projections	26
3 - Town of Melbourne Beach Population and Potable Water Consumption Projections	26
LIST OF EXHIBITS	
Exhibit Pa	ge
1 - Melbourne Beach Evaluation and Appraisal Notification	28
2 - Florida Department of Economic Opportunity Confirmation Letter	30
3 - Reduction of Flood Risk Amendments	31
4 - Five-Year Schedule of Improvements Amendments	46
5 - Amendments to the Future Land Use Map Series	47

#### I. INTRODUCTION

The Melbourne Beach Evaluation and Appraisal Report (EAR) comprehensive plan amendments are submitted in response to the provisions of Section 163.3191, Florida Statutes (F.S.), which requires that the planning program be an ongoing process.

In order to insure the ongoing process, F.S. Section 163.3191(1) requires each local government to prepare a formal evaluation of its comprehensive plan each seven years and notify the state land planning agency of the results. The purpose of the evaluation is to identify amendments to the comprehensive plan necessary to reflect changes in state requirements since the last update. In addition, local governments are encouraged to update comprehensive plans to reflect changed local conditions.

In response to F.S. Section 163.3101(1) requirements, the Melbourne Beach Evaluation and Appraisal Notification Letter (Notification) was submitted to the Florida Department of Economic Opportunity on January 26, 2018. (Ref: Exhibit 1).

The Town's Notification concluded that the following principal amendments are necessary to reflect state comprehensive planning requirements and changed local conditions:

#### A. State Comprehensive Planning Requirements.

- 1. Comprehensive Plan updates related to the reduction of flood risk and participation in the National Flood Insurance Program included in F.S.163.3178 (2) (f) (Coastal Management Element) and 163.3177(3) (b) (Capital Improvements Element).
- 2. Comprehensive Plan revisions related to the Five-Year Capital Improvement Schedule (Five-Year Schedule). Florida Statutes Chapter 163.3177 (3) (b) required the Five-Year Schedule component of the Capital Improvements Element to be updated annually by a comprehensive plan amendment. Recent statutory revisions now allow the Five-Year Schedule to be adopted annually by Town Ordinance. Further, a Five-Year Schedule adopted by ordinance no longer requires a companion comprehensive plan amendment.

#### B. Changes in Local Conditions:

- 1. Update of the Town's Ten-Year Water Supply Facilities Work Plan Sub-Element to maintain consistency with the 2018 Central Springs East Coast (CSEC) Water Supply Plan update;
- 2. Updates to reflect current conditions including editing statutory and administrative code references in the Comprehensive Plan and updating the planning period and population projections; and

3. Reformatting of the current Comprehensive Plan to consist of two separate documents; Support Documentation, to be adopted and revised by Town Resolution, and Goals Objectives and Policies, to be adopted and revised by Town Ordinance.

The Town received confirmation of the Notification from the Florida Department of Economic Opportunity (FDEO) in a letter dated January 31, 2018 (Ref: Exhibit 2).

#### II. FLORIDA STATUTES BASED AMENDMENTS

#### A. Reduction of Flood Risk Amendments

Redevelopment principles included in F.S. 163.3178 (2) (f) are related to the elimination, when opportunities arise, of inappropriate and unsafe development in coastal areas and participation in multi-level government disaster prevention and mitigation programs. Per the Town's FDEO Notification, the following items in F.S. 163.3178 (2) (f) are to be addressed:

- 1. Development and redevelopment principles and strategies that reduce flood risk in the coastal area resulting from high-tide events, storm surge, flash floods, stormwater runoff and the related impacts of sea-level rise.
- 2. Development and redevelopment principles and strategies that result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA).
- 3. Requirements for consistency with the flood-resistant construction requirements of the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.
- 4. Participation in the National Flood Insurance Program Community Rating System (CRS) administered by FEMA to achieve flood insurance premium discounts for Town residents.

#### B. Florida Resilient Coastlines Program Grant

The Town of Melbourne Beach was awarded a Florida Department of Environmental Protection (FDEP) grant to assess sea level rise, storm surge and flooding impacts on the Town, engage the public and develop strategies and policies aimed to mitigate, adapt and plan for the impacts. The Town contracted with the East Central Florida Regional Planning Council (ECFRPC) to develop the vulnerability assessment, engage the public and develop Coastal Management Element policies and recommendations.

Grant work products included the following seven Deliverables which are included herein by reference, and summarized as follows:

- 1. Vulnerability Assessment: Maps, data and analysis were prepared identifying at-risk coastal areas that currently experience, or have historically experienced flooding and coastal inundation. Within these areas, public and private resources that are at risk of being inundated were identified. As part of the vulnerability assessment, maps, charts and/or tables illustrating the coastal high hazard area, storm surge areas, areas subject to sea level rise and flooding were prepare in order to identify vulnerabilities of roadways and Town land uses and facilities.
- 2. Strategies and Tools Recommendations: Potential development and redevelopment principles and strategies for consideration by the Town during the Evaluation and Appraisal Comprehensive Plan update were discussed, including Peril of Flooding and Adaptation Action Area policies, and tools that reduce flood risk in the coastal areas identified in the Vulnerability Assessment. Recommendations were based upon interaction with the residents, survey results, opinions by experts and the Vulnerability Assessment. Feedback from the public engagement process was emphasized in order to develop strategies and policies for consideration by the Town, including Coastal Element goal, objective and policy revisions to address the state mandated Peril of Flood legislation.
- 3. County and Regional Plans Summary: A summary of regional and county plans, programs and policies related to addressing the issue of coastal flooding was prepared as the basis to insure Town continued awareness of, and participation in multi-jurisdictional cooperation efforts. The East Central Florida Regional Planning Council (ECFRPC), through several programs, is involved in coastal flooding resiliency planning for its multi- county region, including the 2060 Plan, Regional Resiliency Action Plan, Vulnerability Analyses for specific areas, and Public Outreach (e.g. Peril of Flood and Resiliency Newsletter and Peril of Flood Website).
- 4. Public Meetings and Online Survey Results: Public Engagement consisted of three distinct components; two separate public workshops and a MetroQuest Online Survey. Discussions at the initial public workshop, including results of a Menti-meter poll, were used in the development of the on-line survey. The results of the on-line survey were then considered when preparing initial draft Comprehensive Plan amendments that addressed citizen concerns regarding flooding, sea level rise, and safeguarding and improving the functions of the Indian River Lagoon.

An overview of the project, vulnerability analysis, survey findings and preliminary recommendations were discussed at the second public workshop. Results of discussions at the workshop, as well as input from Town staff, were used in drafting final proposed Comprehensive Plan recommendations.

Notices of the public meetings and on-line survey were available to residents, businesses, property owners and known interest groups through postings on the Town website, targeted mailings, and existing public announcement procedures.

- 5. Review of Flood-Resistant Codes and Recommendations: A determination was made that the Town code is generally consistent with the flood-resistant construction requirements of the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.It was concluded that, through its Comprehensive Plan, Land Development Code, and educational programs, the Town complies with the intent and letter of the requirements of the Florida Building Code and 44 CFR 60 regarding flood-resistant construction. It was recommended that the Town continue to coordinate with applicable State and Federal agencies, enforce various code provisions for flood-resistant construction, and update the Comprehensive Plan and Land Development Code to reflect changes and innovations in construction methods to minimize impacts of local flooding.
- 6. Review of the Town's National Flood Insurance Program (NFIP) Rating and Recommendations: The Town of Melbourne Beach currently benefits from the (NFIP) Community Rating System (CRS); however, potential areas for class improvement were explored.

The Town currently holds a CRS class 8 score on a scale of 1 to 10. If the Town Floodplain Manager/ CRS coordinator works with the Insurance Service Office ISO/CRS, the community can either choose to strengthen the current class, improve the class, or decide to take no action at this time.

Data was obtained from the State of Florida and examined related to common activities that other small communities implement to receive additional credits in order to help the Town determine the best course of action.

It was recommended that the Town remain in the CRS program at a class 8 unless significant further action is taken. The Town has decided not to pursue a class improvement since an improvement would require additional costs, including personnel to oversee the program.

7. Proposed EAR Comprehensive Plan Amendments: Draft Comprehensive Plan amendments were prepared incorporating the results of Tasks 1 – 6 above. Proposed amendments were prepared for the following Comprehensive Plan elements: Future Land Use; Housing; Coastal Management; Intergovernmental Coordination; and Capital Improvements.

#### C. Current Related Comprehensive Plan Policies

Current Town goals, objectives and policies that address the requirements of F.S. 163.3178 (2) (f) are included in the following elements of the Comprehensive Plan. These elements are appropriate locations for F.S. 163.3178 (2) (f) – based amendments to the Melbourne Beach Comprehensive Plan.

#### 1. Future Land Use Element

#### GOAL:

Promote safe, quality residential development and/or restoration.

#### **OBJECTIVE 7.0:**

Ensure all new construction and/or redevelopment is consistent with requirements for flood prone areas and that residential densities are consistent with Town, county, and regional Hurricane evacuation plans.

#### Policy 7.1:

Maintain up-to-date copies of State and Federal Regulations regarding development and/or redevelopment within flood prone areas and ensure that developments within areas identified on the Flood Hazard Boundary Map and/or the Flood Insurance Rate Map comply with appropriate requirements.

#### Policy 7.2:

Ensure that Ordinances of the Town are in conformance with County, State and Federal Rules and Regulations regarding development and redevelopment within "Coastal High Hazard Areas."

#### Policy 7.3:

Review, analyze, and amend as determined necessary, Code of Ordinances requirements regarding repair or reconstruction of damaged properties including those provisions that apply to Coastal High Hazard Area.

#### Policy 7.4:

Periodically review and revise as necessary, permitted densities within the zoning ordinance to ensure that the population densities do not exceed those that will allow the Town to meet adopted hurricane evacuation timeframes.

#### GOAL:

Encourage the preservation of natural features in existing and future developments.

#### **OBJECTIVE 14.0:**

Continue to maintain and strengthen tree preservation and landscape ordinances, encouraging the use of indigenous vegetation.

#### Policy 14.2:

Continue to enforce regulations regarding building setbacks from the dune.

#### 2. Housing Element

#### GOAL:

The provision of safe, sanitary living conditions, in viable neighborhoods for present and future residents of the town.

#### **OBJECTIVE 1.0:**

Insure that all residential structures are maintained in a safe sanitary condition.

#### Policy 1.1:

The Town shall continue with strict enforcement of the Florida Building Code and Florida Residential Building Code and adopt revisions to these codes as appropriate to ensure that new building material and techniques are permitted in Melbourne Beach.

#### 3. Coastal Management Element

#### GOAL:

Preserve, protect and enhance the coastal resources as development or redevelopment occurs in Melbourne Beach.

#### **OBJECTIVE 1:**

Protect existing native vegetation as development or redevelopment occurs.

#### Policy 1.1:

Native vegetation communities such as those located in dunes along the ocean and along the lagoon to the west shall be preserved and incorporated in any development or redevelopment project through procedures adopted in the Code of Ordinances.

#### Policy 1.2:

The Town shall coordinate with the State and local agencies to provide for the reestablishment of shoreline vegetation where it has been removed.

#### **OBJECTIVE 2:**

The Town shall continue to coordinate with the applicable Federal, State, County and agencies in order to protect the beach and dune system as a viable feature providing storm protection for upland property and serving as an important recreation and aesthetic resource.

#### Policy 2.1:

Codes that control and regulate construction activities in the coastal zone areas shall be adopted and enforced consistently throughout the Town.

#### Policy 2.2:

Codes shall be updated when necessary to conform to new state regulations and advances in the understanding of the coastal process.

#### Policy 2.3:

The coastal building setback requirement shall be modified when necessary to allow the setback line to follow any repositioning of the Coastal Construction Control Line (CCCL).

#### Policy 2.5:

The development code shall specify the appropriate vegetation for planting in dunes, and that such vegetation shall be protected from pedestrian and vehicular traffic. Any construction or reconstruction of beach access shall provide for dune crossing over walks.

#### GOAL:

Protect human life and limit public expenditures in areas subject to destruction by natural disasters.

#### **OBJECTIVE 5:**

Limit public expenditures that subsidize development permitted in coastal high-hazard areas except for restoration and enhancement of natural resources.

#### Policy 5.1:

No construction or development activity shall be permitted, except through the Florida Department of Environmental Protection, seaward of the Coastal Construction Control Line (CCCL) unless it is intended for restoration and enhancement of natural resources.

#### Policy 5.2:

Existing permanent structures protruding into the coastal high-hazard areas shall be required to meet the most recent version of coastal building codes and regulations established by the Florida Department of Environmental Protection when redevelopment occurs on the property.

#### Policy 5.3:

The Coastal High Hazard Area is the area below the elevation of the category 1 storm surge line established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. This encompasses that portion of the Town as depicted on Map 2 (2020 Future Land Use) and Map 9 (Coastal High Hazard Area). Public infrastructure within this area may be built and reconstructed when necessary but not for the purpose of facilitating an increase in permitted density.

#### **OBJECTIVE 6:**

The Town shall maintain an out of County evacuation time of less than sixteen (16) hours for a Category 5 storm event.

#### Policy 6.1:

The Town shall cooperate with, and support, Brevard County in planning for hurricane evacuation.

#### **OBJECTIVE 7:**

The Town shall continue to coordinate with the Brevard County Emergency Management Office to provide immediate response to post-hurricane situations.

#### Policy 7.1:

The current Local Peacetime Emergency Plan shall be modified to comply with the policies under this objective, and shall contain step-by-step details for post-disaster recovery operations.

#### Policy 7.2:

After a hurricane but prior to re-entry of the population into the evacuated areas, the Town Commission shall meet to hear preliminary damage assessments, appoint a Recovery Task Force, and consider a temporary moratorium on building activities not necessary for the public health, safety and welfare.

#### Policy 7.3:

The Recovery Task Force shall review and decide upon emergency building permits, and repair and cleanup actions needed to protect public health and safety; coordinate with County, State and Federal officials to prepare disaster assistance applications; develop a redevelopment plan; and recommend amendments to the Comprehensive Plan, Local Peacetime Emergency Plan, and other appropriate policies and procedures.

#### Policy 7.4:

Repairs to potable water, waste water, and power facilities; removal of debris; stabilization or removal of structures about to collapse; and minimal repairs to make dwellings habitable shall receive first priority in permitting decisions. Long term redevelopment activities shall be postponed until the Recovery Task Force has completed its tasks.

#### Policy 7.5:

Structures destroyed, by any means, to an extent of more than 50% of the replacement cost at the time of destruction shall not be reconstructed except in compliance with the Code of Ordinances.

#### 4. Intergovernmental Coordination Element

#### GOAL:

Maximize the effectiveness and efficiency of intergovernmental relationships between the Town of Melbourne Beach and other governmental entities.

#### **OBJECTIVE 1.0:**

Maintain membership in organizations such as the Space Coast League of Cities in order to foster informal intergovernmental relationships.

#### Policy 1.1:

Ensure that annual membership fees in such organizations are budgeted and Town Representatives attend the organizations meetings.

#### **OBJECTIVE 2.0:**

The Town shall review for compatibility, all comprehensive planning elements and subsequent updates of neighboring jurisdictions. Brevard County, the Brevard County School System, the Florida Department of Transportation, and other units of local government providing services to the Town in order to coordinate with the planning activities of each jurisdiction.

#### Policy 2.1:

Continue to work with the Brevard County Comprehensive Planning Steering Committee. The Town participates through representation on the Spacecoast Transportation Planning Organization and the Intergovernmental Coordination Committee.

#### 5. Capital Improvements Element

#### GOAL:

Undertake actions necessary to adequately provide needed public facilities to all residents of the town in a manner that protects investments in existing facilities and maximizes the use of existing facilities.

#### **OBJECTIVE 2:**

Limit public expenditures that are for the purpose of increasing density in coastal high hazard areas (CHHA).

#### Policy 2.1:

The Town shall not fund infrastructure in the high hazard coastal area that subsidizes development.

#### D. Current Town Programs

The following is a review of Town Codes and requirements to determine consistency with the Flood-resistant construction requirements of the Florida Building Code and applicable flood plain management regulations set forth in 44 CFR Part 60. To complete this task, the following documents were reviewed:

- 44 CFR Part 60, Criteria for Land Management and Use, Subparts A, B, and C;
- Florida Building Code information regarding flood-resistant construction;
- Town of Melbourne Beach Land Development Code; and
- Town of Melbourne Beach web site for relevant information.

#### 1. 44 CFR Part 60, Criteria for Land Management and Use

Subpart A of Section 44 includes six different categories of local circumstances and related federal flood-related compliance criteria applicable to communities across the country. Section (i.e. category) E of 44 CFR 60 is applicable to the Town, which states:

"When the Federal Insurance Administrator has provided a notice of final base flood elevations within Zones A1-30 and/or AE, and if appropriate, has designated AH zones, AO zones, A99 zones and A zones on the communities FIRM, and has identified coastal high hazard areas by designating Zones V1-30, VE, and/or V".

Each category of conditions includes a specific set of criteria which must be implemented in order to comply with the CFR requirements.

In the Town of Melbourne Beach, the Flood Insurance Rate Maps (FIRM) are Maps 12009C0608G, 12009C0604G, and 12009C0616G. As depicted on these FIRM maps, the following Flood Zone designations are applicable to the Town of Melbourne Beach:

- Zone VE (EL 11.7 and 13.7). This zone is a "coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined."
- Zone AO depth 1'. This zone has "flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined."
- Zone AE (EL 3.7 and 4.7). This zone has "base flood elevations determined."

• Zone X. This zone includes "areas determined to be outside the 0.2% annual chance floodplain."

#### 2. Florida Building Codes for Flood-Resistant Construction

The Florida Building Code (FBC) addresses flood provisions in a number of sections including Chapter 1 Administration, the "Building" section, the "Residential" section, the "Existing Building" section, and the "Mechanical, Plumbing and Fuel Gas" sections.

In Chapter 1 Administration, the FBC establishes the applicability of the code and describes how the code is to be applied and enforced. It also specifies requirements including that site plans must show flood hazard areas, floodways and design flood elevations. The "Building" section includes the following key provisions:

- In Section 1612.3, flood hazard areas are established by local floodplain management ordinances, which adopt flood hazard maps.
- Section 1612.5 requires submission of elevation certificates.
- Section 1804.4 addresses where grading and fill are allowed in flood hazard areas.
- Section 3109 includes requirements for buildings seaward of the Coastal Construction Control Line (CCCL).

The "Residential" section includes Section R322, Flood-Resistant Construction, and that dwellings seaward of the CCCL must be in accordance with Section 3109 of the FBC, Building.

The "Existing Building" section includes criteria to address the principal that work on existing buildings does not lessen the compliance or conformance of the structure with current codes. This section also addresses work on existing buildings within flood hazard areas and defines thresholds for work related to "substantial improvement" or the repair of "substantial damage". If these thresholds are exceeded, then the structures must be brought into compliance with current codes.

The sections on Mechanical, Plumbing, and Fuel Gas, have similar provisions requiring equipment and systems to be located at or above the flood elevations and/or that they meet certain performance standards to address flood hazards.

#### 3. Town of Melbourne Beach Land Development Code

The Town Land Development Code (LDC) includes several sections which address construction, development and redevelopment in flood prone areas including Section 1A-3 Definitions, Chapter 4A Buildings Flood Protection Coastal Construction; Chapter 5A Coastal Setback Regulations; and Chapter 7A Zoning.

The Town Land Development Code (LDC) includes several sections which address construction, development and redevelopment in flood prone areas including Section 1A-3 Definitions, Chapter 4A Buildings Flood Protection Coastal Construction; Chapter 5A Coastal Setback Regulations; and Chapter 7A Zoning.

Chapter 1A of the LDC includes Section 1A-3, Definitions, including the following relevant terms: Area of Special Flood Hazard; Base Flood; Building Official (as the position designated to interpret the flood control regulations); Flood or Flooding; Flood Hazard Boundary Map; Flood Insurance Rate Map; Flood Insurance Study; and Floodway.

Chapter 4A is entitled "Buildings; Flood Protection; Coastal Construction" and includes the majority of land development regulations specifically regulating flood-resistant construction. Several relevant sections are as follows:

- Article II Adoption of Building Codes. This section adopts the Florida Building Code, the Florida Residential Building Code, and the Florida Existing Building Code current editions.
- Articles IV, V, VI, VII, and VIII adopt the FBC for Unsafe Building Abatement, Plumbing, Mechanical, and Fuel Gas Codes.
- Article X Coastal Construction Code is adopted to provide construction codes for work within the Coastal Building Zone and coastal barrier islands in the Town.
- Article XII Floodplain Management Code intends to establish minimum requirements to safeguard public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas.
- Chapter 5A is the Coastal Setback Regulations section which prohibits the construction of major structures and minor structures not pile supported within the coastal setback line.

 Chapter 7A Zoning includes the following provisions related to floodplain management: Section 7A-55 Building Construction requires the lowest floor level of all buildings to be at least 18" above the crown of the highest street perpendicular to the foundation to which the property abuts. Plans for construction must include elevations of the property, street, proposed building, FEMA flood zones and elevations.

Section 7A-70 Federal and State Elevation Certificates and Documentation requires that any new construction of substantial improvements located in Flood Zones include an elevation certificate to ensure compliance with FEMA Elevation Certificate requirements.

#### 4. Melbourne Beach Vulnerability Assessment and Resiliency Plan

A vulnerability assessment was conducted by the East Central Regional Planning Council (ECFRPC) in February 2019 which served as the basis for many of the recommendations included in this report. The principal goal of the related Resiliency Plan (i.e. Peril of Flooding and Adaptation Action Area policies) is to identify coastal vulnerabilities specific to the Town and provide recommendations, including Comprehensive Plan amendments, to mitigate the effects of sea level rise.

Maps, data and analysis were prepared in order to identify at-risk coastal areas that currently experience, or have historically experienced flooding and coastal inundation. As part of the analysis, five natural hazards are addressed, including: 1) Storm Surge; 2) Sea Level Rise; 3) FEMA 100-and-500-Year Flood Zones; 4) Nuisance Flooding Area; and (5) Sea Level Rise plus Storm Surge (Ref: FDEP Grant Deliverable 1: Vulnerability Analysis). Within these areas, public and private resources that are at risk of being inundated are identified. The purpose of the data is to provide a preliminary look at sea level rise, erosion, and coastal flooding impacts. Data and maps in the report illustrate the scale of potential flooding, not exact locations.

Based upon the vulnerability assessment, the Town will adopt Peril of Flood policies and establish a Coastal Planning Area (CPA) to address those parts of the Town that are more susceptible to sea level rise and storm surge. By definition, the CPA is the area most susceptible to sea level rise and other flooding, and where the main focus on being sustainable regarding these events will occur.

Overall, Melbourne Beach has a relatively low exposure of critical facilities to natural hazards, as compared to more urbanized areas. The dunes along the ocean protect the Town from impacts from the ocean and, while rising waters from the Indian River Lagoon (IRL) will impact residents in the long term, critical facilities will not experience impacts until after the 2070 timeframe.

Sea level rise impacts to the Town will initially be from the IRL, since elevations are lowest on the west side of Town. Sea level rise projections from NOAA suggest that by 2070, sea levels will have risen more than 4 feet in coastal Florida, which is enough to permanently inundate part of Melbourne Beach. While the impacts will not affect Melbourne Beach until later in the century, putting mechanisms in place well ahead of time will make the transitions required in the future easier to implement.

Currently, Melbourne Beach is experiencing nuisance flooding through prolonged rain and annual high tides. As with sea level rise, Town impacts will initially be from the IRL, since elevations are lowest in that area of the Town. Related inundation is encroaching on critical infrastructure along the IRL and, if not addressed, can be detrimental to the Town. Further, a warmer climate may portend stronger and more frequent hurricanes. It is recommended that the Town assess outfall elevations to determine the impacts of elevating lagoon waters and potential stormwater system failures.

The Town is challenged with maintaining a balance between the current quality of life and the physical realities of increasing hazards from higher water. As a small municipality, Melbourne Beach needs to concentrate on managing the challenges to infrastructure that will continue to be impacted. The Town will need to consider the impacts of a reasonable lower level of service than has been provided in the past due to financial capacity of the Town to construct large and expensive infrastructure projects to protect from the perils of flood. It is important that the Town take a pro-active stance in addressing the mid and long-term future of the Town.

Two public meetings were held and an on-line survey was developed to provide public input. The Town's existing Comprehensive Plan Goals, Objectives and Policies (GOPs) were reviewed and recommendations made to enhance planning for current and future flood impacts, including sea level rise and hurricane surge. Policies adopted by the Town should include approaches that maintain the safety and well-being of the community and preserve municipal infrastructure while also minimizing long-term potential legal liabilities and unintended future risks to residents from the perils of flood. Basic planning principles discussed include:

- There will be an increase in flood potential in the Town from sea level rise and associated intensification of storms and rain events due to climate change.
- The protection of safety and property due to the risk of flooding impacts should be emphasized. Regulations must be based on technical data, such as the information provided in the vulnerability assessment.
- A statement should be included in ordinances that the Town's policy mandates
  that the local government has a need and responsibility to make challenging
  decisions that balance the important interests of property rights with the need for
  the community to responsibly manage its limited financial resources and protect
  the lives of residents and first responders.

- Highlight the fact that the Comprehensive Plan and ordinances are to give residents and businesses adequate current and advanced notice of future conditions of potential property impacts due to the perils of flood.
- Ensure that the processes in ordinances respect due process of property owners.
- Strive to have Comprehensive Plan language, polices and ordinances work in conjunction to accomplish the Town's aims.
- Include policies and ordinances that minimize the risk of "moral hazard"., where risk taking behavior is potentially rewarded by allowing those who take the risk of living in hazardous areas having other tax payers incur the higher costs to maintain the infrastructure necessary to service or protect them.
- Identify existing and future data required to set policy and to implement desired policies, now and in the future.

Revisions to the Coastal and other Elements of the Comprehensive Plan are recommended (Ref: Exhibits 3 and 4), consistent with state mandated Peril of Flood legislation and the findings of the Vulnerability Assessment, for consideration by the Town.

By acting now, the Town can get ahead of many future flood impacts which will have an increasing influence over the daily lives of residents and business owners.

#### 5. Other Related Documents and Information

The Town of Melbourne Beach undertakes additional efforts to ensure compliance with State and Federal requirements as well as help educate it citizens on flood hazards. The Town's web site includes a web page devoted to stormwater management (<a href="https://www.melbournebeachfl.org/stormwater">https://www.melbournebeachfl.org/stormwater</a>). This web page includes links to downloadable informational/educational documents, provides links to other related web sites and a link to the Town's stormwater plan.

Informational and educational documents which can be downloaded from the web page include the following:

- Effective Use of Swales brochure.
- Landscaping and Gardening brochure.
- Urban Runoff Facts brochure.

Links to other related web sites which provide additional educational information for flooding and stormwater include:

- National Water Quality Monitoring Council water quality sampling database.
- University of Florida Institute of Food and Agricultural Sciences (UF/IFAS).
- Brevard County Natural Resources Watershed Management Program.
- US Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES).

The Town of Melbourne Beach 2007 Stormwater Management Plan updated the Town's 2002 Plan and included conditions of the existing system and recommendations for prioritizing and budgeting stormwater system improvements. The overall goal of the plan is to improve flood control and water quality treatment in the Town.

#### E. Regional and County Programs

Redevelopment principles included in F.S. 163.3178 *Coastal Management* Section (2) (f) are related to the elimination, when opportunities arise, of inappropriate and unsafe development in coastal areas and participation in multi-level government disaster prevention and mitigation programs.

#### 1. East Central Florida Regional Planning Council

The East Central Florida Regional Planning Council (ECFRPC), through several programs, is involved in coastal flooding resiliency planning for the multi- county region, including Brevard, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia counties. The following is a summary of ECFRPC programs and services.

Resiliency is defined as the capacity of individuals, communities, institutions, businesses, and systems within a region to plan, sustain, adapt, recover, improve and grow collaboratively through specific actions and implementation strategies geared to address specific vulnerabilities (Source: East Central Florida Regional Resiliency Action Plan).

ECFRPC resiliency planning efforts include assisting State, County and municipal governments with strategies for adapting to both acute shocks and long-term stresses from natural hazards such as sea level rise, storm surge and flooding.

• <u>2060 Plan:</u> Florida Statues 186.507 mandates each Regional Planning Council to adopt a Strategic Regional Policy Plan (SRPP) that includes emergency preparedness strategies. In response to the statutory directive, East Central Florida Regional Planning Council (ECFRPC) prepared the 2060 Plan.

The 2060 Plan promotes coordinated emergency responses for several types of risk, including flooding and storm surge, in Chapter 6 *Emergency Preparedness*. Strategies to address evacuation in vulnerable areas, provision of emergency shelters,

coordination of emergency planning agencies and post-disaster reconstruction are addressed. Maps of evacuation routes and shelter, and fire and law enforcement facility locations are included.

The overall 2060 Plan Emergency Preparedness Goal is to prepare communities to effectively respond to disasters by implementing an all-hazards approach to emergency preparedness planning and coordination at the regional level.

2060 Plan policies pertinent to sea level rise, storm surge and flooding include: Shelters and Evacuation Routes; Smart Growth: and Intergovernmental Coordination.

#### Regional Resiliency Action Plan

ECFRPC has prepared the East Central Florida Regional Resiliency Action Plan (RRAP) which focuses upon Brevard and Volusia Counties. The goal of the RRAP is to increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across various disciplines. The RRAP identified the following four "focus" areas for which plan objectives are identified: Leadership and Strategy; Economic and Society; Infrastructure and Environment; and Health and Wellbeing.

#### Vulnerability Analyses

ECFRPC has completed a Sea Level Rise Vulnerability Analysis for each of the following areas: Space Coast (i.e. includes Brevard County), River to Sea (includes Flagler and Volusia Counties evacuation routes and critical facilities), Satellite Beach, and Indian River Lagoon (includes outfalls within Volusia and Brevard Counties within the East Central Florida Region and Martin, St. Lucie and Indian River Counties within the Treasure Coast Region). Definitions of key terms used in a vulnerability analysis include: Storm surge; Flooding; Coastal erosion; and Sea level rise.

A Vulnerability Analysis consists of two basic components; hazard analysis, and critical facility vulnerability analysis. The hazard analysis portion utilizes hazard-specific data to determine the short and long-term vulnerabilities facing residents and critical infrastructure within an area or political jurisdiction. The following hazards are normally analyzed at the municipal level: storm surge, flooding, coastal erosion, and sea level rise.

The second component, a critical facility vulnerability analysis, normally determines impacts from the following from five perspectives: Financial exposure; Exposure to built parcels by build year; Land use exposure; Critical facility exposure; and Environmental and ecological exposure.

The ECFRPC recommends that local governments opting to prepare a Vulnerability Analysis for their jurisdiction utilize the Satellite Beach study as a model.

#### Public Outreach

In addition to the assessment, planning and management activities summarized above, ECFRPC is actively engaged in the following public outreach efforts: Peril of Flood and Resiliency Newsletter.

Peril of Flood is a website maintained and continually updated by ECFRPC which features a compilation of projects, resources and important dates related to coastal resiliency.

In addition the Resiliency Newsletter, addressing such topics as hurricane evacuation, sustainable communities, and health and wellbeing, is published and updated every two months by the ECFRPC.

#### 2. Brevard County 2015 Local Mitigation Strategy (LMS)

The action group Brevard Prepares established a number of goals and objectives to guide the development of the LMS. The goals and objectives are oriented to focusing the LMS mitigation planning effort to achieve an end result that matches the unique needs, capabilities and desires of the participating jurisdictions.

Brevard County Emergency Management, coupled with a number of community stakeholders, prepared the LMS which is updated every five years to include current data and implementation strategies. The collaborative effort includes all 16 municipal jurisdictions and the County, as well as the American Red Cross, Health First, the Home Builders and Contractors Association, Eastern Florida State College, Florida Power & Light, St. Johns River Water Management District, Florida Solar Energy Center, Harris Corporation, Circles of Care, Brevard Amateur Radio Services, Brevard Public Schools, and Wueshoff Health System.

The goal of the LMS is to provide Brevard County residents, businesses and industries, non-profit organizations, and local governments the education and support necessary to reduce the loss of life and human suffering; to minimize property damage; and to protect environmentally sensitive areas from all types of disasters through a comprehensive, risk-based, all-hazard emergency management program. The principal purposes of the LMS include the following: Provide a methodical, substantive approach to mitigation planning; Enhance public awareness; Create a decision tool for management; Promote compliance with state and federal program requirements; Enhance local policies for hazard mitigation capability; assure inter-jurisdictional coordination of mitigation-related programming; and Create jurisdiction-specific hazard mitigation plans for implementation.

The LMS provides a Hazard Identification and Vulnerability Assessment for each participating jurisdiction, including land uses and population growth trends, existing policies and plans incorporating mitigation goals and actions, identified critical

facilities present in the community, and properties that have been damaged multiple times by past disasters. The LMS profile for the Town of Melbourne Beach is as follows:

"The Town of Melbourne Beach is built-out. Recent development trends include redevelopment of parcels due to the lack of vacant land on which to develop. As these new structures are completed, it has decreased the Town's vulnerability as new construction meets updated codes.

Over the last five years, a local floodplain ordinance has been established, the Town has joined the Community Rating System program as of 2015, a permanent Floodplain Administrator has been hired, and repetitive loss properties have been reduced to two areas by implementing stormwater mitigation projects. Current Stormwater projects, in process, will mitigate flooding problem areas.

Website information has been updated to include Floodplain Ordinance topics. Future land use plans have been amended to not include any increase in density, or lot coverage. New construction project guidelines regarding swales, stormwater run-off, and storm drain protection have been updated by certified and trained permitting staff.

The Public Works employees are now required to complete NPDES training. Beach sea oats planting projects are ongoing through local community involvement. Emergency management plans are being updated to include Police, Fire, Public Works and Building Departments. The Police and Fire Departments are currently updating radio communications for future mutual aid conditions during statewide emergency declarations.

All of the projects listed and the development trends have made the town less vulnerable and more resilient to disasters".

The LMS individualized mitigation plan for the Town of Melbourne Beach is as follows:

"The Town of Melbourne Beach is located in the southeastern coastal section of Brevard County and is susceptible to a wide variety of climatic, technological and societal hazards . . . . ."

Top LMS listed hazards for Melbourne Beach include: High winds associated with thunderstorms, tropical storms and hurricanes; storm surge created by tropical systems and severe winter storms; flooding of normally dry areas resulting from storm surge or intense, short-term rain associated with a thunderstorm; coastal erosion due to natural processes and/or human activity; and sea level rise caused by climate change which alters weather patterns.

The LMS includes a matrix identifying all critical facilities in each of the municipalities in Brevard County. A summary matrix, including the critical facilities in the Town of Melbourne Beach and their vulnerabilities to specific hazards is presented in Table 1.

Table 1
Melbourne Beach Vulnerability Matrix

Facility Name	Address	Flood Zone	Wind Zone (MPH)	Storm Surge Zone	Fire Risk	Type
Community Chapel	501 Ocean Ave.	X-500	111-115	Category 3	Low	Other
Grace Lutheran Church	1805 Oak St.	X-500	111-115	Category 3	Low	Other
Police Department	505 Ocean Ave.	X-500	111-115	Category 3	Low	Other
Public Works Dept.	507 Ocean Ave.	X-500	111-115	Category 3	Low	Other
Town Hall	570 Ocean Ave.	X-500	111-115	Category 3	Low	Other
U.S. Post Office	504 Ocean Ave.	X-500	111-115	Category 3	Low	Other

Source: Brevard County Local Mitigation Strategy

#### 3. Brevard County Emergency Management (BREM)

BREM is responsible for coordinating the review of all local jurisdictions mitigation programs and policies. To complete this task, BREM has conducted county and municipal departmental interviews to identify the mitigation programs and policies. The following Melbourne Beach operating departments are identified as performing functions related to hazard mitigation:

#### Public Works Department

The Department provides four specific types of services: vehicle and equipment maintenance, building maintenance, road and sign maintenance, and parks and grounds maintenance. The Department repairs and performs preventative maintenance and modifications to all Town structures, cleans and repairs all storm drain inlets, cleans storm drain swales, maintains 16 miles of Town streets, replaces damaged signs, and installs new signs as required. The Public Works Department also maintains all of the Town parks and implements beautification and mitigation projects.

Recent stormwater mitigation projects have reduced the potential for future repetitive loss to only two areas. Current stormwater projects have alleviated flooding problem areas. Public Works employees are now required to complete NPDES training to help recognize areas that can be improved upon.

#### Building Department

The Building Official is designated by the Town Manager and charged with the administration, interpretation and enforcement of the building code, flood control, coastal construction, coastal setback regulation, landscaping and trees, environmentally sensitive lands and concurrency, as set forth in the Land Development Code.

New construction project guidelines regarding swales, stormwater run-off, and storm drain protection have been updated and appropriate permitting staff trained and certified.

#### Zoning Department

The Zoning Official is designated by the Town Manager and charged with the interpretation, and enforcement of general administration. administration, comprehensive planning, subdivision regulation, zoning regulation, takings, vested rights, and due process, all as set forth in the Land Development Code. Future land use plans do not include any increase in density or lot coverage. A local floodplain ordinance has been established along with webpage updates to include floodplain topics. The Town of Melbourne Beach has also joined the Community Rating System as of 2015 and hired a permanent Floodplain Administrator. The Town's emergency management plans are being updated.

#### Volunteer Fire Department

The Town has a Volunteer Fire Department which consists of 30 volunteers. The department operates out the City's one fire station. The Fire Department's ISO rating is 4.

The department has 2 engines, a 4WD mini-pumper equipped with a 10,000 pound winch, a 12-foot RHIB rescue boat, a 19' Carolina skiff rescue boat with full radio and light packages, and a 4X4 ATV. Above and beyond regular firefighting, the Fire Department aggressively trains to U.S. Coast Guard standards for Search and Rescue in marine environments (ocean and inter-coastal waterway).

The Fire Department answers, on average, 110 calls per year. It is on standby during emergency situations, is part of the Beach Strike Team for urban interface fires, and assists with hurricane evacuation and post-disaster operations.

Fire prevention efforts include education of local students via annual visits to area schools. The Fire Department mitigates disaster by performing fire and life safety inspections to businesses and homeowners and fire systems plan review, and providing homeowner insurance information. The Fire Department accomplishments include improvements to communication systems, acquiring equipment for emergency response, and conducting staff training and exercises.

#### Police Department

The prime function of the Melbourne Beach Police Department is the preservation of peace and order, the prevention and detection of crime, the apprehension of offenders, the protection of persons and property under the laws of the State of Florida, the ordinances of the Town of Melbourne Beach, and the performance of a multitude of tasks relating to public welfare and safety. The department also plays a role in hurricane evacuation and post-disaster operations. This includes re-entry to the City after a disaster. The Department is also updating radio systems to improve mutual aid and other emergency communications.

#### F. National Flood Insurance Program (NFIP)

The National Flood Insurance Program (NFIP) provides federally underwritten private flood insurance to homeowners. Although the NFIP is nominally a voluntary program, in reality it is a de facto requirement for most homeowners. Typically, property-owners in a Federal Emergency Management Agency (FEMA) designated floodplain (an area with a 1% chance of flooding in any given year) are required to have flood insurance in order to secure a mortgage. Once a mortgage is paid off, homeowners typically retain insurance to preserve their investment.

The National Flood Insurance Program's (NFIP's) Community Rating System (CRS) incentivizes implementation of floodplain management practices that exceed the Federal minimum requirements of the NFIP. CRS is a voluntary program that provides for reductions in flood insurance premiums by 5 to a maximum of 45 percent for policy holders with insurable property in flood zones located within CRS communities. The CRS recognizes 19 creditable activities organized under four categories: Public Information, Mapping and Regulations, Flood Damage Reduction, and Warning and Response.

Communities can elect to undertake any or all of these activities. Based on the number of credit points received, a community earns a rank in one of ten CRS classes.

The CRS recognizes, encourages, and rewards community and State activities that go beyond the minimum required by the NFIP by offering flood insurance premium adjustments if they:

- 1. Reduce and avoid flood damage to insurable property.
- 2. Strengthen and support the insurance aspects of the NFIP.
- 3. Foster comprehensive floodplain management.

Melbourne Beach commissioned a CRS Study by the East Central Regional Planning Council in January 2019. The report focused on how the Town of Melbourne Beach currently benefits from the NFIP CRS as well as exploring the potential for class improvement. The Town currently holds a CRS Class 8 score on a scale of 1 to 10, with one being the highest achievable score. The report gathered data from the State of Florida and examined some of the common activities that other small communities implement to receive credit in order to assist the Town of Melbourne Beach determining the best course of action.

Following completion of the report, the Town decided to remain in the CRS program at a Class 8 designation and not pursue a class improvement due to additional funding and personnel requirements to administer the program.

#### G. Analysis of Notification Issues

The following paragraphs comprise an assessment of the four State Comprehensive Planning Law issues identified in the Town's Notification Letter.

# 1. Development and redevelopment principles and strategies that reduce flood risk in the coastal area.

The Town, through its Code of Ordinances, specifically Chapter 4A Article II *Adoption of Building Codes*, Article X *Coastal Construction*, Article XII *Floodplain Management* has implemented Florida Building Code standards, including minimum first-floor elevations and the use of flood resistant materials and construction practices to reduce flood risk in new developments and redevelopment in the Special Flood Hazard Area (Flood Zones AE and VE). Further, Code Chapter 7A *Zoning* Section 7A-70 *Federal and State Elevation Certificates and Documentation* requires new and substantial improvements construction to procure an elevation certificate from the Town.

In addition, through its web site and a web, page devoted to stormwater management, the Town has implemented a public education program identifying private property protection measures to minimize flood-related damage.

2. Development and redevelopment principles and strategies that result in the removal of coastal real property from flood zone designations. The Special Flood Hazard Areas of Melbourne Beach includes primarily developed single-family residential lots that border the Indian River Lagoon and Atlantic Ocean. The Town has no programs or policies to remove these areas from the Special Flood Hazard Area. However, Article II defines and addresses substantial improvements. The regulations do not result in the removal of properties from a Special Flood Hazard Area; however, they are intended to prevent or minimize future risks of damage due to flooding, including the use of flood resistant elevations, construction materials and practices.

# 3. Requirements for consistency with the flood-resistant construction requirements of the Florida Building Code.

Town Code of Section 4A requires that major structures must conform to state minimum building code requirements and constructed and located in compliance with National Flood Insurance Program regulations. Any development activity within a flood hazard area, or partially within a this area is required to obtain a permit or approval from the Floodplain Administrator. The Town Code also requires that new construction and substantial improvements utilize construction methods and practices that minimize flood damage, and include materials and utility equipment resistant to flood damage.

# 4. Participation in the National Flood Insurance Program Community Rating System (CRS).

Melbourne Beach currently participates in the CRS. Through participation in the CRS program, the Town has achieved a CRS Rating of 8, which has resulted in a 10% reduction of NFIP rates. Consistent with this effort, the Town also participates in the following programs to heighten public awareness on the issue of disaster preparedness and risk reduction strategies: (1) Local Mitigation Strategy; (2) Brevard County Emergency Management Plan; and (3) East Central Florida Regional Planning Council planning activities.

#### H. Proposed Comprehensive Plan Amendments

Proposed Comprehensive Plan amendments, presented in Exhibit 3 *Reduction of Flood Risk Amendments*, are based upon the results of the vulnerability assessment and related interaction with residents, an analysis of current Town plans and programs, and the Town's participation in county, regional and federal flood protection programs.

#### III. FIVE-YEAR SCHEDULE OF IMPROVEMENTS AMENDMENTS

Rather than include the required Five-Year Schedule of Capital Improvements within the Capital Improvements Element of the Comprehensive Plan, the Town of Melbourne Beach has elected to utilize the alternative method of annual review and update provided in Florida Statutes Chapter 163.3177 (3) (b). The alternative method provides

that the Five-Year Schedule of Capital Improvements may be accomplished by Town Ordinance and not deemed an amendment to the Comprehensive Plan. However, the alternative method of Five-Year Schedule of Improvements adoption is referenced in Table x of the Capital Improvements element.

Based upon the alternate method, the Five-Year Schedule of Capital Improvements is referred to the Town's annual budget process and revisions to Policies 1.2 and 1.3 are made to implement the alternative procedure.

#### IV. UPDATES RELATED TO CHANGES IN LOCAL CONDITIONS

#### A. Ten-Year Water Supply Facilities Work Plan Update

#### 1. Support Documentation

The Town's Evaluation and Appraisal Notification Letter identified the update of the Town's Ten-Year Water Supply Facilities Work Plan as an item to be completed as a component of the EAR-based Comprehensive Plan amendments.

Melbourne Beach residential and non-residential users purchase retail water directly from the City of Melbourne which is enabled through a 30-year Water Franchise Agreement enacted on June 10, 2018. The Agreement grants the City of Melbourne the non-exclusive right to operate a potable water distribution system within Melbourne Beach and to sell and distribute water through said system. Specifically, the Agreement grants the City of Melbourne the right to erect, maintain and operate a potable water distribution system in order to provide potable water service to customers within Melbourne Beach.

Per the Florida Department of Economic Opportunity Division of Community Development Bureau of Community Planning document entitled: "A Guide to the Preparation of the Water supply Facilities Work Plan", local governments with no water supply responsibility need only compile the following data and analysis:

1. Population and Water Demand Projections for at least a 10-year period, and a discussion of reuse and conservation methods to reduce demand during the projection period.

The City of Melbourne has a consumptive use permit (CUP) from the St. Johns River Water Management District for its potable water system. The permit (CUP No. 50301) will expire in 2019.

The City has proposed population and water use projections which are being reviewed by the St. Johns Water Management District as part of the CUP renewal process. Proposed projections for the Melbourne service area are presented in Table 2, assuming a consumption rate of 100 gallons per capita per day (gpcd). If approved, the projections will be used in the Town of Melbourne Water Facilities Work Plan Update.

Melbourne Beach population and water use projections are not prepared by Melbourne as part of its CUP and Water Supply Facilities Work Plans. However, Town-prepared projections are used in Table 3 to project Melbourne Beach water demand.

Table 2
City of Melbourne Potable Water Service Area
Population and Potable Water Consumption Projections

Year	Population Projection	Potable Water Consumption (mgd)
2020	192,966	19.2
2025	202,847	20.3
2030	211,121	21.1

Source: Town of Melbourne, St. Johns Water Management District; April 2019

Table 3

Town of Melbourne Beach

Population and Potable Water Consumption Projections

Year	Population Projection	Potable Water Consumption (mgd)
2015	3,398	0.3398
2020	3,426	0.3426
2025	3,454	0.3454
2030	3,482	0.3482

Source: Melbourne Beach Comprehensive Plan; Place Planning and Design; April 2019.

Section 10 of the Water Franchise Agreement states that Melbourne Beach will ,at its discretion, cooperate with and support Melbourne with implementation of water conservation plans and consider municipal ordinances relating to adopting codes for using cross-connection prevention devices, ultra-low flow water fixtures, and moisture sensing devises for irrigation systems and or xeriscape landscaping alternatives. Further, the City of Melbourne may, in its sole discretion, discontinue water services to any customer pursuant to Melbourne's systematic rules and regulations in an effort to enforce compliance with water conservation plans.

2. If the supplier is another local government, demonstration that it has the capacity through its Water Supply Facilities Work Plan or plans to provide adequate capacity. The Town of Melbourne CUP is due to expire in 2019. The Town is currently

negotiating with the St. Johns Water Management District to renew the CUP. Upon renewal, the Town can update its Water Supply Facilities Work Plan.

# 2. Ten-Year Water Supply Facilities Work Plan Amendments

(NOTE: To be included if necessary following completion of the Town of Melbourne Five Year Water Supply Facilities Work Plan Update)

# B. Future Land Use Map Series Amendments

It is necessary to update the Future Land Use Map Series to indicate the projection date of 2030, as well as any new or edited maps resulting from the EAR process. EAR process Maps are included in Exhibit 5.

# EXHIBIT 1 MELBOURNE BEACH EVALUATION AND APPRAISAL NOTIFICATION



# Town of Melbourne Beach

JAN 31 2013

January 26, 2018

This of Committee Develo

Ray Eubanks, Plan Processing Administrator State Land Planning Agency Caldwell Building 107 East Madison Street MSC - 160 Tallahassee, Florida 32399-4120

Re: Submittal of Evaluation and Appraisal Notification for the Town of Melbourne Beach (Brevard County).

Dear Mr. Eubanks:

Pursuant to the requirements of F.S. 163.3191(1), please accept this letter as the Evaluation and Appraisal Notification (Notification) for the Town of Melbourne Beach. In completing the Notification, the Town has researched changes in state comprehensive planning requirements since the date of its last (2009) Evaluation and Appraisal Report (EAR).

Based upon the Town's research into the matter, the principal amendments necessary to reflect updated state comprehensive planning requirements are those included in F.S. 163.3178 (2)(f) (Coastal Management Element) and F.S. 163.3177(3)(b) (Capital Improvements Element).

The following are to be reviewed and appropriately incorporated within the Coastal Management Element of the Town's Comprehensive Plan:

- 1. Development and redevelopment principles and strategies that reduce flood risk in the coastal area resulting from high-tide events, storm surge, flash floods, Stormwater runoff and the related impacts of sea-level rise.
- 2. Development and redevelopment principles and strategies that result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.
- 3. Requirements for consistency with the flood-resistant construction requirements of the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.

Ray Eubanks, Plan Processing Administrator State Land Planning Agency January 26, 2018 Page 2 of 2

4. Participation in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for Town residents.

The Town will also review the Capital Improvements Element 5-year capital improvements schedule requirement to determine if future modifications are to be accomplished by ordinance as opposed to a Comprehensive Plan amendment. Based upon this determination, appropriate amendments to the Capital Improvements Element will be made.

In addition to a review of updated state requirements, the Town has determined that the Comprehensive Plan requires the following additional amendments to appropriately reflect current conditions:

- 1. <u>Ten-Year Water Supply Facilities Work Plan Sub-Element update (Sub-Element Update)</u>. The Town anticipates updating the Sub-Element Update to maintain consistency with the 2018 Central Springs East Coast (CSEC) Water Supply Plan update by the St. Johns River Water Management District. An adoption date of the CSEC Water Supply Plan update is anticipated in December 2018.
- 2. <u>Updates to reflect current conditions:</u> Updates include editing statutory and administrative code references in the Comprehensive Plan, and updating the planning period and population projections.
- 3. <u>Updates to reflect additional local issues</u>. Additional updates, unknown at this time, to address issues that arise during the course of the EAR update process may be included.

The Town will review the above items and transmit appropriate Comprehensive Plan amendments to the State Land Planning Agency. A transmittal date sufficient to allow for the incorporation of the 2018 Central Springs East Coast (CSEC) Water Supply Plan update is proposed.

Any questions regarding this submittal may be addressed to:

Robert J. Daniels

Tel: (321) 724-5860

Town Manager

FAX: (321) 984-8994

Town of Melbourne Beach

E-Mail: townmanager@melbournebeachfl.org

507 Ocean Avenue

Melbourne Beach, FL 32951-8994

Respectfully submitted,

Robert J. Daniels Town Manager

507 Ocean Avenue, Melbourne Beach, Florida 32951

(321) 724-5860 phone

(321) 984-8994 fax

Brevard County's Oldest Beach Community \* Established 1883

# EXHIBIT 2 FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY CONFIRMATION LETTER

Rick Scott



Cissy Proctor

January 31, 2018

Mr. Robert J. Daniels Town Manager Town of Melbourne Beach 507 Ocean Avenue Melbourne, Beach 32951-8994

RE: Melbourne Beach Evaluation and Appraisal Notification Letter

Dear Mr. Daniels,

This is to acknowledge receipt of your Evaluation and Appraisal Notification Letter which was due on October 1, 2017, and received by the Department on January 31, 2018.

Please note that your proposed comprehensive plan amendments based on your Evaluation and Appraisal should be transmitted to the Department by <u>January 31, 2019</u>, within one year of your notification, pursuant to Section 163.3191(2), Florida Statutes. The amendments are subject to the State Coordinated Review Process as outlined in Section 163.3184(4), Florida Statues.

Mr. Adam Antony Biblo of the Department's staff is available to assist and provide technical guidance to your questions concerning the contents of the Evaluation and Appraisal based comprehensive plan amendments and may be reached at (850) 717-8503.

If you have any questions concerning the processing of the Evaluation and Appraisal based amendments, please contact Mr. Ray Eubanks, Plan Processing Administrator, at (850) 717-8483.

Sincerely,

Dlay E D. Ray Eubanks

Plan Processing Administrator

DRE/me

Florida Department of Economic Opportunity | Caldwell Building | 107 E. Madison Street | Tallahassee, FL 32399 850.245.7105 | www.floridaJobs.org www.twitter.com/FLDEO |www.facebook.com/FLDEO

An equal opportunity employer/program. Auxiliary aids and service are available upon request to individuals with disabilities. All voice telephone numbers on this document may be reached by persons using TTY/TTD equipment via the Florida Relay Service at 711.

# EXHIBIT 3 REDUCTION OF FLOOD RISK AMENDMENTS Comprehensive Plan Policy Revisions and Additions

Town goals, objectives and policies that address the requirements of F.S. 163.3178 (2) (f) are included in the following elements of the Comprehensive Plan. These objectives are appropriate locations for F.S. 163.3178 (2) (f) – based amendments to the Melbourne Beach Comprehensive Plan. Proposed additions are indicated in <u>underline</u> format.

# **Future Land Use Element**

#### **GOAL**

Promote safe, quality residential development and/or restoration.

#### **OBJECTIVE 7.0:**

Ensure <u>all</u> new construction and/or redevelopment is consistent with requirements for flood prone areas, is resilient and considers peril of flood issues, and that residential densities are consistent with Town, county, and regional Hurricane evacuation plans.

# **Policy 7.1:**

Maintain up-to-date copies of State and Federal Regulations regarding development and/or redevelopment within flood prone areas and ensure that developments within areas identified on the Flood Hazard Boundary Map and/or the Flood Insurance Rate Map comply with appropriate requirements.

# Policy 7.2:

Ensure that Ordinances of the Town are in conformance with County, State and Federal Rules and Regulations regarding development and redevelopment within "Coastal High Hazard Areas."

#### **Policy 7.3:**

Review, analyze, and amend as determined necessary, Code of Ordinances requirements regarding repair or reconstruction of damaged properties including those provisions that apply to Coastal High Hazard Area.

#### Policy 7.4:

Periodically review and revise as necessary, permitted densities within the zoning ordinance to ensure that the population densities do not exceed those that will allow the Town to meet adopted hurricane evacuation timeframes.

#### **GOAL**

Encourage the preservation of natural features in existing and future developments, <u>and</u> incorporate resiliency practices that protect from the peril of floods.

### **OBJECTIVE 14.0:**

Continue to maintain and strengthen tree preservation and landscape ordinances, encouraging the use of indigenous vegetation.

# **Policy 14.2:**

Continue to enforce regulations regarding building setbacks from the dune.

# Policy 14.4 (new policy)

<u>Stringently enforce protection of vegetation along the lagoon to enhance shoreline protection, erosion control and water quality.</u>

# Policy 14.5 (new policy)

<u>Promote the revegetation of mangroves, grasses and other appropriate plantings as listed in the Coastal element of this plan.</u>

#### **Housing Element**

#### **GOAL**

The provision of safe, sanitary living conditions, in viable neighborhoods for present and future residents of the town.

#### **OBJECTIVE 1.0:**

Insure that all residential structures are maintained in a safe sanitary condition.

#### Policy 1.1:

The Town shall continue with strict enforcement of the Florida Building Code and Florida Residential Building Code and adopt revisions to these codes as appropriate to ensure that new building material and techniques are permitted in Melbourne Beach.

#### Policy 1.2 (new policy)

The Town shall require additional base elevation as needed in areas that will be impacted due to the effects of high tides, sea level rise and storm surge for new construction or reconstruction of substantially damaged structures.

# **Coastal Management Element**

#### GOAL

Preserve, protect and enhance the coastal resources as development or redevelopment occurs in Melbourne Beach.

#### **OBJECTIVE 1:**

Protect existing native vegetation as development or redevelopment occurs.

# Policy 1.1:

Native vegetation communities such as those located in dunes along the ocean and along the lagoon to the west shall be preserved and incorporated in any development or redevelopment project through procedures adopted in the Code of Ordinances.

# Policy 1.2:

The Town shall coordinate with the State, Brevard County and local agencies to provide for the reestablishment of shoreline vegetation where it has been removed to enhance resiliency and protect residents and property from the perils of flood.

#### **OBJECTIVE 2:**

<u>To promote resiliency</u>, the Town shall continue to coordinate with the applicable Federal, State, County and agencies in order to protect the beach and dune system <u>from the perils of flood</u> as a viable feature providing storm protection for upland property and serving as an important recreation and aesthetic resource.

#### Policy 2.1:

Codes that control and regulate construction activities in the coastal zone areas 100-year flood zones that promote resiliency and protect the town from the perils of flood shall be shall be adopted and enforced consistently throughout the Town that promote resiliency and protect from the perils of flood.

#### Policy 2.2:

Codes shall be updated when necessary to conform to new state regulations and advances in the understanding of the coastal process.

#### Policy 2.3:

The coastal building setback requirement shall be modified when necessary to allow the setback line to follow any repositioning of the Coastal Construction Control Line (CCCL) or future implementation of an Adaptation Action Area.

# **Policy 2.5:**

The development code shall specify the appropriate vegetation for planting in dunes, and that such vegetation shall be protected from pedestrian and vehicular traffic. Any construction or reconstruction of beach access shall provide for dune crossing over walks.

#### **GOAL**

Protect human life and limit public expenditures in areas subject to destruction by natural disasters.

#### **OBJECTIVE 5**

Limit public expenditures that subsidize development permitted in coastal high-hazard areas or Coastal Planning Areas except for restoration and enhancement of natural resources.

# Policy 5.1:

No construction or development activity shall be permitted, except through the Florida Department of Environmental Protection, seaward of the Coastal Construction Control Line (CCCL) unless it is intended for restoration and enhancement of natural resources or is the minimum development technique to allow reasonable use of the land while preserving natural coastal features.

# Policy 5.2:

Existing permanent structures protruding into the coastal high-hazard areas shall be required to meet the most recent version of coastal building codes and regulations established by the Florida Department of Environmental Protection when redevelopment occurs on the property.

# Policy 5.3:

The Coastal High Hazard Area is the area below the elevation of the category 1 storm surge line established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. This encompasses that portion of the Town as depicted on Map 2 (2020 2030 Future Land Use) and Map 9 (Coastal High Hazard Area). Public infrastructure within this area, as well as within the Coastal Planning Area, may be built and reconstructed when necessary but not for the purpose of facilitating an increase in permitted density.

#### Policy 5.4: (new policy)

Include the Coastal Planning Area (CPA) as a layer within the future land use element. Periodically review and revise as necessary based on available information.

#### **OBJECTIVE 6**

The Town shall maintain an out of County evacuation time of less than sixteen (16) hours for a Category 5 storm event.

#### Policy 6.1:

The Town shall cooperate with, and support, Brevard County in planning for hurricane evacuation.

### **OBJECTIVE 7:**

The Town shall continue to coordinate with the Brevard County Emergency Management Office to provide immediate response to post-hurricane situations.

# Policy 7.1:

The current Local Peacetime Emergency Plan shall be modified to comply with the policies under this objective, and shall contain step-by-step details for post-disaster recovery operations.

#### Policy 7.2:

After a hurricane but prior to re-entry of the population into the evacuated areas, the Town Commission staff responsible for emergency response shall assess the damage, report to the Town Commission if possible, meet to hear preliminary damage assessments, appoint a Recovery Task Force, and consider may recommend a temporary moratorium on building activities not necessary for the public health, safety and welfare.

#### **Policy 7.3:**

The Recovery Task Force shall review and decide upon emergency building permits, and repair and cleanup actions needed to protect public health and safety; coordinate with County, State and Federal officials to prepare disaster assistance applications; develop a redevelopment plan; and recommend amendments to the Comprehensive Plan, Local Peacetime Emergency Plan, and other appropriate policies and procedures.

# Policy 7.4:

Repairs to potable water, waste water, and power facilities; removal of debris; stabilization or removal of structures about to collapse; and minimal repairs to make dwellings habitable shall receive first priority in permitting decisions. Such repairs within the Coastal Planning Area shall receive the first and highest priority. Long term redevelopment activities shall be postponed until the Recovery Task Force has completed its tasks.

#### Policy 7.5:

Structures destroyed by any means to an extent of more than 50% of the replacement cost at the time of destruction shall not be reconstructed except in compliance with the Code of Ordinances.

# **GOAL (new Goal Objectives and Policies)**

<u>Protect</u>, <u>conserve</u>, <u>maintain</u> and <u>enhance the Town's coastal resources from the natural processes attributable to sea level rise, storm surge, erosion and flooding.</u>

#### **OBJECTIVE 9**

The Town shall continue to limit human-induced dune and beach damage and expand maintenance and restoration efforts, while balancing these with the need to provide beach access to the public for recreational purposes.

#### Policy 9.1

At a minimum, the Town shall utilize the following means of obtaining this objective:

- A. Enforcement of existing regulations and penalties for violations;
- B. Continuation and updating of existing communication efforts;
- C. <u>Cooperative ventures for dune protection and maintenance with ocean-front property owners, citizens, and local volunteer organizations;</u>
- D. <u>Municipal capital outlays for enforcement and resource management</u>;
- E. <u>Continuing Town research and implementation of the latest dune management techniques.</u>

# Policy 9.2

The Town shall maintain and replace as necessary dune cross-overs at all public access points to beaches in accordance with the latest dune protection design standards, including barriers to prohibit user access to adjoining vegetative areas; transportation or parking facilities with appropriate shielded lighting for beach access; and appropriate warning signage to users regarding improper access and penalties for such action.

#### Policy 9.3

The Town shall maintain or as resources allow expand its capability to achieve Policy 9.2.

#### Policy 9.4

The Town shall minimize the disturbance of natural shorelines by improving shoreline stabilization, protection and habitat. Living shoreline elements, including, but not limited to plantings that stabilize the shoreline and inhibit erosion, shall be prioritized over new or replacement armoring (e.g. man-made walls or bolder rocks, etc.)in the CPA. If evidence demonstrates that a living shoreline, by itself, is not sufficient to protect property and life, additional structural elements may be utilized; however, structural elements must be accompanied by living shoreline elements, where effective and feasible.

# Policy 9.5

The Town shall research and implement where feasible the latest techniques to strengthen the integrity of the Town's sand dune system, such as the planting of vegetative native to said systems.

#### Policy 9.6

The Town shall consider incorporating a living shoreline element within the Master Drainage Plan to counter the loss of shoreline and sand dunes due to the effects of sea level rise.

#### Policy 9.7

The Town shall conduct post-storm coastal monitoring to assess beach erosion impacts and monitor subsequent beach recovery progress and additional recovery needs.

#### Policy 9.8

The Town shall, where appropriate and to the extent physically and financially feasible while considering impacts from sea level rise and flooding, maintain and preserve all public access and water-related recreational facilities and shall inventory existing public access to the lagoon and water-related recreational facilities to identify deficiencies and opportunities.

#### Policy 9.9

The Town shall work internally and with stakeholders to seek public and private funding for adaptation projects to address the impacts of flooding within the CPA.

#### Policy 9.10

The Town shall seek opportunities to collaborate with academic and scientific organizations to serve as a monitoring location for sea level rise.

# Policy 9.11

As part of subsequent Evaluation and Appraisal Reports (EARs), the Town shall compare the extent of sea level rise relative to past predictions herein and modify policies accordingly.

#### **OBJECTIVE 10**

To protect, conserve, maintain and enhance the Town's resources proximate to the Indian River Lagoon from the natural processes attributable to sea level rise, flooding and sea level rise.

# **Policy 10.1**

The Town shall continue to cooperate with the Indian River Lagoon National Estuary Program, Florida Department of Environmental protection, St. Johns River Water Management District, Brevard County, and other communities to achieve the goals, objectives, and policies of the Indian River Lagoon Comprehensive Conservation and Management Plan; to protect, conserve, enhance wetlands; marine resources, estuarine, surface and ground water quality; watersheds; wildlife habitat; natural areas and open space for outdoor recreation and enjoyment to the extent that fiscal resources permit.

# Policy 10.2

The Town shall continue enforcing the fertilizer-free zone regulations in Section 27-54 of the land development code for properties along the Indian River Lagoon.

#### Policy 10.3

The Town will encourage the planting of landscaping known for cleansing and absorption properties in the Town-maintained List of Water Cleansing Plants within 10 feet of the Indian River Lagoon.

# Policy 10.4

The Town shall participate in programs, including Keep Brevard Beautiful, that educate property owners on the benefits and creation of lagoon-friendly yards and recognize property owners utilizing such principles.

#### Policy 10.5

The Town shall encourage and be involved in Brevard County programs creating oyster beds in the Indian River Lagoon as both a way of improving water quality and expanding the local and regional economy through aquaculture opportunities.

# Policy 10.6

The Town shall examine the possibility of creating minimum height standards for all new, reconstructed, and substantially improved seawalls along the Indian River Lagoon to counter the impacts of rising river levels.

#### Policy 10.7

The Town shall continue to enforce, and strengthen when determined necessary, its Wetland Protection regulations under Article 1, Chapter 11A of Appendix 1, Land Development Code.

#### Policy 10.8

The Town shall continue to enforce the erosion and sediment control provisions under its National Pollutant Discharge Elimination System Permit.

#### Policy 10.9

The Town shall continue to direct property owners to the proper state and/or federal regulatory agencies when considering the removal of grass beds and other submerged habitat.

#### **Policy 10.10**

The Town shall continue to administer or cooperate with the programs of other organizations in providing information on protecting the West Indian manatee within the Indian River Lagoon.

# **Policy 10.11**

The Town shall continue to work with appropriate regulatory bodies regarding construction activities involving the waters of the State of Florida or the United States.

#### **Policy 10.12**

The Town shall continue to coordinate with appropriate local, state, and federal agencies regarding the monitoring of local waters, including the Indian River Lagoon.

## **Policy 10.13**

The Town shall participate in future updates to the Indian River Lagoon Comprehensive Conservation and Management Plan, most recently updated in 2008, and will continue to support and implement the action plan items applicable to the Town.

# **GOAL**

Protect, conserve, maintain, and enhance the Town's infrastructure, built, and human environment from the natural processes attributable to sea level rise, storm surge and flooding, with primary focus on areas proximate to the Atlantic Ocean and Indian River Lagoon.

#### **OBJECTIVE 11**

Development, redevelopment. rebuilds, retrofits and additions in the Town shall be planned and managed through strategies and design principles that are consistent with sound planning practices that protect life and property from the effects of flooding, storm surge and related impacts of sea level rise and that protect the long-term financial viability of the Town.

#### Policy 11.1

The Town shall consider prohibiting the increase in development density within the CPA if applications for such increase would be contrary to Objective 11 above.

#### Policy 11.2

All new development and redevelopment shall be consistent with, or more stringent than, the flood resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. Part 60.

#### Policy 11.3

At the time of the next Master Drainage Plan update, consider incorporating green infrastructure elements, including such techniques as rain barrels, rain gardens, native landscaping, cisterns, and permeable pavement, particularly on Town-owned properties.

The Town shall only allow development and redevelopment where consistent with sound planning and engineering practices that shall protect life, the subject property, and adjoining properties from the effects of coastal erosion, flooding, sea level rise, or damage to environmental systems.

# Policy 11.5

The Town shall continue to regulate repairs and improvements to all buildings in terms of substantial improvements or damage by requiring compliance with flood plain management provisions of the Town code. In addition, development standards shall be updated to reflect revised flood elevations, as updated information becomes available from FEMA.

# Policy 11.6

The Town shall research and amend as necessary, its Land Development Regulations during each successive Evaluation and Appraisal Report review to address the following:

- A. The feasibility of increasing the freeboard requirement for all new or substantially redeveloped properties within a special flood hazard area (SFHA) with defined or revised base flood elevation provided in the applicable FIRM.
- B. The feasibility of requiring all new or substantially redeveloped properties within the SFHA without an elevation provided on the applicable FIRM to elevate the lowest floor to the greater of the standards of Land Development Code §4A-189(2)-(3), or a minimum elevation.
- C. The feasibility of requiring all new or substantially redeveloped properties outside of the SFHA to be built with the lowest floor being at a minimum elevation.

#### Policy 11.7

The Town shall continue to encourage and work with residents and business owners through educational and other programs in utilizing green infrastructure techniques, per Policy 11.3, in combating the impacts of sea level rise.

#### Policy 11.8

The Town shall seek opportunities to purchase properties within the Coastal Planning Area and subject to repetitive storm damage through the assistance of the Federal Emergency Management Administration (FEMA), non-profit conservation land trusts, and other sources.

The Town shall regularly review the land development regulations that require low-impact development, and will make feasible code revisions, as needed.

# **Policy 11.10**

The Town may utilize, but shall not be limited to, the following tools, site development techniques and strategies for use within the 100-year floodplain to mitigate flooding and effects of sea level rise and storm surge in order to protect property, to the greatest physical and financial extent possible:

- A. Green street techniques, which emulate natural systems, to divert, capture or absorb water in a way to reduce flood impacts on private property, including, but not limited to street trees, landscaped areas and vegetative curb extensions, bioswales, vernacular streetscapes, and roadway re-design.
- B. A Hybrid stormwater master plan to integrate a combination of green and gray (concrete and man-made) infrastructure, including but not limited to bioretention, increasing pipe capacity, stormwater parks, rain gardens/bioswales, pumps, and water flow diversion strategies.
- C. Underground utilities in vulnerable and feasible areas;
- D. <u>Parking standards and parking lot site plan design with greater water capture techniques;</u>
- E. Increase of set-back lines for properties in the CPA;
- F. Natural dune restoration;
- G. Permeable pavement;
- H. Dry and Wet flood proofing of structures; and
- I. Green/Open space

# **Policy 11.11**

The Town shall hold properties in the Coastal Planning Area to their current developed density in order to protect life and property from natural hazards and the effects of sea level rise.

The Town shall continue to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for its residents.

#### **Policy 11.13**

The Town shall research the potential for purchasing flood panels which could be installed in the event of storm/flooding events to protect municipally-owned building during such events and expedite their return to service.

# **Policy 11.14**

The Town shall study options for the hardening of the lift station located within Ryckman Park and coordinate with Melbourne Utilities to accomplish necessary improvements.

#### Policy 11.15

The Town shall research using solar energy to run or augment the running capacity of the Town's power generator.

# **Policy 11.16**

The Town may consider limiting the construction of new public infrastructure or public buildings within the Coastal Planning Area if contrary to Objective 11 above. New construction shall conform to the beach access and lighting standards of Section 40-25 of the Town of Melbourne Beach Code of Ordinances.

#### **Policy 11.17**

The Town shall construct and maintain its stormwater management system to ensure that water velocities are below the level which could cause scour or erosion.

#### **Policy 11.18**

The stormwater master plan shall incorporate an increase in green engineering/infrastructure solutions to reduce run off into the lagoon either directly or indirectly and provide additional opportunities for water capture and filtration. These solutions shall include, but not be limited to, bioswales, water detention/retention ponds, seasonal stormwater parks, trees and other native vegetation, rain gardens and other water flow diversion and capture solutions.

#### **Policy 11.19**

The Town shall consider the acquisition of properties in the 100-year flood plain that can be used for public open space and function as part of a hybrid stormwater master plan that utilizes green engineering techniques such as stormwater parks, bioswales, rain gardens and others that will result in the capture of water and provide natural filtration

prior to entering the lagoon and will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA). These projects shall be designed in a manner that will allow for continued functionality when considering future effects from sea level rise.

# **Policy 11.20**

The Town shall place the greatest priority and work with service providers on infrastructure construction and reconstruction in the Coastal Planning Area.

# **Policy 11.21**

The Town shall research the latest methodologies for hardening roads and other infrastructure to resist the impacts of sea level rise and flooding within the Coastal Planning Area. Where such methodologies are reasonably feasible, the Land Development Code shall be amended by the next Evaluation and Appraisal Report (EAR) to mandate the use of these methodologies for this area.

#### **Policy 11.22**

The Town shall research the feasibility of planting additional canopy trees along State Road A1A/Atlantic Street, Oak Street, Riverside Drive, and Pine Street to assist in stormwater absorption, as well as provide traffic calming.

# **Policy 11.23**

The Town shall continue to research the opportunities, and update the Stormwater Management Plan accordingly, for using green infrastructure as a way of augmenting the Town's traditional stormwater infrastructure to reduce runoff into the Indian River Lagoon and increase the quality of water entering the surficial aquifer while providing for recreation and nature enjoyment opportunities.

#### **Policy 11.24**

The Town will integrate sea level rise planning with its plans, procedures and policies based upon the consideration of a range or rise, vulnerability, allowable risk, and project service life from the date of development construction.

Planning periods should include the following: Short-term – impacts to 2040 (20-year planning horizon); medium-term - impacts to 2060 (40-year planning horizon), and long-term impacts to 2000 (80-year planning horizon).

OBJECTIVE 12: The use of public funds for infrastructure improvements which subsidize increased development in the Coastal Planning Area (CPA) may be restricted to those projects which restore or enhance natural resources, are part of the Town's post-disaster redevelopment plan, and/or serve to reduce existing development risks and property hazards such as sea level rise, flooding and storm surge.

# Policy 12.1

The Town may limit use of public funds and discourage use of funds by other levels of government that subsidize new private development or redevelopment within the CPA, while prioritizing infrastructure improvement projects which mitigate the impacts of seal level rise and flooding.

# Policy 12.2

Public expenditures for capital improvements that promote public access, hazard mitigation and use of coastal areas shall be reviewed through the annual budget process to minimize loss potential and account for future impacts from sea level rise and flooding

# **Policy 12.3**

Any construction activities that are seaward of the coastal construction control lines established pursuant to s. 161.953 shall be consistent with Chapter 161.

# **Intergovernmental Coordination Element**

#### GOAL

Maximize the effectiveness and efficiency of intergovernmental relationships between the Town of Melbourne Beach and other governmental entities, especially those involved in peril of flood issues.

# **OBJECTIVE 1.0:**

Maintain membership in organizations such as the Space Coast\_League of Cities and other agencies <u>involved in preparing for peril of flood issues</u>, in order to foster informal intergovernmental relationships.

#### Policy 1.1:

Ensure that annual membership fees in such organizations are budgeted and Town Representatives attend the organizations meetings.

#### **OBJECTIVE 2.0:**

The Town shall review for compatibility, all comprehensive planning elements and subsequent updates of neighboring jurisdictions. Brevard County, the Brevard County School System, the Florida Department of Transportation, and other units of local government providing services to the Town in order to coordinate with the planning and peril of flood-related activities of each jurisdiction.

## Policy 2.1:

Continue to work with the Brevard County Comprehensive Planning Steering Committee. The Town participates through representation on the Spacecoast Transportation Planning Organization and the Intergovernmental Coordination Committee.

# **Capital Improvements Element**

#### **GOAL**

Undertake actions necessary to adequately provide needed public facilities to all residents of the town in a manner that protects investments in existing facilities and maximizes the use of existing facilities, while considering the risk of flood or sea level rise damage.

## **OBJECTIVE 2:**

Limit public expenditures that are for the purpose of increasing density in coastal high hazard areas (CHHA) and the Coastal Planning Area (CPA).

# Policy 2.1:

The Town shall not fund infrastructure in the high hazard coastal area <u>and Coastal Planning Area</u> that subsidizes development.

#### **EXHIBIT 4**

# FIVE-YEAR SCHEDULE OF IMPROVEMENTS AMENDMENTS

Capital Improvements Element Policy Revisions and Additions

The Town of Melbourne Beach has elected to utilize the alternative method of annual review and update of the Five-Year Schedule of Improvements provided in Florida Statutes Chapter 163.3177 (3) (b); adoption by Town Ordinance. Proposed additions are indicated in <u>underline</u> format. Proposed deletions are indicated in <u>strikethrough</u> format.

#### **GOAL**

Undertake actions necessary to adequately provide needed public facilities to all residents of the town in a manner that protects investments in existing facilities and maximizes the use of existing facilities.

# **OBJECTIVE 1:**

Provide capital improvements to replace or rebuild worn out, obsolete or eroded facilities when necessary, and include these capital improvements in the 5-Year Schedule of Improvements of this element, as soon as the need becomes evident.

# Policy 1.2:

Proposed capital <u>Capital</u> improvement projects including those proposed by State, Regional, and local entities that provide services to the Town, shall be evaluated and ranked in order of priority according to the following guidelines: included within the Five-Year <u>Schedule of Improvements</u>.

- a) Whether the project is needed to:
  - (1) Protect public health and safety;
  - (2) Fulfill the Town's legal commitment to provide facilities and services; or
  - (3) Preserve or achieve full use of existing facilities.
- b) Whether the project:
  - (1) Increases efficiency of use of existing facilities;
  - (2) Prevents or reduces future improvement cost; or
  - (3) Provides service to developed areas lacking some service.

#### Policy 1.3:

The <u>Five-Year</u> Schedule of Capital Improvements shall be <u>revised</u> adopted annually in conjunction with the annual <u>revision of the Town operational</u> budget. The <u>Capital Budget shall be adopted annually as Although part of the operational budget of the Town, the Five-Year Schedule of Capital Improvements shall be adopted by <u>Town Ordinance</u>, and included by reference herein.</u>

# EXHIBIT 5 FUTURE LAND USE MAP SERIES AMENDMENTS

(Refer to following Pages)

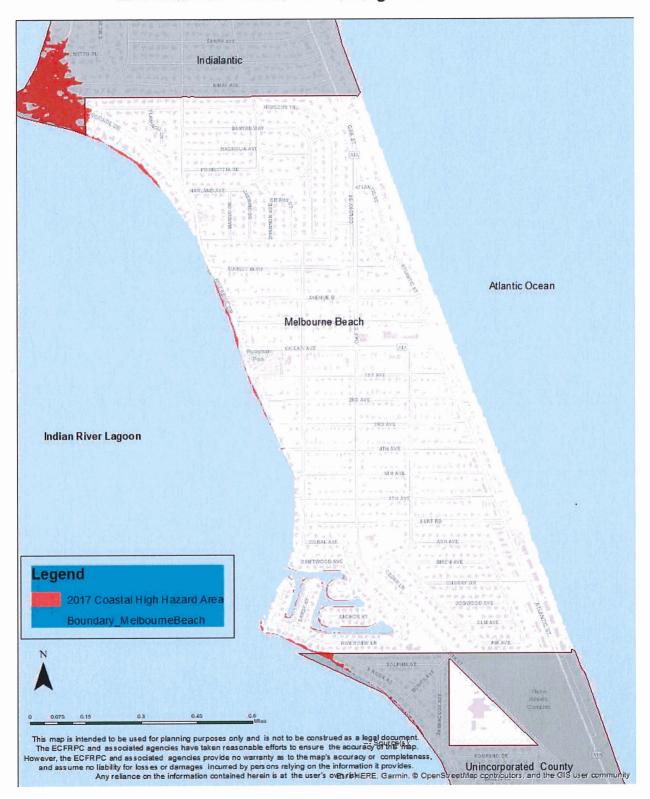
Hurricane Storm Surge Zones



# FEMA Flood Zones & Critical Facilities



# 2017 Melbourne Beach Coastal High Hazard Area



# Melbourne Beach, FL Coastal Planning Area (CPA)



# Town of Melbourne Beach, FL Flood Zones



# PROPOSED NEW COASTAL MANAGEMENT GOAL WITH SUPPORTING OBJECTIVES AND POLICIES

#### **GOAL**

<u>Protect, conserve, maintain and enhance the Town's coastal resources from the natural processes attributable to sea level rise, storm surge, erosion and flooding.</u>

# **OBJECTIVE 9**

The Town shall continue to limit human-induced dune and beach damage and expand maintenance and restoration efforts, while balancing these with the need to provide beach access to the public for recreational purposes.

#### Policy 9.1

At a minimum, the Town shall utilize the following means of obtaining this objective:

- A. <u>Enforcement of existing regulations and penalties for violations</u>;
- B. Continuation and updating of existing communication efforts:
- C. <u>Cooperative ventures for dune protection and maintenance with ocean-front property owners, citizens, and local volunteer organizations;</u>
- D. Municipal capital outlays for enforcement and resource management;
- E. <u>Continuing Town research and implementation of the latest dune management techniques.</u>

#### Policy 9.2

The Town shall maintain and replace as necessary dune cross-overs at all public access points to beaches in accordance with the latest dune protection design standards, including barriers to prohibit user access to adjoining vegetative areas; transportation or parking facilities with appropriate shielded lighting for beach access; and appropriate warning signage to users regarding improper access and penalties for such action.

#### **Policy 9.3**

The Town shall maintain or as resources allow expand its capability to achieve Policy 9.2.

# Policy 9.4

The Town shall minimize the disturbance of natural shorelines by improving shoreline stabilization, protection and habitat. Living shoreline elements, including, but not limited to plantings that stabilize the shoreline and inhibit erosion, shall be prioritized over new or replacement armoring (e.g. man-made walls or bolder rocks, etc.)in the CPA. If evidence demonstrates that a living shoreline, by itself, is not sufficient to protect property and life, additional structural elements may be utilized; however, structural elements must be accompanied by living shoreline elements, where effective and feasible.

#### Policy 9.5

The Town shall research and implement where feasible the latest techniques to strengthen the integrity of the Town's sand dune system, such as the planting of vegetative native to said systems.

#### Policy 9.6

The Town shall consider incorporating a living shoreline element within the Master Drainage Plan to counter the loss of shoreline and sand dunes due to the effects of sea level rise.

#### Policy 9.7

The Town shall conduct post-storm coastal monitoring to assess beach erosion impacts and monitor subsequent beach recovery progress and additional recovery needs.

#### Policy 9.8

The Town shall, where appropriate and to the extent physically and financially feasible while considering impacts from sea level rise and flooding, maintain and preserve all public access and water-related recreational facilities and shall inventory existing public access to the lagoon and water-related recreational facilities to identify deficiencies and opportunities.

#### Policy 9.9

The Town shall work internally and with stakeholders to seek public and private funding for adaptation projects to address the impacts of flooding within the CPA.

#### Policy 9.10

The Town shall seek opportunities to collaborate with academic and scientific organizations to serve as a monitoring location for sea level rise.

#### Policy 9.11

As part of subsequent Evaluation and Appraisal Reports (EARs), the Town shall compare the extent of sea level rise relative to past predictions herein and modify policies accordingly.

#### **OBJECTIVE 10**

To protect, conserve, maintain and enhance the Town's resources proximate to the Indian River Lagoon from the natural processes attributable to sea level rise, flooding and sea level rise.

# **Policy 10.1**

The Town shall continue to cooperate with the Indian River Lagoon National Estuary Program, Florida Department of Environmental protection, St. Johns River Water Management District, Brevard County, and other communities to achieve the goals, objectives, and policies of the Indian River Lagoon Comprehensive Conservation and Management Plan; to protect, conserve, enhance wetlands; marine resources,; estuarine, surface and ground water quality; watersheds; wildlife habitat; natural areas and open space for outdoor recreation and enjoyment to the extent that fiscal resources permit.

# **Policy 10.2**

The Town shall continue enforcing the fertilizer-free zone regulations in Section 27-54 of the land development code for properties along the Indian River Lagoon.

# **Policy 10.3**

The Town will encourage the planting of landscaping known for cleansing and absorption properties in the Town-maintained List of Water Cleansing Plants within 10 feet of the Indian River Lagoon.

# Policy 10.4

The Town shall participate in programs, including Keep Brevard Beautiful, that educate property owners on the benefits and creation of lagoon-friendly yards and recognize property owners utilizing such principles.

#### Policy 10.5

The Town shall encourage and be involved in Brevard County programs creating oyster beds in the Indian River Lagoon as both a way of improving water quality and expanding the local and regional economy through aquaculture opportunities.

#### Policy 10.6

The Town shall examine the possibility of creating minimum height standards for all new, reconstructed, and substantially improved seawalls along the Indian River Lagoon to counter the impacts of rising river levels.

# **Policy 10.7**

The Town shall continue to enforce, and strengthen when determined necessary, its Wetland Protection regulations under Article 1, Chapter 11A of Appendix 1, Land Development Code.

# Policy 10.8

The Town shall continue to enforce the erosion and sediment control provisions under its National Pollutant Discharge Elimination System Permit.

#### Policy 10.9

The Town shall continue to direct property owners to the proper state and/or federal regulatory agencies when considering the removal of grass beds and other submerged habitat.

# **Policy 10.10**

The Town shall continue to administer or cooperate with the programs of other organizations in providing information on protecting the West Indian manatee within the Indian River Lagoon.

# **Policy 10.11**

The Town shall continue to work with appropriate regulatory bodies regarding construction activities involving the waters of the State of Florida or the United States.

# **Policy 10.12**

The Town shall continue to coordinate with appropriate local, state, and federal agencies regarding the monitoring of local waters, including the Indian River Lagoon.

# Policy 10.13

The Town shall participate in future updates to the Indian River Lagoon Comprehensive Conservation and Management Plan, most recently updated in 2008, and will continue to support and implement the action plan items applicable to the Town.

# GOAL

Protect, conserve, maintain, and enhance the Town's infrastructure, built, and human environment from the natural processes attributable to sea level rise, storm surge and flooding, with primary focus on areas proximate to the Atlantic Ocean and Indian River Lagoon.

## **OBJECTIVE 11**

Development, redevelopment. rebuilds, retrofits and additions in the Town shall be planned and managed through strategies and design principles that are consistent with sound planning practices that protect life and property from the effects of flooding, storm surge and related impacts of sea level rise and that protect the long-term financial viability of the Town.

# **Policy 11.1**

The Town shall consider prohibiting the increase in development density within the CPA if applications for such increase would be contrary to Objective 11 above.

All new development and redevelopment shall be consistent with, or more stringent than, the flood resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. Part 60.

# Policy 11.3

At the time of the next Master Drainage Plan update, consider incorporating green infrastructure elements, including such techniques as rain barrels, rain gardens, native landscaping, cisterns, and permeable pavement, particularly on Town-owned properties.

# **Policy 11.4**

The Town shall only allow development and redevelopment where consistent with sound planning and engineering practices that shall protect life, the subject property, and adjoining properties from the effects of coastal erosion, flooding, sea level rise, or damage to environmental systems.

# **Policy 11.5**

The Town shall continue to regulate repairs and improvements to all buildings in terms of substantial improvements or damage by requiring compliance with flood plain management provisions of the Town code. In addition, development standards shall be updated to reflect revised flood elevations, as updated information becomes available from FEMA.

# **Policy 11.6**

The Town shall research and amend as necessary, its Land Development Regulations during each successive Evaluation and Appraisal Report review to address the following:

- A. The feasibility of increasing the freeboard requirement for all new or substantially redeveloped properties within a special flood hazard area (SFHA) with defined or revised base flood elevation provided in the applicable FIRM.
- B. The feasibility of requiring all new or substantially redeveloped properties within the SFHA without an elevation provided on the applicable FIRM to elevate the lowest floor to the greater of the standards of Land Development Code §4A-189(2)-(3), or a minimum elevation.
- C. The feasibility of requiring all new or substantially redeveloped properties outside of the SFHA to be built with the lowest floor being at a minimum elevation.

The Town shall continue to encourage and work with residents and business owners through educational and other programs in utilizing green infrastructure techniques, per Policy 11.3, in combating the impacts of sea level rise.

# **Policy 11.8**

The Town shall seek opportunities to purchase properties within the Coastal Planning Area and subject to repetitive storm damage through the assistance of the Federal Emergency Management Administration (FEMA), non-profit conservation land trusts, and other sources.

#### Policy 11.9

The Town shall regularly review the land development regulations that require lowimpact development, and will make feasible code revisions, as needed.

# **Policy 11.10**

The Town may utilize, but shall not be limited to, the following tools, site development techniques and strategies for use within the 100-year floodplain to mitigate flooding and effects of sea level rise and storm surge in order to protect property, to the greatest physical and financial extent possible:

- A. <u>Green street techniques</u>, which emulate natural systems, to divert, capture or absorb water in a way to reduce flood impacts on private property, including, but not limited to street trees, landscaped areas and vegetative curb extensions, bioswales, vernacular streetscapes, and roadway re-design.
- B. A Hybrid stormwater master plan to integrate a combination of green and gray (concrete and man-made) infrastructure, including but not limited to bioretention, increasing pipe capacity, stormwater parks, rain gardens/bioswales, pumps, and water flow diversion strategies.
- C. Underground utilities in vulnerable and feasible areas;
- D. <u>Parking standards and parking lot site plan design with greater water capture techniques;</u>
- E. Increase of set-back lines for properties in the CPA;
- F. Natural dune restoration;
- G. Permeable pavement;
- H. Dry and Wet flood proofing of structures; and

# I. Green/Open space

# Policy 11.11

The Town shall hold properties in the Coastal Planning Area to their current developed density in order to protect life and property from natural hazards and the effects of sea level rise.

# **Policy 11.12**

The Town shall continue to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for its residents.

#### **Policy 11.13**

The Town shall research the potential for purchasing flood panels which could be installed in the event of storm/flooding events to protect municipally-owned building during such events and expedite their return to service.

# **Policy 11.14**

The Town shall study options for the hardening of the lift station located within Ryckman Park and coordinate with Melbourne Utilities to accomplish necessary improvements.

# **Policy 11.15**

The Town shall research using solar energy to run or augment the running capacity of the Town's power generator.

#### **Policy 11.16**

The Town may consider limiting the construction of new public infrastructure or public buildings within the Coastal Planning Area if contrary to Objective 11 above. New construction shall conform to the beach access and lighting standards of Section 40-25 of the Town of Melbourne Beach Code of Ordinances.

# **Policy 11.17**

The Town shall construct and maintain its stormwater management system to ensure that water velocities are below the level which could cause scour or erosion.

# **Policy 11.18**

The stormwater master plan shall incorporate an increase in green engineering/infrastructure solutions to reduce run off into the lagoon either directly or indirectly and provide additional opportunities for water capture and filtration. These solutions shall include, but not be limited to, bioswales, water detention/retention ponds, seasonal stormwater parks, trees and other native vegetation, rain gardens and other water flow diversion and capture solutions.

The Town shall consider the acquisition of properties in the 100-year flood plain that can be used for public open space and function as part of a hybrid stormwater master plan that utilizes green engineering techniques such as stormwater parks, bioswales, rain gardens and others that will result in the capture of water and provide natural filtration prior to entering the lagoon and will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA). These projects shall be designed in a manner that will allow for continued functionality when considering future effects from sea level rise.

# **Policy 11.20**

The Town shall place the greatest priority and work with service providers on infrastructure construction and reconstruction in the Coastal Planning Area.

# **Policy 11.21**

The Town shall research the latest methodologies for hardening roads and other infrastructure to resist the impacts of sea level rise and flooding within the Coastal Planning Area. Where such methodologies are reasonably feasible, the Land Development Code shall be amended by the next Evaluation and Appraisal Report (EAR) to mandate the use of these methodologies for this area.

#### **Policy 11.22**

The Town shall research the feasibility of planting additional canopy trees along State Road A1A/Atlantic Street, Oak Street, Riverside Drive, and Pine Street to assist in stormwater absorption, as well as provide traffic calming.

#### **Policy 11.23**

The Town shall continue to research the opportunities, and update the Stormwater Management Plan accordingly, for using green infrastructure as a way of augmenting the Town's traditional stormwater infrastructure to reduce runoff into the Indian River Lagoon and increase the quality of water entering the surficial aquifer while providing for recreation and nature enjoyment opportunities.

## **Policy 11.24**

The Town will integrate sea level rise planning with its plans, procedures and policies based upon the consideration of a range or rise, vulnerability, allowable risk, and project service life from the date of development construction.

<u>Planning periods should include the following: Short-term – impacts to 2040 (20-year planning horizon); medium-term - impacts to 2060 (40-year planning horizon), and long-term impacts to 2000 (80-year planning horizon).</u>

OBJECTIVE 12: The use of public funds for infrastructure improvements which subsidize increased development in the Coastal Planning Area (CPA) may be restricted to those projects which restore or enhance natural resources, are part of the Town's post-disaster redevelopment plan, and/or serve to reduce existing development risks and property hazards such as sea level rise, flooding and storm surge.

## Policy 12.1

The Town may limit use of public funds and discourage use of funds by other levels of government that subsidize new private development or redevelopment within the CPA, while prioritizing infrastructure improvement projects which mitigate the impacts of seal level rise and flooding.

# Policy 12.2

<u>Public expenditures for capital improvements that promote public access, hazard mitigation and use of coastal areas shall be reviewed through the annual budget process</u> to minimize loss <u>potential and account for future impacts from sea level rise</u> and flooding

# **Policy 12.3**

Any construction activities that are seaward of the coastal construction control lines established pursuant to s. 161.953 shall be consistent with Chapter 161.