

**RFQ 21-06
EXHIBIT B**

EXHIBIT F

DEP AGREEMENT NO. R2115

Vulnerability Assessment

City of St. Augustine Beach

Final Project Report



This report funded in part, through a grant agreement from the Florida Department of Environmental Protection. The views, statements, findings, conclusions and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida or any of its subagencies.

April 2021

Exhibit F, DEP Agreement #: R2115
1 of 6

Final Project Report

Vulnerability Assessment

Executive Summary

Sea levels have risen measurably over the past century, estimated at 8 to 10 inches. The question is how this rate of sea level rise will change in the future and how will it affect the City of St. Augustine Beach?

To help answer these questions, the city embarked on an assessment to evaluate the vulnerability of the city with respect to nuisance flooding and storm induced flooding from sea level rise in the near future timeframe. This report details the methodology utilized to develop the approach to vulnerability from sea level rise, identifying six (6) geographic areas and associated infrastructure vulnerable to adverse sea level rise and identifying vulnerability of critical essential City and County government facilities and infrastructure.

The results of this effort are a series of maps that may mimic future versions of the FEMA Flood Insurance Rate Maps utilized for planning and building requirements today. The analysis reveals several infrastructure actions taken over the last 30 to 40 years that have built a level of protection for much of the city against short-term sea-level rise, while warning that there may be significant future impacts from sea level rise in the not-so-distant future.

This report forms the basis for the next step in planning for the impacts of sea level rise through development of a near-term Resiliency Capital Improvement Plan estimated roughly at \$3.63 million and a longer-term Resiliency and Protection Adaptation plan. The adaptation plan will consider policies, planning measures, future projects, etc. to help adapt to and mitigate for impacts to vulnerable areas of the City.

This project was made possible by a Resiliency Planning Grant provided by the Florida Department of Environmental Protection's Resilient Coastlines.

Methodology

The Vulnerability Assessment includes analysis of City vulnerabilities to sea level rise, extreme tides, and storm surge, and proposes resiliency measures to mitigate the effects. Its intent is to develop strategies which will support resiliency planning efforts and guide future capital improvement plan development for the City of St. Augustine Beach. The development of the Vulnerability Assessment included coordination with the Northeast Florida Regional Council (NEFRC) and engaged with the citizenry in considering the need to invest in a sustainable future mitigation against sea level rise.

The development of the Vulnerability Assessment consisted of the following three primary tasks:

1. Updating City GIS system with Drainage and Topographic Mapping to determine areas vulnerable to sea level rise and storm surge, including:
 - a. Analyze the City's coastal dune system for vulnerabilities to storm surge
 - b. Update and analyze public and private drainage conveyances to determine vulnerability to backflow from the Matanzas River and Salt Run

- c. Mapping of all low-lying lands which may provide overland conveyance of storm surge into the City of St. Augustine Beach
2. Updating the City Master stormwater model to include new data within the stormwater masterplan area, including:
 - a. Running the updated model for high tide conditions for the current sea level and two sea level rise scenarios with current 25-year and 100-year rainfall events.
 - b. Develop GIS maps showing inundation associated with various model runs. This process would develop a comprehensive set of maps and an interactive GIS data base to allow for the results to be displayed dynamically at public workshops and public hearings. This task included a public workshop which presented the Assessment's findings and included a presentation from the NEFRC's regarding their Regional Resilience Exposure Tool.
 3. Synthesize the results from the first two tasks with the results of the analysis of the sea level rise scenarios evaluated based on implementation feasibility, effective sustainability, and cost. The final prioritized assessment is to be used in development of future resiliency capital improvement programs and will be reviewed and acted upon by the City Commission and presented at a public meeting.

Outcome

Task 1 of the Vulnerability Assessment successfully collected information which was input into the City's GIS mapping. Work for Task 1 was accomplished as follows:

1. The Consultant gathered and used available County Lidar data, County property data, the existing City Stormwater master plan, recent design improvement projects and field reconnaissance to identify areas within the City of St. Augustine Beach most vulnerable to sea level rise, extreme tides and storm surge.
2. The Consultant updated the City's GIS database system by developing and incorporating existing/most recent survey, lidar, and other topographical information. The Consultant conducted field reconnaissance to confirm conflicting available data to further identify and represent within the GIS system a pathway in which storm surge and coastal flooding could inundate the City.
3. The Consultant created a graphic representation of the identified areas within the City vulnerable to flooding due to their elevation and connection to receiving waters. These maps were of sufficient resolution to identify specific parcels subject to flooding.

Task 2 of the Vulnerability Assessment updated the City's Master ICPR Stormwater Model with new input and conducted a public workshop with the results of the first 2 tasks of the assessment, as well as a presentation from the NEFRC regarding their Regional Resilience Exposure Tool. Specific accomplishments included:

1. The Consultant incorporated, within the existing boundaries of the City Stormwater Master Plan ICPR stormwater model, new information gathered in Task 1. The updated model was run for existing as well as projected 1-foot and 2-foot sea level rise scenarios in conjunction with current 25 year-24-hour storm events and a 100 year-24-hour storm events. The inundation data associated with the various model runs was compared and coordinated within the relevant GIS data.

This process yielded the capabilities for a comprehensive set of maps and an interactive GIS database.

2. The City and the NEFRC conducted an informational public workshop at the completion of the modeling update to present maps and graphics and to summarize the results through a PowerPoint presentation. Due to Covid-19, the workshop was conducted via Zoom, in addition to providing for in-person attendance at the City of St. Augustine Beach City Hall. Public input was solicited and incorporated into the assessment. Attendance was light due to Covid-19, however the material presented will remain available to the public in the future and will be used for future public meetings and workshops. The updated stormwater model will also continue to prove very useful in the future during development of recommended resiliency and adaptation projects.

Task 3 of the Vulnerability Assessment synthesized the information from the first two tasks and developed a comprehensive report which was adopted and approved by the St. Augustine Beach City Commission at their May 3, 2021 regular meeting. At the meeting, the Public Works Director gave a brief overview of the project as well as the three primary deliverables of the Vulnerability Assessment, including:

1. Updating the City GIS Mapping
2. Updating the City's Master Stormwater Model and incorporating sea level rise scenarios
3. Synthesize the results of the updated maps and models to develop conceptual projects to address the city's vulnerabilities to sea level rise and storm surge.

The Public Works Director then introduced the vulnerability assessment consultant, CMT Engineers, to present the Final Report. The Final Report, consultant presentation and 2nd Public Meeting attendee list and minutes are included in supporting documentation below. In summary the presentation included:

1. Description of the project background
2. Flood prone areas evaluated
3. Stormwater Modeling effort including sea level rise scenarios
4. Identified vulnerable areas to storm surge inundation
5. Findings and recommendations

The final report includes exhibits of critical infrastructure and geographical areas vulnerable to coastal flooding for the various selected storm events. Specific identified vulnerabilities include:

1. Access to the City Public Works Complex and St. Johns County water and sewer facilities may be vulnerable to future flooding associated with sea level rise
2. Fire Station at Pier Park is vulnerable to storm surge inundation associated with sea level rise
3. Existing culverts along S.R. 312 (C.R. A1A) allow passage of storm surge
4. Existing culverts at Pope Road, west of the City, allow passage of storm surge
5. Sea Grove Subdivision culvert allows passage of storm surge
6. Ocean Trace Subdivision outfall allows passage of storm surge
7. Oleander Street pipe allows passage of storm surge
8. The eastern end of Pope Road and Pier Park seawall is insufficient in height to prevent storm surge flooding from Category One Hurricane

The final report also developed order of magnitude cost estimates to address the identified vulnerabilities, totaling \$3.63 million of improvements including design and permitting. The order of magnitude costs for specific vulnerable areas are detailed in the report. The final report recommends that the city develop an adaptation plan and develop protection strategies including the budgeting of capital to address hardening the drainage system against sea level rise.

The City Commission comments at the public meeting are summarized as follows:

1. The mayor asked if intensifying rainfalls are considered in the report. It was discussed that the focus of the study was to identify vulnerabilities to storm surge and sea level rise, thus the modeling focused on the impacts of increased tailwater conditions associated with sea level rise. A planned update to the City's Master Drainage Study will focus specifically on addressing conveyance capabilities within the City's drainage network.
2. The Commission requested that the report be sent to the City's Sustainability & Environmental Planning Advisory Committee (SEPAC). Copies of the report were subsequently forward to all City Boards and Committees.
3. Discussion also centered around pursuing funding opportunities to implement improvements to identified vulnerabilities. The Commission asked that this topic be considered at a future workshop. The Study, as well funding strategies for developing capital projects for identified vulnerable areas, are currently scheduled to be discussed at a June 17, 2021 workshop.

The City Commission then took public comment on the Vulnerability Assessment. Of those in attendance, only one member of the public, Mr. Nicholas Binder, spoke on the topic, Mr. Binder wanted to stress that it was imperative that the City investigate funding opportunities for implementing capital projects to address the identified vulnerabilities. He suggested that American Rescue Plan Act monies may be able to be used for this project and asked that the City pursue this funding source.

After discussion was ended, the City Commission voted unanimously to adopt and approve the Vulnerability Assessment.

The deliverables from the Vulnerability Assessment will prove essential in the future as the City implements resiliency and adaptation strategies. The results of the assessment have already begun to bear fruit as the City has been successful in adding one recommended improvement (S.R. 312 Area Vulnerable Outfalls) to the St. Johns County Local Mitigation Strategy (LMS) Program and has applied for HMGP Hurricane Dorian assistance to help fund the improvements. Implementation of this Study project will prevent storm surge from entering the City from Salt Run to the north.

As discussed above, the City Commission is conducting a workshop in June to discuss funding of future resiliency and stormwater capital projects. Additional projects recommended by the assessment will also be included in the LMS in the future and will be used to develop funding strategies to implement a comprehensive resiliency capital improvement program.

Further Recommendations

The information contained in this report will be used for planning purposes to begin to identify and address City infrastructure at risk. Understanding that a one-foot rise could occur in the next 20 to 30 years, adaptation strategies should be developed for locations identified as vulnerable in the first scenario. In addition to the vulnerability of infrastructure identified to lie at or below projected sea levels up to a two-foot scenario; the City may also be at risk due to secondary threats such as flooding events and ponding, storm drainage, erosion, bridge clearance, etc. Sea level may continue to rise beyond two feet. The City municipal authorities should begin the development of policies to address these risks and institutionalize the consideration of climate issues for adaptation strategies.

Several drainage areas have been identified as vulnerable to sea level induced flood backflow into the city, as well as the identification of an area of the coastal seawall vulnerable to moderate Category one Hurricane storm surge. This assessment developed an order of magnitude project cost estimate for each

vulnerable access point and as an overall Capital Improvement. The Order of Magnitude cost estimate is \$3.63 million and has been provided in a format to allow individual vulnerable areas to be budgeted and implemented for mitigation. The City should develop a plan to further refine the scope and costs of the solutions, identify funding sources and develop a strategy for implementation of resiliency projects for the identified vulnerable areas.

As the next step in the process of addressing the vulnerabilities identified in this assessment, an adaptation plan is recommended and one of the first strategies in the plan is development of “protection strategies” involving the budgeting of capital to address hardening the drainage system against the sea level rise flood possibility.

The adaptation planning process would engage stakeholders to evaluate the sea level rise predictions and consider what actions, if any, should be taken.

The following five strategies - as described by the Florida Department of Economic Development - should be utilized for adaptation planning:

1. Protection - Protection strategies involve "hard" and "soft" structurally defensive measures to mitigate the impacts of current and future flooding, such as seawalls or beach renourishment, in order to maintain existing development.
2. Accommodation - Accommodation strategies do not act as a barrier to inundation but rather alter the design, construction, and use of structures to handle periodic flooding. Examples include elevating structures and stormwater retrofits that improve drainage or use natural areas to soak up or store water and runoff (i.e., green infrastructure).
3. Strategic Relocation - Strategic relocation involves the possible relocation of existing development to safer areas through voluntary or incentivized measures in populated, hazard prone areas that reduce the intensity of development and/or gradually increase setbacks over time. Such options usually involve the transition of vulnerable land from private to public ownership, but may also include other strategies such as transfer of development rights, purchase of development rights, and rolling easements.
4. Avoidance - Avoidance involves anticipatory actions taken to direct new development away from vulnerable lands to safer areas. Examples include land conservation, conservation easements, transfer of development rights, and increased coastal setbacks.
5. Procedural - Procedural strategies aim to generate vulnerability and adaptation information, increase awareness of vulnerabilities and adaptation options, or incorporate such information into plans or policies. Examples include vulnerability assessments, community outreach and education activities, new comprehensive plan language addressing sea level rise, and real estate disclosures.

The conditions surrounding the Vulnerability Assessment have been identified, evaluated and calculated based upon what is known today and supported by governmental agency information. Due to unknown variables, as well as the uncertainty of future environmental conditions, the projections of what will occur over the next 20 to 50 years will undoubtedly not exactly predict future conditions. This has been a key reason for limiting the assessment to only a 50-year look ahead, knowing that the accuracy of any prediction of the future diminishes with time and periodic adjustments in predictions and projections will be inevitable. The Vulnerability Assessment should remain a flexible document subject to periodic update and refinement.

VULNERABILITY ASSESSMENT
FINAL REPORT

Vulnerability Study for the City of St. Augustine Beach

MAY 24, 2021

Prepared by

Crawford Murphy, & Tilly, Inc.



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Executive Summary

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Background

1.1. Sea Level Rise

On average globally, the sea level has risen by about 8 inches since scientific record keeping began in 1880. This rate has increased in recent decades to a little more than an inch per decade. Global average sea level has risen by about 7–8 inches (about 16–21 cm) since 1900, with about 3 of those inches occurring since 1993. In addition to the global average sea level rise, local sea level rise – sometimes called “relative sea level rise” – happens at different rates in different places. Local sea level rise is affected by the global sea level rise, but also by local land motions, and the effects of tides, currents, and winds.

Figure 1-1 shows an increase in global average sea level in inches since 1880. Note that the blue line, tide gauge data, becomes steeper in recent decades. This indicates an increasing rate of change. The surrounding light blue-shaded area shows upper and lower 95% confidence intervals and the orange line shows sea level as measured by satellites for comparison (1993-2016). (U.S. Global Change Research Program, 2017)

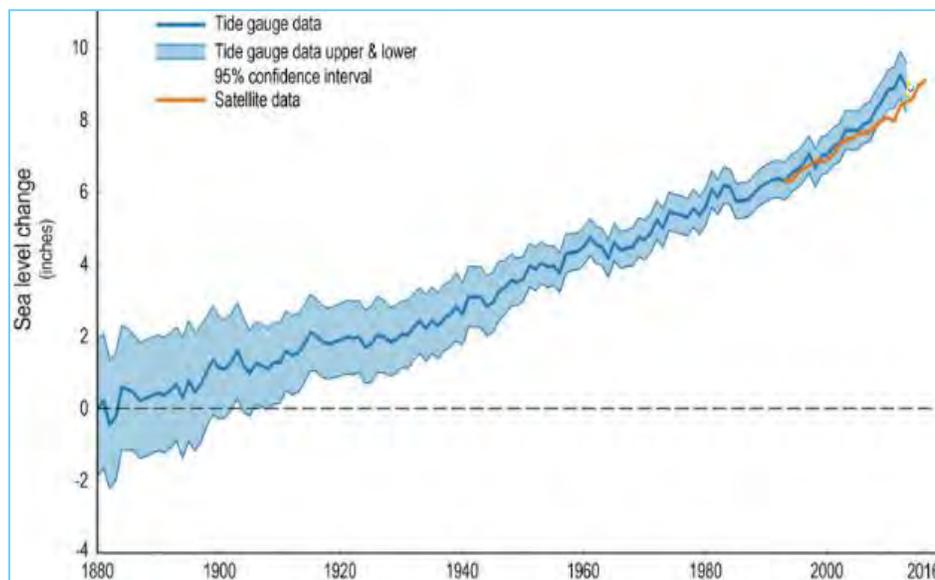


Figure 1-1. Global Average Sea Level Change (US Global Change Research Program)

The closest National Oceanic and Atmospheric Association (NOAA) primary tidal gauge to St. Augustine Beach is located at the Mayport Bar Pilot's Dock (NOAA tide gauge No. 8720218) near the ferry slip. Figure 1-2 depicts the relative change in sea level at the Mayport Bar Pilot's Dock over the 90-year history of this station. The current local rate of sea level change is approximately one inch every decade. (<https://tidesandcurrents.noaa.gov/sltrends/>)

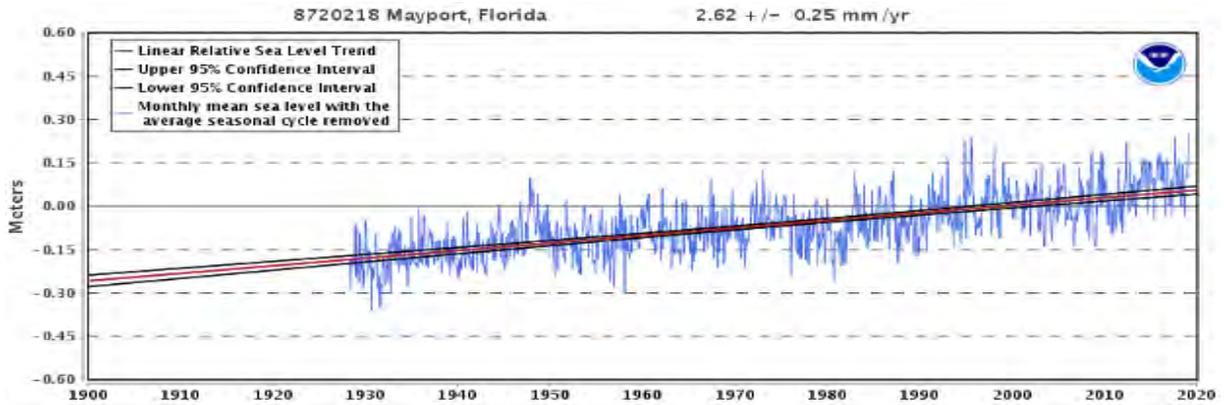


Figure 1-2. Relative Sea Level Rise - Mayport Bar Pilot's Dock (NOAA)

Although there is uncertainty relating to the change in rate of sea level rise, there is no uncertainty that sea level is rising in our area. As sea levels rise, incidents of nuisance flooding will increase and flooding due to severe weather events will affect larger areas of the city. To aid in both planning and assessing the City's potential vulnerability under future scenarios with higher sea levels, the city conducted a rigorous technical analysis to determine just what those effects may be and how they will impact residents and critical infrastructure.

1.2. Projections for Sea Level Rise

A comparison review regarding the several studies that have been published projecting local sea level rise estimates at the Mayport Bar Pilot's Dock NOAA tide gauge No. 8720218 which is the closest gauge to the City of St. Augustine Beach. The results of the various projections of sea level rise are presented graphically in Figure 1-3 and reflect the variation in projections from agency to agency.

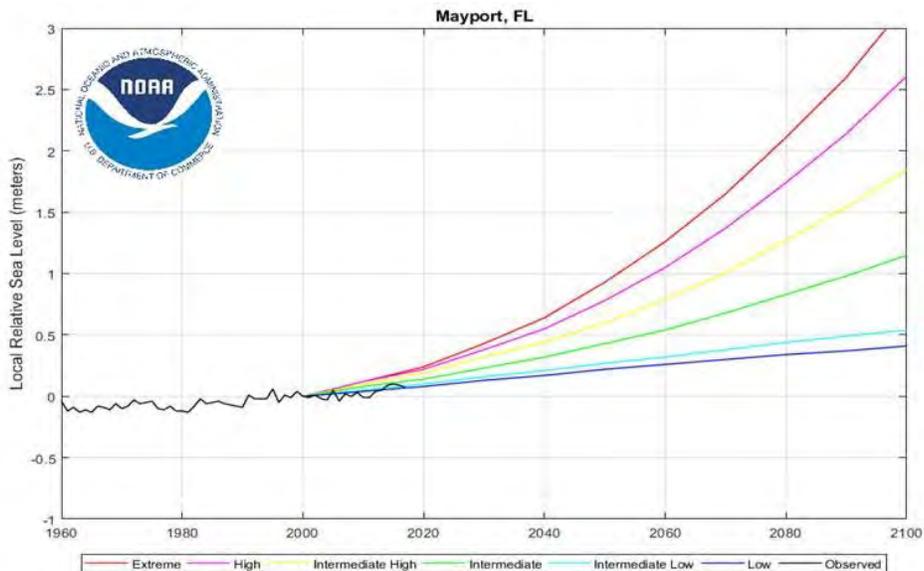


Figure 1-3. Comparison of Projected Sea Level Rise Data Sets

Only two sea level rise numerical increases are used within this study for the vulnerability assessment. Due to the level of uncertainty in the innumerable and varying projections of sea level rise put forth by a litany

of agencies and scientific groups, no date projection has been added to this study. Considering most infrastructure and many buildings only have a life span within approximately 50 years, coupled with the level of uncertainty beyond approximately 50 years, suggests this time frame as a reasonable study time limit.

1.3. City History

The City of St. Augustine Beach occupies the northern portion or section of Anastasia Island, a barrier island located on the coast of the Atlantic Ocean southeast of St. Augustine. The Island runs north–south in a slightly southeastern direction to the Matanzas Inlet. The island is separated from the mainland by the Matanzas River. Part of the northern tip of the island (the Lighthouse Park area) is within St. Augustine city limits, while just south of the Lighthouse area begins the corporate limits of St. Augustine Beach. The City of St. Augustine Beach contains a land area of approx. 2.5 square miles. Lying approximately five miles southeast of the City of St. Augustine, St. Augustine Beach's boundaries are the Atlantic Ocean, the west right-of-way of SR 3-A1A, the north right-of-way of Pope Road, and Sandpiper Village subdivision to the south. SR3-A1A was built north to south from the A1A intersection with SR312 to the return connection with old A1A now called Beach Boulevard on the south end of St. Augustine Beach in the mid 1990's. SR3 A1A effectively rerouted US A1A from the beach area of St. Augustine Beach west along the dune ridge east of the Matanzas River.

The area of the current incorporated City was initially platted as 2 or 3 large subdivisions around the early part of the 20th century. A pier, boardwalk and hotel opened at St. Augustine Beach to attract tourists in 1940. The beach area tied to the pier and beach hotel grew little until in 1959 the area was incorporated into a City. The City grew rather quickly over the following 30 years as a result of property developers/builders and doubled again in developed property in the following 30 years. The 1960 census identified the City population as 396. By 1980, the population had risen to 1,289, and to 3,657 in 1990. The US Census Bureau estimates the 2020 count to be between 6,852 and 7,026.

Due to private development with little governmental oversight, the City's property development in the first 30 years (1960-1990) experienced some level of substandard supportive infrastructure dedicated to the City. However this has been in some instances corrected and in others at least mitigated in the last 30 years of development (1990-2020). Some of the remaining substandard infrastructure shows in the Vulnerability Assessment.

1.4. Stormwater Drainage/Flood Prevention

The original drainage system developed within the area now called St. Augustine Beach consisted of drainage swales and ditches paralleling primarily dirt roads. As development continued over time, the ditches were widened and the roads paved.

In the early 1990s, with the FDOT relocation of the Federal Highway A1A to the alignment of SR-3 and conversion and widening of old A1A to the county owned Beach Boulevard, extensive drainage improvements were needed to accommodate the two roadways. The first City of St. Augustine Beach stormwater Master Plan was developed in 1995, consisting of approximately 720 acres of the city and incorporating the FDOT and St. Johns County SR-3 and Beach Boulevard respectively into a 15-acre city wide master stormwater retention area for a first of its kind for Northeast Florida city wide stormwater treatment system. The 15-acre master stormwater retention area was permitted only for stormwater treatment and did not provide for stormwater attenuation or upstream flood control.

This city-wide stormwater Master Plan was updated in 2004, expanding the receiving drainage area to approximately 1,017 acres of the city and pre-permitting through the SJRWMD a list of infrastructure improvement projects for the city. (i.e., storm sewers, paved streets, government buildings, parks, etc.).

Following hurricanes Matthew and Irma and the resulting damage to the 15-acre master stormwater retention/ treatment area and washout of the overflow weir, the outfall control of the master stormwater retention area was redesigned for stormwater flood control, as a part of the FEMA Hazard Mitigation Grant Program. The new design currently under construction provides internal city flood protection from a FEMA designated 100-year reoccurrence flood elevation of 7.0 (NAVD88).

Existing Conditions

2.1. City Topographic Features

The city's topographic features are similar to all coastal Florida cities. The general topography was formed during the period when much of Florida was submerged as part of the Atlantic Ocean/Gulf of Mexico. A receding water level caused by the Ice Age created an undulating coastal dune pattern of repeating high dune, low valley area to high dune to again a low valley area. The pattern extends basically north to south parallel with the ocean. This pattern of topography creates low flood prone areas between higher elevation ancient dunes or ridges in most coastal cities and is common to St. Augustine Beach.

Figure 2-1 shows the elevation of the city based on the 2013 LiDAR topography. The repetitive dune pattern is evident along Beach Boulevard and most of the adjacent commercial business along Beach Boulevard, as all are located on one of the ridges while the area of 2nd Avenue and Mickler Road are in the low valley areas between the ridges. The area of State Route 3 (SR-3) is primarily located along one of the high ridges, while the Marsh Creek and Sea Grove subdivision are in a lower area adjacent to the Matanzas River.

This pattern of ridges and valleys controls the natural drainage pattern of the city. Elevations in the valleys range from approximately three (3) feet above sea level to six (6) feet, while the ridges can range between seven (7) feet to approximately fifteen (15) feet. Past development tended to be built above elevation five (5) feet and more recent building codes suggest a minimum elevation of eight (8) feet.



Figure 2-4. Topographic Contour Data

2.2. Master Stormwater System

Rainfall induced flooding was analyzed using the Interconnected Pond Routing (ICPR) model developed with the City’s 2004 Stormwater Master Plan for 1,017 acres of drainage basins within the city. This was a necessary step given the flat topography of the city and impacts of tide height on the performance of any coastal Florida drainage system.

The City ICPR Stormwater Model includes a diurnal outfall tailwater(tidal) condition with a mean annual high-water elevation of 3.4 NAVD29 (2.4 NGVD88). The City-wide analysis has been performed using the above referenced storms with the documented diurnal tailwater condition variation.

The modeling tailwater/tidal conditions are established as the “Mean Annual High” tide for the Matanzas River set in the original model in 1995.

Table 1. Current Tailwater/Tidal Conditions

	Mean Annual High Tide (NAVD29)	(NGVD88)
Current	3.4	2.4

The primary outfall for the St Augustine Beach master stormwater system is into a canal that conveys stormwater into the Matanzas River.

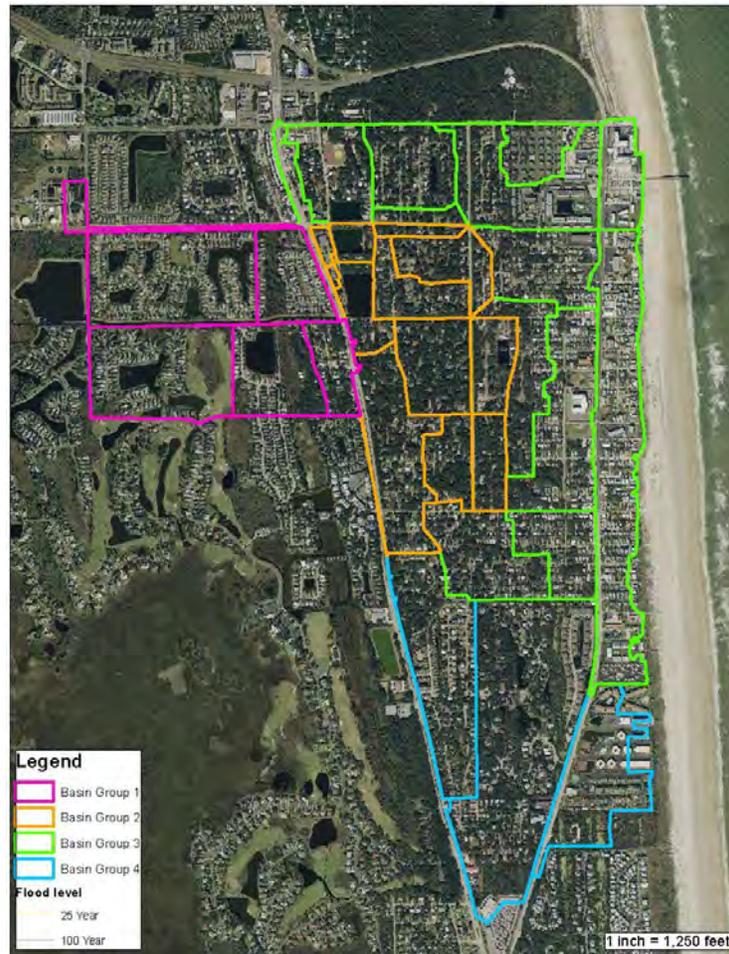


Figure 2-5. Stormwater Model Drainage Basins

Evaluation/Assessment Process

3.1. Infrastructure Data Search

The key to finding and assessing weakness in the protection of the City from sea level rise is to first have a strong understanding of the area's natural geography and the availability and condition of the supporting area infrastructure. The accumulation of such data, either found as existing or investigated and measured, determines the ultimate success of the assessment of vulnerability. The successful receipt and download of the St. Johns County 2013 LiDAR data topographic contours and finding drawings from eighty (80) past Engineering projects documenting details about existing infrastructure dating back over 25 years, established an early assessment efficiency for the project.

Details of what was portrayed by the LiDAR needed to be field verified for accuracy. Determining if the Engineering drawings evaluated above portrayed what was ultimately built in the field required a level of follow up field reconnaissance.

3.2. General Methodology

For this vulnerability assessment, 2013 LiDAR was downloaded from St. Johns County through the City of St. Augustine Beach to be integrated into GIS map layers. Although St. Johns County was in the process of updating the LiDAR from 2013 to 2020, the data was not yet proofed by the County at the time of the Vulnerability Assessment's initial Tasks and was thus not available for use under this study.

Infrastructure such as drainage ditches, road crossing pipes, piped stormwater systems, roads, and stormwater ponds were identified from past engineering design drawings of individual projects and each infrastructure system was field verified. This process coupled with the topographic indicators highlighted and isolated the areas vulnerable to rising sea level.

3.3. GIS Query and LiDAR Topographic Data

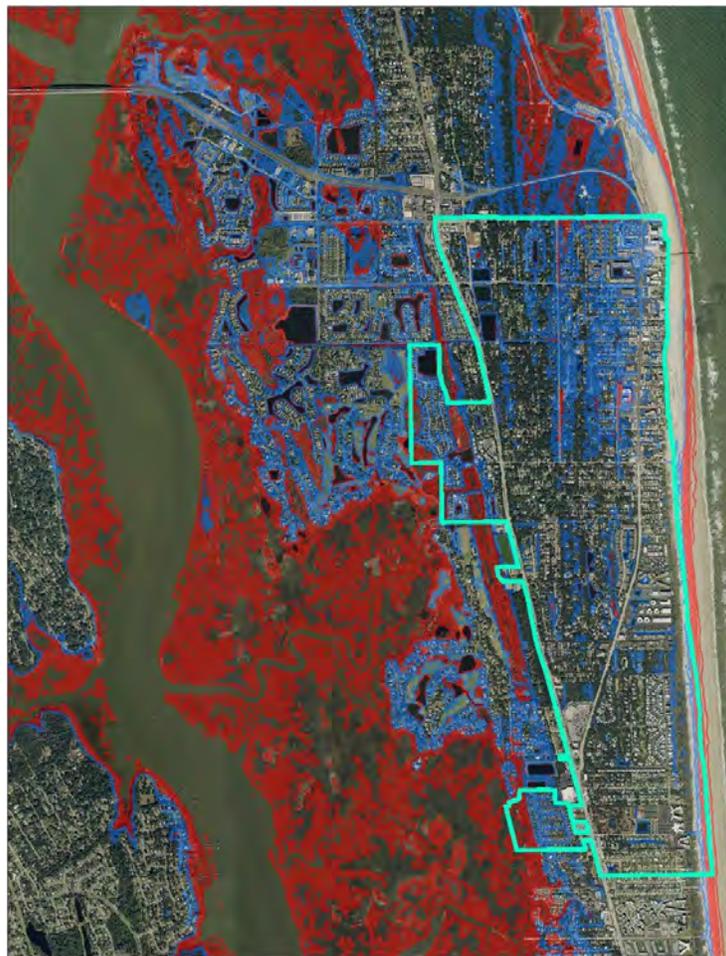


Figure 3-6. Areas vulnerable to storm events due to elevation (red elev 5/ blue 8)

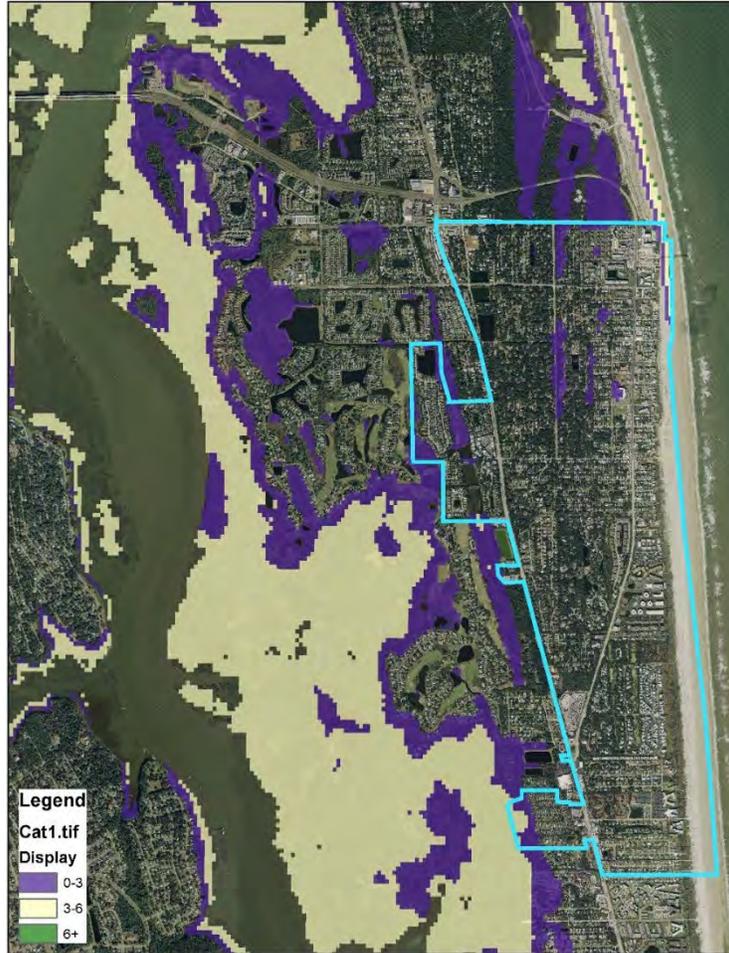


Figure 3-7. Areas vulnerable to Category 1 Hurricane storm surge



Figure 3-8. Areas vulnerable to Category 2 Hurricane storm surge

3.4. Master Stormwater Model Update

3.4.1. Stormwater Inundation Modeling

To determine how rainfall-induced flooding may be impacted by sea level rise within the City, the hydrologic and hydraulic parameters in the original 1990s Interconnected Pond Routing (ICPR) Version 3 model, that was updated during the City's 2004 Stormwater Master Plan, was updated further in this assessment to a ICPR Version 4 model adjusted to reflect identified increased boundary conditions and model node conditions impacted from rising sea levels.

The ground water table is also expected to rise with rising sea levels because of consistently higher tides. This increase in ground water will be more marked in areas directly adjacent to the coastline and would be reduced further inland. However, in the case of the City's pump-controlled stormwater system, the effective use of the pumps can effectively control the normal level of groundwater within the City master stormwater system to pre sea level rise conditions. Accordingly, the basin criteria in the stormwater model considering a controlled groundwater level retained the same relative soil storage capacity for the expected future sea level elevations.

The City’s master stormwater model output data was provided for the 25 year/24-hour rainfall and 100-year/24-hour rainfall events with a base outfall tailwater(tidal) elevation of 3.4 NAVD29 (2.4 NGVD88). The primary outfall for the St Augustine Beach master stormwater system is a canal that conveys stormwater into the Matanzas River. The analysis was performed using the above referenced storms with current tailwater condition and two additional tailwater conditions.

Peak stage results from the future drainage conditions models were used to map the predicted rainfall-induced flood risk in the City for the one- and two-foot sea level rises for a series of 24-hour rain events, including the 25-year and 100-year return period rainfall events

The modeling tailwater/tidal conditions are established as the “Mean Annual High” tide for the Matanzas River set in the original model in 1995.

Table 2. Tailwater/Tidal Model Conditions

	Mean Annual High Tide (NAVD29)	(NGVD88)
Current	3.4	2.4
w/1 ft. rise	4.4	3.4
w. 2 ft. rise	5.4	4.4

The updated model reflects a total of 6 model runs, reflecting the two storm events of 25-year and 100-year for each of the three sea level elevations. The results were then mapped using the digital elevation model (DEM) generated from the 2013 St. Johns County Light Detection and Ranging (LiDAR) data. Note that this does not account for grading changes that have occurred since the LiDAR was collected.

3.4.2. No Combined Inundation

The future storm surge flood risk maps were not combined with the rainfall induced inundation maps for the 100-year return period storm for the two sea level rise increases due to the protective flood nature of the City’s master stormwater system. Where there was overlap between the flood risk mapping, the higher inundation estimate from the two mapping efforts was selected unless the area was protected within the City’s master stormwater system with its protective pump system. These maps independently provide for a spatial estimate of future flood risk that will serve as the basis for the vulnerability assessment.

Note that rainfall induced flood risk and coastal surge flood risk are usually evaluated relatively independently because the two forms of flood risk are neither fully dependent nor fully independent. Therefore, traditional statistical approaches are not applicable and the standard procedure to deal with this is to evaluate the two independently using common sea level rise scenarios and then take the pump-controlled flood elevation or the higher of the none pump protected combined identified risk at each location.

3.4.3. Projected Rainfall Induced Flooding

Figure 3-4 and Figure 3-5 illustrates the projected rainfall induced flooding from a 25-year and 100-year storm in St Augustine Beach for the periods of the one- and two-foot sea level rises. These maps reflects where stormwater infrastructure is inhibited. These maps, due to the uniqueness of the stormwater pump system of the City, must be viewed independently of the areas indicated as below an elevation to flood in the 100 Year flood. The pump system designed to protect against a 100-year flood elevation protects those areas indicated to flood but located within the master stormwater system of the City.

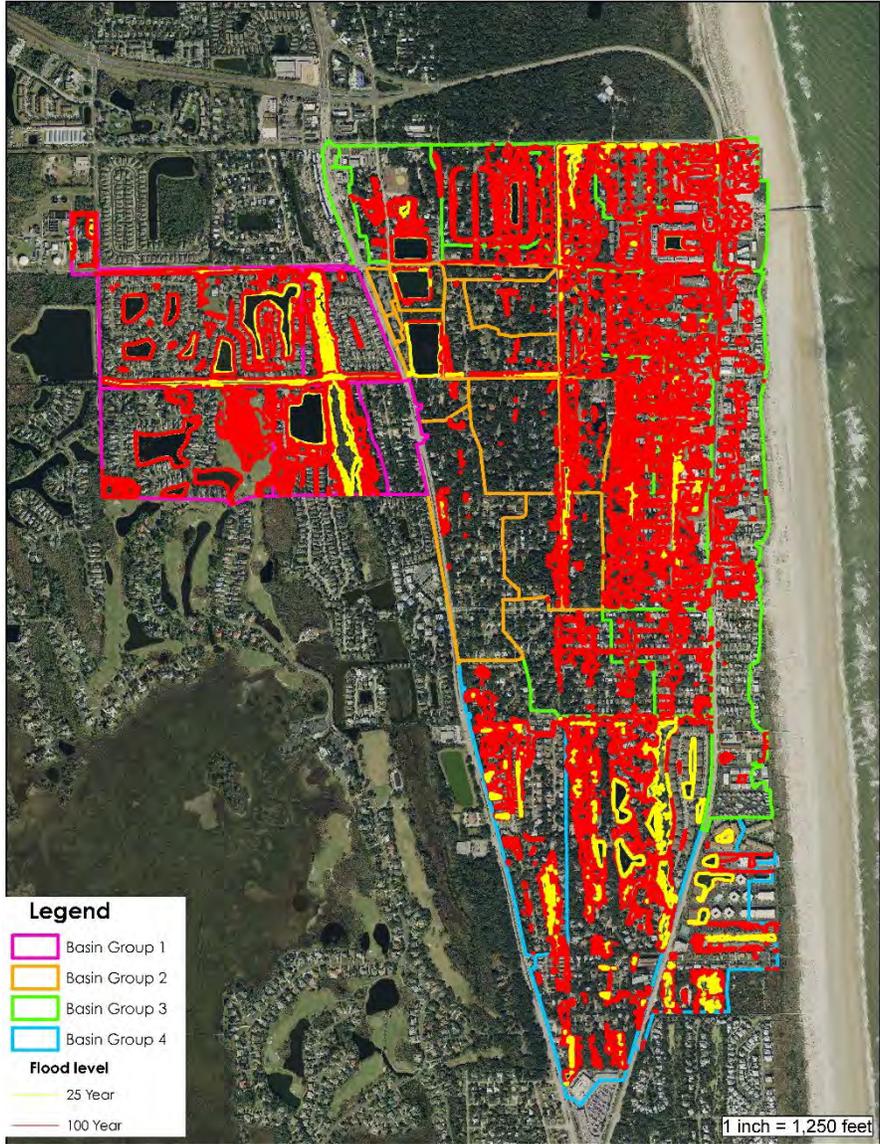


Figure 3-9. Areas vulnerable to 25- and 100-year Storm Events at Current Sea Level

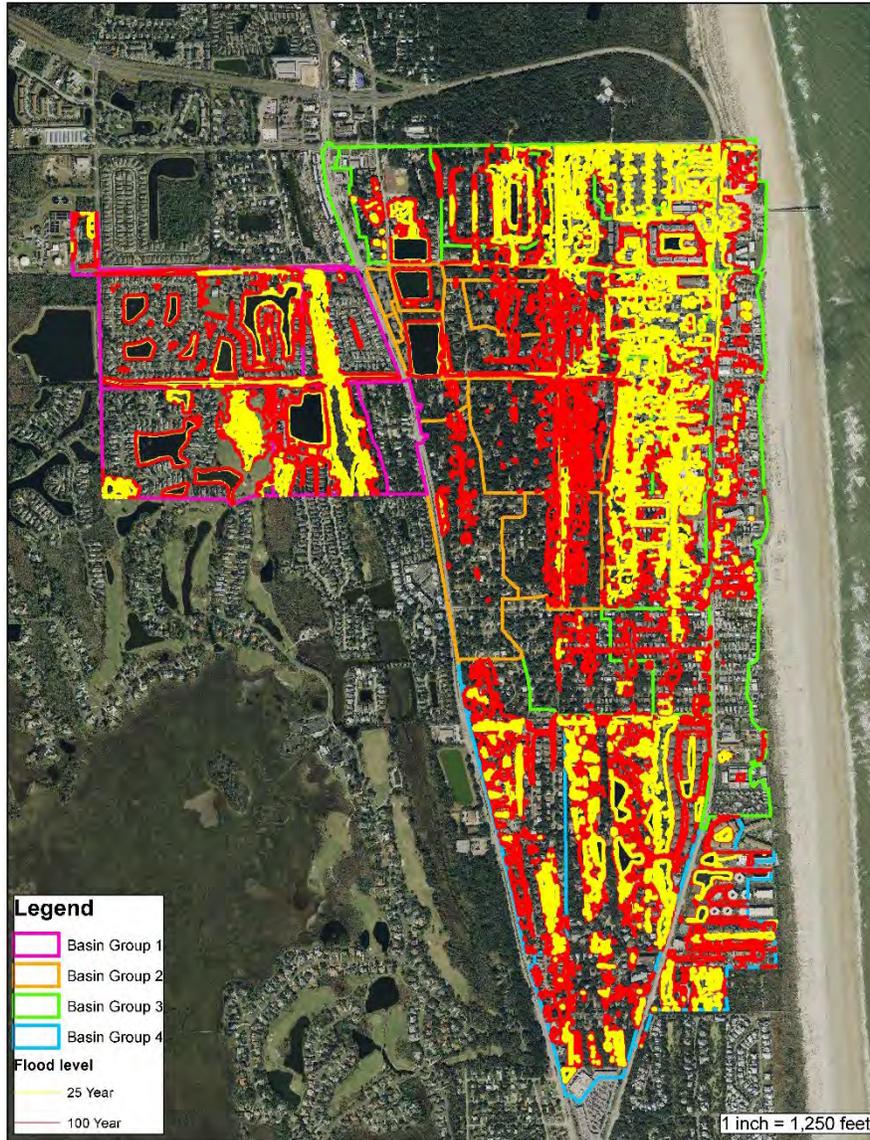


Figure 3-10. Areas vulnerable to 25- and 100-year storm events with Sea Level Rise

Assessment Findings

4.1. Existing Protective Infrastructure

In assessing how vulnerable a community is to external flood influences, it is essential to evaluate the natural geography and topography of the area in and around the community. The next step is to consider any opportunity to reinforce these geographic features with supportive manmade structures. The most common features enhanced for stormwater and flood control are hills and ridges. Over the years, state government has used the higher elevation ridges of the old dune system and by contrast avoided the low wetland areas in its construction of roadways. This design approach to roadways has proved beneficial to the City of St. Augustine Beach. The majority of the City of St. Augustine Beach is effectively surrounded in a triangle of

three primary roadways, all constructed along higher ridges or artificially filled and raised to higher elevations in crossing low flood prone areas, effectively creating a protective flood protection levee system around the core City. The three roadways of Beach Boulevard, along the eastern dune line, SR 312 on the north side of the city, was placed on a filled and raised section through the coastal wetlands of Anastasia State Park and SR 3 A1A on the west side of the city along the ancient dune ridge just east of the Matanzas River.

The city also has the manmade benefit of a somewhat unique master stormwater conveyance system effectively protected from external flooding by the triangle of elevated roadways, while being capable of removing internal stormwater from within the city by use of large stormwater pumps. The upgrade of this system as part of the City's FEMA HMGP grant is currently under construction. The combination of the triangular elevated roadway network effectively surrounding the majority of the city and the internal City stormwater pumping system protects the city from flooding to a higher level than most coastal cities. This protective system has a few vulnerable penetrations or threats from flooding, having been identified and quantified within this assessment. This report further addresses these vulnerable penetrations as being capable of mitigation against flooding.

4.2. VULNERABLE AREAS

Six primary watershed areas with outfalls or unprotected storm surge were identified in and around the City of St. Augustine Beach that represent an inundation vulnerability to the city as a result of sea level rise. These six vulnerable Storm Surge or Outfalls have been identified as

1. SR 312 Area,
2. West Pope Road Area,
3. Sea Grove Area west of SR 3,
4. Ocean Trace Subdivision west of SR 3
5. Oleander Street Wetland
6. Pope Road / Ocean Pier Park on the Atlantic Ocean Beach.

Each of the six areas are described in more detail as follows.

4.2.1. SR 312 Area Vulnerable Outfalls

The SR 312 area (Figure 4-1) on the North end of St. Augustine Beach runs from the bridge crossing the Matanzas River to the end of SR 312 at Anastasia Island and Beach Boulevard in St. Augustine Beach.

The SR 312 Area has five identified drainage systems deemed to be vulnerable to flooding into the city as the result of sea level rise. All five drainage systems are located within St. Johns County and are characterized by drainage culvert crossings under SR 312 and continuing into St. Augustine Beach as a series of ditches, canals, and pipes. Each culvert crossing location under SR 312 has been referenced either east or west of the intersection of SR 3 and SR 312 on the northern limits of St. Augustine Beach. The five vulnerable areas are located along $\frac{3}{4}$ miles of SR 312. Two of the crossings are located west of the SR 3 and SR 312 Intersection, while the remaining three are located east of the SR 3 and SR 312 intersection.



Figure 4-11. Vulnerable area - SR 312

The five sub vulnerable areas have been defined, located, and described below.

1. Crossing at Station 75 feet west - Consisting of one pipe 24 inch in diameter under SR 312 flowing south to north normally into a canal to the north and eventually to the Matanzas River.
2. Crossing at Station 175 feet west - Consisting of one 60-inch diameter pipe under SR 312 flowing from a southern 34x53 inch elliptical pipe south to north through the 60 inches to the Islander Drive Pond and further north through a 72-inch pipe in a series of ponds discharging to the Matanzas River. The connected system continues south through a 42-inch x 66-inch pipe and a 42-inch pipe to Pope Road. At Pope Road, a combination of a 24-inch culvert parallel with Pope Road, 36-inch pipe also parallel with Pope Road and a 30-inch pipe crossing Pope Road combine into the 42inch pipe flowing into a pond system to the north.
3. Crossing at Station 1800 feet east – Consisting of Two parallel 48-inch diameter pipes at approximate elevation (-) 0.09. The two pipes flow south to north into Anastasia State Park.
4. Crossing at Station 2900 feet east - Consisting of Two parallel 36-inch diameter pipes at approximate elevation 0.04. The two pipes flow south to north into Anastasia State Park into the low area between SR 312 and Pope Road and ultimately to a 24-inch diameter pipe crossing under Pope Road at Lee Drive.
5. Crossing at Station 3900 feet east - Consisting of a single 36-inch diameter pipe at approximate elevation (-) 0.09. The pipe flows south to north into Anastasia State Park into the low area between SR 312 and Pope Road and ultimately to a 24-inch diameter pipe crossing under Pope Road at Schooner Court.

4.2.2. West Pope Road Area Vulnerable Outfall

The West Pope Road Area (Figure 4-2) is on the Northwest corner of St. Augustine Beach and south of the Matanzas River bridge crossing of SR 312. The outfall is located at the intersection of Mizell Road and the west end of Pope Road.

The West Pope Road Area has one identified drainage system deemed to be vulnerable to flooding into the city as the result of sea level rise. The vulnerable culvert is located within St. Johns County and extends from SR 3 to the culvert crossing along Pope Road.

Crossing at Station 2000 feet west of SR 3-The contributing drainage area consists of 1100 feet of the southern right of way of west Pope Road, 1400 feet of west 16th Street and 1300 feet of southern Mizell Road. All the area outfalls across Mizell Road at West Pope Road in a 24-inch culvert at an invert of 2.5 to a ditch tributary to the Matanzas River.

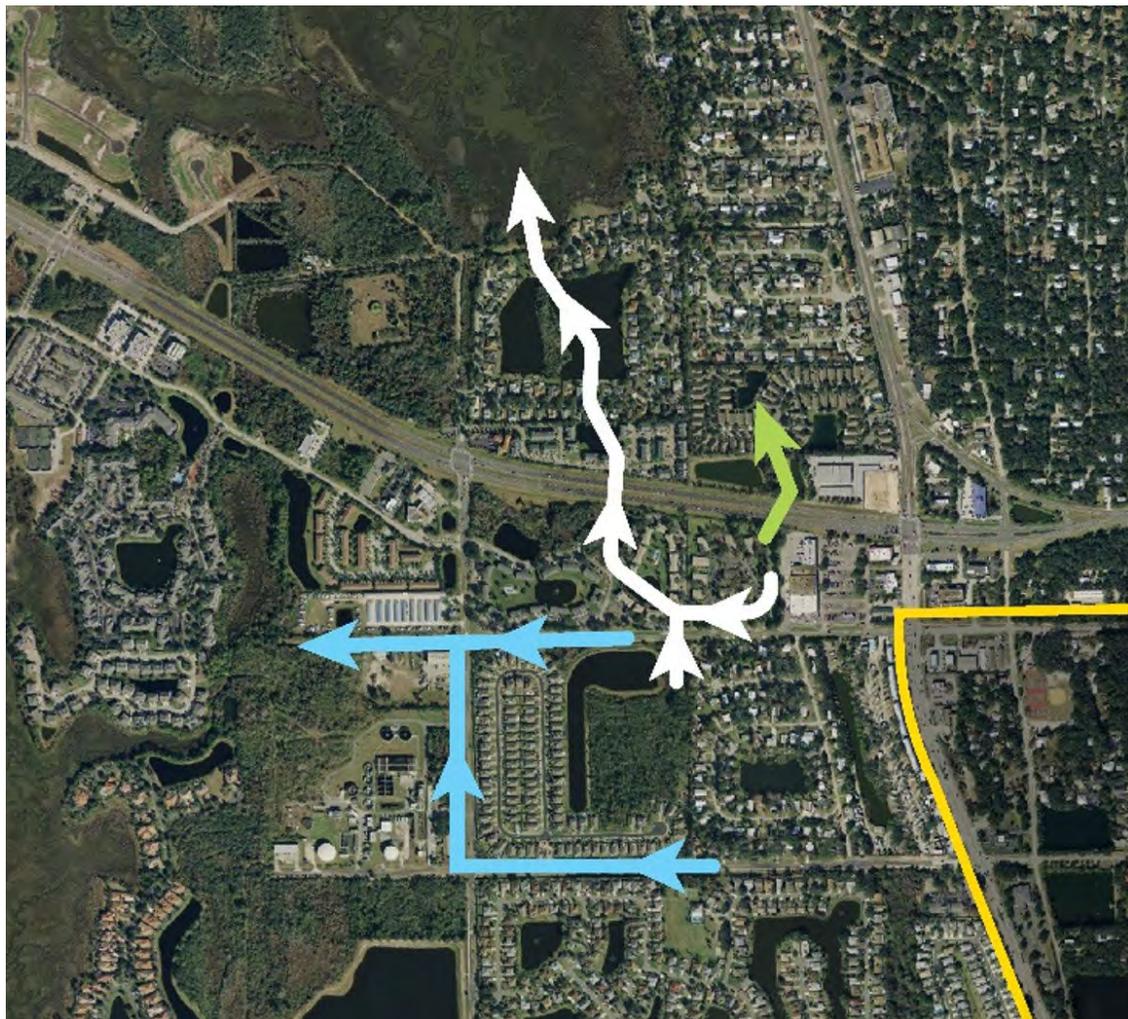


Figure 4-12. Vulnerable Area - West Pope Rd

4.2.3. Sea Grove Area Vulnerable Outfall

The Sea Grove area (Figure 4-3) lies west of the protective elevated SR 3 and adjacent to Marsh Creek and is directly connected to the marsh area and tributaries of the Matanzas River. Although the subdivision properties adjacent to the marsh are elevated to a 100-year flood elevation, the connected north/ south

strand of marsh internal to Sea Grove and utilized for stormwater retention and detention is interconnected by canals, 48-inch pipes, overflow weirs all vulnerable to backflow from the tributary of the Matanzas River inundating access across the causeway. The interconnected north south strand of marsh is also separated from the northern Oleander Street wetland vulnerable area by a narrow low crossing extended from Florida Avenue that would be inundated from the Sea Grove marsh strand allowing backflow from the south to the north through the Oleander Street wetland into the City of St. Augustine Beach.

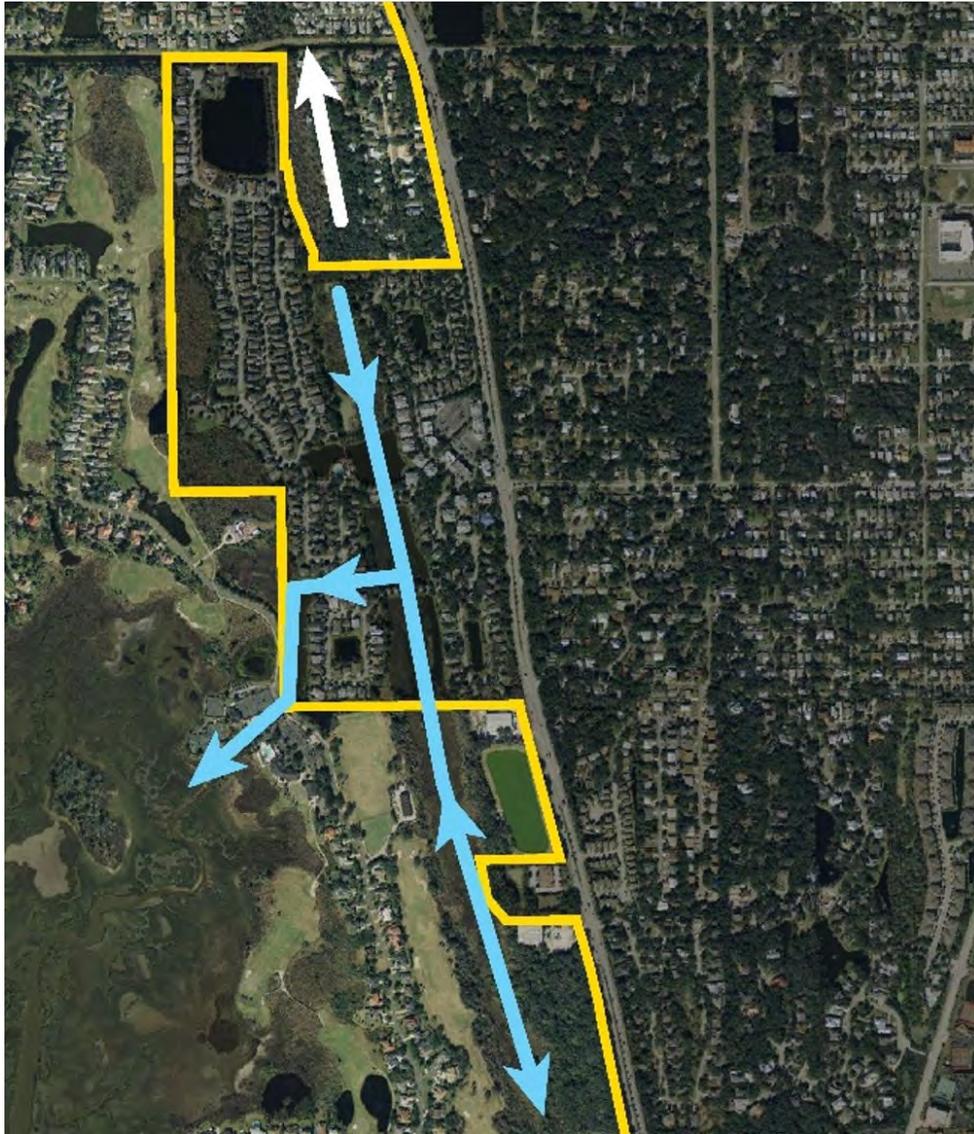


Figure 4-13. Vulnerable Area - Sea Grove

4.2.4. Ocean Trace S/D Vulnerable Outfall

The Ocean Trace area (Figure 4-4) lies west of the protective elevated SR 3 and adjacent to the marsh area of the Matanzas River. The subdivision properties adjacent to the marsh are elevated well above the 100-year flood elevation, however the 24-inch outfall storm sewer from South Ocean Trail Road is not protected from flood elevations in the marsh backflowing into and inundating South Ocean Trail Road.



Figure 4-14. Vulnerable Area - Ocean Trace

4.2.5. Oleander Street Wetland Vulnerable Area

The Oleander Street wetland is connected to the City's master stormwater system at the 11th Street canal by a 24-inch HDPE pipe, the wetland is a part of a south to north marsh strand connected at Sea Grove to a tributary of the Matanzas River.

In the event of backflowing floodwater from the Matanzas River breaching the low crossing at the end of Florida Ave, the Oleander St Wetland connection to the master stormwater system creates a vulnerable connection to the city master stormwater system.

4.2.6. Pope Road / Ocean Pier Park Surge Vulnerable

The Ocean dune/ seawall combination from the Pope Road Overlook Parking area south along the beach past St. Johns County Pier Park to the beginning of the rising dunes near 14th Street is vulnerable to storm surge into the city during a Category One Hurricane.

4.3. Impact on the City Master Stormwater System

Each of the vulnerable areas was evaluated relative to the City's operational Master Stormwater Management System. Each of the five areas, minus the Pope Road/Ocean Pier area, which is vulnerable by storm surge, were identified as stormwater basins outflowing away from the City of St. Augustine Beach not flowing into the city stormwater master system, thus having no direct impact on the City's master stormwater system under the more common rain events even in consideration of sea level rise.

However, under extreme flood conditions such as a 100-year events, all five areas may reverse flow due to an elevated sea level/Matanzas River tidal condition into the City. Only the SR 312 Vulnerable connected pipe systems, the West Pope Road Vulnerable outfall and Sea Grove breach into the Oleander St Wetland Vulnerable area have the potential to backflow into the city master stormwater system raising flood levels within the city.

Considering these vulnerable systems are not internal to the City's master stormwater system, they cannot be effectively incorporated into the City's master ICPR stormwater computer modeling.

Resiliency & Protection

5.1. Critical Facilities

The impact of sea level rise with respect to the vulnerability of critical facilities and infrastructure within the City is important with respect to planning. Critical facilities and infrastructure within the city limits were identified in the assessment as follows:

- City Hall at SR 3 was built on higher ground adjacent to the elevated SR 3 and is not flood prone from the initial considerations of sea level rise.
- City Police Station at SR 3 was built on higher ground adjacent to City Hall and the elevated SR 3 and is not flood prone from the initial considerations of sea level rise.
- Public Works Complex at Mizell Road and Pope Road was built within the County on slightly elevated ground adjacent to the Pope Road Vulnerable Outfall. Access to the complex may be subject to flooding from the initial considerations of sea level rise.
- Fire Station at Beach Boulevard and Pier Park was built on slightly elevated ground but adjacent to the storm surge prone County Pier Park area. Access to the station may be compromised due to storm surge inundation of Beach Boulevard resulting from increased sea level rise.
- The County operated Sewage Pump Stations serving the city are located throughout the city. St. Johns County Utility Department only recognized two such stations that might be vulnerable to the site flooding.
- The two city-operated remote Stormwater Pump Stations are located west of the ocean dune line and protected by the elevated dunes from the evaluated Category one storm surge.

Although the assessment showed no direct flooding impacts to the most critical facilities from the projected sea level, secondary and access impacts to several the facilities can be expected.

County Facilities and infrastructure providing service to the city and others and located outside of the city limits are noted here but not assessed. These facilities should be evaluated in a vulnerability assessment program performed by the County.

- Anastasia Wastewater Treatment Facility at Mizell Road and 16th Street was built on slightly elevated ground. Mizell Road access to the complex may be subject to flooding from the initial considerations of sea level rise.
- Anastasia Drinking Water Treatment Facility at Mizell Road and 16th Street was built on slightly elevated ground adjacent to the Wastewater treatment facility. Mizell Road access to the complex may be subject to flooding from the initial considerations of sea level rise.

5.2. Infrastructure Constraints

Although the City has protective systems in place against broad flooding within the City, both in a protective roadway levee system and an internal City stormwater pumping system, the City does have some remaining internal stormwater conveyance constraints dating from the 1960s through 1990s. A number of the City existing ditch and piped systems, such as Mickler Road ditch, 11th Street ditch east of SR 3 and the 16th Street and Beach Boulevard stormwater collection and conveyance system are still limited in capacity and result in elevated stormwater stages during heavy rainfall in the upper reaches of the City storm sewer conveyance system. Many of these are older conveyance systems constructed without the benefit of calculated design stormwater runoff volumes and may need further evaluation under an update to the stormwater master plan to identify potential improvements to improve their stormwater conveyance hydraulics. Other more isolated areas of the city, such as individual subdivisions or local roadways, most certainly have stormwater conveyance restraints. These areas don't tend to flood to the extent of raising attention of the local residents or the city administration, but none the less represent a level of service below the accepted norms and should be identified and prioritized in a more focused update of the stormwater master plan.

5.3. Long Term Infrastructure Measures

Proposed Mitigation/Resiliency method by vulnerability area

5.3.1. SR 312 Area

- Five drainage systems all located in St. Johns County
- Crossing at Station 75 West – 24-inch pipe intercept pipe at the southern ROW of SR 312.
- Crossing at Station 175 West – 34x53 inch pipe intercept the pipe at the southern side of the SR 312 ROW.
- Crossing at Station 1800-, 2900-, and 3900-feet East – The area tributary to these three crossings is a natural low and can store a substantial amount of floodwater. Intercept of the area should occur at the SR312 three crossings and at the 24-inch pipe crossings of Pope Road at Lee Drive and Schooner Court, both on the south side of Pope Road. The method of intercept and control at Pope Road will consist of structural blocking and rerouting the Schooner Court area drainage from its crossing at Pope Road westward to the Lee Drive area, a structural blocking of the Lee Drive crossing of Pope Road and redirecting both Schooner Court and Lee Drive to the existing City master stormwater drainage connection at the Mickler Blvd and Pope Road. Considering SR312 is

approximately 3 feet higher in elevation than Pope Road the method of intercept will also include structural intercepts at each of the SR312 crossings.

5.3.2. West Pope Road Outfall

- Crossing at Station 2000 West of SR 3 – 24-inch pipe under Mizell Road. Intercept the pipe at west side of Mizell Road.

5.3.3. Sea Grove Area Outfall

- The Sea Grove area -the marsh utilized for stormwater retention and detention is interconnected by a 48-inch pipe under the causeway- Intercept the 48-inch pipe at the cause way crossing.

5.3.4. Ocean Trace S/D Outfall

- The Ocean Trace area-The 24-inch outfall storm sewer under South Ocean Trail Road is not protected from flood prone marsh. Intercept the 24-inch pipe at east side of South Ocean Trail Road.

5.3.5. Oleander Street Wetland Vulnerable Area

- The Oleander Street wetland is connected at the 11th Street canal by a 24-inch HDPE pipe- Intercept the pipe at the south side of the 11th St. Canal.

5.3.6. Pope Road / Ocean Pier Park Surge Vulnerable

- The Ocean seawall from the Pope Road Overlook south fronting Pier Park - Storm surge for Category One Hurricane exceeds existing wall- Raise protective wall landward of the existing wall 7 feet.

5.4. Cost Considerations

5.4.1. Vulnerable Area Mitigation Scenarios

In consideration of the need for initial budgeting of mitigation and resiliency measures for City flood protection against the identified vulnerable access points of flood water backflow into the city, we developed an infrastructure scenario for modifying the seawall area along Pier Park against storm surge. This scenario anticipates an additional sea wall constructed to approximately elevation 12 as a backup to the current seawall.

Additionally, we developed an infrastructure scenario for modifying the vulnerable storm sewer piped systems. The following four graphics depict the situation anticipated, a normal operation of the vulnerable storm sewer and the flooding and backflow situation of the vulnerable storm sewer. The only differing proposed flood protection system associated with the drainage pipe vulnerable areas occurs with the three eastern most SR312 crossing combined with the two Pope Road pipe crossings. The three SR312 crossings can be structurally blocked from sea level rise backflow into the City without the pumping system while the two Pope Road crossings can also be structurally blocked from the flood prone area between Pope Road and SR312 . The rainfall induced drainage to the two Pope Road crossings can rerouted from Schooner

Court and Lee Drive to the City master stormwater system at Mickler Boulevard, thereby routing this rainfall induced stormwater to the City master stormwater system.

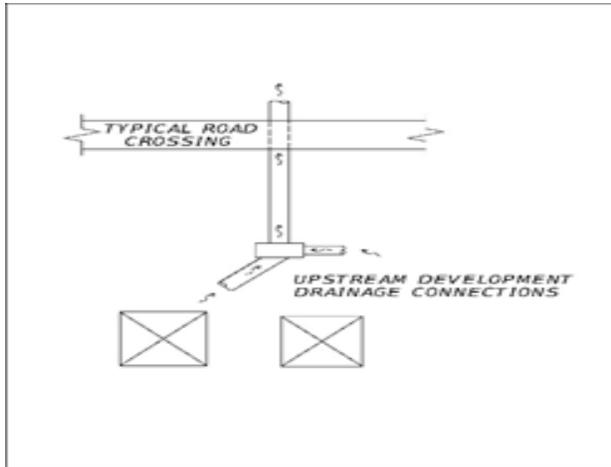


Figure 5-16. Normal Operational Discharge

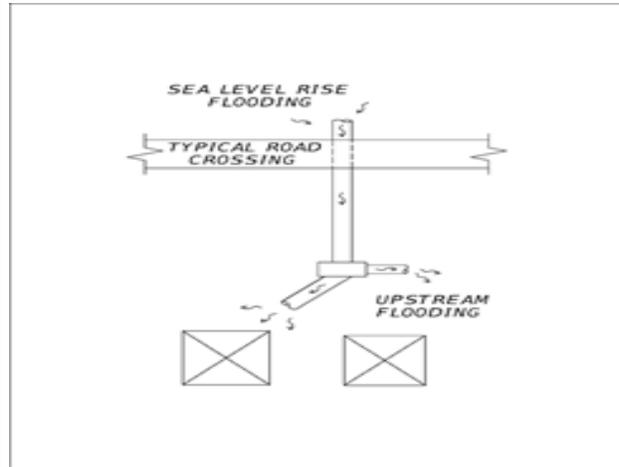


Figure 5-17. Sea Level Induced Flood Backflow

The infrastructure considered at each vulnerable pipe system, anticipates the pipe system will penetrate a raised roadway or similar filled and raised area and this location can be modified and reinforced to provide a level of protection against flood backflow into the city, while providing a method of removing any rain induced accumulation of stormwater from the upstream City to the flooded downstream area. Figure 5-3 and Figure 5-4 depict the scenario of modifying and reinforcing the crossing with the detailed description of the components below.

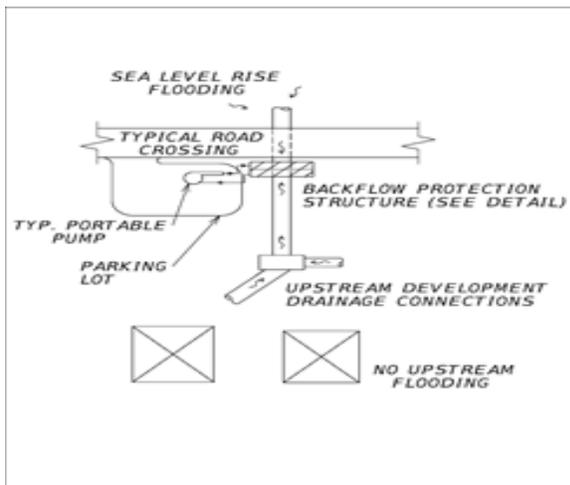


Figure 5-15. Sea Level Flood Backflow w/ Backflow Protection System

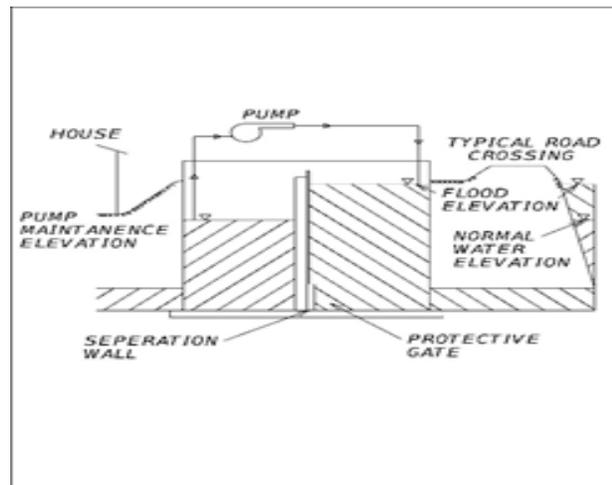


Figure 5-18. Backflow Protection System

The design concept includes the following.

1. A concrete storm sewer structure placed over the vulnerable storm sewer outfall pipe sized to accommodate an estimated flow for the associated vulnerable pipe size, typically starting at approximately 12 ft by 12 ft, with a dividing wall separating the upstream flow chamber from

downstream backflow chamber with a (or multiple gates and/or structures for the larger pipe systems) mounted flood gate in the wall.

2. The staging levels in both chambers to be mounted, and all operational portions to be controlled from an electrical control panel.
3. A pre-installed pressure pipe system with above ground quick disconnects on the upstream chamber for a pump suction and on the downstream backflow chamber as the pump discharge.
4. A concrete pad for installation and tie down of a portable diesel pump and a concrete enclosure for placement of a portable fuel tank.
5. Site work for a driveway access and set up of the portable pump system the pumps to be a minimum of 5000gpm with multiple pump set-ups for the few areas needing as much as 25,000gpm

5.5. Cost Estimating

The basis for construction cost estimates is an order of magnitude for rough budgeting purposes considering the lack of individual site details, governmental jurisdiction issues or detailed evaluation of various other mitigation options for addressing the vulnerable areas. The estimates are based upon current and near-term bidding conditions and should be considered within a range of accuracy of 30%.

Number	Vulnerable Area	Estimated Const Cost
1	SR 312 – 75 Feet West	\$275,000
2	SR 312 – 175 Feet West	\$530,000
3	SR 312 & Pope Road at Lee Drive	\$275,000
4	SR 312 & Pope Road at Schooner Court	\$275,000
5	West Pope Road (at Mizell Road)	\$275,000
6	Sea Grove Area	\$410,000
7	Ocean Trace	\$275,000
8	Oleander St. Wetland	\$275,000
9	Ocean Pier Park /Pope Road Overlook Sea wall	\$650,000
TOTAL ESTIMATED 2022 CONSTRUCTION COST		\$3,240,000
ESTIMATED SURVEY & ENGINEERING COST		\$390,000
TOTAL CIP PROJECT COST		\$3,630,000

Recommendation

6.1. Conclusion

The information contained in this report is intended to be used for planning purposes to begin to identify and address municipal infrastructure at risk. Understanding that a one-foot rise could occur in the next 20 to 30 years, adaptation strategies should be developed for locations identified as vulnerable in the first scenario. In addition to the vulnerability of infrastructure identified to lie at or below projected sea levels up to a two-foot scenario; the municipality may also be at risk due to secondary threats such as flooding events and ponding, storm drainage, erosion, bridge clearance, etc. Sea level may continue to rise beyond

two feet. The City municipal authorities should begin the development of policies to address these risks and institutionalize the consideration of climate issues for adaptation strategies.

Thanks to a couple of forward-thinking infrastructure programs, the City of St Augustine Beach has time to plan mitigation and resiliency actions to combat the eventual sea level rise and its impacts. The infrastructure programs of construction of primarily FDOT elevated roadways forming a triangle around the heavier urbanized areas of the city and the upgrade of the master stormwater system of the city to elevations to protect against the recognized hundred-year flood has given time to plan.

6.2. Vulnerability Mitigation Capital Improvement Plan

As a result of the City's decision to assess its vulnerability to near-term sea level rise, several drainage areas have been identified as vulnerable to sea level induced flood backflow into the city, as well as the identification of an area of the coastal seawall vulnerable to moderate Category one Hurricane storm surge.

As the next step in the process of addressing the vulnerability, an adaptation plan is recommended and one of the first strategies in the plan is development of "protection strategies" involving the budgeting of capital to address hardening the drainage system against the sea level rise flood possibility.

To this end we have developed an order of magnitude project cost estimate for each vulnerable access point and as an overall capital improvement.

The Order of Magnitude cost estimate is \$3.63 million and has been provided in a format to allow individual vulnerable areas to be budgeted and implemented for mitigation.

6.3. Adaptation Planning

The next forward planning step is for the City to begin an adaptation planning process. The adaptation planning process would engage stakeholders to evaluate the sea level rise predictions and consider what actions, if any, should be taken.

The Florida Department of Economic Development (DEO) has resources available to assist local governments in this process and multiple communities have already completed their adaptation plans, while the State legislature is taking steps to start funding mitigation plans. The DEO describes the following five strategies for adaptation planning:

1. **Protection** - Protection strategies involve "hard" and "soft" structurally defensive measures to mitigate the impacts of current and future flooding, such as seawalls or beach renourishment, in order to maintain existing development.
2. **Accommodation** - Accommodation strategies do not act as a barrier to inundation but rather alter the design, construction, and use of structures to handle periodic flooding. Examples include elevating structures and stormwater retrofits that improve drainage or use natural areas to soak up or store water and runoff (i.e., green infrastructure).
3. **Strategic Relocation** - Strategic relocation involves the possible relocation of existing development to safer areas through voluntary or incentivized measures in populated, hazard prone areas that reduce the intensity of development and/or gradually increase setbacks over time. Such options usually involve the transition of vulnerable land from private to public ownership, but may also include other strategies such as transfer of development rights, purchase of development rights, and rolling easements.

4. **Avoidance** - Avoidance involves anticipatory actions taken to direct new development away from vulnerable lands to safer areas. Examples include land conservation, conservation easements, transfer of development rights, and increased coastal setbacks.
5. **Procedural** - Procedural strategies aim to generate vulnerability and adaptation information, increase awareness of vulnerabilities and adaptation options, or incorporate such information into plans or policies. Examples include vulnerability assessments, community outreach and education activities, new comprehensive plan language addressing sea level rise, and real estate disclosures.

6.4. Revisit the Vulnerability Conditions with Time

The conditions surrounding the Vulnerability Assessment have been identified, evaluated and calculated based upon what we know today and supported by governmental agency information, also based upon today's knowledge. The projections of what will occur over the next 20 to 50 years will be found in the future to only have been partially accurate. This has been a key reason for limiting the assessment to only a 50 year look into the future, knowing that the accuracy of any prediction of the future diminishes with time and periodic adjustments in our predictions and projections will be inevitable.

The Vulnerability Assessment should remain a flexible document subject to periodic update and refinement.

2ND PUBLIC MEETING
INFORMATION

City of St. Augustine Beach

Vulnerability Assessment

R2115

2nd Public Meeting Information

City Commission Regular Meeting

May 3, 2021

Advertisement

The 2nd Public Meeting took place at the City Commission Regular Meeting on May 3, 2021. The City Commission meeting was advertised on the city web page in advance of the meeting with the agenda and the agenda book available for public viewing and download. Below are images of the location of the meeting information on the city's website.

The screenshot shows a web browser window displaying the "Regular City Commission Meeting" page. The page is titled "Regular City Commission Meeting" and includes the following information:

- Calendar Date:** Monday, May 3, 2021 - 6:00pm
- MEETING INFORMATION:**
 - Agenda:** Commission Agenda for May 3, 2021 (205 KB)
 - Packets:** Commission Book for May 3, 2021 (14 MB)
 - Audio/Video:** Stream Meeting
- SUPPORTING DOCUMENTS:**
 - Item # 00 (Minutes of Previous Meetings) (267 KB)
 - Item # 00 (Presentations) (671 KB)
 - Item # 01 (Ord. 21-04 to Change Setbacks for Small Platted Lots and to Abolish the Overlay District) (4 MB)
 - Item # 02 (Drug / Alcohol Rehab and Medical Facility Locations) (259 KB)
 - Item # 03 (Construction of 2nd Street West of 2nd Avenue) (615 KB)
 - Item # 04 (Resiliency Study) (30 KB)
 - Item # 05 (Pay for City Commissioners) (479 KB)
 - Item # 06 (Upcoming Workshops) (37 KB)
 - Item # 07 (Public Parking) (2 MB)
 - Item # 08 (Ord. 21-05, to Vacate Alley between B and C Streets West of A1A Beach Boulevard to 2nd Avenues) (169 KB)
 - Item # 09 (Ord. 21-06, to Vacate Alley between A and B Streets, between 3rd and 4th Avenues) (164 KB)
 - Item # 10 (City-Wide LED Streetlight Conversion) (611 KB)
 - Item # 11 (Proposed Personnel Manual Changes) (368 KB)
 - Item # 12 (Long Range Financial Planning) (858 KB)
 - Item # 13 (Reports) (5 MB)
 - Item # 14 (Pending Projects) (147 KB)

The right sidebar contains the following sections:

- CITY COMMISSION**
- OVERVIEW**
- AGENDAS & MINUTES**
- REQUEST TO SPEAK CARD**
- CONTACT INFORMATION:**
 - 2200 A1A South
 - St. Augustine Beach, FL
 - Phone: 904-471-2122
 - Office Hours:** 8:00AM - 5:00PM
 - [VIEW FULL CONTACT DETAILS](#)
- UPCOMING EVENTS:**
 - [Regular City Commission Meeting](#)
 - 06/07/2021 - 6:00pm
 - [VIEW THE CITY COMMISSION CALENDAR](#)

Meeting Agenda

The following pages contain the May 3, 2021 meeting agenda. The agenda item pertaining to the Vulnerability Assessment has been highlighted.



AGENDA

**REGULAR CITY COMMISSION MEETING
MONDAY, May 3, 2021 AT 6:00 P.M.**

CITY OF ST. AUGUSTINE BEACH, 2200 A1A South, St. Augustine Beach, FL 32080

NOTICE TO THE PUBLIC

THE CITY COMMISSION HAS ADOPTED THE FOLLOWING PROCEDURE: PERSONS WISHING TO SPEAK ABOUT TOPICS THAT ARE ON THE AGENDA MUST FILL OUT A SPEAKER CARD IN ADVANCE AND GIVE IT TO THE RECORDING SECRETARY. THE CARDS ARE AVAILABLE AT THE BACK OF THE MEETING ROOM. THIS PROCEDURE DOES NOT APPLY TO PERSONS WHO WANT TO SPEAK TO THE COMMISSION UNDER "PUBLIC COMMENTS."

RULES OF CIVILITY FOR PUBLIC PARTICIPATION

1. The goal of Commission meetings is to accomplish the public's business in an environment that encourages a fair discussion and exchange of ideas without fear of personal attacks.
2. Anger, rudeness, ridicule, impatience, and lack of respect for others is unacceptable behavior. Demonstrations to support or oppose a speaker or idea, such as clapping, cheering, booing, hissing, or the use of intimidating body language are not permitted.
3. When persons refuse to abide by reasonable rules of civility and decorum or ignore repeated requests by the Mayor to finish their remarks within the time limit adopted by the City Commission, and/or who make threats of physical violence shall be removed from the meeting room by law enforcement officers, either at the Mayor's request or by an affirmative vote of a majority of the sitting Commissioners.

"Politeness costs so little." – ABRAHAM LINCOLN

- I. **CALL TO ORDER**
- II. **PLEDGE OF ALLEGIANCE**
- III. **ROLL CALL**
- IV. **APPROVAL OF MINUTES OF REGULAR COMMISSION MEETING ON APRIL 5, 2021**
- V. **ADDITIONS OR DELETIONS OF THE AGENDA**
- VI. **CHANGES TO THE ORDER OF TOPICS ON THE AGENDA**
- VII. **PRESENTATIONS**
 - A. North Florida Transportation Planning Organization's Five-Year Transportation Improvement Program by Ms. Wanda Forrest, Transportation Planning Manager
 - B. Proclamation to Declare May 2021 as Motorcycle Safety Awareness Month by Ms. Sue Hendrick, President of ABATE (A Brotherhood Aimed Towards Education)
 - C. Proclamation to Declare June 2021 as Gay Pride Month by Ms. Sara Bloomberg
- VIII. **PUBLIC COMMENTS**
- IX. **COMMISSIONER COMMENTS**

X. PUBLIC HEARINGS

1. Ordinance 21-04, Second Reading, and First Public Hearing: to Amend the Land Development Regulations to Change Setbacks for Small Platted Lots and to Abolish the Overlay District Adjacent to A1A Beach Boulevard (Presenter: Brian Law, Building Official)

XI. CONSENT

XII. OLD BUSINESS

2. Drug / Alcohol Rehab and Medical Facilities: Review of Proposal of Where to Locate (Presenter: Lex Taylor, City Attorney)
3. Construction of 2nd Street West of 2nd Avenue: Approval of Non-Ad Valorem Assessment for Adjacent Lot Owners to Pay Costs (Presenter: Bill Tredik, Public Works Director)
4. Resiliency Study: Presentation of Report by Bill Tredik, Public Works Director
5. Pay for City Commissioners: Consideration of Adjusting (Presenter: Patty Douylliez, Finance Director)
6. Upcoming Workshops: Consideration of Scheduling One or Two in May for Solid Waste / Recycling Operations, Creating a Stormwater Utility, and Other Topics (Presenter: Max Royle, City Manager)
7. Public Parking: Discussion of Where to Allow and Not Allow Parking and Creating Five-Year Plan for Improvements (Presenters: Max Royle, City Manager; Bill Tredik, Public Works Director)
8. Ordinance 21-05, First Reading, to Vacate Alley between B and C Streets West of A1A Beach Boulevard to 2nd Avenue (Lots 1-16, Block 40, Coquina Gables Subdivision) (Presenter: Brian Law, Building Official)
9. Ordinance 21-06, First Reading, to Vacate Alley between A and B Streets, between 3rd and 4th Avenues (Lots 1-16, Block 49, Coquina Gables Subdivision) (Presenter: Brian Law, Building Official)

XIII. NEW BUSINESS

10. City-Wide LED Streetlight Conversion: Request to Approve Phase 1 for Lights Along the Boulevard, Pope Road, 16th, 11th, and A Streets (Presenter: Bill Tredik, Public Works Director)
11. Proposed Personnel Manual Changes: Resolution 21-17, Minor Changes Regarding Shift Work for the Police Department; Resolution 21-18, Regarding Minor Changes to Standards of Conduct and Discipline; Resolution 21-19, Deleting Provision Regarding Employees Making Personal Long-Distance Telephone Calls; Resolution 21-20, Deleting Sick Pay Incentive and Adding Birthday Holiday in Place of Incentive; and Resolution 21-21, Concerning Changes to Criteria of Employees Who Can Donate Time or Be Recipient of Donated Time (Presenter: Beverly Raddatz, City Clerk)
12. Long Range Financial Planning: Review of Report (Presenter: Patricia Douylliez, Finance Director)

XIV. STAFF COMMENTS

XV. ADJOURNMENT

NOTICES TO THE PUBLIC

1. **SUSTAINABILITY AND ENVIRONMENTAL PLANNING ADVISORY COMMITTEE (SEPAC).** It will hold its monthly meeting on Wednesday, May 12, 2021, at 6:00 p.m. in the Commission meeting room at city hall.
2. **COMPREHENSIVE PLANNING AND ZONING BOARD.** It will hold its monthly meeting on Tuesday, May 18, 2021, at 6:00 p.m.
3. **ART IN THE PARK:** The City, the Cultural Council, and the Art Studio will present Art in the Park on Saturday, May 22, 2021, from 11 a.m. to 5 p.m. The location is the City's Lakeside Park to the east of the police station. Local artists will present their works for sale and a local musician or musicians will provide entertainment. The public is encouraged to walk or bicycle to the event.
4. **HOLIDAY, MEMORIAL DAY.** It will be observed on Monday, May 31, 2021. CITY OFFICES CLOSED. There will be no pickup of household waste on that day. Residents who usually have pickup service on Monday will have service on Tuesday. There will be no change to the recycling and special waste pickup schedule that week.

NOTE:

The agenda material containing background information for this meeting is available on a CD in pdf format upon request at the City Manager's office for a \$5 fee. Adobe Acrobat Reader will be needed to open the file.

NOTICES: In accordance with Florida Statute 286.0105: "If any person decides to appeal any decision made by the City Commission with respect to any matter considered at this scheduled meeting or hearing, the person will need a record of the proceedings, and for such purpose the person 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 based.

In accordance with the Americans with Disabilities act, persons needing a special accommodation to participate in this proceeding should contact the City Manager's Office not later than seven days prior to the proceeding at the address provided, or telephone 904-471-2122, or email sabadmin@cityofsab.org.

Presentation and Workshop Materials

The following pages contain the Vulnerability Assessment presentation as well as the Agenda Item memorandum.

MEMORANDUM

TO: Max Royle, City Manager

FROM: William Tredik, P.E. Public Works Director

DATE: April 23, 2021

SUBJECT: Presentation of Final Plan by Consultant
St. Augustine Beach Vulnerability Assessment and Adaptation Plan

BACKGROUND

In 2019, the City applied to the Florida Resilient Coastlines Program (FRCP) for financial assistance to conduct a Vulnerability Assessment and Adaptation Plan (the Plan). The purpose of the Plan was to identify and analyze the City's vulnerability to flooding due to storm surge and sea level rise and develop an adaptation plan to guide the City in future decision making. On March 3, 2020 the FRCP notified the City of the award of \$72,500 for the project in the State of Florida 2020-2021 fiscal year, beginning July 1, 2020. The grant did not require a City match. On July 31, 2020 the City entered into a grant agreement with the Florida Department of Environmental Protection (FDEP). On August 28, 2020, the City entered a contract with CMT to complete the Plan.

The Plan included the following three major tasks:

1. Update the City GIS system with Drainage and Topographic Mapping to determine areas vulnerable to sea level rise and storm surge.
2. Update the City Master stormwater model to include new data within the stormwater master plan area. An informational public workshop partnering with the Northeast Florida Regional Council was conducted at the completion of the modeling update.
3. Synthesize the results from the first two phases with the results of the analysis of the sea level rise scenarios evaluated based on implementation feasibility, public acceptance, effective sustainability, and cost.

PLAN PROGRESS

Tasks 1 and 2 of the Plan were completed on schedule and deliverables have been submitted to and approved by FDEP. A public workshop, facilitated by the Northeast Florida Regional Council was held via Zoom at the end of Task 2 on February 24, 2021.

During the February public workshop the results of Tasks 1 and 2 were presented and feedback was solicited from attendees. The Consultant has now synthesized feedback and the work product from Tasks 1 and 2 and developed the Task 3 Final Report with recommendations to be presented at the May 3, 2021 City Commission meeting.

The recommendations in the Plan will guide the City in the implementation of future resiliency projects. Approval and adoption of the plan – and the recommended improvements therein – strengthens the City’s position when applying for future funding assistance for resiliency projects and allows the City to request their inclusion into the St. Johns County Local Mitigation Strategy Project List, making them eligible for future Hazard Mitigation funding opportunities as they arise.

Due to the short timeframe between the completion of Task 2 and Task 3, the Final Plan was not complete by printing of the May 3, 2021 City Commission agenda book. The Final Plan will be delivered electronically and made available to the public on the City web page in advance of the May 3, 2021 City Commission Meeting. Hard copies will also be provided to the City Commission in advance of the meeting.

ACTION REQUESTED

Approve and adopt the City of St. Augustine Beach Vulnerability Assessment and Adaptation Plan

Summary Report of Public Meeting

Copies of the presentation and a draft report were given to the Commissioners and made available to the public in advance of the meeting. To open the meeting the Public Works Director gave a brief overview of the project as well as the three primary deliverables of the Vulnerability Assessment, including:

1. Updating the City GIS Mapping
2. Updating the City's Master Stormwater Model and incorporating sea level rise scenarios
3. Synthesize the results of the updated maps and models to develop conceptual projects to address the city's vulnerabilities to sea level rise and storm surge.

The Public Works Director then introduced the vulnerability assessment consultant, CMT Engineers, to present the Final Report. The Final Report, consultant presentation and 2nd Public Meeting attendee list and minutes are included in supporting documentation below. In summary the presentation included:

1. Description of the project background
2. Flood prone areas evaluated
3. Stormwater Modeling effort including sea level rise scenarios
4. Identified vulnerable areas to storm surge inundation
5. Findings and recommendations

The Consultant presented the findings, including exhibits of critical infrastructure and geographical areas vulnerable to coastal flooding for the various selected storm events. The consultant also presented order of magnitude cost estimates to address the identified vulnerabilities, totaling \$3.63 million of improvements including design and permitting.

The City Commission comments at the public meeting are summarized as follows:

1. The mayor asked if intensifying rainfalls are considered in the report. It was discussed that the focus of the study was to identify vulnerabilities to storm surge and sea level rise, thus the modeling focused on the impacts of increased tailwater conditions associated with sea level rise. A planned update to the City's Master Drainage Study will focus specifically on addressing conveyance capabilities within the City's drainage network.
2. The Commission requested that the report be sent to the City's Sustainability & Environmental Planning Advisory Committee (SEPAC). Copies of the report were subsequently forward to all City Boards and Committees.3.Discussion also centered around pursuing funding opportunities to implement improvements to identified vulnerabilities. The Commission asked that this topic be considered at a future workshop. The Study, as well funding strategies for developing capital projects for identified vulnerable areas, are currently scheduled to be discussed at a June 17, 2021 workshop.

The City Commission then took public comment on the Vulnerability Assessment. Of those in attendance, only one member of the public, Mr. Nicholas Binder, spoke on the topic, Mr. Binder wanted to stress that it was imperative that the City investigate funding opportunities for implementing capital projects to address the identified vulnerabilities. He suggested that American Rescue Plan Act monies may be able to be used for this project and asked that the City pursue this funding source.

After discussion was ended, the City Commission voted unanimously to adopt and approve the Vulnerability Assessment.

Summary Report of Public Meeting (Continued)

Materials Created at the Workshop

No materials were created in the workshop other than verbal feedback to the consultant in preparation of the final report. This feedback is included in the meeting minutes.

Minutes, record of votes and resolutions approved by the City Commission

The following pages contain the minutes from the May 3, 2015 City commission meeting. Pertinent portions have been highlighted. As shown in the minutes, the Commission voted unanimously to approve the Vulnerability Assessment. No resolution was introduced or passed as the commission approval was introduced by motion and voted on by roll call.

R2115
City of St. Augustine Beach Vulnerability Assessment
2nd Public Meeting Attendance Sheet
May 3, 2021

The following persons were in attendance at the 2nd Public Meeting, based upon video record and speaker cards.

City Commission

Margaret England, Mayor (Seat 4)
Don Samora, Vice Mayor (Seat 5)
Ernesto Torres (Seat 1)
Dylan Rumrell (Seat 2)
Undine George (Seat 3)

City Staff

Max Royle, City Manager
Lex Taylor, City Attorney
Dan Carswell, Chief of Police
T.G. Harrell, Police Commander
Beverly Raddatz, City Clerk
Patricia Douylliez, Finance Director
Brian Law, Building Official
William Tredik, Public Works Director

Vulnerability Assessment Consultant Presenters

Gary Sneddon, CMT Engineers
Caitlan Breland, CMT Engineers

Public in Attendance (from Speaker Cards)

Brud Helhoski
Nicholas Binder
Rebecca Williams
Lyla Williams
Mary Cobb
JoAnne Maffia
James Whithouse
Craig Thompson
Michel Cloward
Marc Craddock

In addition to those citizens who attended in person and filled in speaker cards, the meeting was live streamed and continues to be available for viewing at:

<https://www.youtube.com/watch?v=MOI9pDeCMkQ>

Content specific to the Vulnerability Assessment is found between 3:18:28 through 3:51:52 in the video file.

Vulnerability Assessment Report

City Commission Presentation
City of St. Augustine Beach

Presentation Order

- Project Background
- Flood Prone Areas
- Stormwater Modeling
- Vulnerable Areas
- Findings & Recommendations

Project Background

- Identify likely storm scenarios
- Find flood prone areas
- Update Stormwater Model
- Provide Recommendations

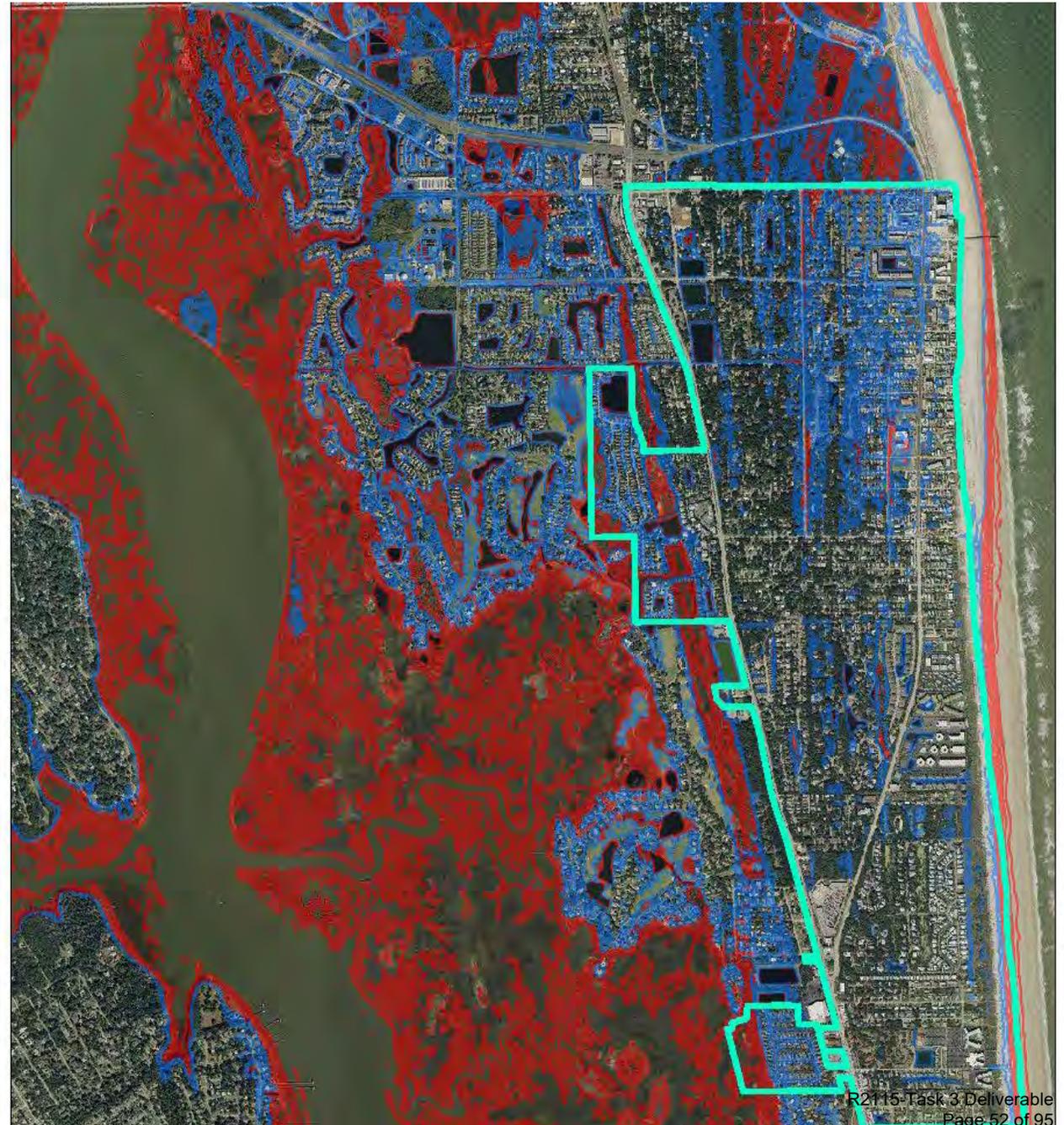


Flood Prone Areas

100-year storm event

Blue = 0' – 3' flooding

Red = 3' – 7' flooding

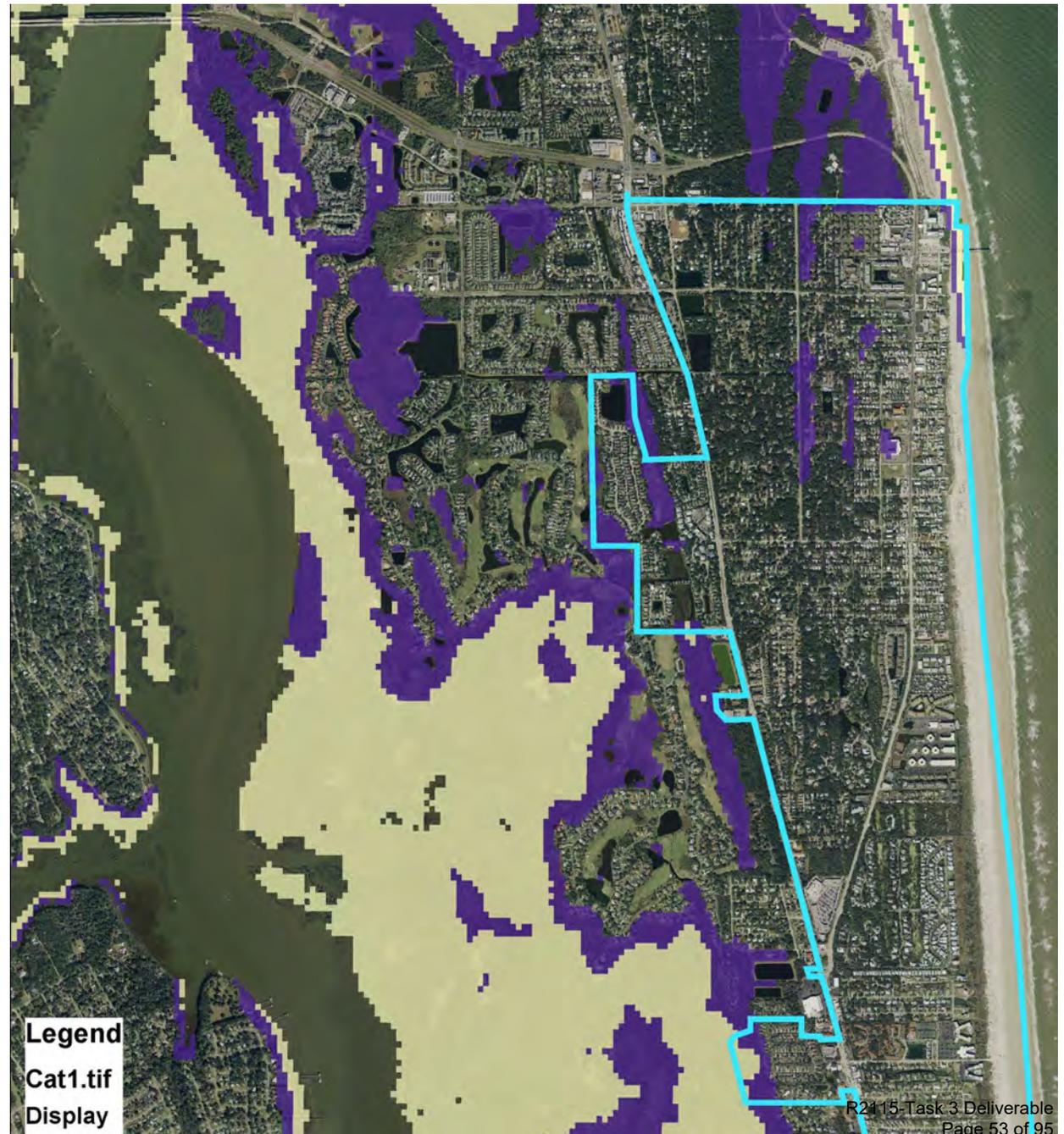


Flood Prone Areas

Category 1 Hurricane

Purple = 0' – 3' flooding

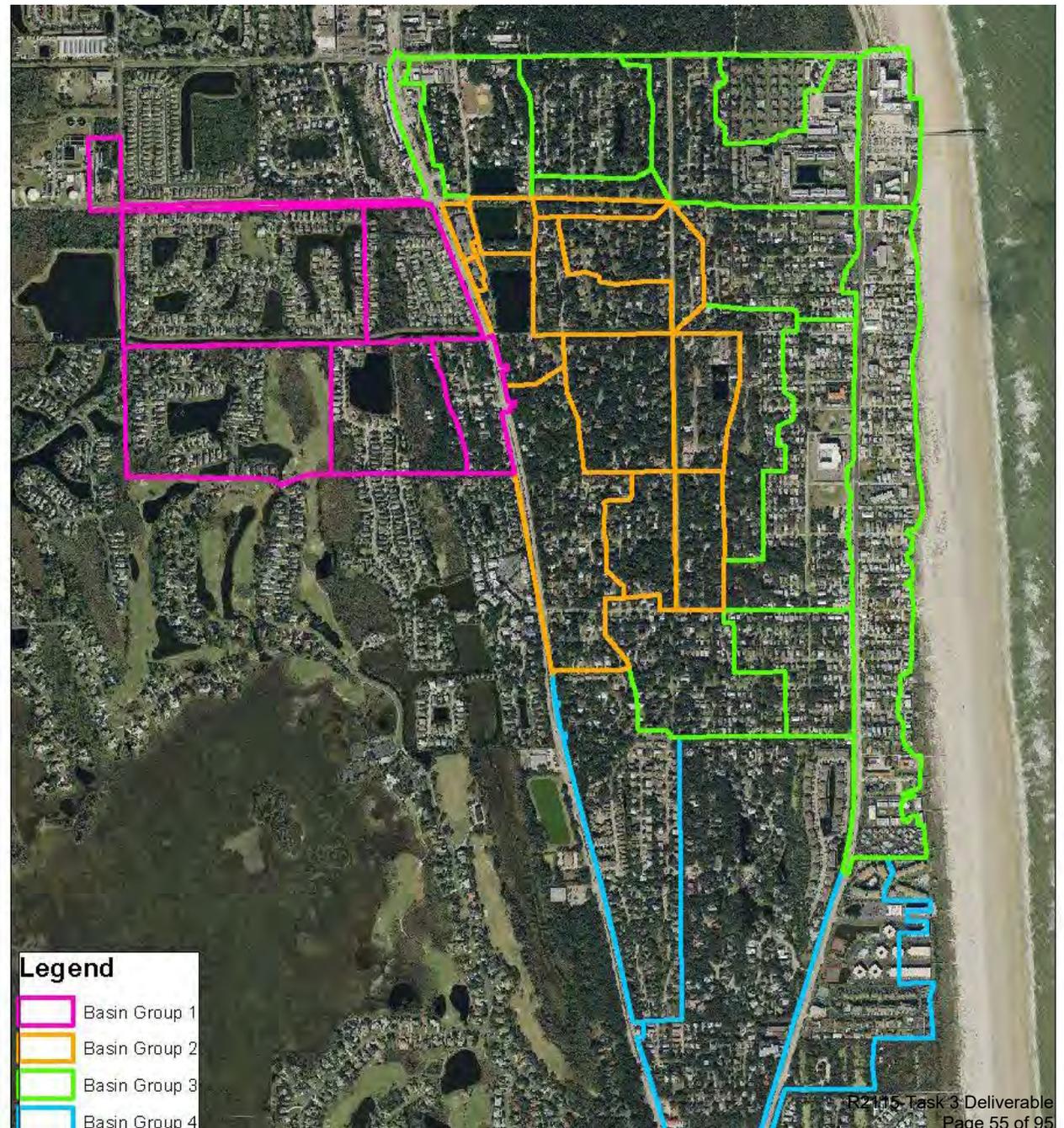
Yellow = 3' – 7' flooding



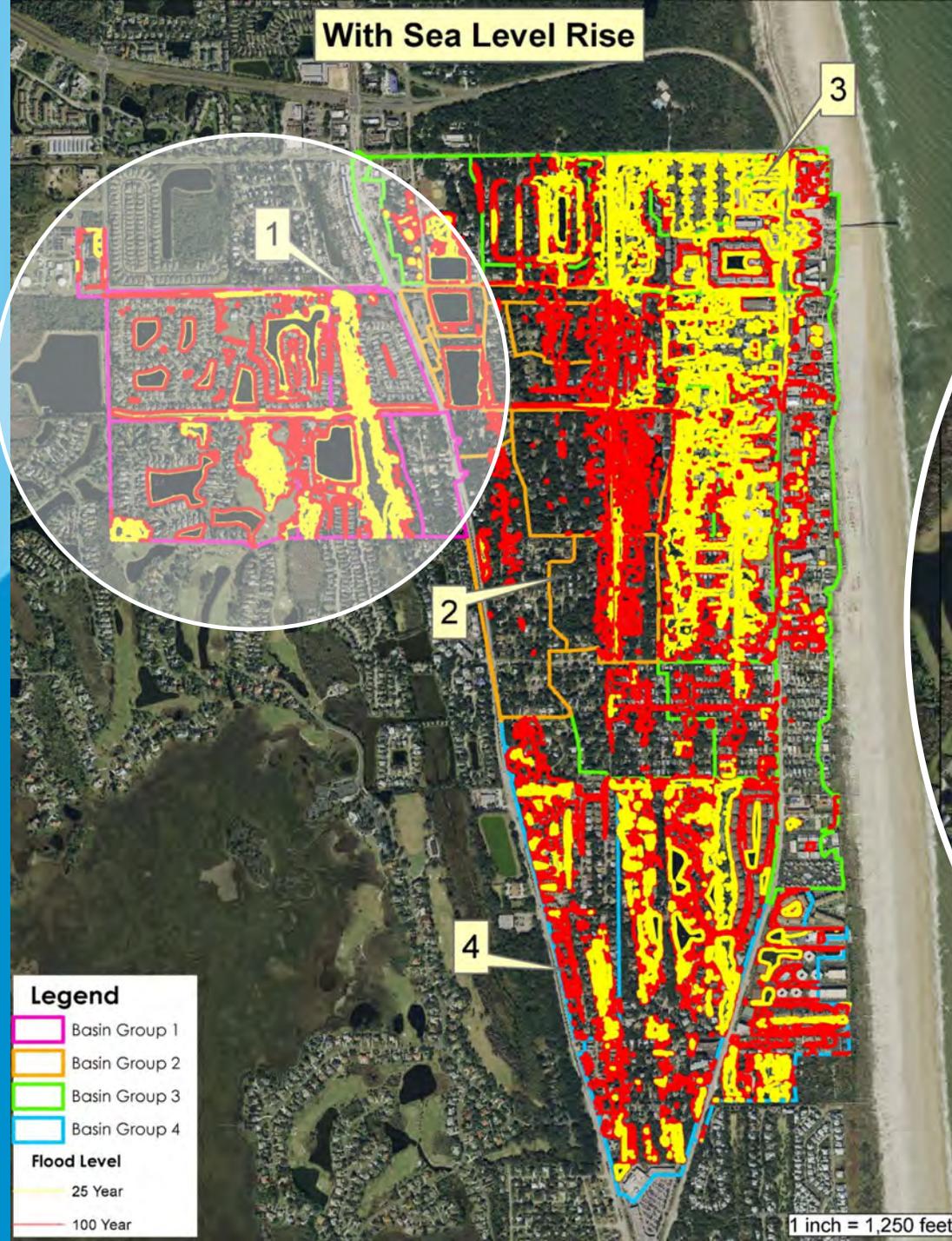
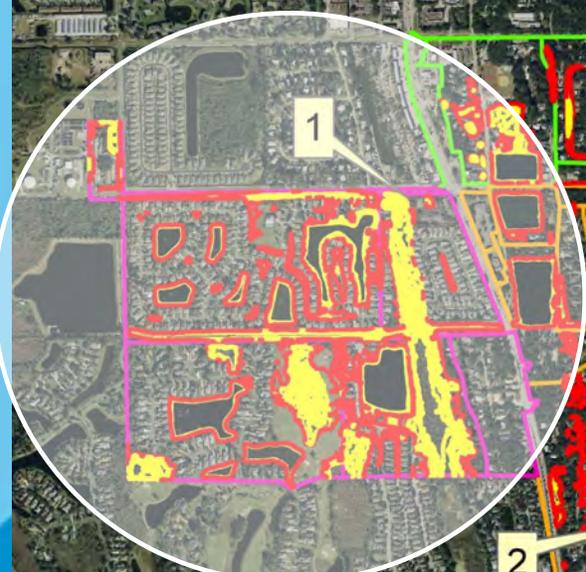
Stormwater Modeling With Sea Level Rise

Stormwater Model

	Mean Annual High Tide (NAVD29)	(NGVD88)
Current	3.4	2.4
w/1 ft. rise	4.4	3.4
w. 2 ft. rise	5.4	4.4



With Sea Level Rise



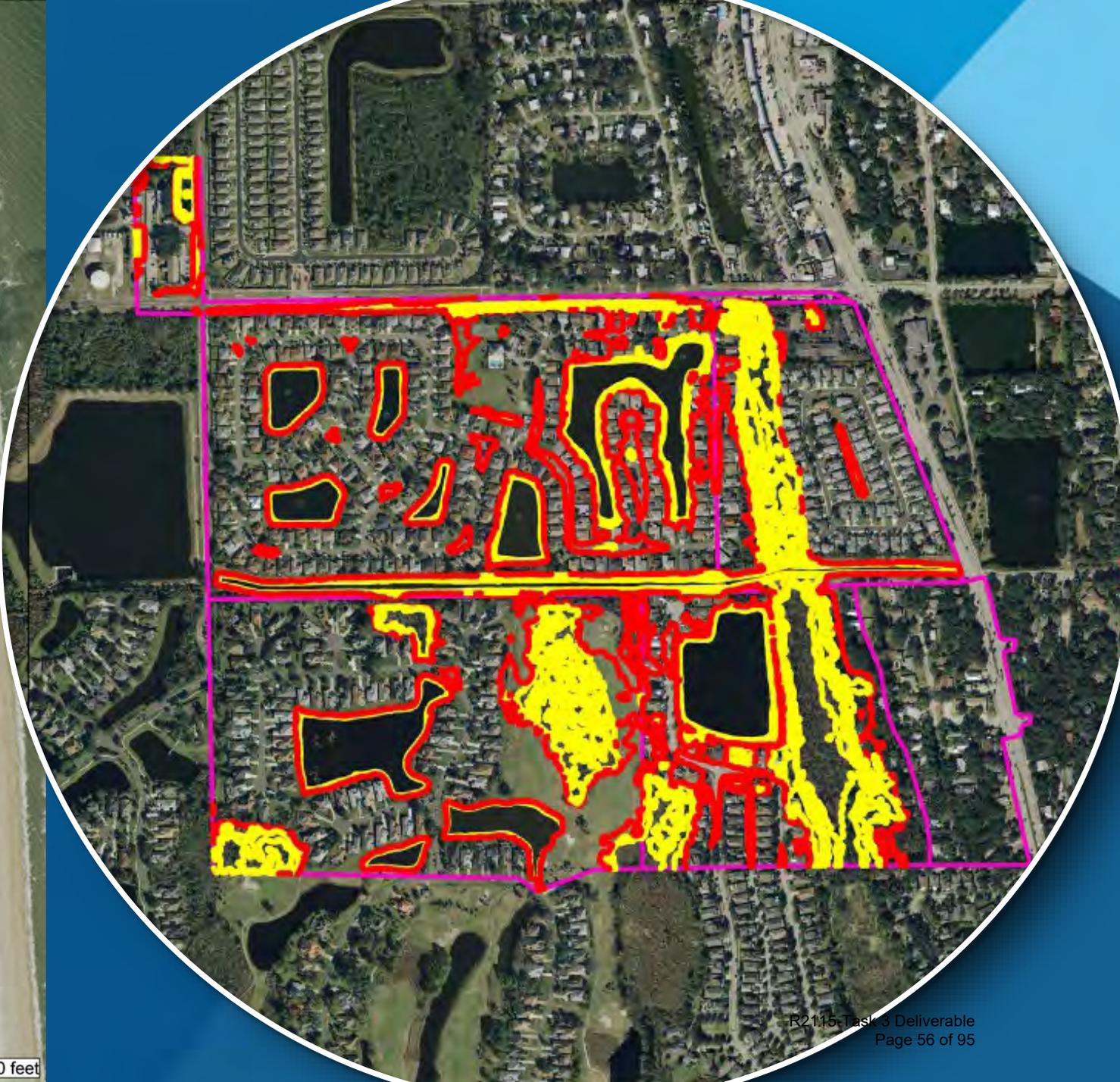
Legend

- Basin Group 1
- Basin Group 2
- Basin Group 3
- Basin Group 4

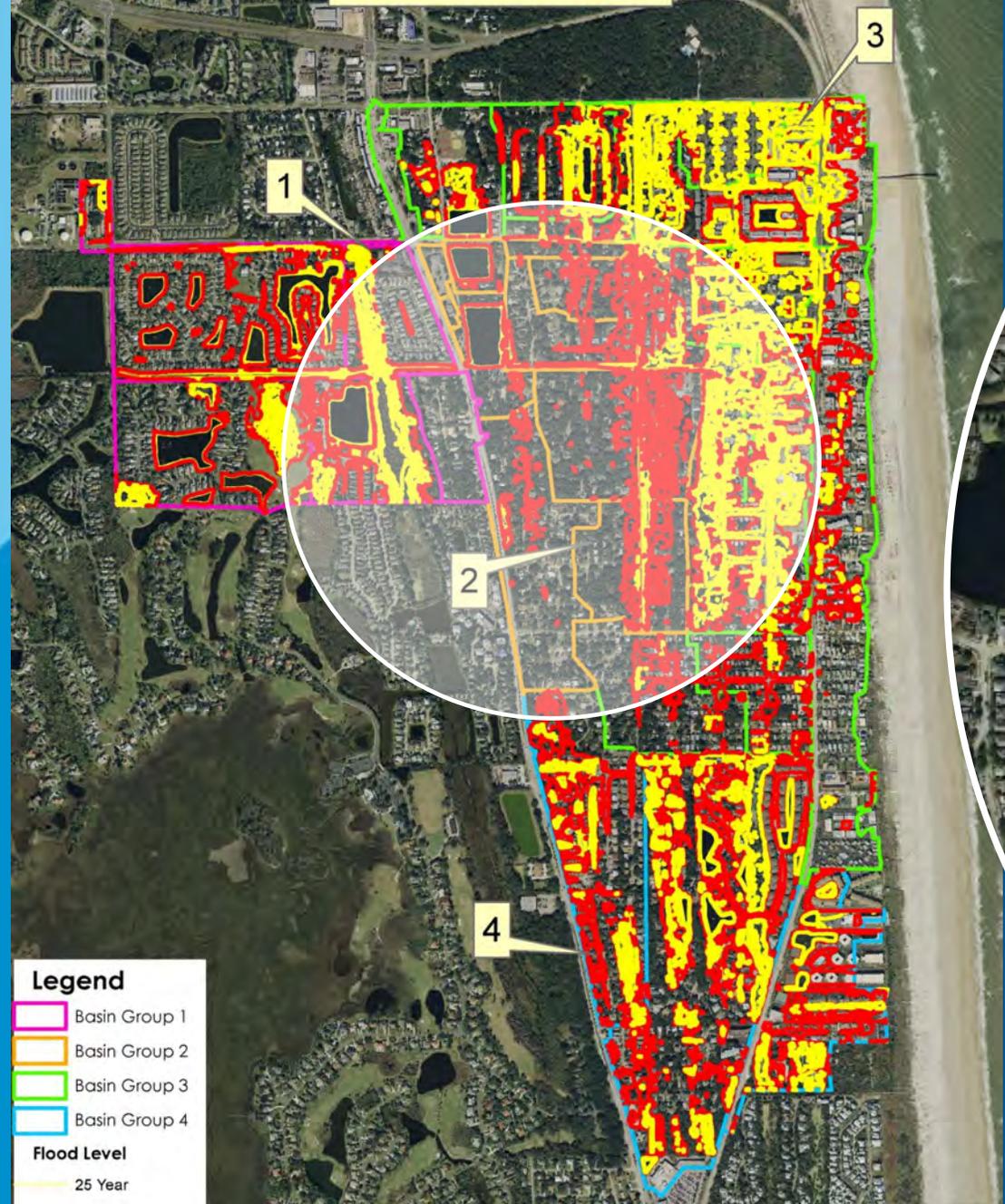
Flood Level

- 25 Year
- 100 Year

1 inch = 1,250 feet



With Sea Level Rise

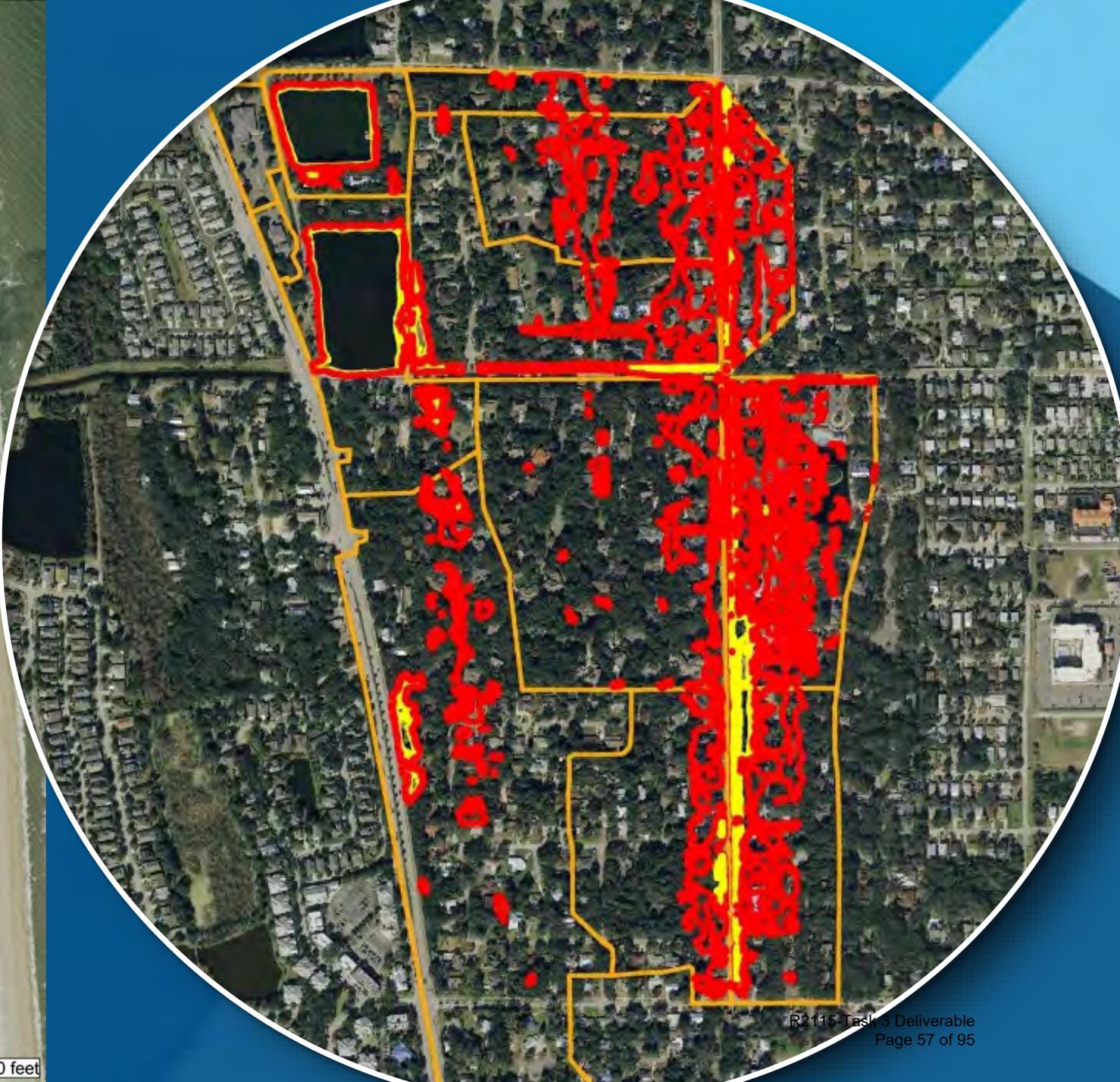


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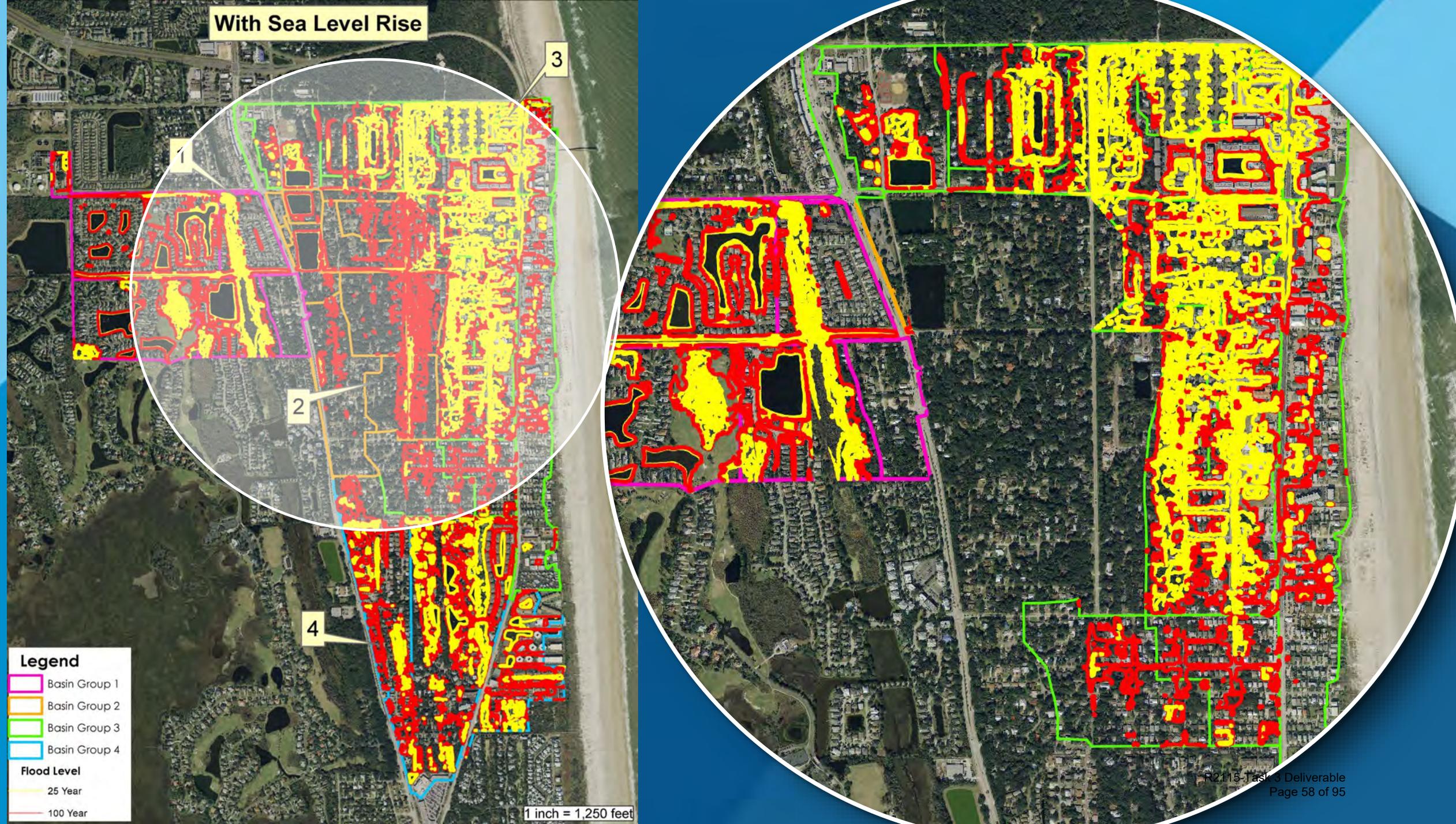
- Basin Group 1
- Basin Group 2
- Basin Group 3
- Basin Group 4

Flood Level

- 25 Year
- 100 Year



With Sea Level Rise



Legend

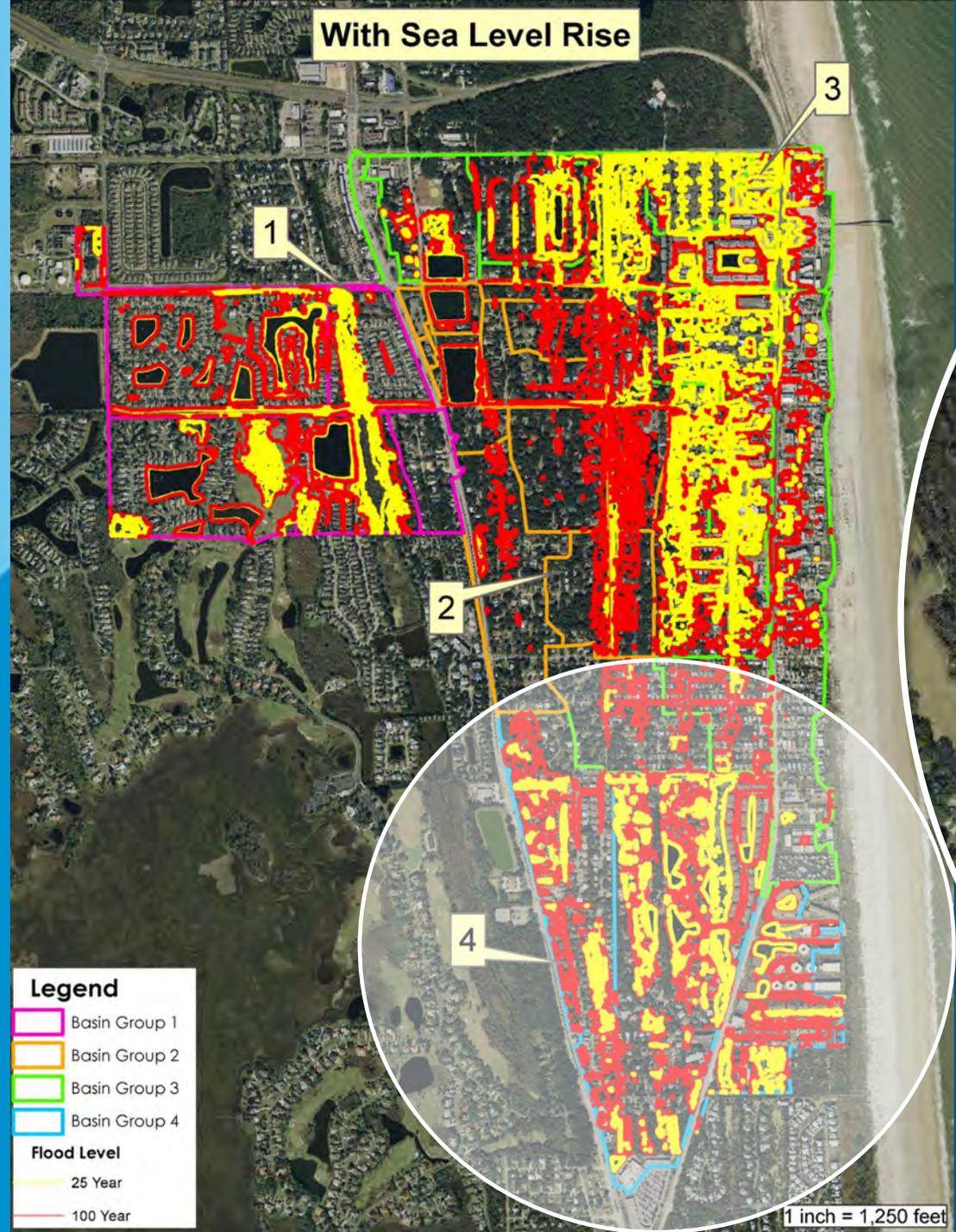
- Basin Group 1
- Basin Group 2
- Basin Group 3
- Basin Group 4

Flood Level

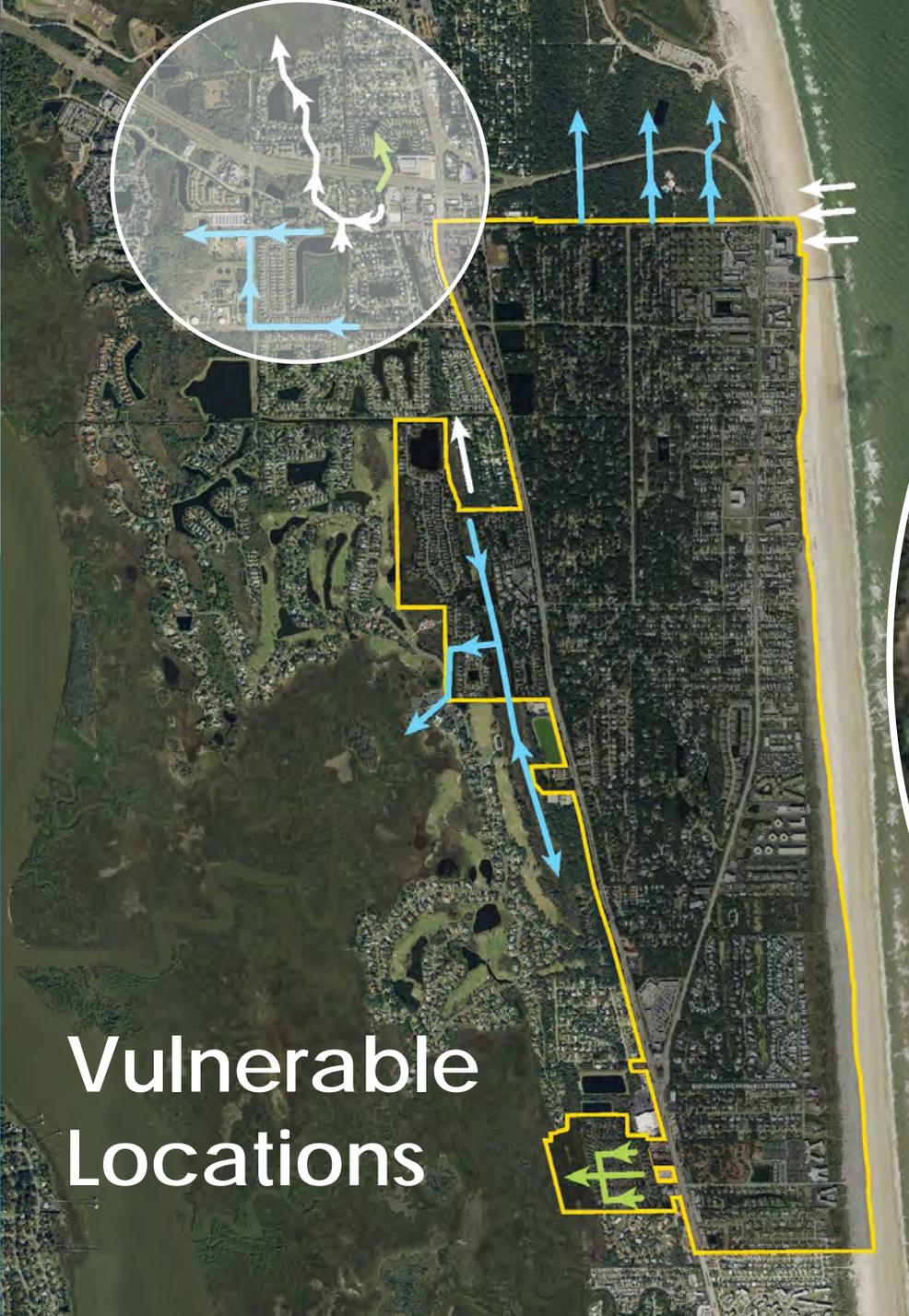
- 25 Year
- 100 Year

1 inch = 1,250 feet

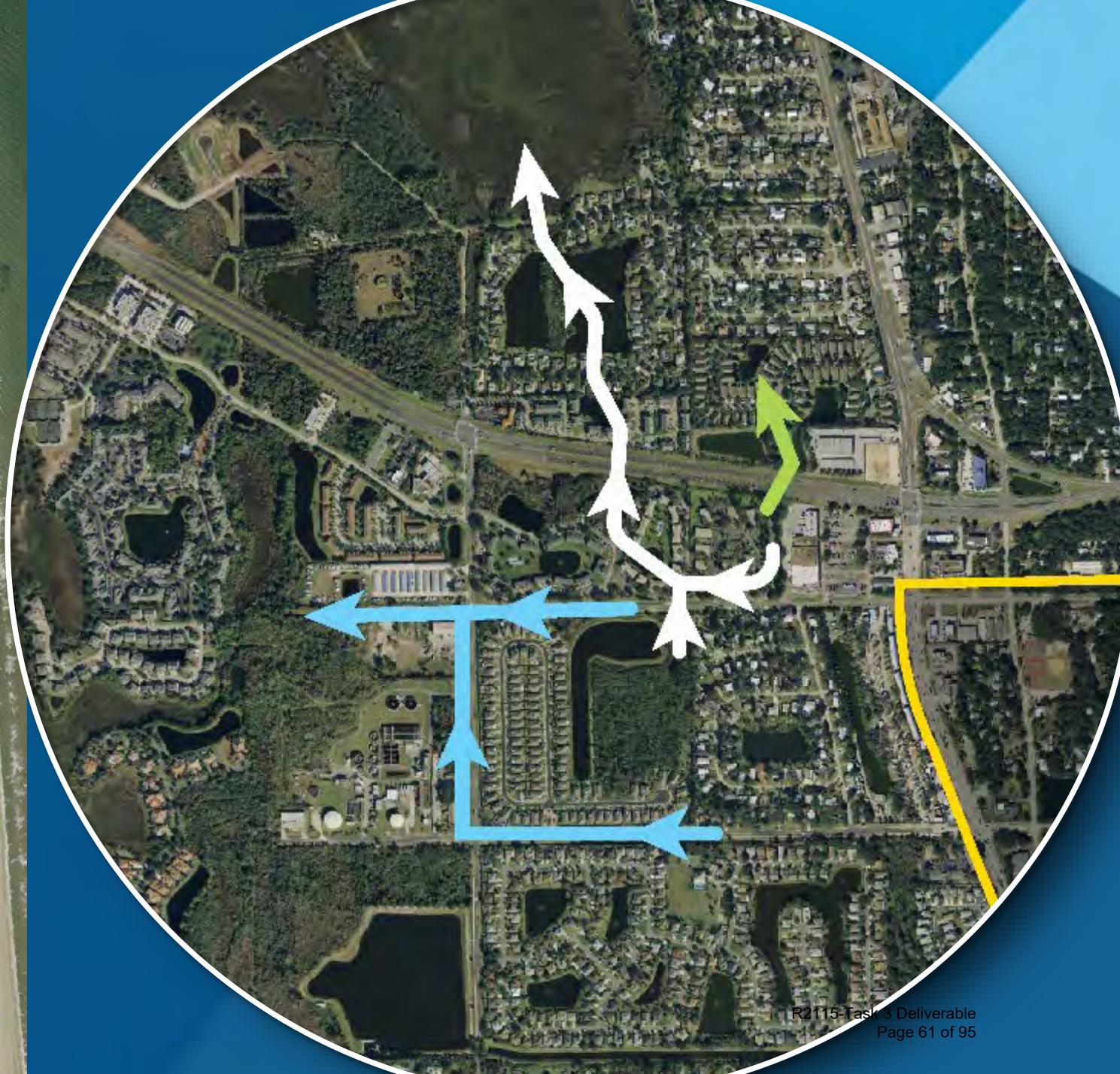
With Sea Level Rise



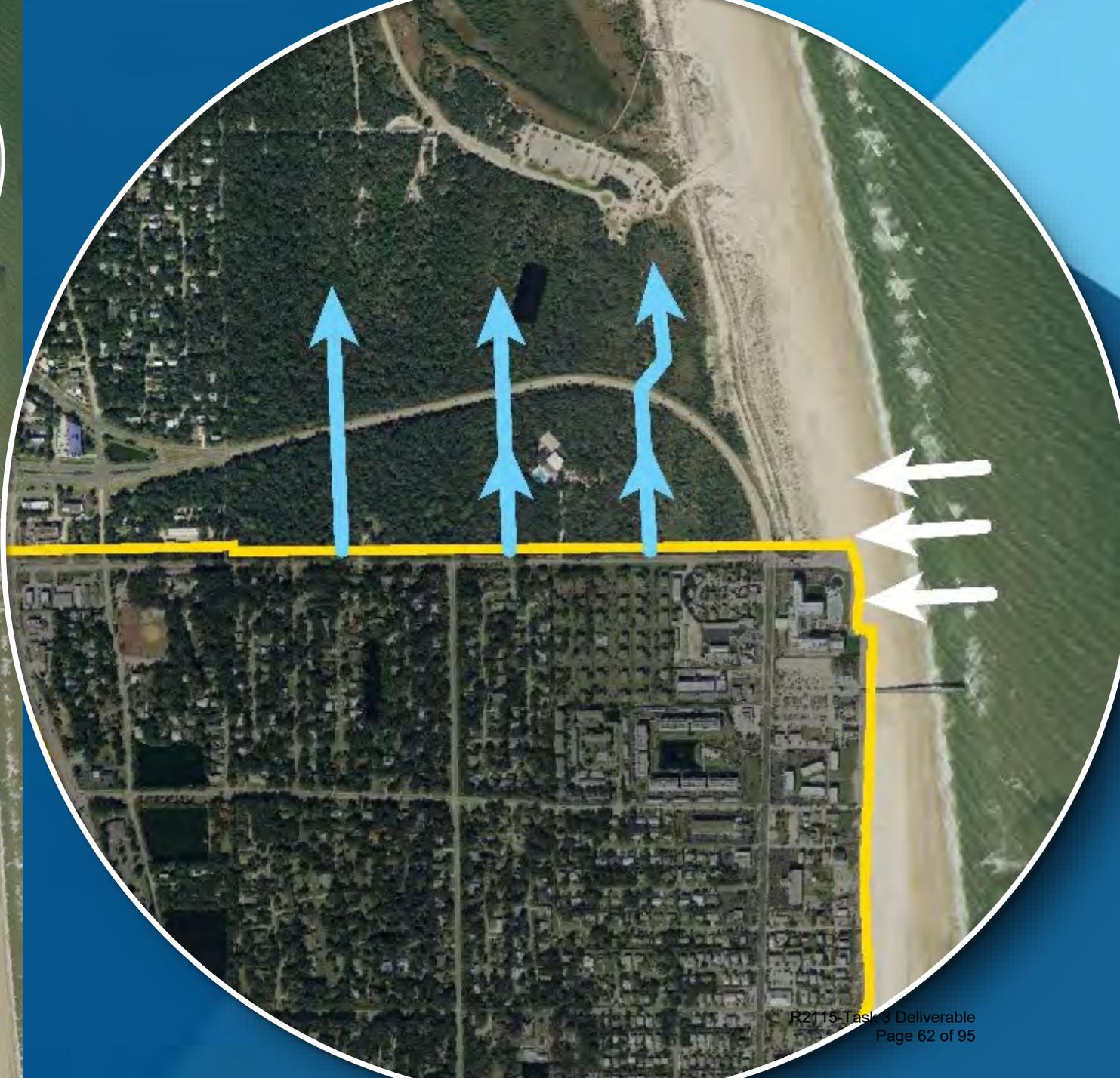
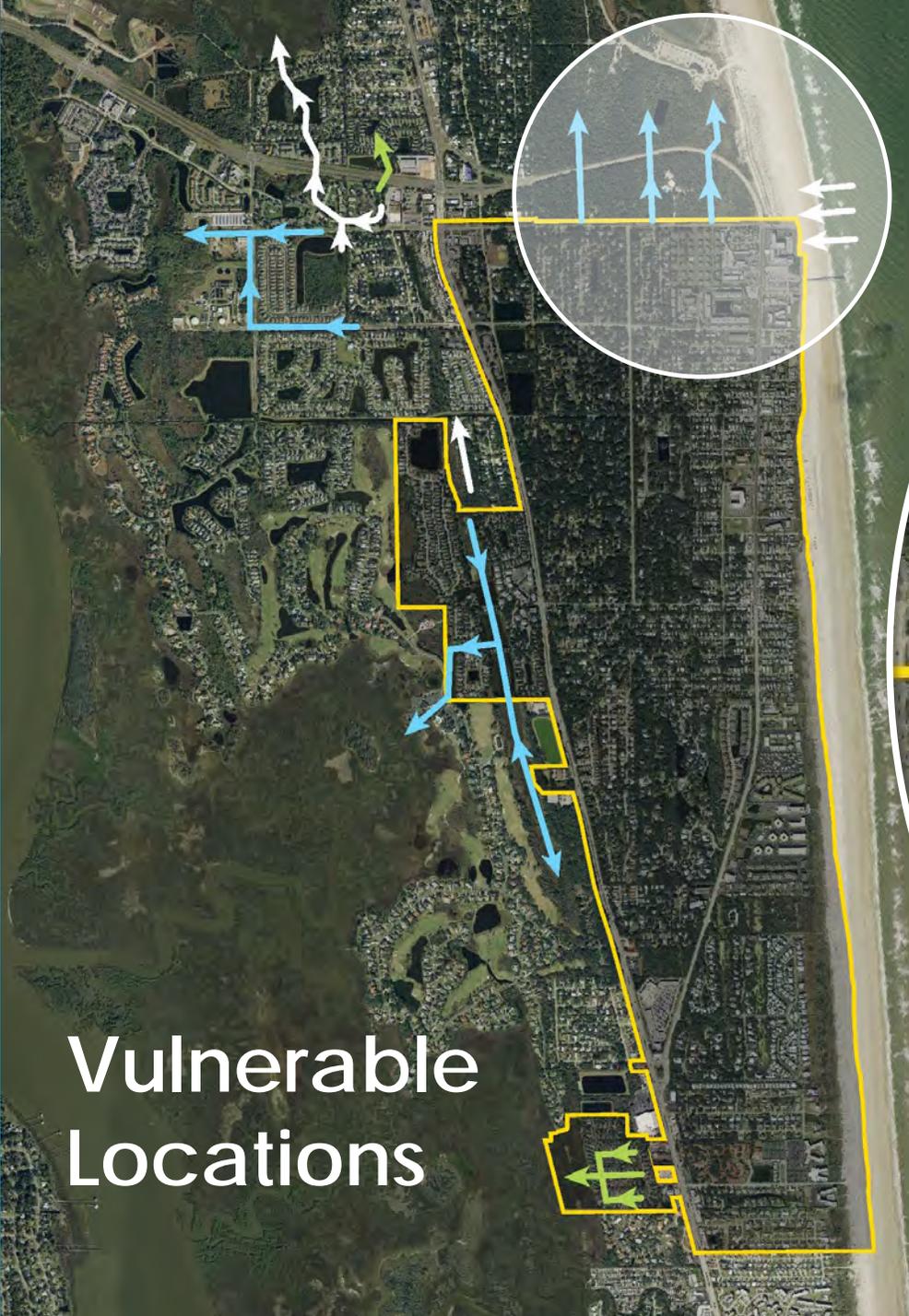
Vulnerable Locations



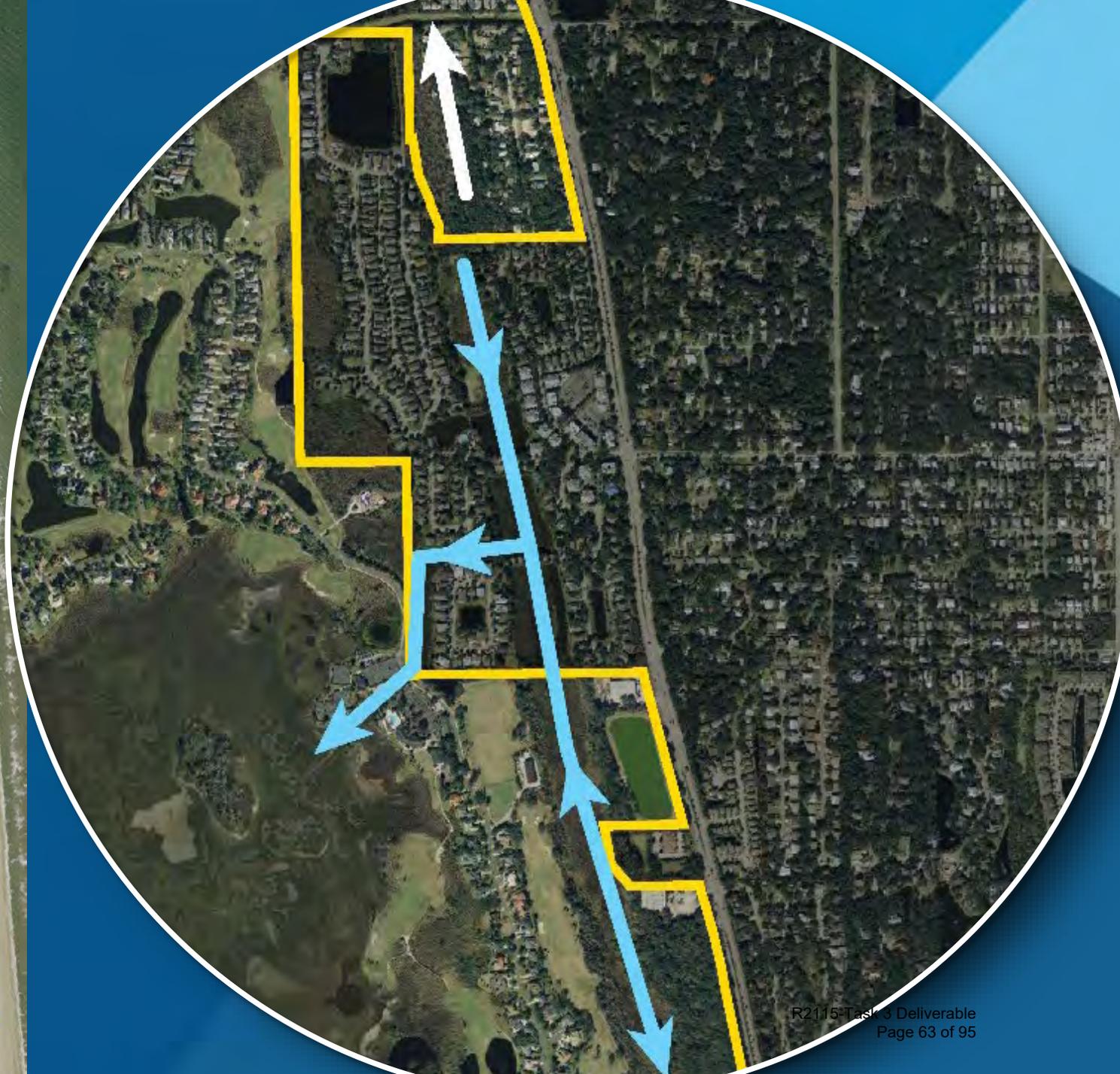
Vulnerable Locations

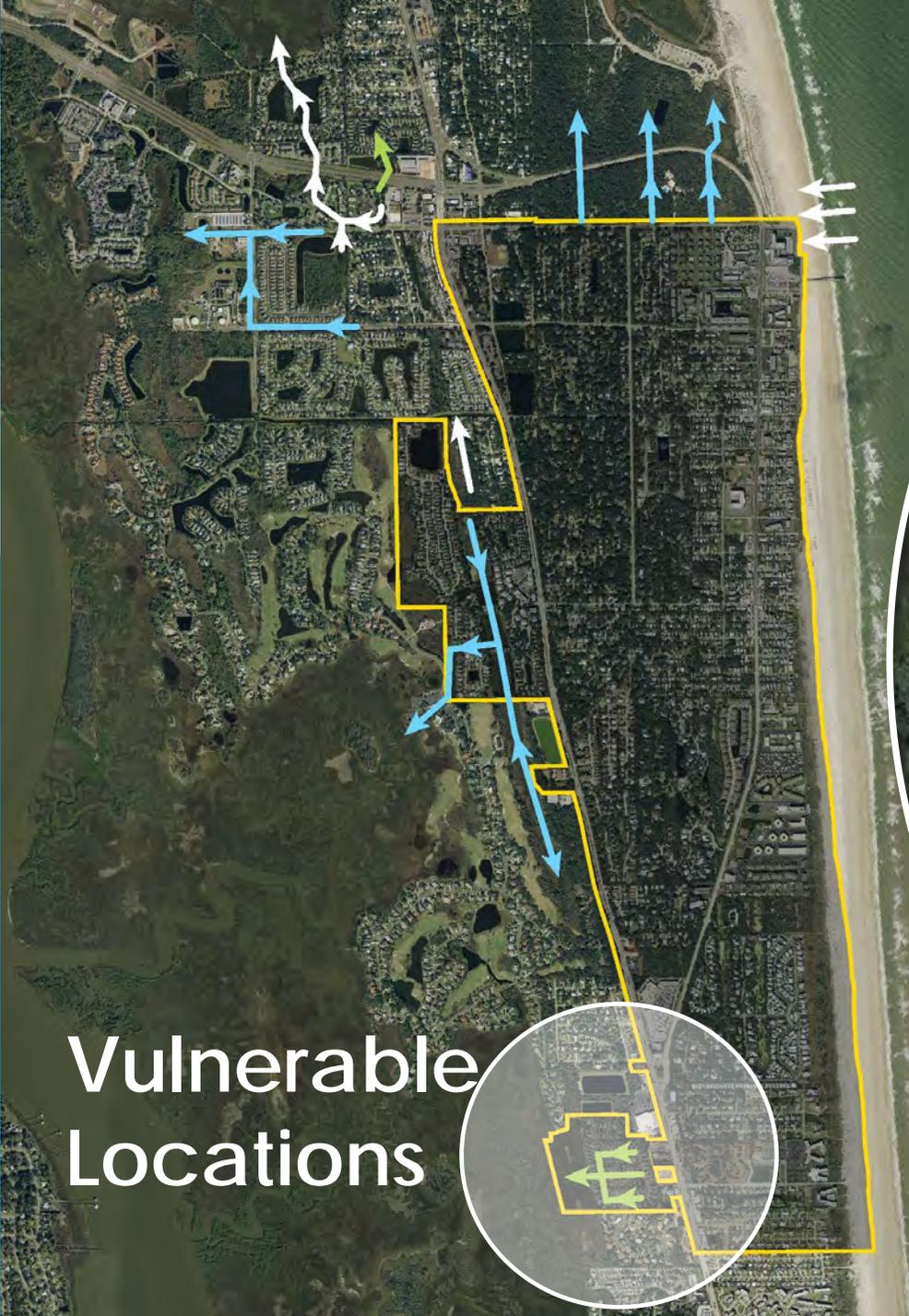


Vulnerable Locations



Vulnerable Locations





Vulnerable Locations



Findings

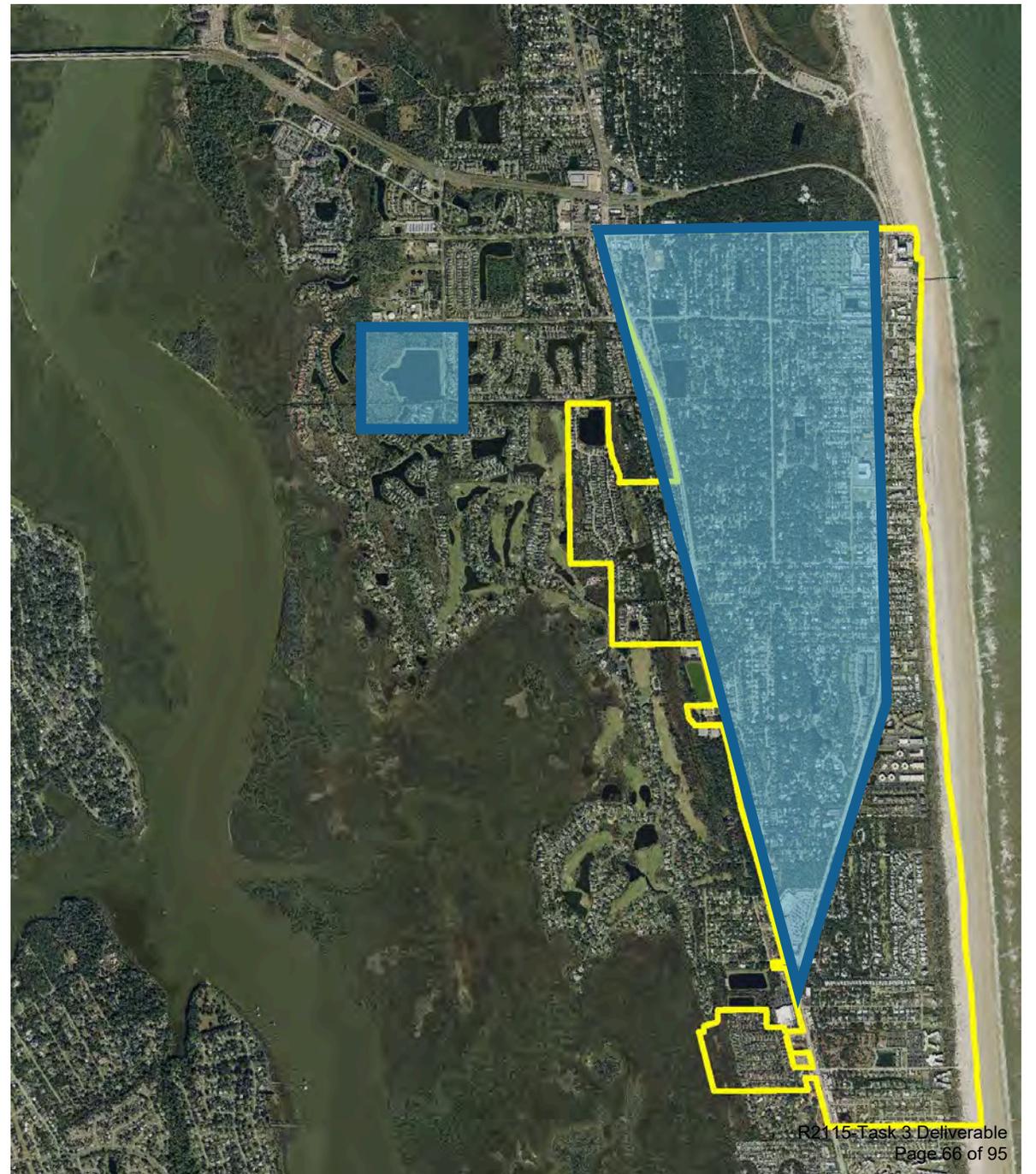
Resiliency & Protection

City Inherent Protection

- Triangle Roadways
- Master Stormwater Pump Station

Infrastructure Constraints

- Mickler Blvd ditch
- 11th St ditch
- 16th St & Beach Blvd storm sewer



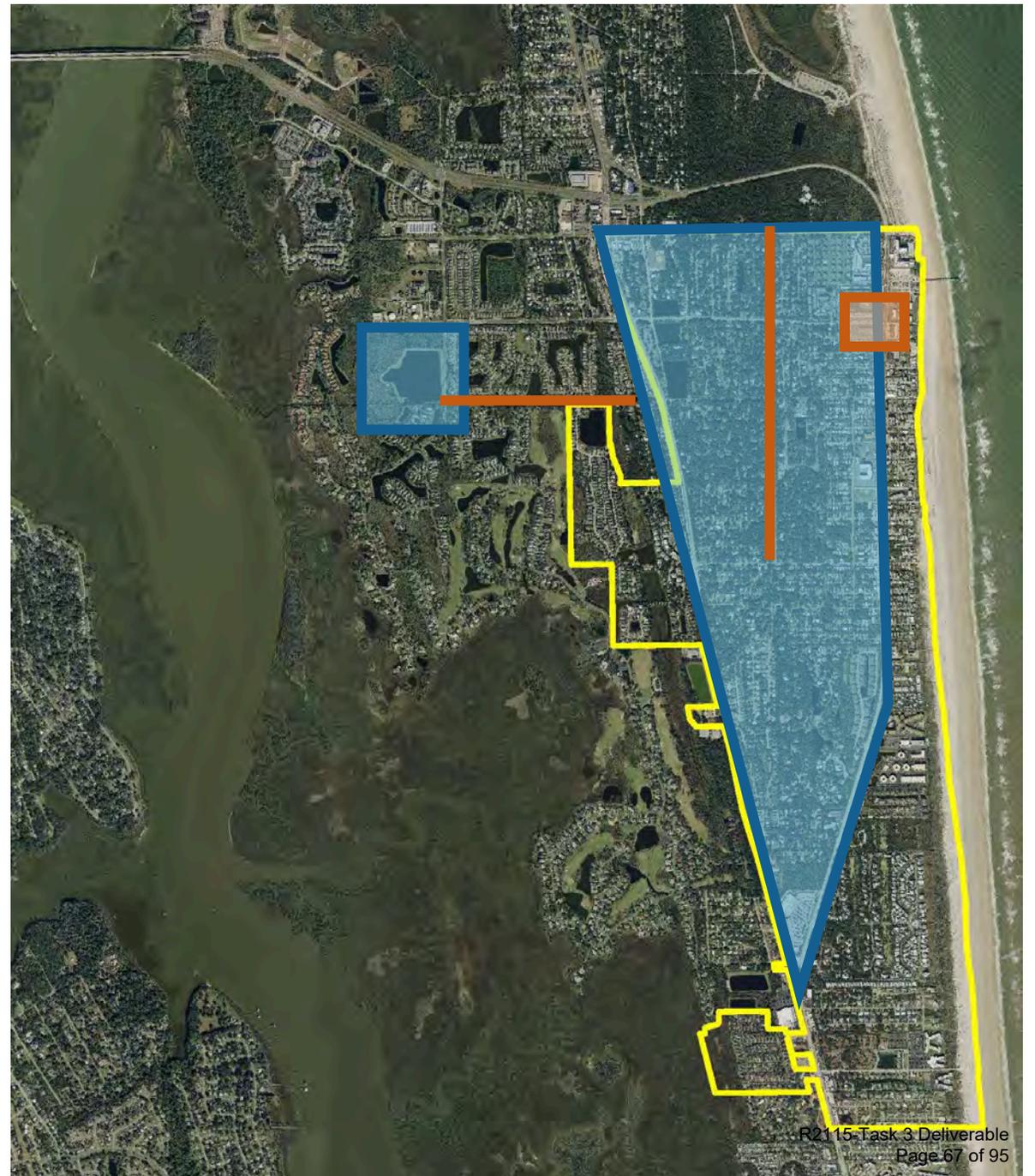
Resiliency & Protection

City Inherent Protection

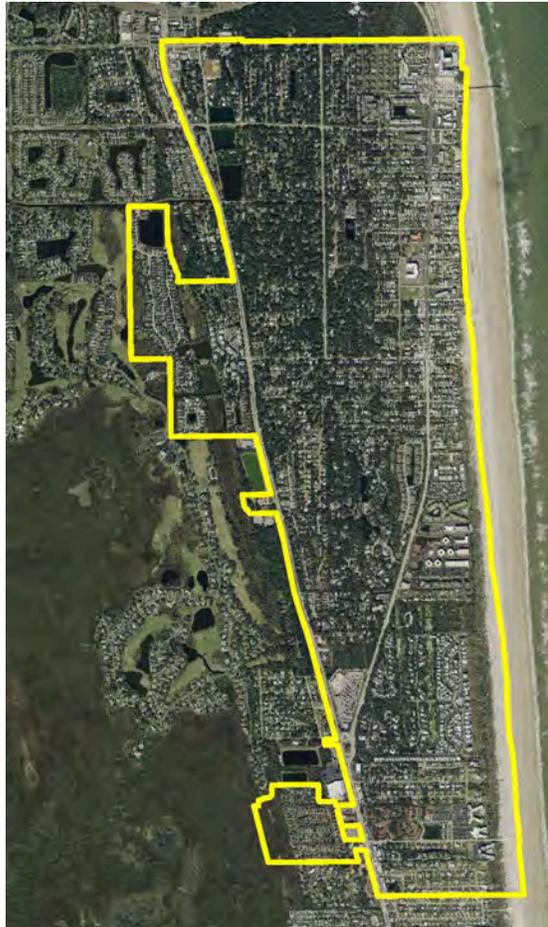
- Triangle Roadways
- Master Stormwater Pump Station

Infrastructure Constraints

- Mickler Blvd ditch
- 11th St ditch
- 16th St & Beach Blvd storm sewer



Critical Facilities



City Hall

City Police Station

Public Works Complex

Fire Station @ Beach Blvd/Pier Park

County Sewage Pump Stations

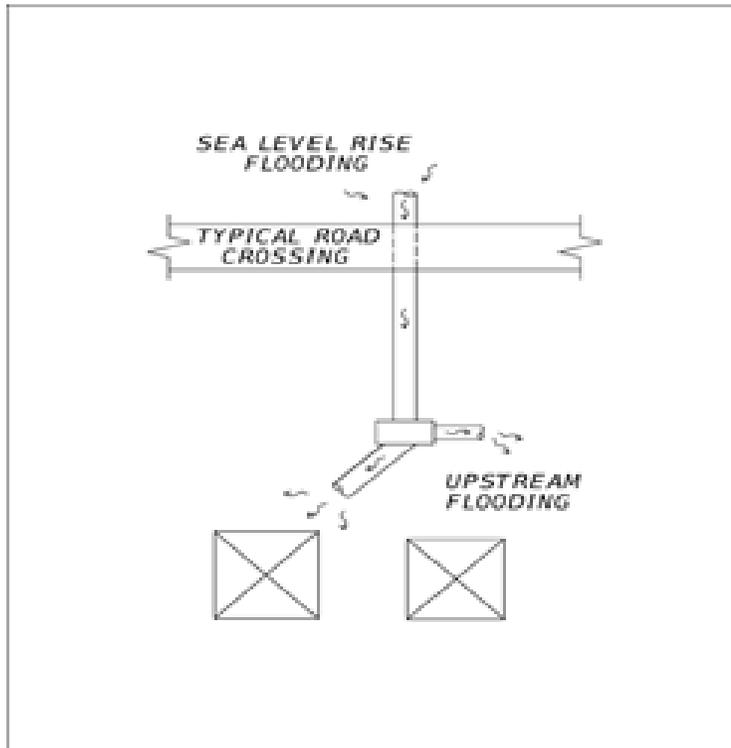
City Stormwater Pump Station

Anastasia Wastewater Treatment Facility

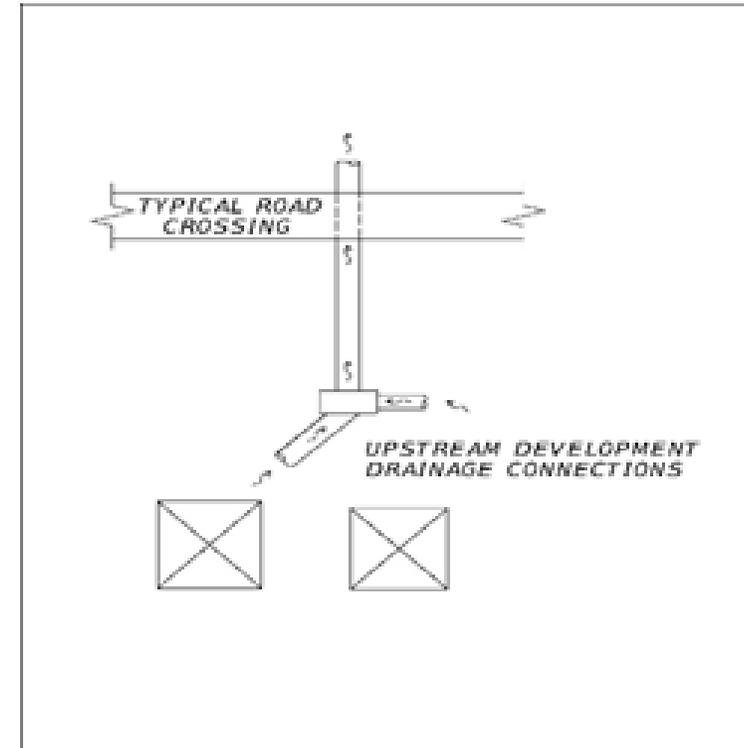
Anastasia Drinking Water Treatment Facility

Vulnerable Area Mitigation Scenario

Normal Operational Discharge

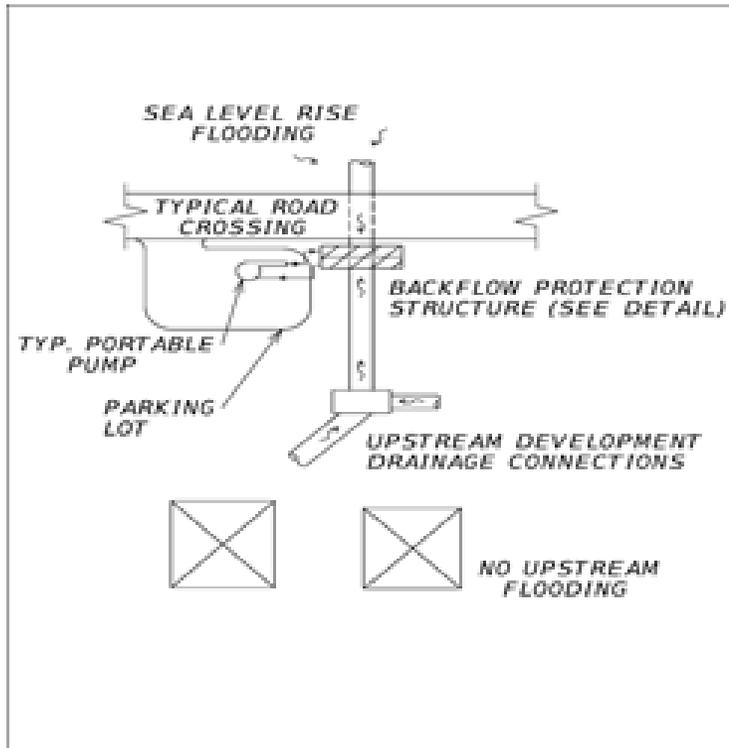


Sea Level Induced Floor Backflow

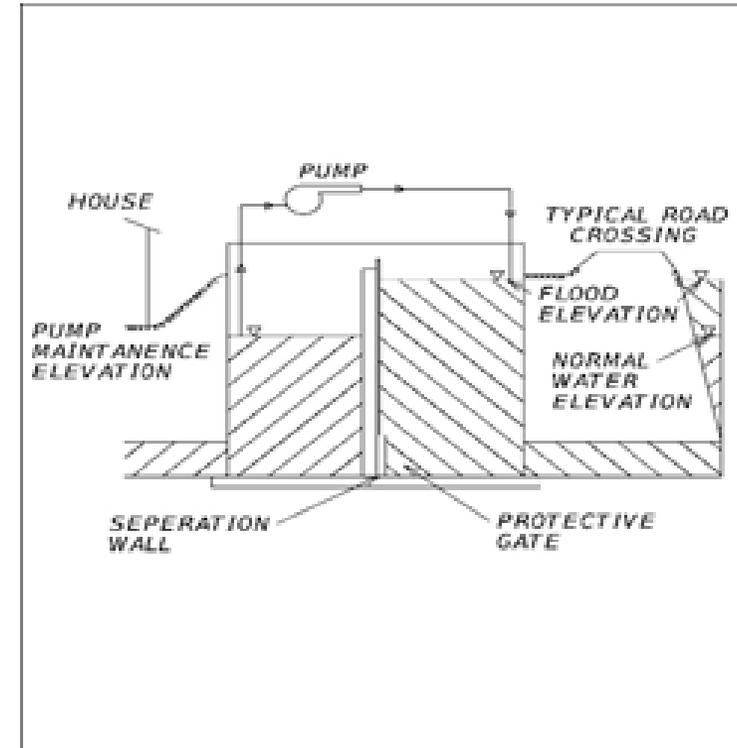


Vulnerable Area Mitigation Scenario

Sea Level Flood Backflow w/ Backflow Protection System



Backflow Protection System



Recommendations

Vulnerable Mitigation Capital Improvement Plan

Adaptation Planning

Revisit the Vulnerability Conditions with Time



MINUTES

REGULAR CITY COMMISSION MEETING

MONDAY, May 3, 2021 AT 6:00 P.M.

CITY OF ST. AUGUSTINE BEACH, 2200 A1A South, St. Augustine Beach, FL 32080

I. CALL TO ORDER

Mayor England called the meeting to order at 6:00 p.m.

II. PLEDGE OF ALLEGIANCE

Mayor England asked Commissioner George to the Pledge of Allegiance.

III. ROLL CALL

Present: Mayor England, Vice Mayor Samora, Commissioner George, Commission Rumrell and Commissioner Torres.

Also present were: City Manager Royle, Assistant City Attorney Taylor, Police Chief Carswell, Police Commander Harrell, City Clerk Raddatz, Finance Director Douylliez, Building Official Law, and Public Works Director Tredik.

IV. APPROVAL OF MINUTES OF REGULAR COMMISSION MEETING ON APRIL 5, 2021

Mayor England asked if there were any discussions regarding the meeting. Being none, Mayor England asked for a motion.

Motion: to approve the Regular Commission minutes for April 5, 2021. **Moved by** Commissioner Rumrell, **Seconded by** Commissioner George. Motion passed unanimously.

Mayor England moved on to Item V.

V. ADDITIONS OR DELETIONS OF THE AGENDA

Mayor England asked if there were any additions or deletions of the agenda. Being none, Mayor England moved to Item VI.

VI. CHANGES TO THE ORDER OF TOPICS ON THE AGENDA

Mayor England asked if there were any changes to the order of topics on the agenda. Being none, Mayor England moved on to Item VII.

VII. PRESENTATIONS

- A. North Florida Transportation Planning Organization's Five-Year Transportation Improvement Program by Ms. Wanda Forrest, Transportation Planning Manager

Mayor England introduced Item VII.A.

City Manager Royle advised that Ms. Forrest could not attend the meeting; however, she Zoomed in to the meeting to discuss her presentation.

Ms. Wanda Forrest showed a PowerPoint presentation (Exhibit 1).

Vice Mayor Samora advised that there were no projects again this year in our City and requested again to please help the City with transportation improvement.

Ms. Forrest advised there are no projects in the City of St. Augustine Beach, but she would bring the Commission's comments back to her Director to discuss it.

Vice Mayor Samora advised that last year the City had suggested to do some safety projects in the City of St. Augustine Beach.

Ms. Forrest advised that there is a St. Johns County Safety Project that the City of St. Augustine Beach could request being a part of.

Mayor England said that the Commission has asked for feasibility studies. She asked if you do a project for the City of St. Augustine, then include our municipality as part the studies.

Ms. Forrest advised that she would discuss it with her Director.

Mayor England moved on to Item VII.B.

- B. Proclamation to Declare May 2021 as Motorcycle Safety Awareness Month by Ms. Sue Hendrick, President of ABATE (A Brotherhood Aimed Toward Education)

Mayor England introduced Item VII.B. and asked Ms. Sue Hendrick to the podium.

Ms. Sue Hendrick, President of ABATE, thanked the Commission for the proclamation and explained that they educate the public, drivers, and motorcyclists on safety programs. She advised that there are far too many fatal motorcycle crashes. She advised that she would like to educate in the schools, but has not been able to as of yet.

Commissioner George thanked Ms. Hendrick and said it was excellent educating the public because of the number of accidents.

Mayor England asked for a motion.

Motion: to declare May 2021 as Motorcycle Safety Awareness Month. **Moved by** Mayor England, **Seconded by** Vice Mayor Samora. Motion passed unanimously.

Mayor England moved on to Item VII.C.

- C. Proclamation to Declare June 2021 as Gay Pride Month by Ms. Sara Bloomberg

Mayor England introduced Item VII.C. and asked Ms. Sara Bloomberg to the podium.

Ms. Sara Bloomberg, President of House of Prism, 161 Blanco Street, St. Augustine, FL, thanked the Commission for declaring June 2021 as Gay Pride Month in the City of St. Augustine Beach and explained the House of Prism's mission is for advocacy, education, outreach, and services for LTBTQ children and adults in St. Johns County.

Mayor England opened the Public Comments section. The following addressed the Commission:

Mary Cobb, 258 Wisteria Road, St. Augustine, FL, commented that she supports Gay Pride Month's proclamation.

Rebecca Williams, 278 Fox Water Trail, St. Augustine, FL, advised that Pride Month is important because it helps the children and thanked the Commission for declaring June 2021 as Gay Pride Month.

Lyla Williams, 278 Fox Water Trail, St. Augustine, FL, thanked the Commission for declaring the Gay Pride Month for June 2021.

JoAnne Maffia, 161 Blanco Street, St. Augustine, FL, explained that when the City acknowledges Gay Pride Month, gay tourists support the community.

Mayor England closed the Public Comments section and asked if the Commission had any further comments.

Motion: to declare June 2021 as Gay Pride Month. **Moved by** Commissioner George, **Seconded by** Mayor England. Motion passed unanimously.

Mayor England moved on to Item VIII.

VIII. PUBLIC COMMENTS

Mayor England opened the Public Comments section. The following addressed the Commission:

Nick Binder, 232 Big Magnolia Court, St. Augustine Beach, FL, suggested using the American Rescue Plan (ARP) funding of \$2.9 million for any water, sewer, city hall improvements, parking, and/or infrastructure projects and start the projects right away because the funding will have to be completed by 2024. He also suggested working with the County, state, and federal governments monthly to expediate the projects to get these items done.

Ray Hamel, 13 Bermuda Run Way, St. Augustine Beach, FL, explained that there are safety concerns at Ocean Hammock Park because of the homeless living there. He said that he has gone by at night and the gates are not locked and they are opened. Also, there are holes dug by gopher tortoises and endangered beach mice. Maintenance needs to be done to the facilities.

Mayor England advised that the facilities are going to be built and are being designed currently. She suggested to Mr. Hamel that he contact Public Works Director Tredik for the improvements that are being planned. She then closed the Public Comments section and moved on to Item IX.

IX. COMMISSIONER COMMENTS

Mayor England asked Commissioner Torres if he had any comments.

Commissioner Torres had no comments.

Commissioner Rumrell thanked Events Coordinator Melinda Conlon for the Arbor Day event that went so well. He also advised that he was able to receive \$694,000 for full funding of the Ocean Walk drainage project. He thanked Public Works Director Tredik for

his help in completing the paperwork and the scope of project for the funding.

Commissioner George explained that an Ocean Trace resident complained about drunken driving, speeding, and destruction of mailboxes in that area. The resident requested speed bumps and other enforcement options. She asked Police Chief Carswell if he responded.

Police Chief Carswell advised that the beach patrol is speaking with him so they would have a good time frame when these incidents have happened, and he will do traffic enforcement along Ocean Trace.

Commissioner George explained that she has had ongoing discussions with the Cultural Council regarding the Civil Rights Monument in our City. She will be bringing proposals and timelines next month to the Commission. She suggested public funding and the Cultural Council feels that there are a lot of good sources to get public funding through the public arts programs, or another artist group said they might be able to get their own funding. She commented that several years ago she brought up the idea of underground utilities and believes it is a worthwhile project, which will take several years to complete. Florida Power and Light (FPL) quoted \$2 million per mile. She explained that property values are increasing and there is an ability for special assessments for the project or other fundraising options. She explained that the first step would be to identify the easements and require the easements to get to the point of construction. She asked for the Commission's support to have FPL to come to a meeting to discuss underground utilities. She explained that there is a 10-15 percent increase in property values when underground utilities are done.

Mayor England advised that now is the time to have all infrastructure projects done with St. Johns County or other agencies to help the City. She asked City Manager Royle today to find out how many properties already have underground utilities and how many do not. She believes that 30-40 percent have that benefit already in the City. She would like to work up a plan.

Vice Mayor Samora would support the first steps in having underground utilities.

Commissioner Rumrell advised that he could ask for funding at Tallahassee for infrastructure projects. He also will research other municipalities that have already done underground utilities.

Mayor England advised that she would ask the North Florida Transportation Planning Organization (NFTPO) to help with this as well.

Commissioner George asked City Manager Royle to bring back to the Commission what steps it would take to go through an underground utility project at future Commission meeting.

Vice Mayor Samora advised that the Tourist Development Council (TDC) has recommended to the Board of County Commissioners a five-cent assessment and discussed how to disburse the five-cent assessment. TDC has five categories of spending and part of what the TDC will be doing is reorganizing those five categories. TDC will meet again on May 17th to finish the reorganizing and disbursement and then will recommend it to St. Johns County. TDC direction is to restore the advertising budget to what it was previously, supporting the infrastructure for tourists coming to the area, and having an intercity shuttle. He will report again at the next Commission meeting.

Commissioner George asked if the TDC was looking into the St. Johns County Golf Course. She mentioned that there is a St. Augustine Disc Golf Association that plays nationally and internationally and would bring tourists in. The maintenance on this type of court would be minor compared to a golf course and it would bring a lot of tourists to the area.

Vice Mayor Samora advised that TDC was discussing sports marketing in the area and he would bring that information up to the TDC at the next meeting.

Mayor England attended a Maritime Memorial, and it recognized the different nationalities. She would like the artists to go look at that memorial when getting a conception for our Civil Rights monument. She requested a listing of all agencies that could help with infrastructure and start completing projects. The NFTPO has the expertise for infrastructure projects, and she will continue to contact them to help the City.

Mayor England moved on to Item 1.

X. PUBLIC HEARINGS

1. Ordinance 21-04, Second Reading, and First Public Hearing: to Amend the Land Development Regulations to Change Setbacks for Small Platted Lots and to Abolish the Overlay District Adjacent to A1A Beach Boulevard (Presenter: Brian Law, Building Official)

Mayor England introduced Item 1 and asked Building Official Law to come to the podium.

Building Official Law gave the history of this subject matter. In February, the Commission requested to bring back an ordinance that was proposed in 2019. In March, the language of the ordinance was clarified and in April there were more changes made by the Commission and to enable architectural profiling. The Comprehensive Planning and Zoning Board reviewed and voted unanimously to reject the ordinance because no technical information was provided and asked if they could meet with the Commission.

Mayor England advised that it was a delay because the Board would like a discussion with the Commission regarding the ordinance.

Building Official Law advised that the Board had to make a motion to approve or deny, so they denied it. There was no information presented and no requests to change the ordinance.

Commissioner George advised that this ordinance does not allow the increase in impervious surface ratio but would allow a greater lot coverage.

Building Official Law advised that all lot coverage is limited to 35 percent. The current setbacks on a 50 x 93 lot strictly prohibit a building from getting to 35 percent. So, one code goes against another code to make the 35 percent coverage possible. The overlay district is problematic because staff rejects it because the owner is not complying with ten-foot side setbacks and 25-foot front and rear setbacks, but if the owner gives the City \$400 for a variance that goes to the Planning and Zoning Department, the owner could get approval. It looks like a discord in the codes.

Mayor England advised that no matter what the setbacks are, the house cannot be 35 percent lot coverage, which remains the same regarding the drainage, impervious surface ratio, and the lot coverage.

Building Official Law advised yes. He advised that all the Commission requested was to change the setbacks.

Commissioner George advised that the current setbacks preclude the owner from getting to the 35 percent lot coverage. She asked with the proposed changes, what would it allow the owner to get to.

Building Official Law advised the owner will be able to get to 35 percent and still move the building to save trees, etc.

Commissioner George advised that this gives the owner more creativity when developing the home.

Building Official Law advised that no one is recommending increasing impervious surface ratios or lot coverage.

Mayor England asked how many small lots are left in the City.

Building Official Law advised that there are about 80 small lots left in the City. The report he gave to the Commission advised that the 50 x 93 lots are being affected. The regular lots were designed to the standards as they were platted; however, these small lots predate the platted lots.

Mayor England asked during the time when there were smaller side setbacks in the overlay district, plus the variances that have been granted, what percentage of small lots have already been built with the reduced setbacks.

Building Official Law advised that since he has been here in December of 2017 and Chapter 6 of the Land Development Codes was changed in June 2018 and then the moratorium lasted until October 2018. He explained that a lot of the buildings were already being designed at the time. He explained that the biggest problem is the overlay district. He remarked that he has a hard time denying the permit and then receiving \$400 for a variance and telling the Comprehensive Planning and Zoning Board they must approve it because it is written in the code. This ordinance would eliminate the overlay district. He discussed the wedding cake homes at 70 percent, which usually happens east of A1A Beach Boulevard and it has only been utilized once since 2016. He explained

if the Commission changed the setbacks on the small, platted lots, those 50 x 93 lots would be irrelevant because of that one provision in the code. He recommended eliminating the overlay districts. He commented if the Commission in the future want an architectural theme it could be done later on A1A Beach Boulevard. He explained that there are proposed legislative changes in Tallahassee that may remove architectural profiling in non-PUD's and single-family residences. He advised that the beachside overlay districts would be eliminated anyway. He explained that there is one more reading if the Commission votes on this today or it could be tabled or remove.

Mayor England advised that the Comprehensive Planning and Zoning Board wanted to discuss the ordinance before the Commission voted on it.

Building Official Law advised that there is no more information to provide to the Comprehensive Planning and Zoning Board. He remarked that he does not like taking money for a sure thing to be approved.

Mayor England advised that there are two issues. First, any language changes to the ordinance and whether to delay making a motion on the ordinance to discuss this issue with the Comprehensive Planning and Zoning Board in a workshop.

Commissioner Rumrell asked if the Comprehensive Planning and Zoning Board approved and asked for the setbacks.

Building Official Law advised that the Board voted 5 to 2 on the same ordinance plus the changes the Commission has done on the last two months. He commented that no technical information was provided to the Board.

Mayor England requested changes on page 4, in the second whereas in the ordinance, to delete "height" and change to "lot coverage." On page 6, B.1.b., should be deleted.

Commissioner George advised that B.1 relates to decks and B.2 relates to auxiliary structures and that is why it is stated in both places. She suggested that on page 7, 2.e, should be renumbered to B.4 so that it covers all categories under Section B. She also suggested to remove the reference under B.1.b.

Discussion ensued regarding variance hardships for a deck and whether the City ever had one and what a deck definition would be.

Mayor England advised that on page 10 under architectural requirements, 5.c. discusses the 70 percent wedding cake building. She asked if the Commission wants that removed or to keep it in the ordinances.

Building Official Law advised that there are a couple of projects that are not utilizing that because they are using the exemption that the owner complied with the ten-foot setbacks, so they did not have to go to the Comprehensive Planning and Zoning Board.

Commissioner George advised that she cares more about vertical and horizontal articulation than the 70 percent rule. She explained that there are ways to complete that goal.

Building Official Law advised that would be another overlay district and complete overwrite of the

codes. He explained that codes need to be written with the future in mind.

Mayor England explained that she does not want 35-foot-high three-story box homes.

Building Official Law advised that there are two homes proposal to be built with an elevator on the roof after the 35-feet height.

Mayor England asked if the Commission wants to have in the ordinance uniformity of an architectural design of the buildings on A1A Beach Boulevard.

Commissioner Torres advised he wants to keep the 35-foot height requirement. He advised that the 70 percent he could give or take, it did not matter.

Commissioner Rumrell gave an example of the home behind the Kookaburra not being allowed to build a one-story building because of the setbacks.

Building Official Law advised that the homeowner applied for a variance and they were instructed to come to the Commission if they wanted to change the codes. He explained that they could not comply with the setbacks and get the home they wanted.

Commissioner Rumrell advised that this homeowner wanted to do less of an impact but was denied due to the setbacks. He agrees with what the codes say currently, and the previous Comprehensive Planning and Zoning Board voted for the same thing 5 to 2. He advised that he agrees to leave it how it is because the 70 percent architectural design could change by the proposed legislation.

Vice Mayor Samora commented that architectural design standards cannot be done in three paragraphs, it would be hundreds of pages long. He explained trying to save a paragraph is hopeless.

Commissioner George advised that architectural design standards could be done separately and have workshops on it.

Mayor England asked if the Commission wanted to have a workshop with the Comprehensive Planning and Zoning Board on May 18, 2021 at 6:00 p.m.

Commissioner George asked for public comments first.

Mayor England opened the Public Hearing. The following addressed the Commission:

Craig Thomson, 6 D Street, St. Augustine Beach, FL, SEPAC member, advised in the ordinance in one of the whereas's it says it may save trees, which is not true on small lots. He commented that on the west side of the Boulevard is where the tree canopy is and if houses are built on the root of the trees, they will die. Trees preserve the environment and water, and he would not like the trees encroached upon by buildings. He asked to pause on the ordinance.

Mayor England asked Mr. Thomson for his response to the small lots.

Craig Thomson advised that 80 percent of the small lots are on the west side of A1A Beach Boulevard. He explained that the overlay district was on the east side of A1A Beach Boulevard.

Commissioner George advised that the lots cannot get to 40 percent because of the other section

of the code and disagrees that it would cause a risk. She said that the smaller lots are being burdened.

James Whitehouse, St. Johns Law Group, 104 Sea Grove Main Street, St. Augustine Beach, FL, advised that he represents several lot owners in St. Augustine Beach, and he suggested that the lot coverage should be the same as before with the 35 percent lot coverage.

Commissioner George said that the Commission should respect the Comprehensive Planning and Zoning Board by listening to them. She suggested that the Commission move forward tonight and then have a workshop with the Comprehensive Planning and Zoning Board and then have a final hearing.

Mayor England closed the Public Hearing and then asked for the preamble to be read.

City Attorney Taylor read the preamble.

Motion: to approve the ordinance with the following changes: on the 2nd whereas remove the word height and replace it with lot coverage; in paragraph B.a. remove the last sentence starting with Any requested...; on page 7, 2.e, renumber to B.4 regarding a general sentence applying for a variance. **Moved by** Mayor England, **Seconded by** Commissioner George.

Commissioner Torres asked for discussion before the vote. He asked if the Commission is going to move forward with this ordinance or is the Commission going to have a workshop first with the Comprehensive Planning and Zoning Board.

Mayor England advised that the Commission could move forward with this reading of the ordinance and then have a workshop with the Comprehensive Planning and Zoning Board and then have a final reading of the ordinance at the June Commission meeting.

Commissioner Torres asked if this should go as a referendum in front of the residents because it effects so many people and because this Commission keeps changing it, which costs staff and Commission time.

Discussion ensued regarding that even if it goes as a referendum, it could be changed by a new Commission if they want it changed.

Mayor England asked for a roll call vote.

City Clerk Raddatz called the role.

MAYOR ENGLAND	Yes
VICE MAYOR SAMORA	Yes
COMMISSIONER GEORGE	Yes
COMMISSIONER RUMRELL	Yes
COMMISSIONER TORRES	Yes

Motion passes unanimously.

Mayor England asked if the Commission is available for a joint workshop on May 18, 2021 at 6:00 p.m.

Commissioner Torres advised that he had a meeting on that day and could not attend. He requested an excused absence for this workshop from the Commission.

Mayor England remarked for the record that Commissioner Torres would be excused from this workshop.

Commissioner Rumrell thanked the three SEPAC members for coming to this meeting and giving their input.

Should this statement below be added:

It was the consensus of the Commission to schedule the workshop meeting with the Comprehensive Planning and Zoning Board and SEPAC on May 18, 2021. Mayor England moved to Item 2.

XI. CONSENT
None.

XII. OLD BUSINESS

2. Drug / Alcohol Rehab and Medical Facilities: Review of Proposal of Where to Locate (Presenter: Lex Taylor, City Attorney)

Mayor England introduced Item 2 and asked City Attorney Taylor for a staff report.

City Attorney Taylor advised he investigated the drug rehab and medical facilities. He explained that it is important to have categories, such as commercial and residential zonings. In the commercial zoning, he did not find any limits to do rehabs or medical facilities. There is case law that shows it could be prohibited if there is no place to put those types of facilities. The City is only approximately two miles long and does not have a lot of facilities, such as schools, softball fields, etc. and the City relies on other municipalities nearby to support those functions. He explained that there is nothing in case law that would prohibit the Commission from making these prohibited uses in the City. He recommended using the definitions in the Florida Statutes regarding the types of licensing the business would have to use, which is in F.S. Chapter 397 of drug /alcohol rehabs. He said that would give the City policeable action if there is a problem by checking their licensing. He further explained that in the residential zoning he researched F.S. Chapter 419, which allows rehab homes in a community; however, they need to be licensed with the State Health Department in order to operate and if not, we could bring them to court and close them down. Chapter 419 advises that there could not be multiple rehab homes together

in a community and there are other restrictions. He recommends adding this language to prohibited uses and advise the staff that they cannot open these facilities without the correct licensing.

Mayor England advised that in the residential zoning there are plenty of regulations in place for staff to monitor rehab homes. In commercial zoning, the City could have an addiction treatment center. She asked the question whether the Commission wants to prohibit the treatment addiction centers throughout the whole City or does the Commission want to only allow the businesses on A1A South in the commercial zone within the City.

Commissioner Rumrell advised that he was not against prohibiting these facilities because he did not know if this community could support these types of businesses. He would like to prohibit them. He asked how duplexes would work if a rehab was setup.

City Attorney Taylor advised that it would go by the parcel number, so if there is two duplexes on one parcel number it would count as one. He explained that the rehab could not have multiple duplexes together.

Vice Mayor Samora agreed to prohibit this use but asked how this applies to the Planned Unit Development (PUD) agreements.

City Attorney Taylor advised that the PUDs create their own zoning, so if they have a business established, the Association would have to amend their own PUD's. There are some agreements that a pharmacy could be there, but at this point he does not want to make a ruling on it. He explained that the PUD trumps the City's rules. In the case with Sea Grove PUD and their business licensing, they could be grandfathered in or not because they say they are a yoga studio and administrative offices only. He stated that if a new PUD takes place, they have the right to set their own zoning, which could be different from the City's, but normally the owners look to the City's zoning and try to follow it closely with a few minor changes if they want to.

Commissioner Torres advised that he remembers seeing a memo from another attorney and asked City Attorney Taylor if he could discuss the other attorney's opinion regarding the land use changes, he proposed.

City Attorney Taylor advised that the memo Commissioner Torres is referring to is whether where the current facility is in Sea Grove would a pharmacy be allowed (not sure, but this prior sentence doesn't sound right to me?). The argument the attorney was making was that since a pharmacy was not one of the uses, they were prohibited. Discussions will take place on the intensity of zoning and its definition of intensity. He gave an example of the different intensities between a two-doctor office and a twenty doctors' office.

Commissioner George agreed with Commissioner Rumrell to prohibit these businesses in the

City.

Mayor England advised that she is supportive of people in need and rehab facilities are very important. She said that there are some exemptions in Chapter 397 that do allow psychologists, counsellors, etc. She wants to make sure that Alcoholics Anonymous (AA) and non-profit support group meetings could continue in the City. She agrees with the prohibitions for the medical facilities and medical rehab centers.

City Attorney Taylor advised that that is why he was researching F.S. Chapter 397 because it is a narrow definition of businesses and licensing that the City could have manage.

Mayor England asked that City Attorney Taylor come back to the next Commission meeting with an ordinance with your recommendations and to please include the exemptions listed in F.S. Chapter 397.

Building Official Law asked about where a substance abuse or drug rehab qualifies as a medical clinic. He explained that City staff needs to know to make their determination. The Homeowner Association could not override City staff and that definition needs to be clarified.

City Attorney Taylor advised that he would be using the medical licensing to see if it would qualify.

Mayor England advised that Sea Grove Association would have to research this issue when they see the City's ordinance.

Commissioner George asked if the City's code could be amended to state that a drug rehab facility as licensed does not constitute a medical clinic.

Mayor England advised that in Chapter 397 has the information in it and Sea Gove Association will have to research what the City is doing and make their own determinations.

Mayor England opened the Public Comments section. Being none, Mayor England closed the Public Comments section and moved on to Item 3.

3. Construction of 2nd Street West of 2nd Avenue: Approval of Non-Ad Valorem Assessment for Adjacent Lot Owners to Pay Costs (Presenter: Bill Tredik, Public Works Director)

Mayor England introduced Item 3 and asked Public Works Director Tredik for a staff report.

Public Works Director Tredik showed a PowerPoint presentation (Exhibit 2). He gave a history of the 16 lots involved and advised that four lots would be conservation. He included in the non-ad valorem assessment \$40,000 for underground utilities. He explained that public hearings are required and then an interlocal agreement will be filed with the Tax Collector to collect the

money. Cost per lot depends on what direction the Commission decides. Commission decision previously was that the City would pay 1/3 of the costs and the lot owners would pay 2/3 regardless of how many lots are developed or kept for conservation. Staff is recommending a middle range from \$15,000 to \$25,000 per lot and maximum total amount for all 12 lots would be \$300,000, with the set cost of \$3,940 per lot based on 12 lots and set a date for a public hearing. He showed a breakdown of payments over six to ten years, which is like a car loan, or the lot owners can pay up front without payments.

Commissioner Torres asked about the history behind this request to pave the roads.

Public Works Director Tredik advised that there are a mixed of lot owners who want or not want the roadway. He explained that 11 lot owners are in favor of the roadway.

Commissioner Rumrell agrees with the six years and asked whether the City's Impact Fee Fund could be used to do this project so it could be done quickly due to the increase in construction costs. As the payments from the lot owners pay, it would be put back into the Impact Fee Fund.

Public Works Director Tredik advised that the Impact Fee Fund could be used and if the lot owners want to pay up front, that would expediate the project.

Vice Mayor Samora asked when the project will be completed.

Public Works Director Tredik advised that the design is being done now and will be done by this fiscal year. Construction could start in the fall. He explained that the City must get an environmental permit; however, it should not be very complicated.

Vice Mayor Samora asked if the lot owners are paying for the roadway, can the City be held to a timeline and can it be in the agreement that if any permits for the lots are pulled, that the assessment needs to be paid in full first.

City Attorney Taylor advised that an agreement could be done with the lot owners; however, he would not like language in the agreement that may set the City up to fail because no one knows what could happen financially in the next few years.

Vice Mayor Samora asked if there can be stipulations or restrictions in the agreement without discussing the full agreement.

City Attorney Taylor advised yes; he could make an agreement with the property owners.

Public Works Director Tredik advised that there could be an amount needed from the property owners before construction will start.

Mayor England opened the Public Comments section. The following addressed the Commission:

James Whitehouse, St. Johns Law Group, 104 Sea Grove Main Street, St. Augustine Beach, FL, explained that time is of the essence. He explained that he would like to lock the costs in by fall. The lot owners want to see the project moving forward. He said that these are individual lot owners and not developers and they want their own homes. He recommended that the costs should be between 16 lots because the City does not know if any of the lots are going to be conserved or not.

Mayor England advised that there should be a deadline on the conservation lots or they should pay as others do.

Public Works Director Tredik advised that the essential assessment would be divided by 16 lots until the lots are dedicated to the City for conservancy.

Michel Cloward, 112 2nd Street, St. Augustine Beach, FL, asked what the purpose of the Impact Fee Fund.

Mayor England explained that impact fees are used for new streets and infrastructure. She advised that the Impact Fee Funds can be applied to other projects throughout the City.

Ms. Cloward asked if the \$83,000 is coming from the Impact Fee Fund.

Mayor England advised yes.

Ms. Cloward asked how it is determined what street uses the funds and what streets need to be paid by the owner.

Mayor England gave history of the meetings and the Commission decisions regarding this project. She explained that the lot owners would pay 2/3 and the City would pay out to the impact fees 1/3 of the project's costs.

Commissioner George advised that in the City's history, the City has never paid over 1/3 of street costs because it is usually done by the developer.

Mark Craddock, 116 2nd Street, St. Augustine Beach, FL, that the owners who want to donate their lots to the City have a letter from Putnam Conservation Trust supporting conserving the lots. He explained that there is a commitment of three to four lots. He agrees with the lot owners who want to develop to front the money earlier than the others to get the project moving forward.

Mayor England closed the Public Comments section and asked for any further Commission

comments.

Finance Director Douylliez advised that the non-ad valorem assessment letters usually have an annual fee not the total fee amount and suggested to change the range to \$2,500 to \$5,000.

Discussion ensued regarding what the range amount should be; putting \$0 amount in the range could be deceiving to the lot owners; not wanting to deplete the Impact Fee Fund on just this project; having the lot owners who want to pay up front do so in order to replenish the Impact Fee Fund; and the first year the lot owners will pay \$48,000 to be paid back to the Impact Fee Fund.

Mayor England asked for a motion.

Motion: to proceed as recommended by staff with Items 1,2,3, and 4; however, amending Item 4 to reflect that notice shall be advertised to reflect the range of \$2,500 to \$5,000 and the first year be \$3,940. **Moved by** Commissioner George, **Seconded by** Commissioner Rumrell.

City Attorney Taylor advised that he is concerned that with the underground utilities it could cause an overrun of more than \$300,000. He recommended to advertise a higher total amount cost in case there are overruns in costs, which could be reduced later.

Public Works Director Tredik agreed with City Attorney Taylor to have the total costs higher.

Motion: to amend the motion to reflect Item 2 to be \$400,000 instead of \$300,000. **Moved by** Commissioner George, **Seconded by** Commissioner Rumrell. Motion passed unanimously.

Mayor England asked for a roll call vote.

City Clerk Raddatz called the roll:

COMMISSIONER RUMRELL	Yes
COMMISSIONER TORRES	Yes
MAYOR ENGLAND	Yes
VICE MAYOR SAMORA	Yes
COMMISSIONER GEORGE	Yes

Motion passed unanimously.

Mayor England when a public hearing could be done.

Discussion ensued regarding the date and time of the public hearing.

Motion: to schedule a Special Commission meeting for this public hearing on Monday, June 7, 2021 at 5:30 p.m. **Moved by** Mayor England, **Seconded by** Commissioner Torres. Motion passed

unanimously.

Mayor England asked for a rollcall vote.

City Clerk Raddatz called the vote:

COMMISSIONER RUMRELL	Yes
COMMISSIONER TORRES	Yes
MAYOR ENGLAND	Yes
VICE MAYOR SAMORA	Yes
COMMISSIONER GEORGE	Yes
Motion passed unanimously.	

Mayor England moved on to Item 4.

4. **Resiliency Study: Presentation of Report by Bill Tredik, Public Works Director**

Mayor England introduced Item 4 and asked Public Works Director Tredik for a staff report.

Public Works Director Tredik advised in 2019 the City applied for the Florida Resiliency Coastline Program for financial assistance to conduct a Vulnerability Study and Adaptation Plan. The purpose of the plan was to look at the City's vulnerability to flooding due to storm surge and sea level rise and to develop an adaption plan to guide the City's future decision making. He advised that Gary Sneddon and Katelyn Breland from CMT will be giving a presentation to the Commission. The plan included three major tasks, which were to update the City's GIS system with drainage and topographic mapping to determine the areas vulnerable to sea level rise and storm surge; updating the City's Master's Stormwater Model to bring in new data within the Master Stormwater Plan; have a public workshop for the public that was attended by members of Sustainability & Environmental Planning Advisory Committee (SEPAC) and Northeast Florida Reginal Council gave a presentation; and the final task is to synthesize the two results from the two phases of this project.

Gary Sneddon, CMT, 7400 Baymeadows Way, Suite 220, Jacksonville, FL, showed a PowerPoint presentation (Exhibit 3). He explained that the master drainage plan for the City is rain influenced and would depend on how much rain the City gets. In the vulnerability assessment, CMT looked at the surge from the ocean to the river and was rain influenced as well. CMT looked at flooding throughout the City, which showed a pattern of zero to three feet and some three to seven feet in some areas. CMT looked at whether the water issues were from the City's elevation or were there outside sources coming into the City. He then introduced Ms. Breland to discuss the storm surge.

Ms. Caitlin Breland, CMT, 7400 Baymeadows Way, Suite 220, Jacksonville, FL, continued the

PowerPoint presentation and explained that CMT updated the stormwater model to ICP 4. CMT split the City's stormwater model into four separate basins and then took the four basins into different groups. The mean annual high tide currently shows 3.4 feet and model the storm surge from a one- and two-foot sea level rise. The first basin shows yellow for flooding in a 25-year storm and red shows flooding in a 100-year storm after one foot of sea level rise. The second basin group does not have as much flooding. The third basin has a lot more flooding and has more vulnerability due to storm events and storm surge. In the fourth basin group the yellow lines are mostly around ponds or ditches and most of the properties are a little bit higher. She advised that west Pope Road led to low levels of the City and marshes and wetlands and explained that those areas during storm surges and sea level rise will rise and infiltrate back into the City, which can affect the City's stormwater system. State Road 312 crossings and Sea Grove area should flow out of the City; however, if any storm surge or major rain event happens, then there would be three points that would come back into the City. Ocean Trace properties are higher elevations, but the stormwater system is low and would be affected by the storm surge or sea level rise. She then turned it back to Mr. Sneddon.

Mr. Sneddon advised that State Road 312, State Road 3 (a.k.a A1A South), and A1A Beach Boulevard roadways make a triangle levy around the core part of the City. The weir would protect the City from a 100-year storm surge if it does not come over the berm. Some areas in the City, such as Mickler Road ditch, 11th Street ditch, etc. still need improvements. The Public Works station on Mizell Road is vulnerable. Sandpiper and Versaggi are protected by the dunes. He recommended a backflow protection system to solve the six vulnerable locations, but it would be expensive. Recommendations were for a vulnerable mitigation capital improvement plan, adaptation planning, and to revisit the vulnerability conditions.

Public Works Director Tredik advised that there are projects recommended and are only conceptual. He explained that he submitted the report to the St. Johns County Local Mitigation Strategy grant program. He advised that if they give the City the grant, it would be a 75 percent commitment to the City; however, the City will have to pay the remaining 25 percent. He estimated that the costs would be \$750,000 to do the improvements and the City would have to pay 25 percent of that. He said it falls back to funding and how the Commission wants to develop the capital improvement plan. He said that the storms seemed to be getting more intense. He requested the Commission give him questions or what they would like to do separately, and he would send them to the consultant. He asked to approve the draft plan so that he could submit it to the agency.

Mayor England advised that SEPAC and the Comprehensive Planning and Zoning Board could get their comments to Public Works Director Tredik before the workshop so he can submit the study on time. She asked that SEPAC and Planning and Zoning members receive a copy of the report. She asked if this addresses the rainfall.

Public Works Director Tredik advised that it is not addressed in developing projects, which this

grant asked for; however, it does address the need for capacity improvements.

Mayor England asked to address the heavy rainfall.

Public Works Director Tredik advised that it would be addressed when the improvements are being done on the master drainage plans.

Mayor England asked for a list of agencies that could help with the stormwater improvements, storm surge and sea level rise.

Mr. Sneddon advised that Governor DeSantis is asking for these reports to be done.

Commissioner George asked to put the maps online on the webpage.

Mayor England opened the Public Comments section. The following addressed the Commission:

Nick Binder, 232 Big Magnolia Court, St. Augustine Beach, FL, advised that this type of project could be allowed under the American Rescue Plan and suggested to list all the projects in writing.

Mayor England closed the Public Comments section and asked for a motion.

Motion: to approve the draft Vulnerability Study. **Moved by** Commissioner George, **Seconded by** Commissioner Rumrell. Motion passed unanimously.

Mayor England asked for a roll call vote.

City Clerk Raddatz read the roll:

MAYOR ENGLAND	Yes
VICE MAYOR SAMORA	Yes
COMMISSIONER GEORGE	Yes
COMMISSIONER RUMRELL	Yes
COMMISSIONER TORRES	Yes

Motion passed unanimously.

Mayor England moved on to Item 5.

5. Pay for City Commissioners: Consideration of Adjusting (Presenter: Patty Douylliez, Finance Director)

Mayor England introduced Item 5 and asked Finance Director Douylliez for a staff report from other municipalities.

Finance Director Douylliez explained that she submitted to the Commission information. She requested guidance from the Commission for next year's budget.

Commissioner George advised that the results look reasonable and would be happy to move forward with these figures.

Commissioner Rumrell asked if Commissioner George was proposing the \$14,589 for the Mayor and \$11,074 for the Commissioners.

Commissioner George agreed with the methodology that was approved for staff.

Mayor England advised that it has been a long time since the Commission has received an increase and any Commissioner can give the difference back if they do not want it.

Commissioner George advised that the stated amount would make it about \$18 an hour.

Commissioner I show it was Torres? asked if the average was the same as this month.

Finance Director Douylliez advised that she changed the figures by taking out the higher numbers that St. Johns County Board of Director received.

Commissioner Torres advised that he made a motion for the average last month and it was not seconded, so what is different this month.

Commissioner George advised that that average was only an average of two municipalities instead of eleven cities. She advised that the City of Daytona Beach was taken out this month.

Mayor England asked for Public Comments. Being none, Mayor England opened it up for discussion with the Commission.

Vice Mayor Samora advised that he did his own analysis per capita and he felt that the Commission is currently receiving what most do. The outliers like Bunnell are only getting paid \$4 per person and as the cities get larger than the capita rate goes down. He explained that the COLA is built in and with the rate the Commission is at currently, the Commission's salaries are where they should be. He is fine where the salary is now and the current structure with the COLA in place.

Commissioner Rumrell agreed with Vice Mayor Samora. He thinks the Commissioners are worth the increase because they put in a lot of effort, but he feels this is his civic duty to give back to the community. He agreed with the COLA. He advised that he would like to put the money toward having a grant writer instead of an increase for the Commission. He would like to keep the millage the same.

Commissioner Torres advised that a few months ago he asked about daytime meetings and Commissioner George said she would need to be compensated more because of her business, which is reasonable. He explained that he would be comfortable with an increase if the Commission would entertain daytime meetings and use the employee overtime monies to go back to the City; otherwise, he is fine with the current salary.

Mayor England advised that the daytime meeting would be problematic for the public to attend and the meetings should be opened to the public.

Commissioner Torres advised that there are public meetings during the day everywhere in Florida and it is not against the law. He explained that the Commission now goes to functions during the day for the City. He is advocating for daytime meetings.

Mayor England advised that it is a good thing to bring up and sees the logic in it.

Commissioner George advised that she was not trying to imply a direct quid pro quo. She advised that there were several reasons why she supported a pay adjustment over the years. It is consistent with what the Commission did with staff. She advised that this is a professional City and Commission. She advised that if this Commission does not do it, someone else will have to. She agreed that the Commission does this as their civic duty for \$18 an hour.

Mayor England asked what the current hourly rate is for a Commissioner.

Commissioner George advised it depends on how many hours you put in. She advised that doing 12 hours a week would be \$9 an hour.

Mayor England made a motion to extend the meeting.

Motion: to extend the meeting. **Moved by** Mayor England, **Seconded by** Vice Mayor Samora. Motion passed unanimously.

Commissioner George advised that staff brought it up and the same methodology has been applied as the Commission agreed to with staff. She commented that the population approach is not really apples to apples. She explained that some of these cities provide health insurance for their Commissioners, which is not documented on this survey. She said that the City of Atlantic Beach does provide health insurance.

Mayor England would not mind a reasonable hourly rate.

Commissioner George advised that staff needs to know for budget reasons.

Mayor England advised that the amount is almost doubled and would be a big increase.

Mayor England opened the Public Comments section. Being none, Mayor England closed the Public Comments section and asked for a motion.

Motion: to approve for the Commissioner pay to be adjusted to \$9,000 and the Mayor's salary adjusted to \$11,000 per year. **Moved by** Commissioner George.

Mayor England asked that she amended her motion to make the Mayor's salary to \$10,000 a year.

Motion: to amend the motion to adjust the Mayor's salary to \$10,000 per year. **Moved by** Commissioner George, **Seconded by** Commissioner Torres with discussion.

Commissioner Torres asked the Commission to consider adjusting the schedule for daytime meetings. He suggested one meeting a quarter and then increase it later throughout the year.

Mayor England requested to keep those items separately, but it can be discussed.

Commissioner George ask that the meetings would be advertised well if changed.

Mayor England asked to do a rollcall vote.

City Clerk Raddatz called the role.

Mayor England asked for a motion.

COMMISSIONER RUMRELL	No
COMMISSIONER TORRES	No
MAYOR ENGLAND	Yes
VICE MAYOR SAMORA	No
COMMISSIONER GEORGE	Yes

Motion dies 3 to 2.

Commissioner George said that staff still needs direction so there should be another motion.

Motion: a motion to maintain the current salaries for the Commissioners and Mayor as well as the current methodology of applying the COLA. **Moved by** Vice Mayor Samora, **Seconded by** Commissioner Rumrell.

Mayor England asked for a roll call vote.

City Clerk Raddatz called the roll.

COMMISSIONER RUMRELL	Yes
COMMISSIONER TORRES	Yes
MAYOR ENGLAND	No
VICE MAYOR SAMORA	Yes
COMMISSIONER GEORGE	No

Motion passed 3 to 2.

Discussion regarding what items could be finish by the Commission in the time allotted and when the Commission would return to complete the rest of the agenda.

After discussion, the following dates and items were approved by the Commission:

May 18, 2021 at 6:00, Joint meeting with the Comprehensive Planning and Zoning Board and SEPAC.

May 24, 2021 after the continuation of the Regular Commission meeting of May 3, 2021 at 1:00 p.m. a workshop regarding recycling and parking will be discussed.

Commissioner George will be out of town but will send questions or comments to City Manager Royle.

Mayor England moved on to Item 10.

6. Upcoming Workshops: Consideration of Scheduling One or Two in May for Solid Waste / Recycling Operations, Creating a Stormwater Utility, and Other Topics (Presenter: Max Royle, City Manager)

Mayor England introduced Item 6 and asked City Manager Royle for a staff report.

City Manager Royle advised the key need for a workshop is to discuss whether to privatize or bring recycling in-house and how it reflects on the budget.

It was the consensus of the Commission to have a workshop on May 24, 2021 at 1:00 p.m. for recycling and public parking.

Commissioner George advised that she would be out of town and would not be able to attend.

Mayor England moved on to Item 10.

7. Public Parking: Discussion of Where to Allow and Not Allow Parking and Creating Five-Year Plan for Improvements (Presenters: Max Royle, City Manager: Bill Tredik, Public Works Director)

This item was rescheduled for Monday, May 24th at 1:00 p.m.

8. Ordinance 21-05, First Reading, to Vacate Alley between B and C Streets West of A1A Beach Boulevard to 2nd Avenue (Lots 1-16, Block 40, Coquina Gables Subdivision) (Presenter: Brian Law, Building Official)

This item has been continued to May 18, 2021 at 6:00 p.m.

9. Ordinance 21-06, First Reading, to Vacate Alley between A and B Streets, between 3rd and 4th Avenues (Lots 1-16, Block 49, Coquina Gables Subdivision) (Presenter: Brian Law, Building Official)

This item has been continued until May 18, 2021 at 6:00 p.m.

XIII. NEW BUSINESS

10. City-Wide LED Streetlight Conversion: Request to Approve Phase 1 for Lights Along the Boulevard, Pope Road, 16th, 11th, and A Streets (Presenter: Bill Tredik, Public Works Director)

Mayor England introduced Item 10 and asked Public Works Director Tredik for a staff report.

Public Works Director Tredik showed a PowerPoint presentation (Exhibit 4) regarding the Light-Emitting Diode (LED) Streetlight Conversion. He explained that there are 386 streetlights throughout the City and 183 are recommended to be converted to LED lighting. He advised that there would be more natural color, easier to see things, focus beam, and night sky compliant. He is recommending the 4000 kelvin for A1A Beach Boulevard, unless it is too bright, and it could be changed to 3000 kelvin at no additional cost. He is not changing the light levels, but if the Commission wants to it would be at an added cost. A hybrid solution would be to increase the light levels on the Boulevard, but not on the other roads at no additional cost. He asked the Commission to execute an LED lightening agreement with Florida Power and Light.

Discussion ensued regarding turtle season making it dark on the Boulevard; protecting the pedestrians on the Boulevard with enough lights; priority on safety on the Boulevard; Department of Transportation pays the City to replace lights; not increasing the brightness; using shields for the lights; the agreement shows equivalent lighting; converting the Boulevard to 41-watt lighting; and the history of the lighting on the Boulevard.

Mayor England opened the Public Comments section. The following addressed the Commission:

Brud Helhoski, 691 A1A Beach Blvd., St. Augustine Beach, FL, advised that the light is too much and recommended not going forward with this agreement until all the Commissioners see the lights on A Street.

Mayor England closed the Public Comments section and asked to discuss how this meeting can be continued.

After discussion, Mayor England asked for a motion for the meetings.

Motion: to continue the Regular Commission meeting of May 3, 2021 for Items 8, 9, 10 to May 24, 2021 at 1:00 p.m. and rescheduled Items 11 and 12 to the Regular Commission meeting of June 7, 2021 at 6:00 p.m. **Moved by** Commissioner George, **Seconded by** Commissioner Rumrell. Motion passed unanimously.

Commissioner George requested to add an agenda item requiring a default date for Commission meetings.

Commissioner Torres advised that he would be available the following Monday.

Mayor England moved on to Item 11.

11. Proposed Personnel Manual Changes: Resolution 21-17, Minor Changes Regarding Shift Work for the Police Department; Resolution 21-18, Regarding Minor Changes to Standards of Conduct and Discipline; Resolution 21-19, Deleting Provision Regarding Employees Making Personal Long-Distance Telephone Calls; Resolution 21-20, Deleting Sick Pay Incentive and Adding Birthday Holiday in Place of Incentive; and Resolution 21-21, Concerning Changes to Criteria of Employees Who Can Donate Time or Be Recipient of Donated Time (Presenter: Beverly Raddatz, City Clerk)

Mayor England asked for a motion to reschedule Items 11 and 12.

12. Long Range Financial Planning: Review of Report (Presenter: Patricia Douylliez, Finance Director)

This item has been rescheduled until June 7, 2021 at 6:00 p.m.

XIV. STAFF COMMENTS

This item was rescheduled until the Regular Commission meeting on June 7, 2021 at 6:00 p.m.

XV. ADJOURNMENT

Mayor England asked for a motion.

Motion: to adjourn to meeting. **Moved by** Commissioner George, **Seconded by** Commissioner Rumrell. Motion passed unanimously.

Meeting was adjourned at 10:07 p.m.

Margaret England, Mayor

Attest:

Beverly Raddatz, City Clerk