

1225 MAIN STREET ■ SEBASTIAN, FLORIDA 32958
TELEPHONE (772) 589-5518 ■ www.cityofsebastian.org

AGENDA
PLANNING AND ZONING COMMISSION
THURSDAY, AUGUST 20, 2020 – 6:00 P.M.

CITY COUNCIL CHAMBERS
1225 MAIN STREET, SEBASTIAN, FLORIDA

ALL AGENDA ITEMS MAY BE INSPECTED IN THE OFFICE OF COMMUNITY DEVELOPMENT
1225 MAIN STREET, SEBASTIAN, FLORIDA *or* www.cityofsebastian.org

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **ROLL CALL**
4. **ANNOUNCEMENTS AND/OR AGENDA MODIFICATIONS**
Modifications and additions require unanimous vote of members. Deletions do not apply.
5. **APPROVAL OF MINUTES** Meetings of July 30, 2020 & August 6, 2020
6. **QUASI-JUDICIAL and PUBLIC HEARINGS** None
7. **PUBLIC INPUT**
Public Input on items other than on the printed agenda, is five minutes, however, it can be extended or terminated by a majority vote of members present
8. **NEW BUSINESS**
 - A. Review of Proposed 2040 Comprehensive Plan Elements –
Goals, Objectives, and Policies & Updated Data and Inventory Analysis:
 - 5. Conservation & Coastal Management Element
 - 6. Parks, Recreation, & Open Space Element
 - a. Power Point Presentation by Kimley-Horn and Associates, Inc
 - b. Discussion facilitated by Consultant and Staff
 - c. Public Input
 - d. Next Steps
9. **OLD BUSINESS** Discussion – Land Use Element and Housing Element Data
10. **COMMISSIONERS MATTERS**
11. **CITY ATTORNEY MATTERS**
12. **STAFF MATTERS**
13. **ADJOURN**

DUE TO HEALTH CONCERNS REGARDING CORONAVIRUS, ALTERNATIVE METHODS WILL BE IN PLACE FOR THE PUBLIC TO PROVIDE INPUT REGARDING THIS MEETING. INTERESTED PARTIES MAY CONTACT THE CITY AT 772-388-8226 OR E-MAIL QUESTIONS AT COSTV@COSTV.CITYOFSEBASTIAN.ORG OR MAY VISIT THE CITY'S WEBSITE AT <http://www.cityofsebastian.org/public-input-methods>.

However, the public is advised to check the City website for up-to-date information on any changes to the manner in which the meeting will be held and the location.

HEARING ASSISTANCE HEADPHONES ARE AVAILABLE IN THE COUNCIL CHAMBERS FOR ALL GOVERNMENT MEETINGS.

ANY PERSON WHO DECIDES TO APPEAL ANY DECISION MADE WITH RESPECT TO ANY MATTER CONSIDERED AT THIS MEETING WILL NEED A RECORD OF THE PROCEEDINGS AND MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH RECORD INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE HEARD. (F.S.286.0105)

IN COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT (ADA), ANYONE WHO NEEDS A SPECIAL ACCOMMODATION FOR THIS MEETING SHOULD CONTACT THE CITY'S ADA COORDINATOR AT 589-5330 AT LEAST 48 HOURS IN ADVANCE OF THIS MEETING.

All government meetings in City Council Chambers will be broadcast live on COS-TV Comcast Channel 25 and ATT UVerse Channel 99 and streamed via the city website – www.cityofsebastian.org unless otherwise noticed and rebroadcast at a later date – see COS-TV Channel 25 for broadcast schedule

**CITY OF SEBASTIAN
PLANNING & ZONING COMMISSION MINUTES
JULY 30, 2020**

1. Call to Order -- Chairman Reyes called the meeting to order at 6:00 p.m.

2. Pledge of Allegiance was recited by all.

3. Roll Call

Present:

Mr. Roth

Mr. Simmons

Ms. Kautenburg (a)

Mr. Carter

Mr. Reyes

Mr. Christino (a)

Mr. Hughan

Not Present:

Mr. Alvarez -- Excused

Mr. Qizilbash -- Excused

Also Present:

Ms. Dorri Bosworth, Planning Manager

Ms. Lisa Frazier, Community Development Director

Mr. Manny Anon, City Attorney

Mr. Kelley Klepper, Kimley-Horn and Associates

Ms. Barbara Brooke-Reese, MIS Manager

Ms. Janet Graham, Technical Writer (via Zoom)

Ms. Mara Schiff, Indian River County School Board liaison, was not present.

4. Announcements and/or Agenda Modifications

Mr. Reyes announced that Mr. Alvarez and Mr. Qizilbash are excused, and Ms. Kautenburg and Mr. Christino will be voting in their places.

5. Approval of Minutes -- Regular Meetings of June 18, 2020 and July 16, 2020

Mr. Christino asked that a correction be made to the Minutes of June 18, 2020, on page 4 regarding his comments on the County's plans for the density of the project where he clearly stated that the capacity "did not exist" instead of what is in the Minutes as "did not exceed the limit." Being that they mean two entirely different things, he wanted that correction to be on the record. Mr. Reyes asked for any other corrections to the Minutes of June 18, 2020. Hearing none, he called for a vote to approve the Minutes of the June 18, 2020 meeting, with the corrections as noted above. A motion to approve the Minutes of the June 18, 2020 meeting as corrected was made by Ms. Kautenburg and seconded by Mr. Christino.

Roll Call

**Sebastian Planning &
Zoning Commission**

Approved _____ Date _____

Approved Subject To _____

Signature _____

(Original Stamp Red)

Mr. Roth -- Yes
Mr. Reyes -- Yes
Mr. Simmons -- Yes
Mr. Carter -- Yes

Mr. Hughan -- Yes
Ms. Kautenburg (a) -- Yes
Mr. Christino (a) -- Yes

Vote was 7-0. Motion passed

Mr. Reyes called for a motion approving the Minutes of the July 16, 2020 meeting. A motion to approve the Minutes of the July 16, 2020 meeting as presented was made by Mr. Simmons, seconded by Mr. Roth, and approved unanimously via voice vote.

6. Quasi-Judicial and Public Hearings -- None
7. Unfinished Business -- None
8. Public Input -- None
9. New Business
 - A. Review of Proposed 2040 Comprehensive Plan Elements --
Goals, Objectives, and Policies & Updated Data and Inventory Analysis
 - i. Land Use Element
 - ii. Transportation & Mobility Element
 - iii. Housing Element
 - a. PowerPoint Presentation by Kimley-Horn and Associates, Inc.
 - b. Discussion facilitated by Consultant and staff
 - c. Public Input
 - d. Next Steps

Ms. Frazier and Mr. Kelly Klepper of Kimley-Horn reviewed a PowerPoint presentation (SEE ATTACHED) describing the proposed 2040 Comprehensive Plan for the City relating to the three elements listed above. Ms. Frazier proposed that the Land Use Element and the Housing Element be covered first and then the Transportation & Mobility Element will be addressed depending on time constraints. It was the consensus of the Commissioners that all three elements be covered at this meeting.

Ms. Frazier reviewed that the proposed 2040 Comprehensive Plan has been presented to the Parks and Recreation Committee and the Natural Resources Board. Their recommendations will be incorporated into the final draft of the Comprehensive Plan. She added that the proposed Comprehensive Plan has been loaded onto the City's website

and is available for the public to review. She then introduced Kelley Klepper from Kimley-Horn and Associates.

Mr. Reyes asked if the strikethroughs were available on the copy that is on the website. Ms. Frazier stated the strikethroughs are not included on the copy on the website, but she will add them.

Mr. Klepper reviewed the PowerPoint presentation addressing the Land Use Element in depth, explaining what factors were considered when composing the draft of the Plan. One of the subjects addressed in particular under the Land Use Element is transfer of development rights (TDRs). Another subject that was covered by Mr. Klepper was the idea of better use of the properties already within the City rather than extending the boundaries of the City and acquiring more land.

Another subject that was addressed was the industrial use of land within the City. Ms. Frazier explained several options for addressing the different classifications of industrial land use in Sebastian. She stated that City Council has recently asked staff to develop a change of use regarding heavy industrial property in the City to allow salvage yards. In the existing Comprehensive Plan regarding industrial use there is language that prohibits salvage yards. If the City allows salvage yards, there will need to be language to the effect that they will be allowed under the section describing recycling facilities with conditions, one of those conditions being that junk yards are prohibited.

Mr. Klepper then called for questions or comments from the Commission.

Mr. Reyes stated that he does not feel comfortable being told to get to an approval on the allowing of salvage yards. He stated he thinks this Commission is being forced to come to a decision on something that has already been voted on.

Mr. Hughan commented regarding junkyards in the City. He is not in favor of them for the reason that they are environmental hazards regarding the liquids that are involved.

Mr. Christino commented regarding changes and strikethroughs, specifically protecting the environmentally sensitive land use in Comprehensive Plans, especially the wetlands. He thinks that the language contained in the existing Comprehensive Plan should be kept and not struck. Ms. Frazier stated that this subject will be addressed in the Conservation and Coastal Management Element, not the Land Use Element of the Plan, and that language will appear there. Mr. Klepper stated that this Committee will be reviewing the Coastal Management Element on August 20th. There has been a significant enhancement to the City's conservation components, from not only the wetlands and the native habitats, but also vegetative communities, etc.

Ms. Kautenburg stated that with respect to the creation of junkyards, she does not have a problem with having a zoning district called heavy industrial, where that would be appropriate. She stated her problem with this suggestion is that the City does not presently have that type of land. She stated that if at some time in the future the City were to annex land, that type of land may be included. After reviewing the maps, she does not see anywhere that there is the type of land needed for salvage yards.

Ms. Kautenburg also addressed the section on land use where there is a section on mobile homes in residential developments. She questioned if it would be possible to insert maintenance criteria for these mobile home parks. Mr. Klepper, in addressing Ms. Kautenburg's suggestion, stated those types of standards are typically found in the Land Development Code or in a companion with the Building Code, like a property maintenance component.

Ms. Kautenburg addressed the matter of limited commercial development, she asked if residences would be permitted in a limited commercial area. Mr. Klepper stated that commercial use should remain commercial, and mixed use would allow for commercial and residential under the one designation.

Mr. Simmons inquired whether the future land use maps that are shown include the existing annexations of property over the past couple of years. Ms. Frazier answered that they include the annexation titled "Spirit of Sebastian" and the 60+ acres north of Route 510. They do not include the current annexation under discussion with City Council.

Mr. Simmons also asked why the language describing residential density was changed which now refers to a specific number. Mr. Klepper stated that it was felt that that language was redundant.

Mr. Christino asked in follow-up to Mr. Simmons' question regarding the annexation along Route 510 if that land is designated as Commercial General. Ms. Frazier answered yes. Mr. Christino asked if it would be within the City's purview to change that land's designation to institutional. Ms. Frazier stated that would not be possible unless the owners of the property would agree.

Mr. Roth asked for an explanation regarding the transfer of development rights in the Riverfront Mixed Use section. Ms. Frazier explained that that is an opportunity that is being presented within this land use category, and she explained how it is done. Mr. Roth asked who controls that activity. Ms. Frazier stated the City would have to approve those transfers. Mr. Keppler stated there is a formal process involved, and there could be an exchange of cash involved.

Mr. Roth had a question about the Objective of Annexation Studies section. He wondered if there must be an annexation study on each annexation. Mr. Keppler stated that was a

recommendation by the Treasure Coast Regional Planning Council. There is the ability of the City to require one, and there is proposed language in the new Comprehensive Plan which designates what is required in the study.

Regarding the wording as to Community Appearance and Urban Design, he likes that section, but he wonders if it is actionable. He would like the City to inform developers what the City is looking for, i.e. the "Old Fishing Village" theme.

Mr. Reyes inquired about the statement that through incentives a developer can go from 8 units to 10 units on an acre lot. He is a little uncomfortable with that idea. Mr. Klepper explained that the areas where the density can be increased are the medium-density residential as well as the mixed-usage areas. That would have to go through a formal process with the City.

Mr. Reyes is concerned about increasing the density by building up. Ms. Frazier stated that height limits are addressed in the Land Development Code, and that is not being proposed to be changed at this time. Mr. Klepper stated that the City does have the right to add something into the Land Development Code while addressing the new Comprehensive Plan.

Mr. Reyes called for input from the public.

- John Reilly, Sebastian. He is not in favor of increasing the density of units per acre. He also thinks TDRs is a terrible idea. He thinks four units per acre is plenty.
- Christopher Nunn, Sebastian. He asked where the area is located whose owner is asking for the heavy industrial designation. He is aware that this platform is not the place to bring that up, but he thinks the City should look at the situation and have a discussion about it. Mr. Christino stated the property is near the airport. Mr. Reyes stated that this Commission has already voted on that.
- Sharon Herman, Sebastian. She agreed with what Mr. Nunn said about the heavy industrial question. She also wished the PowerPoint presentation had been included with the agenda for the public to see. Mr. Reyes stated making the PowerPoints available to the public will be looked at.
- Bill Flynn, Sebastian. He stated that part of his job with St. Lucie County Schools is fluid management. There are good practices that are regulated by both the State and the Federal Governments on how the fluids are handled by salvage/junkyards. He is sure anyone in Sebastian would be following those regulations. As a community, it should be growing and allowing people to create jobs for the local community. Mr. Reyes asked Mr. Flynn how often the laws are violated regarding

the fluids. Mr. Flynn said there was a problem in the past before the regulations were put in place.

- Graham Cox, Sebastian (via Zoom). He agreed that it would be good to have the PowerPoint presentations available to the public, and to limit them to 15 minutes instead of 60 minutes. He also asked if the projection of 9,400 added to the population just addresses the population within the City limits or does that also include the population in the Graves Brothers annexed property. He also asked why it is desired to add 9,000-10,000 to the population. Residential costs more to develop, and commercial development provides more tax money for the City.

Mr. Reyes closed the Public Input and asked staff to move on to the next element of their presentation.

Mr. Klepper reviewed a PowerPoint presentation on the Housing Element of the proposed Comprehensive Plan. He stated housing is an important element for the community to address. All forms of housing, including ownership, rentals, assisted living, housing values, affordable workforce-attainable housing--all forms and functions of housing and how it supports the community--are addressed. There are both State and Federal standards that are in place regarding this subject. He emphasized that staff looked at all the redundancies in the existing Comprehensive Plan and streamlined those redundancies in the proposed 2040 Comprehensive Plan. He then called for questions or comments from the Commissioners.

Mr. Christino addressed the discrepancy on household size, being 2.24 versus 2.42 persons per owner. Mr. Klepper said he will doublecheck on which figures are correct.

Ms. Kautenburg stated she is disappointed that the data used are so inaccurate. She emphasized that the median cost of a home in Sebastian as listed in the new Comprehensive Plan is not accurate. She opined that the rental rates and the mortgage rates are way off. She appreciates the efforts that the City is making to move forward, but she thinks it is necessary to have more accurate information. Mr. Klepper addressed her concerns by relating that there is professionally accepted information and that the multiple listing service has not been recognized to the best of his knowledge. He is aware that the data that have been used are somewhat dated. Staff will go back and confirm the data that have been used.

Mr. Roth addressed the section on affordable housing. He thinks if a proposed developer meets all the codes and requirements, it should not be dictated by the City to be developed otherwise. Mr. Klepper stated that when developers come into the City, they will be told what the development codes and policies are, and the developer can then decide whether to pursue development in Sebastian, whether it is affordable housing or

something else. Mr. Roth also addressed the accessory dwelling units (ADUs). He is concerned about the language that is proposed and whether it protects the homeowners. Mr. Klepper stated that the language used does not mean that these things are going to happen in all areas of the City. It means that the City is going to identify those areas in which ADUs can be used. Ms. Frazier added that the ADUs are becoming part of a solution to the problem of affordable housing. Mr. Roth stated that he is not against ADUs as long as there is a checkpoint to protect other homeowners.

Mr. Roth asked if there is any area in the proposed Plan that addresses tiny homes. Ms. Frazier stated that staff did not add that because there is not enough land available to support something like that. There is a higher density to accommodate those houses. She stated there have been some developers who showed interest in tiny home developments, but the density would not support those developments. She stated if the Commissioners would like staff to address that subject, they will look into it. Mr. Klepper read a section of the proposed Plan labeled Changing Conditions where it states, "The City shall undertake special housing studies as deemed necessary to develop specific local strategies for addressing housing conditions, market trends, and housing-related challenges." He said that under that language, the City could decide to study tiny houses. Mr. Roth stated that if the City annexes additional land, the development of tiny home areas might be permitted. Mr. Klepper mentioned Sarasota County and the options they used to create tiny home developments.

Mr. Reyes is concerned with the ADUs turning into vacation rentals. He stated that energy-efficient housing, LEED, green space, and green products are a great idea, and there is not enough of that here. Those things should be pushed when developers come here.

Mr. Reyes asked what constitutes an historic structure. Mr. Klepper stated there is a definition through the State Department of Historic Resources as well as the federal standards. There are certain qualifications, and he thinks baseline is that the structure is 50 years old.

Mr. Reyes addressed the idea of streamlining the information in the Comprehensive Plan. He opined that streamlining makes it harder for people to find the wording in the document if it is only in one place. He also stated the data that are used for the analyses should definitely be confirmed.

Mr. Reyes called for input from the public on the Housing Element.

- Sharon Herman, Sebastian. She inquired whether there is anywhere in this Plan that addresses the surface water issue. Ms. Frazier stated that stormwater is addressed in the Infrastructure section, and it is also addressed in the Conservation and Coastal Management section. Ms. Herman is also concerned

about the affordable housing problem. She opined that this is becoming a community where the people who work in Sebastian cannot afford to live in Sebastian. She says it is sounding more and more like Sebastian is becoming more a community of the wealthy, supported by the outlying areas. She hopes that is not the way the City is headed. Regarding ADUs, she suggested keeping in mind that this is also a retirement community, and there might be more granny pods being erected.

- Victor Young, Sebastian. He is also concerned about the lack of affordable housing in Sebastian. He specifically addressed those people whose income levels are too high to qualify for low-rent housing and yet are not high enough to afford other housing. He asked what the City is doing to try to address those people as well.

Mr. Christino asked who sets the income limits for qualifying for affordable housing. Mr. Klepper stated that is based on the area median income, which is based on the metropolitan statistical area. Ms. Frazier stated that what Mr. Young is referring to is the "missing middle housing." It is the housing that our essential workers need, but they do not make enough to afford to live in this City. This is not isolated just to Sebastian. She understands the concern about increased density, but when developers come in and want to put in some type of relevant housing that the missing middle can afford, they have to do studies that will show them how much they have to sell the housing units for. Increasing density on the site brings down the cost of the house they are going to produce.

- Graham Cox, Sebastian. (Inaudible)

Mr. Reyes closed the Public Input and asked staff to move on to the next element of their presentation.

Mr. Klepper reviewed a PowerPoint presentation on the Transportation and Mobility Element of the 2040 Comprehensive Plan. (SEE ATTACHED) He talked about all the modes of transportation and tying together the roads, paths, sidewalks, parking, traffic, etc. Maps were included which showed levels of transportation. Ms. Frazier pointed out that plans are being made to increase Route 1 to six lanes from Wabasso south to 53rd Street. Plans are also being made to increase CR 512 to six lanes from the edge of the City to I-95. She wanted the Commissioners and the public to be aware that these are plans that are outside of the City's purview but will affect the City. She also said CR 510 is also going to be widened. They are planning to build 82nd street, and that road is going to be identified as a truck route. Mr. Klepper stated it is critical that the City and the County maintain the relationships in this area and the agreements that they have. That will mean that the City is included in the discussions when and why these improvements are being proposed.

There was extensive discussion among the Commissioners and Ms. Frazier and Mr. Klepper as they went through the PowerPoint. The subjects discussed included width of the roads in the City, bike lanes, walking trails, sidewalks, roads, parks, etc.

Mr. Reyes called for input from the public regarding the Transportation and Mobility Element.

- Victor Young, Sebastian. He thanked the Consultant and staff for going outside the City and looking at the surrounding areas when they drafted the proposed Plan. The plan of the County to connect 82nd Avenue to CR 510 is a good thing. He states it is crucial when that project is done the two quarries between 69th Street and Route 60 are considered. There is a lot of dump truck traffic, and there will be more dump trucks on 512 if that is connected over to the City. That will allow more dump truck traffic on 512. The subject of parking lots was brought up. He feels the problem is that the parking that is available presently is overflowing, and with another 10,000 increase in population over the next 20 years, many of whom will have boats, where will the additional parking come from.
- Christopher Nunn, Sebastian. Regarding the sidewalk along 512, he would like to see that whole row of trees removed, the area widened, and make it more of a bike path and a walking path. He thinks it would serve the community better as well as being safer. He thinks most people are afraid to walk on that sidewalk because nobody can see they are there. He agrees that there should be more sidewalks in the City. Mr. Reyes said he thinks that the sidewalk along 512 is maintained by the County. If it were maintained better, there may be more people use that sidewalk.

Mr. Roth complimented the City in that it has an excellent engineer now, and he is doing a really good job of evaluating sidewalks in addition to traffic control.

10. Commissioners Matters

Mr. Roth is confused by all the acronyms contained in the document. Mr. Klepper stated the list of acronyms is being finalized as a separate pull-out section for everyone.

Mr. Carter commented regarding the data that are being used, especially in the Housing Element. He is concerned about having to make decisions and base them on data that are not accurate.

11. City Attorney Matters -- None

12. Staff Matters

Ms. Frazier reminded everyone that this is not the only time for the public to comment on these elements. People can email the Community Development Department, call by phone, or send written correspondence. Staff will make sure that the strikethroughs and PowerPoints are loaded onto the website. The next meeting will be August 20th with the Conservation and Coastal Management and Parks and Recreation Open Space elements.

13. Adjourn

There being no further business, Mr. Reyes adjourned the meeting at 9:04 p.m.

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**CITY OF SEBASTIAN
PLANNING AND ZONING COMMISSION/LOCAL PLANNING AGENCY MINUTES
AUGUST 6, 2020**

1. Call to Order -- Chairman Reyes called the meeting to order at 6:00 p.m.
2. Pledge of Allegiance was recited by all.
3. Roll Call

Present: Mr. Simmons Mr. Qizilbash
 Ms. Kautenburg (a) Mr. Hughan
 Mr. Reyes Mr. Alvarez

Not Present: Mr. Christino (a) -- Excused
 Mr. Roth -- Excused (by staff)
 Mr. Carter -- Excused

Also Present: Mr. Ken Killgore, Administrative Services Director/CFO
 Mr. Manny Anon, City Attorney (via Zoom)
 Ms. Dorri Bosworth, Planning Manager
 Mr. Robert Loring, Senior Planner
 Ms. Barbara Brooke-Reese, MIS Manager
 Ms. Janet Graham, Technical Writer (via Zoom)

Ms. Mara Schiff, Indian River County School Board liaison, was not present.

4. Announcements and/or Agenda Modifications

Mr. Reyes announced that Mr. Christino and Mr. Carter are excused from tonight's meeting. Ms. Kautenburg will be voting for Mr. Carter as an alternate member.

Mr. Reyes requested an agenda modification. Under New Business, it is requested that Item B, the Accessory Structure Review, be heard before the Review of Capital Improvement Program. Mr. Reyes called for a motion. A motion regarding agenda Item B, Accessory Structure Review, under New Business, be heard before Item A, Review of Capital Improvement Program, was made by Mr. Reyes, seconded by Mr. Qizilbash, and approved unanimously via voice vote.

5. Approval of Minutes -- None
6. Quasi-Judicial and Public Hearings -- None
7. Unfinished Business -- (Tabled Comprehensive Plan Element, if applicable)

**Sebastian Planning &
Zoning Commission**
Approved _____ Date _____
Approved Subject To _____
Signature _____
(Original Stamp Red)

Ms. Bosworth stated that was included in this agenda in case at last week's meeting all the elements on the agenda were not addressed. Since all those elements were addressed at that time, there is no unfinished business tonight.

8. Public Input -- None

9. New Business

A. **Accessory Structure Review** -- LDC Section 54-2-7.5 -- 402 Quarry Lane -- 999 SF Detached Garage (27' X 37') -- Thomas Klooz

Mr. Reyes asked the applicant to present his case. Mr. Thomas Klooz, Sebastian, stated the purpose of this accessory structure is to garage a boat and a truck. He also wants to put some trees in. Mr. Reyes asked the City staff to present their findings.

Mr. Robert Loring stated that the accessory structure as proposed meets all the requirements of the Code. Some additional items for the Commissioners' consideration would be that the applicant will need to amend the building permit to reflect a metal roof to match the roof on the existing home. The garage shall be painted to match the existing home. The applicant shall keep and maintain a minimum of 15 trees on the property. Perimeter landscaping will be needed around the proposed garage. A \$100.00 review fee for the accessory structure will be required prior to issuance of a building permit. Mr. Loring called for questions or comments from the Commissioners.

Mr. Qizilbash is concerned that the height of the accessory structure will be higher than the height of the house. He asked how the measurements were arrived at. Mr. Loring explained that staff verified that the height of the proposed structure will be lower than the height of the house.

Mr. Hughan stated that, according to the plan there should be 15 trees. He only counts 10 by looking at the red markings on the plan. Mr. Loring stated there are 15 trees shown on the plan, including the trees shown at the bottom of the plan. Mr. Hughan had no more questions.

Mr. Simmons asked if there is anything inside the building. Mr. Klooz stated it is just a shell.

Mr. Reyes stated there is still a question about the height of the proposed structure as it relates to the height of the existing home. Mr. Anon suggested asking the applicant regarding that matter. Mr. Klooz said he thinks the garage height will be approximately a foot lower than the house height. Mr. Reyes called for a motion. Mr. Qizilbash stated he is still concerned about the height of the two structures. Mr. Anon called for a point of order, in that Mr. Reyes had called for a motion, and so discussion is over unless Mr.

Reyes wants to withdraw his request for a motion and allow more discussion. Mr. Reyes withdrew his request for a motion and asked Ms. Bosworth to speak on this question. Ms. Bosworth reviewed that there have been scenarios in the past where, because of the grade difference on the second lot, there has been a little wiggle room. She stated staff will verify the height of the house. If the house is 17 feet, because of the grade elevation between the house and the proposed structure, the visual will be that the house and the structure will be the same, and staff has approved those structures in the past. She suggested that a motion can be made with the caveat that the height of the house is not higher than 17 feet.

Mr. Reyes called for input from the public either for or against this project. Hearing none, Mr. Reyes called for a motion.

A motion to approve the accessory structure at 402 Quarry Lane subject to the four elements indicated as staff recommendations with verification that the actual height of the house from the concrete pad is not greater than 17 feet or meets the code was made by Ms. Kautenburg and seconded by Mr. Qizilbash.

Roll Call:

Mr. Hughan -- Yes
Mr. Qizilbash -- Yes
Ms. Kautenburg (a) -- Yes

Mr. Simmons -- Yes
Mr. Alvarez -- Yes
Mr. Reyes -- Yes

Vote is 6-0 in favor. Motion passes.

- B. Recommendation to City Council -- **Review of Capital Improvement Program (CIP) and Capital Outlay Items Greater than \$50,000.00** -- 6-year Schedule FY 2020-2021 through 2025-2026

Mr. Reyes called upon City staff for their recommendation.

Mr. Killgore made a PowerPoint presentation (SEE ATTACHED) setting forth the Capital Improvement Program (CIP) for the fiscal years 2021 to 2026. This CIP proposal will go before City Council on August 26th. The public hearings will be on September 14th and September 23rd. This proposal has been reviewed by the Budget Advisory Committee, who had no items of particular comment. Staff develops this based on what they know the City can afford and what are projected to be the operational needs of the City. He outlined and explained the major expenditures. Mr. Killgore called for questions or comments from the Commission, after which he is requesting this Commission to approve the proposed Capital Improvement Program as is or with any recommendations they may make, after which it will be presented to City Council.

Mr. Hughan:

- Inquired regarding the audio/visual equipment where it states \$75,000.00 for the fiscal year 2020-2021. He questioned whether the City is going to buy the equipment or subscribe to the service based on \$130.00 per hour. Ms. Brooke-Reese answered that the City is purchasing the equipment outright.
- Mr. Hughan asked what the graphic wrap is that goes around the police vehicles. Mr. Killgore explained that is for the community-oriented policing. That is a special insignia explaining what that particular vehicle is.
- Under the Leisure Services Department there is an entry to replace a vehicle for \$16,000.00 and an entry to replace a mower for \$13,000.00. He is wondering why a mower would cost so much. Mr. Killgore said these are the large mowers that are used at the parks for large-scale mowing. The vehicle is actually a utility cart somewhat like a golf cart.
- There are items for restoring the canal sides and bottom and another entry for seawalls. He questioned whether those canals belong to the Water Management District. Mr. Killgore stated they are the City's responsibility.

Mr. Simmons:

- Asked what the definition of operating impact is. Mr. Killgore stated he has some formulas set up that, if a vehicle or a piece of office equipment is purchased, those items are assigned a useful life of maybe five years. If it is something like a roadway or a stormwater system, that may be extended out to 30 years. That gives staff an indication of whether there is value in keeping the equipment or the improvements up to date and in good working condition. It is an entirely subjective formula. His goal is to figure out when it would be to the City's advantage to replace the items.
- Asked, once a project is finished and is moved to the airport and the property is up for sale, will there be additional costs required for environmental remediation. Mr. Killgore stated he is not able to answer that question. He opined it would probably be based on how a potential buyer would plan to use the property.
- Regarding the Sebastian Police Department vehicles, they run approximately \$62,000.00 apiece according to the budget. He inquired as to what the vehicle itself costs. Mr. Killgore stated those vehicles are funded from the Discretionary Sales Tax fund, which has special provisions that apply to the Discretionary Sales Taxes. They allow for purchase of police vehicles and to fully equip them. The vehicles themselves cost around \$32,000.00 to \$33,000.00, but all the special equipment that is needed drives up the cost.
- Asked if a comparison of what is budgeted to what is actually spent is made. Mr. Killgore stated that is not actually looked at until he is doing the year-end financial statements. It depends on the grants as well. He stated that information is in the City's records.
- Regarding funding, for 2019-2020 it was \$5.4 million from Discretionary Sales Tax, and this year the Discretionary Sales Tax is \$2.5 million. He asked if there is a limitation on discretionary. Mr. Killgore stated the funds are allocated, regardless

of how they are spent and whether they are spent this year or are saved towards future projects. As long as the purpose of this fund is adhered to, there is no timing requirement.

- Regarding the public facilities compound, he asked for an explanation as to why there is another \$1,250,000.00 for fiscal year 2022-2023 being asked for. In 2019-2020 there was \$3,351,000.00 budgeted. He asked if that amount was spent. Mr. Killgore stated that the staff and consultants who were involved in designing that project took a closer look, and the result was needing to allocate more money. The anticipated budget at this point is higher than was first thought.
- Inquired when this proposed budget is scheduled to go before City Council. Mr. Killgore stated that the entire budget, including the Capital Improvement Program, will be presented in a workshop setting on August 26th. They actually have the first hearing on the budget and approval of the Capital Improvement Program on September 14th.

Mr. Reyes:

- Asked what is done with the City's old equipment. Is it auctioned off? Mr. Killgore stated there is an entity called Government Deals. They have an auction program that they advertise nationwide. When the City places items with them, it is basically a consignment. The items are posted on their website, and they do other advertising. Mr. Killgore states the City has done quite well with people from other states coming long distances to buy the items. Mr. Reyes stated he knows of an auction business that deals with several cities in this area and sells all their old equipment. He was curious as to how much money the City has gotten in the past with doing that, or even if the City is doing it. Mr. Killgore said the City is consistently doing it. Mr. Reyes asked where those funds go when they are received. Mr. Killgore stated It depends on the department that had originally purchased the items. Mr. Reyes asked if the City leases any vehicles. Mr. Killgore stated the City did a detailed study regarding leasing versus purchasing vehicles and found that it was not cost effective to lease vehicles. Mr. Reyes commented that the City's fleet maintenance department is costing a lot of money.
- Regarding the Police Department's requests for various equipment such as rifles, ballistic plates, etc., he asked if Sebastian has a SWAT team. Mr. Killgore stated yes. Mr. Reyes commented that the department is asking for a lot of money for equipment that he questions if it is being used. He stated this is military equipment, and he has a problem okaying much of that equipment.
- Regarding the Roads Department and the contract to repair sidewalks, he asked if this is just for repairing sidewalks, or is it for adding sidewalks. Mr. Killgore stated it is just for repairing sidewalks. He understands there is no program presently for adding sidewalks. The repairs are mostly to eliminate the trip-and-fall complaints that are received every month. Mr. Reyes asked if these trip-and-fall complaints are about sidewalks mainly along the major roadways such as US-1 and CR-512, for which the City would not be responsible. Mr. Killgore said that most of the ones

he has seen have been for the Indian River Drive area. Mr. Reyes said those were just installed over the last few years and asked if they are failing already. Mr. Killgore said he cannot speak to that.

- Asked regarding the \$13,000.00 mower for the Leisure Services Department. He thought that was in last year's budget also. Mr. Killgore said there are several of those mowers. This mower is going to replace one that has been out of service. Mr. Reyes asked how many mowers the City is using and are those mowers just for the golf course or all the parks. Mr. Killgore said he is not equipped to answer those kinds of details.
- Regarding restoring some of the canals to their original contours, he stated that is a huge task and asked who would be responsible for doing that work. Mr. Killgore stated he is not privy to the decisions made on that at this point. Mr. Reyes commented that the work that has been done already on the canals and waterways has not been done correctly. Mr. Reyes also mentioned Ocean Cove. He further asked if these canals are failing because of their original design. Mr. Killgore stated he could not answer that.
- Commented that, if this Commission is supposed to make decisions on these things for the different departments, maybe staff from those departments should be at these meetings. He cannot see voting on this proposed budget tonight without having a lot of answers. Mr. Killgore stated that the function of the Planning Commission is to look at the overall big picture. Mr. Reyes opined that there are a lot of items in this proposed budget that have been in past budgets, and they just keep appearing.
- Inquired if all the hangars at the airport are leased out. Mr. Killgore said they are, yes.

Ms. Kautenburg:

- Wanted to comment about the canals, as the question was raised as to who is responsible for the work on them. She said all of those canals were laid out and designed by General Development, and they were not done well. Over the years there have been attempts to improve the canals, but that work was done sort of haphazardly. She stated that several years ago there was much discussion about the canal that runs along Main Street where it turns into Wimbrow. At that time there was a lot of work and investigation into who owns the canal and who is responsible for it. She said after months, it was found that the City does own the canals. She opined that the City has not been approaching the canal work from the right perspective. It was not in-house personnel that worked on that canal, and the people who worked on it did a good job. She thinks it is a good idea that the City is coming up with a long-range plan to take care of these canals.

Mr. Hughan:

- Is of the opinion that the Water Management District should be contributing to the work on the canals. He asked if anyone has gone out and actually surveyed the

bottom on the canal to see what the canal bottom looks like and how it can be restored to a normal slope. He agrees with Mr. Reyes.

Mr. Reyes:

- Commented that his main concern is that it does get designed properly and that the Commission gets to see some sections of what is proposed, and that the contractor does the job correctly. He does not think the City should take on those sorts of tasks in-house.

Mr. Reyes called for input from the public. Hearing none, Mr. Reyes closed public input and called for a motion. A motion recommending the proposed Capital Improvement Program to City Council with the understanding that they would review this Commission's comments and make some modifications on their own was made by Mr. Simmons and seconded by Mr. Hughan.

Roll Call:

Mr. Qizilbash -- Yes
Mr. Reyes -- No
Mr. Simmons -- Yes

Mr. Hughan -- Yes
Ms. Kautenburg (a) -- Yes
Mr. Alvarez -- Yes

Vote was 5-1 in favor. Motion passes.

10 Commissioner Matters

Mr. Reyes noted that Mr. Roth was not present at this meeting.

11. City Attorney Matters -- None

12. Staff Matters -- None

13. Adjourn

There being no further business, Mr. Reyes adjourned the meeting at 7:10 p.m.

LAND USE ELEMENT AND HOUSING ELEMENT DATA

Below is a list of the sources of data that are used throughout the Land Use and Housing Elements:

Bureau of Economic and Business Research (BEBR)

(City population estimate, County population projections Table 1-4, Average household size)

BEBR produces Florida's official state and local population estimates and projections. These estimates and projections are used for distributing state revenue-sharing dollars to cities and counties in Florida and for budgeting, planning and policy analysis by state and local government agencies, businesses, researchers, the media, and members of the general public.

Florida Housing Data Clearinghouse (FHDC)

(City population projections Table 1-4, City and County: cost burdened households Table 3-12 and cost burden of households with householder age 65 and older Table 3-13, City assisted housing inventory Table 3-15)

The Florida Housing Data Clearinghouse provides public access to data about housing needs and supply, subsidized rental housing, and household demographics in Florida communities. City population projections are based on 2000 and 2010 U.S. Census data and population projections by the Bureau of Economic and Business Research. City housing data is based on 2000 and 2010 U.S. Census data, U.S. Census American Community Survey (ACS), U.S. Department of Housing Development, Comprehensive Housing Affordability Strategy dataset and population projections by the Bureau of Economic and Business Research. (The FHDC housing tables directly reflect the ACS data and numbers that we used in the Housing Element, additional information/tables provided by FHDC not already reflected were added to the Housing Element).

U.S. Census Bureau

(City seasonal population projections)

The actual census is completed every ten years and remains the standard for allocating a number of federal resources and is the basis for congressional districting. The data is deemed reliable in terms of the detailed profile of the community's housing inventory, its tenure, age, and structural characteristics. As a community which is largely fully developed, these attributes change modestly from one period to another. To the degree these changes may have significance; they are captured in the ACS.

U.S. Census American Community Survey (ACS) 5-Year Estimates

(City and County: dwelling units by structure Table 3-1, dwelling units by tenure Table 3-2, persons per household Table 3-3 (BEBR average household size will be referenced), housing vacancy Table 3-4, housing age table 3-5, gross rent Table 3-6, owner costs Table 3-7, value of owner-occupied units Table 3-8, household income Table 3-9, rent-to income ratio Table 3-10, mortgage costs to income ratio Table 3-11, substandard housing Table 3-14)

Certain data within the census, reported only every ten years, is updated on a selected basis in the course of completing the ACS with samples made available for analysis on a 1, 3 and 5 year cycle. The ACS was fully implemented in 2010. This change in estimating and reporting procedures makes certain socioeconomic information available on a continuing basis which had otherwise been generated strictly during the decennial census.

Zillow

(Not used)

Zillow is a real estate and rental marketplace. Zillow's database includes homes for sale, homes for rent, and homes not currently on the market, as well as estimated home values and Rent estimates. Their "city" data is more metro based and not necessarily based on the adopted City limits. The general consensus is that this source is not professionally

accepted by DEO or RPC as the best available housing data to support a plan or plan amendment. Zillow typically inflates values and sales data is the only “real” data on housing prices.

MLS or Zillow may be used as supplemental data to discuss possible trends the area could be experiencing.

Average Household Size

The average household size referenced throughout the Land Use Element and Housing Element used the 2019 BEBR average household size of 2.24 in the build out analysis. BEBR’s average household size of 2.24 is from an accepted and reliable source.

The sentence that caused confusion was in the Housing Element which stated “The 2013-2017 American Community Survey (ACS) 5-year Estimates states the average household size within the City is 2.42 **persons per owner occupied unit** and 3.09 **persons per renter occupied unit**”. This sentence was comparing owner occupied units to renter occupied units and will be removed to reduce confusion and instead will reference the BEBR overall average household size of 2.24.

Provided below are links to certain portions of the Shimberg data for your reference as well as the ACS (Census).

<http://flhousingdata.shimberg.ufl.edu/income-and-rent-limits/results?nid=3000&nid=3015>

<http://flhousingdata.shimberg.ufl.edu/comprehensive-plan-data/results?nid=3015>

<https://www.census.gov/quickfacts/fact/table/sebastiancityflorida/PST045219>

From Mr. Carter:

Regarding data used under the Housing Element last night. There are others I haven’t listed. **All have a Median Home Value of more than \$157,000, used in presentation.** Rent prices are considerably more than what was used in Element. Please forward to anyone who may be interested.

From Zillow

ZILLOW HOME VALUE INDEX \$230,001

The median home value in Sebastian is \$230,001. Sebastian home values have gone up 3.2% over the past year and Zillow predicts they will fall -0.9% within the next year. The median list price per square foot in Sebastian is \$144, which is lower than the [Sebastian-Vero Beach Metro](#) average of \$164. The median price of homes currently listed in Sebastian is \$239,950 while the median price of homes that sold is \$229,300. The median rent price in Sebastian is \$1,500. Mortgage delinquency is the first step in the foreclosure process. This is when a homeowner fails to make a mortgage payment. The percent of delinquent mortgages in Sebastian is 0.8%, which is lower than the national value of 1.1%. With U.S. home values having fallen by more than 20% nationally from their peak in 2007 until their trough in late 2011, many homeowners are now underwater on their mortgages, meaning they owe more than their home is worth. The percent of Sebastian homeowners underwater on their mortgage is 4.6%, which is lower than Sebastian-Vero Beach Metro at 5.1%.

From Realtor.com

Home values in Sebastian, FL

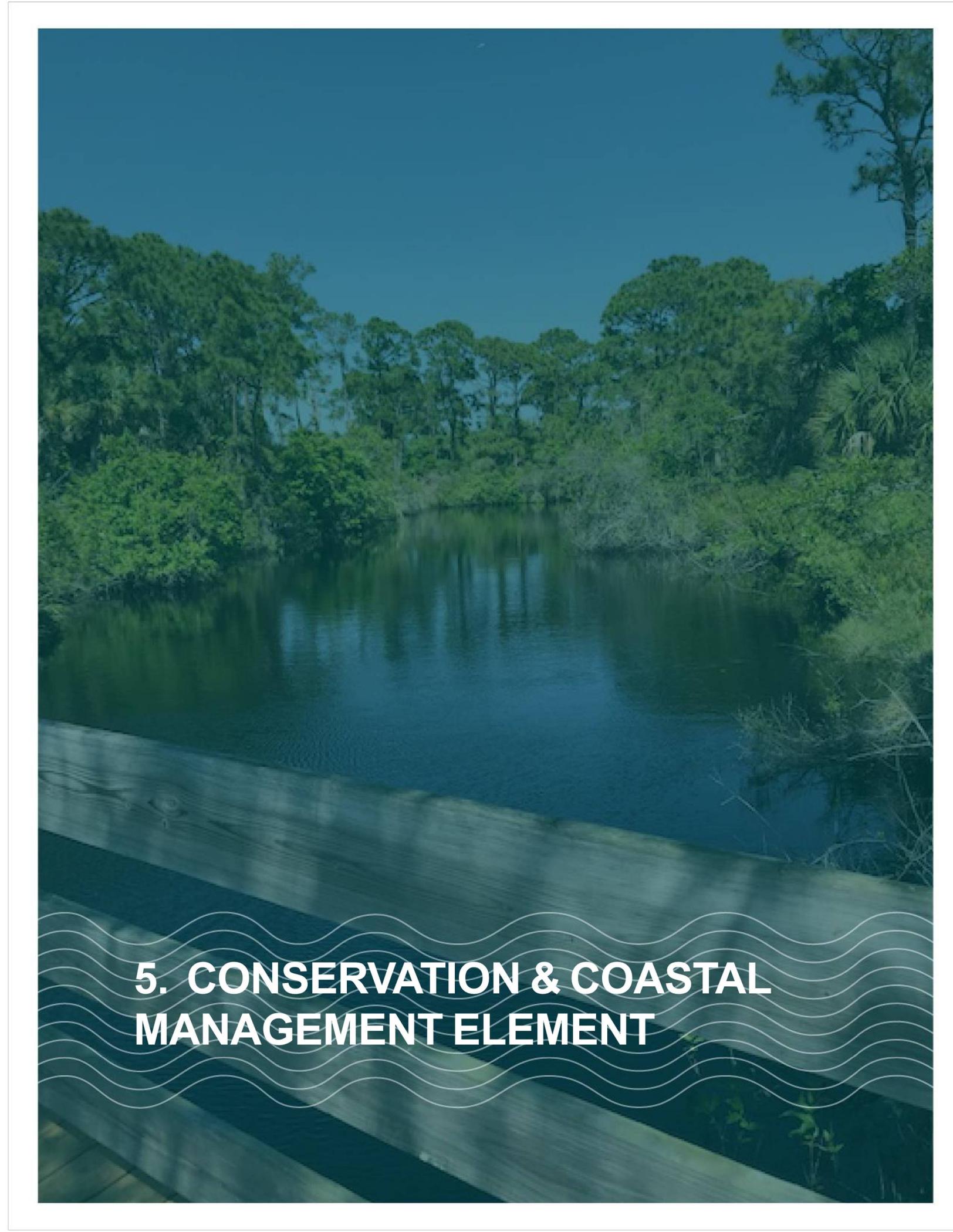
Sebastian is a city in Florida. There are 459 homes for sale, ranging from \$11K to \$5.5M.

Sebastian has affordable multi-families.

Median Listing Home Price: \$249.7K

Median Listing Home Price/Sq. Ft: \$146

Median Sold Home Price: \$226K



**5. CONSERVATION & COASTAL
MANAGEMENT ELEMENT**



CONSERVATION & COASTAL MANAGEMENT ELEMENT

The **Conservation & Coastal Management Element** sets the foundation for the City to protect and preserve its natural environment and coastal resources as well as protect life and property from natural disasters. This Element is broken into two goals: conservation and coastal management. The conservation objectives and policies encourage sustainability initiatives and ensure the protection of the City's natural resources such as lakes, rivers, wetlands, wildlife, shoreline, air, marine resources, native vegetation, and environmentally sensitive lands. The coastal management objectives and policies ensure the protection of the City's coastal shoreline as well as the protection of the City's residents and infrastructure from sea level rise and flooding risks. The **Conservation & Coastal Management Element** ensures the resiliency of the City and protects the quality of natural systems within the community.

CONSERVATION & COASTAL MANAGEMENT ELEMENT HIGHLIGHTS

1. Requires the protection of the City's natural resources, wildlife, and habitats and encourages restoration efforts;
2. Protects the City's native vegetation and trees as well as its air quality;
3. Protects the City's surface waters and marine resources;
4. Protects water quality through the promotion of stormwater treatment and integrated maintenance practices;
5. Protects the City's shorelines and public access to shorelines;
6. Focuses on sustainability measures including green building design, green jobs, and green infrastructure;
7. Enforces the limitation of public expenditures and avoidance of population concentrations in areas subject to destruction by flood risk and natural disasters;
8. Encourages the implementation of mitigation strategies outlined in the City's Coastal Resiliency Plan to prepare against flooding and sea level rise as well as the maintenance of the City's floodplains;
9. Establishes emergency management measures and post-disaster development strategies for the City in the face of a natural disaster;
10. Establishes the use of an Adaptation Action Area (AAA) Overlay District and a Transfer of Development Rights (TDR) program to further resiliency measures within the City;
11. Ensures development is compatible with sensitive coastal and wetland resources.



GOALS, OBJECTIVES, AND POLICIES

Goal 5-1: Protection and Conservation of Natural Resources.

Sebastian is home to a diverse collection of natural resources and habitats and as such shall conserve, protect, promote, and appropriately manage the City's natural resources in order to enhance the quality of natural systems and the sustainability of the community.

Objective 5-1.1: Protection of Wildlife and Habitats. Protect the City's natural resources, wildlife, and habitats to improve the health of the natural environment.

Policy 5-1.1.1: Protection of Natural Resources, Wildlife, and Habitats. The City's land development code (LDC) shall include:

- a. Performance criteria that protects the City's natural resources, wildlife, and habitats of endangered or threatened species from the adverse impacts of development by regulating the location, density, and intensity of those activities which cause the adverse impact.
- b. Standards which increase conservation incentives during development to further protect and preserve the City's natural resources.
- c. Provisions which recognize the rights of property owners to use their lands in a manner consistent with the rules, policies, and guidelines of the St. Johns River Water Management District (SJRWMD), Florida Fish and Wildlife Conservation Commission (FWC) and the United States Fish and Wildlife Service (USFWS).

Policy 5-1.1.2: Wildlife Protection. The City shall utilize the LDC and review processes to ensure that development projects evaluate potential environmental impacts and provide mitigation for negative impacts. Development shall not adversely impact any threatened or endangered species or species of special concern without appropriate permitting and/or mitigation.

Policy 5-1.1.3: Endangered or Threatened Species. The City shall protect threatened or endangered native species by requiring that proposed new development and redevelopment (where applicable) be examined for location of Listed Species. The City through its LDC and review processes, will:

- a. Coordinate with the County, Federal, and State agencies for the identification and protection of endangered and threatened species
- b. Require applicants to consult with the appropriate agencies, to use recognized surveying techniques to identify listed species, and to provide documentation of such coordination and compliance prior to City approval to conduct any activities that could disturb listed species or their habitat
 - If endangered species, threatened species, or species of special concern are found, such species' habitat shall be identified on the proposed site plan and a plan for mitigation shall be discussed in the site plan narrative
 - Such information shall be addressed through the project staff report
- c. Promote connectivity and minimize habitat fragmentation





Policy 5-1.1.4: Designation of Environmentally Sensitive Areas. This Element's DIA specifically includes areas reserved for conservation uses or restricted development. All conservation land uses identified shall either remain undeveloped or shall undergo "restricted development." "Restricted development" shall be regulated through performance criteria adopted and maintained within the LDC.

Policy 5-1.1.5: Wildlife Corridors. Consistent with **Policy 5-1.9.6** and **Policy 5-1.1.6**, the City shall encourage the provision of contiguous conservation easements and preservation areas to maintain wildlife corridors and minimize the fragmentation of habitat.

Policy 5-1.1.6: Open Space Corridor System. Through the LDC and land development review process, the City shall continue to identify opportunities to:

- a. Provide an interconnected open space corridor system that links existing open spaces, greenways, public right of ways, and trails including new open space corridors
- b. Provide connections from adjacent development to existing or planned open space corridors
- c. Connect parks and civic resources (i.e., Community Center)
- d. Provide low-impact natural activities such as walking trails, benches, picnic areas, and canoe/kayak launches
- e. Connect the City and County's open space corridors
- f. Require that open space corridors minimize the fragmentation of significant wildlife habitat. Corridor widths shall be defined based on the natural range of targeted habitat/species; however, are generally considered to be a minimum of 25 feet in width

Policy 5-1.1.7: Open Space Crossings. The City shall consider road construction, reconstruction or other similar improvements encroaching or crossing an open space corridor, encourage crossing design features, and consider alternative roadway design standards. Crossings shall be designed in accordance with the recommendations of the Florida Fish and Wildlife Conservation Commission.

Policy 5-1.1.8: Native Habitats Inventory and Assessment. The City will update its inventory and assess significant native habitat remaining within the City limits. The City will also require development and redevelopment to determine the existence of any significant native habitats and such information will be added to the inventory.

Policy 5-1.1.9: Restoration Efforts. The City shall encourage the restoration of degraded sensitive habitat in order to reestablish natural diversity and encourage connectivity of vital habitats.

Policy 5-1.1.10: Open Space. The City's LDC shall include an open space requirement which:

- a. As density of development increases, the percentage of open space shall increase as well; and
- b. Open space shall be limited to a certain percentage of the stormwater retention area to ensure that native habitat is being conserved.

Policy 5-1.1.11: Protection of Vegetative Communities. The City's LDC, including the adopted Tree Protection and Landscaping Regulations, shall be used in managing and protecting the impacts of development on major vegetative communities. These regulations shall mandate restoration in order to compensate for unauthorized removal of vegetation and to enhance stabilization of fragile slopes and/or shorelines impacted by development.

Policy 5-1.1.12: Protection of Native Habitats. The City shall limit the disturbance of and protect significant native habitats through its LDC and review process including the following:

- a. Preserve existing native vegetation and natural areas including threatened native habitats;



- b. Encourage development forms that provide protection of significant native habitats such as clustered development and alternative roadway designs (i.e., reduced rights-of-way);
- c. Development shall first avoid impact to significant native habitats;
- d. Mitigate adverse impacts whenever areas of native habitats are involved in the development of property;
- e. Require development to first impact lower quality habitats and resources before impacts to higher quality habitats and resources are considered and used;
- f. Native habitat shall be used whenever possible to fulfill open space requirements; and
- g. Protect environmentally sensitive/significant areas (i.e., floodplain, watersheds, water recharge areas, etc.).

Policy 5-1.1.13: Preservation of Native Vegetative Communities. The City’s LDC shall include an open space requirement and mandate that new development set aside a minimum 25% of each native vegetative community including trees as identified in **Policy 5-1.1.11**. The ordinance shall provide incentives for increased conservation of native vegetative communities determined to be regionally rare or endangered. The City may require payment of a fee in lieu of or participation in a tree bank (as may be adopted by the City) for the described mandatory "set aside" of habitat. Such cash payment may be in the form of an impact fee in lieu of habitat preservation to be accumulated from development for the purchase of upland habit preservation off-site rather than on-site. Other adjustments may only be granted where compensatory mitigation is provided through revegetation with native vegetative species compatible with existing vegetative communities.

Policy 5-1.1.14: Florida Friendly Landscaping. The City shall encourage the use of Florida Friendly landscaping which uses low-maintenance plants and environmentally sustainable practices.

Policy 5-1.1.15: Removal of Undesirable Exotic Vegetation. The LDC shall require that, prior to the issuance of a certificate of occupancy for a new development; the owner/applicant shall remove all nuisance and invasive exotic vegetation as defined by the Florida Exotic Pest Plant Council (FLEPPC) on the subject property.

Policy 5-1.1.16: Invasive Exotic Vegetation and Wildlife. The City should help prevent the spread of non-native invasive exotic vegetation and wildlife and protect the health and well-being of the native environment through:

- a. Removal of existing invasive exotic species in coordination with City initiated work projects and replacement with native Florida plant species;
- b. Prohibition of the use of invasive exotic species;
- c. Public awareness about the harmful impacts of non-native species into the environment; and
- d. Regional, state, and federal partnerships on efforts to eradicate invasive exotic species

Policy 5-1.1.17: Tree Protection. The City shall continue to maintain the Tree Protection and Landscaping Ordinance within the LDC to address, at a minimum, tree protection and removal standards, historic trees, mangroves, undesirable exotic vegetation, suitable trees for planting, and residential/commercial development tree requirements.

Policy 5-1.1.18: Urban Tree Canopy. The City shall focus on preserving and promoting its urban tree canopy and consider the addition and enhancement of trees and landscaping within specific public





rights-of-way and other public areas. The City shall maintain their Tree City USA designation through the Arbor Day Foundation.

Objective 5-1.2: Protection of Surface Waters. Implement policies that limit adverse impacts or alterations to surface waters to the greatest extent possible.

Policy 5-1.2.1: Protect the City's Natural Lakes and Rivers. The City's LDC shall include performance criteria designed to regulate against land development activities which adversely impact water quality, contribute to shoreline erosion and sedimentation, or otherwise threaten the long-term existence of the City's surface waters.

Policy 5-1.2.2: Required Dedication of Conservation Easements or Reservations. The City shall maintain regulations that provide for the dedication of conservation easements or reservations where the City finds that the dedication is reasonable in order to protect the value and function of a wetland or other surface water.

Policy 5-1.2.3: Wetland Protection. Wetlands shall be defined as set by 373.421 F.S. and 373.019(27) F.S. and shall be protected from physical or hydrologic alterations in order to maintain natural functions. The City shall maintain LDC performance standards designed to protect, conserve, and enhance wetlands by directing incompatible land uses away from wetlands. The LDC shall also prohibit any development within the wetland shoreline or adjacent buffer area, with the exception of water dependent native shoreline vegetation programs, approved pervious or elevated accessways, or other uses approved by the City pursuant to other City regulations.

Policy 5-1.2.4: Establishing the Wetland Line. No non-water dependent uses shall be permitted on submerged lands or wetlands. The LDC shall include a requirement that any development conduct a delineation of the landward extent of wetlands and other surface waters. The landward extent of wetlands and other surface waters shall be field delineated and flagged by a professional biologist provided by the applicant and formally approved by the SJRWMD, the Florida Department of Environmental Protection (FDEP), and/or the US Army Corps of Engineers (USACE). The approved line shall be delineated on the site plan.

Policy 5-1.2.5: Wetland Transition Area: Development on uplands adjacent to wetlands shall preserve a wetland transition area which will act as a buffer between wetlands and upland development or other land alteration activities. The LDC shall require this buffer to be in accordance to the minimum standards set by SJRWMD. The specific boundary of a wetland transition area shall be established by field investigation and must be indicated on site plans for development. The purpose of the transition area is to ensure the continuing function of respective wetland communities.

Policy 5-1.2.6: Administration of Wetland Development Restrictions. The City shall coordinate with state and federal regulatory agencies in regard to the development rights to be permitted on wetlands and/or lands under the jurisdiction of the state or federal government. The developer of the parcel of environmentally sensitive land shall be responsible for obtaining permits or exemptions from SJRWMD, FDEP, and the USACE, as may be appropriate, prior to obtaining a development order or development plan review approval from the City. Regardless of permitting by Federal or State permitting agencies, the City shall reserve the right to determine the appropriate land use, density/intensity, and special mitigation measures including, but not limited to, the construction of culverts or other means.



Policy 5-1.2.7: Development Requirements. The City's LDC shall include standards that require that the applicant shall bear the burden of proof in determining that development shall not adversely impact wetlands, transitional wetlands, and other environmentally fragile natural systems. The applicant shall prove that the type, value, function, size, and condition of the wetland will not be adversely impacted, such determinations shall be based on physical and biological data obtained from specific site investigations by a biologist, an engineer or by another professional competent in producing data and analysis necessary to support impact assessments. Applicants shall have an opportunity to demonstrate that any wetland designations within the confines of their property no longer function as wetlands.

Objective 5-1.3: Protection of Marine Resources. Protect and appropriately manage the City's marine resources and living marine organisms.

Policy 5-1.3.1: Protect Living Marine Resources, Coastal Marsh, Estuarine Water Quality, and Seagrass Beds. The City shall maintain the LDC to include performance criteria which shall regulate against adverse impacts of development on estuarine areas such as living marine organisms, seagrass, coastal marsh, and mangroves. The LDC shall require that plans for development impacting marine resources be coordinated with state agencies having jurisdiction. The applicant shall bear the burden of demonstrating that potential adverse impacts on estuarine resources have been or shall be prevented. The review process for all proposed development that fronts on Indian River Drive shall involve all local, state, and regional entities with regulatory authority. Impacts to be considered shall include the following but not be restricted to:

- a. Prevent estuarine pollution;
- b. Control surface water run off;
- c. Reduce exposure to natural hazards;
- d. Protect seagrasses and other living marine resources;
- e. Ensure adequate public access; and
- f. Ensure adequate sites and standards for regulating water-dependent and water-related uses.

Policy 5-1.3.2: Manage Impact of Coastal Development on Tidal Flushing and Circulation Patterns. The City's LDC shall include standards that require that tidal flushing and circulation patterns shall not be altered by development activities. No development shall produce changes in the tidal flushing and circulation patterns unless the City and other public agencies having jurisdiction have granted requisite permits. No such permit shall be granted by the City unless all other agencies having jurisdiction have granted clearance and the applicant has submitted hydrographic information sufficient to clearly demonstrate that no adverse environmental impacts shall be occasioned by the proposed changes in tidal flushing and circulation patterns. No alteration in tidal flow shall be permitted which causes stagnation or siltation.

Policy 5-1.3.3: Protection of Manatee Habitat. The City shall promote protection of manatees and manatee habitat in a manner consistent with applicable state guidelines and Indian River County's Manatee Protection and Boating Safety Comprehensive Management Plan (August 2004).

Policy 5-1.3.4: Conservation Easements. The City shall work with private property owners to implement conservation easements to protect sensitive natural resources such as mangroves, dune systems, and coastal tidal areas.

Objective 5-1.4: Improve Water Quality and Quantity. Maintain policies and regulations to protect and improve the City's water quality and quantity.



Policy 5-1.4.1: Water Quality. Water run-off and introduction of nutrients shall be regulated through effective water quality management criteria. In order to protect the water quality of the Aquatic Preserve, no new point source pollution shall be permitted to discharge into the lagoon or into ditches or canals flowing into the lagoon. In addition, in order to reduce non-point source pollutants, the LDC shall comply with FDEP, SJRWMD, and the Indian River Lagoon Comprehensive Conservation and Management Plan.

Policy 5-1.4.2: Requirements. In order to protect water quality the City's LDC shall require the following for new development or redevelopment:

- a. The use of Low Impact Development (LID) strategies and best management practices shall be encouraged including as part of the stormwater fee credit program;
- b. Erosion control consistent with **Objective 5-1.7** and its related policy;
- c. Surface water management systems shall be designed and constructed to retain or detain with filtration, as a minimum the storm water run-off generated from the first one-inch of rainfall over the entire site;
- d. Landscaped buffer areas shall be required in accordance with the minimum buffer requirements established by SJRWMD;
- e. A vegetated and functional littoral zone shall be established on water bodies created as part of the surface water management system on all new developments. Littoral zone plantings shall be established in commercial and residential subdivision permitted stormwater ponds. Prior to construction of the surface water management system for any phase of a project, the developer shall prepare a design and management plan for the wetland/littoral zone that will be created as part of these systems;
- f. Require sewage pump-out facilities at all marinas and for facilities which sell petroleum products require adequate fuel spill containment facilities measures; and
- g. All new development shall be required to connect to the Indian River County Utilities wastewater system when available as defined by FS 381.0065, and in accordance with the City's LDC's.

Policy 5-1.4.3: Class II Waters. Class II Waters (i.e., coastal waterbodies which currently do or have potential for supporting shellfish harvesting) shall be protected by incorporating and maintaining the following provisions in the City's LDC:

- a. Dredging activities shall be limited to approved maintenance dredging and shall minimize adverse impacts on shellfish propagation or harvesting. The City shall require that fill and dredging activities comply with all applicable local, state, and federal permitting requirements;
- b. Ensure good water quality by coordinating with the FDEP and the SJRWMD in monitoring the quality of storm water run-off. The City's LDC shall provide performance criteria designed to ensure that new development provides effective and adequate storm-water management improvements concurrent with the impacts of new development;
- c. Continue to assess needs for retrofitting stormwater outfalls without adequate treatment;
- d. Limit the use of Class II waters to water dependent activities that are not contrary to the public interest and satisfy a community need; and
- e. Limit modification of grass beds only to those cases involving overriding public interest.

Policy 5-1.4.4: Regulate Agricultural Activities to Preserve Water Quality. The City's LDC shall include stipulations requiring that agricultural activities shall:

- a. Not be conducted adjacent to existing waterways and surface water management activities and shall comply with all applicable policies of FDEP, SJRWMD, and other agencies having



appropriate jurisdiction as well as State laws, including administrative rules governing the Indian River Lagoon Aquatic Preserve. Such activities shall not threaten the water quality of the City's rivers and waterbodies;

- b. Maintain natural drainage patterns;
- c. Promote the use of surface water supplies for irrigation purposes;
- d. Prohibit the expansion of agricultural activities into wetland areas; and
- e. Use best management principles and practices in order to reduce pesticide and fertilizer run-off, prevent soil erosion, and preserve water quality.

Policy 5-1.4.5: Protect Deep Aquifer Water Resources. In order to protect the quality and quantity of deep aquifer water resources, the City shall coordinate with SJRWMD and other applicable regulatory agencies in identifying the existence and location of free flowing deep aquifer wells and in requiring corrective measures, including capping, plugging, or installing regulatory devices which control the discharge of water from the deep aquifer pursuant to the SJRWMD policies.

Policy 5-1.4.6: Surficial Aquifer Recharge Area Protection. The City shall protect surficial aquifer recharge areas from impacts that would significantly alter their ability to function. The City's LDC shall include standards that restrict development within surficial aquifer recharge areas and that require retention of open space for all development in order to:

- a. Preserve the quality and quantity of water resources within the surficial aquifer;
- b. Promote improved surface water management; and
- c. Create natural or landscaped urban green space for enhanced community aesthetics and passive pedestrian activities.

Policy 5-1.4.7: Protection and Conservation of Potable Water Supply. The City shall continue to require the LDC to incorporate performance criteria for public potable water wellfield protection. In addition, administrative procedures shall require applicants for development to coordinate with the SJRWMD in obtaining consumptive use permits. In order to comply with potable water conservation policies of the SJRWMD and achieve a reduction in the current rates of water consumption, the City's LDC shall incorporate the following performance standards:

- a. Where reclaimed water is available, potable water supplies may not be used to meet irrigation needs;
- b. Encourage the use of water-saving plumbing fixtures on all new development; and
- c. In order to reduce demand for irrigation water (which in turn often places greater demand upon potable water sources), Florida Friendly landscaping

Policy 5-1.4.8: Emergency Conservation of Water Sources. The City shall coordinate with the SJRWMD in implementing emergency water conservation measures based on the SJRWMD plans for management of the region's water resources.

Policy 5-1.4.9: Managing Land Use Surrounding Water Well Cones of Influence. The City's LDC shall contain performance criteria designed to protect potable water supply and quality by restricting land development within public water well cones of influence in order to avoid potential adverse impacts on potable water resources.

Policy 5-1.4.10: Resiliency. The City is susceptible to impacts of future sea level rise and combined rain events that would cause flooding based on data outlined in the City's Coastal Resiliency Plan. Best management practices to address flooding level of service violations and water quality shall be devised and, given the hydrology of the area, it is encouraged that there be the development of a





pollutant load model. It is also encouraged that there be the hardening of pump-stations in order to increase resiliency against flooding events.

Policy 5-1.4.11: Stormwater Management. Consistent with **Policy 4-1.4.2** of the **Infrastructure Element**, the City shall pursue the development of an update to the 2013 Stormwater Management Master Plan. The plan shall provide a basis for adopting regulatory measures for enhancing water quality and shall identify capital improvements needed to improve the storm water management system.

Policy 5-1.4.12: Illicit Discharge. Consistent with the Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES) generic permit requirements for regulated municipal separate stormwater systems (MS4), the City shall implement a stormwater management program to reduce the contamination of stormwater runoff and prohibit and eliminate illicit discharges to the MS4. The City's regulations related to illicit discharge detection and elimination will be informed by the Best Management Practices as established by FDEP. The City shall also continue to follow the regulatory requirements for the NPDES MS4 permit, as set forth in Chapter 62-624, F.A.C.

Policy 5-1.4.13: Septic to Sewer Conversion. Consistent with **Policy 4-1.2.3** of the **Infrastructure Element**, the conversion of septic tanks to centralized sewer services is critical, considering the location of existing septic tanks within environmentally sensitive areas and areas vulnerable to the impacts of flooding and sea level rise. The City shall continue to support the implementation of the Sebastian CRA Septic to Sewer Conversion Program and Indian River County initiatives to expand sanitary sewer service within the City such as the North Sebastian Septic to Sewer Phase I Conversion Project.

Policy 5-1.4.14: Total Maximum Daily Loads (TMDLs). The City shall continue to support the Basin Management Action Plan (BMAP) for the Central Indian River Lagoon in meeting the Florida Department of Environmental Protection (FDEP) adopted nutrient total maximum daily loads (TMDLs) for the main stem of the Indian River Lagoon Basin.

Objective 5-1.5: Protect Air Quality. Protect and improve air quality by ensuring development meets or exceeds state and federal air quality standards and establishing regulatory programs to prevent and/or minimize non-point and ambient sources of air pollution.

Policy 5-1.5.1: Combat Erosion and Generation of Dust Particles. The City's LDC shall incorporate performance standards which combat erosion and generation of fugitive dust particles. The regulations shall require that measures be taken on building sites or cleared areas which assure that exposed, destabilized, or other altered soil is expeditiously covered with an acceptable erosion control material.

Policy 5-1.5.2: Air Pollution and Land Use Regulations. The City's LDC, including adopted soil erosion and sedimentation controls as well as nuisance abatement standards, shall continue to protect against loss of air quality by maintaining land use controls which promote only activities compatible with existing land uses and natural systems and prohibit activities which generate air pollutants and other adverse impacts on the environmentally fragile coastal ecosystem. The City shall also promote the function of trees in improving air quality through the Tree Protection and Landscaping Ordinance, consistent with **Objective 5-1.9**.

Policy 5-1.5.3: Land Use and Transportation. Consistent with the **Land Use Element** and **Transportation & Mobility Element**, the City shall promote the reduction of vehicle emission by



supporting land uses that promote walking, biking, transit, and alternative modes of transportation, and encourage urban infill development that limits the need for automobile use, increases trip capture, and reduces traffic congestion in a cost-effective manner.

Objective 5-1.6: Protection of Shoreline and Public Access to Shoreline. Protect and preserve the City's shorelines and public access to water based facilities and natural resources. Promote post-development shoreline stabilization methods that mimic a natural shoreline and support native habitat.

Policy 5-1.6.1: Public Access to Waterfront Areas. The City shall encourage developers to provide public waterfront access adjacent to the waterfront. Such access may include walkways, bikeways, water taxis, canoeing/kayaking, public spaces, dining areas, and the like.

Policy 5-1.6.2: Florida Native Vegetation and Features. The City shall require the use of native Florida vegetation and protection of natural features in coastal and waterfront development.

Policy 5-1.6.3: Public Access to Indian River Lagoon. The City's LDC shall require shoreline access to the Indian River Lagoon to be promoted in order to maintain accessways along the shoreline. State assistance shall be enlisted to achieve land required to appropriately store vehicles, provide rest room facilities, and accessways designed in a manner compatible with the shoreline ecosystem.

Policy 5-1.6.4: Waterfront Planning. The City's LDC shall include criteria for regulating water-dependent and water-related shoreline land uses. No structures which constrict water circulation in all flowing surface waters shall be permitted.

Policy 5-1.6.5: Shorelines and Submerged Lands Planning. The City's LDC shall require all applicants proposing development activities along the City's shorelines or within submerged areas to submit a site plan which demonstrate how the development shall incorporate features designed to protect against potential adverse impacts to shoreline vegetation and stabilization, water quality, native habitat, and shoreline access. The City shall require surveys of existing conditions, specifications of planned site improvements, and the techniques to be used in constructing, operating, and maintaining the land use. No shoreline development permit or development order shall be approved until the applicant has demonstrated that potentially adverse impacts shall be prevented or that compensatory mitigation shall occur.

Policy 5-1.6.6: Prioritizing Shoreline Uses and Public Shoreline Access. The City's LDC shall include the following criteria for prioritizing shoreline uses and public shoreline access:

- a. In reviewing applications for shoreline development First Priority shall be directed to non-structural shoreline protection uses (ex: native shoreline revegetation programs) and approved water-dependent shoreline uses (ex: pervious accessways, duly permitted dock facilities, and commercial marinas). Priority shall be directed to water dependent uses which are available for public use.
- b. In reviewing applications for shoreline development Second Priority shall be directed to water-related uses such as parking facilities for shoreline access, residential structures which comply with the building code for structures within the State coastal building zone, and recreational facilities which comply with applicable codes.

Policy 5-1.6.7: Water Dependent Shoreline Uses. The City shall require that water dependent shoreline uses obtain requisite permits from all environmental permitting agencies prior to obtaining



City approval. Docks or marina improvements shall not be approved by the City until the applicant demonstrates compliance with all applicable federal and state laws and administrative rules governing Aquatic Preserves as well as applicable policies of regional agencies. The City's LDC shall require site plans for all docks and marinas and no commercial marina facilities shall be permitted on the St. Sebastian River. Site plans must demonstrate to the City's satisfaction that the facilities shall not adversely impact natural marine resources.

Policy 5-1.6.8: Water Related Shoreline Uses. The City's LDC shall require that all water-related uses be built on uplands landward of the floodway. Within the state coastal building zone all construction activities shall be predicated on plans compliant with applicable state and local building codes. Dredging and filling of wetlands or open water in order to accommodate water-related uses shall not be permitted unless the City approves such activity pursuant to provisions of the wetland protection ordinance, the storm water management ordinance, and all other relevant site plan review criteria.

Policy 5-1.6.9: Hardening of the Shoreline. Hardening of the shoreline with rip-rap, bulkheads or other similar devices shall not be allowed unless erosion constitutes a critical peril to upland property and the use of vegetation has failed to stabilize the shoreline. The City's LDC shall include design specifications of any shoreline hardening structure. Such shoreline hardening structures shall generally not be vertical seawalls or bulkheads. The specific location and design of such structures shall be approved by the City as well as by other public entities having jurisdiction in the matter. The LDC shall require an environmental impact study and a special City Council variance for any sea wall construction. The City shall require the compliance with state and federal permitting requirements in the removal and/or modification of protected shoreline vegetation.

Policy 5-1.6.10: Protect, Stabilize, and Enhance the Shoreline. The City shall promote natural shoreline systems by utilizing the site and development process to promote the installation of native vegetation and living shorelines and the removal of existing hardening structures. The City's LDC shall stipulate that no native vegetation shall be removed from the shoreline without a duly authorized City land clearing permit. Similarly, criteria shall be included in the LDC which requires an applicant for development along the shoreline to be required to revegetate, stabilize, and enhance damaged shorelines by planting native vegetation.

Objective 5-1.7: Minimize Soil Erosion. Reduce the incidence of soil erosion caused by land clearing, breaches in stabilized shorelines, and lands having exposed soil without vegetative cover.

Policy 5-1.7.1: Implementing Erosion Control. The City's LDC shall require that appropriate measures be taken during land clearing and building operations to ensure that exposed, destabilized or otherwise altered soil is expeditiously covered with an acceptable erosion control material. The City's LDC shall require compliance with regulatory requirements and the City's NPDES MS4 permit, including consistency with **Policy 5-1.4.2**. The City's regulations related to soil erosion will be informed by the Best Management Practices as established by SJRWMD, FDEP, FDOT, Florida Cooperative Extension Service, Florida Department of Agriculture and Consumer Services, Institute of Food and Agricultural Sciences, and Natural Resources Conservation Service.

Objective 5-1.8: Mining and Mineral Excavation Activities. Prevent the adverse effects of the extraction of mineral resources within the City.

Policy 5-1.8.1: Prohibition Against Mining Activities. The LDC shall prohibit mining activities, except for existing sand mining operations, to protect the City's ecosystems.



Objective 5-1.9: Green Infrastructure and Sustainability. Consider sustainability and environmental-consciousness in the City's operations and promote the utilization of green infrastructure.

Policy 5-1.9.1: Sustainability. The City shall support the Sustainable Sebastian Initiative and Resolution in order to promote sustainability principles and encourage adaptation strategies.

Policy 5-1.9.2: Sustainability Action Plan. The City shall consider the development of a Sustainability Action Plan to include long-term objectives and short-term actions to guide the City in areas including, but not limited to, improving quality of life and community/individual health; energy conservation/independence; air quality, water quality, and natural systems; and economic sustainability.

Policy 5-1.9.3: Green Jobs. Consistent with the **Economic Development Element**, the City shall explore strategies to leverage the City's natural and economic assets to attract 'green jobs' and related nature based industries.

Policy 5-1.9.4: Integrated Pest Management Plan. The City shall implement its 2020 Integrated Pest Management Plan in order to promote the most sustainable pest management methods which aim to minimize risks to human and environmental health through the limited use of chemicals, while also remaining economically feasible.

Policy 5-1.9.5: Green Building Design. Consistent with **Policy 1-2.3.4** of the **Land Use Element** the City shall encourage energy conservation in building and construction. The City shall encourage green building design (i.e. LEED) which promotes energy and resource efficiency, waste reduction, pollution prevention, respects natural topography, and improves occupant health and productivity.

Policy 5-1.9.6: Green Infrastructure. Green infrastructure provides for wildlife habitat, stormwater management, and recreational opportunities. The City shall plan for and manage its green infrastructure including its parks, greenways, and protected conservation lands. The City shall also coordinate local open space plans with regional green infrastructure plans in order to promote connectivity, investment, and maximize the ecological and public benefits of green infrastructure.

Goal 5-2: Coastal Management and Resiliency. The coastal community of Sebastian shall limit public expenditures in areas subject to destruction by flood risk and natural disasters.

Objective 5-2.1: Coastal High-Hazard Area. The Coastal High Hazard Area (CHHA) is an area particularly vulnerable to the effects of coastal flooding from tropical storm events and is defined by section 163.3178(2)(h)9, Florida Statutes, as the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model (See **Map 5-7**). The City shall enforce development restrictions within the CHHA and any area found to have historically experienced destruction or severe damage from storm driven, wind, water, or erosion. The City has identified the high velocity storm surge area as indicated on the Federal flood insurance rate maps as the only such area.

5-2.1.1: Coastal High Hazard Area Application: The following shall apply for purposes of evaluating applications for development within the City, specifically comprehensive plan land use amendments, map and text, and rezoning:

- a. If 50 percent or more of a parcel of land is located within the Coastal High Hazard Area, then the entire parcel shall be considered within the Coastal High Hazard Area



- b. Isolated areas that are defined by the SLOSH computerized storm surge model to be at higher elevations, and are surrounded by the CHHA or by the CHHA and a body of water, shall be considered within the CHHA
- c. For purposes of evaluating development proposals or site plans, if any portion of the proposed building footprint is in the CHHA, then the entire parcel shall be considered within the CHHA

Policy 5-2.1.2: Limiting Public Subsidy of Development in the Coastal High-Hazard Area. The City shall limit public expenditures that subsidize development permitted in the CHHA to restoration or enhancement of natural resources and public services for water dependent uses. The only exception to this regulation shall be that existing mobile homes within the CHHA shall be grandfathered in, thereby may be repaired and/or replaced as long as the density does not increase. The City shall aim to minimize the impact of natural hazards such as flooding and sea level rise to the community by directing development away from the CHHA as defined by State Statute §163.3178(2)(f), F.S. This policy shall not be interpreted as prohibiting the extension of sewer lines to replace failed septic tank systems identified in **Policy 5-2.1.2** and **Policy 5-2.1.3** below.

Policy 5-2.1.3: CHHA Infrastructure. Consistent with **Policy 4-1.2.3** of the **Infrastructure Element**, the City shall support septic to sewer efforts in order to preserve environmental integrity and protect the health of residents. Enhanced septic systems which include additional treatments may be allowed in the CHHA for areas not serviced by wastewater facilities.

Policy 5-2.1.4 Infrastructure Extensions: The City shall encourage the extension of wastewater facilities to replace failing septic tank systems in areas subject to flooding as a means to protect ground water quality.

Policy 5-2.1.5: Existing Infrastructure in the CHHA. The City shall establish a priority list of infrastructure facilities located in the CHHA which could be relocated, mitigated or replaced should state funding become available for such activities. Additional infrastructure and assets are inventoried in the City's Coastal Resiliency Plan.

Policy 5-2.1.6: Public Investments in CHHA. Except as provided in Policies above, publicly funded facilities shall not be built in the CHHA, unless the facility is for public access, resource restoration, adequate evacuation, or service to water dependent activities. These facilities may face inundation and be impacted if they are outdoor facilities according to the City's Coastal Resiliency Plan. **The City is encouraged to consider a funding source for purchasing CHHA properties and creating low impact/ low risk re-use of the property.**

Policy 5-2.1.7: Hazard Mitigation and CHHA. The City shall maintain LDC's which contain performance standards regulating development activities in a manner which minimizes the danger to life and property occasioned by natural hazard events including:

- a. Non-residential construction within the CHHA shall meet storm and floodproofing standards exceeding those required for a one hundred (100) year storm; and
- b. If a structure located within the CHHA receive storm damage in excess of fifty (50) percent of its physical size, all such damaged structures shall be required to meet all current laws and ordinances, including those enacted since construction of the subject structure.

Policy 5-2.1.8: Avoid Population Concentrations in CHHA. The City shall restrict development and not increase or support densities or intensities beyond those depicted on the Future Land Use Map in



the CHHA in order to minimize danger to life and property caused by hurricane events, flooding, or sea level rise. The City shall direct population concentrations away from CHHA.

Policy 5-2.1.9: Restrict Development in CHHA. The City shall incorporate policies in the LDC in order to direct population concentrations away from known or predicted areas in the CHHA. Also, the City shall direct population concentrations away from known areas that are vulnerable to flooding inundation and sea level rise as established in the City’s Coastal Resiliency Plan. Development principles and strategies that eliminate unsafe development in the CHHA must be used as defined by §163.3178(2)(f), F.S. The following provisions shall restrict development within the CHHA:

- a. Water and sewer treatment plants, industrial holding ponds and other potential point pollution sources within the coastal high-hazard area are prohibited;
- b. Require construction within the hurricane flood zone to meet storm and flood proofing standards exceeding those required for a 100-year storm; and
- c. Residential development and/or redevelopment in the CHHA shall not exceed existing residential densities for that property.

Objective 5-2.2: Maintenance of Floodplain. Protect the natural functions, including flood- carrying and flood storage capacity, of the 100-year floodplain.

Policy 5-2.2.1: Enforce Policies to Maintain Floodplain. The City shall continue to enforce its surface water management and flood damage prevention regulations including the following:

- a. New development encroaching into the floodplain shall incorporate flood protection measures sufficient to protect against the 100-year flood. New development encroaching into areas subject to sea level rise, storm surge, and flood inundation shall incorporate flood protection measures as defined in the City’s Coastal Resiliency Plan.
- b. The City’s Storm Water Management and Flood Protection Ordinance shall maintain consistency with program policies of the Federal Insurance Administration including the National Flood Insurance Program (NFIP) Community Rating System (CRS). The City shall monitor new cost-effective programs for minimizing flood damage. Such programs may include compensatory storage for loss of floodplain or modification to construction setback requirements, or other site design techniques, as well as upgraded building and construction techniques.
- c. The City shall encourage the use of best management practices for development strategies that result in reducing flood risk and the removal of coastal real property from flood zone designations established by the Federal Emergency Agency as required by §163.3178(2)(f), F.S.

Policy 5-2.2.2: Purchase of Floodplain. The City shall identify and recommend to the State and FDEP purchase of floodplains that would comply with program guidelines established under the Florida Forever Program.

Objective 5-2.3. Emergency Management. Ensure City preparedness in the case of a natural disaster or emergency.

Policy 5-2.3.1 Emergency Preparedness: Consistent with **Objective 1-2.5** of the **Land Use Element** and **Policies 4-1.1.10 and 4-1.1.11** of the **Infrastructure Element**, the City shall include emergency management criteria into the LDC to mitigate the impacts of natural disasters or emergency





events, including fires, pandemics/epidemics, terrorism and other disasters in order to protect public health and safety.

Policy 5-2.3.2: Hurricane Evacuation. The City shall coordinate with Indian River County in attaining a hurricane evacuation time of less than twelve (12) hours. There is the potential to put into place early warning notifications for elderly residents who are potentially more vulnerable as recommended in the City's Coastal Resiliency Plan. According to the Coastal Resiliency Plan, inundation caused by flooding and sea level rise is predicted to impact evacuation routes on Sebastian Boulevard and this vulnerability should be addressed to increase resilience.

Policy 5-2.3.3: Removal of Trees Causing Safety Hazard. The City's LDC shall require that trees, such as Australian Pines, that are prone to wind damage and blockage of evacuation routes be removed from areas deemed by the City to be critical corridors for evacuation purposes. In addition, the City shall consider the feasibility of imitating a similar program to remove any trees on public property which impose a critical threat to evacuation routes.

Policy 5-2.3.4: Hurricane Evacuation Logistical Support. In order to prevent unnecessary evacuees crowding roads and shelters, the City shall coordinate with Indian River County in disseminating information concerning the need of residents to evacuate at various hurricane threat levels, flood events, and sea level rise events. The City shall coordinate with the County and the Indian River County Emergency Management Director in assisting the implementation of the County's campaign to educate the general citizenry regarding emergency preparedness plans, including specific citizen directives.

Policy 5-2.3.5: Future Coordination with the County in Emergency Preparedness. In order to provide for safe and efficient evacuation of the residents of the City of Sebastian and other communities in the event of a hurricane or other disaster,

- a. The City shall enforce its Emergency Management Plan and continue to coordinate with Indian River County in annual updates of the County's Comprehensive Emergency Management Plan addressing future populations and responses (response times, evacuation times, shelter capacity, etc).
- b. The City's LDC shall mandate that new development maintain a density threshold which is consistent with the County's Comprehensive Emergency Management Plan. This stipulation will assure that future density thresholds may be accommodated without adversely impacting hurricane evacuation time. The City shall also coordinate with the County in updating hurricane evacuation shelter assignments as well as other policy formulation surrounding land use and emergency preparedness.

Policy 5-2.3.6: Coordinate Update of the Hazard Mitigation Plan. The City shall coordinate with the County in updating the hazard mitigation component of the County's Comprehensive Emergency Management Plan pursuant to the five (5) year interval schedule adopted by the County. Updates of the Plan shall identify specific actions that may be implemented to reduce exposure to natural hazards, include strategies for post-disaster recovery operations, and incorporate interagency hazard mitigation reports as such reports are generated in the future. The City shall also maintain, update, and enforce the City of Sebastian's Emergency Management Plan to ensure preparedness in the case of a natural disaster.



Objective 5-2.4: Post-disaster Redevelopment. Coordinate with Indian River County in providing immediate response to post-disaster situations.

Policy 5-2.4.1: Post-Hurricane Assessments. The City Council shall appoint a Recovery Task Force (RTF) comprised of the City Manager, the Building Official, and others as determined by the City Council. The RTF shall be responsible for assessing the conditions following a hurricane or other similar disasters such as flooding events and shall propose strategic actions necessary to establish order and re-establish communication and basic service delivery systems necessary for health, safety, and welfare. Within ninety (90) days after appointment of the Recovery Task Force, the Task Force shall meet to determine a management framework for resolving issues confronted in times of a natural disaster. The management framework shall be reviewed with the County Civil Defense Officer for compliance with the County's Comprehensive Emergency Management Plan and shall be presented to the City Council for review and approval. The management plan should provide a basis for executing the following activities during times of natural disaster:

- a. Establishing a temporary moratorium on building activity;
- b. Reviewing and deciding upon emergency building permits;
- c. Coordinating with State and Federal officials to prepare disaster assistance applications;
- d. Analyzing and recommending to the City Council hazard mitigation options, including reconstruction or relocation of damaged public facilities;
- e. Developing a redevelopment plan including limitations on redevelopment in areas of repeated damage; and
- f. Recommending amendments to the Local Peacetime Emergency Plan and other appropriate policies and procedures.

Policy 5-2.4.2: Repair and Clean-up. In planning post-disaster redevelopment activities, factors to be considered in order to protect the public health and safety shall include:

- a. Repairs to potable water, wastewater and power facilities;
- b. Removal of debris;
- c. Stabilization or removal of structures in a perilous condition; and
- d. Minimal repairs to make structures habitable.

These considerations shall receive first priority in determining the appropriateness of emergency building permits. Long term redevelopment activities shall be postponed until the Recovery Task Force has coordinated immediate repair and clean-up operations.

Policy 5-2.4.3: Redevelopment Activities. The LDC shall require the redevelopment of any structure within the City that received storm-damage in excess of fifty (50%) percent of its appraised value to meet all current laws and ordinances, including those enacted since construction of the subject structure. The city shall require that new development and redevelopment in areas that are at high risk of flooding to use best practices, strategies, and engineering solutions that may reduce risk and losses due to storms, flooding and sea level rise as defined by §163.3178(2)(f), F.S.

Policy 5-2.4.4: Establish Public Facilities Review Committee. The City Council shall designate the Recovery Taskforce as the City's designated Public Facilities Review Committee charged with the responsibility for reviewing available alternatives for managing damaged public facilities following a hurricane event. The Committee shall evaluate future options for such facilities, including, but not limited to, abandonment repair in place, relocation, and reconstruction, with



structural modifications. The Committee shall consider these options based on the following considerations:

- a. Cost to construct;
- b. Impacts on the environment;
- c. Cost to maintain;
- d. Public sector;
- e. Recurring damages;
- f. Impacts on land use; and
- g. Other relevant factors.

Objective 5-2.5: Establish an Adaptation Action Area Overlay District.

To minimize future risk, establish an Adaptation Action Area (AAA) Overlay District for areas that are vulnerable to coastal flooding and the impacts of sea level rise, based on the data and modeling outlined within the City's Coastal Resiliency Plan and compliant with §163. 3178, F.S.

Policy 5-2.5.1: Adaptation Action Area (AAA). Within the LDC, the City of Sebastian shall establish criteria for Low Impact Design and Flood Resistant Design for new development and redevelopment within the AAA. Development within this overlay district must comply with coastal development best practices including but not limited to construction engineering solutions and low impact development techniques that utilize vegetation and natural features to minimize surface runoff and reduce flood risk.

Policy 5-2.5.2: Transfer of Development Rights Program. The City shall utilize the Transfer of Development Rights (TDR) program identified in **Land Use Policy 1-1.5.1** to incentivize the preservation of natural resources and habitats including those within vulnerable areas and also those identified within but not limited to the City's Coastal Resiliency Plan. The City shall designate parcels within the established CHHA or proposed AAA Overlay District as sending zones for development rights, and less vulnerable parcels outside of the established CHHA or proposed AAA as receiving sites for density and intensity transferred through the TDR program. This allows development at higher densities in low risk areas and encourages less intense development in the City's floodplains and natural areas.

Objective 5-2.6: Continuing Evaluation of the Conservation & Coastal Management Element Effectiveness. Evaluate the effectiveness of the **Conservation & Coastal Management Element**.

Policy 5-2.6.1: Review the Impact of Changing Conditions on Coastal Management and Conservation Policy. The City shall monitor and evaluate significant changes in the characteristics of natural coastal resources and natural resources within the City. Policy implications of such changes shall be examined, and corrective measures shall be pursued. Coastal management and conservation policies shall be refined as needed in order to remain responsive to evolving problems and issues.

Policy 5-2.6.2: Schedule, Budget and Implement Programmed Activities. The timely scheduling, programming, budgeting and implementation of programmed coastal management activities and conservation activities identified in this Element shall be evidence of the City's effectiveness in carrying out a systematic program for implementing coastal management and conservation goals, objectives, and policies.

Policy 5-2.6.3: Coordinate with Public and Private Sectors. While continually implementing and evaluating the **Conservation & Coastal Management Element**, the City shall maintain a process of



intergovernmental coordination as well as coordination, with private sector groups interested in coastal management and conservation policy and programs. The effectiveness of this approach shall be evaluated by the success of coordination mechanisms in resolving coastal management and conservation problems and issues.

Policy 5-2.6.4: Achieve Effective Resolution of Coastal Management and Conservation Goals, Objectives and Policies. The effectiveness of the **Conservation & Coastal Management Element** shall be measured by the City's success in achieving coastal management and conservation goals, objectives and policies. The **Conservation & Coastal Management Element** incorporates a systematic planning process for identifying coastal management and conservation problems and issues and implementing corrective actions.

Policy 5-2.6.5: Intergovernmental Coordination. Specific Objectives and Policies regarding intergovernmental coordination and this Element are provided and identified in the **Governance & Implementation Element**.

DATA INVENTORY AND ANALYSIS

Introduction

Pursuant to the requirements of Chapter 163 of the 2019 Florida Statutes, the **Conservation & Coastal Management Element** consists of a data inventory and analysis that influences the overarching goals, objectives, and policies. This Element sets the foundation for the City to protect its natural environment and protect life and property from natural disasters.

Waterbodies

Utilizing data retrieved from the U.S. Fish and Wildlife Service, **Map 5-1** illustrates the waterbodies located within and surrounding the City of Sebastian. The inland areas of Sebastian which are submerged during all of the year, with the exception of extreme dry periods, include streams, wetlands, lakes, ponds, canals, and waterways. Those areas of Sebastian classified as inland open waterways include Collier Creek, Schumann Lake, three unnamed lakes/ponds, Collier Waterway, and Elkcam Waterway. Wetlands are scattered throughout Sebastian, with concentrations in the northeast and southeast portions of the City. The St. Sebastian River runs along the west side of the City limits and has historically been preserved through setback restrictions.



The Indian River Lagoon rests along the eastern border of Sebastian and is one of the most biologically diverse estuaries in North America. It has been designated as an Outstanding Florida Water and an Estuary of National Significance. The estuary's mangrove wetlands and salt marshes provide a plethora of benefits for the community such as filtering runoff, stabilizing sediments, maintaining water quality, and protecting shorelines from erosion. The Indian River Lagoon is protected by State regulations from impacts of development on its shores, as well as from fill and dredge activities within its waters.

Waterways within the City are protected and will receive only minimal effects from future development. Although development will not encroach into the waterways, urban runoff from adjacent residential neighborhoods could possibly degrade their water quality. However, increases in pollution levels associated with runoff should be minimal, allowing the vegetation and wildlife now present therein to proliferate for years to come.

Wildlife and Habitats

The City of Sebastian's native vegetation and forests as well as wetlands, streams, lakes, ponds, canals, and freshwater waterways including the St. Sebastian River provide vital habitat for wildlife within the City. The Pelican Island National Wildlife Refuge is found along the eastern border of Sebastian. The Pelican Island Wildlife Refuge was the nation's first national wildlife refuge and is designated as a National Historic Landmark and a Wetland of International Importance. The Refuge provides a habitat for endangered species and migratory birds. The Indian River Lagoon estuary also acts as a home for a large variety of plants and animals with concentrations of rare and endangered organisms including mammals, birds, reptiles, fishes, and invertebrates. These species exist in several communities, such as sea grass beds, deep water areas, tidal flats, saltmarsh grass, and oyster bars. Throughout the Indian River Lagoon there are a number of commercially and recreationally valuable species of fin and shellfish. Clams, oysters, crabs and shrimp are the major invertebrates that are commercially valuable in the area. Sea trout, snook, pompano, mullet, and redfish are among the finfish that are harvested both commercially and recreationally from the waters bordering the City of Sebastian.

Marine grasses are generally found in shallow water areas of estuaries. The Indian River Lagoon has a significant amount of grass beds in the vicinity of Sebastian. These species tend to form in distinct zones, with their location depending on water depth. These areas stabilize sediments, entrap silt, recycle nutrients, provide habitat, and are an important direct food source for a number of animals, including the endangered West Indian Manatee. Increased freshwater and storm water run-off as well as dredge and fill activities can cause increased turbidity, siltation, and subsequent degradation of these beds.

Due to shallow waters within the Sebastian area, the top of seagrass beds lie near the surface, making this habitat susceptible to damage from motor boats, both pleasure and commercial craft. Any wildlife thriving in these shallow waters also are susceptible to harm from motor boats. Manatees are susceptible to detrimental impacts from both loss of seagrass beds as well as water crafts. Threats to manatees from water craft may be reduced in areas along the Indian River where reduced speed limits are posted or where manatee habitats are identified and posted as such.

The City of Sebastian should continue to maintain and support Resolution No. R-08-14 which adopts guidelines for the protection of scrub habitat in accordance with land clearing activities. The related goals, objectives, and policies that ensure the protection of wildlife and habitats within this Element are important for the protection of the Gopher Tortoise and Scrub Jay habitats within the City. The Scrub Jay is a bird presently listed as a threatened species by both the United States Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission. General locations of their habitat and nesting areas within Sebastian include the area just south of the airport and the Sebastian Highlands area. **Map 5-3** identifies Scrub Jay



locations within the City. Identification of their nesting areas has enabled the City, County, and State to preserve some areas from future detrimental impacts of development. The City’s 2019 report, *Conservation of the Florida Scrub-Jay within the City’s Municipal Airport*, includes a summary of more than 30 years of scrub-jay conservation efforts and regulatory requirements from the Habitat Conservation Plan (1999), the Incidental Take Permit (2000), and other City documentation.

Conservation of Resources

Lands that are conserved within and adjacent to the City are identified in **Map 5-2**. Approximately 901 acres within the City of Sebastian are conservation lands. These areas include:

- Ansin Tract
- Archie Smith Fish House
- Fischer Tract
- North Sebastian CA
- NSCA addition
- Sebastian Harbor Preserve
- Sebastian Scrub CA
- St Sebastian River Greenway
- Jane Schnee Scrub Preserve
- Pelican Island Elementary Scrub Preserve
- Rotary Park

These conservation lands help protect natural resources, enhance environmental quality, conserve vital habitats, and reduce fragmentation within the City.

Threatened and Endangered Species

Wildlife species which have been listed by the United States Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission as being endangered or threatened in the City of Sebastian are documented in **Table 5-1**. This list is not all inclusive. Some of the species which are included in the list are found infrequently within the City but have ranges that do include Sebastian.

Table 5-1: Threatened and Endangered Wildlife Species

Common Name	Scientific Name	Protection Status
Birds		
Everglade snail kite	<i>Rostrhamus sociabilis plumbeus</i>	Federally Endangered
Red-cockaded woodpecker	<i>Picoides borealis</i>	Federally Endangered
Wood stork	<i>Mycteria americana</i>	Federally Threatened
Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	Federally Threatened
Piping Plover	<i>Charadrius melodus</i>	Federally Threatened
Florida scrub-jay	<i>Aphelocoma coerulescens</i>	Federally Threatened
Rufa ed knot	<i>Calidris canutus rufa</i>	Federally Threatened
Bald eagle	<i>Haliaeetus leucocephalus</i>	Bald and Golden Eagle Protection Act



Common Name	Scientific Name	Protection Status
Least tern	<i>Sternula antillarum</i>	State Threatened
Black skimmer	<i>Rynchops niger</i>	State Threatened
Tricolored heron	<i>Egretta tricolor</i>	State Threatened
Little blue heron	<i>Egretta caerulea</i>	State Threatened
Reddish egret	<i>Egretta rufescens</i>	State Threatened
American oyster catcher	<i>Haemotopus palliates</i>	State Threatened
Florida sandhill crane	<i>Antigone canadensis pratensis</i>	State Threatened
Mammals		
West Indian manatee (Florida manatee)	<i>Trichechus manatus (Trichechus manatus latirostris)</i>	Federally Threatened
Florida panther	<i>Puma concolor coryi</i>	Federally Endangered
Southeastern beach mouse	<i>Peromyscus polionotus niveiventris</i>	Federally Threatened
Florida bonneted bat	<i>Eumops floridanus</i>	Federally Endangered
Bottlenose dolphin	<i>Tursiops truncatus</i>	Marine Mammal Protection Act
Reptiles		
American alligator	<i>Alligator mississippiensis</i>	Federally Threatened (Due to Similarity of Appearance)
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Federally Endangered
Leatherback sea turtle	<i>Dermochelys coriacea</i>	Federally Endangered
Loggerhead sea turtle	<i>Caretta caretta</i>	Federally Threatened
Kemp's Ridley Sea Turtle	<i>Lepidochelys kempii</i>	Federally Endangered
Gopher Tortoise	<i>Gopherus polyphemus</i>	State Threatened

Source: United States Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission

Land Use Cover

According to the St. Johns River Water Management District (SJRWMD) 2013-2016 land use data set, primary land uses and their acreages within the City's boundaries are shown in **Table 5-2** below. Each of these land uses and their corresponding detailed land use covers within Sebastian are broken out in this section. **Map 5-4** delineates the generalized locations of these SJRWMD land uses within the City. Vegetative communities included within these land uses shall be protected to the maximum extent practicable to reduce fragmentation of wildlife corridors. Changes to the character of the community's vegetation and related-densities will likely induce species sensitive to environmental changes to seek more attractive, undisturbed habitats in areas outside Sebastian's corporate limits. However, no abnormal impacts on flora or fauna are expected to occur; only those impacts normally associated with an area experiencing further urbanization are anticipated.



Table 5-2: SJRWMD Land Use Coverage

Land Use	Acreage	Percentage
Agriculture	238	2.5%
Barren Land	13	0.1%
Rangeland	898	9.5%
Transportation, Communication, and Utilities	412	4.3%
Upland Forests	467	5.0%
Urban and Built-Up	6,096	64.2%
Water	853	9.0%
Wetlands	514	5.4%
Total	9,489	100%

Source: Florida Department of Environmental Protection

Agriculture: The Agriculture land use covers within Sebastian include the following:

- Improved Pastures
- Woodland Pastures
- Tree Nurseries
- Citrus Groves
- Herbaceous (Dry Prairie)
- Mixed Upland Nonforested
- Abandoned Tree Crops

Barren Land: The Barren Land land use covers within Sebastian include the following:

- Disturbed Lands
- Spoil Areas

Rangeland: The Rangeland land use covers within Sebastian include the following:

- Herbaceous (Dry Prairie)
- Shrub and Brushland
- Mixed Upland Nonforested

Transportation, Communication, and Utilities: The Transportation, Communication, and Utilities land use covers within Sebastian include the following:

- Airports
- Roads and Highways
- Electric Power Facilities
- Auto Parking Facilities (When not directly related to other land use)
- Communications
- Electrical Power Transmission Lines
- Wet Prairies
- Water Supply Plants (Including pumping stations)
- Surface Water Collection Features



Conservation & Coastal Management

- Emergent Aquatic Vegetation
- Freshwater Marshes
- Surface Water Collection Features

Upland Forest: The Upland Forest land use covers within Sebastian include the following:

- Pine Flatwoods
- Sand Pine
- Longleaf Pine - Xeric Oak
- Upland Hardwood Forests
- Upland Mixed - Coniferous / Hardwood

Urban and Built Up: The Urban and Built Up land use covers within Sebastian include the following:

- Residential
- Commercial and Services
- Cemeteries
- Commercial and Services Under Construction
- Sand and Gravel Pits
- Holding Ponds
- Other Light Industrial
- Institutional
- Marina's and Fish Camps
- Parks and Zoos
- Golf Courses
- Community Recreational Facilities
- Herbaceous (Dry Prairie)
- Shrub and Brushland
- Mixed Upland Nonforested

Water: The Water land use covers within Sebastian include the following:

- Streams and Waterways
- Lakes
- Reservoirs
- Bays and Estuaries

Wetlands: The Wetlands land use covers within Sebastian include the following:

- Bay Swamps
- Mangrove Swamps
- Mixed Wetland Hardwoods
- Cabbage Palm Hammock
- Wetland Forested Mixed
- Freshwater Marshes
- Wet Prairies
- Mixed Scrub-shrub Wetland
- Emergent Aquatic Vegetation



Primary vegetative communities within the City that are listed above include, but are not limited to, wet prairies, mixed scrub-shrub wetland, freshwater marshes, mixed wetland hardwoods, sand pine, upland hardwood forests, pine flatwoods, mixed upland non-forested, shrub and brushland, and herbaceous upland non-forested. These primary vegetative communities indigenous to Sebastian are described below based upon data and information from the Florida Fish and Wildlife Conservation Commission.

Wet prairies: Wet prairies are flatland or slope with sand or clayey sand substrate. They are usually saturated but only occasionally inundated. They are statewide excluding the extreme southern peninsula. Wet prairies experience frequent fire (2-3 years). They are a treeless, dense herbaceous community with few shrubs. Included is wiregrass, blue maidencane, cutthroat grass, wiry beaksedges, flattened pipewort, toothache grass, pitcher plants, and coastal plain yellow-eyed grass.

Mixed scrub-shrub wetland: Mixed scrub-shrub wetlands are wetland areas that are dominated by woody vegetation less than 20 feet in height. This can occur in many situations, but in most cases involves transitional or disturbed communities on drier sites. Persistent examples of shrub wetlands include shrub bogs and willow swamps.

Mixed wetland hardwoods: Mixed wetland hardwoods are wetland hardwood communities which are composed of a large variety of hardwood species tolerant of hydric conditions yet exhibit an ill-defined mixture of species.

Freshwater marshes: Freshwater marshes are long hydroperiods that are dominated by grasses, sedges, broadleaf emergents, floating aquatics, or shrubs.

Sand pine: Sand pine is found on ridges throughout the state. It experiences rare fire (20-80 years). It includes a canopy of sand pine and an understory of the three shrubby oaks, or less commonly, and Florida rosemary.

Upland hardwood forests: Upland hardwood forests are located upland with sand/clay and/or calcareous substrate. Located from the Panhandle to the central peninsula. It experiences rare or no fire. Includes a closed deciduous or mixed deciduous/evergreen canopy. Also includes American beech, southern magnolia, hackberry, swamp chestnut oak, white oak, horse sugar, flowering dogwood, and mixed hardwoods.

Pine flatwoods: Pine flatwoods include mesic pine woodland or mesic shrubland on flat sandy or limestone substrates, often with a hard pan that impedes drainage.

Mixed upland non-forested: Mixed upland non-forested areas include upland non-forested landscape in which neither herbaceous nor shrubs cover over 2/3 of the area. It may include areas where tree species are regenerating naturally after clear cutting or fire but are less than 20 feet tall. These include native hardwood and coniferous species, but does not apply to plantations.

Shrub and brushland: Shrub and brushland includes saw palmettos, gallberry, wax myrtle, coastal scrub and other shrubs and brush. Generally, saw palmetto is the most prevalent plant cover intermixed with a wide variety of other woody scrub plant species as well as various types of short herbs and grasses. Coastal scrub vegetation would include pioneer herbs and shrubs composed of such typical plants as sea purslane, sea grapes and sea oats without any one of these types being dominant.

Herbaceous upland non-forested: Herbaceous upland non-forested areas include upland nonagricultural, non-forested lands which contain no evidence of cattle grazing. It includes areas that have over 67% herbaceous cover, not counting any forested inclusions, which may be up to 25% of the area. It also includes prairie grasses which occur on the upland margins of the wetland zone and may be periodically inundated by water. Generally, it is the marginal area between marsh and upland forested areas. These grasslands are



generally treeless but in wet areas would have many types of soils resulting in a variety of vegetation types dominated by grasses, sedges, rushes and other herbs while dryer grass areas would be dominated by wire grasses with some saw palmetto present.

Air Quality

The Florida Department of Environmental Protection rates the quality of air in the City of Sebastian as good. The absence of major industries in the area helps to support the air quality in the City. Pollution generated from commercial and industrial developments within and adjacent to the City is not anticipated to adversely affect the air quality of Sebastian. Fugitive dust particles from land cleared for development may be experienced by the community, and developers should be requested to quickly replant development areas following clearing. The majority of air pollution in the City of Sebastian continues to emanate from automobile emissions. As the population in the area continues to increase so will traffic and emissions.

Water Quantity and Quality

This section analyzes the current and projected water needs and sources based on the demands for industrial, agricultural, and potable water use and the quality and quantity of water available to meet these demands.

Water Demands

The City of Sebastian’s potable water is provided by a system operated by the Indian River County Utilities Department. The City is located within the North County Service Area and serviced by the North County Water Treatment Plant. Potable water in the City of Sebastian is received from either private on-site wells or from the County’s water treatment plant. Currently, the plants operated by the Indian River County Utilities Department use the Upper Floridan aquifer as their primary water source. The County uses reverse osmosis to treat water drawn from the Floridian Aquifer. Located on the north side of 77th Street, west of 58th Avenue, the North County Water Treatment Plant began operating in 1997. According to Indian River County , the current permitted design capacity of the plant is 11.44 MGD. Currently, there is adequate treatment capacity for the planning period. Additionally, the County is currently upgrading the Roseland Tank to a storage and repump station that will improve pressure in the North Sebastian area.

According to the **Land Use Element**, zero percent of the City’s acreage is designated for Agriculture. No change in agricultural land uses is anticipated in the foreseeable future. According to the Indian River County Comprehensive Plan Potable Water Sub-Element, the existing and projected industrial demand for the North County area is and will continue to be 2,500 gallons per day (GPD) per gross acre. The City’s adopted Level of Service Standard for potable water is 250 gallons per day per equivalent residential unit. **Table 5-3** provides a listing of the projected potable water demand based upon the population projections and the entire City being connected to the County potable water system. In order to meet projected demand in 2040, the City will require an estimated 3,978,000 gallons per day. To ensure the efficient and acceptable delivery of potable water services to the City of Sebastian continued coordination with Indian River County Utilities is recommended.

Table 5-3: Projected Potable Water Demand

Year	Population	Residential Units	Gallons/Unit/Day	Estimated Average Demand (gallons/day)
2020	25,957	11,616	250	2,904,000
2025	28,562	12,933	250	3,233,250



2030	30,806	14,100	250	3,525,000
2035	32,757	15,029	250	3,757,250
2040	34,567	15,912	250	3,978,000

Source: Population projections and household estimates from Florida Housing Data Clearinghouse

Water Conservation

The City of Sebastian participates in water conservation, use, and protection through programs and policies supported by SJRWMD. Per Section 373.016, F.S., the SJRWMD, and all other water management districts are required to "promote the conservation, replenishment, recapture, enhancement, development, and proper utilization of surface and groundwater." To accomplish this directive, the SJRWMD considers conservation in the development of policy and rules, public information programs, planning, and resource management and evaluation.

Conservation measures are also witnessed through the use of a consumptive use permitting process, which enables the SJRWMD to review certain proposed and existing developments for reasonable and beneficial use of water.

The SJRWMD encourages the reuse of wastewater for irrigation purposes as a measure to conserve water. Incentives to install and utilize wastewater reuse facilities are provided in the Water Management District's permitting process for wastewater treatment facilities.

Included among the SJRWMD's conservation efforts is a program targeted at plugging unattended, free-flowing artesian wells. This program attempts to identify abandoned wells, seal them, and restore them to their natural hydrologic condition.

SJRWMD also promulgates information to the public concerning water conservation. Pamphlets, slide shows, speeches, and addresses made through media sources are a variety of ways in which the District educates and informs the public about water conservation.

Aquifer Recharge

There are no areas within the City that have been adopted by the St. John's River Water Management District as prime groundwater recharge areas for the Floridan aquifer. The coastal ridge area has the best recharge potential. However, most of this area has been developed as part of the "Old Town." Other portions have been mined for sand. The Floridan aquifer is recharged in eastern Osceola County and very little down migration of water is possible due to two factors:

- A confining layer of silt and clay and various other materials separates the surficial and deep (Floridan) aquifer; and
- The potentiometric surface of the aquifer is approximately +30 feet NGVD (National Geodetic Vertical Datum), this upward pressure will not permit recharge except under extremely high head conditions.

The top of the surficial aquifer within the City is generally located between five (5) and ten (10) feet below the ground surface but may be much closer to the ground surface depending upon the amount of rainfall which is present. The rainfall in the area recharges the surficial aquifer, and as such, the water table depth fluctuates with the amount and intensity of the rainfall.

The surficial aquifer recharge areas within the City may not supply large quantities of water to the aquifer but serve to prevent lateral saltwater intrusion into inland groundwater supplies.



The City's zoning regulations, flood damage prevention ordinance, and subdivision regulations accomplish an adequate degree of protection for natural drainage and recharge areas. Sebastian's existing land use has generally developed in a manner favorable to natural groundwater recharge and natural flood protection.

Water Quality

The degradation of water quality in Sebastian may be a concern with the potential for increased growth and urbanization. With an increase in impervious surfaces the more concern there is for pollutants and runoff into water bodies. A decrease in water quality can cause several issues for the City including harmful algal blooms. Improvement of water quality should continue to be a cooperative effort between the City, the County, St. Johns River Water Management District (SJRWMD), the National Estuary Program, Indian River County Mosquito Control District, and the Natural Resource Conservation Service. SJRWMD has also worked with Florida Department of Health, Indian River County Department of Environmental Health, the Marine Resources Council of East Central Florida, and the National Estuary Program to monitor surface water quality.

Urban run-off is a major contributor of pollutants to the surface waters of the City and Indian River County. Utilization of more advanced treatment techniques and storm water management will assist in decreasing the detrimental effects of pollution on the natural systems of the City. Impacts of sea level rise and combined rain events may affect water quality and a pollutant load model may need to be developed as recommended in the City's Coastal Resiliency Plan. The City's Stormwater Management Plan shall identify approaches to address existing and potential deficiencies in the City's existing stormwater management system to maintain water quality.

Indian River County operates all centralized potable water and sanitary sewer service in Sebastian. Therefore, any of the existing wastewater treatment plants that were discharging into the Lagoon are now deactivated and not polluting the waters. As more septic tanks are connected to central sewer, the opportunity for pollutants from septic tanks to enter the Lagoon will be eliminated.

As stated in the Basin Management Action Plan (BMAP) for the Central Indian River Lagoon (2013), the Florida Department of Environmental Protection (FDEP) has classified the estuary bordering the City of Sebastian as:

- Class II waters which have a designated use of shellfish propagation or harvesting; and
- Class III waters which means that it must be suitable for recreation and must support the propagation and maintenance of a healthy, well-balanced population of fish and wildlife.

FDEP develops and adopts total maximum daily loads (TMDLs) for the waterbody segments it identifies as impaired. A TMDL is the maximum amount of a specific pollutant that a waterbody can assimilate while maintaining its designated uses. As stated in the BMAP, FDEP adopted the nutrient TMDLs for the main stem of the IRL Basin in March 2009. The TMDLs focus on the water quality conditions necessary for seagrass regrowth at depth limits where seagrass historically grew in the basin, based on a multiyear composite of seagrass coverage. The median depth limits of seagrass coverage in the IRL Basin decreased over the years due to decreased water quality resulting from anthropogenic influences. As polluted runoff reached the lagoon, it created conditions that prevented the seagrass from growing in deeper water.

As described in the BMAP, the Central Indian River Lagoon is currently meeting the TMDL seagrass depth limit targets. The purpose of the BMAP is to document the completed projects that contributed to this success and to identify future projects to continue seagrass improvement.



Soils

Soils indigenous to Sebastian are a natural resource that has been an important factor in the development of the City. In earlier times, when agriculture was a major occupation, soil properties were a crucial determinant of the success of a farm or grove. Other development occurred, given the right location, on soils having the least limitations and requiring the least amount of corrective measures. Under the economics of land development today, the choice of land for a specified use is more often determined by factors such as location rather than the kind of soil. However, knowledge of the types of soil present in Sebastian is still important in assessing the limitations or reclamation that must be done to develop a site. The Indian River County Soil Survey prepared by the Soil Conservation Service and revised in September 2019 gives details of the 30 different soil types that exist in Sebastian. The soil classifications are made based upon the water table, slope, erosion potential, permeability, subsidence and organic (muck/peat) content. The soils are also rated as to their potential for development based upon those limiting properties. Soil types covering the City are illustrated in **Map 5-5**.

According to DEP's Division of Water Resource Management, there are no commercially valuable deposits of coquina, dolomite, phosphate, clay, or peat present within the City of Sebastian. No active or inactive mineral mining sites, other than sand mining along the coastal ridge in the southeast portion of the City, have been identified within the City. The City of Sebastian does not have any specific areas of soil erosion. Erosion potential can be mitigated by reducing the time interval between the clearing of land and actual development or construction.

Coastal Area

The coastal area in Sebastian is defined as the area between U.S. 1 and the Indian River Lagoon, except where North Central Avenue intersects with U.S. 1, then the eastern edge of North Central Avenue shall constitute the western boundary of the City's coastal area. The land uses along the Indian River Lagoon within Sebastian consist mainly of commercial land uses with several recreational and open space areas. In addition to the commercial uses, there are several scattered residential uses located within the coastal area. The coastal area is approximately 65 acres in size. The **Land Use Element** identifies historically significant buildings within the City of Sebastian. Since the vast majority of the historical sites in Sebastian are located within the coastal area, it is important for the City to preserve these sites.

Water Dependent Uses

Water dependent uses are activities that can be carried out only on, in, or adjacent to water areas because the use requires access to the water body. Within Sebastian, these activities include public and private marinas, fishing, boating, kayak launches, and active and passive recreation. The waterfront area is a vital economic activity area within the City. The ambiance of the City is perhaps rooted in this area. The City has a Riverfront Plan for the waterfront area to spur revitalization and redevelopment. The City places a high value on the few water dependent facilities and looks forward to their continued use, maintenance, and enhancement over time.

A number of water-dependent structures are located east of Indian River Drive including three marinas, two piers, and two boat ramps. There are also several small privately-owned boat docks and piers but they do not represent major water-dependent or related land uses. The marinas are located in an area that is suitable for marina activities. Along the Indian River Lagoon shoreline, the City has two major access points at the Municipal Pier and at the Yacht Club and Boat. The waterfront area spans approximately 9,000 linear feet within the City limits. The natural resources within Sebastian are used for water dependent uses and commercial fishing. The Indian River Lagoon provides the most extensive resource-based recreational area



within the City. Fishing, boating and other water-dependent recreation are available throughout the Aquatic Preserve.

Water Related Uses

Water related uses are activities which are not directly dependent upon access to a water body, but which provide goods and services that are directly associated with water-dependent or waterway uses. Water related uses include: boat storage, marine repair, retail boat and trailer sales, marine industrial (boat building, boat yards, hull work and painting, marine construction), tropical fish collection and sales, fish houses (wholesale and retail fish sales, processing, and packaging), commercial fishing support (trap storage, building and dipping), ship stores, bait and tackle stores, and dive shops. The City has no water related activities aside from the water dependent activities discussed herein.

Coastal Economy

The City of Sebastian strives to provide a highly desirable natural setting with water oriented recreational amenities for its residents. The waterfront core area is a vital economic activity area within the City. The riverfront plays an important role in Sebastian's economy. In order for the City to retain the natural beauty of the area as well as increase the economic base, a mix of residential and commercial uses is necessary within the coastal area.

As stated in the Basin Management Action Plan for the Central Indian River Lagoon (2013), the IRL is a valuable ecological and economic asset for the state of Florida and the counties that border the lagoon and its tributaries. The lagoon directly and indirectly supports a large part of the region's and the state's economy. The basin supports the multimillion-dollar Indian River citrus industry and boat and marine sales industries. Finfish and shellfish harvesting from the lagoon contribute to local economies. A 2008 economic study (Hazen and Sawyer) carried out for the IRL NEP estimated the total value of the lagoon's benefits to residents and visitors at \$3.725 billion, measured in 2007 dollars. The Impact Analysis for Planning Regional Economic Input Output Model was used to estimate the economic contribution of lagoon-related expenditures. More than \$1.3 billion of economic benefit was generated from money spent on recreational activities, both from residents and visitors, including items such as boat purchases, boat repairs, and marina slip rental and dockage fees. An additional \$762 million was estimated for recreational use value, which is the amount that people would be willing to pay for the opportunity to engage in a recreational activity on the lagoon. Therefore, the total value for 2007 for lagoon-related recreation was close to \$2.1 billion.

A significant increase in the amount and diversity of wildlife on the lagoon and improved water quality in the basin would increase the recreational use value of the entire IRL system by about \$80 million per year. Other recreational expenditures and real estate values may also increase under improved environmental conditions but were not estimated during the study. The increase in value reflects a greater willingness by residents and visitors to pay to improve the environmental quality of the lagoon (Hazen and Sawyer 2008). The economic value of the IRL Basin's seagrass beds was estimated at \$329 million per year for 72,400 acres of seagrass. Seagrass habitats are an important component of the lagoon's ecology and are the foundation of the food web for many of the animals that live in the IRL by providing nursery and feeding areas. This is particularly true for many of the recreational and commercial fish species. Seagrass may provide additional economic value related to water quality and aesthetics (Hazen and Sawyer 2008). Therefore, investing in projects and programs to improve the lagoon's water quality and seagrass beds is not only important for environmental considerations but also to improve the economy.



Land Use Conflicts

At this time there are few if any conflicts related to land use in the coastal area; however, this could change in the future. The Riverfront Plan sets up guidelines for improving the riverfront, including preservation of strategic areas. The goals, objectives, and policies of this Element will govern any conflicts that arise between land uses proposed in the Riverfront Plan and the environmentally sensitive portions of the coastal area. It is the purpose of this Element to protect estuarine resources from the adverse impacts of development and to prevent potential conflict associated with development or redevelopment of marine related activity in the waterfront core area.

Floodplains

Flood zones allocated in the City of Sebastian are illustrated in **Map 5-6**. There are several areas within the City of Sebastian which have been identified by the Federal Emergency Management Agency (FEMA) as having the potential for flooding in the 100-year storm event. Flood Zone A and AE represent the 100-year storm event flood levels. Also included in the map is the 500-year storm event area (X500). These areas are subject to rising waters due to their proximity to nearby rivers, tributaries, and lakes.

The City's Coastal Resiliency Plan includes additional flood data and maps regarding storm surge and future sea level rise. The vulnerabilities that Sebastian faces due to sea level rise are outlined in this Plan and include possible impact to outdoor facilities, City streets, and lift stations in future flooding events. Tropical storms and hurricanes may further increase these risks. The Coastal Resiliency Plan also outlines mitigation strategies such as defining existing street and structure flooding levels of service.

Coastal High Hazard Area

The Coastal High Hazard Area is an area particularly vulnerable to the effects of coastal flooding from tropical storm events and is defined by section 163.3178(2)(h)9, Florida Statutes, as the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model (See **Map 5-7**). The only structures within the CHHA in Sebastian are mobile homes. Additional infrastructure in the City that has been inventoried or identified as being at risk to sea level rise or flooding is recorded in the City's Coastal Resiliency Plan. The threats of sea level rise and flood events should be taken into consideration in regard to development and redevelopment strategies used in the CHHA as defined in § 163.3178(2), F.S. The restriction of development activities and limiting of public infrastructure expenditures within the CHHA and hazard prone areas should also be considered.

Hurricane Vulnerability Zone

The hurricane vulnerability zone for the City of Sebastian has been identified as those areas requiring evacuation during the event of a 100-year storm, or Category 3 hurricane. The areas requiring evacuation during such occurrences are the Indian River Lagoon shoreline, the 100-year floodplains, mobile home residences, and areas receiving impacts from Category 3 hurricane storm-surge heights. Generally, areas experiencing Category 3 storm-surge impacts lie within the 100-year floodplain. Areas within the City receiving storm-surge impacts during Category 3 storm events are within the 100-year floodplain for either the Indian River or Sebastian River. Development and redevelopment strategies should be used to reduce flood risk in these areas as defined in § 163.3178(2), F.S. Maps of the City's storm surge zones are documented in **Map 5-8** and the City's evacuation zones are illustrated in **Map 5-9**.



Shelter Capacity

During natural disasters, residents will seek refuge at public shelters managed by either the American Red Cross or the Indian River County Emergency Management Service. The primary evacuation shelters within Sebastian include Pelican Island Elementary School, Sebastian Elementary School, Sebastian River Middle School, and Sebastian River High School. Although public shelters are dispersed throughout Indian River County, some County residents from other evacuation zones or from neighboring coastal Counties may choose to take refuge at Sebastian area shelters, yet, their numbers are expected to be minimal. Therefore, the City's local shelters adequately meet the needs of those seeking shelter.

Evacuation Routes

The evacuation routes out of the City of Sebastian include US 1 and CR 512. These two roadways also serve most of the northern half of the County. US 1 runs north and south through the entire County and would be used by a number of residents to evacuate into other counties. CR 510 via the Wabasso Causeway would provide an evacuation route for the residents of the north barrier island. CR 510 connects with CR 512 west of Sebastian and CR 512 connects with I-95 a few miles west of the CR 510 intersection. Because the evacuation routes serving the City also serve the County, hurricane evacuation planning must be done on a countywide basis.

Constraints are likely to prevail on certain segments of U.S. 1 and C.R. 512 since they both traverse through areas subject to flooding from 100 to 500-year storm waters. The segment of U.S. 1 just south of C.R. 512 north to Main Street lies within a 100 to 500-year floodplain, while a quarter-mile length of C.R. 512 crosses the 100-year floodplain associated with Collier Creek. The potential for road-surface flooding during heavy rainfall is greater along these road segments within Sebastian than along others.

Evacuation clearance times for Indian River County will vary based on storm levels and impacts associated with a hurricane. In case of a hurricane threat, Sebastian residents will be notified by radio and television broadcast systems and the mobile public-address system on appropriate time to evacuate their areas. Proper notification will allow sufficient time for Sebastian residents to evacuate the area. The City's Coastal Resiliency Plan outlines societal exposure to hurricanes especially to the older population. The demographics of the city may impact the warning time that the City needs to provide to its residents. The Indian River County Emergency Management Department maintains a file of the physically handicapped and individuals with special needs. Special transportation has been arranged which includes vans and hydraulic lifts, ambulances, taxis, and private vehicles. Red Cross officials also have designated special shelters. Evacuation Routes are illustrated in **Map 5-10**.

According to the City's Coastal Resiliency Plan, the results for 2070 sea level rise show nominal impact to City maintained streets and Emergency Evacuation Routes.

Disaster Preparedness

In order to be prepared for natural disasters such as hurricanes, sea level rise, and flooding the City should take preventive action. The *Official Disaster Preparedness Guide for Indian River County* is a source of information for residents to be better prepared for natural disasters that occur. The City's Coastal Resiliency Plan outlines adaptation strategies to increase the City's resilience to natural disasters and to decrease the detrimental impacts to residents and the environment. The adaptation strategies were screened qualitatively using the following criteria:



Conservation & Coastal Management

- Ability to increase resilience
- Cost and benefits
- Community acceptance
- Environmental impacts
- Socio-economic impacts

A summary of the screening criteria is provided in **Table 5-4**. The table below summarizes potential adaptations and their impacts within the community.

Table 5-4: Potential Adaptation Strategies

Potential Adaptation Strategies	Ability to Increase Resilience	Cost and benefits	Community Acceptance	Environmental Impacts	Socio-economic impacts
Canal Bank Inspections	●	●	●	●	●
Define Street and Structure Level of Service	●	●	●	●	●
Retrofit Outfalls with Inline Check Valve	●	●	●	●	●
Update Comprehensive Plan	●	●	●	●	●
Update Stormwater Master Plan	●	●	●	●	●
Raise Lift Station Electrical Controls	●	●	●	●	●
*Level of value to the City: ● = High ● = Medium ● = Low					

Source: City of Sebastian Coastal Resiliency Plan

These adaptation strategies will help the City to be better prepared and recover more quickly from natural disasters.

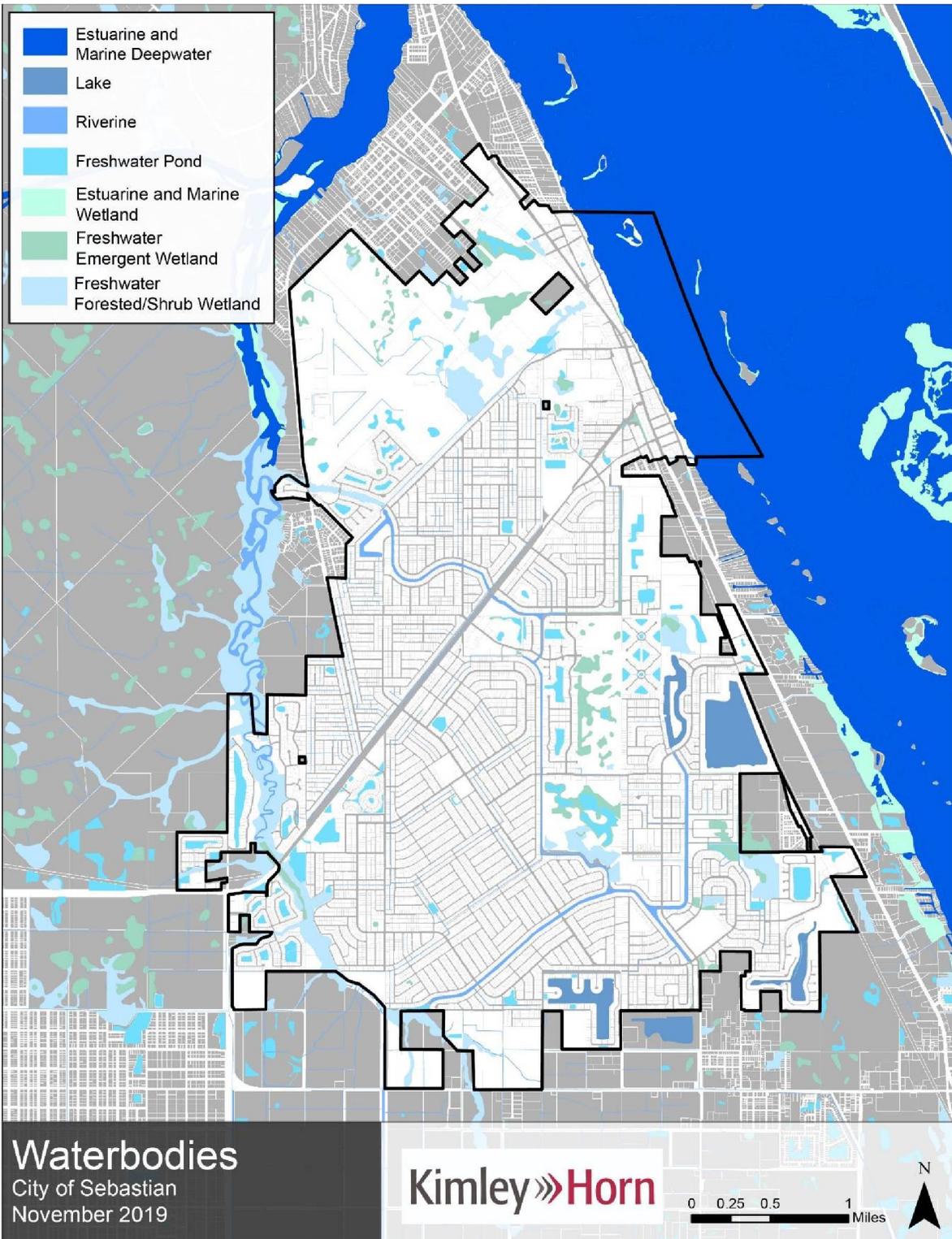
Conclusion

Per Chapter 163.3177 of Florida Statutes, this Conservation & Coastal Management Element provides for the conservation and protection of natural resources in the area, including air, water, water recharge areas, wetlands, waterwells, estuarine marshes, soils, beaches, shores, flood plains, rivers, bays, lakes, harbors, forests, fisheries and wildlife, marine habitat, minerals, and other natural and environmental resources. This Element’s data inventory and analysis influences the overarching goals, objectives, and policies for conservation and coastal management within the City. This Element sets the foundation for the City to protect its natural environment and protect life and property from natural disasters.





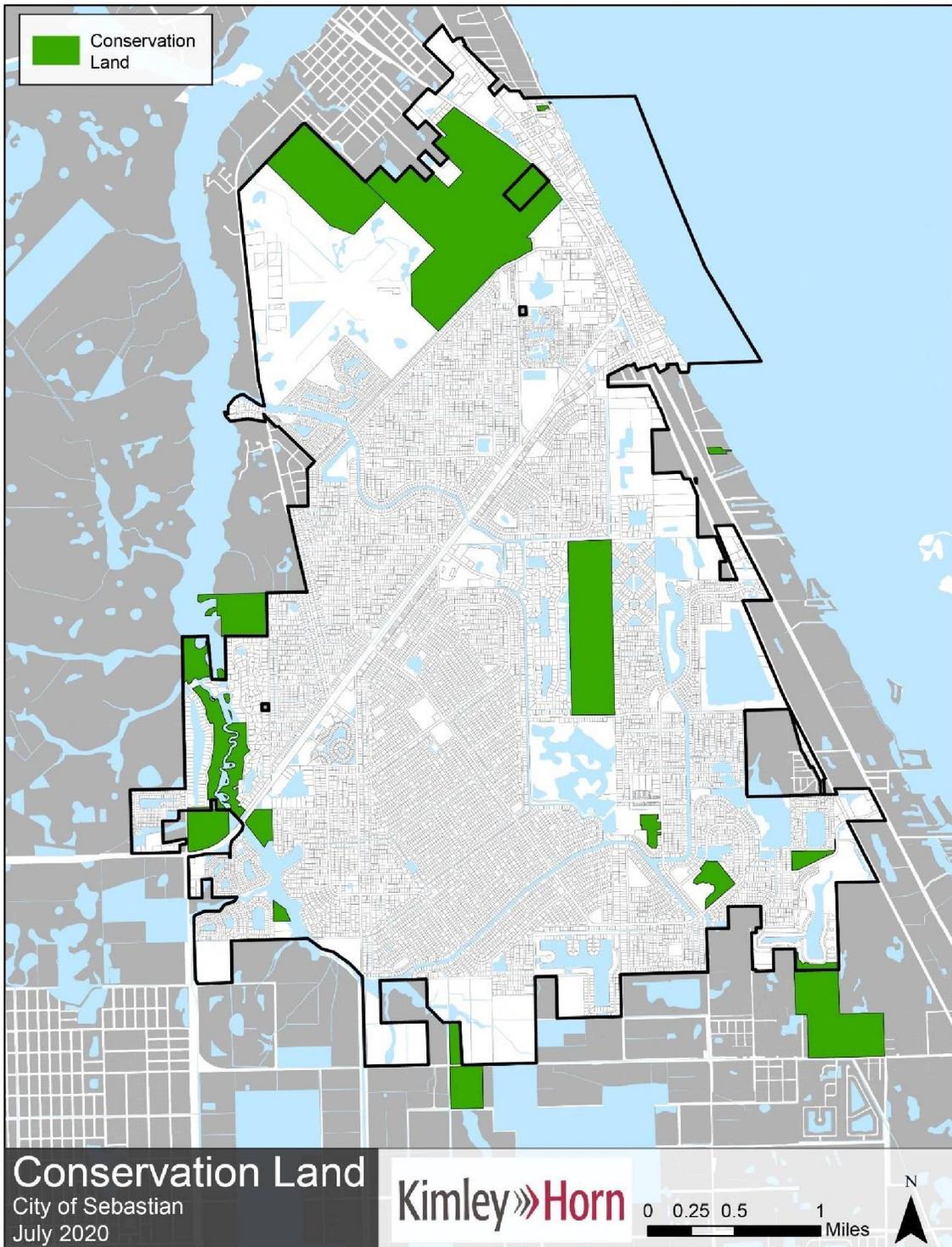
Map 5-1: Waterbodies



Source: U.S. Fish and Wildlife Service



Map 5-2: Conservation Land



Source: City of Sebastian

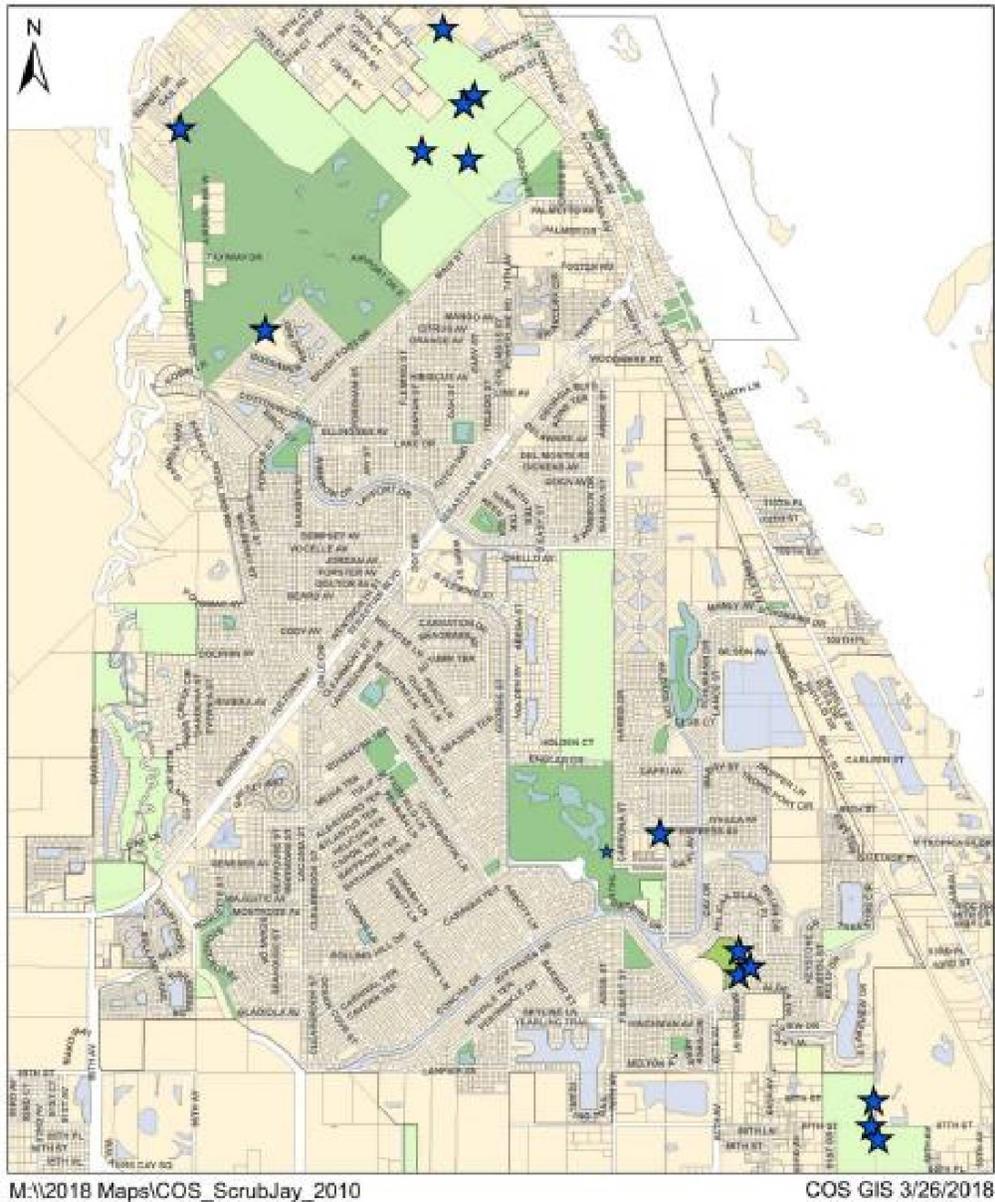


Map 5-3: Scrub Jay Locations



Scrub Jay Locations

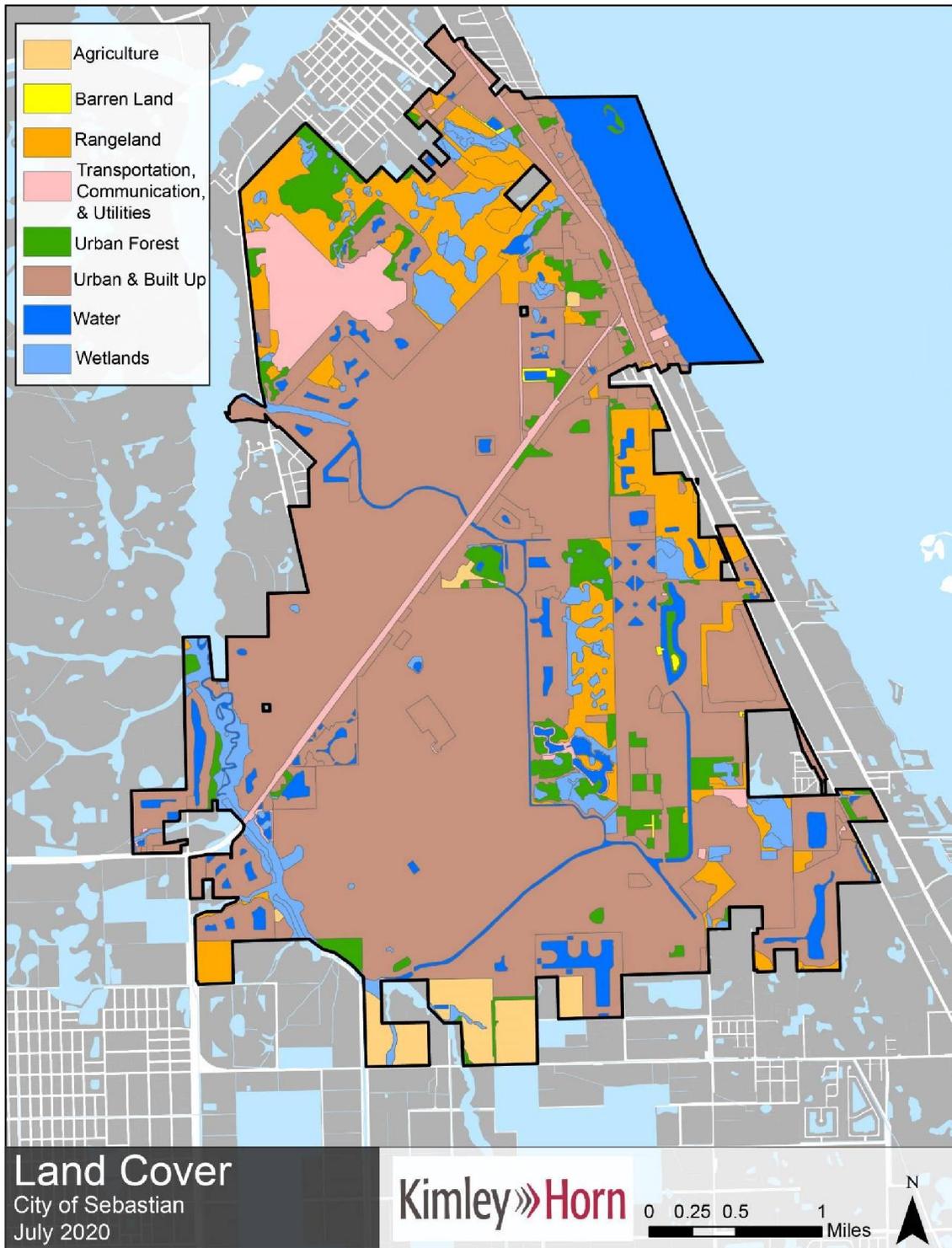
City of Sebastian, Florida



Source: City of Sebastian Conservation of the Florida Scrub-Jay within the City of Sebastian, and the City's Municipal Airport (2019)



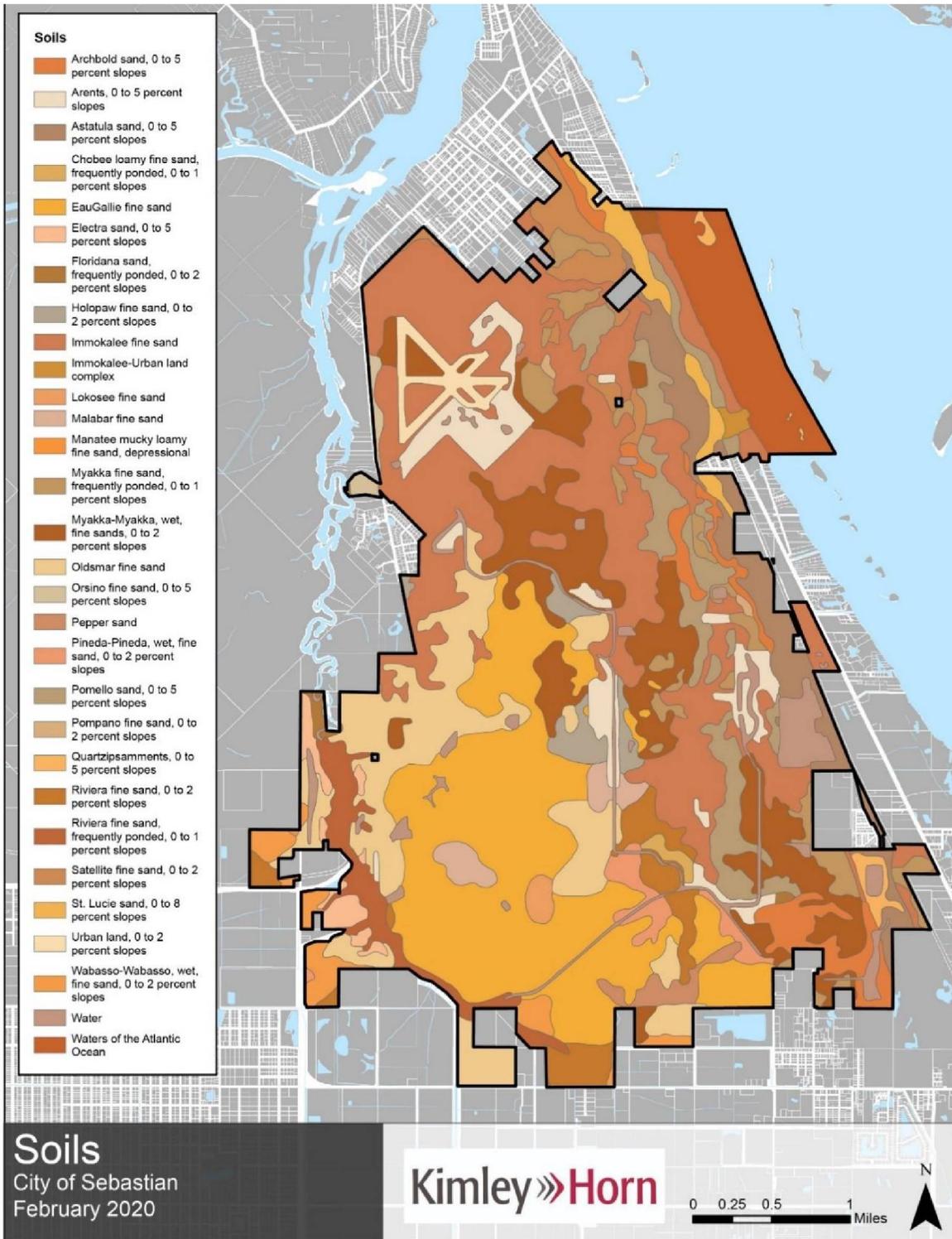
Map 5-4: Land Cover



Source: Florida Department of Environmental Protection



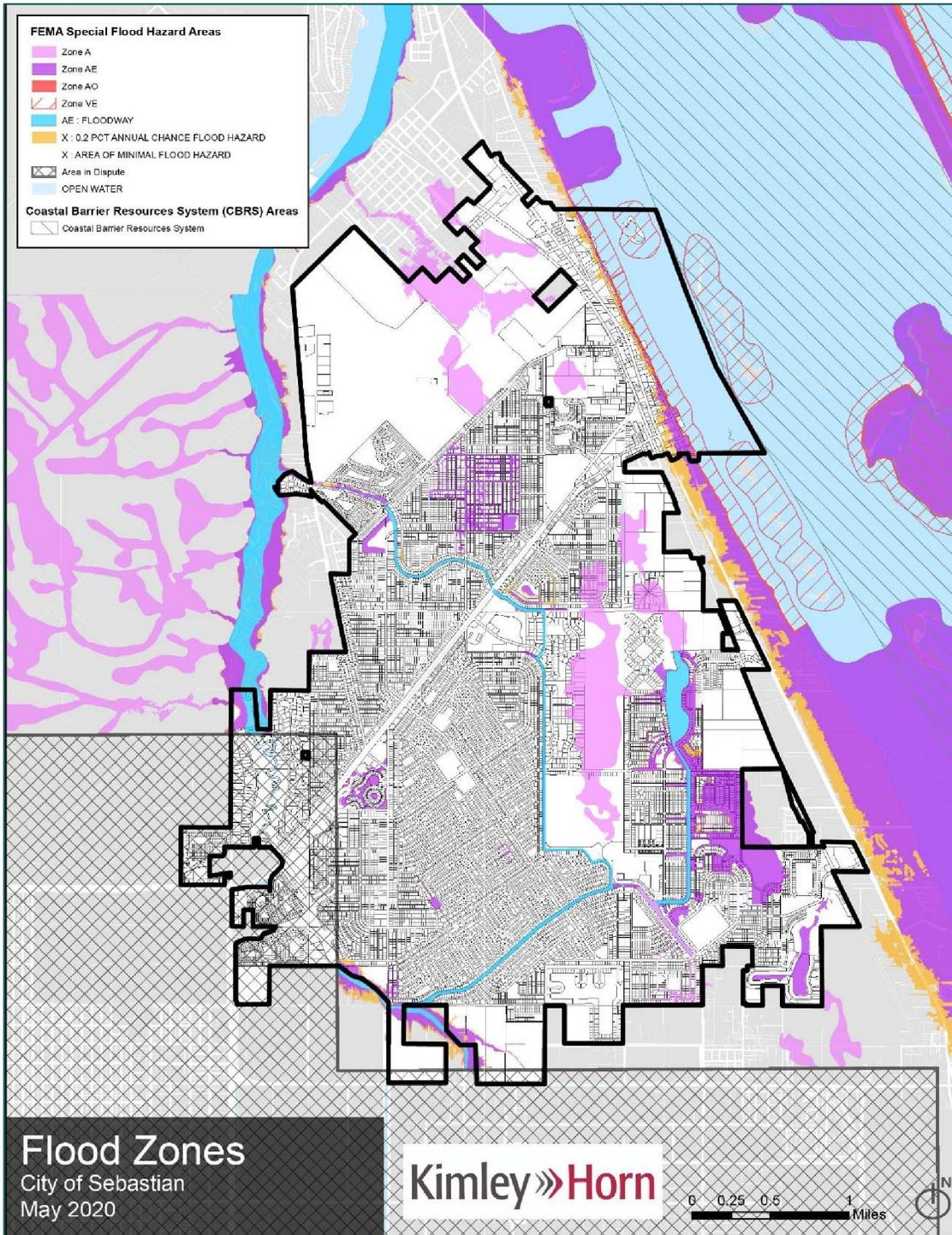
Map 5-5: Soil Types & Topography



Source: Soil Conservation Service



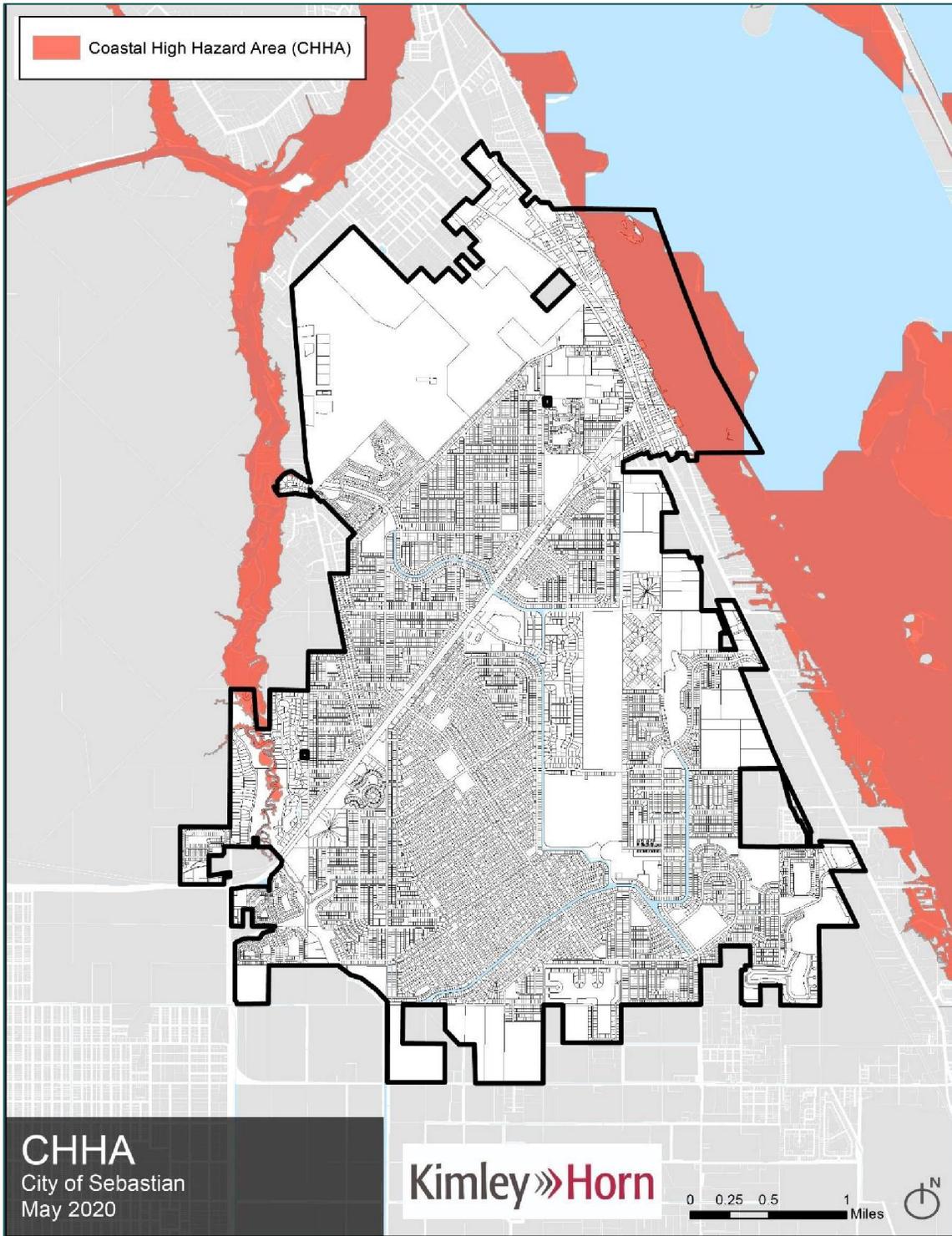
Map 5-6: Flood Zones



Source: Indian River County GIS. FEMA Flood Areas and Special Flood Hazard Areas with an effective date of 12/4/2012 for Indian River County, Florida. Base Flood Elevations (BFE's) specified using the North American Vertical Datum of 1988 (NAVD88). FEMA Version of 8/31/2017



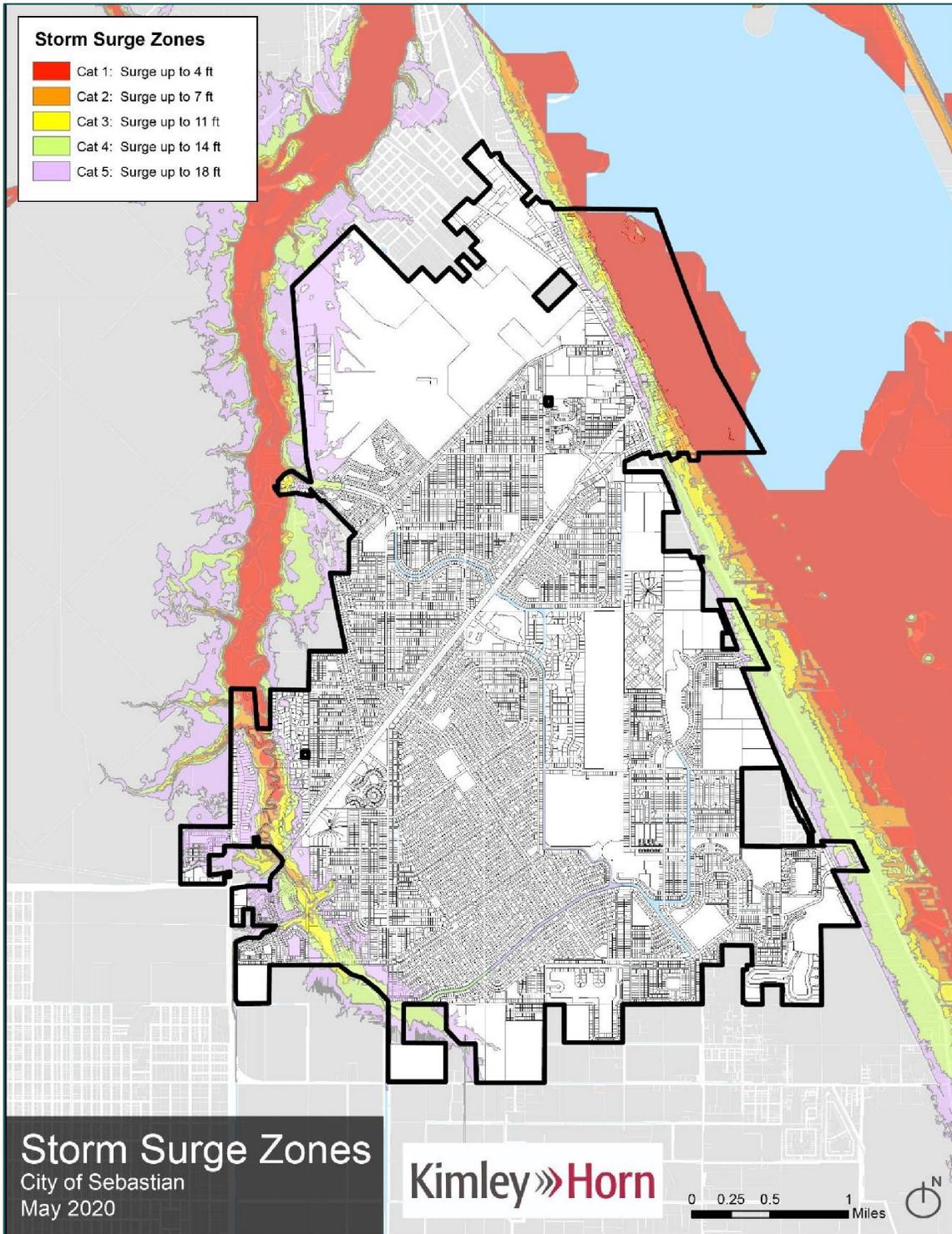
Map 5-7: Coastal High Hazard Area (CHHA)



Source: Treasure Coast Region Florida Statewide Regional Evacuation Study Program for Indian River, Martin, Palm Beach, and St. Lucie Counties, Treasure Coast Regional Planning Council, 2010



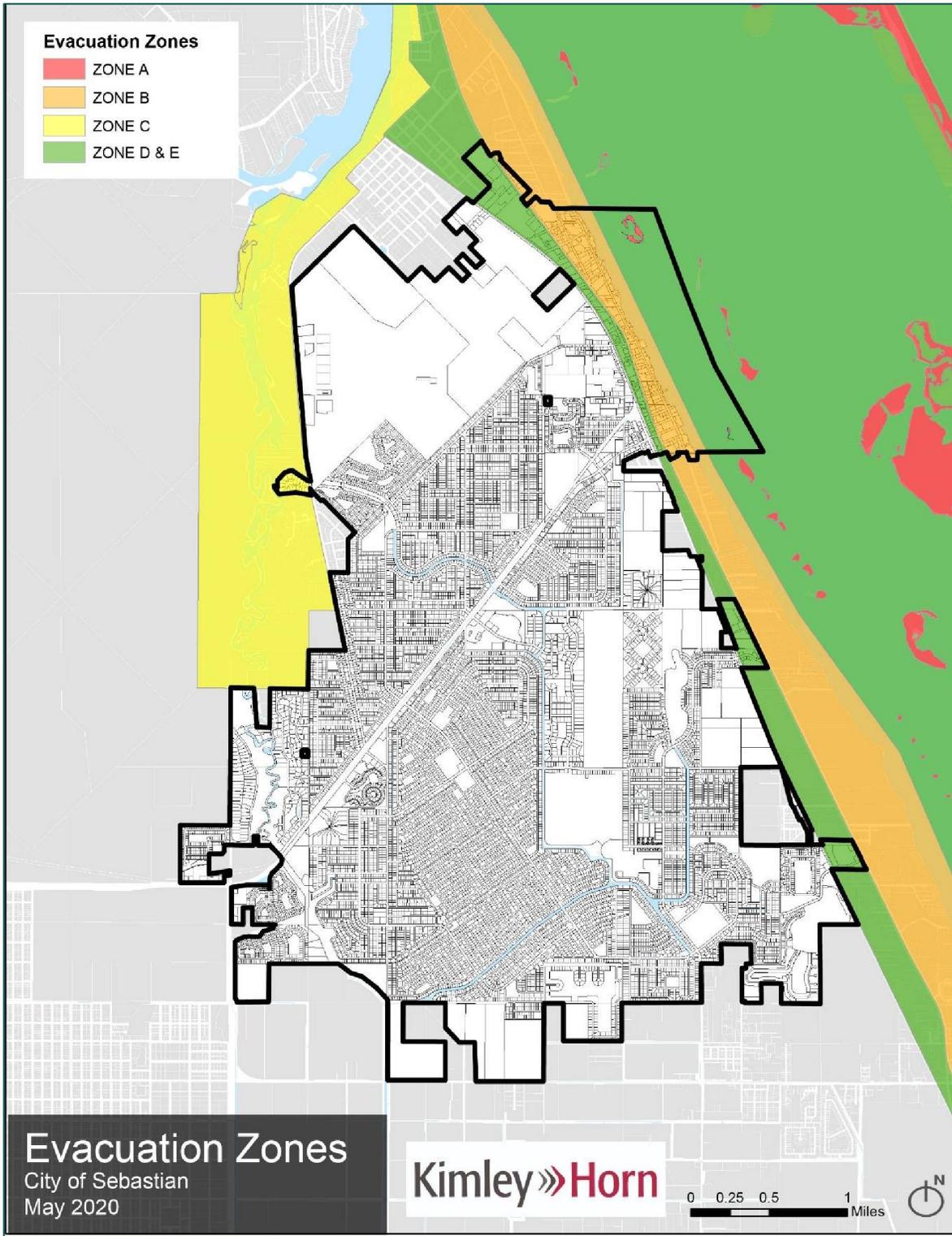
Map 5-8: Storm Surge Zones



Source: Treasure Coast Region Florida Statewide Regional Evacuation Study Program for Indian River, Martin, Palm Beach, and St. Lucie Counties, Treasure Coast Regional Planning Council, 2010



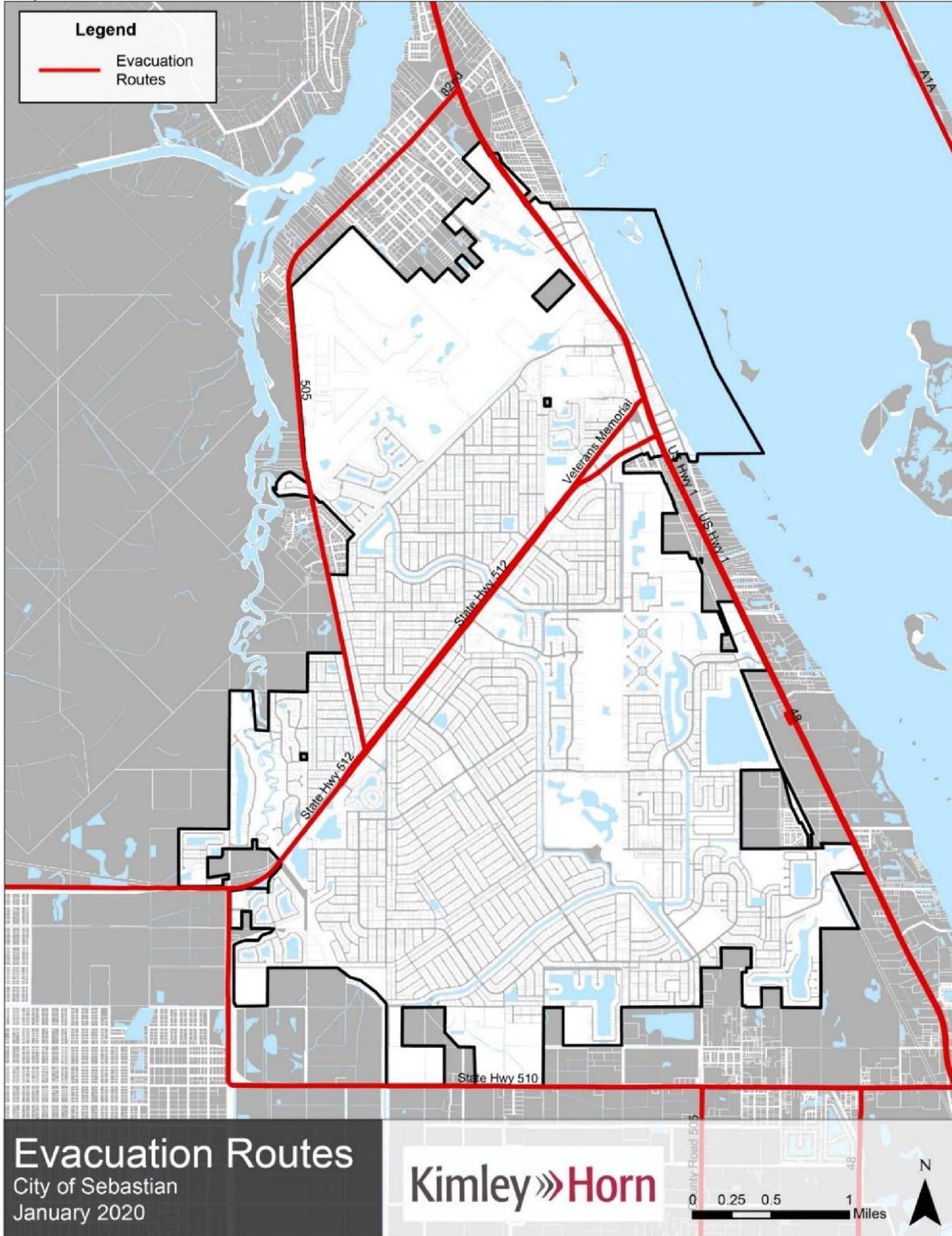
Map 5-9: Hurricane Evacuation Zones



Source: Indian River County Emergency Management



Map 5-10: Evacuation Routes



Evacuation Routes
City of Sebastian
January 2020

Kimley»Horn



Source: Florida Division of Emergency Management

CITY OF SEBASTIAN
Comprehensive Plan

2040





PARKS, RECREATION, & OPEN SPACE ELEMENT

The City of Sebastian has a comprehensive system of public and private recreation sites including parks, natural areas, waterway access, and recreation facilities. The City makes it a priority that adequate active and passive recreation and open space is provided and distributed equitably throughout the City. The **Parks & Recreation Element** ensures that the City has a comprehensive system of public recreation and open space which meets the needs of existing and projected users and which enhances the natural resources of the City.





PARKS, RECREATION, & OPEN SPACE ELEMENT

1. Requires Level of Service (LOS) standards for parks and recreation facilities;
2. Ensures equitable distribution of parks to guarantee accessibility to recreational facilities for all residents;
3. Requires the development of a City Parks System Master Plan to identify and plan for the maintenance of existing facilities and development of new facilities;
4. Encourages the utilization of creative urban design concepts such as low impact development and Crime Prevention Through Environmental Design (CPTED);
5. Enforces the City's Integrated Pest Management Plan to encourage nature-based pest management methods;
6. Promotes the conservation of environmentally sensitive open space, environmental teaching, and sustainability efforts at parks;
7. Emphasizes bicycle and pedestrian access and the expansion of the City's trail network;
8. Promotes increased public access to the City's shorelines;
9. Encourages community outreach and promotes environmental education activities; and
10. Identifies City coordination efforts with the public and private sector in order to provide and promote recreational opportunities.



GOALS, OBJECTIVES, & POLICIES

Goal 6-1: Provide Well Planned Parks, Recreational Facilities, and Open Space.

The City’s Goal is to provide well planned, active and passive recreation and open space ensuring a comprehensive system of parks, recreational facilities, and open space that meets the health, safety and welfare needs of the City residents and visitors and which enhances the natural environment of the City.

Objective 6-1.1: Parks and Recreation System. The City shall undertake a comprehensive program to ensure that the Level of Service (LOS) for parks and recreation facilities is maintained, with a distribution of parks and recreational facilities throughout the City that meets the needs of all residents and visitors.

Policy 6-1.1.1: LOS Standards for Parks and Recreation Facilities. The City adopts the standards shown in **Tables 6-1** and **6-2** as the Recreation and Open Space LOS standards. The City shall maintain these adopted LOS standards to reflect the diverse character of Sebastian and the needs of the various age groups, social and economic groups, and recreational preferences of City residents. Facilities and their respective standards and service areas are defined as either neighborhood or community parks. Note, for the purpose of this Element, the definitions provided in the Data Inventory and Analysis (DIA) shall apply.

Table 6-1: Recreation Standards for Size and Location

Classification	Location	Acres/1,000 Residents	Size	Service Area
Neighborhood	Neighborhood area	2.0	1.0 to 5.0 acres	0.5 mile radius
Community	Group of neighborhoods	2.0	5.0 to 25.0 acres	0.5 mile to 3 mile radius





Table 6-2: Recreation Standards for Facilities

Facility	Standard
Baseball/Softball Fields	1 field per 6,000 residents
Basketball Courts	1 court per 5,000 residents
Boat Ramps	1 ramp per 12,500 residents
Equipped Play Areas (playground)	1 area per 10,000 residents
Football Fields	1 field per 20,000 residents
Golf Course	18 holes per 50,000 residents
Recreation Center & Gym	1 center per 25,000 residents
Soccer Fields	1 field per 10,000 residents
Swimming Pools	1 pool per 25,000 residents
Tennis Courts	1 court per 5,000 residents
Volleyball Courts	1 court per 8,500 residents
Bicycle Trail (paved)	1 mile per 31,250 residents
Bicycle Trail (unpaved)	1 mile per 10,750 residents
Hiking Trail	1 mile per 6,000 residents
Pickleball	1 court per 5,000 residents

Note: Standards are based on permanent population.

Policy 6-1.1.2: Public Parks. The City shall use the information and analysis developed as part of the DIA to create a Parks System Master Plan. The Parks System Master Plan shall be consistent with the Open Space LOS Standard, except as may be amended per E below, and provide additional information including development of a schedule for the:

- A. Inventory of existing facilities;
- B. Identification and maintenance of existing facilities;
- C. Development of new facilities;
- D. Criteria for the prioritization of funding for the acquisition, development and enhancement of public parks, with an emphasis on existing parks to facilitate projects to maintain adopted LOS standards for the Capital Improvements Program (CIP); and
- E. Investigate potential alternative approaches to meeting LOS through the use of a park hierarchy, differential LOS, etc. that looks at not only the inventory of facilities but also the location and proximity to users.



Policy 6-1.1.3: Capital Planning. Consistent with **Policy 6-1.1.2**, the City shall review on an annual basis the need for new recreation sites and facilities as well as the need for repair and renovation of existing facilities. These identified needs shall be incorporated into the capital improvement plan. The analysis shall be directed towards maintaining a system of recreational sites and facilities which is responsive to user needs.

Policy 6-1.1.4: Monitor and Update Recreation Demand and Supply Analysis. When a park activity threshold listed in **Table 6-2** is reached, the City shall investigate the applicability of providing such activity or facility. The investigation shall include public input and may utilize hearings and user surveys to encourage input. Periodically, the continued relevance of the facility standards to current resident needs and desires shall also be investigated in a similar manner.

Policy 6-1.1.5: Population Projections. The City, as part of the Comprehensive Plan update, shall update the population projections for the following five and ten year planning horizons and apply these projections to determine projected future demand. The City will strive to review and update the population projections on a five-year basis.

Policy 6-1.1.6: Current and Projected Unmet Park Facility Demand. Consistent with **Policy 6-1.1.10**, the City shall adopt and maintain a multi-year schedule of capital construction projects to address future projected deficit in park facilities as identified in the DIA. As part of the recommended Parks Master Plan and population projections, the City shall analyze future projected (potential) deficit in Community Park space. Projected deficits in future years shall be scheduled to be addressed prior to their projected occurrence.

Policy 6-1.1.7: Mandatory Land Dedication or Fees in Lieu Thereof. The City shall enforce provisions for the mandatory dedication of land for parks and recreation or fees in lieu thereof for all development with new dwelling units. These regulations are intended to ensure that new development provides for the necessary recreation lands, facilities, and/or fees in lieu in order to accommodate the additional demands generated by residents of the new development.

Policy 6-1.1.8: Land Dedication Enhancement. The City shall update and maintain the Land Development Code (LDC) to match the LOS standards, enhance the applicability of the dedication or fee in lieu provisions, add objective criteria for determining private recreation credits, and eliminate the ability for private recreation credits to satisfy all public recreation land dedication requirements.

Policy 6-1.1.19: Coordination with Governance & Implementation Element. The City shall schedule and incorporate such projects costing \$25,000 or more into the **Governance & Implementation Element**.

Policy 6-1.1.10: Maintenance of Existing Recreation Land and Facilities. The City shall maintain existing recreation land and facilities through the use of proper management and funding techniques. The City shall ensure that recreation facilities are well managed, well maintained, and that high quality recreation programs are available to all residents.

Policy 6-1.1.11: Utilize Creative Concepts of Urban Design and Conservation of Environmentally Sensitive Open Space. All plans for development or redevelopment of park land resources involving or adjacent to environmentally sensitive lands shall incorporate creative concepts of



urban design (stormwater/low impact development) and landscape. The plans shall be designed to enhance controlled access along the shoreline and wetland systems. Active and passive recreation areas shall be planned in a manner compatible with unique natural features of the site. Where provided, the design shall provide a circulation system to minimize conflict between pedestrians and vehicles and shall seek to use necessary stormwater management areas as a beneficial feature of the design. Adequate landscape and screening shall be integrated into park development plans to minimize land use conflicts, protect stability of established residential areas, and enhance community appearance.

Policy 6-1.1.12: Promote Environmental Education as Part of Recreation Programs. The City shall promote environmental education and management as an integral part of park and recreation policies and programs. Support for cooperative programming between resource agencies and local educational advisors will provide park and recreation resources as an instrument for environmental teaching, and as a means for accomplishing the City's Goals and Objectives. The City shall promote the development and maintenance of the nature trail at Kildaire Park.

Policy 6-1.1.13: Promote Health Education. The City shall continue to offer community events and provide educational programming that highlights the importance of health and fitness.

Policy 6-1.1.14: Promote Sustainable Development Concepts as Part of Park Design. The City shall utilize native plants and Florida Friendly Landscape techniques when landscaping is added or updated in parks, recreation facilities, and open spaces. The City shall utilize low-impact development strategies to reduce stormwater runoff from parks and recreation facilities. The City shall utilize the 2020 Parks Integrated Pest Management Plan in maintaining parks, recreation, and open space landscapes.

Policy 6-1.1.15: Waterfront Redevelopment. Consistent with **Policy 6-1.1.3**, the City shall consider waterfront redevelopment needs, particularly the potential for new access points to the Indian River, including areas to support parking demands generated by shoreline access improvements. As such land, facility, and improvement needs are identified; the City shall investigate the potential of addressing such needs through the use of public or private not-for-profit agency resources.

Policy 6-1.1.16: Crime Prevention Through Environmental Design (CPTED). The City shall incorporate cost-efficient CPTED principles and practices into the design, construction, and operations of new park and facility construction. The City shall also begin to incorporate CPTED principles in existing properties as it becomes fiscally possible or when renovations take place.

Policy 6-1.1.17: Outings. The City shall continue to offer youth, adult, and senior recreational opportunities and outings.

Objective 6-1.2: Land Acquisition. The City shall maintain a program to continually evaluate the potential purchase of land for parks, recreation, conservation, and open space needs.

Policy 6-1.2.1: Acquisition. The City shall identify and prepare a list of possible acquisition lands for recreation or open space to meet the current and future needs of City residents, as measured by the adopted City LOS standards through 2040. The City shall add proposed land acquisition projects to the City's CIP.



Policy 6-1.2.2: Access. The City shall give priority to acquisition of lands that provide access to parks, recreation or open space areas.

Policy 6-1.2.3: Priority. The City shall give high priority to acquisition of lands in the Coastal High Hazard Area (CHHA) and in or adjacent to jurisdictional wetlands for passive recreational purposes, provided that that the City determines that recreational use of these sites would not endanger the public health, safety, welfare or environment.

Objective 6-1.3: Protect Natural and Open Space. The City shall maintain a comprehensive LDC which includes performance criteria designed to protect lands designated as natural reserves or open space including the Indian River Lagoon, the St. Sebastian River, and their tributaries from incompatible land uses and to ensure such lands shall remain functionally intact.

Policy 6-1.3.1: Implementing the LDC. In addition to the mandatory park and recreation land and facilities regulations, the City shall enforce the LDC which includes specific open space definitions and standards addressing protection of open space, natural vegetation, landscape, and signage. Standards shall include stipulations governing the provision and use of open space for buffering, protection of natural corridors, including drainageways, as well as other commonly accepted uses. The City shall also maintain standards which include performance criteria designed to preserve public access to the Indian River Lagoon, St. Sebastian River, and their tributaries.

Policy 6-1.3.2: Standards for Review and Maintenance. The City shall maintain criteria which shall be used to review all proposals for development in existing and proposed areas designated as open space on the master drainage plan map(s) and/or the Future Land Use Map.

Policy 6-1.3.3: Preservation of Potential Sites. All sites listed in the DIA as Unimproved Future Park Sites shall be retained by the City for use as parks, recreation facilities, or nature reserves.

Policy 6-1.3.4: Incorporation of Green Infrastructure Plan. The City shall strive to incorporate a natural system of connectivity within the park and open space system. The Green Infrastructure will aid in transport of natural ecosystems, reduced flooding of developed area, and increased treatment of stormwater runoff.

Policy 6-1.3.5: Environmentally Sensitive Lands. Whenever possible, recreational sites should be established with active and passive uses to provide a range of recreational facilities and opportunities, and to ensure preservation or conservation of environmentally sensitive lands. The City shall identify those recreational sites containing environmentally sensitive lands and limit those portions to passive use recreation only; where it is determined that passive recreational use of these lands would not endanger the public health, safety, welfare, or environment.

Policy 6-1.3.6: Passive Recreation. The City may use City-owned floodplains, conservation lands or environmentally sensitive lands, and other similar areas for passive recreational land, provided that the City determines that passive recreational use of these sites would not endanger the public health, safety, welfare, or environment. The City shall partnership with local, regional, state and federal agencies in reaching this goal.



Objective 6-1.4: Public Access. Multi-modal access (i.e. pedestrian, bike, vehicular) shall be provided to all public recreation sites, with pedestrian access to all facilities at such sites. As park sites are acquired, developed, or redeveloped, all modes of access shall be considered.

Policy 6-1.4.1: Access. All future City owned parks and recreational facilities shall have direct access on a public street, right of way, or easement. The City shall not vacate necessary existing rights-of-way, easements, walkways, and other properties available for public access to parks and recreation facilities or open space.

Policy 6-1.4.2: Park and Public Space Connectivity. The City shall connect parks and public spaces through pedestrian/bike access ways including linear parks, sidewalks, bicycle lanes, trails, blueways (such as kayak trails), and greenways.

Policy 6-1.4.3: Automobile Access. The City shall ensure an appropriately scaled level of automobile access. Parks with facilities designed to appeal to a wider audience than the immediate adjacent area shall have adequate parking for the anticipated number of users. Parking areas where coverage of sod cannot be maintained due to the level of use shall have paved parking installed. Compatibility with the character of the park and surroundings shall be taken into account in designing automobile access.

Policy 6-1.4.4: Bicycle and Pedestrian Access. The City shall ensure bicycle and pedestrian access to all sites and internal pedestrian access to all recreation facilities. Whenever possible, site access shall be connected to existing sidewalks and pathways providing access to the community at large. Bicycle racks shall be provided at all parks, special facilities, and nature reserve areas.

Policy 6-1.4.5: Accessible Facilities. Recreation sites shall be connected to external accessible routes when present and shall include internal accessible routes to all facilities whenever feasible. All types of amenities shall be provided with barrier-free access in a representative quantity. The City shall identify and schedule any readily constructible barrier-free access improvements and evaluate other improvements for inclusion in the capital improvement plan. The City will provide vehicle parking, ADA-compliant parking, bicycle racks, and barrier-free access at City-owned parks and recreational facilities.

Policy 6-1.4.6: Restrooms. Parks with existing restrooms shall be evaluated for the condition of the restrooms and the level of accessibility provided. Deteriorated facilities shall be scheduled for renovation, with feasible accessibility improvements included in the scope of work.

Policy 6-1.4.7: Opportunity. Each park amenity replacement, improvement, or addition shall be recognized as an opportunity to improve access for all users, including those with special needs, through universal design.

Policy 6-1.4.8: Bicycle and Hiking Trails. The City shall pursue the expansion of the existing network of trails so that a comprehensive, connected system is created which includes integration with State and County networks.

Policy 6-1.4.9: Wayfinding and Voluntary Compliance. The City shall add wayfinding and similar signage, using consistent design themes and language, to all parks that are currently not marked and shall install park system maps at all parks as may be necessary. To improve user understanding and



compliance, and facilitate enforcement, the City shall install a park rules sign of consistent appearance at each site.

Objective 6-1.5: Coordination of Planning and Resources. The City shall coordinate planning for recreation improvements with each level of government including the State of Florida, Indian River County, the Indian River County School Board, non-profits, the private sector, and the public at large in order to provide and promote recreational opportunities, understand needs, and encourage environmental education activities all in a cost effective manner.

Policy 6-1.5.1: Joint School-Park Concept. Consistent with the **Public Schools Element**, the City shall cooperate with the Indian River County School Board to promote joint use of schools and parks for school and public recreation activities. Efforts shall be focused on the two schools within the City limits (Pelican Island and Sebastian elementary schools), however the two schools immediately adjacent to the City may be included as well (Sebastian River Middle and Sebastian River High).

Policy 6-1.5.2: Private Sector. On a continuing basis through the site plan and subdivision approval process, the City shall coordinate with private sector developers in providing needed improvements to recreation facilities by enforcing the recreation land and facility dedication or fee in lieu provisions of the LDC.

Policy 6-1.5.3: Funding Sources. The City shall pursue grants, foundations, and other public/private funding sources for the development, expansion, and maintenance of park and public space resources. The City shall seek out and obtain the advantages of all appropriate local and non-local sources of financial and technical assistance. Alternative funding sources and their operational and administrative impacts shall be regularly monitored so that evolving State and Federal assistance programs can be aggressively pursued in furtherance of the City's recreation goals and objectives while remaining cost effective and fiscally equitable.

Policy 6-1.5.4: Other Human Service Planning Efforts. The City shall create realistic plans and take responsive action to meet identified needs in a cost-effective and fiscally equitable manner by encouraging the use of local park and recreation resources for a wider range of human services delivery (i.e. health information, consumer protection, nutrition, literacy, etc.)

Policy 6-1.5.5: Cooperative Education Programs. Park and recreation resources shall be used by the City as an instrument for environmental education as well as other adaptive education programs. This effort shall facilitate the use of local parks as year-round community education and recreation facilities for all age groups.

Policy 6-1.5.6: Citizen Outreach. The City shall coordinate with local media outlets (newspaper, television, etc.) as well as use the City website and social media as appropriate to inform residents about recreation activities and events. Outreach efforts shall include targeted efforts to reach the entire community.

Policy 6-1.5.7: Volunteer Organizations. The City shall continue to support the efforts of and work closely with volunteer organizations that provide a wide range of recreation programs.



Policy 6-1.5.8: Intergovernmental Coordination. Specific Objectives and Policies regarding intergovernmental coordination and this Element are provided and identified in the **Governance & Implementation Element**.

Objective 6-1.6 Boating And Waterways. The City shall include blueways, waterways, and boating in parks, recreation, and open space planning including the identification of high priority facilities.

Policy 6-1.6.1: Schedule. The City shall develop and maintain a schedule for the assessment of high priority waterways networks, including boating, kayak and canoe trail ways, and other water transportation options including but not limited to inspections, repairs, and future capital improvements projects.

Policy 6-1.6.2: LOS. The City shall adopt LOS standards for boating and fishing facilities, such as boat ramps, kayak and canoe launches, fishing piers, and public access points.

Policy 6-1.6.3: Public Access. The City shall strive to maintain a no net loss policy for public access to waterways and shorelines and will work to maintain and/or expand the publicly accessible location throughout the City.





DATA INVENTORY AND ANALYSIS

INTRODUCTION

The City of Sebastian has a comprehensive system of public and private recreation sites, including parks, natural areas, waterway access, and recreation facilities. This Element provides a recreation inventory, analysis, and policies pursuant to the requirements of Section 163.3177(6)(e) of the Florida Statutes. In addition, current and projected needs for recreation sites, facilities, and open space are analyzed based on an assessment of existing and projected recreation demands and a plan to meet those demands provided.

DEFINITIONS

Neighborhood Park. A smaller park for diverse local recreational activities. Neighborhood parks are generally 1 to 5 acres in size and accessible by foot or bicycle with a service radius of about one-half mile and a service population of up to 5,000 persons. Typical development may include basketball and tennis courts, open play areas, play structures, picnic tables, benches, landscaping, lighting, and limited parking.

Community Park. A larger park that provides a diverse range of community-scale recreational and leisure activities or contains an area of environmental or aesthetic quality. Facilities and activities may include, but are not limited to, athletic fields and courts, swimming pools, gymnasiums, performing and fine arts centers, crafts buildings, play structures, picnic tables, benches, landscaping, lighting, and parking. A community park is typically a “drive-to” facility from 5 to 25 acres in size that services the needs of up to 25,000 people. Community parks are ideally located near collector or arterial roads to accommodate adequate access and should be well-buffered from adjacent residential areas.

Special Facilities. Special recreation facilities are generally identified as unique in their nature and purpose. Special facilities are exemplified by golf courses, community centers, boat ramps, zoos, stadiums, and other single-purpose facilities. While development standards are available for such facilities, the provision of special facilities is typically based more on the desires or unique characteristics of a community rather than numerical standards.

District Park. A major or district park is usually designed to provide recreation opportunities to more than one community or an entire county. These sub-regional parks are often based on a resource or scale that cannot be provided by a community park. District parks can serve populations of about 100,000 people and are typically located within 30 minutes driving time of the users. These parks may provide ample contact with natural aspects of the setting and include large picnic areas, areas for field sports, nature trails, boating facilities, and riding trails.

Regional Park. Regional parks function primarily to provide special natural resource use to people of all ages. They are generally more than 3,000 acres in size and within an hour’s driving time of the population they serve. Activities available at a typical regional park include boating, swimming, hiking, horseback riding, picnicking, overnight camping, and nature appreciation.

Nature Reserve Area. Areas primarily designed with consideration for outdoor recreation and nature preservation, including but not limited to, areas for viewing and studying land, aquatic, or avian wildlife;



conservation activities; swimming; hiking; camping; trail facilities; nature centers; or botanical gardens. Service area radius and desirable acreage vary. A nature reserve area may be one of the following:

Conservation / Open Space Area. Are preserved and managed to protect its natural environment or aesthetic quality or to protect health, safety, and welfare by providing open spaces between roadways or development, with recreation and leisure activity serving as a secondary function.

Linear Recreation Area. Area developed to provide travel routes for one or more types of recreational or human operated vehicles such as horseback riding, bicycling, hiking, or jogging.

RECREATION AND OPEN SPACE INVENTORY

This section presents an inventory of park sites, existing resource-based and activity-based recreational facilities and open space, and identifies parks, playgrounds, and beaches accessible to the public within the vicinity of Sebastian. The inventory also indicates the type of improvements (amenities) developed on the sites. Included in the inventory are city, county, and state parks. Recreational facilities at school sites, though only potentially available for public use when classes are not in session, represent another resource included in the inventory.

The inventory provides an emphasis on recreation space within the city limits of Sebastian. However, Indian River County and the State of Florida maintain an abundance of district and regional parks and open space throughout the area in the northern part of Indian River County that are available to and frequented by Sebastian residents and these have been inventoried. Smaller scale county parks immediately nearby Sebastian are also mapped. Recreation facilities that are owned and operated by the private sector which may be available at a private club or as an amenity provided by a housing development are not included due to their restricted access.

A. Classification

Since recreation space provided by the City differs according to purpose, function, and activity, a regimen of recreation space classification was developed and used to profile the existing recreation system. As a design guide helpful to measure the adequacy of future recreation resources and needs, this classification system defines recreation space according to service area and function. Service area classifications include neighborhood and community parks as well as natural areas and special facilities. In addition, recreation areas can be classified into two broad categories: active-based and passive-based recreation activities. Most public parks and open spaces can be classified as either active- or passive-based recreation depending on the facilities and natural resources located at the park site. These terms are defined as follows:

1. **Active-Based.** Active-based recreation activities involve the pursuit of physical exertion that raises the heart rate to a level significantly above the resting level. This may be achieved through participation in a variety of activities such as team sports like baseball and football, as well as individual activities including jogging, bicycling, hiking, swimming, or playground activity. The main benefits of such recreation uses are increased cardiovascular fitness and improved mental health through release of energy and/or tension.

Active-based recreation activities rely on the presence of recreational facilities that enable certain activities to function. Without the provision of such facilities, the activity would either be limited in quality or altogether eliminated. Active-based recreation areas may include open space areas which allow for



unprogrammed play of a variety of sports. Active-based recreation activities are further divided into two categories:

- a. **User Oriented.** User-oriented activities can be provided anywhere, if funding and space are available. Activities include: baseball, football, basketball, golf, and tennis. User-oriented facilities generally are man-made, and should be located to best serve the population of the community.
 - b. **Resource Based.** Resource-based activities are those activities that can only occur in certain environments. This includes all water related activities, hiking trails, hunting, and camping. Resource-based activities are designed to make maximum use of the natural resources, such as waterways, woodlands, and wetlands since the resource is not present in all communities.
2. **Passive-Based.** Passive-based recreation involves activities that do not necessarily raise the heart rate significantly above the resting level, but rather provide refreshment through furnishing visual and/or psychological release from the pressures of everyday urban life. In passive-based recreation facilities, emphasis is placed on enjoyment of a natural resource or an activity and not on participation. The passive-based recreation facilities category includes picnic tables, observation areas, botanical gardens, historical or archaeological sites, and park benches. Passive recreation activities include sunbathing at the beach, walking through a scenic area, or a visit to a local historical site.

Passive-based recreation areas are often referred to as open spaces and preserves. Open spaces include: fields, walking trails, scenic view points, and greenbelts. Generally, open space areas have minimal facilities. Open space can also be used to enhance urban areas by providing relief from intense or monotonous development.

B. Inventory of Parks and Recreation Areas

The City has a total of approximately 584 acres of developed, city-owned recreation land and other undeveloped recreation land. Within and immediately adjacent to the City are public school sites with recreation areas that can be available to the public. In addition, state and county owned lands available for recreation use are located near the City in the unincorporated portion of Indian River County. Below is a listing of the recreation sites and open space areas within the City of Sebastian and the nearby unincorporated area, including a listing of amenities, organized by type and shown on the associated maps.

1. **Neighborhood Parks** (See **Table 6-3** and **Map 6-1**)
2. **Community Parks** (See **Table 6-4** and **Map 6-2**)
3. **Special Facilities** (See **Table 6-5** and **Map 6-3**)
4. **Nature Reserve Areas** (See **Table 6-6** and **Map 6-4**)
5. **Unimproved Future Park Sites** (See **Table 6-7** and **Map 6-5**)
 - a. The City of Sebastian obtained a number of unimproved park sites as part of the settlement with General Development Corporation (GDC). These former GDC sites total 52.36 acres of land which can be used in the future for neighborhood parks, community parks, special facilities, or nature reserves depending on their size and location and the community's needs.
6. **School Sites** (See **Map 6-6**). The Indian River County School Board has two schools within the City of Sebastian as well as two schools immediately abutting City limits. These schools provide areas which could be made available for recreation use by nearby residents.
 - a. **Sebastian Elementary.** This 40 +/- acre school is located within the City on CR 512 east of the Florida Power and Light Company easement at 400 Sebastian Boulevard in the northern part of the



City. Facilities include a baseball field, outdoor playground, basketball courts, and open space for passive recreation.

- b. **Pelican Island Elementary.** This 32.23 +/- acre school is located within the City at the corner of Schumann Drive and Barber Street at 1355 Schumann Drive in the south portion of Sebastian Highlands. Facilities include a baseball field, an all-purpose field, basketball courts, an outdoor playground, and open space for passive recreation.
- c. **Sebastian River Middle.** This 43 +/- acre school is located on CR 512 immediately west of the City limits at 9400 CR 512. Facilities include a baseball field, a football/soccer field, and four tennis/basketball courts.
- d. **Sebastian River High.** This 78 +/- acre school is located on 90th Avenue south of CR 512 immediately west of the City limits at 9001 90th Avenue. Facilities include a football stadium with running track, three football/soccer fields, baseball field, softball field, two basketball courts, and eight tennis courts.

7. **Indian River County Parks.** The County's Parks Department operates the following in the northern portion of Indian River County:

- a. **Amber Sands Beach Access.** This 3.38 acre site is located along the Atlantic Ocean within the Archie Carr National Wildlife Refuge at 12566 North A1A. Amenities include a beach access boardwalk and unpaved parking.
- b. **Dale Wimbrow Park.** Sharing a 74 acre site with Donald McDonald Park west of the City limits, between the Sebastian River and the Airport, this park is located at 11805 Roseland Road. Amenities include a playground, picnic pavilions, an event pavilion, boat launch, fitness trail, fishing access, BBQ grills, restrooms, and paved parking.
- c. **Donald McDonald Park.** Sharing a 74 acre site with Dale Wimbrow Park west of the City limits, between the Sebastian River and the Airport, this park is located at 12315 Roseland Road. Amenities include 29 primitive campsites, 1 campsite with electricity, an observation boardwalk, boat launch, fire pits, picnic tables, restrooms with showers, and a ranger's office with a multi-purpose room.
- d. **Golden Sands Beach Park.** This 15.42 acre site is located along the Atlantic Ocean at 10350 North A1A. Amenities include beach access with lifeguards, a playground, picnic pavilions, restrooms with showers, and paved parking.
- e. **Kiwanis Hobart Park.** This site is located southeast of the City at 5790 77th Street. Amenities include 2 baseball fields, basketball court, playground, 2 large pavilions, covered picnic tables, horseshoe pits, and restrooms.
- f. **North County Regional Park.** This site is adjacent to the west side of the City at 9450 CR 512 within the St. Sebastian Buffer Preserve State Park. Amenities include a swimming pool, waterpark, 4 baseball fields, 4 soccer fields, playground, and restrooms.
- g. **Roseland Ballfield (Helen Hanson Park).** This 1.93 acre site is north of the City limits at 8020 129th Court. Amenities include a baseball field, playground, halfcourt basketball court, and restrooms.
- h. **Roseland Community Center and Park.** This 0.72 acre site is located along the Sebastian River north of the City limits at 12925 83rd Avenue. Amenities include a community building, river access boardwalk, pavilion, playground, and BBQ grill.
- i. **Seagrape Trail Beach Access.** This 0.76 acre site is located along the Atlantic Ocean on the east side of North A1A and north of Marbrisa Drive. Amenities include boardwalk beach access and paved parking.



- j. **Treasure Shores Beach Park.** This 20.8 acre site is located along the Atlantic Ocean at 11300 North A1A. Amenities include beach access, a playground, walking trails, restrooms with showers, and parking.
- k. **Turtle Trail beach Access.** This 1.16 acre site is located along the Atlantic Ocean on the east side of North A1A and north of River Club Drive. Amenities include boardwalk beach access and paved parking.
- l. **Wabasso Beach Park.** This 1.32 acre site is located along the Atlantic Ocean at 1820 Wabasso Beach Road. Amenities include beach access with lifeguards, restrooms with showers, and paved parking.
- m. **Wabasso Causeway Park.** This 0.46 acre site is located on the Indian River Lagoon southeast of the City limits at 3105 Wabasso Bridge Road. Amenities include a boat launch, canoe launch, picnic tables, pavilions, restrooms, and paved parking.
- n. **West Wabasso Park.** This 10 acre site is adjacent to the south side of the City at 8900 64th Avenue. Amenities include 1 baseball field, 2 basketball courts, a tennis court, playground, 2 pavilions, and restrooms.
- o. **Indian River County Conservation Areas.** The County maintains a number of conservation areas in the northern portion of Indian River County within or adjacent to Sebastian:
- p. **Ansin Riverfront Conservation Area and Canoe Launch.** This 123 acre site northeast of the intersection of CR 512 and CR 510 is partially in an unincorporated pocket along the west side of the City and partially in the City. The site contains a walking trail and mature live oak habitat. Also, at 9800 Canoe Launch Cove, are a canoe launch, 2 pavilions, and parking. The site augments the protection of the St. Sebastian River and provides a pedestrian connection and greenway between CR 512, the Trans-Florida Central Railroad trail grade (Fellsmere Rail Trail), and the 22,000 acre St. Sebastian River Preserve State Park.
- q. **North Sebastian Conservation Area.** This 407 acre site is in the northern portion of the City, with general access from Friendship Park at 1225 Main Street and equestrian access from further west on Main Street. The conservation area contains numerous habitats: xeric oak scrub, sand and pine scrub, sand pine forest, scrubby flatwoods, mesic pine flatwoods, wet flatwoods (osprey nesting area), freshwater marsh, upland hardwood forest, wetland forested mix, shrub, brushland, and freshwater ponds and lakes. The area is a key mitigation tract for the Florida Scrub-Jay Habitat Conservation Plan, and is accessible to the public through over 5 miles of hiking, off-road bicycling, and horseback trails; fishing; a boardwalk; kayak launch; and horse trailer parking and corrals.
- r. **Sebastian Scrub Conservation Area.** This 9.94 acre site is located at 1258 Schumann Drive within the City limits and near the Englar Drive Stormwater Park. It provides oak scrub and scrubby flatwoods habitat for the Florida Scrub-Jay.
- s. **Sebastian Harbor Preserve.** This 163 acre site is located on Englar Drive across the street from the Englar Stormwater Park and (in combination with the abutting Sebastian Scrub Conservation Area) forms part of a large contiguous area of habitat preservation.
- t. **Wabasso Scrub Conservation Area.** This 111 acre site along CR 510 west of 58th Avenue adjacent to the south side of the City primarily consists of sand pine / scrub oak habitat. It is an important component of the Florida Scrub-Jay Habitat Conservation Plan and is also being utilized for gopher tortoise relocations.

In addition, there are other conservation areas maintained by the County in the vicinity of Sebastian that are not listed because they are not open to the public.



8. State Parks

- a. **Pelican Island and Indian River Spoil Islands.** The 4,760 acre Pelican Island wildlife sanctuary is the nation's first designated wildlife sanctuary. Wildlife enthusiasts frequent this area in boats to observe a wide variety of water fowl and marine life. In addition, the various spoil islands within the Intracoastal Waterway offer a number of recreational opportunities, including camping, fishing, swimming, water skiing, and shellfishing. A total of 19 spoil islands are located within the waterway spanning from the Brevard County line to the Wabasso Causeway. These islands range in size from 0.5 to 4 acres and are undeveloped.
- b. **Sebastian Inlet State Park.** This 1,000 acre site spans Indian River and Brevard counties, stretching over 3 miles of the barrier island east of Sebastian. The main entrance is at 9700 South State Road A1A in Melbourne Beach. Amenities include beach access, boat rental, canoe and kayak rental, boat launch, improved campsites, pavilions, picnic areas, a playground, and restrooms. Activities include fishing, hiking, biking, and wildlife watching. A unique feature of the park is the treasure museum commemorating the sunken Spanish treasure off shore.
- c. **St. Sebastian River Preserve State Park.** This 22,000 acre site is located in both Indian River and Brevard counties and is adjacent to the City across the Sebastian River. The main entrance is at 1000 Buffer Preserve Drive in Fellsmere. The park protects a longleaf pine forest and native plants and animals. Amenities include horseback and hiking trails, primitive campsites, and picnic areas. Activities include canoeing, boating, fishing, and wildlife watching.

9. **Private Recreation.** Private recreation areas and facilities provided within Sebastian reduce the need for the City to provide such facilities. A wide assortment of recreation opportunities are made available to the residents of Sebastian through private recreation resources both within and outside the City. Active recreation opportunities include outdoor sports and athletics such as golf, fishing, and boating. Indoor activities include gymnastics, weight training, aerobics, karate, and yoga. Since a significant portion of the City's population has access to these private recreation offerings, the City's obligation to provide land area and facilities is reduced and was taken into consideration in the recreation supply and demand analysis in the next section.

Table 6-3: Neighborhood Parks

ID	Name	Active/ Passive	Size in Acres	Basketball Courts	BBQ Grills	Benches	Bicycle/Walking Trail (paved) miles	Bicycle/walking Trail (unpaved) miles	Equipped Play Area (playground)	Open Play Field	Dock	Pavilion	Picnic Tables (covered)	Picnic Tables (uncovered)	Racquetball courts	Shuffleboard courts	Tennis Courts	Volleyball Courts	Restrooms (male and female)	Trash Receptacles	Dog Waste Pick-up Stations	Bicycle Racks	Parking (regular) (paved)	Parking (regular) (unpaved)	Parking (handicap) (paved)
1	Blossom Street 940 Cody Avenue	Active	2.68			5			1				2							1	1			8	
2	Bryant Court 117 Bryant Court	Active	3.55			2		.07	1	1			2							1				4	
3	Cheltenham Lake, Cheltenham Street & Cownie Lane	Passive	2.51			2														2	1				
4	Easy Street 458 Easy Street	Active	6.94		1	13	.21		1	1			2	2						4	2			4	1
5	Filbert Street 170 Filbert Street	Active	9.08			2			1	1		1	1							2	1			10	
6	Garden Club 1028 Barber Street	Passive	8.32			12	.09					1								1				3	
7	George Street 1270 George Street	Active	2.27			3			1	1				2						2	1			6	
8	Historical Schumann Drive	Passive	2.49							1															
9	Periwinkle 444 Periwinkle Drive	Passive	4.42			3								2						2	1			6	
	Total		42.26		1	42	.30	.07	5	5		2	7	7						15	7			41	1

Inventory as of May 2020



Parks & Recreation

Table 6-4: Community Parks

ID	Name	Active/ Passive	Size in Acres	Baseball /Softball Fields	Basketball Courts	BBQ Grills	Benches	Bicycle/Walking Trail (paved) (miles)	Bicycle/walking Trail (unpaved) miles	Canoe/Kayak Launch	Dock Day Slips	Equipped Play Area (playground)	Fishing Pier	Multi-Purpose Athletic Fields	Open Play Field	Pavilion	Picnic Tables (covered)	Picnic Tables (uncovered)	Racquetball courts	Shuffleboard courts	Swimming Pools	Tennis Courts	Pickleball Courts	Volleyball Courts	Dog Park	Restrooms (male and female)	Trash Receptacles	Dog Waste Pick-up Stations	Bicycle Racks	Parking (regular) (paved)	Parking (regular) (unpaved)	Parking (handicap) (paved)
1	Barber Street Sports Complex 1101 and 1121 Barber Street	Active	22.54	4	2		1					2		3		1	3							1		3	13		1	122	128	18
2	Bark Park 245 Keen Terrace	Active	7.43				8	0.2						1	2	5	2								1	1	5	5		17		2
3	Friendship Park 1225 Main Street	Active	18.14	1	1		8	.35	0.2			1		1	1	7			4		4		1		1	5			34		4	
4	Hardee Park 530 Barber Street	Active	19.72				10		0.6			1		1			2								1	3	2		13		1	
5	Riverview (includes Twin Piers) 600 US Highway 1	Active	12.21				11	.27		1	26	2	3	1	3	11	1							2		1	16	6		67	130	9
6	Schumann Drive 1096 Schumann Drive	Active	4.08		2		9					1		1	2	4	1					6	2		1	3			38		2	
8	Pickleball Complex 160 Airport Drive East	Active	1.3				4								1	2							8		1	2		1	22		1	
	Total		85.42	5	5		51	.82	0.8	1	26	7	3	4	4	10	35	6	4		10	10	4	1	9	47	13	2	313	258	37	

Inventory as of May 2020



Parks & Recreation

Table 6-5: Special Facilities

ID	Name	Active/ Passive	Size in Acres	BBQ Grills	Benches	Bicycle/Walking Trail (paved) (miles)	Bicycle/Walking Trail (unpaved) (miles)	Boat Ramp	Commercial Boat Slips	Community Building	Dock	Equipped Play Area (playground)	Fishing Pier	Golf Course (18 holes)	Walking Trail (paved) miles	Historical Marker	Picnic Tables (covered)	Picnic Tables (uncovered)	Skateboard Ramps	Splash Pad	Restroom (male and female)	Trash Receptacles	Dog Waste Pick-up Stations	Bicycle Racks	Bicycle Repair Station	Parking (regular) (paved)	Parking (regular) (unpaved)	Parking (handicap) (paved)	Parking (boat trailer) (unpaved)	Parking (boat trailer) (handicap) (paved)
1	Airport Observation 100 East Airport Drive	Passive	0.15													1										38		2		
2	Riverfront Walkway	Active	1.6 mi.		20	1.6								1.6	2	4						4		1	1					
3	Community Center 1805 Central Avenue	Active	1.07		2					1		1						1						1		36		2		
4	Fisherman's Landing Working Waterfront 1540 N. Indian River Drive	Active	2.19		4				11		1		1								1	1					60	3	10	
5	North County Greenway	Active	--			3.1																								
6	Golf Course 100 Brush Foot Drive	Active	154											1							3	?				116	18	6		
7	Main Street Boat Ramp 1302 US Highway 1	Active	3.19		5			1			2		1				2				1	7	1			33		3	27	1
8	Sebastian Yacht Club 820 Indian River Drive	Active	0.72		4			1		1	2		1				3				1	5				14		7	38	2
9	Sebastian Historical Museum at Friendship Park	Passive	Note 2							1											1					178		9		
10	Senior & Art Center at Friendship Park	Passive	Note 2							2											1									
11	Skate Park at Barber Street Park	Active	Note 2		2														3		1	1				1		2		
12	Splash Pad at Riverview Park	Active	Note 2		7												5			1	1	3				26		2		
13	Veterans Memorial at Riverview Park	Active	Note 2		5											1														
	Total		161.47		49	4.7		2	11	5	5	1	3	1	1.6	4	15	1	3	1	10	21	1	2	1	442	78	36	75	3

1. **Inventory as of May 11, 2020**
2. **Acres included with host park**
3. **Trailer Parking for Sebastian Yacht Club is at Riverview Park**
4. **Senior & Art Center, Sebastian Historical Museum, and City Hall shared parking**
5. **Fisherman's Landing Working Waterfront includes fish market, fish cleaning and weighing area, and public observation benches**



Table 6-6: Nature Reserve Areas

ID	Name	Active/ Passive	Size in Acres	BBQ	Benches	Boat Ramp	Canoe/Kayak Launch	Dock	Hiking Trail (miles)	Open Play Field	Picnic Tables (uncovered)	Trash Receptacles	Dog Waste Pick-up Station	Bicycle Rack	Parking (regular) (paved)	Parking (regular) (unpaved)	Parking (handicap) (paved)
1	Englar Stormwater Englar Drive	Passive	178.9		10				4.7			2	2			14	
2	Kildare Kildare Drive & Bailey Drive	Passive	37.2			1		1	1.0	1		1				10	
3	Stonecrop Sunport Road	Passive	28.14				1		0			1					
	Total		244.24		10	1	1	1	5.7	1		4	2			24	

Inventory as of May 2020



Table 6-7: Unimproved Future Park or Nature Reserve Sites

ID	Name	Location	Parcel Number	Size In Acres
10	100 Main Street	Main Street	31380100002000800000.0	1.03
2	Adams Street	Adams Street/Acorn Terrace/Barber Street	31382500001000100001.0	3.81
3	Carnival Terrace	Carnival Terrace/Caravan Terrace/Periwinkle Drive	31382500001282000000.1, and .2	2.05
5	Concha Drive	Concha Drive/Horizon Terrace/Ocean Cove Street	31382500001347000000.1	2.93
6	Empress Avenue	Empress Avenue	31391900001001700001.0	1.72
7	Kildare Drive	113 Kildare Drive/High Drive	31391800003001600001.0	1.6
8	Manly Avenue	Manly Avenue/Donna Lane	31391800001000100002.0	0.68
9	Melrose Lane	Melrose Lane/Crown Street/Celtic Ave.	31381300002193000000.0	1.9
10	Newhall Terrace	Newhall Terrace/Rosebush Terrace	31382400001267000000.1	2.24
11	Tracy Drive	Northwest of Keystone Drive & Bristol Street at 134, 136, 138, 140, 142 & 144 Tracy Street	31391900001000900001.0 and 31391900001570000009.0, 10.0, 11.0, 12.0, 13.0 and 14.0	35.33
12	Tuxedo Terrace	Tuxedo Terrace/Surrey Terrace	31382400001211000000.1	2.49
13	US 1 Green Area	1401 US Highway 1	31390600003002000001.0	0.06
14	Wimbrow Drive	Wimbrow Drive	31390700001000000000.3	4.62
			TOTAL	60.46

Inventory as of October 6, 2017

RECREATION ANALYSIS

A. Summary of Inventory

The recreation and open space inventory indicates that the City of Sebastian contains 584.3 acres dedicated for public recreation, which includes 126.38 acres of developed park land, 244.24 acres of nature preserve, 52.36 acres of unimproved future park sites, and 161.32 acres for the public golf course and other special facilities. Based on the April 1, 2017 estimated resident population of 24,192 for Sebastian, this total parks acreage represents 24.15 acres per 1,000 residents. The population estimate is provided by the Bureau of Economic and Business Research (BEBR) at the University of Florida, which is the official population estimate recognized by the State.

B. Demand Methodology

Current and future demands for recreation space were determined by applying recreational space standards to population estimates and projections for the City of Sebastian. Standards for developed park area acreage and service area are established by policy as a Level of Service standard and are shown in **Table 6-8**. Standards for types of amenities were determined by utilizing the existing statewide provided average Level of Service provided by the Florida Department of Environmental Protection in their publication Outdoor Recreation in Florida – 2013 (the Statewide Comprehensive Recreation Plan). Also utilized was an average of the Regional, Population, and Jurisdiction Type benchmarks from the 2017 NRPA (National Recreation and Parks Association) Agency Performance Review as well as standards established by Indian River County.

C. Current Recreation Demand

1. **Acreage Demand.** For each park classification, a minimum amount of area is required to satisfy space requirements needed to support those facilities that are demanded by residents living within that service area.

Table 6-8: Recreation Standards for Size and Location

Classification	Location	Acres/1,000 Residents	Size	Service Area	Existing LOS	Surplus/(Deficit)
Neighborhood	Neighborhood area	2.0	1.0 to 5.0 acres	0.5 mile radius	3.04 ac.	1.04 ac./1,000
Community	Group of neighborhoods	2.0	5.0 to 25.0 acres	0.5 mile to 3 mile radius	2.19 ac.	0.19 ac./1,000

Notes: Based on Policy 6-1.1.1; Existing LOS as of October 6, 2017 based on April 1, 2017 population of 24,192 per BEBR and inventory Tables 6-3 and 6-4.

Park acreage standards were compared to Sebastian’s April 1, 2017 population to estimate current demand for park area. **Table 6-8** identifies existing demand for the Neighborhood and Community park classifications and demonstrates that the City has no existing deficiencies.

Facility Demand. Recreational facility demands shown in **Table 6-9** represent the minimum level of service to be provided within the City to meet the resident population’s basic facility needs. Other facilities not included in the minimum facilities list may be provided at the City’s discretion and facilities may be provided before the population threshold is reached (the existing golf course for example) if the City determines it is in the best interest of the residents to do so.



Table 6-9: Recreation Standards for Facilities

Facility	Standard	Demand	Existing	Surplus/ (Deficit)
Baseball/Softball Fields	1 field per 6,000 residents	4	5	1
Basketball Courts	1 court per 5,000 residents	4	4	
Boat Ramps	1 ramp per 12,500 residents	1	3	2
Equipped Play Areas (playground)	1 area per 10,000 residents	3	13	10
Football Fields	1 field per 20,000 residents	1	2	1
Golf Course	18 holes per 50,000 residents	–	1	1
Recreation Center & Gym	1 center per 25,000 residents	–	0	
Soccer Fields	1 field per 10,000 residents	2	1	(1)
Swimming Pools	1 pool per 25,000 residents	–	0	
Tennis Courts	1 court per 5,000 residents	4	10	6
Volleyball Courts	1 court per 8,500 residents	2	3	1
Bicycle Trail (paved)	1 mile per 31,250 residents	–	0	
Bicycle Trail (unpaved)	1 mile per 10,750 residents	2.3 miles	0	(2.3)
Hiking Trail	1 mile per 6,000 residents	4.0 miles	unknown	unknown
Pickleball	1 court per 5,000 residents			

Notes: Demand based on April 1, 2017 population of 24,192 per BEBR; Existing as of October 6, 2017.

Recreation facility standards were compared to Sebastian’s April 1, 2016 population to estimate current demand for recreational facilities. **Table 6-9** identifies existing demand for those facilities included in the list and shows that the City has existing deficiencies for soccer fields (1 field). Strong consideration should be given to how to address these deficiencies and /or whether other County facilities open to the general public meet the need.

Regarding unpaved bicycle trails and hiking trails, the City’s unpaved trails have all been categorized as hiking trails though they can also be used by suitable off-road bicycles.



D. Future Recreation Demand

Tables 6-11 and 6-12 identify future park land and amenity demands based on the rates established above and the City’s projected population in five and ten years as shown in Table 6-10.

Table 6-10: Projected Population

	April 1, 2017	2020	2021	2025	2026	2030
Indian River County	148,962	156,600	158,960	168,400	170,380	178,300
City of Sebastian	24,192	25,381	25,762	27,285	27,607	28,895

Notes: Current (April 1, 2017) population per BEBR; Indian River County projected population figures for 2020, 2025, and 2030 are BEBR “medium,” other years are extrapolated; City of Sebastian projected population figures are based on utilizing the same growth percentage as Indian River County projections by BEBR.

1. Future Park Area Demand. The demand for park land in the future is based upon two factors: the future population and the adopted Level of Service. Through **Policy 6-1.1.1**, the City has adopted a Level of Service of 2 acres per 1,000 population for neighborhood parks and 2 acres per 1,000 population for community parks. The demand is determined by dividing the future population by 1,000 and then multiplying it by 2 acres for each classification. Beginning in 2023, the City will begin to experience a deficit in the Community Park classification while still exhibiting a surplus on an overall basis.

Table 6-11: Projected Park Acreage Demand

Year	Classification	Population	Adopted LOS (Acres/1,000 Population)	Demand Acres	Existing Acres	Surplus/ (Deficit)
2017	Neighborhood	24,192	2.0	48.38	73.49	25.11
	Community		<u>2.0</u>	<u>48.38</u>	<u>52.89</u>	<u>4.51</u>
	Total		4.0	96.76	126.38	29.62
2021	Neighborhood	25,762	2.0	51.52	73.49	21.97
	Community		<u>2.0</u>	<u>51.52</u>	<u>52.89</u>	<u>1.37</u>
	Total		4.0	103.04	126.38	23.34
2026	Neighborhood	27,607	2.0	55.21	73.49	18.28
	Community		<u>2.0</u>	<u>55.21</u>	<u>52.89</u>	<u>(2.32)</u>
	Total		4.0	110.42	126.38	15.96

Notes: Adopted Level of Service based on Policy 6-1.1.1. Existing acres based on inventory in Tables 6-3 and 6-4 as of October 6, 2017.

2. Future Park Facility Demand. The demand for park facilities in the future is based upon the same two factors as the future land demand: the future population and the adopted Level of Service. Through **Policy 6-1.1.1**, the City has adopted the Level of Service rates shown below in **Table 6-12**. The demand is determined by dividing the future population by the various rates, with a result less than 1 meaning that no such facility is yet required and all other results being rounded down to the nearest whole number.



Currently, the City is deficient in the provision of soccer field facilities and this is projected to worsen with the addition of basketball courts, recreation center/gym, and swimming pool facilities to the deficiency list during the 10-year planning period.

Table 6-12: Projected Park Facility Demand

Facility	Adopted LOS Residents/Facility	Demand			Existing	Surplus/(Deficit)		
		2017 (24,192)	2021 (25,762)	2026 (27,607)		2017	2021	2026
Baseball/Softball Fields	6,000	4	4	5	5	1	1	0
Basketball Courts	5,000	4	5	5	4	0	(1)	(1)
Boat Ramps	12,500	1	2	2	3	2	1	1
Equipped Play Areas (Playground)	10,000	3	3	3	13	10	10	10
Football Fields	20,000	1	1	1	2	1	1	1
Golf Course (18 holes)	50,000	-	-	-	1	1	1	1
Recreation Center & Gym	25,000	-	1	1	0	0	(1)	(1)
Soccer Fields	10,000	2	2	2	1	(1)	(1)	(1)
Swimming Pools	25,000	-	1	1	0	0	(1)	(1)
Tennis Courts	5,000	4	5	5	10	6	5	5
Volleyball Courts	8,500	2	3	3	3	1	0	0
Bicycle Trail (paved) (mile)	31,250	-	-	-	0	0	?	?
Bicycle Trail (unpaved) (mile)	10,750	2.3 miles	2.3 miles	2.5 miles	0	(2.3)	(2.3)	(2.5)
Hiking Trail (mile)	6,000	4.0 miles	4.2 miles	4.6 miles	unknown	unknown	unknown	unknown

Notes: Adopted Level of Service based on Policy 6-1.1.1; Existing facilities based on inventory in Tables 6-3 and 6-4 as of October 6, 2017.

E. Extrajurisdictional Recreation Demand

Parks provided by the City of Sebastian can be used by City residents as well as by residents of other municipalities and unincorporated Indian River County. In a similar manner, parks and open space provided by Indian River County can be used by City residents. Other municipalities are not anticipated to be a significant factor because those near Sebastian are smaller in population and not particularly close geographically. In considering the effects of population growth in unincorporated Indian River County on the City’s parks, it is noteworthy that the population of the City and the County as a whole are growing at the same rate. In addition, both the City and the County have established the same Level of Service of 2.0 acres per 1,000 population for neighborhood parks and 2.0 acres per 1,000 population for community parks. The County has an overall Level of Service for parks of 6.61 acres per 1,000 population, which is greater than the City’s overall standard of 4.0 acres per 1,000 population. The County’s Level of Service for various park amenities approximates the City’s, with most standards the same or more stringent than the City’s. Therefore, the impacts of population growth in the County are not anticipated to be disproportionate or a significant detriment to the City’s park system.



RECREATION PLAN

This section describes several alternative ways to provide recreation space and facilities to meet the current and future demands identified above and how to meet the desires of Sebastian's population in the future.

A. Park Area Supply

The future supply of park land is based upon the existing improved park acreage and the current supply of unimproved park land. The deficit identified in **Table 6-11** above could be addressed by reclassifying an existing Neighborhood Park (with appropriate changes to the amenities) into a Community Park. This would need to be coupled with ensuring that the Neighborhood Park category is also kept in compliance with the Level of Service standard. There may also be operational or programmatic needs (field space, parking, etc.) that may trigger the need to expand one or more of the existing Community parks which would also address the projected deficit. In addition, as shown in **Table 6-7**, there are 52.36 acres of unimproved vacant park land distributed across 7 sites in the City that could be used to meet the deficit if appropriately sized and located. The unimproved park land could also be used as nature reserves, open space, or for as-yet undetermined needs and should be retained.

Most neighborhoods are within close proximity to parks within Sebastian. Access for all ages is improved when residents can reach recreation opportunities by walking or biking rather than driving, therefore good geographic distribution of parks is an important consideration for future supply. To maintain this important relationship between residents and recreation, parks may need to be added to serve locational needs that are in excess of the numerical demand calculated above.

Critical to ensuring that the park acreage Level of Service is met is ensuring that the recreation demand created by new development is fully met through the use of the recreation land dedication and fee-in-lieu provisions in the LDC. The dedication requirement should be set the same as the established Level of Service so that new development does not exacerbate any existing or pending shortfalls. Appropriate use of the fee-in-lieu provisions will ensure that impacts are addressed in the most efficient and fairest manner to serve the whole community since a series of small land dedications would be less beneficial than consolidated park sites of appropriate size that could be adequately designed and provided with useful amenities.

B. Park Facility Supply

The future supply of park facilities is based upon the existing improved park sites and the City's ability to add amenities to existing park sites and/or develop new park sites with new amenities. The deficits identified in **Table 6-12** above could be addressed through either of those means by utilizing existing City recreation impact fee funds and fee-in-lieu funds from new residential development. There may also be as-yet unidentified facilities that the community may desire or current recreation activities that fall out of favor and whose facilities can be converted to other uses. The best matching of resident desires and facilities provided is an ongoing process, and the City's Parks and Recreation Advisory Committee and City staff can play a useful role in this effort.

C. Quality

The service that recreational facilities provide should be measured not only by the quantity available but also by the quality of the facility as well. Facilities that are in disrepair should be repaired as soon as possible since they discourage participation and reduce the level of service provided by the City. Deteriorated facilities also promote unwanted activities by sending a message that the area is not monitored. Recreational facilities that



are underdeveloped also limit use by the community. Amenities which provide for a more fulfilling and enjoyable park visit (restrooms, picnic tables, lights, etc.) should be provided to the extent desired by the community even though there is no established numerical standard.

D. Open Space

The City has a robust inventory of open spaces and natural areas, which provide a remarkable balance and boundary to the suburban development of the City. These natural areas should be celebrated and preserved, including enhancing public use to reinforce public appreciation and support.

E. Special Groups

The provision of recreational facilities should consider the needs of special groups such as the elderly, individuals with disabilities or special needs, and children. These groups require special planning in the provision and design of parks and recreation facilities.

1. Individuals with Disabilities. Parks and recreational facilities should be designed to accommodate the needs of those residents with disabilities and/or special needs. Parking facilities at parks should include ADA compliant parking spaces and active recreation facilities such as football and baseball fields should contain accessible routes utilizing ramps as necessary to enable passive participation or spectating at events. In addition, accessible routes should be provided to all types of amenities within a park to the extent feasible. Special consideration should be given to improving access, including restroom design, whenever work is done to renovate or expand a park since this benefits all users of the park.

2. Seniors. The recreational interests of seniors may vary from those of more active age groups. Ensuring an adequate mix of active and passive recreation opportunities is an important way to satisfy the needs of all age groups in the City.

3. Children. Young children lack the size and strength to actively participate in certain recreational activities, but can do so where special facilities are provided. For example, shallow wading pools located immediately adjacent to swimming pools allow them to safely enjoy water activities. Playgrounds should also include equipment designed for various youth age groups when space allows, and accessibility should be provided and improved whenever possible.

F. School Sites

The use of school recreation sites for public recreation represents an efficient use of these facilities and, ultimately, efficient use of public tax expenditures. After the school day and any school-sponsored afterschool activities, and when school is not in session, these facilities are left unused when not made available to the public. The creation and maintenance of a joint-use agreement between the City and the Indian River County School Board would be a means to enhance recreation opportunities and meet the demands identified in **Tables 6-11** and **6-12** above.

G. Coordination with Indian River County

A portion of the park and open space area within and surrounding the City is owned and maintained by Indian River County. Therefore, the City should coordinate future recreation plans with the County, especially specialized facilities or those that serve a larger than neighborhood scale population.

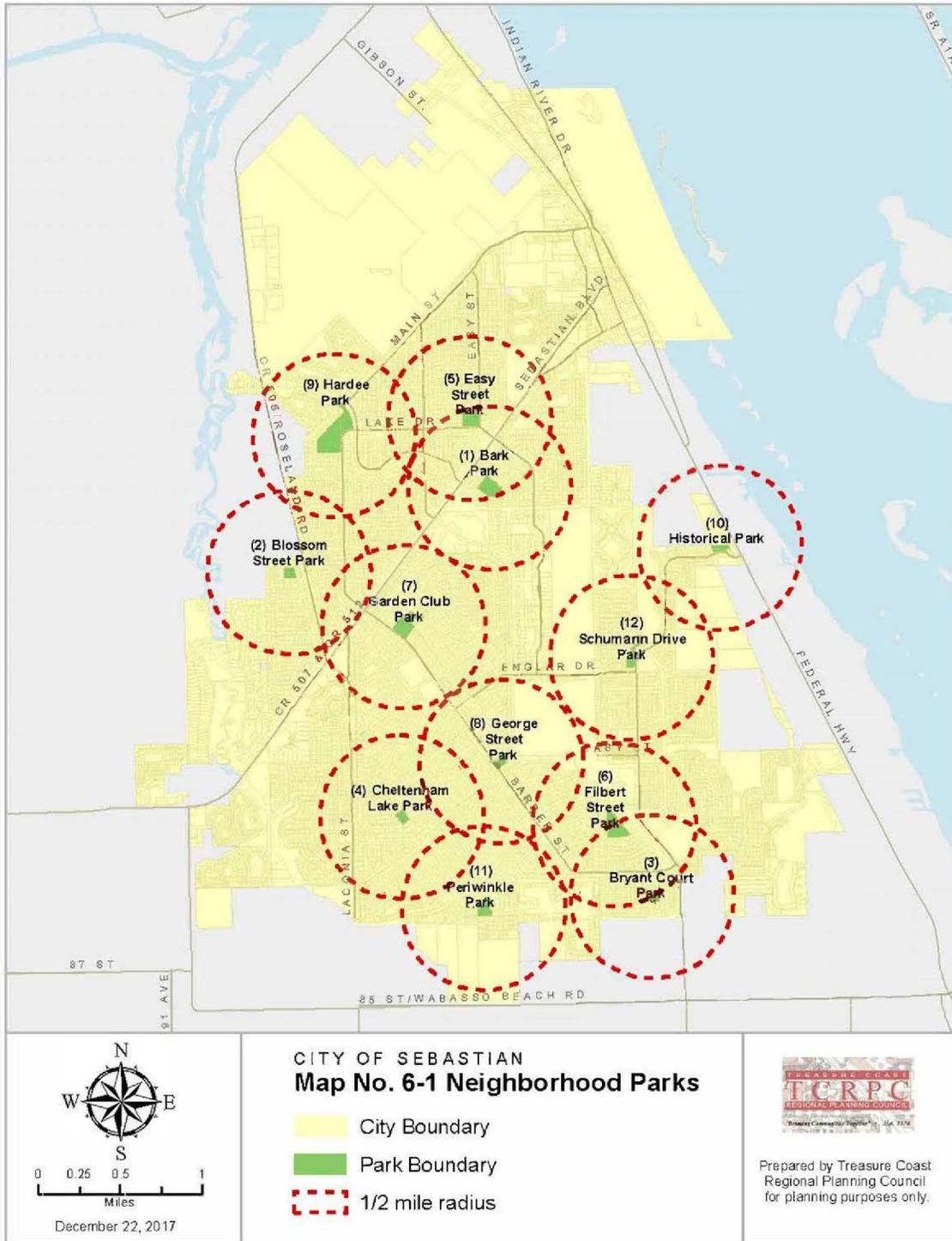


H. Private Recreation

Some existing developments provide private on-site recreation for their residents. While this does help to reduce the demand on public parks, it is important to recognize that the amenities are not always comparable and the provision of recreation in the public realm where all residents can come together is key to a sense of community identity and pride. The private on-site recreation provided in residential developments is also not typically of the same scale as public recreation (private neighborhood playgrounds vs. large community public ballfields for example). Accordingly, new developments which provide their own on-site recreation may be granted partial but not total credit towards the recreation land dedication requirements through careful application of the LDC.

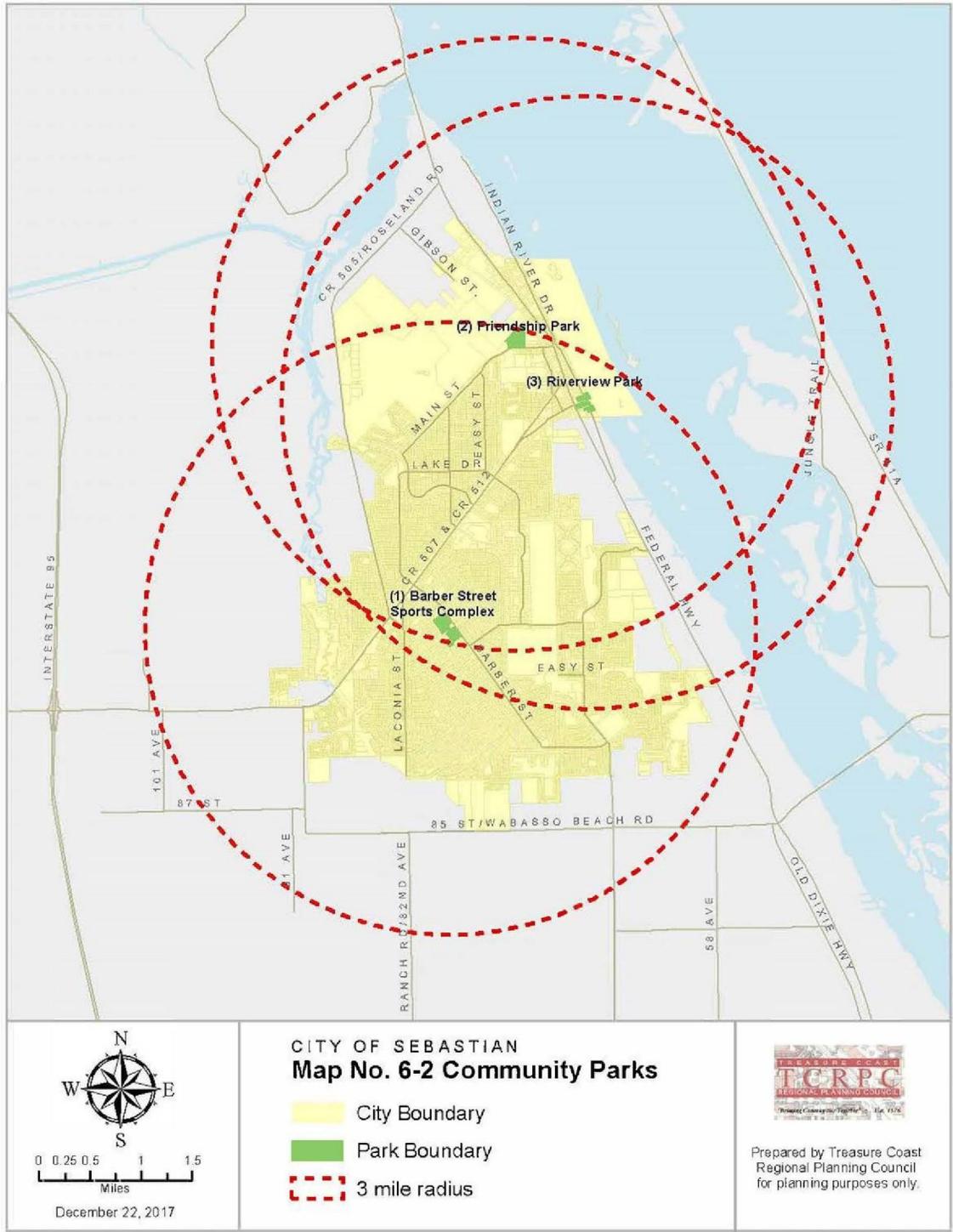


Map 6-1: Neighborhood Parks



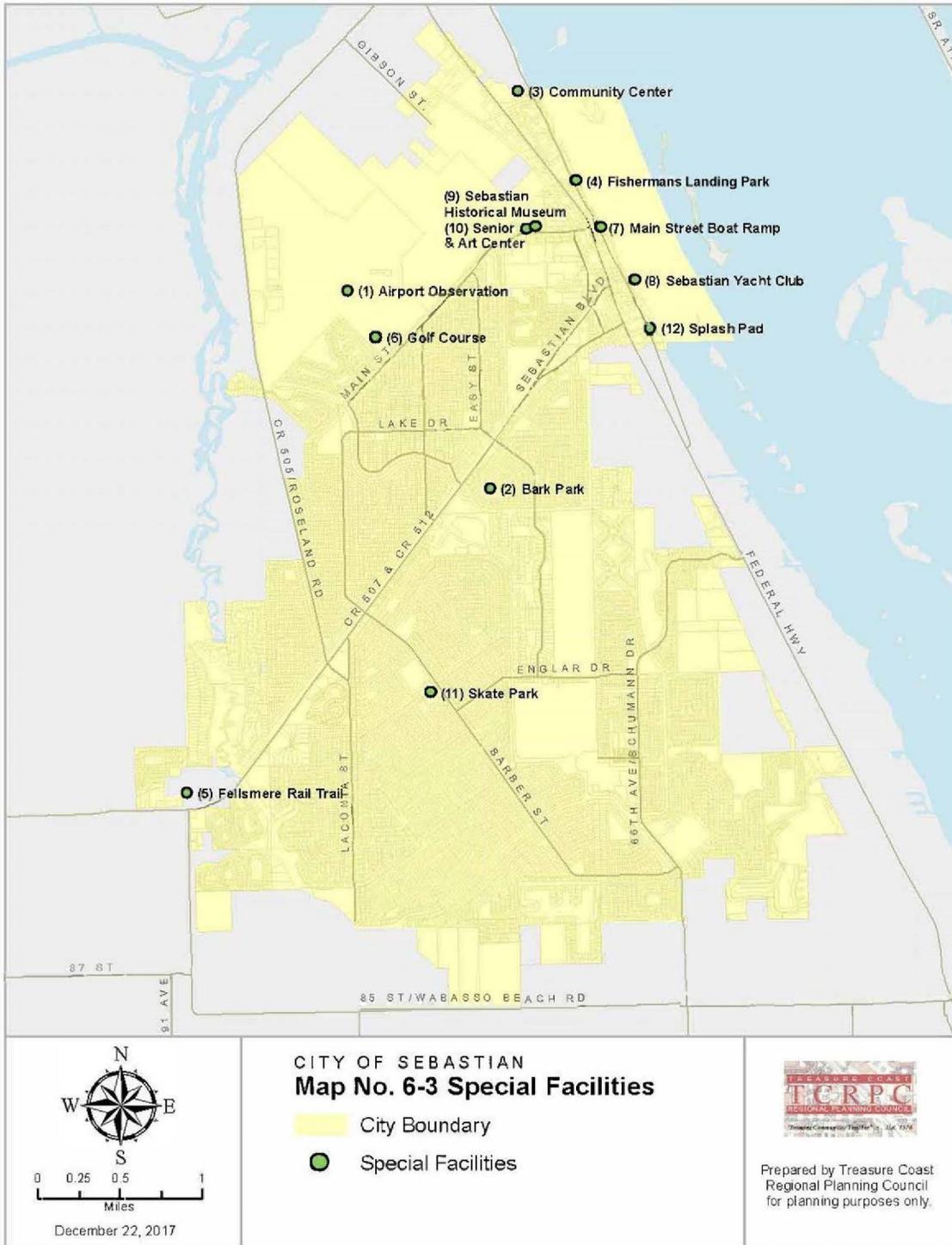


Map 6-2: Community Parks



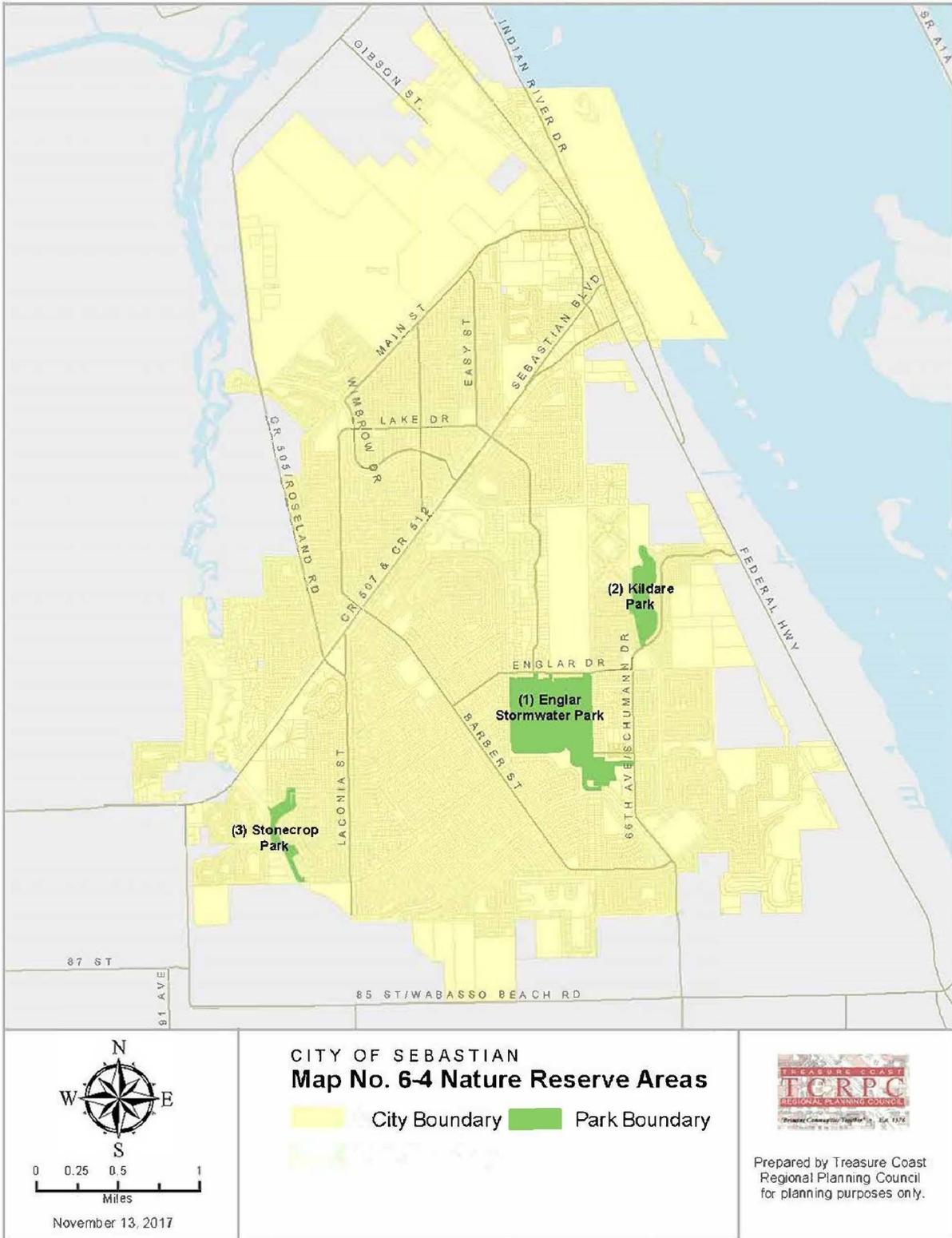


Map 6-3: Special Facilities



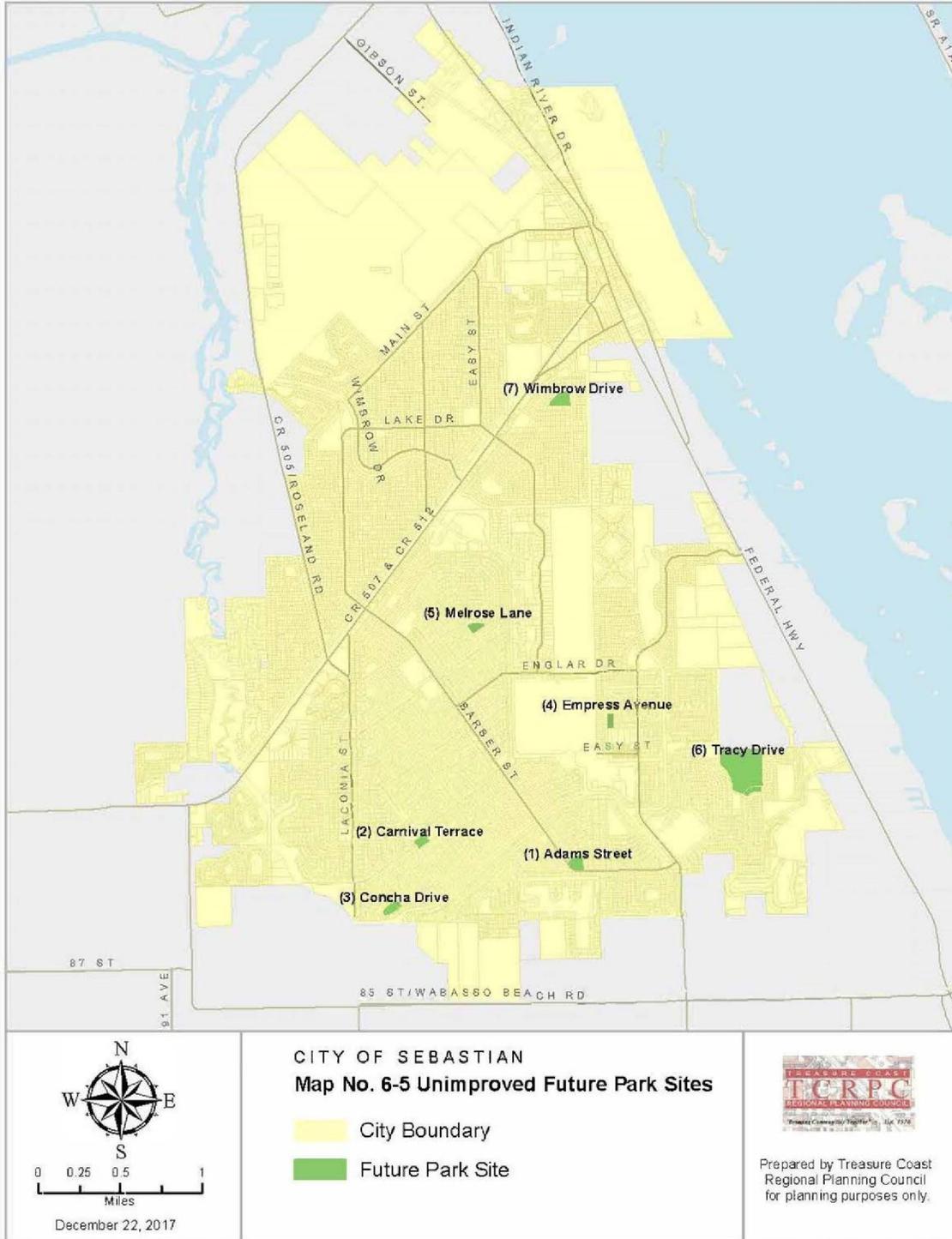


Map 6-4: Nature Reserve Areas





Map 6-5: Unimproved Future Park Sites





Map 6-6: School Locations

