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## **Executive Summary**

St Helena is a largely rural and agricultural island located on the eastern edge of Beaufort County, SC, near the Atlantic Ocean. The island is a cultural treasure, full of rich history, and home to the largest Gullah/Geechee community in the area. In recent years, St Helena residents have expressed concerns about flooding and rising tides resulting in land loss. The purpose of this project was to develop a flood model of St Helena Island to identify existing areas of flooding as well as projected future areas of flooding based on future land use conditions and projected sea level rise. The goals of this project were as follows:

- Develop a model to identify current and potential future areas of flooding associated with both development and sea level rise.
- Identify problem areas of flooding under existing and/or future conditions.
- Evaluate the impacts of improving stormwater infrastructure to reduce flooding in identified problem areas.
- Summarize flood reduction efforts aimed at protecting residents through land development regulations and public education efforts.
- Identify projects that could reduce flooding in certain areas.

The majority of the flooding, in both existing and future conditions, on St Helena Island are attributed to low elevations and sea level rise rather than inadequate stormwater infrastructure. The five identified stormwater infrastructure improvement projects described in this report are likely too costly to be justified given the minimal flood reduction that was predicted.

Overall, the County should focus efforts on non-structural flood reduction efforts, aimed at protecting residents through land development regulations and public education, including but not limited to:

- Review their applicable ordinances, regulations, zoning, and other documents to ensure they
  agree with each other, meet the goals of the County, and protect the community today and under
  future conditions. Evaluate the effectiveness of the St Helena Cultural Overlay District restrictions
  to prevent worsening flooding.
- Evaluate the potential to improve their FEMA Community Rating System program class rating. Activities credited by the Community Rating System provide direct benefits to the community, including enhanced public safety, reduction in flood damage, environmental protection, and reduced flood insurance rates.
- Ensure that their websites and social media outlets provide the public with information about flood risks, and about potential for future impacts based on the changing climate.
- Consider reaching out to residents who are in future areas of concern to provide information about future flooding concerns and options to protect their homes such as elevation or relocation.

This report includes detailed descriptions of the modeling effort, results, and community flood reduction recommendations.

## 1 Study Purpose and Goals

St Helena Island is located in Beaufort County, directly inland of Fripp Island, Hunting Island, and Pritchards Island. The island is largely rural and agricultural, and is expected to be subject to direct sea level rise impacts in the future. In response, Beaufort County engaged Woolpert to identify existing areas of flooding as well as projected future areas of flooding based on future land use conditions and projected sea level rise (SLR). Woolpert produced a planning level, two-dimensional (2D) HEC-RAS model of the St Helena Island Study Area. The goals of this project include:

- The identification of problem areas in existing conditions
- The identification of problem areas due to potential future land development.
- The identification of problem areas due to future sea level rise.
- An alternatives analysis to evaluate potential inundation reduction measures.

This St Helena Watershed Study Report summarizes the stormwater modeling, problem area identification, and alternatives analysis completed for the St Helena Study Area. Components of a Mitigation Needs Assessment are included in this report to assist the County with obtaining Community Development Block Grant Mitigation (CDBG-MIT) funds if a viable and appropriate project is identified.

# 2 Description of Watershed

The St Helena Island Study Area is located directly inland of Fripp Island, Hunting Island, and Pritchards Island. Figure 1 below shows the study area boundary. The study area is approximately 52 square miles, is largely rural/agricultural, and will be subject to direct sea level rise impacts in the future. Due to its proximity to the coast, Beaufort County studied St Helena Island to identify existing areas of flooding as well as potential areas subject to flooding due to future land use conditions and projected sea level rise. This section describes the watershed characteristic data used to develop the 2D HEC-RAS model of the St Helena Island Study Area.

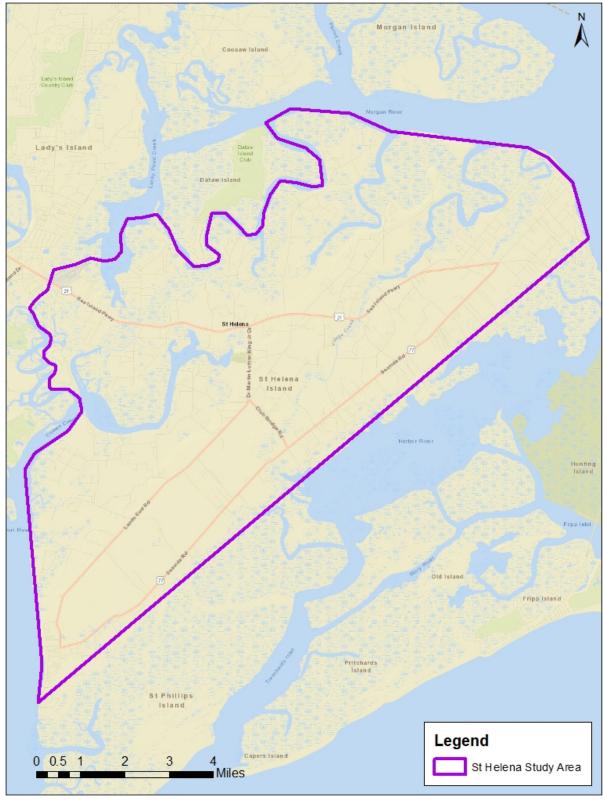


Figure 1. St Helena Island Study Area

# 2.1 Topography

The 2020 USGS LiDAR digital elevation model (DEM) for the Savannah Pee Dee basin (Figure 2) was used to develop the 2D HEC-RAS model of the study area. The LiDAR data was published on September 4, 2020 and obtained via the National Oceanic and Atmospheric Administration (NOAA) Digital Coast data access viewer. Elevations within the study area range from -5.5 to 39.2 ft with a mean of 7.6 ft and a median of 7.1 ft as referenced from the NAVD88 vertical datum.

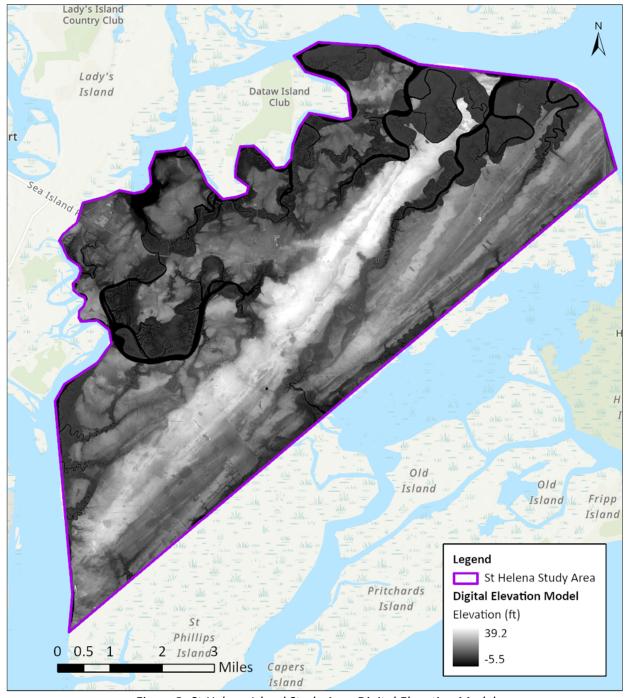


Figure 2. St Helena Island Study Area Digital Elevation Model

### 2.2 Soils and Geology

The soil data used in model development was obtained from the Natural Resources Conversation Service (NRCS) Web Soil Survey. The St Helena Island Study Area contains mostly sand and loam type soils. Due to the proximity to the coast, the majority of the hydrologic soil groups (HSG) are A, D, or A/D. Table 1 shows a breakdown of HSGs by area for the St Helena Island Study Area.

| Tuble 1. St Helena Islana Study Area Soll Summary |              |                   |  |  |  |  |  |  |  |
|---|--------------|-------------------|--|--|--|--|--|--|--|
| HSG   | Area (sq mi) | Area (% of total) |  |  |  |  |  |  |  |
| Α   | 15.98        | 28.4%             |  |  |  |  |  |  |  |
| В   | 4.55         | 8.1%              |  |  |  |  |  |  |  |
| С   | 0.58         | 1.0%              |  |  |  |  |  |  |  |
| D   | 16.16        | 28.7%             |  |  |  |  |  |  |  |
| A/D   | 11.07        | 19.7%             |  |  |  |  |  |  |  |
| B/D   | 3.71         | 6.6%              |  |  |  |  |  |  |  |
| C/D   | 0.45         | 0.8%              |  |  |  |  |  |  |  |
| Water   | 3.76         | 6.7%              |  |  |  |  |  |  |  |
| Total   | 56.26        | 100.0%            |  |  |  |  |  |  |  |

Table 1. St Helena Island Study Area Soil Summary

### 2.3 Hydrology

Rainfall data for the St Helena Island Study Area was obtained from the NOAA Atlas-14 Volume 2 Version 3 in Beaufort County. Table 2 below shows the precipitation depths in inches for the 2, 10, 25, 50, and 100-year recurrence intervals with durations ranging from 5 minutes to 24 hours that were used for model development.

Table 2. Beaufort County Rainfall Depth Frequency Estimates (NOAA Atlas 14)

| Recurrence | Precipitation Depth (inches) |                               |        |        |        |      |      |      |       |       |  |
|------------|------------------------------|-------------------------------|--------|--------|--------|------|------|------|-------|-------|--|
|            |                              | Precipitation Deptit (inches) |        |        |        |      |      |      |       |       |  |
| Interval   | 5-min                        | 10-min                        | 15-min | 30-min | 60-min | 2-hr | 3-hr | 6-hr | 12-hr | 24-hr |  |
| 2-Year     | 0.587                        | 0.940                         | 1.18   | 1.63   | 2.05   | 2.47 | 2.64 | 3.07 | 3.57  | 4.20  |  |
| 10-Year    | 0.762                        | 1.22                          | 1.54   | 2.23   | 2.91   | 3.57 | 3.85 | 4.52 | 5.34  | 6.42  |  |
| 25-Year    | 0.856                        | 1.36                          | 1.73   | 2.56   | 3.41   | 4.18 | 4.57 | 5.43 | 6.49  | 7.82  |  |
| 50-Year    | 0.931                        | 1.48                          | 1.88   | 2.83   | 3.83   | 4.68 | 5.18 | 6.23 | 7.50  | 8.96  |  |
| 100-Year   | 1.00                         | 1.60                          | 2.02   | 3.09   | 4.26   | 5.17 | 5.79 | 7.06 | 8.55  | 10.20 |  |

FEMA flood zone data was also reviewed and considered during model development. As shown in Figure 3, inland areas of the St Helena Study Area are largely composed of VE or AE special flood hazard areas (SFHA) in all but the most elevated areas. AE zones are defined as zones with a 1% annual chance of flooding with defined base flood elevations that represent expected flooding depths during the 100-year storm event. AE zones can also include additional hazards associated with storm waves up to 3ft, which are known as coastal AE zones. VE zones are similar to AE zones except they include additional hazards associated with at least 3 ft of storm wave impact. The prevalence of VE zones indicates the potential for sea level rise impacts to further increase the size of the floodplain and base flood elevations in those zones, as well as in coastal AE zones, due to the increase in wave height that would be associated with

sea level rise. The area beyond the southeast border of the study area is comprised of Coastal Barrier Resources System (CBRS) or otherwise protected areas.

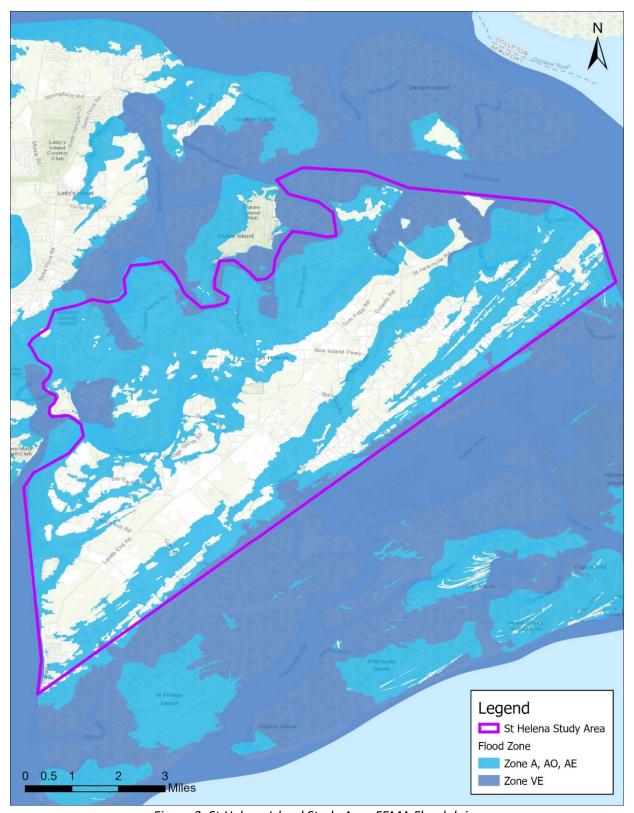


Figure 3. St Helena Island Study Area FEMA Floodplains

#### 2.4 Land Use

### 2.4.1 Existing Land Use

Existing land use data for St Helena Island was obtained from the 2019 US Geological Survey (USGS) National Land Cover Database (NLCD). The majority of St Helena Island is wetland and forested areas, with rural and agricultural development spread throughout, mostly in the highland areas. A summary of the NLCD 2019 land cover data is shown in Table 3.

Table 3. St Helena Island Existing Land Use (NLCD 2019)

|                                     | J 1          | ,                 |
|-------------------------------------|--------------|-------------------|
| Land Use Classification             | Area (sq mi) | Area (% of total) |
| Barren Land                         | 0.15         | 0.27%             |
| Cultivated Crops                    | 0.40         | 0.70%             |
| Deciduous Forest                    | 0.15         | 0.27%             |
| Developed, High Intensity           | 0.05         | 0.09%             |
| Developed, Low Intensity            | 0.78         | 1.38%             |
| Developed, Medium Intensity         | 0.24         | 0.42%             |
| Developed, Open Space               | 4.95         | 8.80%             |
| <b>Emergent Herbaceous Wetlands</b> | 16.17        | 28.74%            |
| Evergreen Forest                    | 10.49        | 18.64%            |
| Grassland/Herbaceous                | 1.78         | 3.15%             |
| Mixed Forest                        | 2.93         | 5.21%             |
| Open Water                          | 4.46         | 7.93%             |
| Pasture/Hay                         | 4.98         | 8.86%             |
| Shrub/Scrub                         | 1.30         | 2.31%             |
| Woody Wetlands                      | 7.43         | 13.21%            |
| Total                               | 56.26        | 100.00%           |

Zoning on the Island is mostly rural and rural residential, and the entire island was established as the St Helena Cultural Overlay District in April 1999. The goal of the overlay district is to guide development in a way that protects traditional and historical land use patterns and retains the rural way of life for the residents. This overlay district prevents the construction of gated communities, resorts, golf courses, or any other developments that restrict access to the local waterways and other culturally significant locations.

#### 2.4.2 Future Land Use

Given that St Helena Island is a coastal community with many flat, low-lying areas, future land use must be considered due to the potential for increased development exacerbating flooding issues throughout the island. As noted in the previous section, development on St Helena is restricted through current zoning regulations. St Helena was specifically discussed in the Beaufort County 2040 Comprehensive Plan as an area of cultural importance that may need further limitations on growth and development beyond the existing Cultural Overlay District restrictions. The Comprehensive Plan projects future land use on St Helena to be rural, with some areas of preserved lands. This study aims to find the balance between anticipated future land use and "worst case scenario" future conditions to provide a conservative evaluation of potential future conditions on the island.

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For this study, future development was restricted to areas with an elevation of 6 ft (NAVD88), approximately 2.5 ft above the mean high-high water (MHHW) level of 3.5 ft at the NOAA Ft Pulaski GA tide monitoring station (8670870). It was assumed that development will only occur along the main roadways, leaving the rural areas of the island unimpacted. The methodology and identification of parcels considered for future buildout will be further described in Section 3.2.4 of this report.

#### 2.5 Sea Level Rise

While the cause of rising sea levels may be debated, scientific evidence proves that the sea level is rising, and at an arguably alarming rate. SLR has become evident along the coast of South Carolina, especially in Beaufort County where the Beaufort-Port Royal Sea Level Rise Task Force was created in 2014. According to the task force website, "In Beaufort and Port Royal, SC, local sea level has risen 6 inches since 1965..." NOAA has developed a Sea level Rise Viewer that shows the direct impacts of sea level rise and potential flooding impact areas and relative depth (<a href="https://coast.noaa.gov/digitalcoast/tools/slr.html">https://coast.noaa.gov/digitalcoast/tools/slr.html</a>). While NOAA's Sea Level Rise Viewer is important to begin to understand the impacts of SLR, it does not show the secondary effects associated with higher tailwater elevations, impacting more inland areas with greater depths and durations of flooding.

The Global Sea Level Rise Scenarios for the United States National Climate Assessment (December 2012) acknowledges that while past trends give scientists a basis for SLR projections, the actual future sea levels are widely unknown. Projections for SLR in South Carolina range from 8 in to 8.2 ft from 2000 to the year 2100, according to NOAA Sea Level Rise Projections (Figure 4). For planning purposes, the Federal Emergency Management Agency (FEMA) recommends using the "intermediate-high" projections shown in green in Figure 4.

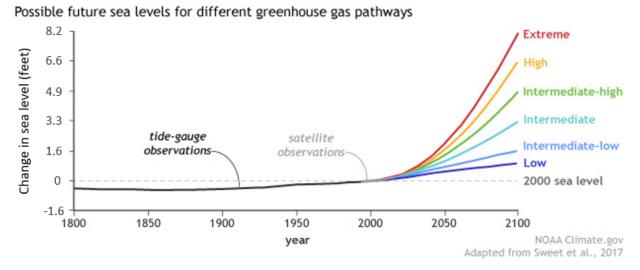


Figure 4. Projected Sea Level Rise (NOAA)

For model formation, 25-year and 50-year planning periods were considered, resulting in SLR of approximately 1.5 ft and 2.5 ft respectively, above 2000 sea levels based on the intermediate-high projections. To incorporate the importance of sea level rise into this analysis, the following conditions were considered:

- 1. Existing land use, current sea levels
- 2. Existing land use, 1.5 feet of sea level rise (from sea levels in 2000)
- 3. Existing land use, 2.5 feet of sea level rise (from sea levels in 2000)
- 4. Future land use, current sea levels
- 5. Future land use, 1.5 feet of sea level rise (from sea levels in 2000)
- 6. Future land use, 2.5 feet of sea level rise (from sea levels in 2000)

These scenarios provide the County with information about how future land use and SLR, independently and in conjunction, are projected to impact St Helena Island.

### 2.6 Known Areas of Flooding

While there have been vocal concerns about rising water and flooding on St Helena, the County does not have many recorded complaints of flooding during storm events on the island. The County is aware of issues along Airport Circle and on Warsaw Island, both of which are not technically on St Helena Island but were included in the study area. News reports indicate that St Helena experienced widespread flooding during Hurricane Irma in 2017, which caused widespread damage across the County.

## 3 Model Development

The hydrologic model for St Helena Island will serve as the primary tool for decision making and to emulate and evaluate projected future conditions. For this effort, a 2D HEC-RAS version 6.0, rain-on-grid model was developed. The following sections describe the key players in the model development.

### 3.1 Hydrologically Corrected DEM

The 2020 USGS LiDAR DEM described in Section 2.1 was updated to be hydrologically correct so that it could be incorporated into the model. Based on stormwater system inventory collected by Beaufort County, physical features, such as culverts, were burned into the 2020 USGS LiDAR DEM. Burn-in is a process by which the DEM is altered manually to lower elevation and allow flow at locations where conveyances are present (e.g., bridges, culverts, channels, etc.) that would otherwise not be accounted for in the LiDAR data. In total, 727 modifications were made to the DEM with 57 of these modifications being size and invert data which were incorporated into the model as 1-D links. The remaining modifications that did not have available invert data were burned into the DEM with the following specifications: the bottom width of the channel was set to the diameter of the pipe, the top of the channel was calculated to be three times the diameter of the pipe, and the side slopes of the channel were set to 1:1 to allow water to flow through roadway embankments that had drainage infrastructure in place.

### 3.2 2D Flow Area Setup

The 2D flow area is the portion of the model that is used by HEC-RAS's computational algorithms to compute 2D flow within a defined region. The 2D flow area for this study extended beyond the boundaries

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of the St Helena Study Area to account for tidal influences and upstream flow regions. Components of the 2D flow area are described below.

#### 3.2.1 2D Computational Mesh

HEC-RAS uses a 2D computational mesh to define overland flow within the 2D flow area. The computational mesh is a series of cells with a maximum of eight sides that uses a Finite-Volume solution scheme to move water throughout the bounded area. The mesh was initially constructed by creating 400 feet x 400 feet squares throughout the study area. Break lines were added to further refine the mesh in areas of interest or where more detail was necessary to accurately model the area. These break lines are generally added to locations that act as barriers to flow, such as roadways, and are used to force the mesh to align the computation cell face along the break line and create refined, higher-resolution cells adjacent to the break line. Primary roads, as well as certain secondary roads that were determined to be of value through engineering judgement and drainage infrastructure placement, were included as break lines to refine the computation mesh near these features. Break lines were used to create smaller cells along the lines to refine the model along the break lines and provide more resolution in those areas. Cells nearest to the road break lines were reduced to 100 feet x 100 feet, with this cell size repeated 1-2 times. The next cell was refined to size of approximately 200-300 feet x 200-300 feet before transitioning to the 400 feet x 400 feet cells that were created initially. Certain streams and channels were also used as break lines to maintain flow within the channel until the water surface elevation (WSE) overtopped the channel banks. Stream break lines were used to refine cells to size of 200 feet x 200 feet near the stream break lines, repeated one time. The next nearest cell was refined to approximately 300 feet x 300 feet before transitioning to the 400 feet by 400 feet cells that were initially created.

### 3.2.2 Storage Area to 2D Flow Area Connections

Storage area to 2D flow area (SA/2D) connections were used within the St Helena Island HEC-RAS model to create a hydraulic connection within the 2D flow area at locations where 1D culverts with invert and size data were modeled. Reinforced concrete pipe (RCP) culverts were assumed to be concrete pipe culverts with a groove end entrance. These were assigned an entrance loss coefficient of 0.2, exit loss coefficient of 1, and Manning's n of 0.012. Corrugated metal pipe (CMP) culverts were modeled with an entrance loss coefficient of 0.7, exit loss coefficient of 1, and Manning's n of 0.025.

### 3.2.3 Existing Land Use

Existing land use coverage was obtained as described in Section 2.4.1. The NLCD 2019 coverage data, along with the NRCS soil survey, were used to define Manning's roughness coefficients, abstraction ratios, and curve numbers throughout the St Helena Island study area (Figure 1). A minimum infiltration rate of 0.01 in/hr was assigned to all land use and soil combinations.

Impervious area was defined using the County's impervious area coverage shapefile combined with the road centerline shapefile buffered to 25 ft on each side to assume a mean right-of-way (ROW) across the study area. Polygons defined in the impervious coverage shapefile were assigned a percent impervious of 100%, ROW 80%, and areas with no impervious coverage were assumed to be pervious.

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Table 4. St Helena Island Manning's Land Use Parameters

|    |                                | Manning's | Abstraction | 3   |     |     |     | ologic S | oil Gro | up  |       |     |
|----|--------------------------------|-----------|-------------|-----|-----|-----|-----|----------|---------|-----|-------|-----|
| ID | Description                    | N         | Ratio       | Α   | В   | С   | D   | A/D      | B/D     | C/D | Water | Unk |
| 0  | NoData                         | 0.1       | 0.2         | 39  | 61  | 74  | 80  | 39       | 61      | 74  | 100   | 74  |
| 1  | 255                            | 0.1       | 0.2         | 39  | 61  | 74  | 80  | 39       | 61      | 74  | 100   | 74  |
| 11 | Open Water                     | 0.035     | 0.05        | 100 | 100 | 100 | 100 | 100      | 100     | 100 | 100   | 100 |
| 21 | Developed, Open<br>Space       | 0.035     | 0.1         | 39  | 61  | 74  | 80  | 60       | 71      | 77  | 100   | 74  |
| 22 | Developed, Low<br>Intensity    | 0.08      | 0.1         | 39  | 61  | 74  | 80  | 60       | 71      | 77  | 100   | 81  |
| 23 | Developed, Medium<br>Intensity | 0.12      | 0.05        | 39  | 61  | 74  | 80  | 60       | 71      | 77  | 100   | 88  |
| 24 | Developed, High<br>Intensity   | 0.15      | 0.05        | 39  | 61  | 74  | 80  | 60       | 71      | 77  | 100   | 94  |
| 31 | Barren Land<br>Rock/Sand/Clay  | 0.03      | 0.2         | 39  | 61  | 74  | 80  | 60       | 71      | 77  | 100   | 74  |
| 41 | Deciduous Forest               | 0.1       | 0.2         | 36  | 60  | 73  | 79  | 58       | 70      | 76  | 100   | 73  |
| 42 | Evergreen Forest               | 0.15      | 0.2         | 36  | 60  | 73  | 79  | 58       | 70      | 76  | 100   | 73  |
| 43 | Mixed Forest                   | 0.12      | 0.2         | 36  | 60  | 73  | 79  | 58       | 70      | 76  | 100   | 73  |
| 52 | Shrub/Scrub                    | 0.05      | 0.2         | 39  | 61  | 74  | 80  | 60       | 71      | 77  | 100   | 74  |
| 71 | Grassland/Herbaceous           | 0.04      | 0.2         | 30  | 58  | 71  | 78  | 54       | 68      | 75  | 100   | 71  |
| 81 | Pasture/Hay                    | 0.045     | 0.2         | 49  | 69  | 79  | 84  | 67       | 77      | 82  | 100   | 79  |
| 82 | Cultivated Crops               | 0.05      | 0.2         | 67  | 78  | 85  | 89  | 78       | 84      | 87  | 100   | 85  |
| 90 | Woody Wetlands                 | 0.07      | 0.2         | 80  | 85  | 90  | 95  | 88       | 90      | 93  | 100   | 90  |
| 95 | Emergent Herbaceous Wetlands   | 0.045     | 0.2         | 75  | 80  | 85  | 90  | 83       | 85      | 88  | 100   | 85  |

#### 3.2.4 Future Land Use

As described in Section 2.4.2, future land use was defined using parcel data coverage above 6 ft of elevation (approximately 2.5 ft above the MHHW level) as determined through comparison with the DEM. Road centerlines were buffered 300 ft on each side to clip the parcels above 6 ft elevation to identify any area near a roadway that would be considered as having potential for future development. The existing impervious area within these parcels was calculated using the existing land use impervious area described in Section 3.2.3 above. Parcels that contained less than 25% impervious area in the existing condition were adjusted to 25% impervious coverage, and parcels with greater than or equal to 25% impervious coverage in the existing conditioned were maintained as-is in the future land use condition. This brought all areas within 300 feet of a main roadway on the island up to an impervious cover of at least 25%, providing a conservative estimate of future development on the island.

### 3.3 Unsteady Flow Data

### 3.3.1 Boundary Conditions

Stage hydrograph boundary conditions were developed using datum information as reported from the NOAA tide gauging station at Fort Pulaski, GA (8670870). A tidal pattern was derived to closely match the tide cycle with a peak elevation at the MHHW of 3.45 ft at four different tidal boundary condition lines. These boundaries are at locations where inland waters meet the Atlantic Ocean, with one being at the northeast portion of St Helena Island, one at the southeast, and two at the southwest. The tidal cycle was aligned to approximately correlate with peak rainfall conditions to simulate a worst-case scenario in tidally impacted locations of St Helena Island.

### 3.3.2 Meteorological Data

Rainfall data was obtained as described in Section 2.3. The 24-hour rainfall depths for the 2-, 10-, 25-, 50-, and 100-year recurrence intervals were used with the NRCS 24-hour synthetic rainfall distributions based on the individual recurrence interval's 1-hour to 24-hour depth ratios. The NOAA-A distribution was used for the 2-year event, the NOAA-B distribution for the 10- and 25-year event, and the NOAA-C distribution for the 50- and 100-year events (Table 5). These rainfall distributions were applied uniformly across the study area to simulate meteorological conditions during the five storms mentioned above.

Table 5. Beaufort County NRCS Rainfall Distributions

| Recurrence Interval | 1-hr Depth (in) | 24-hr Depth (in) | Depth Ratio | NRCS Distribution used |
|---------------------|-----------------|------------------|-------------|------------------------|
| 2-Year              | 2.05            | 4.2              | 0.488       | NOAA_A (>0.48)         |
| 10-Year             | 2.91            | 6.42             | 0.453       | NOAA_B (0.43 - 0.48)   |
| 25-Year             | 3.41            | 7.82             | 0.436       | NOAA_B (0.43 - 0.48)   |
| 50-Year             | 3.83            | 8.96             | 0.427       | NOAA_C (0.38 - 0.43)   |
| 100-Year            | 4.26            | 10.2             | 0.418       | NOAA_C (0.38 - 0.43)   |

### 4 Model Results and Problem Area Identification

#### 4.1 Problem Area Identification

Problem areas were identified using a 25-year inundation analysis. Due to low-lying areas, little to no pipe slopes along the drainage system, and boundary conditions limiting the pipe system's outflow capacity, there is an expectation that standing water is not uncommon throughout St Helena Island following a storm event. Therefore, 6 inches was set as the inundation level of concern where roadways are considered to be unsafe for travel. County-owned roads were buffered five feet on each side of the available street centerlines and intersected with polygons showing greater than 0.5 ft (6 inches) of inundation for two scenarios: (1) the 25-year existing condition scenario, and (2) the 25-year future conditions with 2.5 ft of sea level rise. These areas were chosen to be prioritized as the County can directly target roads under their ownership for potential improvements that may relieve flooding at these locations.

The zones identified below are locations where County-owned roads and surrounding areas are inundated greater than 6 inches during the 25-year existing conditions scenario and/or the 25-year storm, future conditions with 2.5 ft of SLR scenario (Figure 5). These two scenarios were chosen to be displayed on the map as they show current flooding issues, as well as worst-case scenario with future development and long-term SLR. In areas where SLR had a significant impact on flooding it was observed to far outweigh the contribution of future development. Therefore, it was determined that these two scenarios depicted the separate impacts well enough that the other four scenarios could be omitted for brevity and to avoid redundancy. Appendix A contains the 100-year floodplain for depths greater than 6 inches overlaying both aerials and the DEM. Appendix B contains a summary of inundated roadways in each of the six scenarios for all storm sizes considered. The maps in the sections below display existing impervious area within the study area, all roads, conveyances that were modeled either as 1D links or through DEM burn-in, and the 25-year existing conditions floodplain overlaying the 25-year future conditions with 2.5 ft SLR floodplain. Roads that are inundated are described below by the smallest storm in which they were observed to be inundated in the study area.

Table 6. County-Owned Road Inundation Summary by Zone

|      | Table 6. County-      | l .  | ngth of Roa |        |                            |        | in (ft) |  |
|------|-----------------------|------|-------------|--------|----------------------------|--------|---------|--|
| _    | o                     |      | Condition   |        | Future Conditions, 25-year |        |         |  |
| Zone | Street Name           | 0 ft | 1.5 ft      | 2.5 ft | 0 ft                       | 1.5 ft | 2.5 ft  |  |
|      |                       | SLR  | SLR         | SLR    | SLR                        | SLR    | SLR     |  |
|      | Estrolita St          | 84   | 84          | 84     | 68                         | 68     | 68      |  |
|      | Fort Fremont Rd       | 317  | 330         | 336    | 774                        | 752    | 746     |  |
|      | Gingerwood Rd         | 250  | 250         | 250    | 454                        | 454    | 454     |  |
| 1    | McCoy Rd              | 6    | 6           | 6      | 53                         | 53     | 53      |  |
|      | Mixon Rd              | 38   | 38          | 38     | 400                        | 400    | 400     |  |
|      | Shamrock Rd           | 106  | 106         | 106    | 146                        | 146    | 146     |  |
|      | Triangle Rd           | 34   | 34          | 34     | 102                        | 102    | 102     |  |
|      | Langford Rd           | 685  | 685         | 692    | 728                        | 728    | 728     |  |
|      | Shed Rd               | 192  | 192         | 565    | 807                        | 814    | 1131    |  |
| 2    | Wards Landing Rd      | 303  | 307         | 307    | 380                        | 380    | 380     |  |
|      | William Jenkins Rd    | 156  | 156         | 156    | 246                        | 250    | 246     |  |
| 3    | John Fripp Cir        | 120  | 120         | 120    | 128                        | 128    | 128     |  |
| 3    | The Avenue            | 489  | 489         | 489    | 634                        | 634    | 634     |  |
| 4    | Cusabo Rd             | 103  | 103         | 103    | 461                        | 463    | 463     |  |
| 5    | Harold Rivers Rd      | 214  | 214         | 214    | 230                        | 230    | 230     |  |
| 3    | Hunters Grove Rd      | 174  | 174         | 174    | 307                        | 307    | 307     |  |
| 6    | Ernest Dr             | 40   | 40          | 40     | 45                         | 45     | 45      |  |
| 6    | Queens Rd             | 114  | 114         | 114    | 146                        | 146    | 146     |  |
| 7    | Bible Camp Rd         | 83   | 83          | 83     | 171                        | 171    | 171     |  |
| 8    | Prayer House Rd       | 284  | 284         | 284    | 394                        | 394    | 394     |  |
| 9    | Rosie Singleton Dr    | 178  | 178         | 178    | 264                        | 264    | 264     |  |
| 10   | Rose Petal Dr         | 249  | 251         | 253    | 351                        | 351    | 353     |  |
| 11   | Sea Pines Dr          | 55   | 55          | 55     | 116                        | 116    | 116     |  |
| 12   | Golden Dock Rd        | 71   | 71          | 71     | 121                        | 121    | 121     |  |
| 13   | Bridgewood Rd         | 108  | 108         | 108    | 194                        | 194    | 194     |  |
| 14   | Old Distant Island Rd | 90   | 90          | 90     | 102                        | 102    | 102     |  |
| 15   | Dockside Ln           | 60   | 60          | 103    | 73                         | 73     | 127     |  |
| 16   | Tropicana Rd          | 85   | 85          | 87     | 324                        | 321    | 322     |  |
| 17   | David Green Rd        | 74   | 74          | 74     | 159                        | 159    | 159     |  |
| 18   | Tombee Rd             | 49   | 49          | 64     | 103                        | 103    | 127     |  |
| 19   | Mattis Dr             | 34   | 36          | 36     | 44                         | 44     | 46      |  |
| 20   | Fredericka Taylor Ln  | 0    | 0           | 0      | 92                         | 92     | 92      |  |
| 21   | Jenkins Port Rd       | 0    | 0           | 95     | 0                          | 1      | 107     |  |
| 22   | Shade Tree Ln         | 0    | 0           | 0      | 17                         | 17     | 17      |  |
| 23   | Warsaw Island Rd      | 0    | 0           | 0      | 81                         | 81     | 81      |  |
| 24   | McTeer Dr             | 530  | 549         | 614    | 804                        | 815    | 864     |  |

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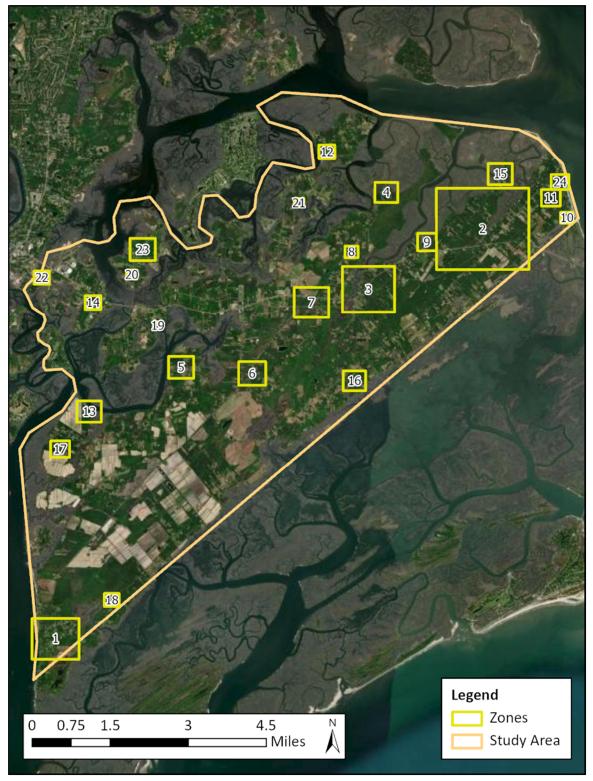


Figure 5. St Helena Island Study Area Overall Problem Zone Map

#### 4.1.1 Zone 1

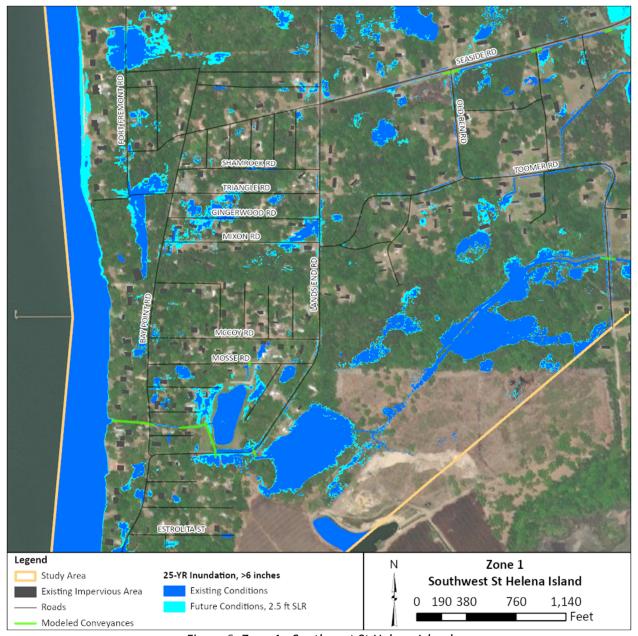


Figure 6. Zone 1 - Southwest St Helena Island

Zone 1 includes areas in the southwest portion of the St Helena Island study area near Fort Fremont Rd, Seaside Rd, and Lands End Rd (Figure 6). Roads in this zone that are expected to be inundated are Gingerwood Rd in the 2-year; Estrolita St and Fort Fremont Rd in the 10-year; and Lands End Rd, McCoy Rd, Mixon Rd, Seaside Rd, Shamrock Rd, and Triangle Rd in the 25-year (Table 6, Appendix B). The inundation appears to be caused primarily by the lack of stormwater infrastructure in this area due to the low-lying, flat nature of the location with the only targetable, inundated infrastructure being culverts across Lands End Rd. Future development in this area has the potential to exacerbate flooding conditions, however, the area is largely protected from at least 2.5 ft of SLR due to its elevation compared to the adjacent water surface.

#### 4.1.2 Zone 2

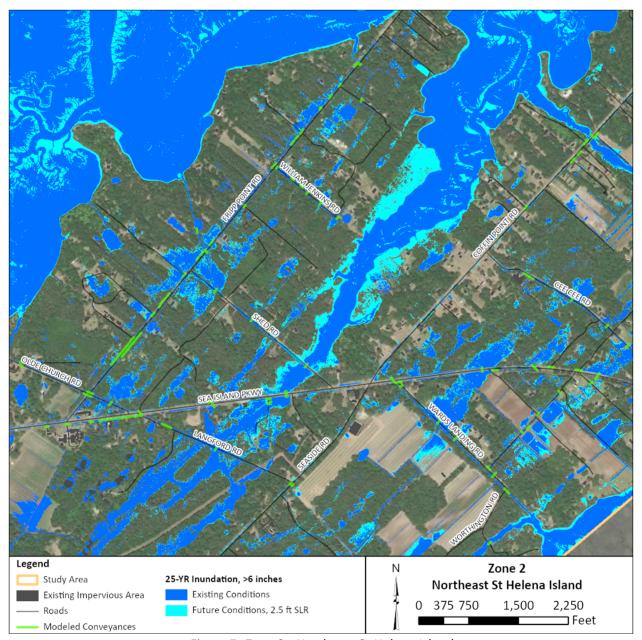


Figure 7. Zone 2 - Northeast St Helena Island

Zone 2 includes areas in the northeast portion of the St Helena Island study area near Sea Island Pkwy and Fripp Point Rd (Figure 7). Roads, and the culvert crossings shown at these roads, in this area that are expected to be inundated are Langford Rd in the 2-year; Wards Landing Rd and William Jenkins Rd in the 10-year, and Shed Rd in the 25-year storm scenario (Table 6, Appendix B). The area is low-lying and flat; reducing the ability of the stormwater infrastructure in the area to relieve flooding. This zone has the potential to be impacted by SLR, particularly in the area of Shed Rd, due to the tidally impacted stream that crosses through the zone. Future development also has the potential to increase flooding in this zone. The inundated culvert crossings were among those targeted for alternative scenarios in Section 5.

#### 4.1.3 Zone 3

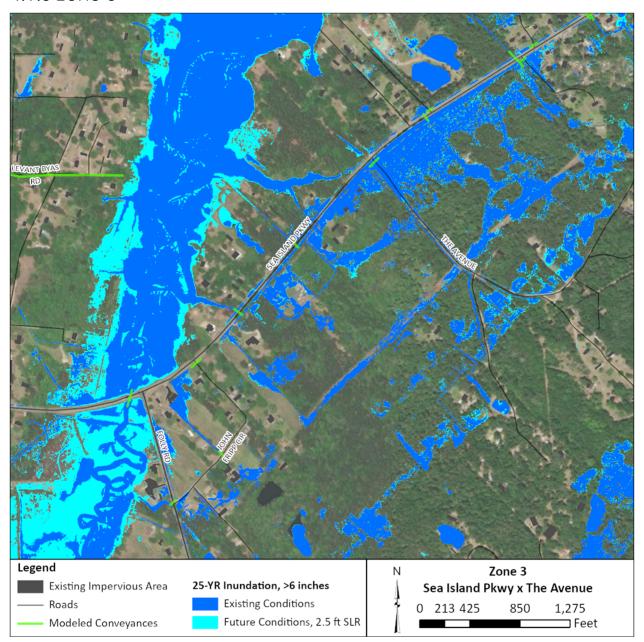


Figure 8. Zone 3 - Sea Island Parkway x The Avenue

Zone 3 is located in the vicinity of the intersection between Sea Island Parkway and The Avenue (*Figure 8*). Roads inundated in this area are the Sea Island Parkway/The Avenue intersection, as well as the culvert at this intersection, during the 2-year storm scenario, and a small portion of John Fripp Circ during the 10-year storm scenario (Table 6, Appendix B). The inundation is likely due to this area being in a depression located near a stream. This leads to the water draining from the higher elevation down into this zone prior to entering the stream. The lack of elevation change within the inundated zone reduces the ability of the stormwater infrastructure to relieve the flooding caused by the elevation change. Although future development appears to increase inundation in the area, the elevation difference between the stream and the area prevents impacts due to modeled SLR.

### 4.1.4 Zone 4

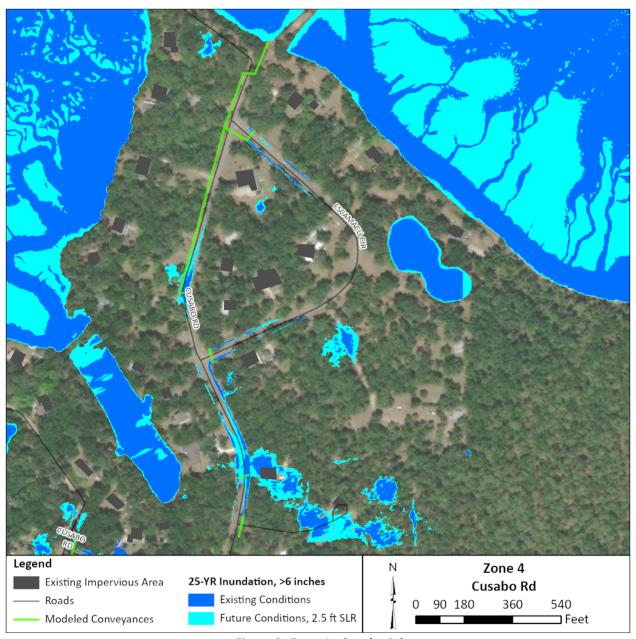


Figure 9. Zone 4 - Cusabo Rd

Zone 4 is located along the inundated portion of Cusabo Rd (*Figure 9*, Table 6, Appendix B). Inundation first occurs during the 2-year storm scenario and appears to be due to the lack of elevation change in this localized area which leads to shallow flooding since the stormwater infrastructure cannot properly drain the area. Due to the higher elevation in this zone, future impacts are expected to be due to development in the area and not SLR.

### 4.1.5 Zone 5

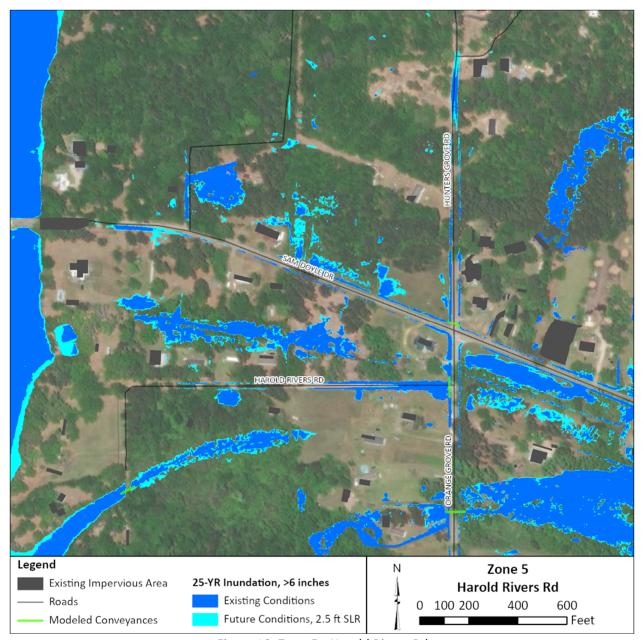


Figure 10. Zone 5 - Harold Rivers Rd

Zone 5 is located near the intersection of Harold Rivers Rd and Orange Grove Rd (Figure 10). Roads in this area that are inundated include Harold Rivers Rd, including the culvert, in the 2-year and Hunters Grove Rd in the 10-year storm scenario (Table 6, Appendix B). Inundation in this area is likely due to the intersection being at a low point compared to the surrounding elevations. The low-lying nature of this particular area creates a localized depression where shallow flooding can occur. This zone was not impacted by modeled SLR, but future development in this zone may exacerbate flooding issues.

### 4.1.6 Zone 6

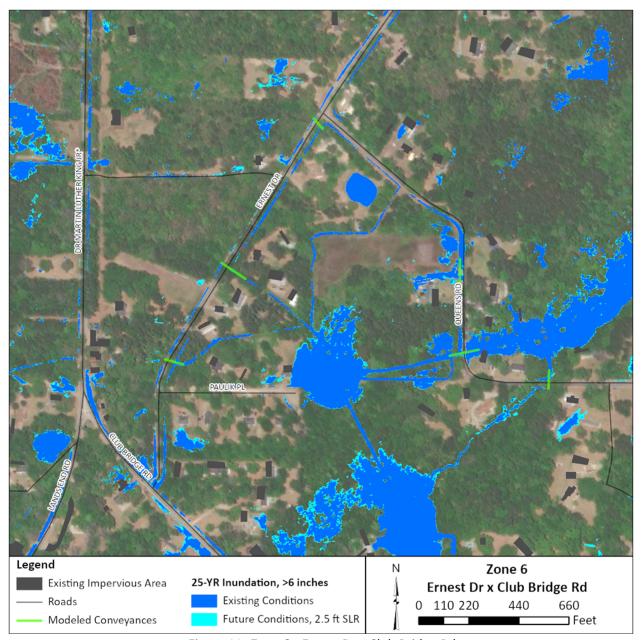


Figure 11. Zone 6 - Ernest Dr x Club Bridge Rd

Zone 6 is located at the intersection of Club Bridge Rd and Ernest Dr (Figure 11). Inundation in this area occurs at the intersection of Ernest Dr and Club Bridge Rd in the 2-year storm scenario (Table 6, Appendix B). Inundation in this area is likely due to the lack of elevation change within the zone, causing water to move slowly through the area and creating shallow flooding zones. There is not a culvert located at the noted intersection. Modeled future development impacts appear to be minimal, and there are no impacts due to modeled SLR.

Bible Camp Rd

560

840

□ Feet

0 140 280

Existing Impervious Area

Modeled Conveyances

- Roads

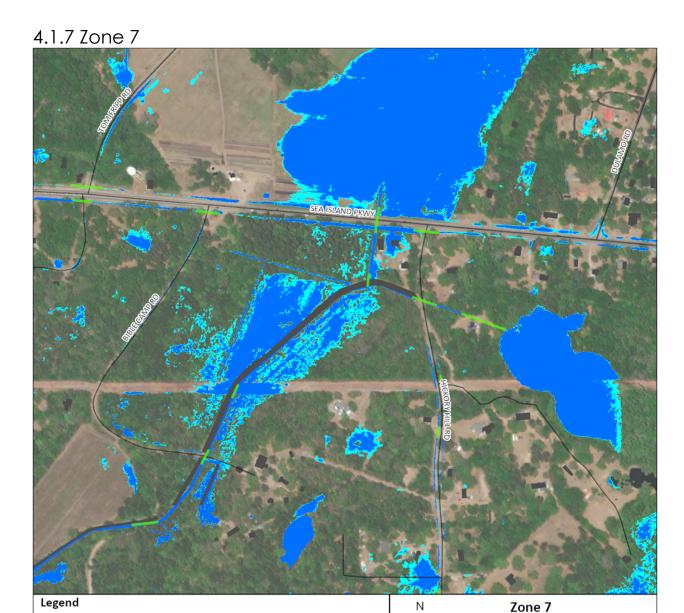


Figure 12. Zone 7 - Bible Camp Rd

25-YR Inundation, >6 inches

**Existing Conditions** 

Future Conditions, 2.5 ft SLR

Zone 7 is located along Bible Camp Rd, which is inundated during the modeled 25-year storm scenarios (Figure 12, Table 6, Appendix B). Potential cause of this inundation is a localized low-lying area in the proximity of the road. Flooding conditions in this zone are exacerbated by modeled future development, however, there is no impact due to modeled SLR. The channel culvert was targeted as an alternative.

#### 4.1.8 Zone 8

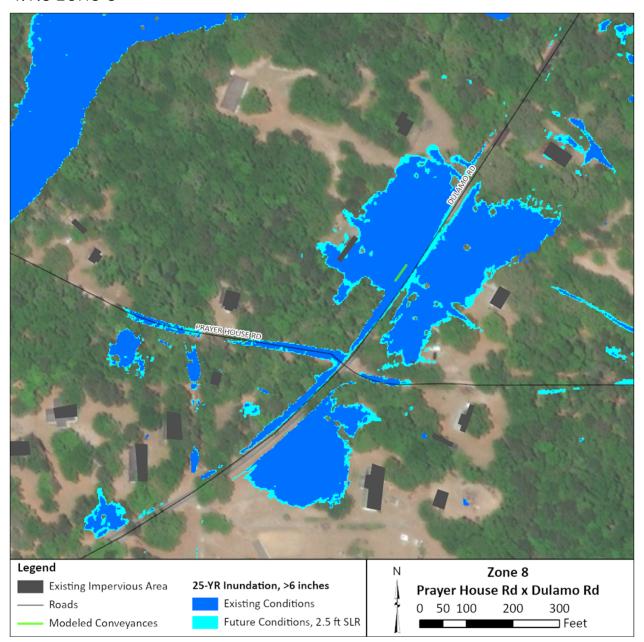


Figure 13. Zone 8 - Prayer House Rd x Dulamo Rd

Zone 8 is located near the intersection of Prayer House Rd and Dulamo Rd (Figure 13), both of which are inundated during the modeled 10-year and the 25-year storm scenarios, respectively (Table 6, Appendix B). This zone is located in a very flat area which reduces the ability of stormwater infrastructure to drain water, leading to shallow flooding in the nearby area. Flooding conditions in this area are exacerbated by modeled future development but not modeled SLR. There are no targetable culverts at this location, likely due to lack of elevation change.

### 4.1.9 Zone 9

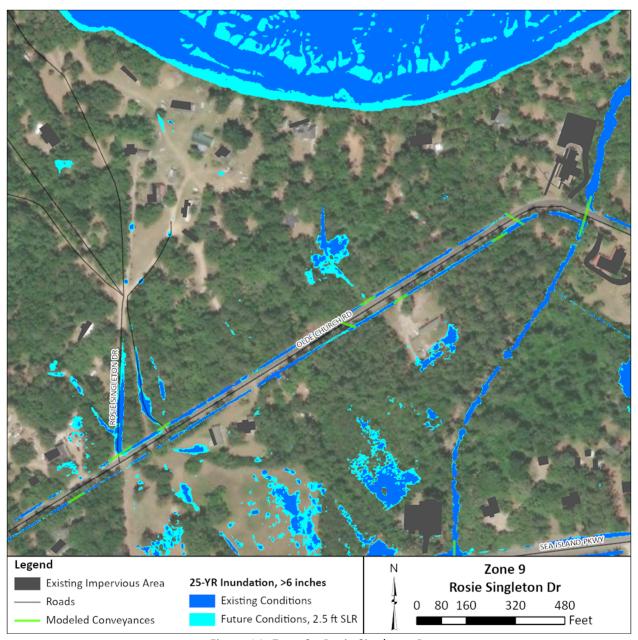


Figure 14. Zone 9 - Rosie Singleton Dr

Zone 9 is located in the area at the intersection of Rosie Singleton Dr and Olde Church Rd. (Figure 14, Table 6). Inundation at this location may be due to localized elevation changes along Dulamo Rd. The culvert crossing at Rosie Singleton Dr was targeted for increased capacity in Section 5.1.7 to attempt to reduce the inundation at this location, however, it did not improve the flooding conditions at the intersection. Flooding in this zone is exacerbated by modeled future development; however, it is not impacted by modeled SLR.

### 4.1.10 Zone 10

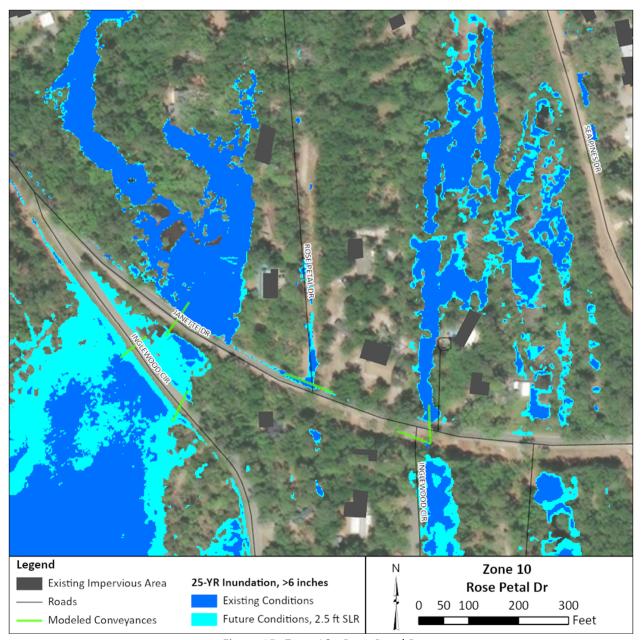


Figure 15. Zone 10 - Rose Petal Dr

Zone 10 is located at the intersection of Rose Petal Dr and Janette Dr (Figure 15, Table 6, Appendix B). Inundation in this area in the 10-year storm is likely due to localized low elevations in this zone that cause water to drain and pool in certain locations. The inundated culvert at the previously mentioned intersection was targeted as a possible alternative with no observed flooding reduction (Section 5.1.7). Flooding in this location is exacerbated by modeled future development and not by modeled SLR.

### 4.1.11 Zone 11

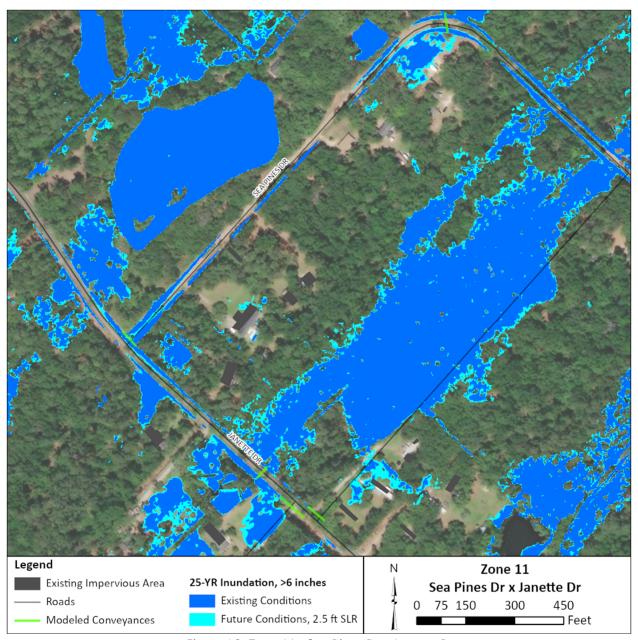


Figure 16. Zone 11 - Sea Pines Dr x Janette Dr

Zone 11 is located in the area of the intersection at Sea Pines Dr and Janette Dr (Figure 16, Table 6, Appendix B). The inundation during the modeled 10-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location. Flooding at this location is exacerbated by modeled future development and not by modeled SLR. The conveyance crossing was targeted for increased capacity with no observed reduction in flooding, as seen in Section 5.1.9.

### 4.1.12 Zone 12

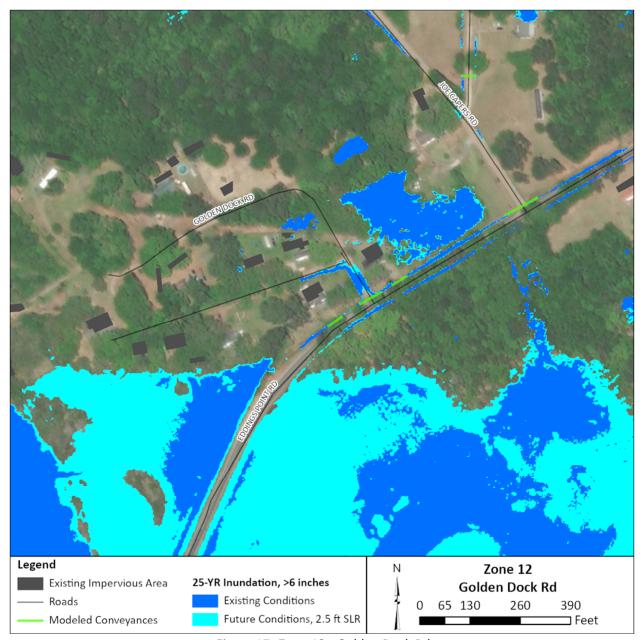


Figure 17. Zone 12 - Golden Dock Rd

Zone 12 is located at the intersection of Golden Dock Rd (Figure 17, Table 6, Appendix B). The inundation during the modeled 25-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location. Flooding at this location is increased slightly by modeled future development. While SLR is a factor in this area, it is contained in the marsh area around the tidally impacted waterbody and was not observed to impact properties or roads at this location.

### 4.1.13 Zone 13

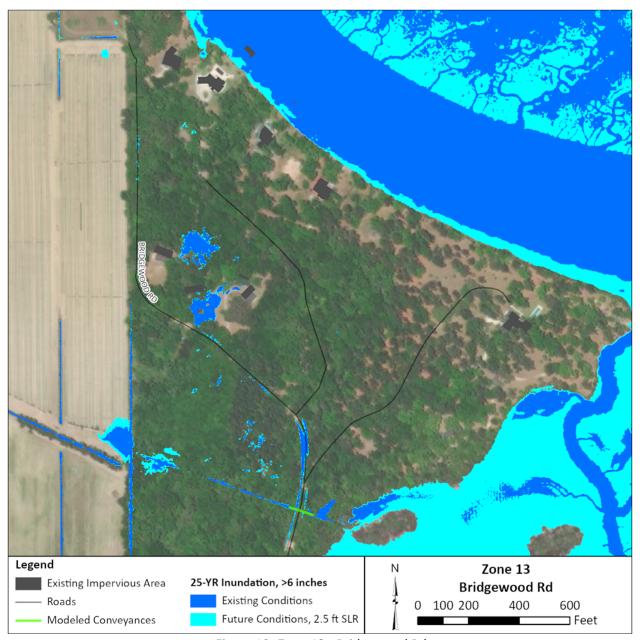


Figure 18. Zone 13 - Bridgewood Rd

Zone 13 is located at Bridgewood Rd (Figure 18, Table 6, Appendix B). The inundation during the modeled 10-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location. Flooding at this location is increased with increased development, as modeled in the future conditions scenario. SLR is observable along the tidally impacted waterbody on the east side of the zone, however, it does not rise above the elevation at which it affects roads or nearby properties.

### 4.1.14 Zone 14

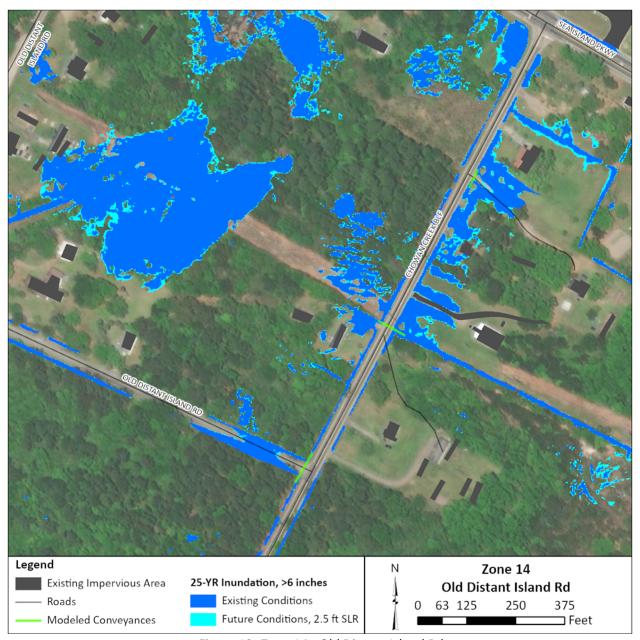


Figure 19. Zone 14 - Old Distant Island Rd

Zone 14 is located at Old Distant Island Rd near the intersection of Chowan Creek Blf (Figure 19, Table 6, Appendix B). The inundation during the modeled 10-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location. Flooding at this location is slightly increased by modeled future development but not by SLR. The culvert crossing at the intersection was targeted as an alternative for increased capacity with insignificant reductions in flooding (Section 5.1.12).

#### 4.1.15 Zone 15

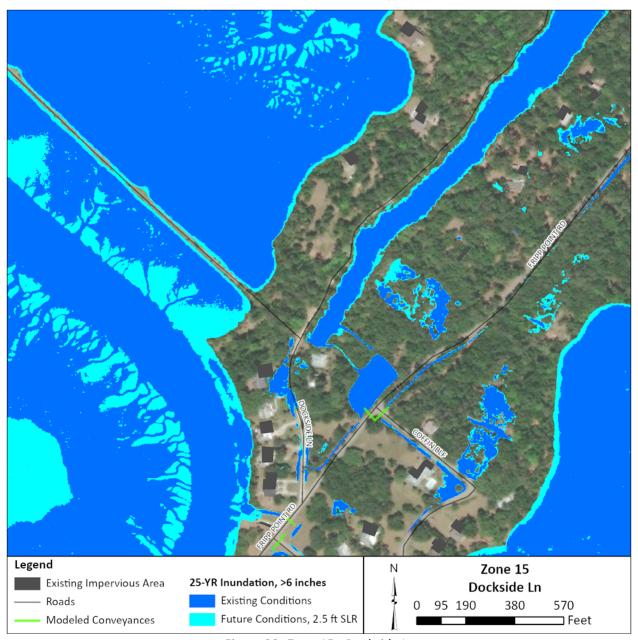


Figure 20. Zone 15 - Dockside Ln

Zone 15 is located at Dockside Ln near Fripp Point Rd (Figure 20, Table 6, Appendix B). The inundation during the modeled 25-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location and reduce impacts of stormwater infrastructure. Inundation along the roadway at this location is exacerbated by modeled future development. Additionally, SLR was observed to increase possible flooding into the backyards of the properties along Dockside Ln due to the adjacent tidally impacted waterbody.

#### 4.1.16 Zone 16

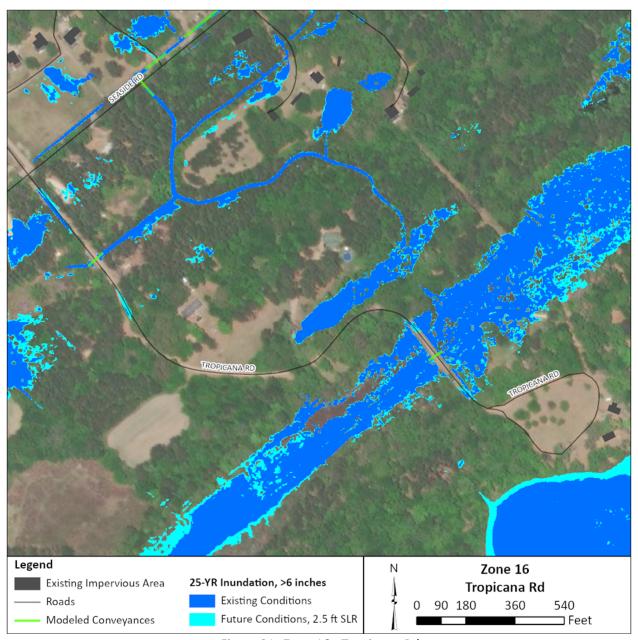


Figure 21. Zone 16 - Tropicana Rd

Zone 16 is located at Tropicana Rd (Figure 21, Table 6, Appendix B). The inundation during the modeled 25-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location and reduce impacts of stormwater infrastructure. Flooding at this location is exacerbated by modeled future development and not by modeled SLR, likely due to the elevation difference between the built-out area and the adjacent tidally impacted waterbody. The culvert at this location was targeted for increased capacity, as seen in Section 5.1.13, but had minimal effect on flood reduction in this location.

#### 4.1.17 Zone 17

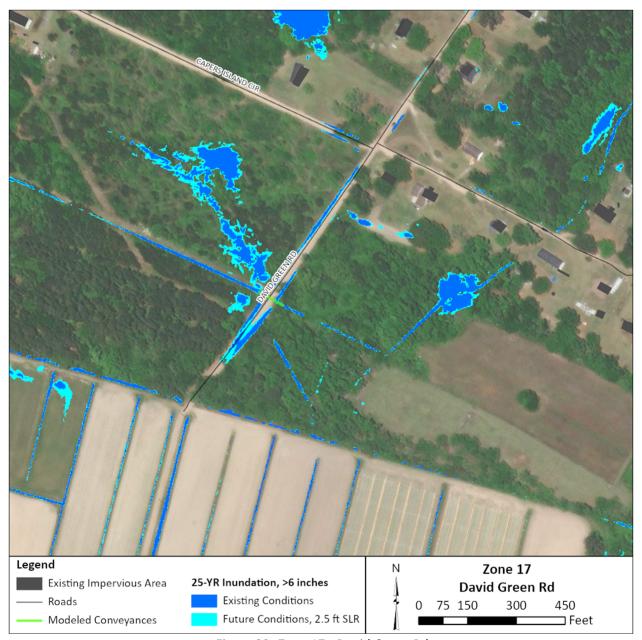


Figure 22. Zone 17 - David Green Rd

Zone 17 is located at David Green Rd (Figure 22, Table 6, Appendix B). The inundation at this road during the modeled 25-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location and reduce the ability of stormwater infrastructure to adequately convey runoff. Flooding at this location is exacerbated by modeled future development and modeled SLR due to the proximity of the zone to a tidally impacted waterbody. This zone is largely rural/agriculture with little stormwater infrastructure in the area.

#### 4.1.18 Zone 18

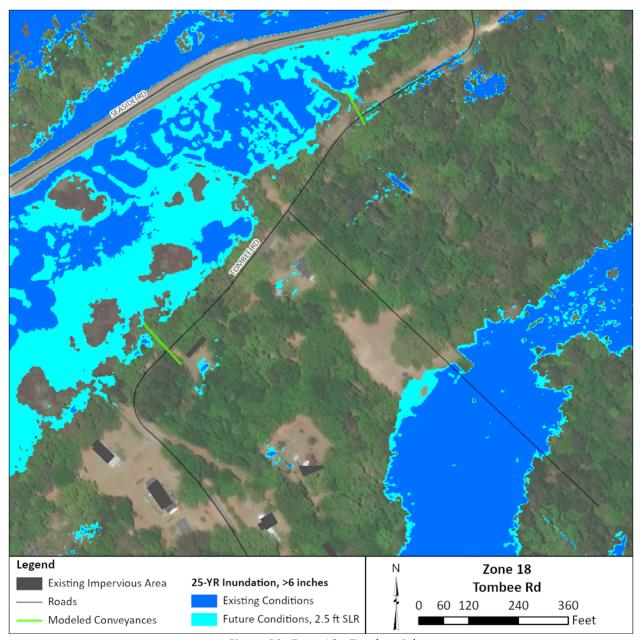


Figure 23. Zone 18 - Tombee Rd

Zone 18 is located at Tombee Rd (Figure 23, Table 6, Appendix B). The inundation at this roadway during the modeled 25-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location as it overtops the roadside ditch. Flooding at this location is exacerbated by modeled future development and modeled SLR due to the proximity of the zone to a tidally impacted waterbody. The privately owned portion of Tombee Rd that overtops in the 2-year storm has no known infrastructure to relieve flooding, likely due to the wetland area at this location.

#### 4.1.19 Zone 19

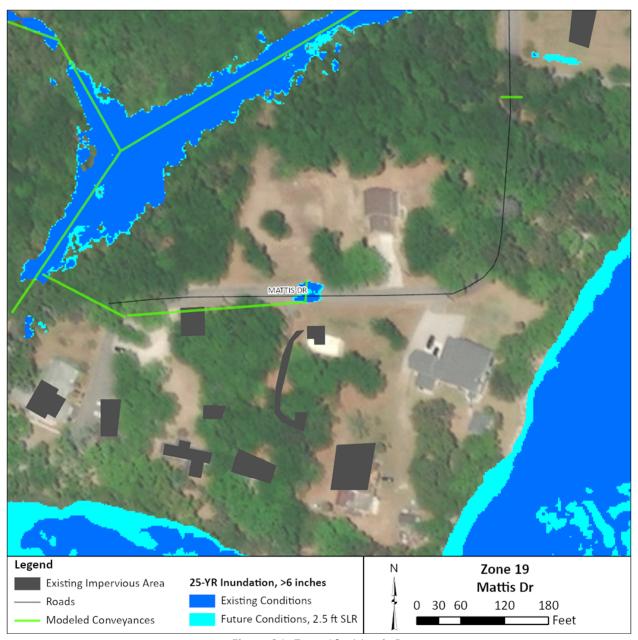


Figure 24. Zone 19 - Mattis Dr

Zone 19 is located at Mattis Dr (Figure 24, Table 6, Appendix B). The inundation during the modeled 10-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location. Increasing the capacity of stormwater infrastructure in this area has the potential to improve conditions at this location. Flooding at this location is exacerbated by modeled future development but not by modeled SLR. The culvert crossing was targeted for increased capacity in Section 5.1.15 with insignificant reductions observed. The apparent flooding on the northwest side is due to that being a low-lying area draining toward a marsh.

#### 4.1.20 Zone 20

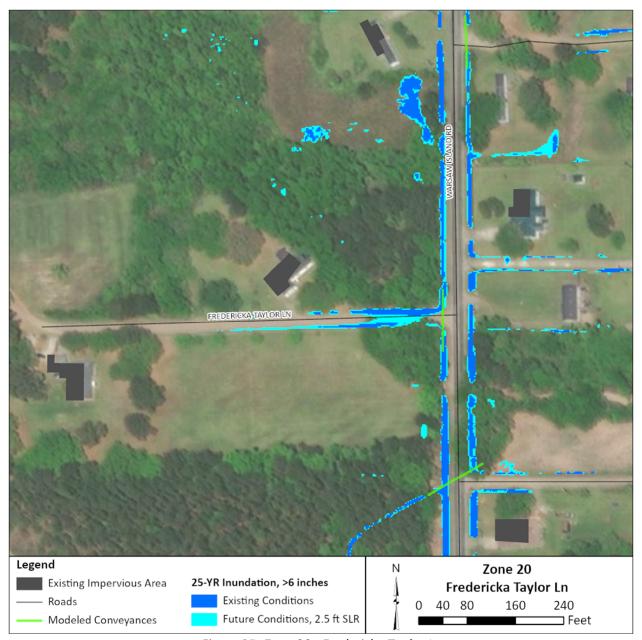


Figure 25. Zone 20 - Fredericka Taylor Ln

Zone 20 is located near the intersection of Fredericka Taylor Ln and Warsaw Island Rd (Figure 25, Table 6, Appendix B). Inundation at this location does not occur in existing conditions until the 50-year storm scenario, however, inundation would be expected under the modeled 10-year storm scenario in modeled future development conditions. Modeled SLR does not have an effect on flooding in this zone. The culvert crossing was targeted for increased capacity in Section 5.1.16 with no observed flooding reduction. The runoff in this location is largely contained with the present roadside ditches.

#### 4.1.21 Zone 21

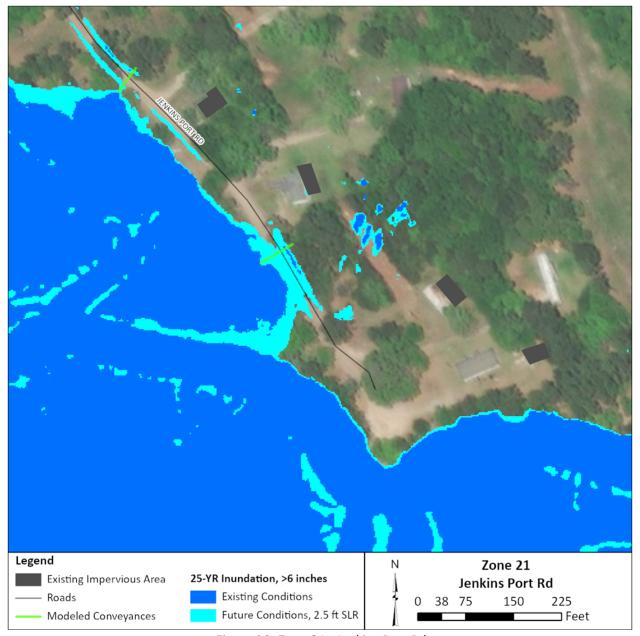


Figure 26. Zone 21 - Jenkins Port Rd

Zone 21 is located at Jenkins Port Rd (Figure 26, Table 6, Appendix B). Inundation at the southeastern culvert location does not occur in existing conditions, however, inundation would be expected under the modeled 2-year storm scenario in existing development and future development conditions with 2.5 ft SLR. This is primarily due to the proximity of this zone to the adjacent tidally impacted waterbody, which severely limits the ability to reduce flooding in this zone with rising sea levels due to the tailwater condition blocking flow at the southeastern culvert. This tailwater condition also occurs to a lesser degree at the northwestern culvert location.

#### 4.1.22 Zone 22

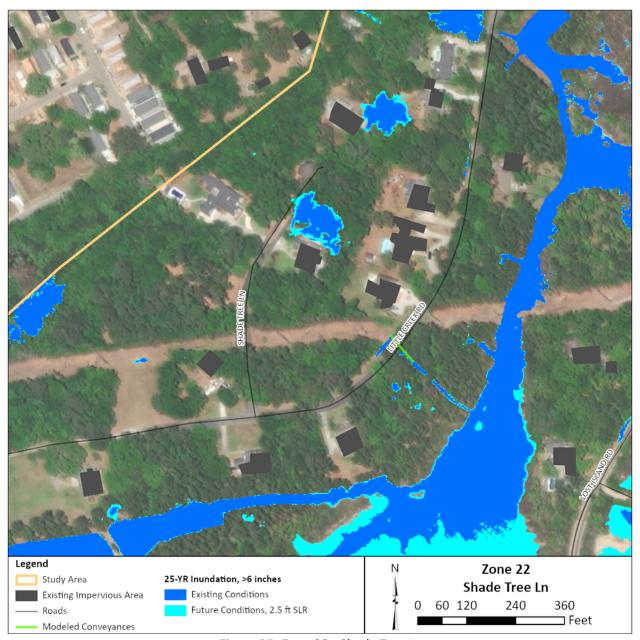


Figure 27. Zone 22 - Shade Tree Ln

Zone 22 is located at Shade Tree Ln (Figure 27, Table 6, Appendix B). Inundation at this location does not occur for the 25-year storm scenario in existing conditions, however, inundation would be expected under the modeled 25-year storm scenario in modeled future development conditions. Modeled SLR does not have an effect on flooding in this zone. Flooding in this area is due to localized depressions.

#### 4.1.23 Zone 23

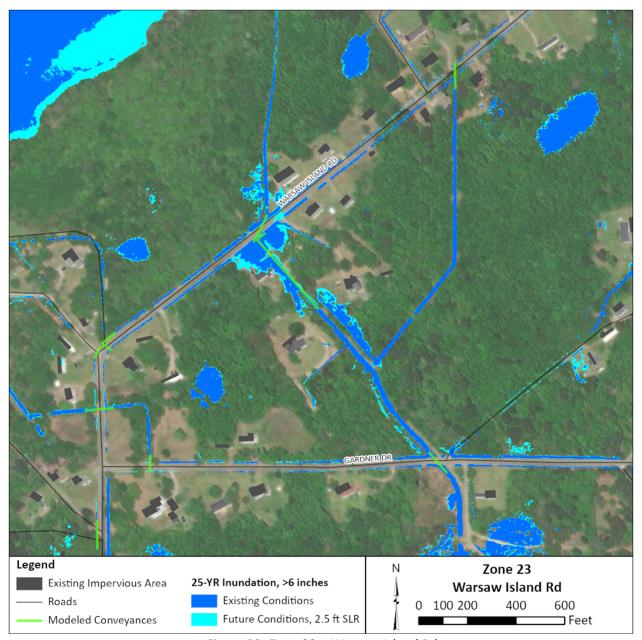


Figure 28. Zone 23 – Warsaw Island Rd

Zone 23 is located at Warsaw Island Rd (Figure 28, Table 6, Appendix B). Inundation of roadways is not a major concern at this location, only occurring in the 100-year existing condition scenario and the 25-year future development conditions scenario, however, properties adjacent to the culvert crossing at Warsaw Island Rd in the center of Figure 28. This culvert was targeted for increased capacity in Section 5.1.18 with no reduction in flooding. This may indicate roadside ditches that are surcharging in the 25-year storm events.

#### 4.1.24 Zone 24

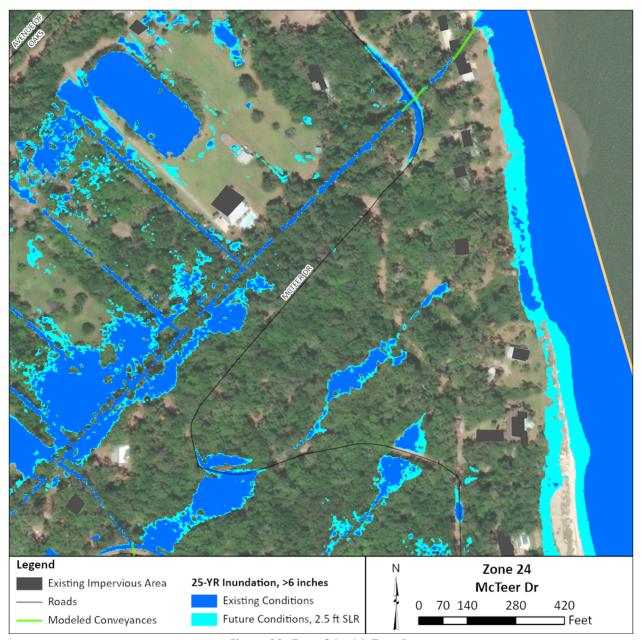


Figure 29. Zone 24 – McTeer Dr

Zone 24 is located at McTeer Rd (Figure 29, Table 6, Appendix B). The inundation during the modeled 2-year storm scenarios is likely caused by localized elevation changes that cause water to pool in this location and reduce impacts of stormwater infrastructure. Flooding at this location is exacerbated by modeled future development and by modeled SLR due to the proximity of this location to the adjacent tidally impacted waterbody exacerbating tailwater conditions and blocking flow at the outlet. The conveyances shown were targeted for increased capacity in Section 5.1.19 with no observed reduction in flooding, likely due to the aforementioned tailwater issue.

# 5 Alternatives Analysis

A planning level evaluation model was developed to evaluate which areas of flooding could be reduced by increasing the capacity of modeled conveyances, both as 1-D links and burned in channels in the DEM. This provided an assessment to determine areas where flooding is attributed to existing stormwater conveyance capacities, and the ability to evaluate the feasibility of reducing flooding through an increase of conveyance capacities. Two system capacity scenarios were evaluated:

- Alternative 1 consisted of, at minimum, doubling the cross-sectional flow area (Flow Area x 2), rounded up to the next nominal pipe size, through a modeled 1-D culvert or burned in channel pipe
- Alternative 2 consisted of increasing the flow area through a modeled 1-D culvert or burned in channel pipe to an extreme of 16 ft (Unrestricted Flow), in most cases, to determine if it is possible to reduce flooding in the area with any increase in system capacity.

Based on the ability to reduce flooding through system capacity increases, locations were placed in one of the following three categories:

- Green System capacity improvements are likely to reduce flooding,
- Orange System capacity improvements may reduce flooding, and
- Red System capacity improvements are unlikely to reduce flooding.

Locations placed within the Green category "system capacity improvements are likely to reduce flooding" represent simple improvements that are likely to impact large areas or greatly reduce inundation.

Locations placed within the Orange category "system capacity improvements may reduce flooding" represent areas where a reduction of flooding appears to be possible, but at a significant cost or with minimal impacts. In these cases, the cost/benefit ratio would likely be too high to justify the possible improvement. Other mitigation measures beyond an increase in system capacity may be required in Orange areas to reduce flooding and/or flooding impacts.

Locations placed within the Red category "system capacity improvements are unlikely to reduce flooding" represent areas where a reduction of flooding was not achieved even in the "Unrestricted Flow" alternative. Due to the flat terrain and coastal nature of St Helena Island, not every place will be able to adequately convey runoff regardless of the size of the conveyances in that area. Other mitigation measures beyond an increase in system capacity may be required in Red areas to reduce flooding and/or flooding impacts.

A matrix summarizing the problem area locations, the flooding impacts, and the upgrade potential is provided in Table 7 below. Zones are color-coded by improvement category in Figure 30 below, with N/A indicating no improvements were identified in these zones.

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Table 7. Summary of Problem Areas and Capacity Upgrade Potential

| Summary of Problem Areas and System Capacity Upgrade Potential |                    |          |               |                   |                   |  |  |  |
|--|--------------------|----------|---------------|-------------------|-------------------|--|--|--|
| Modeled Conveyance Size (in)                                   |                    |          |               |                   |                   |  |  |  |
| Zone   | Location           | Existing | , , , ,       |                   |                   |  |  |  |
|  |                    | Actual   | Flow Area x 2 | Unrestricted Flow | Upgrade Potential |  |  |  |
|  | Lands End Rd       | 30       | 48            | 192               | Red               |  |  |  |
| 1  | Bay Point Rd       | 15       | 30            | 192               | Red               |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
| 2  | Langford Rd        | 24       | 36            | 192               | Red               |  |  |  |
|  | Sea Island Pkwy    | 42, 48   | 54, 72        | 2 x 192           | Orange            |  |  |  |
|  | Shed Rd            | 2 x 48   | 2 x 72        | 360               | Red               |  |  |  |
|  |                    | 15       | 30            | 192               | Red               |  |  |  |
|  | William Jenkins Rd | 15       | 30            | 192               | Orange            |  |  |  |
|  |                    | 15       | 24            | 192               | Orange            |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
|  | 6 11 15            | 18       | 30            | 192               | Orange            |  |  |  |
| 3  | Sea Island Pkwy    | 18       | 30            | 192               | Red               |  |  |  |
|  | The Avenue         | 24       | 36            | 192               | Red               |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
|  | Cusabo Rd          | 15       | 30            | 192               | Red               |  |  |  |
| 4  |                    | 24       | 36            | 192               | Orange            |  |  |  |
|  |                    | 24       | 36            | 192               | Orange            |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
| 5  | Harold Rivers Rd   | 18       | 30            | 192               | Red               |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
| 6  | Ernest Dr          | N/A      | N/A           | N/A               | N/A               |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
|  | Bible Camp Rd      | 30       | 48            | 192               | Red               |  |  |  |
| 7  | Hickory Hill Rd    | 30       | 48            | 192               | Orange            |  |  |  |
|  |                    | 30       | 48            | 192               | Orange            |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
| 8  | Prayer House Rd    | N/A      | N/A           | N/A               | N/A               |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |
|  | Rosie Singleton Dr | 15       | 24            | 192               | Red               |  |  |  |
| 9  | Olde Church Rd     | 15       | 24            | 192               | Red               |  |  |  |
|  |                    | 15       | 24            | 192               | Red               |  |  |  |
|  |                    | 2 x 36   | 2 x 54        | 384               | Red               |  |  |  |
|  |                    |          |               | 4.0.0             |                   |  |  |  |
| 10   | Rose Petal Dr      | 18       | 30            | 192               | Red               |  |  |  |
|  | Janette Dr         | 24       | 36            | 192               | Orange            |  |  |  |
|  | Inglewood Cir      | 18       | 30            | 192               | Red               |  |  |  |
|  |                    |          |               |                   |                   |  |  |  |

| Summary of Problem Areas and System Capacity Upgrade Potential |                       |          |                       |                   |        |  |  |  |
|--|-----------------------|----------|-----------------------|-------------------|--------|--|--|--|
|  |                       | Mod      |                       |                   |        |  |  |  |
| Zone   | Location              | Existing | Existing Alternatives |                   |        |  |  |  |
|  |                       | Actual   | Flow Area x 2         | Unrestricted Flow | v      |  |  |  |
| 11   | Sea Pines Dr          | 15       | 30                    | 192               | Red    |  |  |  |
|  | Janette Dr            | 15       | 24                    | 192               | Red    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 12   | Golden Dock Rd        | 18       | 18 30 192             |                   | Red    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 13   | Bridgewood Rd         | 36       | 54                    | 192               | Red    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 14   | Old Distant Island Rd | 18       | 30                    | 192               | Red    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 15   | Dockside Ln           | N/A      | N/A                   | N/A               | N/A    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 16   | Tropicana Rd          | 24       | 36                    | 192               | Red    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 17   | David Green Rd        | N/A      | N/A                   | N/A               | N/A    |  |  |  |
|  |                       |          |                       |                   |        |  |  |  |
| 18   | Tombee Rd             | 54       | 72                    | 192               | Red    |  |  |  |
|  |                       |          |                       |                   | _      |  |  |  |
|  | Mattis Dr             | 18       | 30                    | 192               | Orange |  |  |  |
| 19   |                       | 18       | 30                    | 192               | Orange |  |  |  |
|  |                       | 15       | 24                    | 192               | Orange |  |  |  |
| 2.0  |                       | 15       | 2.4                   | 1.0               | 5 1    |  |  |  |
| 20   | Fredericka Taylor Ln  | 15       | 24                    | 16                | Red    |  |  |  |
|  |                       | 45       | 24                    | 402               | D - d  |  |  |  |
| 21   | Jenkins Port Rd       | 15<br>15 | 24<br>24              | 192               | Red    |  |  |  |
|  |                       | 15       | 24                    | 192               | Red    |  |  |  |
| 22   | Chado Troo La         | N/A      | N/A                   | N/A               | N/A    |  |  |  |
| 22   | Shade Tree Ln         | IN/A     | IN/A                  | IN/A              | IN/A   |  |  |  |
|  | Warsaw Island Rd      | 24       | 36                    | 192               | Red    |  |  |  |
| 23   | Gardner Rd            | 24       | 36                    | 192               | Red    |  |  |  |
|  | Garuilei Ku           | ۷4       | 30                    | 132               | Reu    |  |  |  |
|  |                       | 1.5      | 2.5                   | 192               | Red    |  |  |  |
| 24   | McTeer Dr             | 1.5      | 2.5                   | 192               | Red    |  |  |  |
|  |                       | 1.J      | 2.3                   | 132               | Reu    |  |  |  |

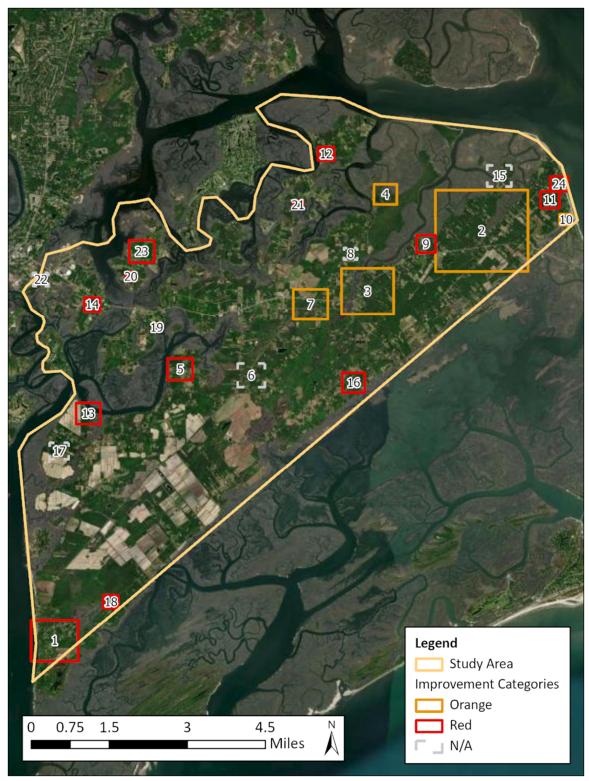


Figure 30. St Helena Island Study Area Capacity Improvement Categories

### 5.1 Anticipated Impacts

As seen in Table 7 above, there is minimal potential to improve inundation throughout the St Helena Island study area with upgrades to the current stormwater infrastructure. Much of this is dictated by the lack of elevation changes where inundation occurs, as well as the proximity to tidally impacted waterbodies. System capacity alternatives are not anticipated to be a viable or cost-effective option for improving flooding conditions on St Helena Island.

The maps in the sections below display the 25-year storm scenario inundation floodplains for either the existing conditions or the future development conditions with 2.5 ft of SLR, along with the potential floodplains if the alternative scenarios were to be implemented. This allows for a direct visual comparison of the reduction of inundation that would occur were the potential system capacity upgrades to be implemented. Maps are only shown if system capacity modifications were implemented in an attempt to relieve flooding in a given zone. Table 8 below summarizes the effects of the alternatives on inundation for each zone compared to the 25-year existing conditions and 25-year future development conditions with 2.5 ft SLR scenarios.

Table 8. County-Owned Roads Alternatives Inundation Summary by Zone

|      | rubic o. county       | Length of Roadway Inundated at least 6 in (ft) |          |              |                     |          |              |
|------|-----------------------|--|----------|--------------|---------------------|----------|--------------|
| Zone | Street Name           | Existing Conditions                            |          |              | Future Conditions   |          |              |
|      |                       | 25-year, 0 ft SLR                              |          |              | 25-year, 2.5 ft SLR |          |              |
|      |                       | Current  | Flow     | Unrestricted | Current             | Flow     | Unrestricted |
|      |                       | Current  | Area x 2 | Flow         |                     | Area x 2 | Flow         |
| 1    | Estrolita St          | 84   | 84       | 84           | 68                  | 68       | 68           |
|      | Fort Fremont Rd       | 317  | 317      | 317          | 746                 | 746      | 746          |
|      | Gingerwood Rd         | 250  | 250      | 250          | 454                 | 454      | 454          |
|      | McCoy Rd              | 6  | 6        | 6            | 53                  | 53       | 53           |
|      | Mixon Rd              | 38   | 38       | 38           | 400                 | 400      | 400          |
|      | Shamrock Rd           | 106  | 106      | 106          | 146                 | 146      | 146          |
|      | Triangle Rd           | 34   | 34       | 34           | 102                 | 102      | 102          |
| 2    | Langford Rd           | 685  | 685      | 685          | 728                 | 728      | 728          |
|      | Shed Rd               | 192  | 192      | 192          | 1131                | 1131     | 1138         |
|      | Wards Landing Rd      | 303  | 307      | 307          | 380                 | 394      | 394          |
|      | William Jenkins Rd    | 156  | 156      | 156          | 246                 | 216      | 182          |
| 3    | John Fripp Cir        | 120  | 120      | 120          | 128                 | 128      | 128          |
|      | The Avenue            | 489  | 489      | 487          | 634                 | 634      | 634          |
| 4    | Cusabo Rd             | 103  | 97       | 82           | 463                 | 406      | 388          |
| -    | Harold Rivers Rd      | 214  | 210      | 214          | 230                 | 218      | 230          |
| 5    | Hunters Grove Rd      | 174  | 174      | 174          | 307                 | 307      | 307          |
| 7    | Bible Camp Rd         | 83   | 77       | 65           | 171                 | 162      | 161          |
| 9    | Rosie Singleton Dr    | 178  | 178      | 172          | 264                 | 266      | 264          |
| 10   | Rose Petal Dr         | 249  | 245      | 235          | 353                 | 351      | 339          |
| 11   | Sea Pines Dr          | 55   | 55       | 33           | 116                 | 116      | 106          |
| 12   | Golden Dock Rd        | 71   | 41       | 41           | 121                 | 72       | 70           |
| 13   | Bridgewood Rd         | 108  | 111      | 109          | 194                 | 196      | 199          |
| 14   | Old Distant Island Rd | 90   | 89       | 70           | 102                 | 97       | 86           |
| 16   | Tropicana Rd          | 85   | 82       | 79           | 322                 | 320      | 309          |
| 18   | Tombee Rd             | 49   | 48       | 48           | 127                 | 126      | 120          |
| 19   | Mattis Dr             | 34   | 22       | 0            | 46                  | 32       | 2            |
| 20   | Fredericka Taylor Ln  | 0  | 0        | 0            | 92                  | 92       | 92           |
| 21   | Jenkins Port Rd       | 0  | 0        | 0            | 107                 | 101      | 68           |
| 23   | Warsaw Island Rd      | 0  | 0        | 0            | 81                  | 53       | 53           |
| 24   | McTeer Dr             | 530  | 530      | 523          | 864                 | 864      | 866          |

## 5.1.1 Zone 1

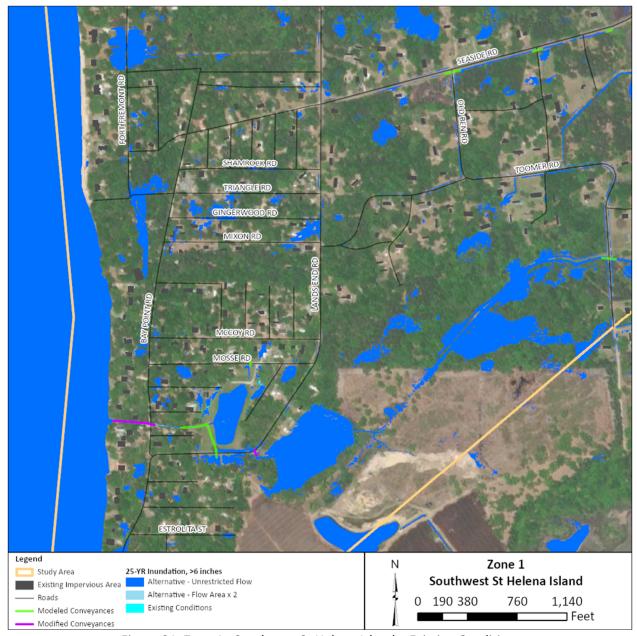


Figure 31. Zone 1 - Southwest St Helena Island – Existing Conditions

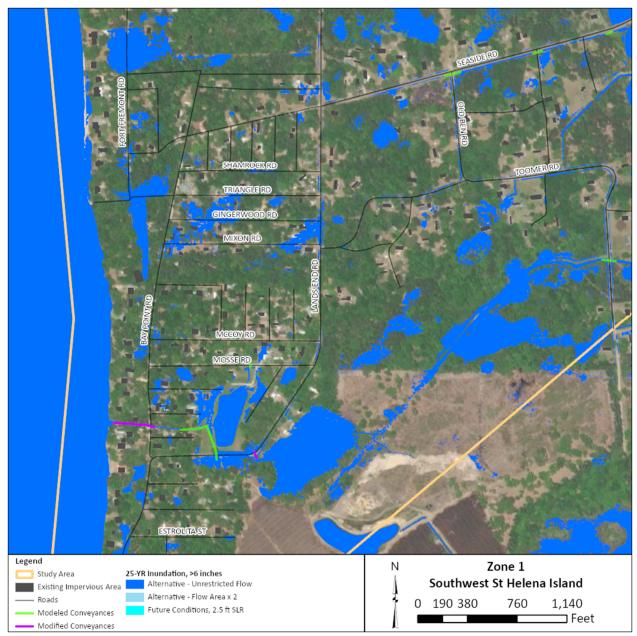


Figure 32. Zone 1 - Southwest St Helena Island - Future Conditions, 2.5 ft SLR

Conveyances at Lands End Rd (currently a 30-inch system) and at Bay Point Road (currently a 15-inch system) were evaluated in these alternatives. Due to the topography of Zone 1, there were few opportunities to attempt to increase system capacity. The floodplains show that the modifications attempted in both alternatives made no impact on decreasing inundation or floodwaters in this area in either scenario presented (Table 8, Figure 31, Figure 32).

## 5.1.2 Zone 2

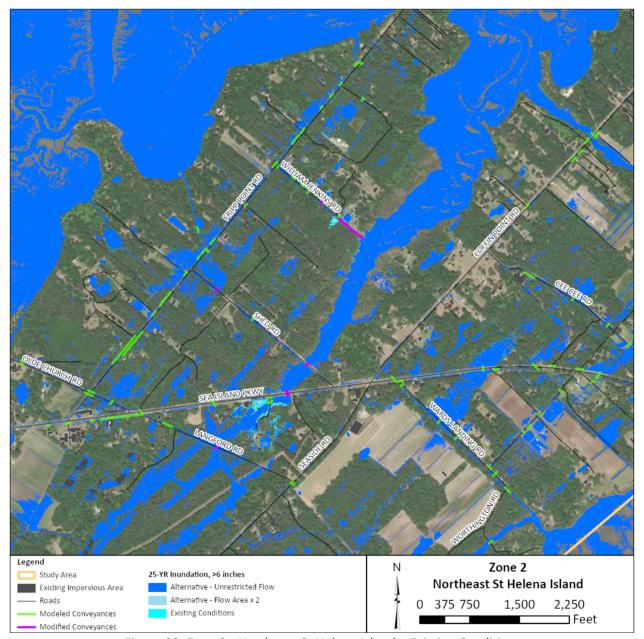


Figure 33. Zone 2 - Northeast St Helena Island – Existing Conditions



Figure 34. Zone 2 - Northeast St Helena Island - Future Conditions, 2.5 ft SLR

Zone 2 had six modifications made in an attempt to relieve flooding by increasing system capacity: Langford Rd, Sea Island Parkway, Shed Rd (2 systems), and William Jenkins Rd (2 systems) (Table 7). While doubling the flow area through the double-barrel culvert on Sea Island Pkwy does provide some relief to the area bounded by Sea Island Pkwy, Langford Rd, and Seaside Rd, it does not appear significant enough to justify the cost of performing these upgrades as it would require more than doubling the flow area of the existing infrastructure to achieve these results (Figure 33, Figure 34). These upgrades also do not provide any relief of inundation along the roadways in Zone 2 (Table 8).

### 5.1.3 Zone 3

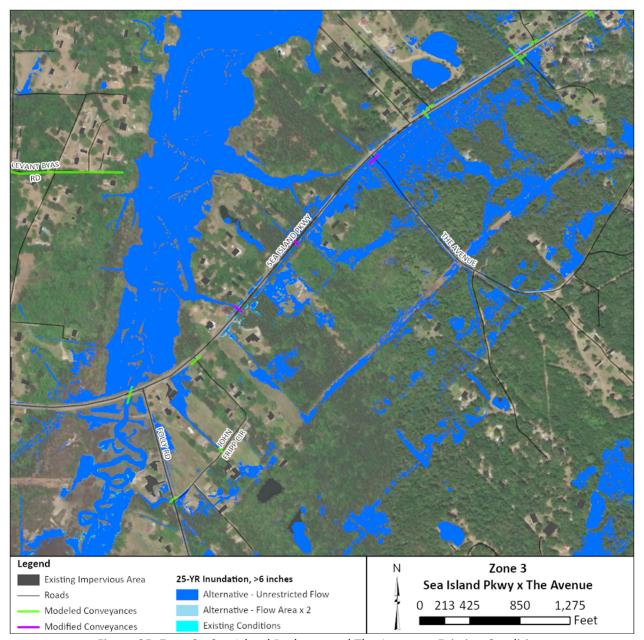


Figure 35. Zone 3 - Sea Island Parkway and The Avenue – Existing Conditions

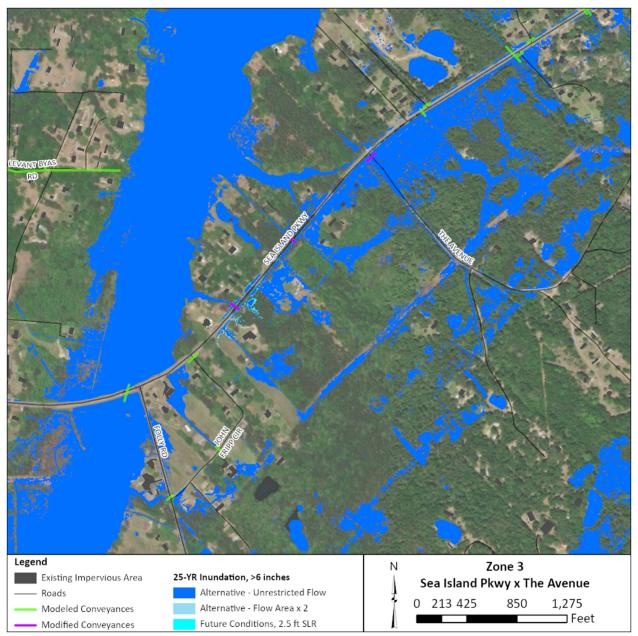


Figure 36. Zone 3 - Sea Island Parkway and The Avenue – Future Conditions, 2.5 ft SLR

Three modifications were made in Zone 3 in an attempt to reduce flooding in this area through an increase in system capacity: Sea Island Parkway (2 systems) and The Avenue (Table 7). These alternatives showed little benefit in decreasing inundation in areas adjacent to Sea Island Pkwy, and no benefit at The Avenue (Figure 35, Figure 36). No benefits to inundated roadways were observed (Table 8).

## 5.1.4 Zone 4

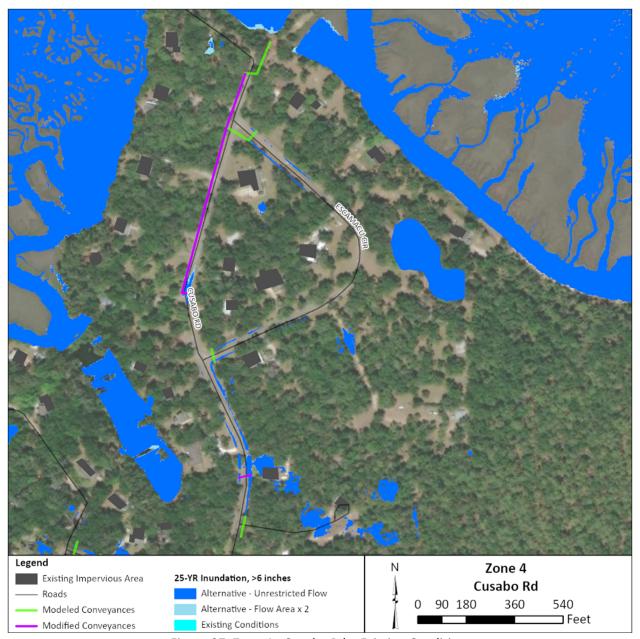


Figure 37. Zone 4 - Cusabo Rd – Existing Conditions

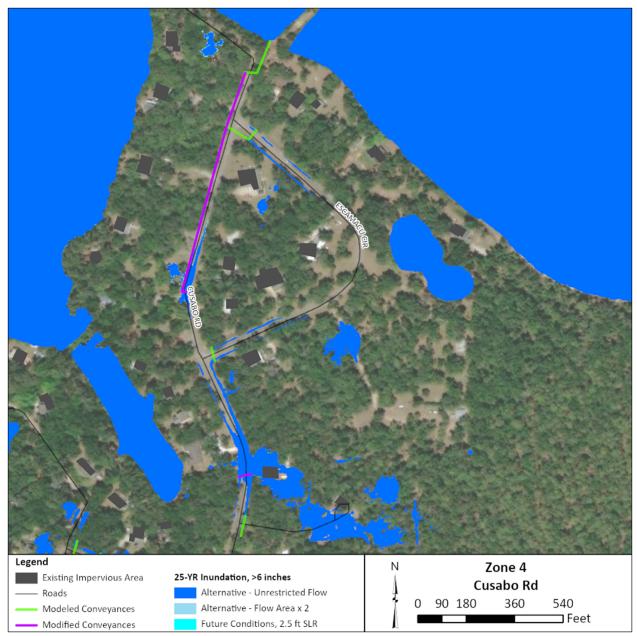


Figure 38. Zone 4 - Cusabo Rd - Future Conditions, 2.5 ft SLR

Three modifications were made along Cusabo Rd in Zone 4 in attempt to decrease flooding in this area by increasing system capacity (Table 7). These modifications were observed to provide minor benefits in reducing inundation along Cusabo Rd (Table 8, Figure 37, Figure 38). Although some benefit is seen, it is likely too insignificant to justify the cost of the project to implement these improvements, as it would require more than double the current flow area provided by the existing infrastructure.

## 5.1.5 Zone 5

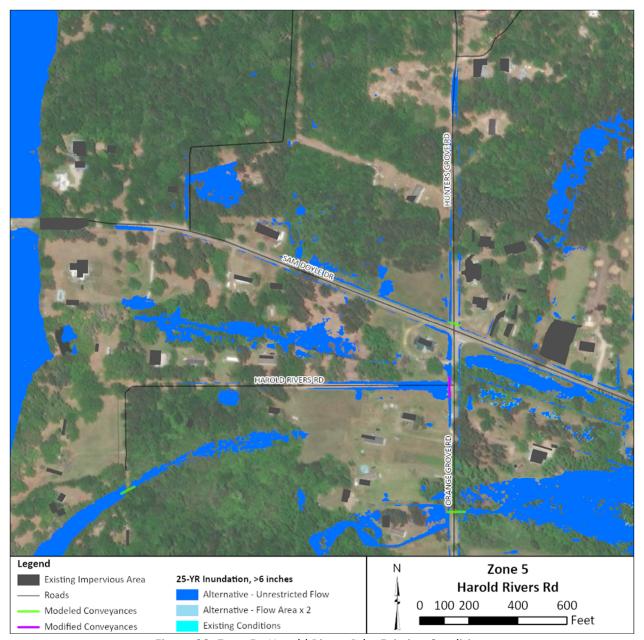


Figure 39. Zone 5 - Harold Rivers Rd – Existing Conditions

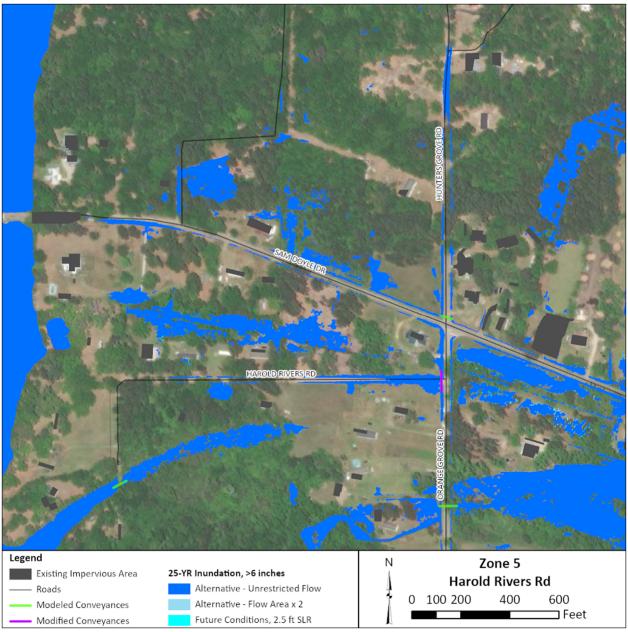


Figure 40. Zone 5 - Harold Rivers Rd – Future Conditions, 2.5 ft SLR

One modification was made along Harold Rivers Rd in Zone 5 in an attempt to relieve inundation along Harold Rivers Rd (Table 7). This modification did not provide any observable benefits in flood reduction (Table 8, Figure 39, Figure 40).

## 5.1.6 Zone 7

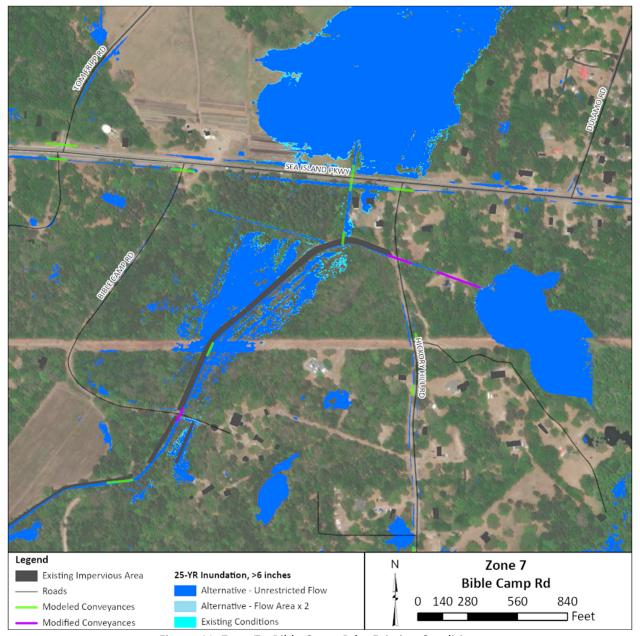


Figure 41. Zone 7 - Bible Camp Rd – Existing Conditions

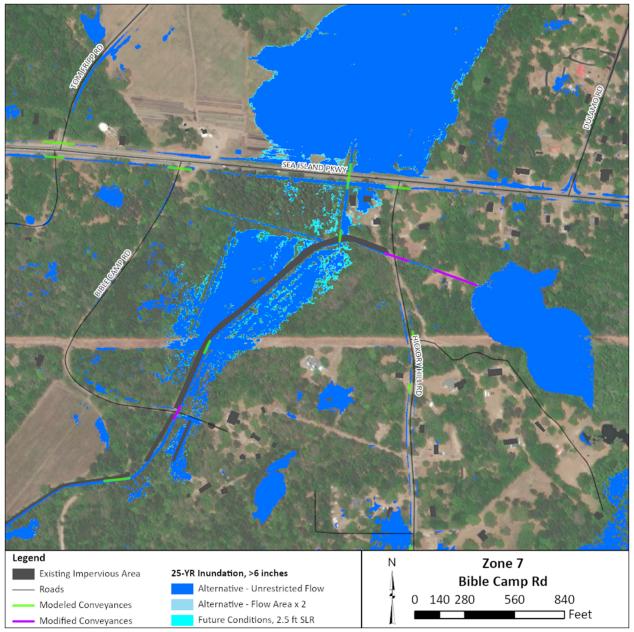


Figure 42. Zone 7 - Bible Camp Rd - Future Conditions, 2.5 ft SLR

Three modifications were made in Zone 7 in an attempt to relieve flooding in the area of Bible Camp Road: one crossing at Bible Camp Rd and two crossings along Hickory Hill Rd (Table 7). Although minor benefits were observed in the area between Bible Camp Rd and Hickory Hill Rd (Table 8, Figure 41, Figure 42), the cost to implement the pipe size increases necessary to provide this limited flooding reduction is likely unjustifiable given the limited, observed impact of these upgrades. Additionally, the areas flooding are uninhabited and the roadway flooding is minimal.

## 5.1.7 Zone 9

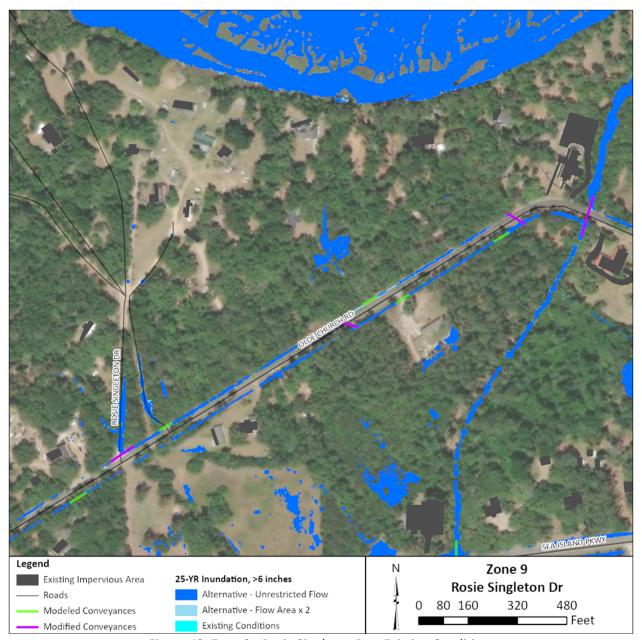


Figure 43. Zone 9 - Rosie Singleton Dr – Existing Conditions

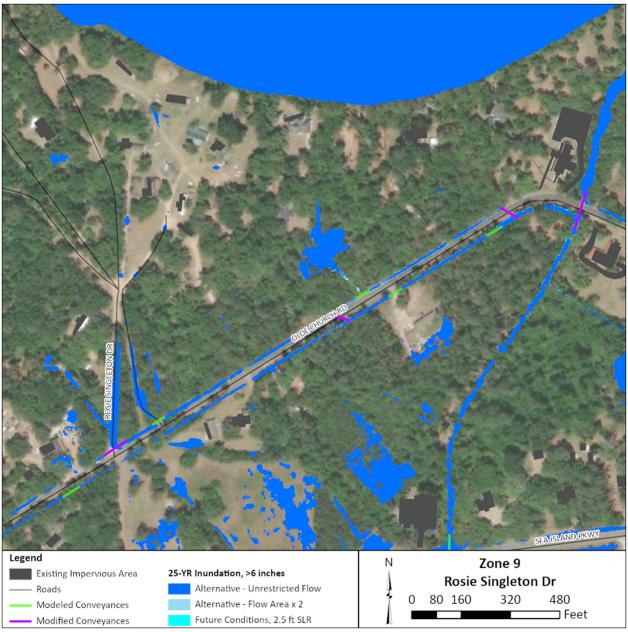


Figure 44. Zone 9 - Rosie Singleton Dr – Future Conditions, 2.5 ft SLR

Four modifications were made in Zone 9 in an attempt to reduce flooding in the area of Rosie Singleton Dr: one crossing on Rosie Singleton Dr and three crossings along Olde Church Rd (Table 7). These modifications provided no observable benefits in flood reduction (Table 8, Figure 43, Figure 44).

## 5.1.8 Zone 10

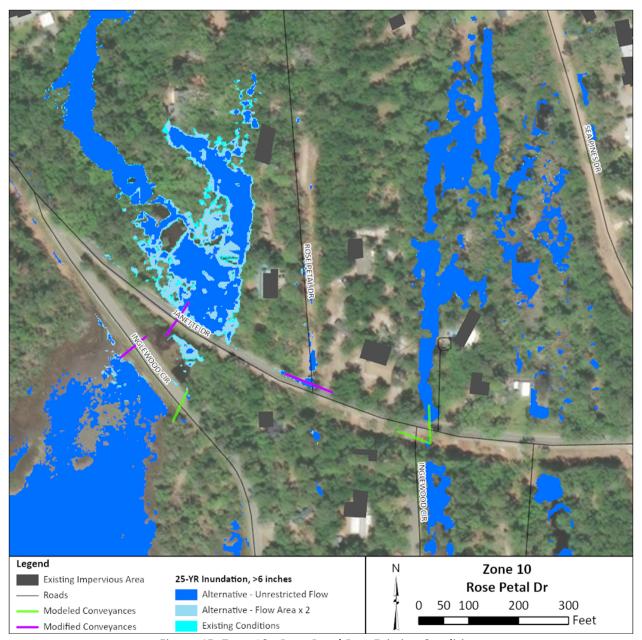


Figure 45. Zone 10 - Rose Petal Dr – Existing Conditions

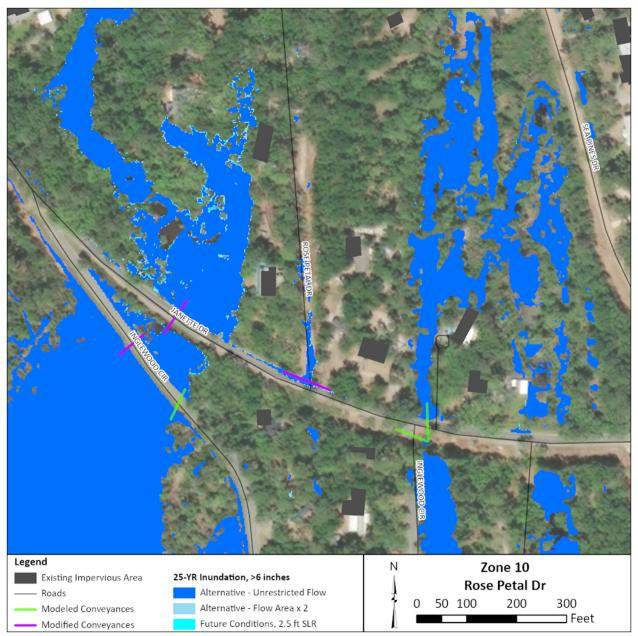


Figure 46. Zone 10 - Rose Petal Dr – Future Conditions, 2.5 ft SLR

Three modifications were made in Zone 10 in an attempt to relieve flooding in Zone 10: one culvert on Rose Petal Dr, one culvert on Janette Dr, and one culvert at Inglewood Circle (Table 7). Minimal benefits in flood reduction were observed on the west side of Rose Petal Dr, however, these would require more than doubling the flow area through these existing pipes to realize this benefit (Table 8, Figure 45, Figure 46). Therefore, the cost is likely unjustifiable given the minimal reduction observed.

## 5.1.9 Zone 11

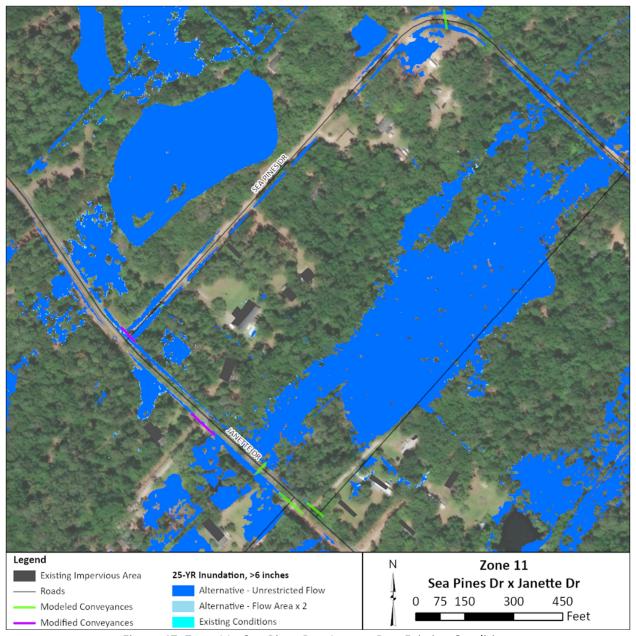


Figure 47. Zone 11 - Sea Pines Dr x Janette Dr – Existing Conditions

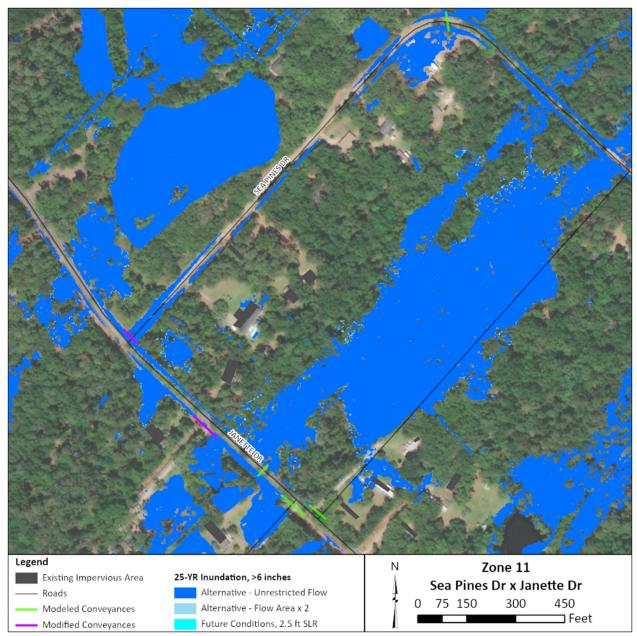


Figure 48. Zone 11 - Sea Pines Dr x Janette Dr – Future Conditions, 2.5 ft SLR

Two modifications were made in Zone 11 to reduce flooding in the area of the intersection between Sea Pines Dr and Janette Dr (Table 7). Little to no benefits in terms of flood reduction were observed when these alternatives were implemented in the model (Table 8, Figure 47, Figure 48).

## 5.1.10 Zone 12

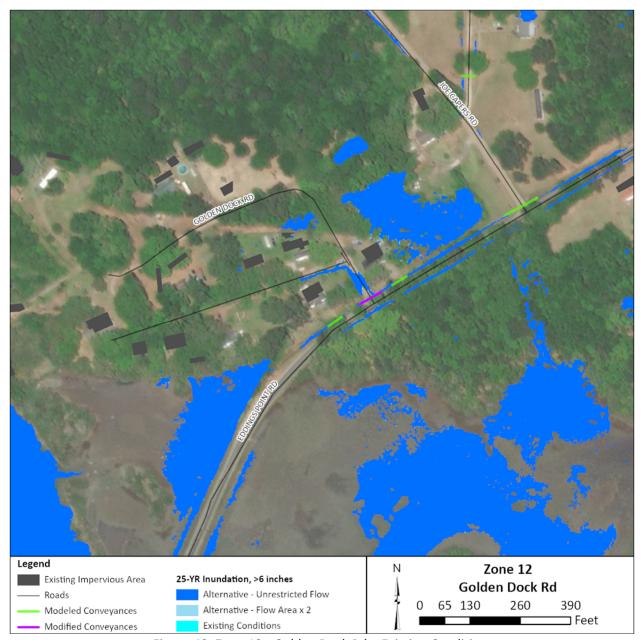


Figure 49. Zone 12 - Golden Dock Rd – Existing Conditions

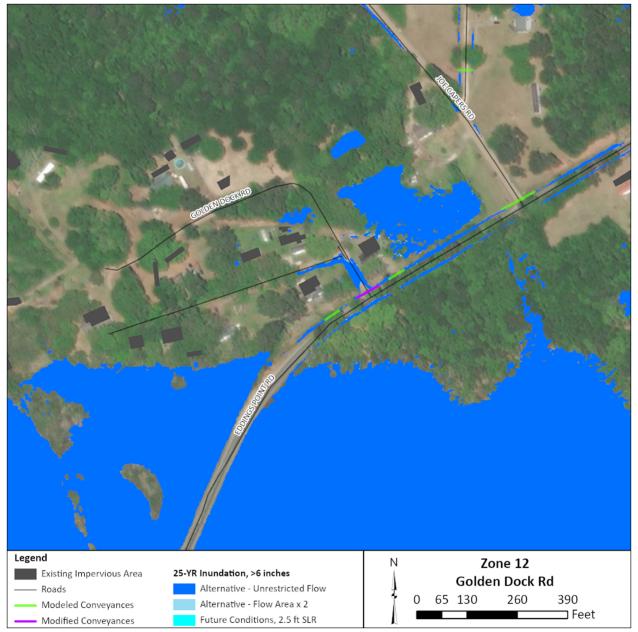


Figure 50. Zone 12 - Golden Dock Rd - Future Conditions, 2.5 ft SLR

One modification was made in Zone 12 to relieve flooding in the area of Golden Dock Rd (Table 7). Although it appears there was a slight decrease in inundated roadway length (Table 8), there were no observed benefits in the reduction of floodplains (Figure 49, Figure 50). Therefore, the cost and effort of implementing upgrades to this existing infrastructure is likely unjustifiable given the minimal nature of the benefits.

## 5.1.11 Zone 13

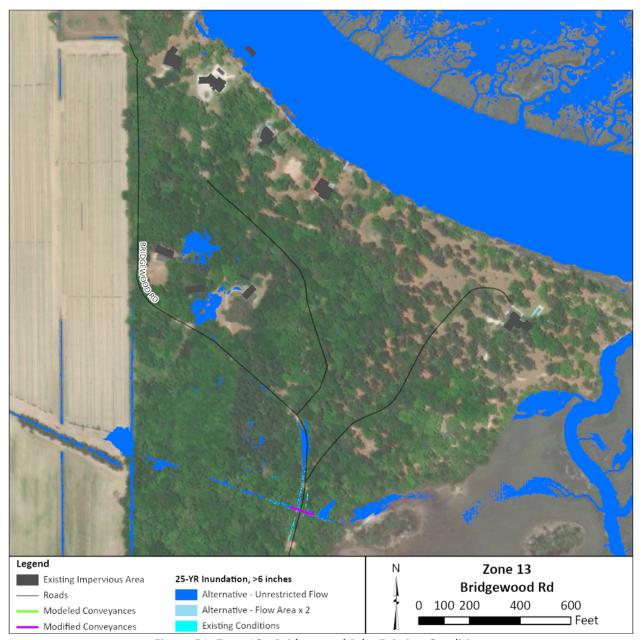


Figure 51. Zone 13 - Bridgewood Rd – Existing Conditions

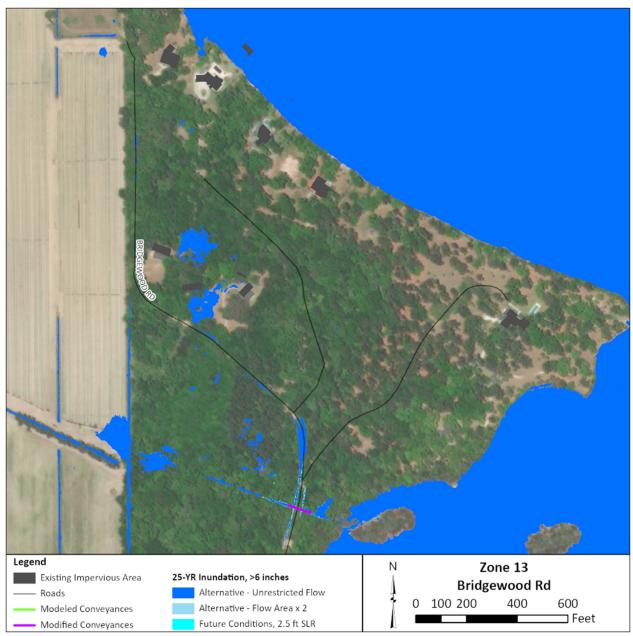


Figure 52. Zone 13 - Bridgewood Rd – Future Conditions, 2.5 ft SLR

One modification was made in Zone 13 in an attempt to relieve inundation along Bridgewood Rd (Table 7). This modification did not provide observable benefits in flood reduction (Table 8, Figure 51, Figure 52).

#### 5.1.12 Zone 14

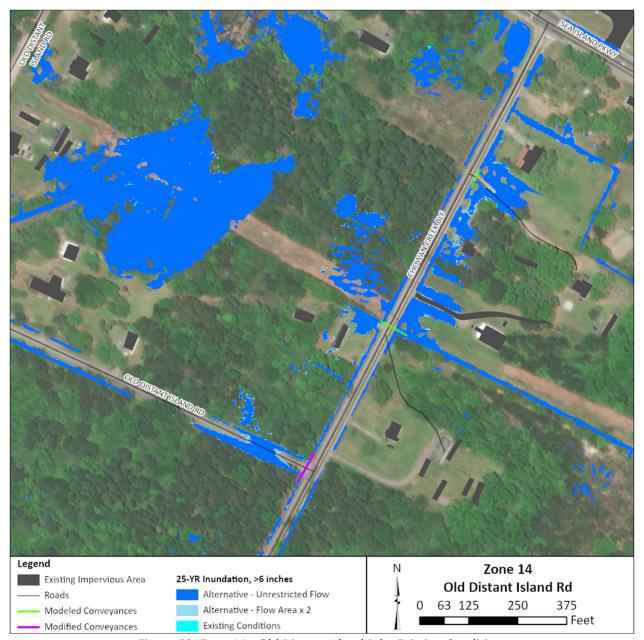


Figure 53. Zone 14 - Old Distant Island Rd – Existing Conditions

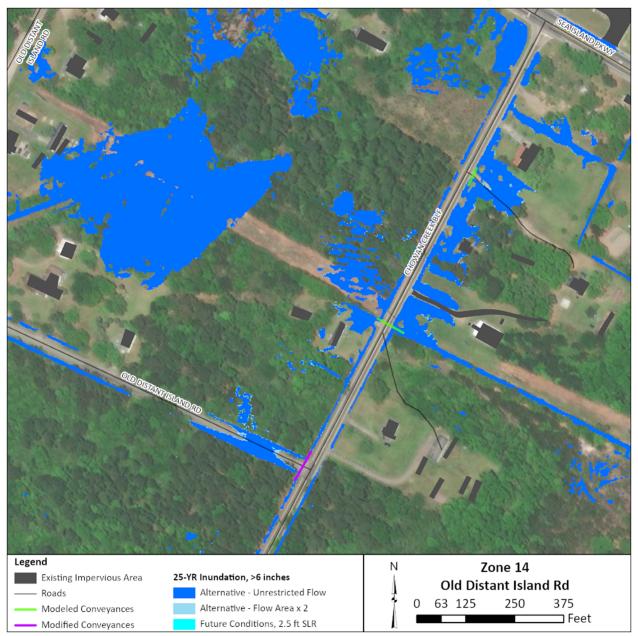


Figure 54. Zone 14 - Old Distant Island Rd - Future Conditions, 2.5 ft SLR

One modification was made in Zone 14 in an attempt to relieve inundation along Old Distant Island Rd (Table 7). This modification provided limited observable benefits in flood reduction and reduced inundation along the roadway (Table 8, Figure 53, Figure 54). These benefits were only observed when the flow area through the existing infrastructure was more than doubled. Therefore, it is unlikely that the minimal benefits observed are greater than the cost and effort to implement this upgrade.

#### 5.1.13 Zone 16

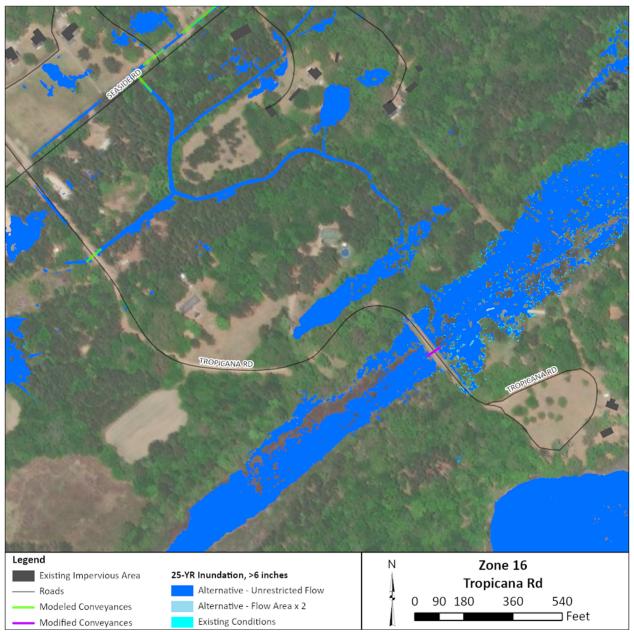


Figure 55. Zone 16 - Tropicana Rd – Existing Conditions

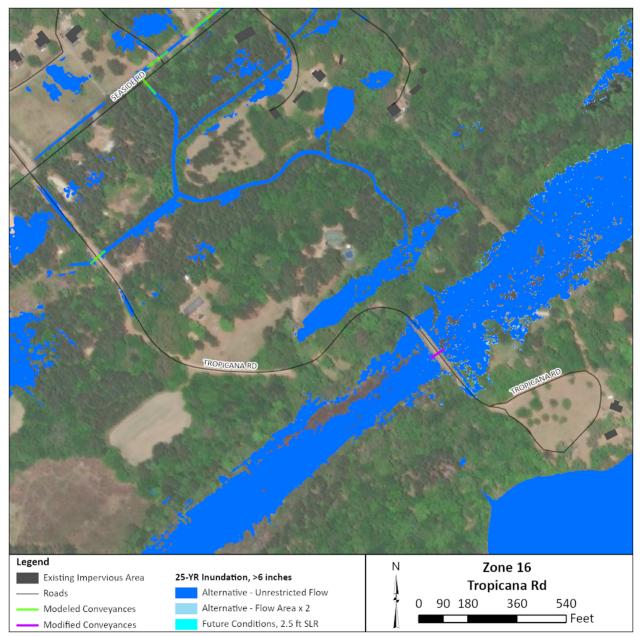


Figure 56. Zone 16 - Tropicana Rd - Future Conditions, 2.5 ft SLR

One modification was made in Zone 16 to relieve flooding in the area of Tropicana Rd (Table 7). Although it appears there was a slight decrease in inundated roadway length (Table 8), there were no observed benefits in the reduction of floodplains (Figure 55, Figure 56). Therefore, the cost and effort of implementing upgrades to this existing infrastructure is likely unjustifiable given the minimal nature of the benefits.

## 5.1.14 Zone 18

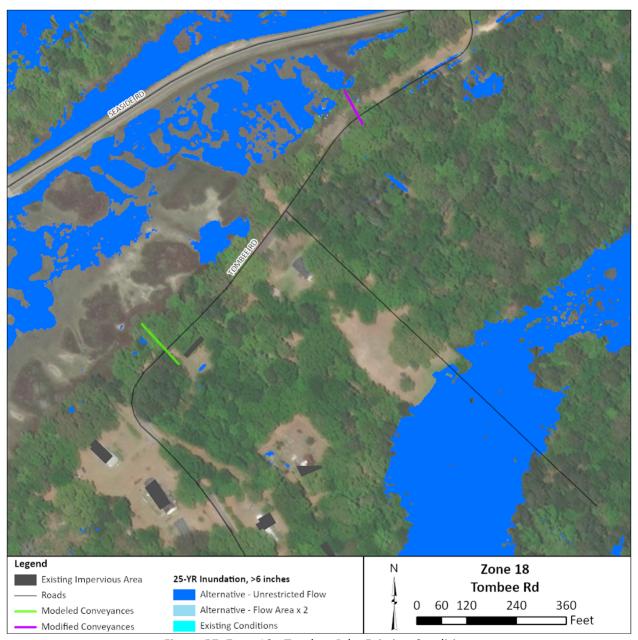


Figure 57. Zone 18 - Tombee Rd – Existing Conditions

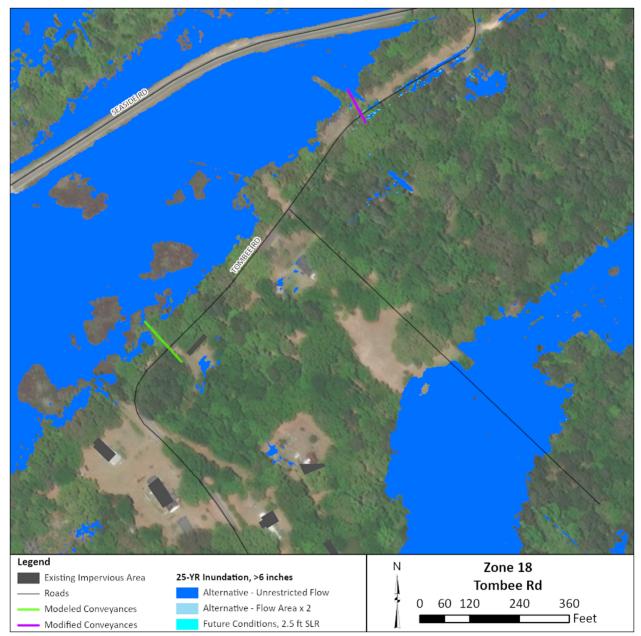


Figure 58. Zone 18 - Tombee Rd – Future Conditions, 2.5 ft SLR

One modification was made in Zone 18 to relieve flooding in the area of Tombee Rd near Seaside Rd (Table 7). Although it appears there was a slight decrease in inundated roadway length (Table 8), there were no observed benefits in the reduction of floodplains (Figure 57, Figure 58). Therefore, the cost and effort of implementing upgrades to this existing infrastructure is likely unjustifiable given the minimal nature of the benefits.

## 5.1.15 Zone 19

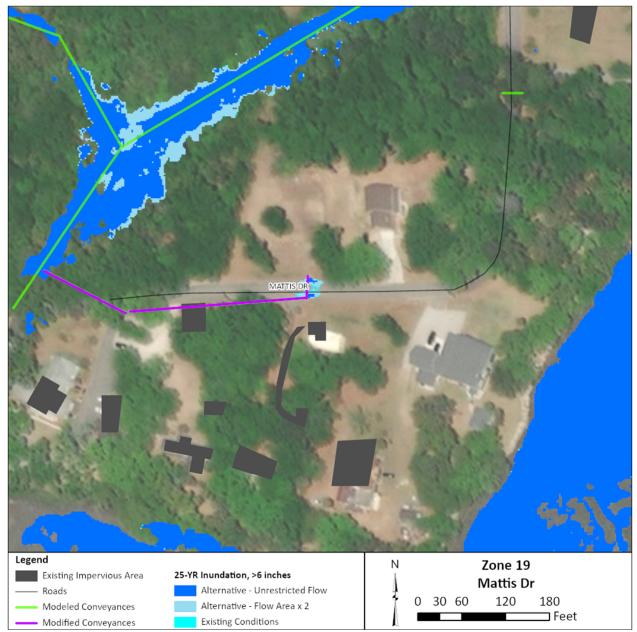


Figure 59. Zone 19 - Mattis Dr – Existing Conditions

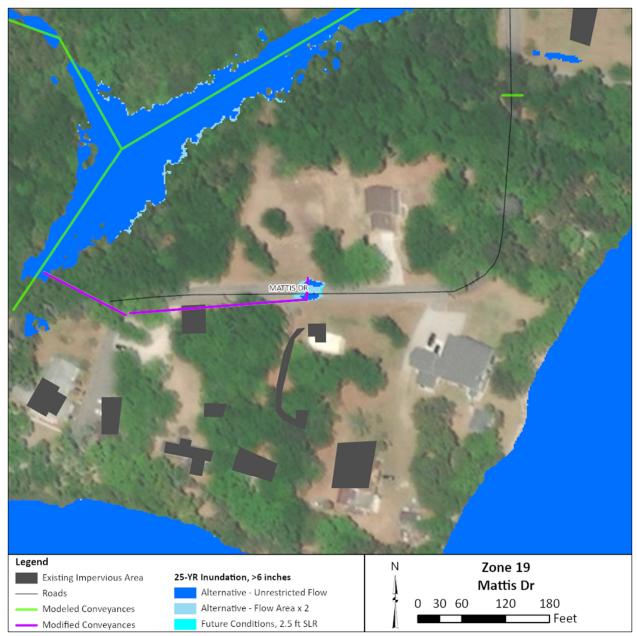


Figure 60. Zone 19 - Mattis Dr – Future Conditions, 2.5 ft SLR

Three modifications were made in Zone 19 in an attempt to relieve inundation along Mattis Dr (Table 7). These modifications provided limited observable benefits in flood reduction and reduced inundation along the roadway (Table 8, Figure 59, Figure 60). Significant benefits were only observed when the flow area through the existing infrastructure was more than doubled. Therefore, it is unlikely that the minimal benefits observed are greater than the cost and effort to implement this upgrade.

## 5.1.16 Zone 20

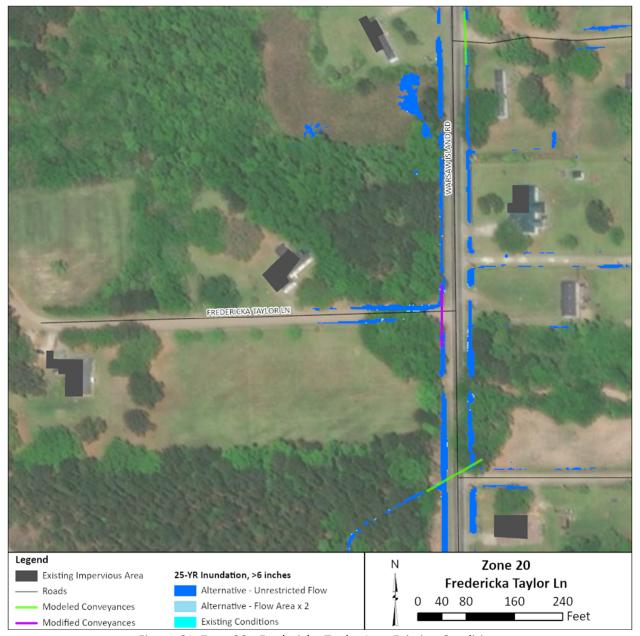


Figure 61. Zone 20 - Fredericka Taylor Ln – Existing Conditions

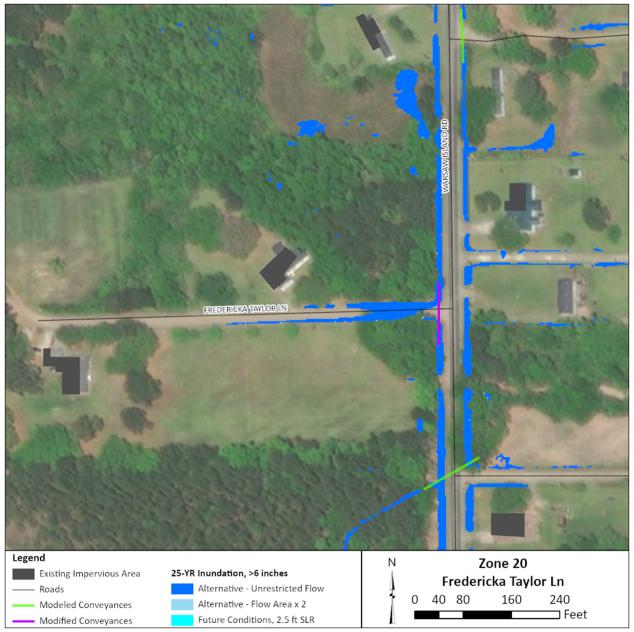


Figure 62. Zone 20 - Fredericka Taylor Ln - Future Conditions, 2.5 ft SLR

One modification was made in Zone 20 in an attempt to relieve inundation along Fredericka Taylor Ln (Table 7). This modification did not provide any observable benefits in flood reduction (Table 8, Figure 61, Figure 62).

## 5.1.17 Zone 21

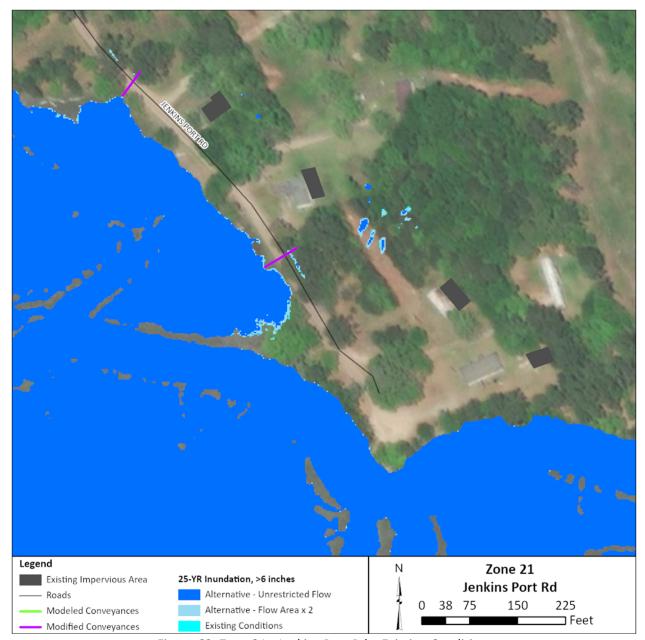


Figure 63. Zone 21 - Jenkins Port Rd – Existing Conditions



Figure 64. Zone 21 - Jenkins Port Rd – Future Conditions, 2.5 ft SLR

Two modifications were made in Zone 21 in an attempt to reduce flooding caused by expected SLR near Jenkins Port Rd (Table 7). These modifications were ineffective in reducing inundation due to future SLR given the proximity to a tidally impacted waterbody (Table 8, Figure 63, Figure 64).

## 5.1.18 Zone 23



Figure 65. Zone 23 – Warsaw Island Rd – Existing Conditions

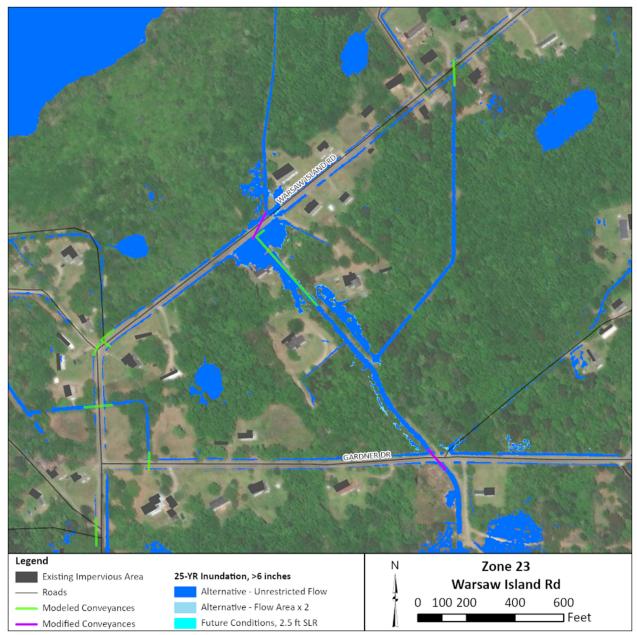


Figure 66. Zone 23 – Warsaw Island Rd – Future Conditions, 2.5 ft SLR

Two modifications were made in Zone 23 in an effort to reduce increased flooding due to future development in Zone 23: one culvert at Warsaw Island Rd and one culvert at Gardner Dr. (Table 7). These modifications had minimal impact on the reduction of flooding in future development conditions (Table 8, Figure 65, Figure 66). This indicates that if future development were to occur in Zone 23, careful attention should be given to the drainage capacity of this area.

## 5.1.19 Zone 24

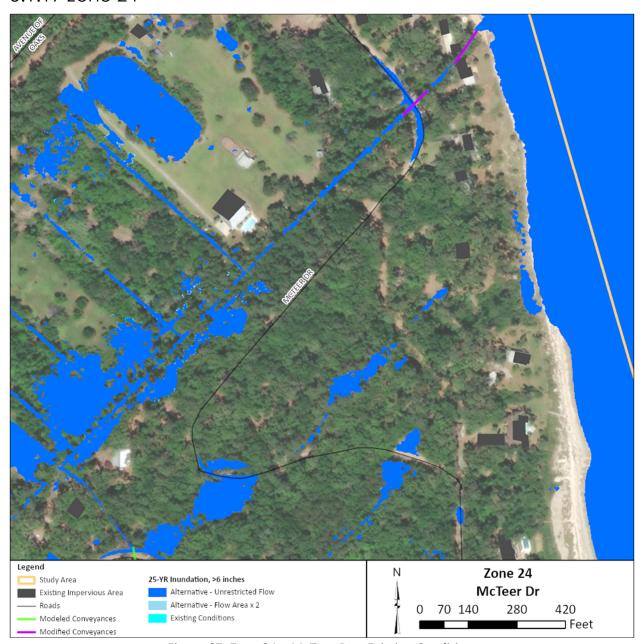


Figure 67. Zone 24 – McTeer Dr – Existing Conditions

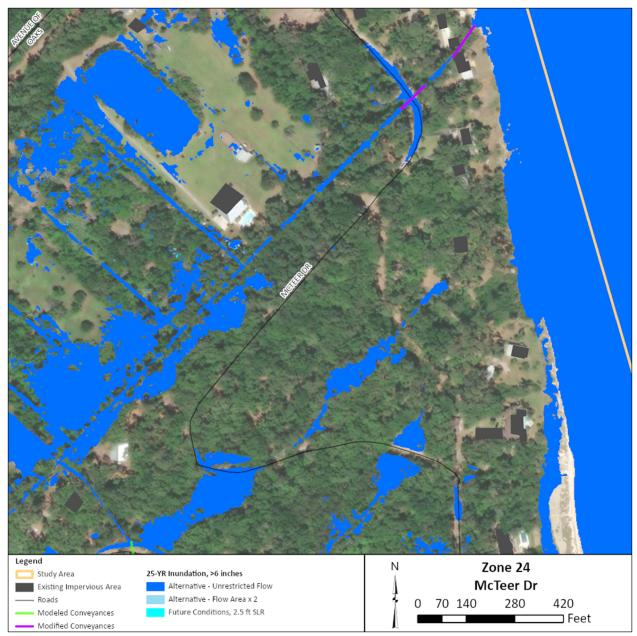


Figure 68. Zone 24 – McTeer Dr – Future Conditions, 2.5 ft SLR

Two modifications were made in Zone 24 in an attempt to relieve inundation along McTeer Dr (Table 7). These modifications did not provide any observable benefits in flood reduction (Table 8, Figure 67, Figure 68).

## 5.2 Structural Improvement Project Prioritization

Although the effects of structural improvement projects were found to be minimal, a few possible projects are identified in Table 9 below.

Table 9. Structural Improvement Project Prioritization

| Priority | Zone | Street Name     | Modification*  | Impact   | Estimated<br>Construction<br>Cost** |
|----------|------|-----------------|--|--|-------------------------------------|
| 1        | 10   | Janette Dr      | Increase 24"<br>culvert to 36"<br>culvert.   | Decrease<br>flooding<br>adjacent to<br>roadway   | \$17,000                            |
| 2        | 19   | Mattis Dr       | Increase 2 x<br>18" culverts to<br>2 x 30"<br>culverts.<br>Increase 15"<br>culvert to 24"<br>culvert | Potential to relieve flooding along the roadway. | \$133,000                           |
| 3        | 12   | Golden Dock Rd  | Increase 18"<br>culvert to 30"<br>culvert  | Slight flood reduction along the roadway.        | \$16,000                            |
| 4        | 7    | Hickory Hill Rd | Increase 2 x<br>30" culverts to<br>48" culverts  | Slight flood reduction along the roadway.        | \$155,000                           |
| 5        | 4    | Cusabo Rd       | Increase 2 x<br>24" culverts to<br>36" culverts  | Slight flood reduction along the roadway.        | \$332,000                           |

<sup>\*</sup> See Table 7 and Section 5.1 for more information.

The alternatives presented in this report are concept level representations of potential system improvements, and the cost estimates do not account for permitting, easement acquisition, and utility coordination. Any improvement considered for implementation by the County should be thoroughly evaluated by the designing engineer prior to project execution.

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<sup>\*\*</sup>Cost estimates are based on current information at the time of this report.

#### 6 Recommendations

Due to the existing topography, changing climate, and rising seas, St Helena must adapt to long-term changes in the environment which requires a layer of strategies and multiple lines of defense rather than a single, fixed set of solutions. The overarching strategies recommended for St Helena include:

- Policies and regulations
- Community improvement efforts
- Public information / education
- Infrastructure improvements

These strategies include both structural and non-structural approaches to address flooding and rising tides both now and in the future.

#### 6.1 Policies and Regulations

The most effective way to protect St Helena from areas of new development, as well as areas being redeveloped, is to have policies and regulations in place to ensure development proceeds in a responsible, resilient way. Equally important to the development of these regulations is the implementation and enforcement through a thorough review of proposed developments, comprehensive inspections, and ensuring the appropriate personnel have the authority to correct issues and issue fines large enough to deter developers.

St Helena currently has policies in place to regulate development. As discussed previously, the St Helena Cultural Overlay District was established in April 1999 to guide development in a way that protects traditional and historical land use patterns and retains the rural way of life for the residents. The overlay district prevents the construction of gated communities, resorts, golf courses, or any other developments that restrict access to the local waterways and other culturally significant locations. Additionally, St Helena was specifically discussed in the Beaufort County 2040 Comprehensive Plan as an area of cultural importance that may need further limitations on growth and development beyond the existing Cultural Overlay District restrictions.

The County should review their applicable ordinances, regulations, and other documents to ensure they agree with each other and meet the goals of the County and protect the community today and under the future conditions. Areas of particular concern under future conditions should be considered as undevelopable areas or areas with more stringent development requirements. Development should be encouraged in areas of higher ground that will be more protected from sea level rise and more frequent severe storm events. The current County policies should also be compared to similar coastal communities. The County may consider taking actions such as preventing any additional development below a certain elevation to avoid future issues.

#### 6.2 Community Improvement Efforts

In addition to addressing problem areas, it is important to focus on community improvement efforts. Community improvement efforts are focused on building and maintaining a resilient community, with communication, coordination, and organization to ensure that residents have the tools and resources needed for resiliency.

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There are efforts the County can take to improve the livelihood of their residents. The FEMA Community Rating System (CRS) is a voluntary incentive program that rewards communities for exceeding the minimum requirements of the National Floodplain Insurance Program (NFIP). Beaufort County is currently a Class 5 community, yielding a 25% decrease in flood insurance premiums for those homes within a SFHA and a 10% discount for those outside the SFHA. With classes 1-10, with 1 yielding the highest reductions in premium costs, the County should evaluate the potential to improve their CRS program class rating. Activities credited by the CRS to improve program class rating provide direct benefits to the community, including enhanced public safety, reduction in flood damage, and environmental protection.

#### 6.3 Public Information / Education

Public education is a critical tool for helping the public protect their homes and businesses and understand the challenges and realities of living in places like St Helena, where the primary cause of flooding is low lying areas and tidal influences that cannot be controlled through infrastructure. It is important that public education efforts are focused on helping citizens understand the challenges facing St. Helena Island and manage realistic expectations for the future. The opportunities and methods for public education are endless. First, the County should ensure that their websites and social media outlets provide the public with information about flood risks, and about potential for future impacts based on the changing climate. This information should include the importance of flood insurance, both inside and out of the SFHA, and steps the County is taking to protect residents and businesses. Based on the demographics of the island, the County should also work with island resources like the Penn Center to disseminate important information.

Based on the findings of this report, the County could reach out to residents who are in future areas of concern to provide information about future flooding concerns and options to protect their homes such as elevation or relocation. The County could consider offering credits or financial assistance to those residents in short-term areas of concern who are willing to move to a more protected area. As an island with strong cultural ties and a rich history, the County can leverage the existing strong sense of community to improve the safety of awareness of island residents.

#### 6.4 Infrastructure Improvements

As has been shown throughout this report, most of the flooding concerns, existing and future, on St Helena Island are attributed to low topography rather than undersized or inadequate infrastructure. Section 5.2 and Table 9 show a prioritized list of potential infrastructure improvement projects on the island. The first two projects, Janette Dr and Mattis Dr, do have some potential to reduce flooding by a measurable amount and should be considered by the County, but the cost likely exceeds the measurable benefits. The costs of the remaining three projects (Golden Dock Rd, Hickory Hill Rd, and Cusabo Rd) are likely too high given the minimal flood reduction achieved by each.

Overall, the County should focus efforts on non-structural flood reduction efforts, aimed at protecting residents through development regulations and education and outreach. The County should remain apprised of current research related to sea level rise and convey this information to County residents as applicable to improve the County's resiliency and protection of its residents.

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## 7 References

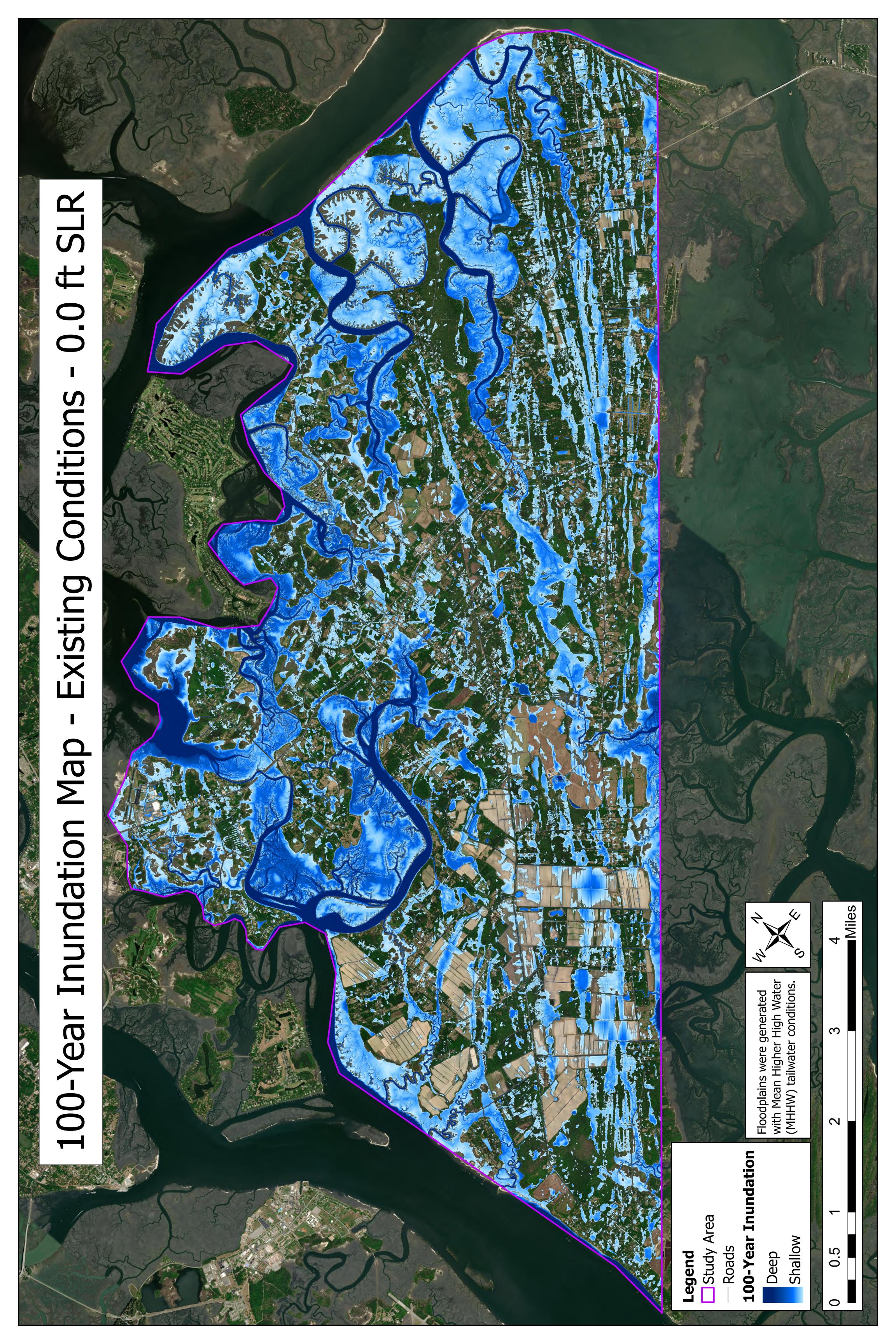
Dewitz, J. (2021). National Land Cover Database (NLCD) 2019 Products [Data set]. U.S. Geological Survey. https://doi.org/10.5066/P9KZCM54

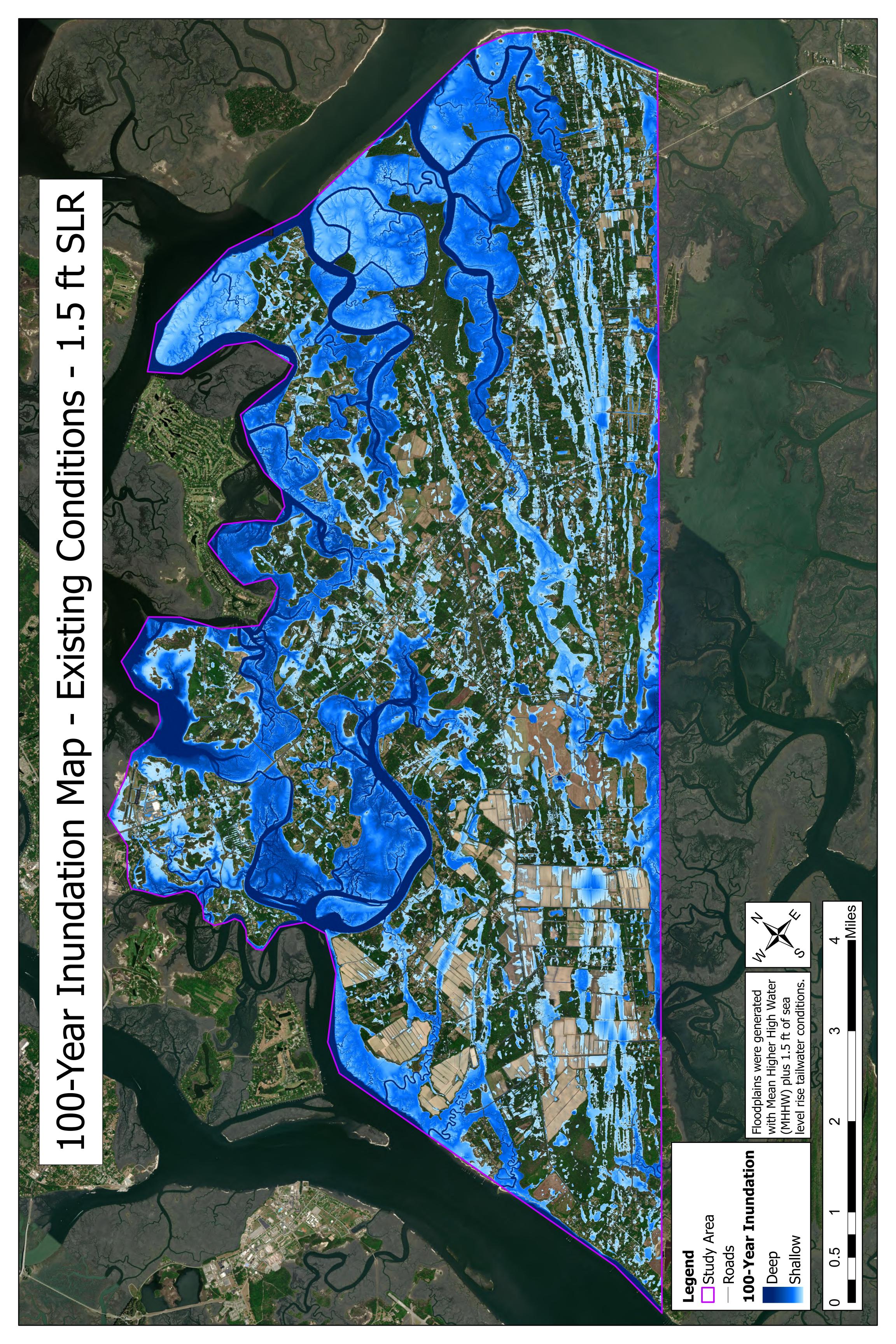
OCM Partners, 2022: 2020 USGS Lidar DEM: Savannah Pee Dee, SC, <a href="https://www.fisheries.noaa.gov/inport/item/65959">https://www.fisheries.noaa.gov/inport/item/65959</a>.

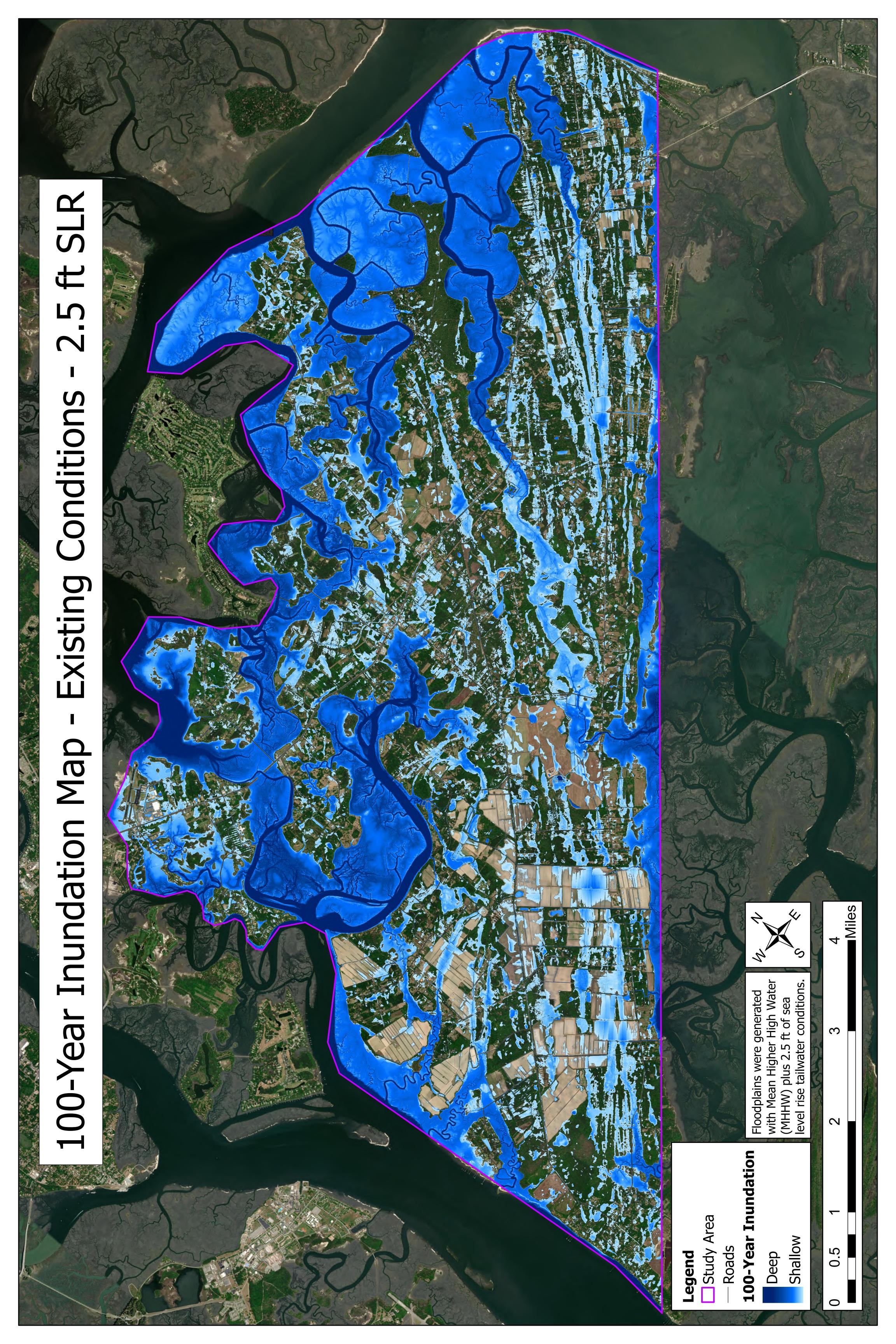
Parris, A. S., Bromirski, P., Burkett, V., Cayan, D. R., Culver, M. E., Hall, J., ... & Weiss, J. (2012). Global sea level rise scenarios for the United States National Climate Assessment.

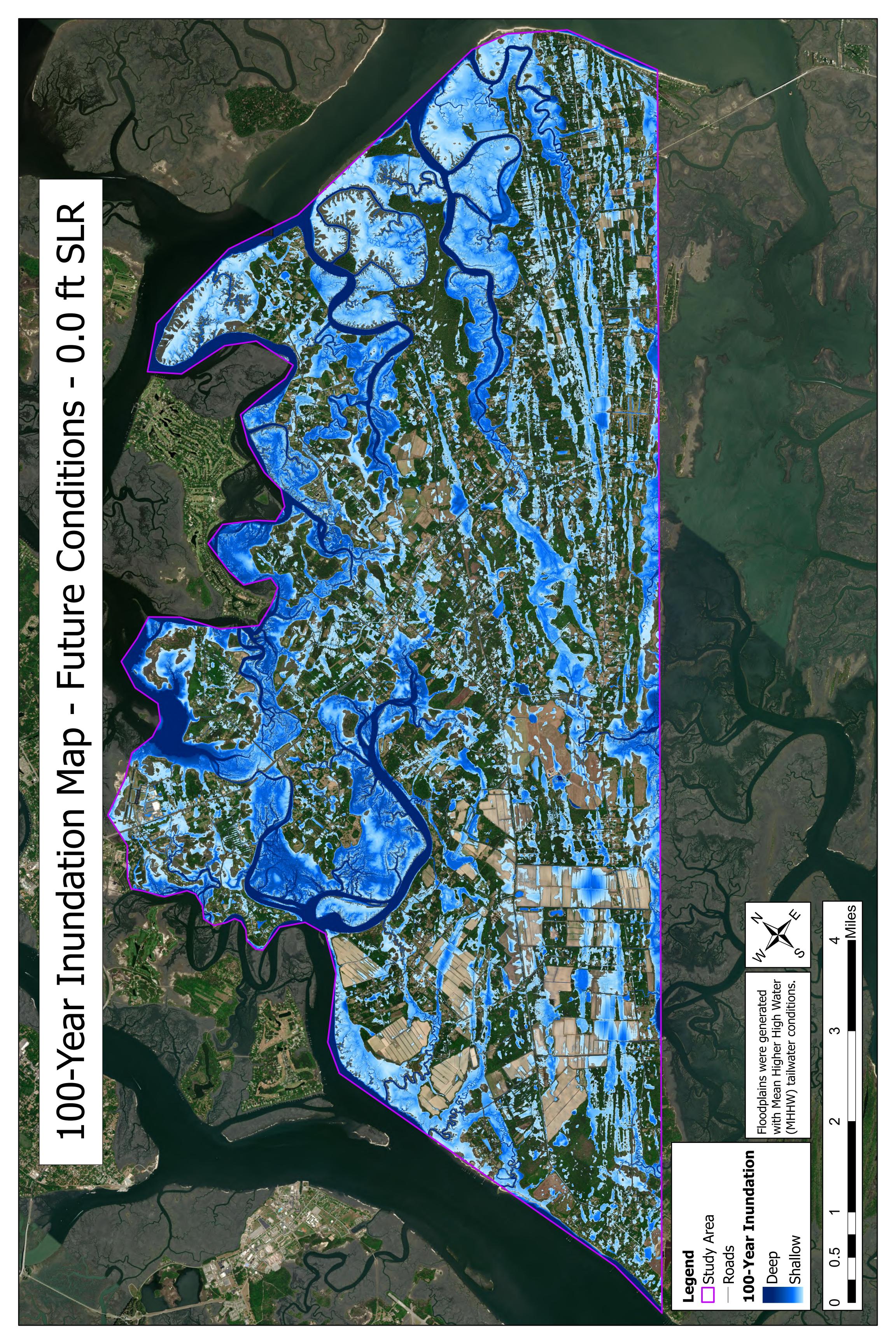
# Appendix A

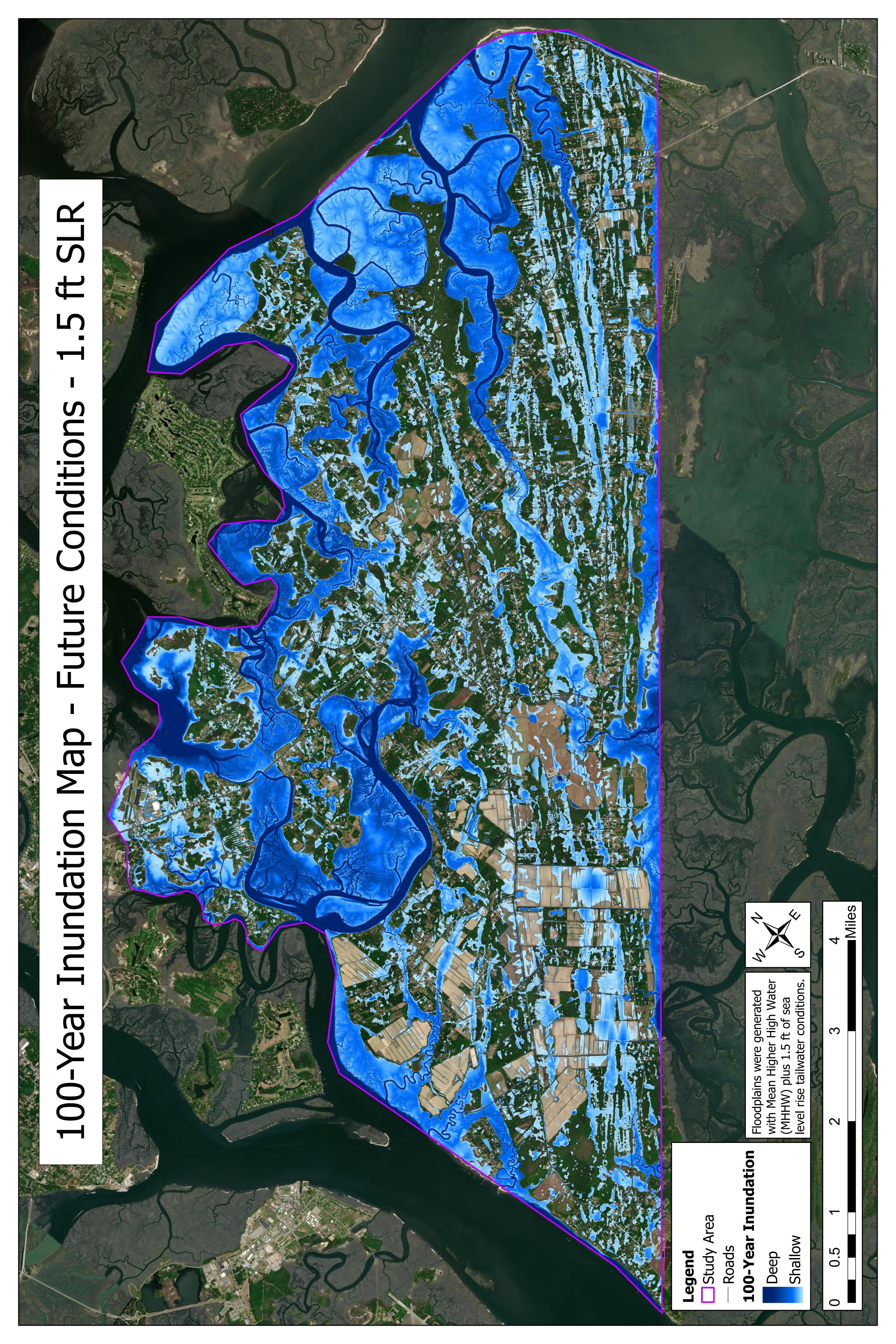
100-Year Inundation Maps

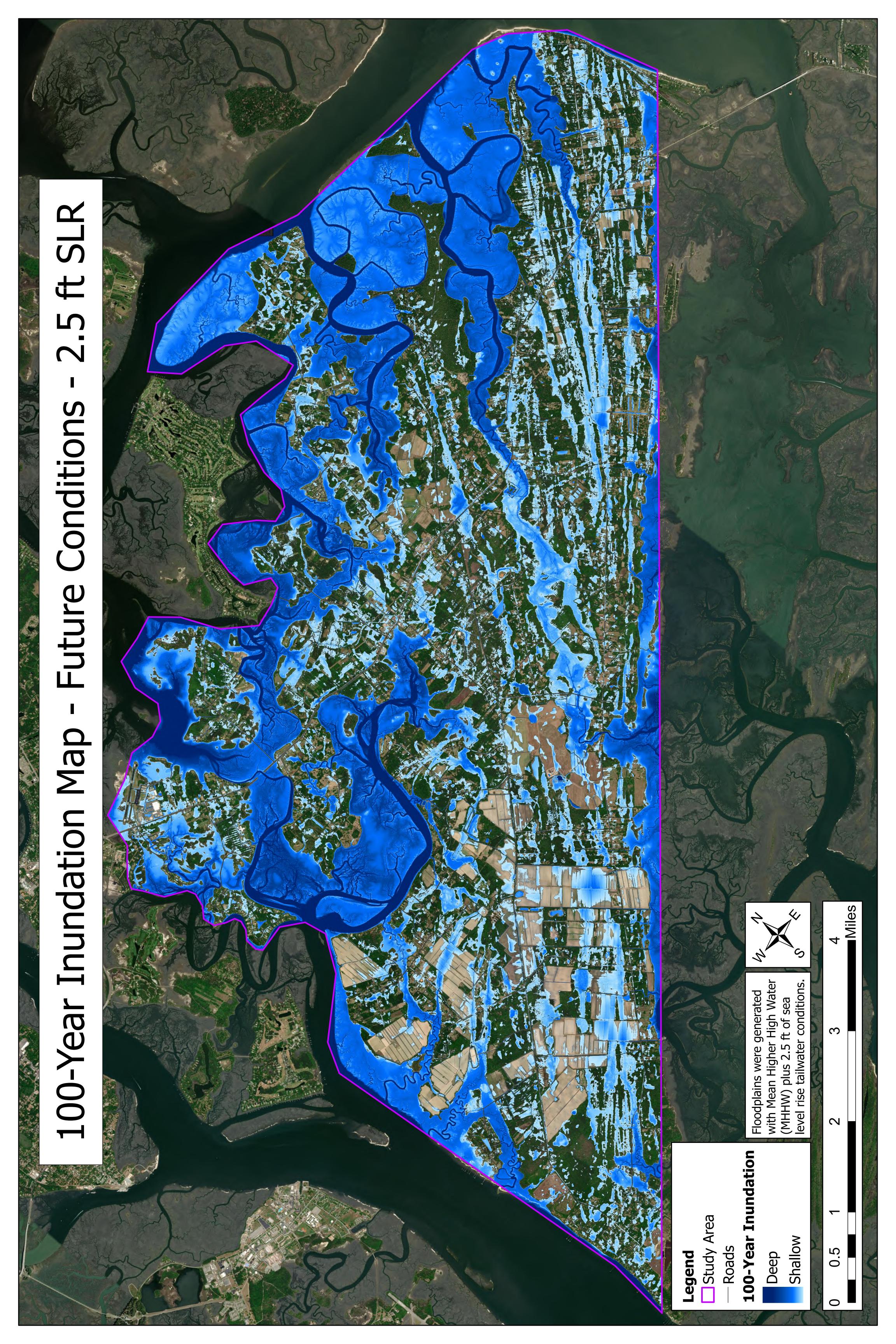


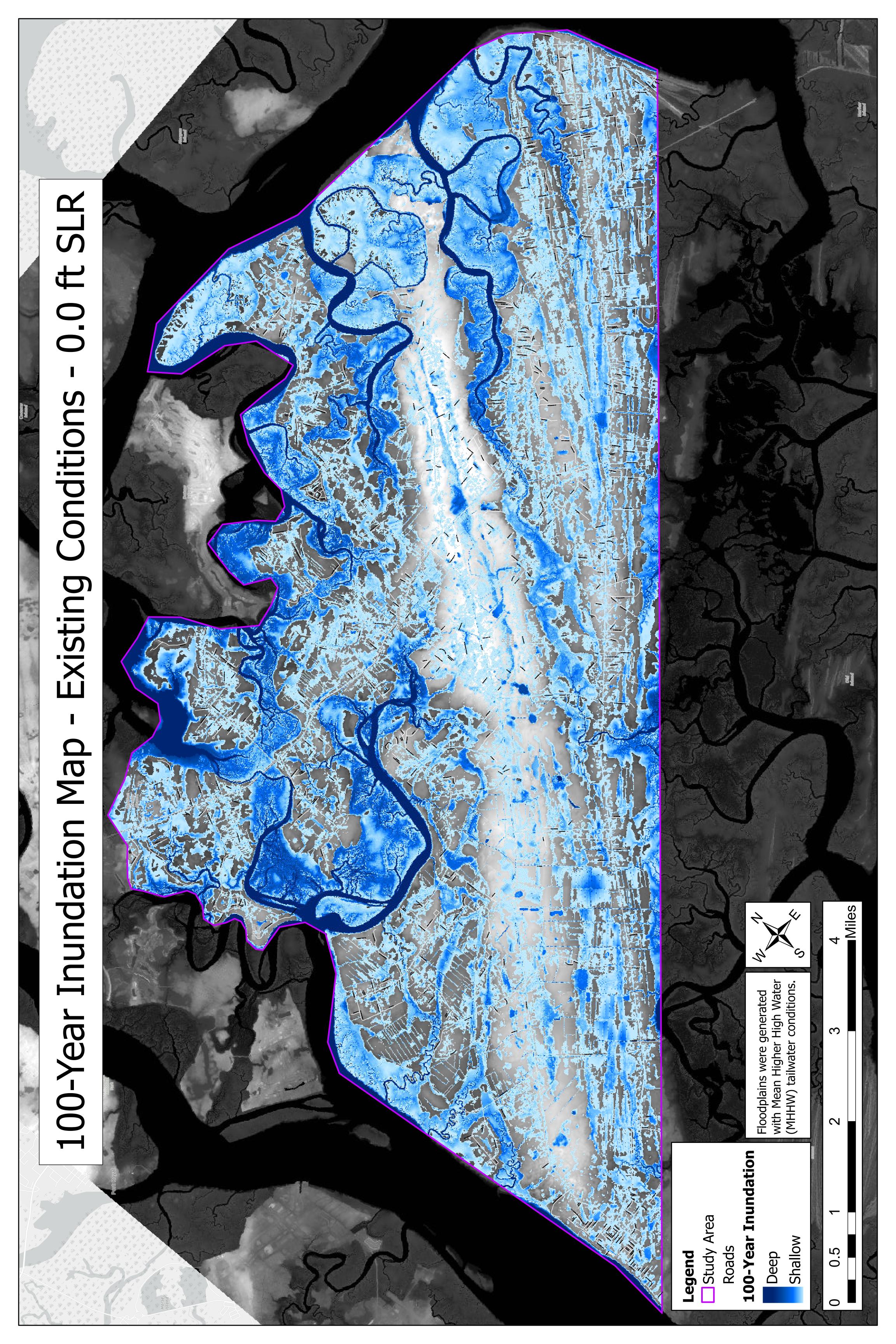


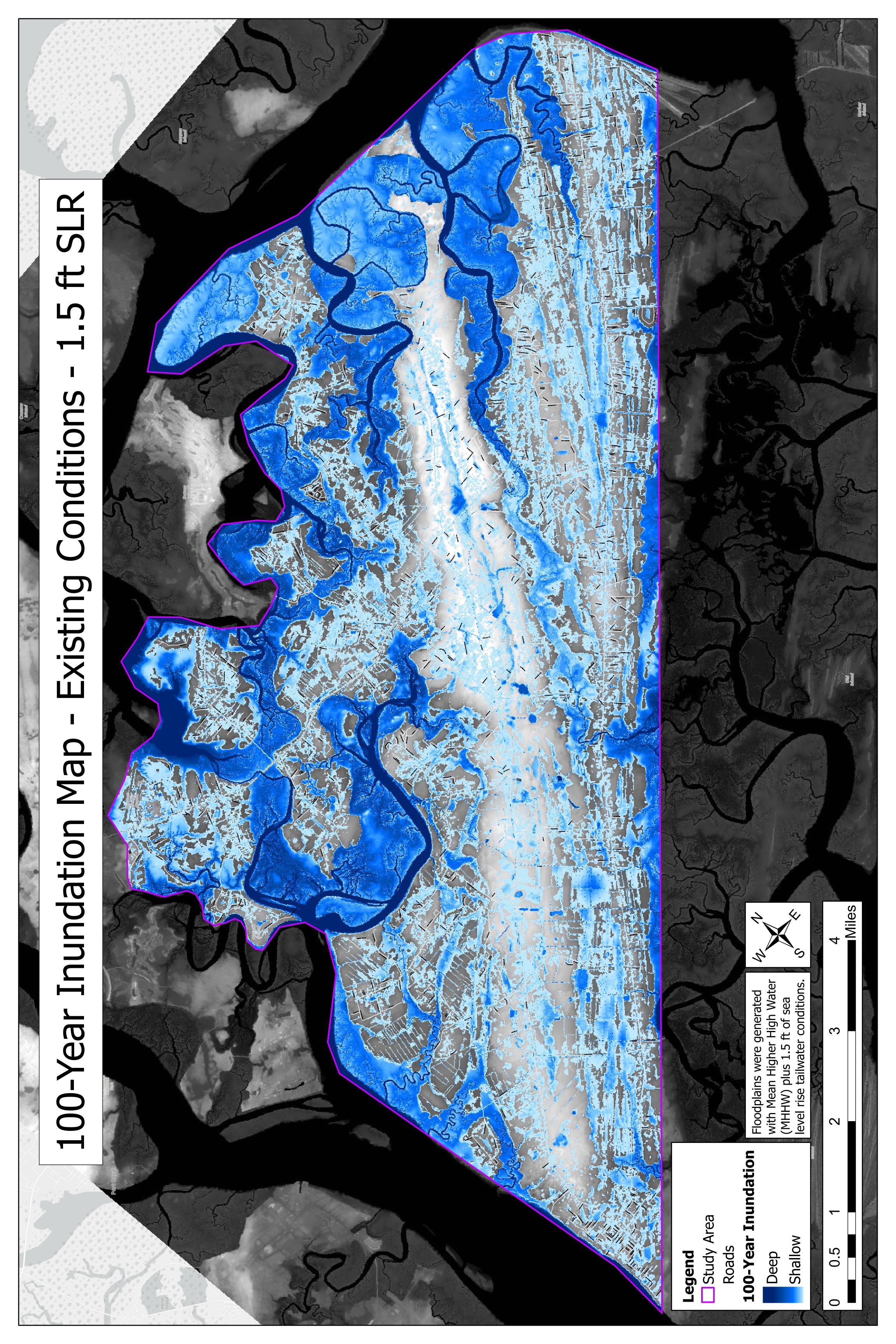


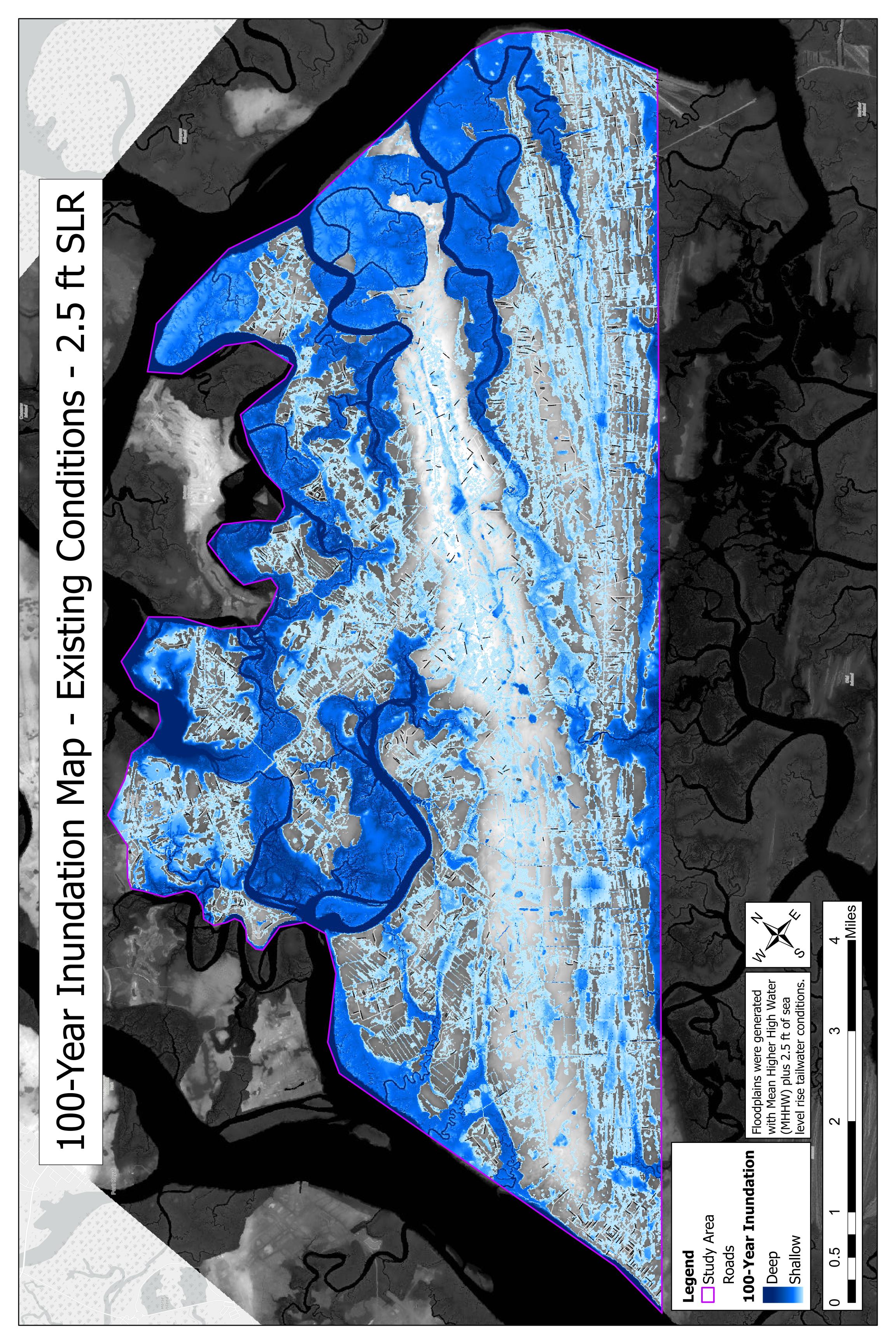


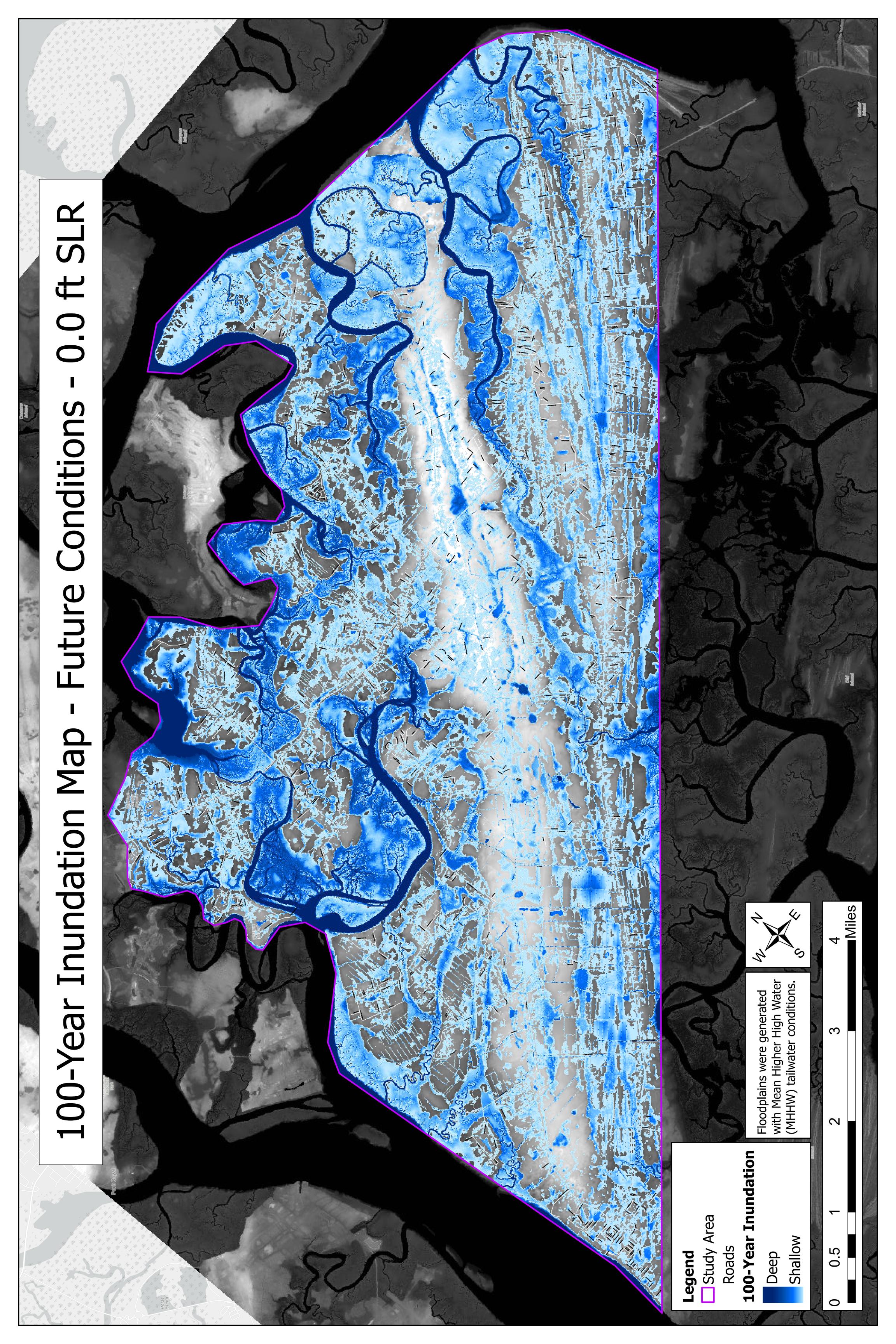


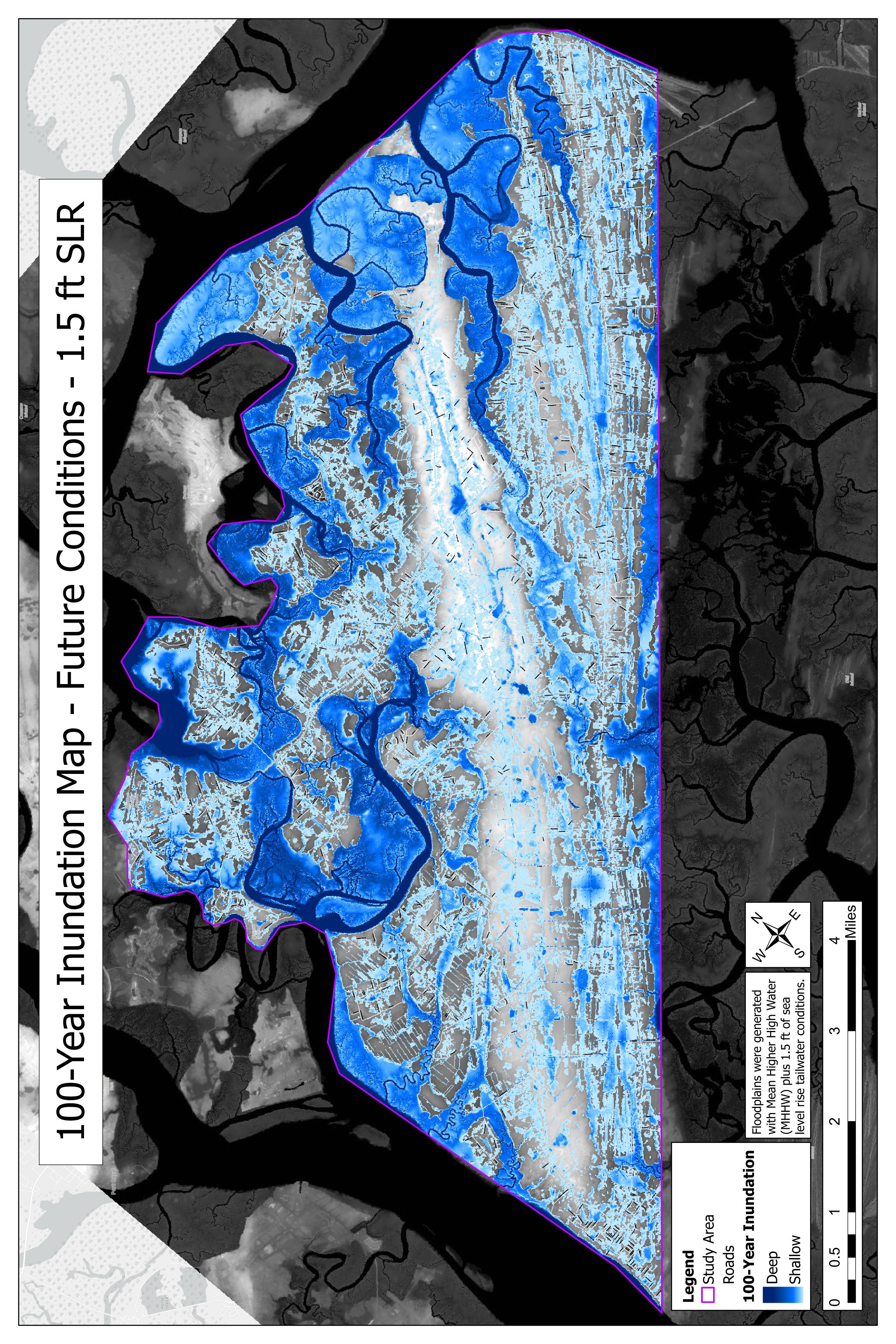


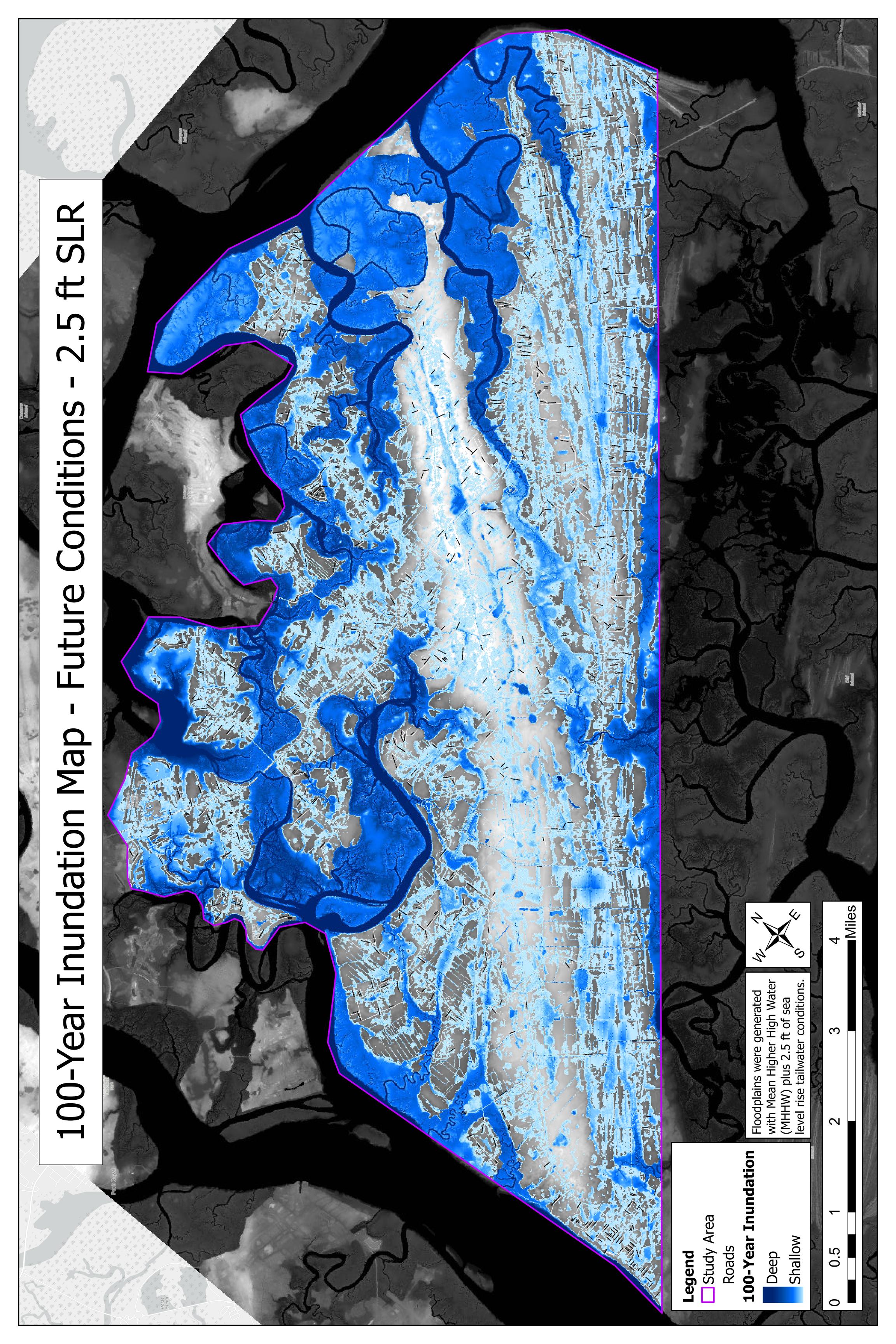












# Appendix B

Summary Table of Roads Inundated in Each Modeled Scenario

|   |                            |              | 2.5                  | 284         | 36           | 265          | 72               | 119            | 20       | 27                | 36                       | 260          | 354       | 7                |            | 43         | 496          |                    | 0               | 1084             | 8        | 204          | 89            | 39            | 470             | 192        |
|---|----------------------------|--------------|----------------------|-------------|--------------|--------------|------------------|----------------|----------|-------------------|--------------------------|--------------|-----------|------------------|------------|------------|--------------|--------------------|-----------------|------------------|----------|--------------|---------------|---------------|-----------------|------------|
|   |                            | 100-year     | 1.5                  | 280         | 11           | 255          | 72               | 119            | 3        | 27                | 36                       | 256          | 354       | 7                |            | 43         | 470          |                    | 0               | 1076             | 8        | 204          | 89            | 39            | 464             | 174        |
|   |                            |              | 0.0                  | 280         | 11           | 255          | 72               | 119            |          | 27                | 36                       | 251          | 354       | 7                |            | 43         | 470          |                    | 0               | 1069             | 8        | 204          | 89            | 39            | 340             | 160        |
|   |                            |              | 2.5                  | 106         | 0            | 217          | 64               | 20             |          | 2                 | 14                       | 190          | 234       |                  |            | 6          | 302          |                    |                 | 606              |          | 28           | 47            |               | 468             | 188        |
|   |                            | 50-year      | 1.5                  | 106         | 0            | 217          | 64               | 20             |          | 2                 | 14                       | 192          | 234       |                  |            | 6          | 265          |                    |                 | 902              |          | 89           | 47            |               | 462             | 174        |
| (ft)  |                            |              | 0.0                  | 103         | 0            | 217          | 64               | 20             |          | 5                 | 14                       | 190          | 234       |                  |            | 6          | 242          |                    |                 | 806              |          | 89           | 47            |               | 319             | 156        |
| 6 inches  | itions                     |              | 2.5                  | 25          | 0            | 174          | 09               | 41             |          | 8                 | 12                       | 159          | 125       |                  |            | 8          | 128          |                    |                 | 811              |          | 13           | 98            |               | 468             | 186        |
| at least  | <b>Existing Conditions</b> | 25-year      | 1.5                  | 57          | 0            | 160          | 90               | 41             |          | 3                 | 12                       | 157          | 125       |                  |            | 3          | 94           |                    |                 | 803              |          | 13           | 36            |               | 462             | 171        |
| ndated a  | Existi                     |              | 0.0                  | 57          | 0            | 157          | 9                | 41             |          | 3                 | 12                       | 157          | 125       |                  |            | 3          | 94           |                    |                 | 803              |          | 13           | 36            |               | 305             | 156        |
| vay Inul  |                            |              | 2.5                  |             |              | 104          | 51               | 39             |          | 1                 | 9                        | 1            | 0         |                  |            |            | 1            |                    |                 | 550              |          |              |               |               | 468             | 186        |
| of Roadv  |                            | 10-year      | 1.5                  |             |              | 73           | 51               | 39             |          | 1                 | 9                        | 1            | 0         |                  |            |            | 1            |                    |                 | 534              |          |              |               |               | 462             | 171        |
| of Length of Roadway Inundated at least 6 inches (ft) |                            |              | 0.0                  |             |              | 73           | 51               | 39             |          | 1                 | 9                        | 1            | 0         |                  |            |            | 1            |                    |                 | 525              |          |              |               |               | 294             | 153        |
| nary of   |                            |              | 2.5                  |             |              |              | 36               | 35             |          |                   |                          |              |           |                  |            |            |              |                    |                 | 69               |          |              |               |               | 468             | 186        |
| Summary   |                            | 2-year       | 1.5                  |             |              |              | 36               | 35             |          |                   |                          |              |           |                  |            |            |              |                    |                 | 2                |          |              |               |               | 462             | 171        |
|   |                            |              | 0.0                  |             |              |              | 36               | 35             |          |                   |                          |              |           |                  |            |            |              |                    |                 | 5                |          |              |               |               | 294             | 143        |
|   | Scenario:                  | Storm Event: | Sea Level Rise (ft): | Airport Cir | Ball Park Rd | Bay Point Rd | Chowan Creek BIf | Club Bridge Rd | Cuffy Rd | Distant Island Dr | Dr Martin Luther King Jr | S Dulamo BIf | Dulamo Rd | Eddings Point Rd | Ephraim Rd | Janette Dr | Lands End Rd | Oaks Plantation Rd | Orange Grove Rd | Peaches Hill Cir | Perry Rd | Sam Doyle Dr | Saxonville Rd | Scott Hill Rd | Sea Island Pkwy | Seaside Rd |

|   |                            | 100-year     | 0.0 1.5 2.5          | 43   43   57 |                |              | 175              | 164 164 164   | 188 188 188   | 12   12   4  |                  |            | 286 286 286 | 157   158   158 | 88 90 84    | 7 7 13           | 50   50   50 | 62 62 62     | 638 629 621     | 71 71 71             | 6 6 6          | 11   11   11 | 370 370 370   | 25 37 51  |           | 98 98 98       |            | 52             | 230   230   230  | 284 284 284      | 25            |                       | _ |
|---|----------------------------|--------------|----------------------|--------------|----------------|--------------|------------------|---------------|---------------|--------------|------------------|------------|-------------|-----------------|-------------|------------------|--------------|--------------|-----------------|----------------------|----------------|--------------|---------------|-----------|-----------|----------------|------------|----------------|------------------|------------------|---------------|-----------------------|---|
|   |                            |              | 2.5 0                | 72 4         |                |              | 152              | 113 1         | 136 1         | 3 1          |                  |            | 159 2       | 127 1.          | 8 02        | . 7              | 44 5         | 9 76         | 9 267           | 25 7                 | 6              | 1 6          | 3.            | 7         |           | 26 9           |            | 39             | 216 2:           | 190 2            | 13            |                       |   |
|   |                            | 50-year      | 1.5                  | 7            |                |              |                  | 113           | 136           | 4            |                  |            | 159         | 127             | 20          | 2                | 44           | 95           | 206             | 25                   | 6              | 6            | 286           |           |           | 56             |            |                | 216              | 190              |               |                       |   |
| nes (ft)  | 9                          |              | 0.0                  | 7            |                |              | 3                | 113           | 3 136         | 4            |                  |            | 3   159     | 127             | 70          | 2                | 44           | 95           | 3 495           | 25                   | 6              | 6            | ) 286         |           |           | 26             |            |                | 1 216            | 190              |               |                       |   |
| of Length of Roadway Inundated at least 6 inches (ft) | <b>Existing Conditions</b> | ar           | 2.5                  | 24           |                |              | 143              | 83            | 108           |              |                  |            | 103         | 74              | 09          | 2                | 40           | 84           | 338             |                      | 6              | 3            | ) 250         |           |           | 41             |            | 38             | 214              | 174              | 10            |                       |   |
| d at leas   | ting Co                    | 25-year      | 1.5                  | 2            |                |              |                  | 83            | 108           |              |                  |            | 103         | 74              | 09          |                  | 40           | 84           | 330             |                      | 6              | 3            | 250           |           |           | 41             |            |                | 214              | 174              |               |                       |   |
| undated   | Exis                       |              | 0.0                  | 2            |                |              |                  | 83            | 108           |              |                  |            | 103         | 74              | 09          |                  | 40           | 84           | 317             |                      | 6              | 3            | 250           |           |           | 41             |            |                | 214              | 174              |               |                       |   |
| way In  |                            | r            | 2.5                  | 19           |                |              | 125              | 2             | 44            |              |                  |            | 89          | 2               | 9           |                  | 32           | 20           | 28              |                      | 7              |              | 200           |           |           |                |            | 23             | 188              | 44               | 4             |                       |   |
| of Road   |                            | 10-year      | 1.5                  |              |                |              |                  | 2             | 44            |              |                  |            | 89          | 2               | 2           |                  | 32           | 0/           | 99              |                      | 2              |              | 200           |           |           |                |            |                | 188              | 44               |               |                       |   |
| Length  |                            |              | 0.0                  |              |                |              |                  | 5             | 44            |              |                  |            | 89          | 7               | 7           |                  | 32           | 02           | 09              |                      | 5              |              | 700           |           |           |                |            |                | 188              | 44               |               |                       |   |
|   |                            |              | 2.5                  | 19           |                |              | 117              | 1             |               |              |                  |            | 24          |                 |             |                  | 13           | 7            | 7               |                      | 2              |              | 164           |           |           |                |            | 4              | 174              |                  |               |                       |   |
| Summary   |                            | 2-year       | 1.5                  |              |                |              |                  | 1             |               |              |                  |            | 24          |                 |             |                  | 13           | 2            | 4               |                      | 5              |              | 164           |           |           |                |            |                | 174              |                  |               |                       |   |
|   |                            |              | 0.0                  |              |                |              |                  | 1             |               |              |                  |            | 24          |                 |             |                  | 13           | 7            | 7               |                      | 2              |              | 164           |           |           |                |            |                | 174              |                  |               |                       |   |
|   | Scenario:                  | Storm Event: | Sea Level Rise (ft): | Airport Cir  | Avenue Of Oaks | Bay Point Rd | Bermuda Bluff Rd | Bible Camp Rd | Bridgewood Rd | Bud Miley Dr | Candy Johnson Dr | Cee Cee Rd | Cusabo Rd   | David Green Rd  | Dockside Ln | Eddings Point Rd | Ernest Dr    | Estrolita St | Fort Fremont Rd | Fredericka Taylor Ln | Fripp Point Rd | Gardner Dr   | Gingerwood Rd | Glover Rd | Godley Rd | Golden Dock Rd | Halifax Dr | Harbor Oaks Ln | Harold Rivers Rd | Hunters Grove Rd | Inglewood Cir | James D Washington Rd | , |

| Scenario: Storm Event: Sea Level Rise (ft): Joe Capers Rd John Fripp Cir Jonathan Francis Sr Rd Landing Hill Rd |        |     |     |         |     |        | מרוכמאר                    | of Length of Addway Indinated at least 6 inches (14) | (UC) |         |     |     |          |      |
|---|--------|-----|-----|---------|-----|--------|----------------------------|--|------|---------|-----|-----|----------|------|
| 0.0 0.0 r Rd  |        |     |     |         |     | Existi | <b>Existing Conditions</b> | itions   |      |         |     |     |          |      |
| r Rd  | 2-year |     |     | 10-year |     |        | 25-year                    |  |      | 50-year |     | ` ' | 100-year |      |
| ripp Cir<br>rancis Sr Rd  | 1.5    | 2.5 | 0.0 | 1.5     | 2.5 | 0.0    | 1.5                        | 2.5  | 0.0  | 1.5     | 2.5 | 0.0 | 1.5      | 2.5  |
| Fripp Cir<br>Francis Sr Rd<br>ng Hill Rd  |        |     |     |         |     | 7      | 7                          | 7  | 10   | 10      | 10  | 70  | 20       | 20   |
| Francis Sr Rd<br>ng Hill Rd   |        |     | 89  | 89      | 89  | 120    | 120                        | 120  | 128  | 128     | 128 | 140 | 140      | 140  |
| ng Hill Rd  |        |     |     |         |     |        |                            |  |      |         |     | 18  | 18       | 18   |
|   |        |     |     |         |     |        |                            |  |      |         |     |     |          |      |
| Langford Rd 170   | 185    | 269 | 588 | 589     | 601 | 685    | 982                        | 692  | 738  | 734     | 747 | 800 | 800      | 805  |
| Luther Warren Dr  |        |     |     |         |     |        |                            |  |      |         |     |     |          |      |
| Mary Jenkins Cir  |        |     |     |         |     |        |                            |  | 4    | 4       | 4   | 15  | 15       | 15   |
| Mary Smalls Rd 9  | 6      | 6   | 10  | 10      | 10  | 18     | 18                         | 18   | 18   | 18      | 18  | 20  | 20       | 20   |
| Mattis Dr   |        |     | 16  | 16      | 16  | 24     | 24                         | 24   | 28   | 28      | 28  | 32  | 34       | 32   |
| Mccoy Rd  |        |     |     |         |     | 9      | 9                          | 9  | 18   | 18      | 18  | 37  | 37       | 37   |
| Mcteer Dr 64  | 99     | 112 | 340 | 355     | 412 | 530    | 549                        | 614  | 602  | 616     | 999 | 759 | 764      | 811  |
| Mixon Rd  |        |     |     |         |     | 38     | 38                         | 38   | 86   | 86      | 86  | 274 | 274      | 274  |
| No Man Land Rd  |        |     | 13  | 13      | 13  | 17     | 17                         | 17   | 17   | 17      | 17  | 24  | 24       | 24   |
| Old Distant Island Rd   |        |     | 31  | 31      | 31  | 89     | 68                         | 68   | 96   | 96      | 96  | 127 | 127      | 127  |
| Pineland Ave  |        |     | 3   | 3       | 2   | 8      | 8                          | 8  | 8    | 8       | 8   | 28  | 21       | 25   |
| Prayer House Rd 12  | 12     | 12  | 134 | 134     | 134 | 284    | 787                        | 787  | 345  | 345     | 343 | 407 | 407      | 407  |
| Queens Rd   |        |     | 20  | 20      | 20  | 110    | 110                        | 110  | 136  | 136     | 136 | 226 | 226      | 226  |
| Renell Rd   |        |     | 8   | 8       | 4   | 42     | 40                         | 40   | 42   | 42      | 42  | 46  | 46       | 46   |
| Reynolds Howard Dr 47   | 47     | 47  | 59  | 59      | 29  | 51     | 13                         | 51   | 64   | 64      | 99  | 28  | 78       | 78   |
| Rose Island Rd  |        | 2   |     |         | 2   |        |                            | 7  |      |         | 7   |     |          | 2    |
| Rose Petal Dr   |        |     | 16  | 16      | 18  | 90     | 76                         | 65   | 136  | 136     | 138 | 188 | 188      | 188  |
| Rosie Singleton Dr  |        |     | 92  | 92      | 92  | 178    | 8/1                        | 178  | 192  | 192     | 192 | 230 | 230      | 230  |
| Sea Pines Dr  |        |     | 6   | 6       | 6   | 55     | <b>S</b> S                 | 22   | 26   | 26      | 26  | 152 | 152      | 152  |
| Seashell Dr 1   | 1      | 1   | 6   | 6       | 6   | 19     | 19                         | 19   | 74   | 24      | 24  | 39  | 39       | 39   |
| Seaside Rd  |        |     |     |         |     | 8      | 10                         | 8  | 70   | 77      | 22  | 32  | 32       | 32   |
| Shade Tree Ln   |        |     |     |         |     |        |                            |  |      |         |     | 2   | 2        | 5    |
| Shamrock Rd 24  | 24     | 24  | 20  | 20      | 20  | 106    | 901                        | 901  | 148  | 148     | 148 | 178 | 178      | 178  |
| Shed Rd   |        | 343 |     |         | 360 | 192    | 192                        | 292  | 388  | 368     | 788 | 974 | 971      | 1281 |
| Shiney Rd   |        |     |     |         |     |        |                            |  |      |         |     |     |          |      |
| Simmons Rd  |        |     |     |         |     |        |                            |  |      |         |     | 3   | 3        | 3    |

| ons                        | 50-year 100-year | 1.5   2.5   0.0   1.5 | 471 504 504                | 108 155 157  |  | 84 84  | 399 393   | 2 3   | 444   | 99  | 8   | 274   |  | 4                                  |  |  |   |  |  |  |  |  |  |  |  |   |  |   |   |  |  |  |
|----------------------------|------------------|-----------------------|----------------------------|--|--|--|---|---|---|---|---|---|--|------------------------------------|--|--|---|--|--|--|--|--|--|--|--|---|--|---|---|--|--|--|
| ons                        |                  | 2.5                   |                            | +  |  | 84   | 399   | 7   | 4   |   |   |   |  | 7                                  | 7  |  | 28  | 332  | 148  | 64   | 923  | 422  |  | 126  | 268  | 2   | 4  | 116   | 10  | 148  | 142  | 10   |
| ons                        | 50-year          |                       | 471                        | 108  |  |  |   |   | 444   | 99  | 8   | 274   |  | 4                                  | 2  |  | 28  | 328  | 148  | 45   | 923  | 418  |  | 126  | 268  | 2   | 4  | 116   | 10  | 139  | 135  | 10   |
| ons                        | 50-year          | 1.5                   |                            |  |  | 48   | 185   |   | 364   |   | 4   | 191   |  |                                    |  | 36   | 30  | 226  | 104  | 92   | 819  | 375  | 6  | 86   | 243  |   | 1  | 104   | 8   | 107  | 83   | 0  |
| ons                        |                  |                       | 471                        | 81   |  | 48   | 187   |   | 364   |   | 4   | 191   |  |                                    |  |  | 30  | 208  | 104  | 45   | 818  | 371  |  | 86   | 243  |   | 1  | 104   | 8   | 90   | 75   | 2  |
| ons                        |                  | 0.0                   | 471                        | 81   |  | 48   | 187   |   | 364   |   | 4   | 191   |  |                                    |  |  | 30  | 198  | 104  | 9  | 819  | 371  |  | 86   | 243  |   | 1  | 104   | 8   | 64   | 99   | 2  |
| Ш                          |                  | 2.5                   | 450                        | 64   |  | 34   | 87  | 3   | 307   |   | 4   | 156   |  |                                    |  | 36   | 17  | 124  | 72   | 63   | 735  | 303  | 6  | 88   | 206  |   |  | 101   | 4   | 57   | 36   |  |
| <b>Existing Conditions</b> | 25-year          | 1.5                   | 450                        | 49   |  | 34   | 82  | 3   | 307   |   | 4   | 156   |  |                                    |  |  | 17  | 116  | 72   | 10   | 735  | 296  |  | 88   | 206  |   |  | 101   | 4   | 31   | 36   |  |
| Existi                     |                  | 0.0                   | 450                        | 49   |  | 34   | 82  | 3   | 305   |   | 4   | 156   |  |                                    |  |  | 17  | 116  | 72   | 2  | 735  | 293  |  | 88   | 206  |   |  | 101   | 4   | 12   | 32   |  |
|                            |                  | 2.5                   | 394                        | 6  |  | 4  | ∞   |   | 121   |   |   | 56  |  |                                    |  | 36   | 7   | 99   | 34   | 13   | 648  | 237  | 6  | 72   | 157  |   |  | 53  | 4   | 2  | 18   |  |
|                            | 10-year          | 1.5                   | 397                        | ∞  |  | 4  | 2   |   | 78  |   |   | 56  |  |                                    |  |  | 7   | 09   | 34   | 2  | 648  | 231  |  | 72   | 157  |   |  | 53  | 4   | 1  | 18   |  |
|                            |                  | 0.0                   | 397                        | ∞  |  | 4  | æ   |   | 78  |   |   | 56  |  |                                    |  |  | 7   | 09   | 34   | 2  | 648  | 231  |  | 72   | 157  |   |  | 53  | 4   | 1  | 18   |  |
|                            |                  | 2.5                   | 336                        |  |  |  |   |   |   |   |   |   |  |                                    |  | 36   |   | ∞  |  | 10   | 440  | 104  | 6  | 34   | 23   |   |  |   |   | 6  | 10   |  |
|                            | 2-year           | 1.5                   | 336                        |  |  |  |   |   |   |   |   |   |  |                                    |  |  |   | ∞  |  | 2  | 440  | 87   |  | 34   | 23   |   |  |   |   | 8  | 10   |  |
|                            |                  | 0.0                   | 336                        |  |  |  |   |   |   |   |   |   |  |                                    |  |  |   | ∞  |  | 1  | 440  | 81   |  | 34   | 23   |   |  |   |   | 9  | 10   |  |
| Scenario:                  | Storm Event:     | Sea Level Rise (ft):  | The Avenue                 | Tombee Rd  | Toomer Rd  | Triangle Rd  | Tropicana Rd  | Vineyard Point Rd   | Wards Landing Rd  | Warsaw Island Rd  | Wiggfall Rd   | William Jenkins Rd  | A Farm Rd  | Abbie Smith Ln                     | Addison Dr   | Adhemar Rd   | Amazing Grace Ln  | American Ave   | Andrew & Julia Dr  | Anna Estate Ln   | Arbor Ln   | Archer Fields Ln   | Ashton Dr  | Athens Ln  | Autumn Park Ct   | Beacon Dr   | Beas Dr  | Beautyberry Ln  | Ben Mack Dr   | Benchmark Cir  | Bermuda Downs  | Bermuda Inlet Dr   |
|                            |                  | t: 2-year 10-year     | 2-year 10-year 0.0 1.5 2.5 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394 | 2-year       10.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       39         8       8       9 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       397       397       394       394         8       8       8       9 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       337       394       39         8       8       9         4       4       4       4 | 2-year       10.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       39         8       8       8       9         9       4       4       4         4       4       4       4         33       5       8       8 | 2-year 10-year 10-year 10.0 1.5 2.5 0.0 1.5 2.5 2.5 0.0 1.5 2.5 2.5 0.0 1.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2 | 2-year 10-year 10-year 10.0 1.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2 | 2-year 10-year 10-year 10.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 2.5 0.0 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | 2-year 10-year 10-year 10.0 1.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2 | 2-year   10-year   10-year   10-year   10-year   11-5   2.5   11-5   2.5   11-5   2.5   11- | 2-year 10-year 10-year 10-year 2.5 | 2-year   10-year   10-year   10-year   10-year   1.5   2.5   0.0   1.5   2.5 | 2-year 10-year 10-year 10-year 10-year 10-year 2.5 | 2-year   10-year   10-year   10-year   10.0   1.5   2.5   0.0   1.5   2.5   2.5   0.0   1.5   2.5 | Sample   S | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       2.5         8       8       8       9       8         8       8       8       9       8         8       8       8       9       8         8       8       8       9       8         8       8       8       9       8         8       8       8       9       8         8       8       8       9       9         10       12       12       12         10       12       12       12         10       12       12       12         10       12       12       12         10       12       12       12         10       12       12       12         10       12       12       12         10       12       12       12         10       12       12       12         11       12       12       12         12       12 <th>  10.0   1.5   2.5   0.0   1.5   2.5   2.5   0.0   1.5   2.5   0.0   1.5   2.5   0.0   1.5   2.5   0.0</th> <th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394          8       8       8       9          8       8       8       9          8       8       8       9          8       8       8       9          8       8       8       9          8       3       5       8       8         8       8       7       7       7         9       8       8       60       60       66         10       2       5       13       7       7         11       5       10       2       5       13</th> <th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       39         336       336       397       394       39         340       38       8       8       9         340       3       5       8       8       8         340       3       5       8       <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       3       8       8       9       8         340       3       5       8       8       8       9         340       3       5       8       8       8       9       8         340       3       5       8</th><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       397       394       394         336       336       397       394       394         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4</th><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394         34       38       8       8       9         34       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4       4         44       4       4       4</th><th>2-year         10-year           0.0         1.5         2.5         0.0         1.5         2.5           336         336         336         397         394            336         336         397         397         394            336         336         397         394             340         3         8         8         9  <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       4</th></t<><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       34       4       4       4       4       4         440       4       <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         33       38       8       8       9         8       8       8       9       9         8       8       8       8       9         10       1       1       1       1         10       1       1       1       1       1         10       1</th></t<><th>  Colored   Colo</th><th>  Colored   Colo</th><th>  Colored   Colo</th></th></th></t<></th> | 10.0   1.5   2.5   0.0   1.5   2.5   2.5   0.0   1.5   2.5   0.0   1.5   2.5   0.0   1.5   2.5   0.0 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394          8       8       8       9          8       8       8       9          8       8       8       9          8       8       8       9          8       8       8       9          8       3       5       8       8         8       8       7       7       7         9       8       8       60       60       66         10       2       5       13       7       7         11       5       10       2       5       13 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       39         336       336       397       394       39         340       38       8       8       9         340       3       5       8       8       8         340       3       5       8 <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       3       8       8       9       8         340       3       5       8       8       8       9         340       3       5       8       8       8       9       8         340       3       5       8</th><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       397       394       394         336       336       397       394       394         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4</th><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394         34       38       8       8       9         34       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4       4         44       4       4       4</th><th>2-year         10-year           0.0         1.5         2.5         0.0         1.5         2.5           336         336         336         397         394            336         336         397         397         394            336         336         397         394             340         3         8         8         9  <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       4</th></t<><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       34       4       4       4       4       4         440       4       <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         33       38       8       8       9         8       8       8       9       9         8       8       8       8       9         10       1       1       1       1         10       1       1       1       1       1         10       1</th></t<><th>  Colored   Colo</th><th>  Colored   Colo</th><th>  Colored   Colo</th></th></th></t<> | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       3       8       8       9       8         340       3       5       8       8       8       9         340       3       5       8       8       8       9       8         340       3       5       8 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       397       394       394         336       336       397       394       394         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4       4       4       4         4       4 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394         34       38       8       8       9         34       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4         44       4       4       4       4       4         44       4       4       4 | 2-year         10-year           0.0         1.5         2.5         0.0         1.5         2.5           336         336         336         397         394            336         336         397         397         394            336         336         397         394             340         3         8         8         9 <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       4</th></t<> <th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       34       4       4       4       4       4         440       4       <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         33       38       8       8       9         8       8       8       9       9         8       8       8       8       9         10       1       1       1       1         10       1       1       1       1       1         10       1</th></t<><th>  Colored   Colo</th><th>  Colored   Colo</th><th>  Colored   Colo</th></th> | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       4 | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         336       336       397       394       394       394         340       34       4       4       4       4       4         440       4 <t< th=""><th>2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         33       38       8       8       9         8       8       8       9       9         8       8       8       8       9         10       1       1       1       1         10       1       1       1       1       1         10       1</th></t<> <th>  Colored   Colo</th> <th>  Colored   Colo</th> <th>  Colored   Colo</th> | 2-year       10-year         0.0       1.5       2.5       0.0       1.5       2.5         336       336       336       397       394       394         33       38       8       8       9         8       8       8       9       9         8       8       8       8       9         10       1       1       1       1         10       1       1       1       1       1         10       1 | Colored   Colo | Colored   Colo | Colored   Colo |

|   |                            | _            | 2.5                  | 44           | 962          | 28            | 39              | 45       | 6       | 2           | 83        | 1          | 147           | 16         | 214         |               | 296       | 515            | 75            | 7           | 79        | 286           | 29             | 69          | 122           | 43               | 111             | 10                   |                 | 32                   |          | 82        | 9         |
|---|----------------------------|--------------|----------------------|--------------|--------------|---------------|-----------------|----------|---------|-------------|-----------|------------|---------------|------------|-------------|---------------|-----------|----------------|---------------|-------------|-----------|---------------|----------------|-------------|---------------|------------------|-----------------|----------------------|-----------------|----------------------|----------|-----------|-----------|
|   |                            | 100-year     | 1.5                  | 44           | 920          | 26            | 39              | 45       | 6       | 2           | 81        | 1          | 147           | 16         | 210         |               | 296       | 512            | 75            | 5           | 79        | 286           | 29             | 69          | 122           | 7                | 111             | 10                   |                 | 23                   |          | 82        | 9         |
|   |                            |              | 0.0                  | 44           | 829          | 56            | 39              | 45       | 6       | 2           | 81        | 1          | 147           | 16         | 200         |               | 296       | 512            | 75            | 2           | 79        | 286           | 29             | 69          | 122           |                  | 111             | 10                   |                 | 23                   |          | 82        | 9         |
|   |                            | L            | 2.5                  | 56           | 881          |               | 39              | 22       | 6       |             | 64        | 12         | 152           | 16         | 152         |               | 258       | 356            | 71            |             | 22        | 264           | 20             | 46          | 104           | 42               | 99              | 8                    |                 | 18                   |          | 69        | 3         |
|   |                            | 50-year      | 1.5                  | 56           | 826          |               | 39              | 22       | 6       |             | 64        | 12         | 152           | 16         | 141         |               | 258       | 326            | 71            |             | 22        | 264           | 20             | 45          | 104           | 2                | 26              | 8                    |                 | 15                   |          | 71        | 3         |
| s (ft)  |                            |              | 0.0                  | 56           | 740          |               | 39              | 22       | 6       |             | 64        | 12         | 152           | 16         | 137         |               | 258       | 355            | 73            |             | 22        | 264           | 20             | 45          | 104           |                  | 28              | 8                    |                 | 15                   |          | 71        | 3         |
| of Length of Roadway Inundated at least 6 inches (ft) | litions                    | _            | 2.5                  | 23           | 826          |               | 37              | 6        | 6       |             | 59        | 7          | 52            | 16         | 108         |               | 236       | 266            | 71            |             | 45        | 240           | 13             | 32          | 86            | 42               | 11              | 8                    |                 | 14                   |          | 42        |           |
| at least  | <b>Existing Conditions</b> | 25-year      | 1.5                  | 23           | 750          |               | 37              | 6        | 6       |             | 59        | 7          | 52            | 16         | 86          |               | 236       | 264            | 71            |             | 45        | 240           | 13             | 32          | 86            | 2                | 11              | 8                    |                 | 6                    |          | 42        |           |
| ndated  | Existi                     |              | 0.0                  | 23           | 671          |               | 37              | 6        | 6       |             | 59        | 7          | 52            | 16         | 96          |               | 236       | 264            | 71            |             | 45        | 240           | 13             | 32          | 86            |                  | 11              | 8                    |                 | 6                    |          | 42        |           |
| way Inu   |                            | _            | 2.5                  | 20           | 711          |               | 33              |          | 9       |             | 26        | 0          | 42            | 12         | 99          |               | 175       | 123            | 69            |             | 32        | 134           | 7              | 11          | 89            | 42               |                 | 9                    |                 | 3                    |          | 23        |           |
| of Road   |                            | 10-year      | 1.5                  | 20           | 620          |               | 33              |          | 9       |             | 26        | 0          | 42            | 12         | 58          |               | 173       | 117            | 69            |             | 32        | 134           | 7              | 11          | 89            | 2                |                 | 9                    |                 |                      |          | 23        |           |
| Length  |                            |              | 0.0                  | 20           | 540          |               | 33              |          | 9       |             | 26        | 0          | 42            | 12         | 52          |               | 173       | 114            | 69            |             | 32        | 134           | 7              | 11          | 89            |                  |                 | 9                    |                 |                      |          | 23        |           |
| mary of   |                            |              | 2.5                  | 7            | 547          |               | 28              |          | 4       |             | 5         |            | 20            | 7          | 19          |               |           | 23             | 59            |             | 12        | 20            |                |             | 12            | 42               |                 | 2                    |                 |                      |          |           |           |
| Summary   |                            | 2-year       | 1.5                  | 7            | 382          |               | 28              |          | 4       |             | 5         |            | 20            | 7          | 10          |               |           | 23             | 59            |             | 12        | 20            |                |             | 12            | 2                |                 | 2                    |                 |                      |          |           |           |
|   |                            |              | 0.0                  | 7            | 293          |               | 28              |          | 4       |             | 5         |            | 20            | 7          | 8           |               |           | 23             | 59            |             | 12        | 20            |                |             | 12            |                  |                 | 2                    |                 |                      |          |           |           |
|   | Scenario:                  | Storm Event: | Sea Level Rise (ft): | Big House Rd | Bird Foot Rd | Birds Nest Ln | Blazing Star Ln | Boggy Ln | Boyd PI | Bridgett Ln | Browns Ln | Bulrush Dr | Bumble Bee Dr | Butlers Ct | Campfire Dr | Candlewood Dr | Canopy Ln | Capt Capers Dr | Capt Rojas Rd | Caroline Rd | Carson Dr | Castleford Dr | Centennial Cir | Champion Dr | Chez Par Muse | Claires Point Rd | Clara Glover Ln | Clarence Mitchell Rd | Clear Spring Rd | Clifford & Minnie Rd | Cohen Dr | Copper Cv | Corner Dr |

|   |                            | _            | 2.5                  | 196           | 9            | 218          | 82               | 174      | 4           | 609          | 239               | 72           | 35          | 264      | 3009              | 54          | 54       | 168         |               | 2               | 341             | 2                       | 34                 | 8          | 327         | 350        | 41         | 45        | 129         | 1          |                  |             | 9          |
|---|----------------------------|--------------|----------------------|---------------|--------------|--------------|------------------|----------|-------------|--------------|-------------------|--------------|-------------|----------|-------------------|-------------|----------|-------------|---------------|-----------------|-----------------|-------------------------|--------------------|------------|-------------|------------|------------|-----------|-------------|------------|------------------|-------------|------------|
|   |                            | 100-year     | 1.5                  | 194           |              | 218          | 82               | 160      | 4           | 209          | 239               | 72           | 32          | 264      | 2997              |             | 99       | <b>29</b>   |               | 7               | 340             | 2                       | 34                 | 8          | 327         | 345        | 36         | 45        | 129         |            |                  |             | 9          |
|   |                            |              | 0.0                  | 186           |              | 218          | 82               | 147      | 7           | 209          | 538               | 72           | 32          | 264      | 2998              |             | 99       |             |               | 7               | 340             | 2                       | 34                 | 8          | 327         | 345        | 32         | 45        | 129         |            |                  |             | 9          |
|   |                            |              | 2.5                  | 26            | 9            | 186          | <i>LL</i>        | 168      | 7           | 512          | 203               | 9            | 24          | 206      | 2507              | 44          | 20       | 156         |               |                 | 222             |                         | 87                 | 8          | 234         | 264        | 3          | 42        | 96          | 1          |                  |             | 7          |
|   |                            | 50-year      | 1.5                  | 26            |              | 186          | <i>LL</i>        | 154      | 7           | 487          | 707               | 9            | 24          | 200      | 2510              |             | 20       | 27          |               |                 | 222             |                         | 28                 | 8          | 234         | 258        | 3          | 42        | 63          |            |                  |             | 7          |
| s (ft)  |                            |              | 0.0                  | 26            |              | 186          | <i>LL</i>        | 147      | 7           | 464          | 707               | 9            | 24          | 200      | 2496              |             | 20       |             |               |                 | 222             |                         | 87                 | 8          | 234         | 258        | 3          | 42        | 63          |            |                  |             | 7          |
| y of Length of Roadway Inundated at least 6 inches (ft) | litions                    |              | 2.5                  | 64            | 9            | 144          | 89               | 164      | 1           | 418          | 171               | 51           | 14          | 172      | 2208              | 44          | 10       | 145         |               |                 | 172             |                         | 27                 | 9          | 215         | 184        |            | 37        | 71          | 1          |                  |             | 6          |
| at least  | <b>Existing Conditions</b> | 25-year      | 1.5                  | 64            |              | 144          | 89               | 154      | 1           | 191          | 171               | 51           | 14          | 172      | 2212              |             | 12       | 10          |               |                 | 172             |                         | 27                 | 5          | 215         | 177        |            | 37        | 71          |            |                  |             | C          |
| ndated  | Existi                     |              | 0.0                  | 64            |              | 144          | 89               | 147      | 1           | 200          | 171               | 51           | 14          | 172      | 2203              |             | 12       |             |               |                 | 172             |                         | 27                 | 2          | 215         | 177        |            | 37        | 71          |            |                  |             | 6          |
| way Inu   |                            |              | 2.5                  | 32            | 2            | 89           | 45               | 160      | 1           | 62           | 121               | 56           |             | 113      | 1541              | 37          | 9        | 141         |               |                 | 123             |                         | 17                 | 3          | 168         | 118        |            | 29        | 24          | 1          |                  |             |            |
| of Road   |                            | 10-year      | 1.5                  | 32            |              | 89           | 45               | 154      | 1           | 27           | 121               | 56           |             | 113      | 1537              |             | 9        | 2           |               |                 | 123             |                         | 17                 | 2          | 168         | 106        |            | 29        | 24          |            |                  |             |            |
| Length (  |                            |              | 0.0                  | 32            |              | 89           | 45               | 148      | 1           | 27           | 121               | 56           |             | 113      | 1531              |             | 9        |             |               |                 | 123             |                         | 17                 | 2          | 168         | 106        |            | 29        | 24          |            |                  |             |            |
| nary of   |                            |              | 2.5                  | 6             | 2            | 2            | 10               | 170      |             | 4            | 74                |              |             | 20       | 900               | 36          |          | 128         |               |                 | 92              |                         | 13                 |            | 19          | 73         |            | 24        |             | 1          |                  |             |            |
| Summary   |                            | 2-year       | 1.5                  | 6             |              | 2            | 10               | 154      |             |              | 74                |              |             | 20       | 868               |             |          |             |               |                 | 92              |                         | 13                 |            | 19          | 22         |            | 24        |             |            |                  |             |            |
|   |                            |              | 0.0                  | 6             |              | 2            | 10               | 147      |             |              | 74                |              |             | 20       | 894               |             |          |             |               |                 | 92              |                         | 13                 |            | 19          | 22         |            | 24        |             |            |                  |             |            |
|   | Scenario:                  | Storm Event: | Sea Level Rise (ft): | Creekhouse Ln | Creekside Ln | Crossover Rd | Crown Heights Ln | Dataw Dr | Day Care Ln | Day Lilly Dr | Deacon Heyward Rd | Deep Hole Rd | Delmont Cir | Dietz Rd | Distant Island Dr | Dockside Ln | Donna Rd | Dr White Rd | Ed & Grant Dr | Eddie Holmes Ct | Edding White Rd | <b>Eddings Point Rd</b> | Edward N Warren Dr | Esquire Ln | Eternity Ln | Eva Mae Rd | Everest Rd | Family Ln | Filices Way | Finders Ln | First Venture Rd | Flaherty Rd | Fortune Rd |

| of Length of Roadway Inundated at least 6 inches (ft)  Existing Conditions  10-year 25-year 50-year 10-year 10-year 50-year 10-year 50-year 10-year 10 | 0.0 1.5 2   | 11 11 19<br>3 213 213 217 ;  | 205 2               | 3     16     2     2       3     3     19     19     53     53 | 1 94 109 109 109 124 | 5 5 5 5 5 5 5 | 7 9 9 9 10 10 | 7 15 15 15 37 37 | 106 105          | 15         15         15         109         109 | 255 255 260 260 |               | 12 10   | 19   19   16   16 | 65 65 78 78 | 75 75 157 157 | 25 43    | 41 138 138      | 3 108 174 174 | 26 36 36 | 4 254 448 448     | 1 184 210 212 | 45 81 81  | 5 335 363 363 | 9 10 10  | 4 4 5 5        | 8 8    | 16 16 44 44      | 8 13 13          |
|--|---|--|---------------------|--|----------------------|---------------|---------------|------------------|------------------|--|-----------------|---------------|---------|-------------------|-------------|---------------|----------|-----------------|---------------|----------|-------------------|---------------|-----------|---------------|----------|----------------|--------|------------------|------------------|
| / of Length of Roadway Inundated at least 6 inches (ft)         Existing Conditions         10-year       25-year         5       0.0       1.5       2.5       0.0         1.5       2.5       0.0       1.5       0.0  | 0.0         1.5         2.5         0.0         1.5         2.5   | 2         2         2         11         11         11           209         209         209         213         213         213 | 102 114 142 143 150 | 2 2 19 19 19   | 94 109 109 109       | 5 5 5 5       | 6 6 6         | 15 15 15         | 106              | 15 15  | 255             |               | 12      | 19                | 65          | 75            | 25       | 41              | 108           | 56       | 254               | 184           | 45        | 335           |          | 4              | 8      | 16               | 8                |
| r of Length of Roadway Inundated at least 6 inches (ft)         Existing Conditions         10-year       25-year       50-year         5       0.0       1.5       0.0       1.5       0.0       1.5  | 0.0         1.5         2.5         0.0         1.5           2         2         2         11         11 | 209 209 209 213 213  | 102 114 142 143     | 8 2 2 19 19  | 94 109 109           | 5 5 5         | 6             | 15 15            |                  | 15   |                 |               |         |                   |             |               | $\dashv$ |                 | $\dashv$      |          | $\dashv$          |               |           |               | 6        |                |        | _                |                  |
| Cof Length of Roadway Inundated at least 6 inches (ft)         Existing Conditions         10-year       25-year         5       0.0       1.5       2.5       0.0   | 0.0 1.5 2.5 0.0   | 209 209 209 213  | 102 114 142         | 2 2 19   | 94 109               | 5 5           | 6             | 15               |                  |  | 255             |               |         | 19                | 35          | 2             | ا , .    |                 | ~ l           |          | 4                 | 1             |           | 2             |          | 4              |        | 16               |                  |
| Tof Length of Roadway Inundated at least 6 inches (for the conditions         Existing Conditions         10-year       25-year         5       0.0       1.5       2.5  | 0.0 1.5 2.5   | 209 209 209  | 102 114             | 8 2  | 94                   | 5             |               |                  |                  | 15   |                 | $\overline{}$ |         |                   |             | _             | 25       | 43              | 108           | 26       | 254               | 181           | 45        | 335           | 6        | ,              |        |                  | ∞                |
| ry of Length of Roadway Inundated at least 6 inches         Existing Conditions         10-year       25-year         25       0.0       1.5       2.5   | 0.0 1.5   | 2 2 2 2 209 209  | 102                 | ,  | -                    |               | 7             | _                |                  |  | 255             |               |         | 19                | 65          | 75            | 25       | 43              | 108           | 26       | 254               | 177           | 45        | 335           | 6        | 4              |        | 16               | ∞                |
| ry of Length of Roadway Inundated at least  Existing Conc  10-year 25-year  2.5 0.0 1.5 2.5 0.0 1.5  | 0:0<br>-<br>-   | 200  |                     |  | 94                   |               |               |                  |                  | 11   | 263             |               |         | 19                | 55          | 29            | 17       | ∞               | 84            | 24       | 121               | 158           | 35        | 325           | 2        | 1              |        | 4                | 9                |
| ry of Length of Roadway Inundated  Existi  10-year  2.5 0.0 1.5 2.5 0.0  |   | +  | 102                 | /  |                      | ٠,            | 7             | 7                |                  | 11   | 263             |               |         | 19                | 55          | 31            | 21       | ∞               | 84            | 24       | 121               | 150           | 31        | 325           | 2        | 1              |        | 4                | 9                |
| ry of Length of Roadway Inu  10-year 2.5 0.0 1.5 2.5   | 2.5   | 12   |                     |  | 94                   | 2             | 7             | 7                |                  | 11   | 263             |               |         | 19                | 52          | 31            | 21       | ∞               | 84            | 24       | 121               | 136           | 29        | 325           | 2        | 1              |        | 4                | 9                |
| ry of Length of Road  10-year  |   | 17   | 34                  | 2  | 71                   | 4             | 7             | 1                |                  |  | 247             |               |         | 16                | ∞           | 13            | 7        |                 | 20            | 14       | 13                | 94            | 10        | 322           |          |                |        |                  |                  |
| ry of Length of  | 1.5   | 172  | 6                   |  | 71                   | 4             | 2             | 1                |                  |  | 247             |               |         | 16                | 8           | 13            | 13       |                 | 20            | 14       | 13                | 92            | 6         | 322           |          |                |        |                  |                  |
| ry of  | 0.0   | 172  | 9                   |  | 71                   | 4             | 7             | 1                |                  |  | 247             |               |         | 16                | ∞           | 13            | 13       |                 | 20            | 14       | 13                | 90            | 9         | 322           |          |                |        |                  |                  |
| na<br>L  | 2.5   | 103  |                     |  | 7                    |               |               |                  |                  |  | 227             |               |         | 2                 |             |               | 4        |                 |               |          |                   |               |           | 265           |          |                |        |                  |                  |
| Summary<br>2-year<br>1.5 2   | 1.5   | 103  |                     |  | 7                    |               |               |                  |                  |  | 227             |               |         | 2                 |             |               | 4        |                 |               |          |                   |               |           | 265           |          |                |        |                  |                  |
| 0.0  | 0.0   | 103  |                     |  | 7                    |               |               |                  |                  |  | 227             |               |         | 2                 |             |               | 4        |                 |               |          |                   |               |           | 265           |          |                |        |                  |                  |
| Scenario:<br>Storm Event:<br>Sea Level Rise (ft):  | ea Level Rise (ft):<br>Foxtrot  | Foxtrot<br>Frances Butler Ln   | Freda Ln            | Frigate Ln<br>Front St   | Gateway Ln           | Gazebo Dr     | Geneva Rd     | Ginsing Ln       | Grace & Allen Rd | Hackles Dr                                       | Hall Path       | Hallmark Rd   | Hand Dr | Harbor Breeze Dr  | Harris Ln   | Hawksbill Rd  | Helen Rd | Henry Holmes Dr | Holland Ct    | Hope Ct  | Hopes Cemetery Rd | Howerton Dr   | Hudson Dr | Ishmael Ln    | Ivory Rd | J Stevens Path | J&J Dr | James Bradley Dr | Jane Johnson Cir |

|   |                            | ı.           | 2.5                  | 11             | 10        |         | 32          | 19                  | 7                |                | 174        | 391              |        | 100         | 202        | 165       | 66              | 114          | 58               | 137       | 118               | 128             | 34         | 16             | 106                | 4           | 55        | 78             | 43               | 226            | 71       | 101          | Ş  |
|---|----------------------------|--------------|----------------------|----------------|-----------|---------|-------------|---------------------|------------------|----------------|------------|------------------|--------|-------------|------------|-----------|-----------------|--------------|------------------|-----------|-------------------|-----------------|------------|----------------|--------------------|-------------|-----------|----------------|------------------|----------------|----------|--------------|----|
|   |                            | 100-year     | 1.5                  | 11             | 10        |         | 32          | 19                  | 7                |                | 174        | 401              |        | 09          | 202        | 165       |                 | 112          | 58               | 133       | 118               | 86              | 32         | 13             | 102                | 4           | 22        | 82             | 43               | 516            | 29       | 92           | ڹ  |
|   |                            |              | 0.0                  | 11             | 10        |         | 32          | 19                  | 7                |                | 174        | 401              |        | 43          | 202        | 165       |                 | 110          | 28               | 133       | 116               | 64              | 34         | 13             | 102                | 4           | 22        | 82             | 43               | 389            | 29       | 92           | ٩  |
|   |                            |              | 2.5                  | 10             | 10        |         | 25          | 14                  | 9                |                | 157        | 314              |        | 92          | 186        | 132       | 92              | 06           | 49               | 08        | 108               | 146             | 20         | 2              | 86                 |             | 43        | 72             | 38               | 202            | 61       | 94           | ļ; |
|   |                            | 50-year      | 1.5                  | 10             | 10        |         | 25          | 14                  | 2                |                | 157        | 322              |        | 52          | 186        | 130       |                 | 06           | 49               | 9/        | 108               | 108             | 20         | 2              | 86                 |             | 43        | 74             | 32               | 465            | 61       | 66           |    |
| s (ft)  |                            |              | 0.0                  | 10             | 10        |         | 25          | 14                  | 2                |                | 157        | 322              |        | 38          | 186        | 130       |                 | 06           | 49               | 9/        | 104               | 72              | 20         | 1              | 86                 |             | 43        | 72             | 32               | 220            | 29       | 93           |    |
| y of Length of Roadway Inundated at least 6 inches (ft) | litions                    |              | 2.5                  | 6              | 10        |         | 24          | 6                   |                  |                | 153        | 298              |        | 92          | 170        | 116       | 92              | 99           | 45               | 99        | 108               | 116             | 20         |                | 86                 |             | 28        | 99             | 32               | 480            | 22       | 65           |    |
| at least  | <b>Existing Conditions</b> | 25-year      | 1.5                  | 6              | 10        |         | 24          | 12                  |                  |                | 153        | 300              |        | 52          | 170        | 114       |                 | 26           | 45               | 52        | 106               | 82              | 20         |                | 86                 |             | 28        | 99             | 32               | 430            | 22       | 93           |    |
| ndated  | EXIST                      |              | 0.0                  | 6              | 10        |         | 24          | 12                  |                  |                | 153        | 300              |        | 38          | 170        | 114       |                 | 99           | 45               | 52        | 100               | 54              | 20         |                | 86                 |             | 28        | 99             | 32               | 173            | 22       | 93           |    |
| way Inu   |                            |              | 2.5                  | 9              | 9         |         | 19          | 9                   |                  |                | 146        | 254              |        | 87          | 115        | 73        | 92              |              | 33               | 24        | 94                | 64              | 15         |                | 06                 |             | 19        | 54             | 19               | 432            | 45       | 81           |    |
| of Road   |                            | 10-year      | 1.5                  | 9              | 9         |         | 19          | 9                   |                  |                | 146        | 254              |        | 44          | 115        | 73        |                 |              | 33               | 20        | 90                | 34              | 15         |                | 06                 |             | 19        | 54             | 14               | 382            | 45       | 19           |    |
| Length (  |                            |              | 0.0                  | 9              | 9         |         | 19          | 9                   |                  |                | 146        | 254              |        | 30          | 115        | 73        |                 |              | 33               | 20        | 82                | 18              | 15         |                | 06                 |             | 19        | 54             | 14               | 136            | 43       | 79           |    |
| nary of   |                            |              | 2.5                  |                |           |         | 13          | 14                  |                  |                | 80         | 202              |        | 26          | 28         | 20        | 82              |              | 13               |           | 54                | 18              | 6          |                | 89                 |             | 2         | 56             | 14               | 394            | 2        | 63           |    |
| Summary   |                            | 2-year       | 1.5                  |                |           |         | 13          | 14                  |                  |                | 80         | 175              |        | 6           | 28         | 48        |                 |              | 13               |           | 20                | 9               | 6          |                | 89                 |             | 2         | 56             | 12               | 295            | 3        | 09           |    |
|   |                            |              | 0.0                  |                |           |         | 13          | 14                  |                  |                | 80         | 175              |        | 1           | 28         | 48        |                 |              | 13               |           | 44                |                 | 6          |                | 89                 |             | 2         | 26             | 12               | 29             | 2        | 09           |    |
|   | Scenario:                  | Storm Event: | Sea Level Rise (ft): | Little Foot Rd | Lizzie Ln | Lois Rd | Lonicera Ln | Luther & Margies Ln | Luther Warren Dr | Marsh Point Rd | Marthas Ln | Mattie Bailey Rd | Mclane | Meantime Dr | Meeting St | Melody Ln | Middle Point Rd | Millstone Dr | Monday & Jane Ln | Moorer Rd | Morgan Passage Ln | Morgan Point Rd | N Front Dr | Nathan Pope Rd | Nathan Robinson Dr | Neighbor Ln | Nelson Ln | Net Menders Ln | Net Menders Loop | Net Weavers Pl | Noble Dr | Oak Trail Ln |    |

|   |                            | _            | 2.5                  | 2         | 11          | 331             |                        | 111                    |            |           | 142     | 165        | 26             | 219          | 61        | 32              | 27                | 14             | 54            | 22             | 51          | 16           | 116              | 2          |                 | 35           | 112          | 74          | 184           | 397             | 48          | 215             | ٦           |
|---|----------------------------|--------------|----------------------|-----------|-------------|-----------------|------------------------|------------------------|------------|-----------|---------|------------|----------------|--------------|-----------|-----------------|-------------------|----------------|---------------|----------------|-------------|--------------|------------------|------------|-----------------|--------------|--------------|-------------|---------------|-----------------|-------------|-----------------|-------------|
|   |                            | 100-year     | 1.5                  | 2         | 11          | 331             |                        | 111                    |            |           | 142     | 165        | 26             | 219          | 61        | 32              | 27                | 14             | 54            | 55             | 51          | 16           | 116              |            |                 | 35           | 112          | 74          | 184           | 397             | 48          | 210             | ۵           |
|   |                            |              | 0.0                  | 2         | 11          | 331             |                        | 111                    |            |           | 142     | 165        | 99             | 219          | 61        | 32              | 27                | 14             | 54            | 22             | 51          | 16           | 116              |            |                 | 35           | 112          | 74          | 184           | 397             | 48          | 210             | u           |
|   |                            |              | 2.5                  | 2         | 11          | 508             |                        | 98                     |            |           | 124     | 133        | 36             | 180          | 51        | 18              | 22                | 8              | 45            | 42             | 41          | 14           | 84               |            |                 | 26           | 87           | 48          | 150           | 321             | 31          | 187             |             |
|   |                            | 50-year      | 1.5                  | 2         | 11          | 508             |                        | 92                     |            |           | 124     | 131        | 36             | 180          | 51        | 18              | 22                | 8              | 45            | 42             | 41          | 14           | 84               |            |                 | 26           | 87           | 48          | 150           | 321             | 31          | 187             |             |
| s (ft)  |                            |              | 0.0                  | 2         | 11          | 508             |                        | 98                     |            |           | 124     | 131        | 36             | 180          | 51        | 18              | 22                | 8              | 45            | 42             | 41          | 14           | 84               |            |                 | 56           | 87           | 48          | 150           | 321             | 31          | 187             |             |
| y of Length of Roadway Inundated at least 6 inches (ft) | itions                     |              | 2.5                  | 2         | 11          | 176             |                        | 80                     |            |           | 124     | 113        | 31             | 165          | 47        | 14              | 18                | 8              | 39            | 31             | 27          | 14           | 92               |            |                 | 4            | 70           | 35          | 136           | 251             | 23          | 169             |             |
| at least  | <b>Existing Conditions</b> | 25-year      | 1.5                  | 7         | 11          | 177             |                        | 8/                     |            |           | 124     | 113        | 31             | 165          | 47        | 14              | 18                | 8              | 68            | 31             | 27          | 14           | 92               |            |                 | 4            | 70           | 32          | 136           | 251             | 23          | 169             |             |
| ndated  | Existi                     |              | 0.0                  | 7         | 11          | 177             |                        | 8/                     |            |           | 124     | 113        | 31             | 165          | 47        | 14              | 18                | 8              | 68            | 31             | 27          | 14           | 9/               |            |                 | 4            | 70           | 32          | 136           | 251             | 23          | 169             |             |
| way Inu   |                            |              | 2.5                  |           | 6           | 74              |                        | 69                     |            |           | 108     | 51         | 19             | 106          | 38        | 2               | 14                | 8              | 18            | 16             | 2           | 14           | 29               |            |                 |              | 26           | 27          | 124           | 114             | 15          | 77              |             |
| of Road   |                            | 10-year      | 1.5                  |           | 6           | 74              |                        | 99                     |            |           | 108     | 51         | 19             | 106          | 38        | 2               | 14                | 8              | 18            | 16             | 5           | 14           | 29               |            |                 |              | 26           | 27          | 124           | 114             | 15          | 77              |             |
| Length  |                            |              | 0.0                  |           | 6           | 74              |                        | 99                     |            |           | 108     | 51         | 19             | 106          | 38        | 2               | 14                | 8              | 18            | 16             | 5           | 14           | 29               |            |                 |              | 26           | 27          | 124           | 114             | 15          | 77              |             |
| nary of   |                            |              | 2.5                  |           | 7           | 20              |                        | 61                     |            |           | 9/      | 23         |                | 31           | 31        |                 | 7                 | 8              | 3             | 3              | 1           | 10           | 9                |            |                 |              | 2            | 12          | 28            | 09              | 15          | 3               |             |
| Summary   |                            | 2-year       | 1.5                  |           | 7           | 20              |                        | 20                     |            |           | 9/      | 23         |                | 31           | 31        |                 | 7                 | 8              | 3             | 3              | 1           | 10           | 9                |            |                 |              | 2            | 12          | 28            | 09              | 15          | 3               |             |
|   |                            |              | 0.0                  |           | 7           | 20              |                        | 20                     |            |           | 9/      | 23         |                | 31           | 31        |                 | 7                 | 8              | 3             | 3              | 1           | 10           | 9                |            |                 |              | 2            | 12          | 28            | 09              | 15          | 3               |             |
|   | Scenario:                  | Storm Event: | Sea Level Rise (ft): | Obrian Rd | Old Farm Ln | Old Polowana Rd | Old Smugglers Wharf Ln | Old Smugglers Wharf Rd | Orchard Rd | Otoole Rd | Pace Ln | Paragon Rd | Paul Watson Ln | Pea Patch Rd | Peanut Ln | Pearl Harbor Dr | Penn Center Cir E | Penn Center Rd | Peppermint Dr | Pigeonberry Ln | Pinnacle Ln | Plum Tree Ln | Pope Estates Way | Porter Cir | Porter House Ln | Priscilla Ln | Privateer Dr | Progress Ln | Queenester Ln | Queens Court Dr | R Walker Ln | Racoon Ridge Dr | Pagwood Cir |

| Scharlich         Explanation         Explanation         Stond light         Color light         Light         Light         Color light   |             |     | Summary |     | Length o | of Length of Roadway Inundated at least 6 inches (ft) | vay Inur | ndated a | it least ( | inches | (ft) |         |     |     |          |     |
|---|-------------|-----|---------|-----|----------|---|----------|----------|------------|--------|------|---------|-----|-----|----------|-----|
| 10. year   |             |     |         |     |          |   |          | Existir  | ng Cond    | itions |      |         |     |     |          |     |
| 0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         3.2         3.6         1.5         2.5         3.5 <th>nt:</th> <th></th> <th>2-year</th> <th></th> <th></th> <th>10-year</th> <th></th> <th></th> <th>25-year</th> <th></th> <th></th> <th>50-year</th> <th></th> <th></th> <th>100-year</th> <th></th>   | nt:         |     | 2-year  |     |          | 10-year   |          |          | 25-year    |        |      | 50-year |     |     | 100-year |     |
| 118         118         118         129         293         294         318 <th>se (ft):</th> <th>0.0</th> <th>1.5</th> <th></th> <th>0.0</th> <th>1.5</th> <th>2.5</th> <th>0.0</th> <th>1.5</th> <th>2.5</th> <th>0.0</th> <th>1.5</th> <th>2.5</th> <th>0.0</th> <th>1.5</th> <th>2.5</th>   | se (ft):    | 0.0 | 1.5     |     | 0.0      | 1.5   | 2.5      | 0.0      | 1.5        | 2.5    | 0.0  | 1.5     | 2.5 | 0.0 | 1.5      | 2.5 |
| 28         32         36         166         166         166         250         254         276         276         276         276         278         333         336         338         336         338         336         336         337         336         337         336         337  | ger Dr      | 118 | 118     |     | 293      | 293   | 293      | 318      | 318        | 318    | 335  | 335     | 332 | 348 | 348      | 348 |
| 28         3.2         3.6         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         1.66         2.69         2.64         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.76         2.77         2.76         2.77         2.7   | ler Ln      |     |         |     |          |   |          |          |            |        |      |         |     |     |          |     |
| 108         110         188         184         184         264         205         204         205         256         205         256         205         256         256         237         235 <td>ell Ln</td> <td>28</td> <td>32</td> <td>32</td> <td>166</td> <td>166</td> <td>166</td> <td>250</td> <td>254</td> <td>254</td> <td>276</td> <td>276</td> <td>278</td> <td>333</td> <td>336</td> <td>336</td>   | ell Ln      | 28  | 32      | 32  | 166      | 166   | 166      | 250      | 254        | 254    | 276  | 276     | 278 | 333 | 336      | 336 |
| 5         6         6         9         9         13  | ty Dr       | 108 | 110     | 188 | 184      | 184   | 226      | 208      | 506        | 248    | 226  | 220     | 258 | 237 | 235      | 268 |
| 2         3         3         5         6         6         6         7         7         7         8         8         8           15         1         1         1         7         7         7         13<   | yward Rd    | 5   | 5       | 5   | 6        | 6   | 6        | 13       | 13         | 13     | 19   | 19      | 19  | 27  | 27       | 27  |
| 1           | bline Rd    |     |         |     |          |   |          |          |            |        |      |         |     |     |          |     |
| 1         1         1         7         7         13  | ard Dr      | 2   | 3       | 3   | 33       | 33  | 33       | 59       | 62         | 62     | 77   | 77      | 77  | 88  | 88       | 88  |
| 153         153         153         153         243         243         291         291         291         303         303         303         307         327         327           77         79         79         122         122         153         153         178         178         178         239         333         330         327         329           17         17         19         140         163         282         282         297         343         340         350         525         525           21         17         17         17         140         163         282         282         297         343         370         525         52  | rdson Pl    | 1   | 1       | 1   | 7        | 7   | 7        | 13       | 13         | 13     | 17   | 17      | 17  | 23  | 23       | 23  |
| 77         79         79         122         122         153         153         153         153         153         153         153         153         153         153         153         153         153         178         178         178         178         178         178         178         178         178         239         239         239         130         130         130         134         343         343         370         555  | Field Ct    | 153 | 153     | 153 | 243      | 243   | 243      | 291      | 291        | 291    | 303  | 303     | 303 | 327 | 327      | 327 |
| 77         79         79         122         122         122         153         154         158  | irs Cres    |     |         |     |          |   |          |          |            |        |      |         |     |     |          |     |
| 17         17         19         140         163         282         282         297         343         370         525         525         525           21         1.2   | & Clara Trl | 77  | 79      | 79  | 122      | 122   | 122      | 153      | 153        | 153    | 178  | 178     | 178 | 239 | 239      | 239 |
| 21         21         21         11         26         17         24         52         75         199           21         21         21         66         66         66         130         130         174         174         174         218         218           33         3         3         3         13         13         13         188         28         28         35         35         35         35         38         38         38         35         35         35         35         35         38         38         38         38         38         38         38         18         170         170         170         173         173         173         173         173         173         173         173         173         173         173         173         173         173         185         185         180  | ock Rd      | 17  | 17      | 19  | 140      | 140   | 163      | 282      | 282        | 297    | 343  | 343     | 370 | 272 | 272      | 572 |
| 21         21         21         66         66         66         130         130         174         174         174         174         218           3         3         4         4         4         6         6         6         14         14         14         18         18         18         14         14         14         18         18         6         6         14         14         14         14         18         18         6         6         14         14         14         18         18         28         28         28         28         35   | cky Rd      |     |         |     |          |   | 2        | 7        | 11         | 56     | 17   | 24      | 52  | 75  | 109      | 354 |
| 3         3         4         4         6         6         6         14         14         14         14         8         6         6         14         14         14         14         18         38         38         3         3         13         13         13         28         28         28         35   | nan Ln      | 21  | 21      | 21  | 99       | 99  | 99       | 130      | 130        | 130    | 174  | 174     | 174 | 218 | 218      | 218 |
| 3         3         3         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         13         15 <td>sa Cir</td> <td></td> <td></td> <td></td> <td>4</td> <td>4</td> <td>4</td> <td>9</td> <td>9</td> <td>9</td> <td>14</td> <td>14</td> <td>14</td> <td>28</td> <td>28</td> <td>28</td>  | sa Cir      |     |         |     | 4        | 4   | 4        | 9        | 9          | 9      | 14   | 14      | 14  | 28  | 28       | 28  |
| 68         68         68         74         120         120         126         158         158         160         173         173         173         195         195           8         8         8         114         116         118         198         198         202         216         6         6         6         6         7         30           8         8         8         114         116         118         198         198         202         216         6         6         6         6         7         30         30         30         30         30         30         40         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         46         7         47         47         47         47         47         47         47         47         47         47         47         47  | Scott Dr    | 3   | 3       | 3   | 13       | 13  | 13       | 28       | 28         | 28     | 35   | 35      | 32  | 32  | 32       | 32  |
| 8         8         114         116         118         198         20         2         6         6         6         6         7         30           8         8         114         116         118         198         202         216         616         66         6         6         6         7         30         7<  | Petal Dr    | 89  | 89      | 74  | 120      | 120   | 120      | 158      | 158        | 160    | 173  | 173     | 173 | 195 | 195      | 195 |
| 8         8         8         114         116         118         198         202         216         66            | etta Dr     |     |         |     |          |   |          |          |            |        |      |         |     | 8   | 8        | 3   |
| 8         8         114         116         118         198         198         202         216         216         216         230           1         38         11         11         11         11         21         46         7         43         43         43         57         7           1         1         11         11         11         11         43         43         43         43         57           | labout Cir  |     |         |     |          |   |          | 2        | 2          | 2      | 9    | 9       | 9   |     |          |     |
| 46         38         40         40         46         46         46         46         46         46         46         46         46         46         46         46         46         46         46         46         48         43         43         43         43         43         43         43         43         43         43         43         43         43         43         57<  | tu Ln       | 8   | 8       | 8   | 114      | 116   | 118      | 198      | 198        | 202    | 216  | 216     | 216 | 730 | 230      | 232 |
| A Matrix Controls   | wind Dr     |     |         | 38  |          |   | 40       |          |            | 46     |      |         | 46  |     |          | 46  |
| 4         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         12         12         12         18         19         19         19         19         19         19         10<   | nuel Ln     |     |         |     | 11       | 11  | 11       | 21       | 21         | 21     | 43   | 43      | 43  | 25  | 25       | 22  |
| 221         221         235         268         268         306         306         309         331         331         333         341           4 <td>/ View Ln</td> <td></td> <td></td> <td></td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>5</td> <td>5</td> <td>2</td> <td>2</td> <td>7</td> <td>7</td>  | / View Ln   |     |         |     | 2        | 2   | 2        | 2        | 2          | 2      | 5    | 5       | 2   | 2   | 7        | 7   |
| 221         225         268         268         306         306         309         331         333         341           4   | ohire Rd    |     |         |     | 5        | 5   | 5        | 12       | 12         | 12     | 18   | 18      | 18  | 27  | 27       | 27  |
| Angle of the language         Angle of the language | rah Ln      | 221 | 221     |     | 268      | 268   | 268      | 306      | 306        | 309    | 331  | 331     | 333 | 341 | 341      | 346 |
| 2         2         2         2         2         2         4           10         10         10         12         12         12         20         20         20         28           10         10         10         10         10         20         20         20         38           10         10         10         10         20         20         38         2   | urns Cir    |     |         |     |          |   |          |          |            |        |      |         |     | 0   | 0        | 0   |
| 10         10         10         12         12         12         20         20         20         28           10         10         10         10         10         20         20         20         38  | aul Ln      |     |         |     |          |   |          | 2        | 2          | 2      | 2    | 2       | 2   | 4   | 4        | 4   |
| 10     10     10     10     20     20     38  | l Farm Rd   |     |         |     | 10       | 10  | 10       | 12       | 12         | 12     | 20   | 20      | 20  | 28  | 28       | 28  |
|   | oam Rd      |     |         |     |          |   |          | 10       | 10         | 10     | 20   | 20      | 20  | 38  | 38       | 38  |
|   | ring Rd     |     |         |     |          |   |          |          |            |        |      |         |     | 2   | 2        | 2   |

|           | 100-year                      | 0.0 1.5              | 8  | 176  |  |  |   |                                      |  | 130  | 17   | 5174   | 13   | 14  | 24  |  | 26  | 53  | 268   | 69   | 109  | 36  |   | 98  | 338   | 127   | 325   | 11   | 397   | 2  |  | 208   |
|-----------|-------------------------------|----------------------|--|--|--|--|---|--------------------------------------|--|--|--|--|--|---|---|--|---|---|---|--|--|---|---|---|---|---|---|--|---|--|--|---|
|           |                               | 0.0                  |  |  | 4  | 240  | 144   | 722                                  | 34   | 130  | 17   | 5137   | 13   | 14  | 22  |  | 26  | 53  | 268   | 69   | 109  | 36  |   | 98  | 338   | 127   | 323   | 11   | 274   | 2  |  | 206   |
|           |                               |                      | 8  | 165  | 4  | 240  | 144   | 722                                  | 34   | 130  | 17   | 4156   | 13   | 14  | 24  |  | 26  | 53  | 268   | 69   | 109  | 36  |   | 86  | 337   | 127   | 323   | 11   | 256   | 2  |  | 206   |
|           |                               | 2.5                  | 1  | 136  |  | 186  | 92  | 623                                  | 32   | 71   | 7  | 4667   | 4  | 8   | 70  |  | 2   | 20  | 222   | 64   | 99   | 16  |   | 86  | 289   | 83  | 319   | 8  | 244   |  |  | 180   |
|           | 50-year                       | 1.5                  | 1  | 128  |  | 186  | 92  | 653                                  | 32   | 71   | 7  | 4635   | 4  | 8   | 18  |  | 2   | 20  | 222   | 64   | 22   | 14  |   | 98  | 286   | 83  | 316   | 3  | 181   |  |  | 180   |
|           |                               | 0.0                  | 1  | 118  |  | 186  | 92  | 653                                  | 30   | 71   | 7  | 3587   | 4  | 8   | 20  |  | 2   | 20  | 222   | 64   | 22   | 16  |   | 98  | 286   | 83  | 316   | 3  | 173   |  |  | 180   |
| litions   |                               | 2.5                  |  | 116  | 4  | 156  | 72  | 009                                  | 27   | 52   | 1  | 4423   | 4  | 10  | 18  |  | 1   | 37  | 208   | 49   | 40   | 2   |   | 82  | 242   | 89  | 312   |  | 178   |  |  | 160   |
| ng Conc   | <b>25-yea</b>                 | 1.5                  |  | 110  | 4  | 158  | 72  | 009                                  | 27   | 52   | 1  | 4390   | 4  | 10  | 14  |  | 1   | 37  | 208   | 49   | 40   | 2   |   | 82  | 240   | 89  | 302   |  | 138   |  |  | 158   |
| Existi    |                               | 0.0                  |  | 6  | 4  | 158  | 72  | 009                                  | 25   | 52   | 1  | 3318   | 4  | 10  | 14  |  | 1   | 37  | 208   | 49   | 40   | 2   |   | 82  | 237   | 89  | 302   |  | 126   |  |  | 158   |
|           | _                             | 2.5                  |  | 06   | 2  | 148  | 38  | 543                                  | 24   | 46   |  | 3477   |  | 3   | 12  |  |   | 4   | 161   |  | 33   |   |   | 89  | 80  | 26  | 287   |  | 128   |  |  | 101   |
|           | 10-year                       | 1.5                  |  | 81   | 2  | 148  | 38  | 543                                  | 22   | 46   |  | 3442   |  | 3   | 4   |  |   | 4   | 161   |  | 33   |   |   | 89  | 78  | 26  | 259   |  | 81  |  |  | 101   |
|           |                               | 0.0                  |  | 72   | 2  | 148  | 38  | 543                                  | 20   | 46   |  | 2329   |  | 3   | 4   |  |   | 4   | 161   |  | 33   |   |   | 89  | 78  | 26  | 259   |  | 99  |  |  | 101   |
|           |                               | 2.5                  |  | 63   |  | 146  | 14  | 77                                   | 20   |  |  | 2680   |  | 2   |   |  |   |   | 101   |  | 8  |   |   | 20  |   | 51  | 244   |  | 06  |  |  | 16  |
|           | 2-year                        | 1.5                  |  | 22   |  | 146  | 14  | 22                                   | 18   |  |  | 2630   |  | 2   |   |  |   |   | 101   |  | 8  |   |   | 20  |   | 51  | 223   |  | 22  |  |  | 16  |
|           |                               | 0.0                  |  | 22   |  | 146  | 14  | 77                                   | 18   |  |  | 1452   |  | 2   |   |  |   |   | 101   |  | 8  |   |   | 20  |   | 51  | 223   |  | 52  |  |  | 16  |
| Scenario: | Storm Event:                  | Sea Level Rise (ft): | Sha Vasia Ln   | Shipman Dock Rd  | Shorter Ln   | Sid & Lois Ln  | Simmons Rd  | Sims Rd                              | Singleton Ellis Rd   | Solitude Dr  | Spanish Oak Ave  | St Helenville Rd   | Stanchion Ln   | Stonewood Rd  | Streamside Dr   | Sun Dog Ln   | Sundance Blvd   | Swingabout Ln   | Talbert Dr  | Taylor Dr  | The Avenue   | Thomas Atkins Rd  | Thomas Dr   | Tillman Dr  | Tom & Mike Rd   | Tom Polite Dr   | Tombee Ln   | Toomer Rd  | Tornado Aly   | Two Oaks Dr  | Victory Dr   | Vinewood Ln   |
|           | Scenario: Existing Conditions | 2-year 10-year       | Existing Conditions  2-year 10-year 25-year  0.0   1.5   2.5   0.0   1.5   2.5 | Existing Conditions  2-year 10-year 25-year  0.0   1.5   2.5   0.0   1.5   2.5 | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         2.5         3.5 | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5         9.0           10         1.5         2.5         0.0         1.5         2.5         2.5           10         2.5         2.5         2.5         2.5         2.5         2.5           10         2.5         2.5         2.5         2.5         2.5         2.5         2.5           10         2.5         2.5         2.5         4.4         4.4         4.4         4.4         4.4 | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5-year           1         1         1         1         1         1         2           1         2         2.5         0.0         1.5         2.5         0.0         1.5         2.5           1         3         4         4         4         4         4         4         4           1         1         1         1         1         1         4 | 2-year   10-year   25-year   25-year | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5-year           1         1         1         1         1         2         2           1         1         2         2         2         4         4         4           1         1         1         1         1         1         4         4         4           1         1         1         1         1         1         1         1         4         4         4           1         1         1         1         1         1         1         4< | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5-year           id         57         57         63         72         81         90         97         110         116           146         146         146         148         148         148         158         156           77         77         77         543         543         600         600         600           d         18         18         20         22         2         4         4         4           14         14         38         38         38         72         72         72           18         18         20         22         2         4         4         4           18         14         148         148         158         156         72         72           18         18         20         22         24         25         27         27 | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         0.0         1.6 | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         1.5         2.5         0.0         1.5 | 2-year         10-year         25-year           6.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         0.0         1.5         2.5         2.5         2.5         2.5         4 | Existing Conditions           2-year         10-year         25-year           0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         2.5         2.5         2.5         2.5         4 <th>Scenario:         2-year         10-year         Existing Conditions           SealLevel Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shalbaman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         146         146         146         148         148         148         148         4         4           Sind Rcis Ln         14         14         14         38         38         38         72         72         72           Sims Rd         77         77         74         543         543         540         600         600         600           Singleton Ellis Rd         18         18         20         20         22         24         45         52         52         52         52         52         52         52</th> <th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         25-year           Sha Vasia Ln         3.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Shipman Dock Rd         57         57         63         72         81         90         97         1.0         1.6           Shorter Ln         146         146         148         148         148         148         158         158         156           Simmons Rd         14         14         38         38         38         72         72         72           Simgleton Ellis Rd         18         18         20         20         22         24         4         4         4           Solitude Dr         77         77         743         543         543         600         600         600         600           Spanish Oak Ave         1452         2630         2680         2329         3442         3477         318         4390         4423           <th< th=""><th>Storm Event:         2-year         10-year         Existing Conditions           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.</th><th>Storm Event:         2-year         10-year         55-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         Shipman Dock Rd         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         2         2         4         4         4         4           Shipman Dock Rd         146         146         148         148         148         158         158         156         156           Simmons Rd         17         77         77         77         543         543         540         600         600         600         600         600         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57<th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         2.5         6.3         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         156         50         57         57         52         2         4</th><th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         2.5         0.0         1.5         2.5         2.5         3.5         3.6         3.5         3.6         3.5         3.6         3.5</th><th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         146         148         148         158         158         158         156         156         150         100         100         600</th><th>Scalario:         Existing Conditions           Scalevel Rise (ft):         2-year         10-year         25-year           Sha Vasia Ln         57         63         72         81         90         97         110         116           Sha Vasia Ln         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         158         156         157         157         157         157         157         157         157         157</th><th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.</th><th>Scenario:         2-year         10-year         Existing Conditions           Saa Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         146         146         146         148         148         148         158         158         156           Shipman Dock Rd         17         77         77         77         77         77         77         77         77         77         77         77         77         77         78         81         88         18         158         148</th><th>Stenario:         Assiming Conditions           Scalevel Rise (ft):         0.0         1.5         2.5         0.0         1.0         1.1</th><th>Scenario:         Existing Conditions           Scalevel Rise (Hz):         2-year         10-year         15-year         25-year           She Vasia Ln         57         63         72         81         90         97         110         116           She Vasia Ln         146         146         148         148         148         158         158         156           She Lois Ln         146         146         146         148         148         158         158         156           Simmono Rd         77         77         77         543         543         600         600         600         600           Simgleton Ellis Rd         18         18         20         22         2         4</th><th>Scanario:         Avear         Avear</th><th>c.d         10-year         2-year         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           c.d         57         63         72         81         90         97         110         116           14         146         146         148         148         148         158         158         156         156           d         14         14         38         38         38         72         72         72         72         24         25         27         72           d         18         14         148         148         148         158         156         150         160</th></th></th<><th>Stormer Venetic:         Appear         &lt;</th><th>Stormation:         Assisting Conditions           Storm Event:         2-year         10-year         2-year         2-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shipman Dock Rd         57         57         63         72         81         90         97         1.10         1.16           Shipman Dock Rd         57         57         63         72         81         4</th><th>StormEvent:         Acyear         Acyear         Existing Conditions           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shipman Dock Rid         57         57         63         72         81         90         97         1.10         1.16           Shipman Dock Rid         57         57         63         72         2         2         4</th><th>Scenario:         Appert         LOyear         LOyear         Loyear         Existing Conditions           Seavelaise (H):         0.0         1.5         2.5         0.0         1.5         2.5 year         25-year           Seavelaise (H):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5 year           She Vaise (H):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5 year           Shipman Dock Rd         57         57         63         72         2         2         2         4</th></th> | Scenario:         2-year         10-year         Existing Conditions           SealLevel Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shalbaman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         146         146         146         148         148         148         148         4         4           Sind Rcis Ln         14         14         14         38         38         38         72         72         72           Sims Rd         77         77         74         543         543         540         600         600         600           Singleton Ellis Rd         18         18         20         20         22         24         45         52         52         52         52         52         52         52 | Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         25-year           Sha Vasia Ln         3.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Shipman Dock Rd         57         57         63         72         81         90         97         1.0         1.6           Shorter Ln         146         146         148         148         148         148         158         158         156           Simmons Rd         14         14         38         38         38         72         72         72           Simgleton Ellis Rd         18         18         20         20         22         24         4         4         4           Solitude Dr         77         77         743         543         543         600         600         600         600           Spanish Oak Ave         1452         2630         2680         2329         3442         3477         318         4390         4423 <th< th=""><th>Storm Event:         2-year         10-year         Existing Conditions           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.</th><th>Storm Event:         2-year         10-year         55-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         Shipman Dock Rd         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         2         2         4         4         4         4           Shipman Dock Rd         146         146         148         148         148         158         158         156         156           Simmons Rd         17         77         77         77         543         543         540         600         600         600         600         600         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57<th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         2.5         6.3         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         156         50         57         57         52         2         4</th><th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         2.5         0.0         1.5         2.5         2.5         3.5         3.6         3.5         3.6         3.5         3.6         3.5</th><th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         146         148         148         158         158         158         156         156         150         100         100         600</th><th>Scalario:         Existing Conditions           Scalevel Rise (ft):         2-year         10-year         25-year           Sha Vasia Ln         57         63         72         81         90         97         110         116           Sha Vasia Ln         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         158         156         157         157         157         157         157         157         157         157</th><th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.</th><th>Scenario:         2-year         10-year         Existing Conditions           Saa Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         146         146         146         148         148         148         158         158         156           Shipman Dock Rd         17         77         77         77         77         77         77         77         77         77         77         77         77         77         78         81         88         18         158         148</th><th>Stenario:         Assiming Conditions           Scalevel Rise (ft):         0.0         1.5         2.5         0.0         1.0         1.1</th><th>Scenario:         Existing Conditions           Scalevel Rise (Hz):         2-year         10-year         15-year         25-year           She Vasia Ln         57         63         72         81         90         97         110         116           She Vasia Ln         146         146         148         148         148         158         158         156           She Lois Ln         146         146         146         148         148         158         158         156           Simmono Rd         77         77         77         543         543         600         600         600         600           Simgleton Ellis Rd         18         18         20         22         2         4</th><th>Scanario:         Avear         Avear</th><th>c.d         10-year         2-year         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           c.d         57         63         72         81         90         97         110         116           14         146         146         148         148         148         158         158         156         156           d         14         14         38         38         38         72         72         72         72         24         25         27         72           d         18         14         148         148         148         158         156         150         160</th></th></th<> <th>Stormer Venetic:         Appear         &lt;</th> <th>Stormation:         Assisting Conditions           Storm Event:         2-year         10-year         2-year         2-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shipman Dock Rd         57         57         63         72         81         90         97         1.10         1.16           Shipman Dock Rd         57         57         63         72         81         4</th> <th>StormEvent:         Acyear         Acyear         Existing Conditions           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shipman Dock Rid         57         57         63         72         81         90         97         1.10         1.16           Shipman Dock Rid         57         57         63         72         2         2         4</th> <th>Scenario:         Appert         LOyear         LOyear         Loyear         Existing Conditions           Seavelaise (H):         0.0         1.5         2.5         0.0         1.5         2.5 year         25-year           Seavelaise (H):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5 year           She Vaise (H):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5 year           Shipman Dock Rd         57         57         63         72         2         2         2         4</th> | Storm Event:         2-year         10-year         Existing Conditions           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2. | Storm Event:         2-year         10-year         55-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         Shipman Dock Rd         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         2         2         4         4         4         4           Shipman Dock Rd         146         146         148         148         148         158         158         156         156           Simmons Rd         17         77         77         77         543         543         540         600         600         600         600         600         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57         57 <th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         2.5         6.3         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         156         50         57         57         52         2         4</th> <th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         2.5         0.0         1.5         2.5         2.5         3.5         3.6         3.5         3.6         3.5         3.6         3.5</th> <th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         146         148         148         158         158         158         156         156         150         100         100         600</th> <th>Scalario:         Existing Conditions           Scalevel Rise (ft):         2-year         10-year         25-year           Sha Vasia Ln         57         63         72         81         90         97         110         116           Sha Vasia Ln         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         158         156         157         157         157         157         157         157         157         157</th> <th>Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.</th> <th>Scenario:         2-year         10-year         Existing Conditions           Saa Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         146         146         146         148         148         148         158         158         156           Shipman Dock Rd         17         77         77         77         77         77         77         77         77         77         77         77         77         77         78         81         88         18         158         148</th> <th>Stenario:         Assiming Conditions           Scalevel Rise (ft):         0.0         1.5         2.5         0.0         1.0         1.1</th> <th>Scenario:         Existing Conditions           Scalevel Rise (Hz):         2-year         10-year         15-year         25-year           She Vasia Ln         57         63         72         81         90         97         110         116           She Vasia Ln         146         146         148         148         148         158         158         156           She Lois Ln         146         146         146         148         148         158         158         156           Simmono Rd         77         77         77         543         543         600         600         600         600           Simgleton Ellis Rd         18         18         20         22         2         4</th> <th>Scanario:         Avear         Avear</th> <th>c.d         10-year         2-year         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           c.d         57         63         72         81         90         97         110         116           14         146         146         148         148         148         158         158         156         156           d         14         14         38         38         38         72         72         72         72         24         25         27         72           d         18         14         148         148         148         158         156         150         160</th> | Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           Sha Vasia Ln         2.5         6.3         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         156         50         57         57         52         2         4 | Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         2.5         2.5         0.0         1.5         2.5         2.5         3.5         3.6         3.5         3.6         3.5         3.6         3.5 | Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shorter Ln         146         146         146         148         148         158         158         158         156         156         150         100         100         600 | Scalario:         Existing Conditions           Scalevel Rise (ft):         2-year         10-year         25-year           Sha Vasia Ln         57         63         72         81         90         97         110         116           Sha Vasia Ln         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         63         72         81         90         97         110         116           Shorter Ln         146         146         148         148         148         158         158         156         157         157         157         157         157         157         157         157 | Scenario:         Existing Conditions           Storm Event:         2-year         10-year         25-year           Sha Vasia Ln         3.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1.5         0.0         1. | Scenario:         2-year         10-year         Existing Conditions           Saa Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sha Vasia Ln         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         57         57         63         72         81         90         97         110         116           Shipman Dock Rd         146         146         146         148         148         148         158         158         156           Shipman Dock Rd         17         77         77         77         77         77         77         77         77         77         77         77         77         77         78         81         88         18         158         148 | Stenario:         Assiming Conditions           Scalevel Rise (ft):         0.0         1.5         2.5         0.0         1.0         1.1 | Scenario:         Existing Conditions           Scalevel Rise (Hz):         2-year         10-year         15-year         25-year           She Vasia Ln         57         63         72         81         90         97         110         116           She Vasia Ln         146         146         148         148         148         158         158         156           She Lois Ln         146         146         146         148         148         158         158         156           Simmono Rd         77         77         77         543         543         600         600         600         600           Simgleton Ellis Rd         18         18         20         22         2         4 | Scanario:         Avear         Avear | c.d         10-year         2-year         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         25-year           c.d         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5           c.d         57         63         72         81         90         97         110         116           14         146         146         148         148         148         158         158         156         156           d         14         14         38         38         38         72         72         72         72         24         25         27         72           d         18         14         148         148         148         158         156         150         160 | Stormer Venetic:         Appear         < | Stormation:         Assisting Conditions           Storm Event:         2-year         10-year         2-year         2-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shipman Dock Rd         57         57         63         72         81         90         97         1.10         1.16           Shipman Dock Rd         57         57         63         72         81         4 | StormEvent:         Acyear         Acyear         Existing Conditions           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Sea Level Rise (ft):         0.0         1.5         2.5         0.0         1.5         2.5-year           Shipman Dock Rid         57         57         63         72         81         90         97         1.10         1.16           Shipman Dock Rid         57         57         63         72         2         2         4 | Scenario:         Appert         LOyear         LOyear         Loyear         Existing Conditions           Seavelaise (H):         0.0         1.5         2.5         0.0         1.5         2.5 year         25-year           Seavelaise (H):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5 year           She Vaise (H):         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5 year           Shipman Dock Rd         57         57         63         72         2         2         2         4 |

|             |                         |     | Summary |     | of Length of Roadway Inundated at least 6 inches (ft) | of Roadv | vay Inui | ndated a | at least (                 | 6 inches | (ft) |         |      |      |          |      |
|-------------|-------------------------|-----|---------|-----|---|----------|----------|----------|----------------------------|----------|------|---------|------|------|----------|------|
|             | Scenario:               |     |         |     |   |          |          | Existi   | <b>Existing Conditions</b> | itions   |      |         |      |      |          |      |
|             | Storm Event:            |     | 2-year  |     |   | 10-year  |          |          | 25-year                    |          |      | 50-year |      | 1    | 100-year |      |
|             | Sea Level Rise (ft):    | 0.0 | 1.5     | 2.5 | 0.0   | 1.5      | 2.5      | 0.0      | 1.5                        | 2.5      | 0.0  | 1.5     | 2.5  | 0.0  | 1.5      | 2.5  |
|             | Vineyard Point Rd       |     |         |     | 12  | 12       | 12       | 14       | 14                         | 14       | 19   | 19      | 19   | 59   | 59       | 29   |
|             | W Cedar Rd              | 5   | 2       | 22  | 14  | 12       | 79       | 31       | 31                         | 68       | 47   | 45      | 101  | 91   | 98       | 133  |
| \$          | Wallace Landing Retreat |     |         |     | 14  | 14       | 14       | 24       | 24                         | 24       | 32   | 32      | 32   | 36   | 36       | 36   |
| pe          | Well House Rd           | 303 | 303     | 304 | 283   | 537      | 537      | 854      | 854                        | 854      | 1084 | 1086    | 1086 | 1352 | 1352     | 1356 |
| Во          | Wharf Dr                |     |         |     | 0   | 0        | 0        | 5        | 8                          | 8        | 8    | 10      | 10   | 13   | 13       | 13   |
| pəu         | White Sands Cir         |     |         |     |   |          |          |          |                            |          |      |         |      |      |          |      |
| IWC         | Whitfield Ln            |     |         |     |   |          |          | 2        | 2                          | 2        | 10   | 10      | 10   | 62   | 62       | 62   |
| )- <b>λ</b> | Whitners Landing Rd     |     |         | 9   |   |          | 6        |          | 4                          | 12       |      | 4       | 21   |      | 4        | 21   |
| əte         | Willie Gardner Rd       | 14  | 16      | 19  | 30  | 30       | 30       | 30       | 30                         | 30       | 33   | 33      | 33   | 48   | 48       | 48   |
| viyo        | Willow Whisp Ln         | 8   | 8       | 8   | 10  | 10       | 10       | 10       | 10                         | 10       | 21   | 21      | 21   | 48   | 48       | 48   |
| ł           | Wina Rd                 |     |         |     |   |          |          |          |                            |          |      |         |      | 4    | 4        | 4    |
|             | Wm Milton Ln            | 62  | 62      | 62  | 150   | 150      | 150      | 164      | 164                        | 164      | 169  | 169     | 169  | 202  | 202      | 202  |
|             | Yachtsman Dr            |     |         |     |   |          |          |          |                            |          |      |         |      |      |          |      |

|     |                          |     | Summary | nary of | of Length of Roadway Inundated at least 6 inches (ft) | of Roadv | vay Inur | ndated a | at least                 | 6 inches | (ft) |          |          |      |          |      |
|-----|--------------------------|-----|---------|---------|---|----------|----------|----------|--------------------------|----------|------|----------|----------|------|----------|------|
|     | Scenario:                |     |         |         |   |          |          | Futur    | <b>Future Conditions</b> | tions    |      |          |          |      |          |      |
|     | Storm Event:             |     | 2-year  |         |   | 10-year  |          |          | 25-year                  |          |      | 50-year  |          |      | 100-year |      |
|     | Sea Level Rise (ft):     | 0.0 | 1.5     | 2.5     | 0.0   | 1.5      | 2.5      | 0.0      | 1.5                      | 2.5      | 0.0  | 1.5      | 2.5      | 0.0  | 1.5      | 2.5  |
|     | Airport Cir              |     |         |         | 2   | 2        | 2        | 65       | 65                       | 65       | 107  | 110      | 111      | 287  | 287      | 287  |
|     | Ball Park Rd             |     |         |         |   |          |          | 0        | 0                        | 0        | 3    | 3        | 2        | 29   | 59       | 432  |
|     | Bay Point Rd             | 104 | 104     | 120     | 198   | 217      | 217      | 290      | 767                      | 267      | 319  | 327      | 988      | 421  | 421      | 429  |
|     | Chowan Creek Blf         | 98  | 36      | 36      | 25  | 22       | 22       | 64       | 64                       | 64       | 64   | 64       | 64       | 72   | 72       | 72   |
|     | Club Bridge Rd           | 45  | 45      | 45      | 48  | 48       | 48       | 25       | 52                       | 52       | 69   | 69       | 69       | 351  | 351      | 351  |
|     | Cuffy Rd                 |     |         |         |   |          |          |          |                          |          |      |          |          | 20   | 26       | 86   |
|     | Distant Island Dr        |     |         |         | 1   | 1        | 1        | 8        | 8                        | 8        | 7    | 7        | 6        | 32   | 32       | 32   |
|     | Dr Martin Luther King Jr | 9   | 9       | 9       | 14  | 14       | 14       | 28       | 28                       | 28       | 50   | 20       | 20       | 102  | 102      | 102  |
| sp  | Dulamo BIf               | 25  | 28      | 09      | 175   | 175      | 178      | 243      | 253                      | 254      | 276  | 787      | 588      | 567  | 567      | 304  |
| 603 | Dulamo Rd                |     |         |         | 218   | 218      | 218      | 346      | 346                      | 346      | 438  | 438      | 438      | 230  | 290      | 590  |
| y p | Eddings Point Rd         |     |         |         |   |          |          |          |                          |          | 2    | 9        | 2        | 10   | 11       | 15   |
| əun | Ephraim Rd               |     |         |         |   |          |          |          |                          |          |      |          |          | 2    | 2        | 4    |
| ۸0- | Janette Dr               |     |         |         | 8   | 3        | 3        | 16       | 16                       | 16       | 62   | <u> </u> | <u> </u> | 156  | 156      | 156  |
| ate | Lands End Rd             |     |         |         | 02  | 70       | 104      | 445      | 442                      | 462      | 809  | 809      | 625      | 879  | 879      | 868  |
| 15  | Oaks Plantation Rd       |     |         |         |   |          |          |          |                          |          | 56   | 56       | 56       | 98   | 98       | 86   |
|     | Orange Grove Rd          |     |         |         |   |          |          | 0        | 0                        | 0        | 0    | 0        | 0        | 2    | 2        | 2    |
|     | Peaches Hill Cir         | 252 | 306     | 407     | 625   | 629      | 650      | 872      | 875                      | 879      | 954  | 926      | 964      | 1227 | 1229     | 1241 |
|     | Perry Rd                 |     |         |         |   |          |          | 2        | 2                        | 2        | 3    | 3        | 3        | 33   | 33       | 33   |
|     | Sam Doyle Dr             |     |         |         | 9   | 9        | 9        | 71       | 71                       | 71       | 154  | 154      | 154      | 355  | 357      | 357  |
|     | Saxonville Rd            | 10  | 10      | 10      | 56  | 56       | 56       | 49       | 49                       | 49       | 89   | 89       | 89       | 72   | 72       | 72   |
|     | Scott Hill Rd            |     |         |         |   |          |          |          |                          |          | 2    | 2        | 2        | 129  | 129      | 129  |
|     | Sea Island Pkwy          | 294 | 462     | 468     | 294   | 462      | 468      | 309      | 462                      | 468      | 327  | 462      | 468      | 351  | 466      | 470  |
|     | Seaside Rd               | 146 | 171     | 186     | 153   | 171      | 186      | 156      | 171                      | 186      | 156  | 174      | 188      | 162  | 190      | 207  |

|   |                          |              | 2.5                  | 66          | 2              |              | 179              | 246           | 301           | 12           | 9                | 27         | 658       | 419            | 138         | 166              | 62        | 66           | 934             | 110                  | 11             | 18         | 554           | 52        | 29        | 133            | 28         | 62             | 246              | 391              | 45            | 1                     | 165             |
|---|--------------------------|--------------|----------------------|-------------|----------------|--------------|------------------|---------------|---------------|--------------|------------------|------------|-----------|----------------|-------------|------------------|-----------|--------------|-----------------|----------------------|----------------|------------|---------------|-----------|-----------|----------------|------------|----------------|------------------|------------------|---------------|-----------------------|-----------------|
|   |                          | 100-year     | 1.5                  | 82          | 5              |              |                  | 246           | 301           | 22           |                  | 27         | 959       | 405            | 121         | 160              | 62        | 26           | 920             | 110                  | 12             | 18         | 554           | 68        | 27        | 133            | 22         |                | 244              | 391              |               | 1                     | 16              |
|   |                          |              | 0.0                  | 71          | 5              | 7            |                  | 246           | 301           | 22           |                  | 27         | 959       | 399            | 144         | 147              | 62        | 26           | 1048            | 108                  | 12             | 18         | 554           | 27        | 27        | 133            | 20         |                | 244              | 391              |               | 1                     |                 |
|   |                          |              | 2.5                  | 33          | τ              |              | 157              | 190           | 231           | 4            |                  | τ          | 490       | 235            | <i>LL</i>   | 22               | 50        | 78           | 830             | 102                  | 6              | 15         | 464           | 51        |           | 86             |            | 47             | 230              | 332              | 31            |                       | 130             |
|   |                          | 50-year      | 1.5                  | 14          | 1              |              |                  | 190           | 578           | 4            |                  | 1          | 490       | 225            | <i>LL</i>   | 54               | 20        | 28           | 824             | 102                  | 10             | 15         | 464           | 37        |           | 86             |            |                | 230              | 330              |               |                       | 4               |
| (ft)  |                          |              | 0.0                  | 14          | τ              |              |                  | 190           | 578           | 4            |                  | τ          | 487       | 209            | <i>LL</i>   | 52               | 20        | 92           | 836             | 102                  | 10             | 15         | 464           | 27        |           | 86             |            |                | 230              | 330              |               |                       |                 |
| of Length of Roadway Inundated at least 6 inches (ft) | itions                   |              | 2.5                  | 25          | 1              |              | 146              | 171           | 194           | 4            |                  |            | 406       | 159            | 23          | 44               | 45        | 89           | 746             | 95                   | 6              | 13         | 454           | 20        |           | 72             |            | 39             | 230              | 307              | 25            |                       | 107             |
| at least  | <b>Future Conditions</b> | 25-year      | 1.5                  | 7           | 1              |              | 2                | 171           | 194           | 4            |                  |            | 406       | 159            | 73          | 44               | 45        | 89           | 752             | 95                   | 6              | 13         | 454           | 37        |           | 72             |            |                | 230              | 307              |               |                       | 1               |
| ndated  | Futu                     |              | 0.0                  | 7           | 1              |              | 2                | 171           | 194           | 4            |                  |            | 406       | 159            | 73          | 44               | 45        | 89           | 774             | 95                   | 6              | 13         | 454           | 25        |           | 72             |            |                | 230              | 307              |               |                       |                 |
| way Inu   |                          |              | 2.5                  | 20          |                |              | 128              | 114           | 137           |              |                  |            | 267       | 126            | 49          | 2                | 40        | 62           | 552             | 69                   | 6              | 6          | 326           |           |           | 41             |            | 27             | 214              | 194              | 13            |                       | 83              |
| of Road   |                          | 10-year      | 1.5                  | 1           |                |              |                  | 114           | 137           |              |                  |            | 267       | 121            | 48          | 2                | 40        | 62           | 263             | 69                   | 6              | 6          | 326           |           |           | 41             |            |                | 214              | 194              |               |                       |                 |
| Length  |                          |              | 0.0                  | 1           |                |              |                  | 114           | 137           |              |                  |            | 267       | 121            | 48          | 0                | 40        | 62           | 269             | 69                   | 6              | 6          | 326           |           |           | 41             |            |                | 214              | 194              |               |                       |                 |
|   |                          |              | 2.5                  | 19          |                |              | 117              | 17            | 92            |              |                  |            | 117       | 2              |             |                  | 27        | 96           | 237             |                      | 2              | 3          | 228           |           |           |                |            | 12             | 188              | 80               | 12            |                       | 54              |
| Summary   |                          | 2-year       | 1.5                  |             |                |              |                  | 17            | 9/            |              |                  |            | 117       | 2              |             |                  | 27        | 96           | 252             |                      | 2              | 3          | 228           |           |           |                |            |                | 188              | 80               |               |                       |                 |
|   |                          |              | 0.0                  |             |                |              |                  | 17            | 92            |              |                  |            | 117       | 2              |             |                  | 27        | 96           | 230             |                      | 2              | 3          | 228           |           |           |                |            |                | 188              | 80               |               |                       |                 |
|   | Scenario:                | Storm Event: | Sea Level Rise (ft): | Airport Cir | Avenue Of Oaks | Bay Point Rd | Bermuda Bluff Rd | Bible Camp Rd | Bridgewood Rd | Bud Miley Dr | Candy Johnson Dr | Cee Cee Rd | Cusabo Rd | David Green Rd | Dockside Ln | Eddings Point Rd | Ernest Dr | Estrolita St | Fort Fremont Rd | Fredericka Taylor Ln | Fripp Point Rd | Gardner Dr | Gingerwood Rd | Glover Rd | Godley Rd | Golden Dock Rd | Halifax Dr | Harbor Oaks Ln | Harold Rivers Rd | Hunters Grove Rd | Inglewood Cir | James D Washington Rd | Jenkins Port Rd |

| 1.0. In Heat         1.0. In Heat< |          |      | Summary |     | ength o | of Length of Roadway Inundated at least 6 inches (ft) Future Conditions | vay Inur | ndated a | ated at least 6 inch<br>Future Conditions | 6 inches<br>tions | (ft) |         |      |      |          |      |
|--|----------|------|---------|-----|---------|---|----------|----------|---|-------------------|------|---------|------|------|----------|------|
| 4.6         6.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5         2.5         0.0         1.5 <th>2-ye</th> <th>2-ye</th> <th>ar</th> <th></th> <th></th> <th>10-year</th> <th></th> <th></th> <th>25-year</th> <th></th> <th></th> <th>50-year</th> <th></th> <th></th> <th>100-year</th> <th></th>   | 2-ye     | 2-ye | ar      |     |         | 10-year   |          |          | 25-year                                   |                   |      | 50-year |      |      | 100-year |      |
| 1         6         6         7         17         17         20  | 0.0      | 1    | 5       |     | 0.0     | 1.5   | 2.5      | 0.0      | 1.5                                       | 2.5               | 0.0  | 1.5     | 2.5  | 0.0  | 1.5      | 2.5  |
| 6         94         94         128         128         128         133         133         133         157         150         50         50           406         645         645         648         648         728         728         778         778         778         778         78         879         879           406         645         645         648         728         728         778         778         778         78         88         8           10         18 <t< th=""><th>1   1</th><th>1</th><th></th><th>1</th><th>9</th><th>9</th><th>9</th><th>17</th><th>17</th><th>17</th><th>20</th><th>20</th><th>20</th><th>56</th><th>76</th><th>26</th></t<>   | 1   1    | 1    |         | 1   | 9       | 9   | 9        | 17       | 17  | 17                | 20   | 20      | 20   | 56   | 76       | 26   |
| 406         645         646         648         728         778         778         778         778         778         778         78         8 <th>9 9</th> <td></td> <td>,</td> <td>9</td> <td>94</td> <td>94</td> <td>94</td> <td>128</td> <td>128</td> <td>128</td> <td>133</td> <td>133</td> <td>133</td> <td>157</td> <td>157</td> <td>157</td>   | 9 9      |      | ,       | 9   | 94      | 94  | 94       | 128      | 128                                       | 128               | 133  | 133     | 133  | 157  | 157      | 157  |
| 406         645         648         728         728         778         778         778         879         879         879           406         645         645         648         728         728         778         778         778         879         879         879           406         645         645         648         728         728         778         778         789         879         879           10         12   |          |      |         |     |         |   |          |          |   |                   |      |         |      | 20   | 20       | 50   |
| 406         645         645         648         728         728         778         778         778         778         778         778         778         778         778         778         778         778         778         779         770 <th></th> <td></td> <td>8</td> <td>8</td> <td>8</td>   |          |      |         |     |         |   |          |          |   |                   |      |         |      | 8    | 8        | 8    |
| 1         1         6         6         6         6         6         7         3         4  | 359 3(   | 3(   | 53      | 406 | 645     | 645   | 648      | 728      | 728                                       | 728               | 778  | 778     | 782  | 879  | 879      | 887  |
| 10         18         18         6         6         6         6         13         13         13         17  |          |      |         |     |         |   |          |          |   |                   |      |         |      | 7    | 2        | 2    |
| 10         18         34         34         34         36         36         36         38         38         38         38         38         38         38         38         38         36         36         36         38         38         38         38         38         38         84         85         856         902         907         907         400         400         400         400         480         480         480         507         9   |          |      |         |     |         |   |          | 9        | 9   | 9                 | 13   | 13      | 13   | 17   | 17       | 17   |
| 8         24         24         34         34         34         36         36         38         38         38         38         38         36         36         36         36         36         38         38         38         38         68 </td <th>10 1</th> <td>1</td> <td>0</td> <td>10</td> <td>18</td> <td>18</td> <td>18</td> <td>18</td> <td>18</td> <td>18</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td>  | 10 1     | 1    | 0       | 10  | 18      | 18  | 18       | 18       | 18  | 18                | 20   | 20      | 20   | 20   | 20       | 20   |
| 6         18         18         18         53         53         53         57         57         57         68         68           448         623         638         708         804         815         864         845         856         902         974         990           11         132         192         400         400         400         480         480         480         576         576         970         990           11         13         13         13         17         17         17         19         19         190         576   | 8        |      | 8       | 8   | 24      | 24  | 24       | 34       | 34  | 34                | 36   | 98      | 38   | 88   | 38       | 40   |
| 448         623         638         708         815         864         845         856         902         974         990           12         192         192         400         400         400         480         480         576         576         576           11         13         13         13         17         17         17         19         19         19         576         576         576         576         576         576         576         576         576         576         577         577         579         5   | 9        |      | 9       | 9   | 18      | 18  | 18       | 53       | 23  | 53                | 22   | 57      | 22   | 89   | 89       | 70   |
| 12         192         192         400         400         480         480         480         576         576           11         13         13         13         17         17         17         19         19         19         50         50         50         50         50         50         97         97         104         104         104         140 <th>391   4(</th> <td>4(</td> <td>00</td> <td>448</td> <td>623</td> <td>638</td> <td>708</td> <td>804</td> <td>815</td> <td>864</td> <td>845</td> <td>856</td> <td>905</td> <td>974</td> <td>066</td> <td>1028</td>   | 391   4( | 4(   | 00      | 448 | 623     | 638   | 708      | 804      | 815                                       | 864               | 845  | 856     | 905  | 974  | 066      | 1028 |
| 11         13         13         13         17         17         17         19         19         19         26         26         26           89         22         22         22         97         97         97         104         104         104         140  | 12 1     | 1    | 2       | 12  | 192     | 192   | 192      | 400      | 400                                       | 400               | 480  | 480     | 480  | 925  | 929      | 576  |
| 89         52         52         97         97         97         104         104         104         104         140         140         140           89         2         2         2         9         9         10         11         11         11         11         13         13           89         2         2         2         2         9         9         10         11         11         11         11         11         13         13         89         14         414   | 11 1     | 1    | 1       | 11  | 13      | 13  | 13       | 17       | 17  | 17                | 19   | 19      | 19   | 97   | 56       | 56   |
| 89         2         9         9         10         11         11         11         11         13           89         279         279         394         394         394         414         414         414         493         493           80         56         56         142         142         142         144         414         414         493         493           70         56         56         142         142         142         446         466         466         466         58 </td <th></th> <td></td> <td></td> <td></td> <td>52</td> <td>52</td> <td>52</td> <td>97</td> <td>26</td> <td>6</td> <td>104</td> <td>104</td> <td>104</td> <td>140</td> <td>140</td> <td>140</td>  |          |      |         |     | 52      | 52  | 52       | 97       | 26  | 6                 | 104  | 104     | 104  | 140  | 140      | 140  |
| 89         279         279         394         394         394         414         414         414         414         419         493         493           1         56         56         56         142         142         174         174         174         474         46         46         46         46         573         573           1         40         38         38         44         44         44         46         46         46         58         58         58           1         2         1         3         3         3         3         3         3         3         3  |          |      |         |     | 2       | 2   | 2        | 6        | 6   | 10                | 11   | 11      | 11   | 111  | 73       | 79   |
| 72         56         56         142         142         142         174         174         174         273         273           72         40         38         38         44         44         44         46         46         46         58         58         58           72         53         53         78         78         78         81         81         84         98         98         58           140         72         7         78         78         78         81         84         98         98         58           140         24         44         44         46         46         46         58         58         58         58         58         58         58         58         59         59         59         59         59         59         59         59         59         59         59         59         59         59         58         58         58         58         58         58         58         58         59         59         59         59         59         59         59         59         59         59         59         59         59 <t< td=""><th>58   68</th><td>58</td><td>_</td><td>68</td><td>279</td><td>279</td><td>279</td><td>394</td><td>394</td><td>394</td><td>414</td><td>414</td><td>414</td><td>493</td><td>493</td><td>493</td></t<>  | 58   68  | 58   | _       | 68  | 279     | 279   | 279      | 394      | 394                                       | 394               | 414  | 414     | 414  | 493  | 493      | 493  |
| 72         53         38         44         44         44         46         46         46         46         46         46         58         58         58           2         53         53         53         78         78         78         81         81         84         98         98         98           34         84         62         78         78         78         72         72         78         98         98         98           180         34         84         162         162         164         178         180         180         213         213         216         264         264         276         276         276         273         233         210         264         264         276         276         276         279         249         279         249         249         249         249         249         249         249         249         249         249         249         249         240         240         240         240         240         240         240         240         240         240         240         240         240         240         240         240   |          |      |         |     | 26      | 26  | 26       | 142      | 142                                       | 142               | 174  | 174     | 174  | 273  | 273      | 273  |
| 72         53         53         78         78         78         81         84         98         98         98           2   .   |          |      |         |     | 40      | 38  | 38       | 44       | 44  | 44                | 46   | 46      | 46   | 28   | 28       | 58   |
| 2         8         8         8         1         2         6         1         2         7         2         7  | 72 7.    | 7.   | 2       | 72  | 53      | 53  | 53       | 78       | 78  | 78                | 81   | 81      | 84   | 86   | 86       | 98   |
| 34         84         84         162         162         164         178         180         180         213         213         213           180         230         230         264         264         264         276         276         300         300           14         35         55         55         116         116         162         162         162         249         249           8         37         37         53         53         53         64         64         64         64         73         73           8         32         32         33         34         34         34         34         34         56         40           52         12         17         17         17         26         26         26         42         42           52         135         135         146         146         162         162         34 <td< td=""><th></th><td></td><td></td><td>2</td><td></td><td></td><td>2</td><td></td><td></td><td>2</td><td></td><td></td><td>2</td><td></td><td></td><td>2</td></td<>   |          |      |         | 2   |         |   | 2        |          |   | 2                 |      |         | 2    |      |          | 2    |
| 180         230         230         264         264         264         264         264         264         276         276         276         300         300           14         35         55         55         116         116         116         162         162         162         249         249           8         37         37         53         53         53         64         64         64         73         73         73           8         32         32         33         34         34         34         34         56         40         73         73           52         135         135         146         146         162         162         26         42         42           52         135         135         146         146         162         162         162         234         232           351         142         807         814         1131         1067         1063         1354         1245           4         1         1         1         1         1         1         1           8         1         1         1         1  | 34 3     | 3    | 4       | 34  | 84      | 84  | 84       | 162      | 162                                       | 164               | 178  | 180     | 180  | 213  | 213      | 213  |
| 14         37         55         116         116         116         162         162         162         249         249         249           8         37         37         53         53         53         64         64         64         67         73         73           8         32         32         33         34         34         34         34         56         40           52         12         17         17         17         16         162         162         42         42           52         135         135         146         146         162         162         162         234         232           351         142         514         807         814         1131         1067         1063         1354         1245           4         1         1         1         1         1         1         1           8         1         1         1         1         1         1         1         1           8         1         1         1         1         1         1         1         1         1         1         1         1   | 180 1    | 1    | 80      | 180 | 230     | 230   | 230      | 264      | 264                                       | 264               | 276  | 276     | 276  | 300  | 300      | 300  |
| 14         37         37         53         53         53         64         64         64         64         73         73         73           8         32         32         32         33         34         34         34         34         56         40           52         2         2         17         17         17         26         26         26         42         42           52         135         135         146         146         162         162         162         234         232           351         142         514         807         814         1131         1067         1063         1354         1245         1245           4   |          |      |         |     | 55      | 55  | 55       | 116      | 116                                       | 116               | 162  | 162     | 162  | 249  | 249      | 249  |
| 8         32         32         33         34         34         34         34         34         34         34         34         34         34         34         34         34         56         40         40           1         2         2         2         17         17         17         26         26         26         42         42           1         351         142         146         146         146         162         162         162         234         232           1         351         142         514         807         814         1131         1067         1063         1354         1245         1245           1         1         1         1         1         1         1         1         1           1   | 14 1     | 1    | 4       | 14  | 37      | 37  | 37       | 53       | 23  | 53                | 64   | 64      | 64   | 73   | 73       | 73   |
| 52         135         135         146         146         146         162         162         162         26         26         42         42         42           351         142         135         146         146         146         162         162         162         234         232           351         142         142         807         814         1131         1067         1063         1354         1245         1245           1         1         1         1         1         1         1         1         1         1           1         1         1         1         1         1         1         1         1         1         1  | 8        | ~    | 3       | 8   | 32      | 32  | 32       | 33       | 34  | 34                | 34   | 34      | 34   | 26   | 40       | 42   |
| 52         135         135         146         146         146         162         162         162         234         232           351         142         142         514         807         814         1131         1067         1063         1354         1244         1245           1         1         1         1         1         1         1         1         1         1           1   |          |      |         |     | 2       | 2   | 2        | 17       | 17  | 17                | 26   | 26      | 56   | 42   | 42       | 42   |
| 142         142         514         807         814         1131         1067         1063         1354         1245         1245           1  | 52 5     | 2    | 2       | 52  | 135     | 135   | 135      | 146      | 146                                       | 146               | 162  | 162     | 162  | 234  | 232      | 232  |
| 1     1     1     1       0     0     9     9  |          |      |         | 351 | 142     | 142   | 514      | 807      | 814                                       | 1131              | 1067 | 1063    | 1354 | 1244 | 1245     | 1510 |
| 6 6 0 0  |          |      |         |     |         |   |          |          |   |                   | 1    | 1       | 1    | 1    | 1        | 1    |
|  |          |      |         |     |         |   |          |          |   |                   | 0    | 0       | 0    | 6    | 6        | 6    |

| Summary of length of Roadway Inundated at least 6 lindhes (R)   Summary of Length of Roadway Inundated at least 6 lindhes (R)   Substitute Conditions   Substitute Condition |           |           | 100-year      | 1.5 2.5              | 518 518    | 182 224   | 2 2       | 138 138     | 561 561      | 121 123           | 495 502          | 196 196          | 38 38       | 318 317            | 57 57     | 4 4            | 4 4        | 38         | 30 30            | 436 458      | 162 162           | 79 99          | 996 996  | 508 513          | 6         | 256 256   | 350 350        | 8 8       | 11 12   | 130 130        | 11 10       | 196 204       | 0,0           |
|--|-----------|-----------|---------------|----------------------|------------|-----------|-----------|-------------|--------------|-------------------|------------------|------------------|-------------|--------------------|-----------|----------------|------------|------------|------------------|--------------|-------------------|----------------|----------|------------------|-----------|-----------|----------------|-----------|---------|----------------|-------------|---------------|---------------|
| Company of Length of Roadway Intundated at Least 6 inches (ft)   Future Conditions   Future Conditions   Future Conditions   Solvear   |           |           | 1(            | 0.0                  | 518        | 182       | 2         | 138         | 295          | 117               | 492              | 196              | 38          | 318                | 22        | 4              | 4          |            | 30               | 426          | 162               | 64             | 996      | 504              |           | 256       | 350            | 8         | 11      | 130            | 11          | 189           | 737           |
| Summary of Length of Road Amay Inundated at Least 6 inches (ft)   Florent  |           |           |               | 2.5                  | 495        | 171       |           | 114         | 424          | 64                | 433              | 81               | 8           | 291                | 17        | 9              | 2          | 38         | 32               | 388          | 148               | 88             | 98       | 457              | 6         | 152       | 321            | 3         | 8       | 115            | 10          | 153           | 101           |
| Summary of Length of Roadway Inundated at least 6 inches (   |           |           | 50-year       | 1.5                  | 495        | 140       |           | 114         | 424          | 62                | 430              | 81               | 8           | 294                | 17        | 9              | 2          |            | 32               | 386          | 148               | 22             | 865      | 447              |           | 152       | 321            | 3         | 8       | 115            | 10          | 148           | 106           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | s (ft)    |           |               | 0.0                  | 495        | 139       |           | 114         | 427          | 29                | 430              | 81               | 8           | 294                | 17        | 9              | 2          |            | 32               | 382          | 148               | 35             | 865      | 439              |           | 152       | 321            | 3         | 8       | 115            | 10          | 139           | 195           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | t 6 inche | litions   | ı.            | 2.5                  | 479        | 127       |           | 102         | 322          | 41                | 380              | 28               | 4           | 246                | 10        | 4              |            | 38         | 23               | 362          | 118               | 9/             | 800      | 424              | 6         | 136       | 308            | 2         | 2       | 108            | 10          | 128           | 175           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | at least  | ire Cond  | 25-yea        | 1.5                  | 479        | 103       |           | 102         | 321          | 38                | 380              | 28               | 4           | 250                | 10        | 4              |            |            | 23               | 350          | 118               | 45             | 802      | 420              |           | 136       | 308            | 2         | 2       | 108            | 10          | 120           | 170           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | ındated   | Fut       |               | 0.0                  | 479        | 103       |           | 102         | 324          | 38                | 380              | 28               | 4           | 246                | 10        | 4              |            |            | 23               | 342          | 118               | 9              | 805      | 420              |           | 136       | 308            | 2         | 2       | 108            | 10          | 102           | 168           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | lway Int  |           | ı.            | 2.5                  | 433        | 37        |           | 64          | 112          | 2                 | 285              |                  | 2           | 137                |           | 4              |            | 36         | 2                | 258          | 64                | 53             | 662      | 367              | 6         | 104       | 277            | 2         | 4       | 91             | 4           | 57            | 121           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | of Roac   |           | <b>10-yea</b> | 1.5                  | 433        | 53        |           | 64          | 112          | 2                 | 272              |                  | 2           | 137                |           | 4              |            |            | 2                | 240          | 64                | 8              | 662      | 361              |           | 104       | 277            | 2         | 4       | 91             | 4           | 31            | 120           |
| Summary       2-year       0.0     1.5     2       358     358     35       358     358     35       1     1     7       1     1     1       1     1     1       1     1     1       1     2     2       2     2     2       3     3       3     3       4     4     4       4     4     4       4     4     4       4     4     4       4     4     4   | Length    |           |               | 0.0                  | 433        | 53        |           | 64          | 112          | 2                 | 265              |                  | 2           | 137                |           | 4              |            |            | 2                | 232          | 64                | 2              | 662      | 354              |           | 104       | 277            | 2         | 4       | 91             | 4           | 12            | 122           |
| 200<br>358<br>358<br>358<br>36<br>37<br>37<br>38<br>47<br>47<br>47<br>47<br>47<br>47<br>47<br>47<br>47<br>47   |           |           |               |                      | 358        | 7         |           | 22          | 1            | 6                 | 2                |                  |             |                    |           |                |            | 36         |                  | 110          | 2                 | 10             | 473      | 216              | 6         | 80        | 238            |           |         | 3              | 4           |               | 44            |
|  | Sum       |           | 2-year        | 1.5                  | 358        | 1         |           | 22          | 1            | 6                 | 2                |                  |             |                    |           |                |            |            |                  | 100          | 2                 | 2              | 473      | 195              |           | 80        | 238            |           |         | 3              | 4           |               | 41            |
| Scenario: Storm Event: sa Level Rise (ft): The Avenue Tombee Rd Tombee Rd Toomer Rd Triangle Rd Triangle Rd Triangle Rd Triangle Rd Triangle Rd Arrangle Rd Warsaw Island Rd Warsaw Island Rd William Jenkins Rd Abbie Smith Ln Addison Dr Addison Dr Adhemar Rd Abbie Smith Ln Adhemar Rd Athemar Rd Adhemar Rd Adhemar Rd Athens Ln Archer Fields Ln Archer Fields Ln Archer Fields Ln Arbor Ln Beas Dr Beautyberry Ln Ben Mack Dr Benchmark Cir  |           |           |               | 0.0                  | 358        | 1         |           | 22          | 1            | 6                 | 2                |                  |             |                    |           |                |            |            |                  | 86           | 2                 | 1              | 473      | 188              |           | 80        | 238            |           |         | 3              | 4           |               | 7             |
|  |           | Scenario: | Storm Event:  | Sea Level Rise (ft): | The Avenue | Tombee Rd | Toomer Rd | Triangle Rd | Tropicana Rd | Vineyard Point Rd | Wards Landing Rd | Warsaw Island Rd | Wiggfall Rd | William Jenkins Rd | A Farm Rd | Abbie Smith Ln | Addison Dr | Adhemar Rd | Amazing Grace Ln | American Ave | Andrew & Julia Dr | Anna Estate Ln | Arbor Ln | Archer Fields Ln | Ashton Dr | Athens Ln | Autumn Park Ct | Beacon Dr | Beas Dr | Beautyberry Ln | Ben Mack Dr | Benchmark Cir | Bermida Downs |

|   |                   | ır           | 2.5                  | 20           | 1005         | 105           | 42              | 67       | 6       | 2           | 123       | 23         | 185           | 19         | 244         | 2             | 305       | 638            | 79            | 38          | 100       | 328           | 38             | 92          | 122           | 43               | 227             | 14                   | 1               | 35                   | 20       | 94        |
|---|-------------------|--------------|----------------------|--------------|--------------|---------------|-----------------|----------|---------|-------------|-----------|------------|---------------|------------|-------------|---------------|-----------|----------------|---------------|-------------|-----------|---------------|----------------|-------------|---------------|------------------|-----------------|----------------------|-----------------|----------------------|----------|-----------|
|   |                   | 100-year     | 1.5                  | 20           | 961          | 103           | 42              | 69       | 6       | 2           | 123       | 23         | 185           | 19         | 238         | 2             | 305       | 625            | 79            | 38          | 100       | 328           | 38             | 92          | 122           | 7                | 227             | 14                   | 1               | 32                   | 20       | 94        |
|   |                   |              | 0.0                  | 20           | 698          | 103           | 42              | 69       | 6       | 2           | 123       | 23         | 185           | 19         | 234         | 7             | 302       | 625            | 83            | 36          | 100       | 328           | 38             | 62          | 122           |                  | 227             | 14                   | 1               | 32                   | 20       | 94        |
|   |                   |              | 2.5                  | 28           | 937          | 25            | 40              | 45       | 6       | 2           | 82        | 12         | 162           | 19         | 197         |               | 267       | 515            | 75            | 2           | 98        | 324           | 32             | 22          | 118           | 42               | 192             | 12                   |                 | 33                   | 10       | 88        |
|   |                   | 50-year      | 1.5                  | 28           | 875          | 17            | 40              | 45       | 6       | 2           | 82        | 12         | 162           | 19         | 191         |               | 265       | 512            | 75            | 2           | 98        | 324           | 32             | 22          | 118           | 2                | 192             | 12                   |                 | 59                   | 10       | 88        |
| s (ft)  |                   |              | 0.0                  | 28           | 791          | 17            | 40              | 45       | 6       | 2           | 82        | 12         | 162           | 19         | 184         |               | 265       | 512            | 75            | 2           | 98        | 324           | 32             | 22          | 118           |                  | 192             | 12                   |                 | 29                   | 10       | 88        |
| 6 inches  | itions            |              | 2.5                  | 54           | 877          |               | 39              | 34       | 6       | 2           | 73        | 7          | 160           | 16         | 159         |               | 248       | 406            | 75            |             | 75        | 305           | 30             | 49          | 112           | 42               | 173             | 12                   |                 | 28                   | 9        | 98        |
| at least  | Future Conditions | 25-year      | 1.5                  | 54           | 801          |               | 39              | 34       | 6       | 7           | 23        | 7          | 160           | 16         | 150         |               | 248       | 406            | 22            |             | 22        | 808           | 90             | 49          | 112           | 5                | 173             | 12                   |                 | 21                   | 9        | 98        |
| ndated  | Futul             |              | 0.0                  | 54           | 721          |               | 68              | 34       | 6       | 7           | 23        | 2          | 160           | 16         | 146         |               | 248       | 406            | 22            |             | 52        | 808           | 30             | 67          | 112           |                  | 173             | 12                   |                 | 21                   | 9        | 98        |
| vay Inu   |                   |              | 2.5                  | 40           | 762          |               | 37              | 6        | 6       |             | 59        | 12         | 141           | 16         | 89          |               | 208       | 263            | 71            |             | 45        | 283           | 16             | 28          | 96            | 42               | 111             | 8                    |                 | 18                   |          | 9/        |
| of Road   |                   | 10-year      | 1.5                  | 40           | 673          |               | 37              | 6        | 6       |             | 59        | 12         | 141           | 16         | 81          |               | 208       | 257            | 71            |             | 45        | 283           | 16             | 28          | 96            | 5                | 111             | 8                    |                 | 12                   |          | 9/        |
| y of Length of Roadway Inundated at least 6 inches (ft) |                   |              | 0.0                  | 40           | 602          |               | 37              | 6        | 6       |             | 69        | 12         | 141           | 16         | 62          |               | 208       | 257            | 71            |             | 45        | 283           | 16             | 28          | 96            |                  | 111             | 8                    |                 | 12                   |          | 92        |
| nary of   |                   |              | 2.5                  | 22           | 613          |               | 31              |          | 6       |             | 16        | 0          | 117           | 16         | 38          |               | 14        | 78             | 29            |             | 28        | 252           | 2              | 2           | 50            | 42               | 23              | 6                    |                 |                      |          | 25        |
| Summary   |                   | 2-year       | 1.5                  | 22           | 488          |               | 31              |          | 6       |             | 16        | 0          | 117           | 16         | 31          |               | 14        | 80             | 67            |             | 28        | 252           | 5              | 2           | 50            | 5                | 23              | 6                    |                 |                      |          | 25        |
|   |                   |              | 0.0                  | 77           | 431          |               | 31              |          | 6       |             | 16        | 0          | 117           | 16         | 21          |               | 14        | 28             | 29            |             | 28        | 252           | 2              | 2           | 20            |                  | 23              | 9                    |                 |                      |          | 25        |
| .ci.acaooo  | scenario:         | Storm Event: | Sea Level Rise (ft): | Big House Rd | Bird Foot Rd | Birds Nest Ln | Blazing Star Ln | Boggy Ln | Boyd Pl | Bridgett Ln | Browns Ln | Bulrush Dr | Bumble Bee Dr | Butlers Ct | Campfire Dr | Candlewood Dr | Canopy Ln | Capt Capers Dr | Capt Rojas Rd | Caroline Rd | Carson Dr | Castleford Dr | Centennial Cir | Champion Dr | Chez Par Muse | Claires Point Rd | Clara Glover Ln | Clarence Mitchell Rd | Clear Spring Rd | Clifford & Minnie Rd | Cohen Dr | Copper Cv |

| of Length of Roadway Inundated at least 6 inches (ft)<br>Future Conditions | ar 50-year 100-year | 0.0   1.5   2.5   0.0   1.5 | 275 283 434 436 | 9            | 218 256 256  | 82 86 86         | 147 160  | 4 4         | 617 617      | 261 261           | 83           | 98          | 331      | 3809              |             |          |             |               |                 |                 |                  |                    |            | $\neg \neg$ |            |            |           |             |            |                  |             |            |
|--|---------------------|-----------------------------|-----------------|--------------|--------------|------------------|----------|-------------|--------------|-------------------|--------------|-------------|----------|-------------------|-------------|----------|-------------|---------------|-----------------|-----------------|------------------|--------------------|------------|-------------|------------|------------|-----------|-------------|------------|------------------|-------------|------------|
|  | 50-year             | 1.5 2.5                     | 283             | 9            |              |                  |          | 4           | 617          | 51                |              | -           | ,        | 38                | 1           | 134      | 80          | П             | 6               | 562             | 9                | 62                 | 6          | 363         | 503        | 74         | 20        | 190         |            | 1                | 4           | 9          |
| h of Roadway Inundated at least 6 inches (ft)<br>Future Conditions         |                     | 1.5                         | $\vdash$        | 9            | 218          | 2                |          |             |              | 2(                | 83           | 98          | 330      | 3809              |             | 134      |             | 1             | 6               | 562             | 9                | 62                 | 6          | 363         | 503        | 71         | 20        | 190         |            | 1                | 4           | 9          |
| h of Roadway Inundated at least 6 inches (ft)<br>Future Conditions         |                     |                             | 275             |              |              | 8                | 168      | 4           | 589          | 242               | 73           | 53          | 276      | 3488              | 64          | 9        | 172         |               | 2               | 375             | 7                | 20                 | ∞          | 310         | 434        | 35         | 42        | 182         | 1          | 1                | 2           | 9          |
| h of Roadway Inundated at least 6 inches (ft)<br>Future Conditions         | ar                  | 0.0                         |                 |              | 218          | 82               | 154      | 4           | 552          | 242               | 73           | 53          | 276      | 3490              | 1           | 58       | 63          |               | 2               | 375             | 7                | 20                 | ∞          | 310         | 422        | 25         | 42        | 182         |            | 1                | 2           | 9          |
| h of Roadway Inundated at least 6 inched<br>Future Conditions              | ar                  |                             | 267             |              | 218          | 82               | 147      | 4           | 258          | 242               | 73           | 53          | 276      | 3492              |             | 28       |             |               | 2               | 373             | 7                | 20                 | ∞          | 310         | 422        | 25         | 42        | 182         |            | 1                | 2           | 9          |
| h of Roadway Inundated at least<br>Future Cond                             | <u>~</u>            | 2.5                         | 174             | 9            | 202          | 81               | 166      | 2           | 494          | 239               | 89           | 49          | 221      | 3337              | 54          | 44       | 159         |               |                 | 271             | 7                | 46                 | ∞          | 245         | 372        | 12         | 42        | 164         | 1          |                  |             | 9          |
| h of Roadway Inundated<br>Futu   | 25-year             | 1.5                         | 172             |              | 202          | 81               | 154      | 2           | 459          | 238               | 89           | 49          | 221      | 3335              | 0           | 46       | 48          |               |                 | 271             | 2                | 46                 | ∞          | 245         | 368        | 12         | 42        | 164         |            |                  |             | 9          |
| h of Roadway Inu   |                     | 0.0                         | 168             |              | 202          | 81               | 147      | 2           | 469          | 238               | 89           | 47          | 221      | 3336              |             | 46       |             |               |                 | 271             | 2                | 46                 | 8          | 245         | 366        | 12         | 42        | 164         |            |                  |             | 9          |
| h of Road  |                     | 2.5                         | 75              | 9            | 130          | 71               | 160      | 1           | 186          | 700               | 22           | 56          | 166      | 2956              | 47          | 10       | 142         |               |                 | 151             |                  | 37                 | 9          | 198         | 256        | 1          | 31        | 106         | 1          |                  |             | 4          |
| اعا  | 10-year             | 1.5                         | 22              |              | 130          | 71               | 154      | 1           | 45           | 200               | 22           | 56          | 165      | 2938              |             | 10       | 7           |               |                 | 151             |                  | 37                 | 9          | 198         | 250        | 1          | 31        | 106         |            |                  |             | 4          |
| Lengt  |                     | 0.0                         | 75              |              | 130          | 71               | 147      | 1           | 77           | 200               | 75           | 26          | 164      | 2941              |             | 10       |             |               |                 | 151             |                  | 37                 | 9          | 198         | 249        | 1          | 31        | 106         |            |                  |             | 4          |
| nary of  |                     | 2.5                         | 53              | 9            | 48           | 42               | 170      | 1           | 11           | 134               | 99           | 2           | 78       | 2295              | 37          |          | 138         |               |                 | 96              |                  | 30                 | 2          | 48          | 132        |            | 56        | 62          | 1          |                  |             | 2          |
| Summary  | 2-year              | 1.5                         | 29              |              | 48           | 42               | 154      | 1           |              | 134               | 99           | 7           | 78       | 2291              |             |          | 1           |               |                 | 96              |                  | 30                 | 2          | 48          | 118        |            | 26        | 62          |            |                  |             | 2          |
|  |                     | 0.0                         | 53              |              | 48           | 42               | 147      | 1           |              | 134               | 99           | 2           | 78       | 2280              |             |          |             |               |                 | 96              |                  | 30                 | 2          | 48          | 118        |            | 26        | 62          |            |                  |             | 2          |
| Scenario:  | Storm Event:        | Sea Level Rise (ft):        | Creekhouse Ln   | Creekside Ln | Crossover Rd | Crown Heights Ln | Dataw Dr | Day Care Ln | Day Lilly Dr | Deacon Heyward Rd | Deep Hole Rd | Delmont Cir | Dietz Rd | Distant Island Dr | Dockside Ln | Donna Rd | Dr White Rd | Ed & Grant Dr | Eddie Holmes Ct | Edding White Rd | Eddings Point Rd | Edward N Warren Dr | Esquire Ln | Eternity Ln | Eva Mae Rd | Everest Rd | Family Ln | Filices Way | Finders Ln | First Venture Rd | Flaherty Rd | Fortune Rd |

|  | ır           | 2.5                  | 20      | 236               | 391      | 41         | 173      | 170        | 5         | 12        | 89         | 149              | 192        | 569       | 4           | 102     | 28               | 85        | 180          | 72       | 316             | 236        | 54      | 497               | 232         | 99        | 371        | 13       | 10             | 37     | 95               |
|--|--------------|----------------------|---------|-------------------|----------|------------|----------|------------|-----------|-----------|------------|------------------|------------|-----------|-------------|---------|------------------|-----------|--------------|----------|-----------------|------------|---------|-------------------|-------------|-----------|------------|----------|----------------|--------|------------------|
|  | 100-year     | 1.5                  | 20      | 236               | 346      | 8          | 149      | 170        | 2         | 12        | 89         | 149              | 192        | 569       | 4           | 102     | 56               | 82        | 180          | 74       | 317             | 236        | 54      | 497               | 221         | 66        | 371        | 13       | 10             | 37     | 95               |
|  |              | 0.0                  | 20      | 236               | 304      | 8          | 151      | 170        | 2         | 12        | 89         | 149              | 192        | 569       | 4           | 102     | 23               | 82        | 180          | 74       | 317             | 236        | 54      | 497               | 220         | 93        | 371        | 13       | 10             | 37     | 92               |
|  |              | 2.5                  | 46      | 217               | 211      | 58         | 105      | 142        | 2         | 10        | 40         | 121              | 169        | 526       |             | 30      | 19               | 22        | 138          | 47       | 219             | 158        | 20      | 476               | 190         | 77        | 347        | 10       | 2              | 8      | 64               |
|  | 50-vear      | 1.5                  | 46      | 217               | 202      |            | 86       | 142        | 2         | 10        | 40         | 121              | 169        | 256       |             | 30      | 19               | 75        | 138          | 49       | 219             | 158        | 20      | 476               | 186         | 77        | 347        | 10       | 2              | 8      | 64               |
| ; (ft)   |              | 0.0                  | 46      | 217               | 180      |            | 100      | 142        | 5         | 10        | 40         | 123              | 169        | 526       |             | 35      | 19               | 52        | 138          | 49       | 219             | 158        | 20      | 476               | 184         | 0/        | 347        | 10       | 5              | 8      | 64               |
| 6 inches   |              | 2.5                  | 39      | 215               | 143      | 13         | 69       | 134        | 5         | 6         | 19         | 117              | 151        | 255       |             | 9       | 18               | 68        | 93           | 37       | 142             | 126        | 44      | 344               | 176         | 45        | 331        | 10       | 5              | 4      | 54               |
| ated at least 6 inch<br>Future Conditions                                    | 25-year      | 1.5                  | 39      | 215               | 142      |            | 62       | 134        | 5         | 6         | 19         | 117              | 151        | 255       |             | 4       | 18               | 89        | 93           | 39       | 144             | 126        | 44      | 344               | 167         | 45        | 331        | 10       | 5              | 9      | 54               |
| ndated a   |              | 0.0                  | 39      | 215               | 141      |            | 62       | 134        | 5         | 6         | 19         | 117              | 151        | 255       |             | 8       | 18               | 89        | 66           | 39       | 146             | 126        | 44      | 344               | 162         | 45        | 331        | 10       | 5              | 4      | 54               |
| vay Inur   |              | 2.5                  | 22      | 197               | 6        | 9          | 45       | 112        | 5         | 4         | 7          | 100              | 121        | 256       |             |         | 16               | 37        | 25           | 21       | 32              | 99         | 36      | 122               | 110         | 26        | 325        | 6        |                |        | 20               |
| f Roadv  | 10-vear      | 1.5                  | 22      | 197               | 97       |            | 45       | 112        | 5         | 4         | 7          | 100              | 121        | 256       |             |         | 16               | 37        | 25           | 23       | 32              | 99         | 36      | 122               | 6           | 26        | 325        | 6        |                |        | 18               |
| y of Length of Roadway Inundated at least 6 inches (ft)<br>Future Conditions |              | 0.0                  | 22      | 197               | 88       |            | 45       | 112        | 5         | 4         | 7          | 100              | 121        | 256       |             |         | 16               | 37        | 25           | 23       | 32              | 99         | 36      | 122               | 94          | 24        | 325        | 6        |                |        | 18               |
| nary of I  |              | 2.5                  | 2       | 138               |          |            | 11       | 94         | 5         |           |            |                  | 15         | 231       |             |         | 19               |           | 5            | 8        |                 | 4          | 24      | 1                 | 17          |           | 287        | 5        |                |        | 1                |
| Summary  | 7-vear       | 1.5                  | 2       | 138               |          |            | 11       | 94         | 5         |           |            |                  | 15         | 231       |             |         | 19               |           | 5            | 10       |                 | 4          | 24      | 1                 |             |           | 287        | 5        |                |        | 1                |
|  |              | 0.0                  | 2       | 138               |          |            | 11       | 94         | 5         |           |            |                  | 15         | 231       |             |         | 19               |           | 5            | 10       |                 | 4          | 24      | 1                 |             |           | 287        | 5        |                |        | 1                |
| Scenario:  | Storm Event: | Sea Level Rise (ft): | Foxtrot | Frances Butler Ln | Freda Ln | Frigate Ln | Front St | Gateway Ln | Gazebo Dr | Geneva Rd | Ginsing Ln | Grace & Allen Rd | Hackles Dr | Hall Path | Hallmark Rd | Hand Dr | Harbor Breeze Dr | Harris Ln | Hawksbill Rd | Helen Rd | Henry Holmes Dr | Holland Ct | Hope Ct | Hopes Cemetery Rd | Howerton Dr | Hudson Dr | Ishmael Ln | lvory Rd | J Stevens Path | J&J Dr | James Bradley Dr |

|   |                          | <u>.</u>     | 2.5                  | 8               | 2                 | 304           | 99                | 74          | 712           | 236           | 64                     | 72               | 62      | 461              | 243        | 77              | 414      | 43          | 250        | 126             | 3        | 93          | 2       | 184     | 47         | 119       | 56          | 10                    | 292            | 50     | 143       | 3           | 123              |
|---|--------------------------|--------------|----------------------|-----------------|-------------------|---------------|-------------------|-------------|---------------|---------------|------------------------|------------------|---------|------------------|------------|-----------------|----------|-------------|------------|-----------------|----------|-------------|---------|---------|------------|-----------|-------------|-----------------------|----------------|--------|-----------|-------------|------------------|
|   |                          | 100-year     | 1.5                  | 8               | 2                 | 304           | 52                | 74          | 712           | 226           | 64                     | 72               | 62      | 380              | 243        | 45              | 409      | 43          | 244        | 4               | 3        | 93          | 2       | 184     | 47         | 119       | 56          | 10                    | 292            | 36     | 143       | 3           | 123              |
|   |                          |              | 0.0                  | 8               | 2                 | 304           | 52                | 74          | 712           | 226           | 64                     | 72               | 62      | 372              | 243        | 45              | 409      | 43          | 244        |                 | 3        | 63          | 2       | 184     | 47         | 117       | 26          | 10                    | 292            | 38     | 143       | 3           | 123              |
|   |                          | _            | 2.5                  | 8               | 2                 | 290           | 20                | 58          | 282           | 199           | 52                     | 22               | 4       | 376              | 211        | 40              | 396      | 30          | 218        | 124             |          | 27          | 2       | 134     | 45         | 26        | 20          | 2                     | 264            | 30     | 13        |             | 115              |
|   |                          | 50-year      | 1.5                  | 8               | 2                 | 290           | 36                | 58          | 282           | 195           | 52                     | 22               | 4       | 320              | 211        | 32              | 396      | 30          | 216        | 2               |          | 29          | 2       | 134     | 43         | 26        | 20          | 2                     | 264            | 36     | 19        |             | 115              |
| s (ft)  |                          |              | 0.0                  | 8               | 2                 | 290           | 36                | 58          | 282           | 195           | 52                     | 22               | 4       | 311              | 209        | 32              | 391      | 30          | 216        |                 |          | 27          | 2       | 134     | 43         | 52        | 20          | 2                     | 264            | 38     | 13        |             | 115              |
| of Length of Roadway Inundated at least 6 inches (ft) | itions                   | _            | 2.5                  | 8               | 2                 | 285           | 41                | 13          | 922           | 154           | 47                     | 38               |         | 332              | 186        | 56              | 372      | 27          | 202        | 87              |          | 25          |         | 126     | 19         | 48        | 45          |                       | 252            | 28     | 45        |             | 110              |
| at least  | <b>Future Conditions</b> | 25-year      | 1.5                  | 8               | 2                 | 285           | 32                | 13          | 256           | 141           | 47                     | 38               |         | 299              | 186        | 24              | 372      | 27          | 196        | 2               |          | 25          |         | 126     | 17         | 48        | 45          |                       | 252            | 28     | 45        |             | 110              |
| ndated  | Futu                     |              | 0.0                  | 8               | 2                 | 285           | 30                | 13          | 226           | 140           | 47                     | 38               |         | 292              | 186        | 24              | 372      | 27          | 196        |                 |          | 25          |         | 126     | 17         | 45        | 45          |                       | 252            | 32     | 45        |             | 110              |
| way Inu   |                          | L            | 2.5                  | 8               |                   | 244           | 32                | 9           | 429           | 3             | 29                     | 24               |         | 301              | 147        | 13              | 351      | 23          | 164        | 29              |          | 10          |         | 87      |            | 27        | 17          |                       | 202            | 26     | 11        |             | 92               |
| of Road   |                          | 10-year      | 1.5                  | 8               |                   | 244           | 16                | 9           | 427           | 1             | 29                     | 24               |         | 279              | 147        | 13              | 347      | 23          | 150        | 2               |          | 10          |         | 87      |            | 27        | 17          |                       | 202            | 28     | 11        |             | 92               |
| Length  |                          |              | 0.0                  | 8               |                   | 244           | 12                | 9           | 427           | 1             | 29                     | 24               |         | 275              | 147        | 13              | 344      | 23          | 150        |                 |          | 10          |         | 87      |            | 25        | 17          |                       | 202            | 28     | 11        |             | 92               |
| nary of   |                          |              | 2.5                  | 8               |                   | 190           | 23                |             | 233           |               | 6                      |                  |         | 288              | 20         |                 | 312      | 13          | 09         | 21              |          | 1           |         | 17      |            | 21        |             |                       | 140            | 18     |           |             | 63               |
| Summary   |                          | 2-year       | 1.5                  | 8               |                   | 190           | 4                 |             | 233           |               | 6                      |                  |         | 258              | 20         |                 | 309      | 13          | 46         | 2               |          | 1           |         | 17      |            | 21        |             |                       | 140            | 14     |           |             | 63               |
|   |                          |              | 0.0                  | 8               |                   | 190           | 4                 |             | 233           |               | 6                      |                  |         | 253              | 20         |                 | 300      | 13          | 46         |                 |          | 1           |         | 17      |            | 21        |             |                       | 140            | 14     |           |             | 63               |
|   | Scenario:                | Storm Event: | Sea Level Rise (ft): | Jenkins Bros Rd | Jenkins Family Dr | Jerimiah Path | Jesse & Rachel Rd | Joe Mell Dr | Joe Polite Dr | Joey Dobbs Rd | John Fripp Cemetary Rd | John Gay Farm Rd | Josi Ln | Judy Seabrook Dr | Jupiter Ln | Katie Parker Dr | Kelis Ln | Keystone Dr | Kinfolk Ln | Kingston Key Dr | Kinte Dr | Kit Rosa Rd | Kiwi Ct | Kiwi Ln | Klebold Rd | Ladson Rd | Lady Bug Ln | Lands End Woodland Rd | Laura Towne St | Lee Rd | Legree Rd | Linnaeus Ln | Little Dipper Ln |

|   |                          | _            | 2.5                  | 16             | 14        | 16      | 116         | 19                  | 47               | 2              | 194        | 483              | 1      | 104         | 291        | 193       | 66              | 141          | 74               | 171       | 118               | 160             | 46         | 99             | 116                | 4           | 72        | 88             | 47               | 282            | 85       | 105          | ; |
|---|--------------------------|--------------|----------------------|----------------|-----------|---------|-------------|---------------------|------------------|----------------|------------|------------------|--------|-------------|------------|-----------|-----------------|--------------|------------------|-----------|-------------------|-----------------|------------|----------------|--------------------|-------------|-----------|----------------|------------------|----------------|----------|--------------|---|
|   |                          | 100-year     | 1.5                  | 16             | 14        | 16      | 116         | 19                  | 47               | 2              | 194        | 489              | 1      | 29          | 291        | 193       |                 | 139          | 74               | 171       | 118               | 126             | 46         | 33             | 114                | 4           | 72        | 88             | 47               | 548            | 82       | 103          | , |
|   |                          |              | 0.0                  | 16             | 14        | 16      | 116         | 19                  | 47               | 2              | 194        | 489              | 1      | 47          | 291        | 193       |                 | 139          | 74               | 171       | 116               | 96              | 46         | 33             | 114                | 4           | 72        | 88             | 47               | 514            | 82       | 103          | إ |
|   |                          |              | 2.5                  | 14             | 14        | 10      | 66          | 19                  | 14               |                | 187        | 382              |        | 6           | 253        | 171       | 66              | 105          | 99               | 163       | 112               | 118             | 34         | 18             | 108                |             | 61        | 9/             | 43               | 546            | 81       | 26           |   |
|   |                          | 50-year      | 1.5                  | 14             | 14        | 10      | 66          | 19                  | 11               |                | 181        | 391              |        | 22          | 253        | 169       |                 | 103          | 99               | 191       | 110               | 92              | 34         | 15             | 106                |             | 61        | 8/             | 43               | 512            | 81       | 94           |   |
| (ft)  |                          |              | 0.0                  | 14             | 14        | 10      | 66          | 19                  | 11               |                | 181        | 391              |        | 41          | 253        | 169       |                 | 103          | 99               | 191       | 108               | 58              | 34         | 15             | 106                |             | 61        | 92             | 43               | 378            | 62       | 94           |   |
| y of Length of Roadway Inundated at least 6 inches (ft) | itions                   |              | 2.5                  | 12             | 10        | 9       | 08          | 19                  | 2                |                | 181        | 698              |        | 97          | 239        | 166       | 95              | 82           | 61               | 139       | 108               | 154             | 67         | 2              | 106                |             | 52        | 74             | 42               | 216            | 23       | 94           |   |
| at least  | <b>Future Conditions</b> | 25-year      | 1.5                  | 12             | 10        | 9       | 80          | 19                  | 2                |                | 187        | 228              |        | 55          | 240        | 164       |                 | 80           | 61               | 135       | 108               | 114             | 23         | 2              | 106                |             | 52        | 74             | 42               | 487            | 11       | 86           |   |
| ndated  | Futur                    |              | 0.0                  | 12             | 10        | 9       | 80          | 19                  | 7                |                | 187        | 377              |        | 41          | 240        | 164       |                 | 80           | 61               | 135       | 102               | 76              | 23         | 7              | 106                |             | 52        | 74             | 42               | 245            | 69       | 93           |   |
| vay Inul  |                          |              | 2.5                  | 10             | 10        |         | 38          | 19                  | 2                |                | 178        | 273              |        | 92          | 206        | 118       | 95              | 4            | 45               | 78        | 102               | 96              | 20         |                | 98                 |             | 50        | 64             | 37               | 474            | 61       | 89           |   |
| of Road   |                          | 10-year      | 1.5                  | 10             | 10        |         | 38          | 19                  | 2                |                | 178        | 271              |        | 48          | 206        | 118       |                 | 4            | 45               | 9/        | 98                | 60              | 20         |                | 86                 |             | 50        | 64             | 32               | 430            | 29       | 68           |   |
| Length (  |                          |              | 0.0                  | 10             | 10        |         | 38          | 19                  | 7                |                | 178        | 271              |        | 35          | 206        | 118       |                 | 4            | 45               | 92        | 90                | 42              | 70         |                | 86                 |             | 20        | 64             | 32               | 178            | 69       | 68           |   |
| nary of   |                          |              | 2.5                  | 10             | 4         |         | 24          | 6                   |                  |                | 153        | 216              |        | 65          | 179        | 81        | 85              | 2            | 34               | 37        | 56                | 34              | 13         |                | 96                 |             | 26        | 46             | 27               | 400            | 45       | 75           |   |
| Summary   |                          | 2-year       | 1.5                  | 10             | 4         |         | 24          | 9                   |                  |                | 153        | 200              |        | 18          | 179        | 81        |                 | 2            | 34               | 36        | 56                | 10              | 13         |                | 96                 |             | 26        | 46             | 22               | 346            | 45       | 29           |   |
|   |                          |              | 0.0                  | 10             | 4         |         | 24          | 6                   |                  |                | 153        | 700              |        | 6           | 179        | 81        |                 | 2            | 34               | 98        | 54                | 4               | 13         |                | 96                 |             | 26        | 46             | 22               | 106            | 45       | <b>2</b> 9   |   |
|   | Scenario:                | Storm Event: | Sea Level Rise (ft): | Little Foot Rd | Lizzie Ln | Lois Rd | Lonicera Ln | Luther & Margies Ln | Luther Warren Dr | Marsh Point Rd | Marthas Ln | Mattie Bailey Rd | Mclane | Meantime Dr | Meeting St | Melody Ln | Middle Point Rd | Millstone Dr | Monday & Jane Ln | Moorer Rd | Morgan Passage Ln | Morgan Point Rd | N Front Dr | Nathan Pope Rd | Nathan Robinson Dr | Neighbor Ln | Nelson Ln | Net Menders Ln | Net Menders Loop | Net Weavers Pl | Noble Dr | Oak Trail Ln |   |

|   |                          | _            | 2.5                  | 7         | 14          | 365             | 8                      | 115                    | 84         | 4         | 192     | 184        | 119            | 271          | 99        | 99              | 44                | 28             | 63            | 88             | 51          | 16           | 254              | 2          | 2               | 26           | 126          | 125         | 226           | 455             | 51          | 255             | 42          |
|---|--------------------------|--------------|----------------------|-----------|-------------|-----------------|------------------------|------------------------|------------|-----------|---------|------------|----------------|--------------|-----------|-----------------|-------------------|----------------|---------------|----------------|-------------|--------------|------------------|------------|-----------------|--------------|--------------|-------------|---------------|-----------------|-------------|-----------------|-------------|
|   |                          | 100-year     | 1.5                  | 7         | 14          | 365             | 2                      | 115                    | 84         | 4         | 192     | 184        | 119            | 271          | 99        | 99              | 44                | 28             | 63            | 88             | 51          | 16           | 254              | 2          | 2               | 26           | 126          | 125         | 226           | 455             | 51          | 244             | 40          |
|   |                          |              | 0.0                  | 7         | 14          | 365             | 2                      | 115                    | 84         | 4         | 192     | 184        | 119            | 271          | 99        | 99              | 44                | 28             | 63            | 88             | 51          | 16           | 254              | 2          | 2               | 26           | 126          | 125         | 226           | 455             | 51          | 244             | 40          |
|   |                          |              | 2.5                  |           | 14          | 257             | 3                      | 111                    | 23         |           | 176     | 160        | 78             | 203          | 64        | 20              | 32                | 14             | 29            | 69             | 49          | 16           | 207              |            |                 | 53           | 94           | 107         | 186           | 386             | 45          | 218             | 10          |
|   |                          | 50-year      | 1.5                  |           | 14          | 257             | 3                      | 111                    | 22         |           | 176     | 160        | 78             | 203          | 64        | 20              | 32                | 14             | 59            | 69             | 49          | 16           | 207              |            |                 | 53           | 94           | 107         | 186           | 386             | 45          | 215             | 10          |
| s (ft)  |                          |              | 0.0                  |           | 14          | 257             | 3                      | 111                    | 23         |           | 176     | 160        | 78             | 203          | 64        | 20              | 32                | 14             | 59            | 69             | 49          | 16           | 207              |            |                 | 53           | 94           | 107         | 186           | 386             | 45          | 215             | 10          |
| y of Length of Roadway Inundated at least 6 inches (ft) | itions                   |              | 2.5                  |           | 14          | 205             | 2                      | 101                    | 11         |           | 164     | 139        | 62             | 180          | 62        | 42              | 24                | 8              | 54            | 62             | 47          | 14           | 162              |            |                 | 47           | 84           | 79          | 176           | 337             | 31          | 207             | 1           |
| at least  | <b>Future Conditions</b> | 25-year      | 1.5                  |           | 14          | 205             |                        | 86                     | 11         |           | 164     | 139        | 62             | 180          | 62        | 42              | 24                | 8              | 54            | 62             | 47          | 14           | 162              |            |                 | 47           | 84           | 79          | 176           | 337             | 31          | 205             | 1           |
| ndated  | Futu                     |              | 0.0                  |           | 14          | 205             |                        | 86                     | 11         |           | 164     | 139        | 62             | 180          | 62        | 42              | 24                | 8              | 54            | 62             | 47          | 14           | 162              |            |                 | 47           | 82           | 13          | 176           | 337             | 31          | 205             | 1           |
| way Inu   |                          |              | 2.5                  | 2         | 13          | 108             |                        | 80                     |            |           | 140     | 79         | 42             | 149          | 53        | 56              | 18                | 8              | 43            | 20             | 45          | 14           | 66               |            |                 | 39           | 94           | 32          | 130           | 199             | 16          | 169             |             |
| of Road   |                          | 10-year      | 1.5                  | 2         | 13          | 107             |                        | 92                     |            |           | 140     | 79         | 42             | 149          | 53        | 56              | 18                | 8              | 43            | 20             | 45          | 14           | 66               |            |                 | 39           | 94           | 35          | 130           | 199             | 16          | 169             |             |
| Length  |                          |              | 0.0                  | 2         | 13          | 107             |                        | 74                     |            |           | 140     | 79         | 42             | 149          | 53        | 56              | 18                | 8              | 43            | 20             | 45          | 14           | 66               |            |                 | 39           | 94           | 32          | 130           | 199             | 16          | 169             |             |
| mary of   |                          |              | 2.5                  |           | 6           | 27              |                        | 61                     |            |           | 124     | 45         | 22             | 69           | 37        | 7               | 14                | 8              | 13            | 17             | 27          | 12           | 99               |            |                 | 24           | 71           | 20          | 108           | 87              | 15          | 53              |             |
| Summary   |                          | 2-year       | 1.5                  |           | 6           | 27              |                        | 09                     |            |           | 124     | 45         | 22             | 69           | 37        | 7               | 14                | 8              | 13            | 17             | 27          | 12           | 99               |            |                 | 24           | 71           | 20          | 108           | 87              | 15          | 53              |             |
|   |                          |              | 0.0                  |           | 6           | 27              |                        | 09                     |            |           | 124     | 45         | 22             | 69           | 37        | 7               | 14                | 8              | 13            | 17             | 27          | 12           | 99               |            |                 | 24           | 71           | 20          | 108           | 87              | 15          | 53              |             |
|   | Scenario:                | Storm Event: | Sea Level Rise (ft): | Obrian Rd | Old Farm Ln | Old Polowana Rd | Old Smugglers Wharf Ln | Old Smugglers Wharf Rd | Orchard Rd | Otoole Rd | Pace Ln | Paragon Rd | Paul Watson Ln | Pea Patch Rd | Peanut Ln | Pearl Harbor Dr | Penn Center Cir E | Penn Center Rd | Peppermint Dr | Pigeonberry Ln | Pinnacle Ln | Plum Tree Ln | Pope Estates Way | Porter Cir | Porter House Ln | Priscilla Ln | Privateer Dr | Progress Ln | Queenester Ln | Queens Court Dr | R Walker Ln | Racoon Ridge Dr | Ragweed Cir |

|   |                          |              | 2.5                  | 898       | 56         | 400       | 276      | 111            | 9            | 104        | 58            | 698            | 1           | 333                | 758     | 496      | 292      | 52       | 37            | 203           | 4          | 8              | 254   | 48          | 72        | 8             | 20          | 380      | 15          | 9       | 30             | 99         | m          |
|---|--------------------------|--------------|----------------------|-----------|------------|-----------|----------|----------------|--------------|------------|---------------|----------------|-------------|--------------------|---------|----------|----------|----------|---------------|---------------|------------|----------------|-------|-------------|-----------|---------------|-------------|----------|-------------|---------|----------------|------------|------------|
|   |                          | 100-year     | 1.5                  | 363       | 56         | 368       | 247      | 111            | 9            | 104        | 53            | 369            | 1           | 333                | 750     | 440      | 292      | 20       | 37            | 203           | 4          | 8              | 252   |             | 72        | 8             | 50          | 372      | 15          | 9       | 30             | 26         | ۲          |
|   |                          |              | 0.0                  | 363       | 56         | 368       | 249      | 111            | 9            | 104        | 59            | 369            | 1           | 333                | 750     | 399      | 292      | 48       | 37            | 203           | 4          | 8              | 252   |             | 72        | 8             | 20          | 372      | 15          | 9       | 30             | 26         | ٣          |
|   |                          |              | 2.5                  | 352       |            | 315       | 270      | 99             | 9            | 86         | 25            | 355            |             | 271                | 557     | 343      | 243      | 40       | 32            | 199           | 3          | 9              | 248   | 47          | 29        | 7             | 38          | 341      | 0           | 4       | 56             | 20         | ٣          |
|   |                          | 50-year      | 1.5                  | 352       |            | 309       | 243      | 26             | 2            | 86         | 25            | 355            |             | 271                | 537     | 114      | 243      | 40       | 32            | 199           | 3          | 9              | 246   |             | 59        | 7             | 38          | 337      | 0           | 4       | 56             | 20         | ٣          |
| s (ft)  |                          |              | 0.0                  | 352       |            | 309       | 243      | 99             | 2            | 86         | 25            | 355            |             | 271                | 537     | 80       | 243      | 40       | 32            | 199           | 3          | 9              | 246   |             | 29        | 7             | 38          | 337      | 0           | 4       | 56             | 20         | ٣          |
| y of Length of Roadway Inundated at least 6 inches (ft) | itions                   | ļ            | 2.5                  | 348       |            | 278       | 268      | 28             | 3            | 91         | 23            | 331            |             | 241                | 426     | 182      | 196      | 28       | 32            | 189           | 1          | 2              | 238   | 46          | 52        | 2             | 29          | 333      |             | 4       | 22             | 46         | ٣          |
| at least  | <b>Future Conditions</b> | 25-year      | 1.5                  | 348       |            | 278       | 240      | 28             | 3            | 91         | 23            | 331            |             | 239                | 403     | 40       | 196      | 28       | 32            | 189           | 1          | 2              | 236   |             | 52        | 2             | 29          | 327      |             | 4       | 22             | 46         | ٣          |
| ndated  | Futu                     |              | 0.0                  | 348       |            | 278       | 243      | 28             | 3            | 91         | 23            | 331            |             | 237                | 401     | 31       | 196      | 28       | 32            | 189           | 1          | 2              | 236   |             | 52        | 2             | 29          | 327      |             | 4       | 22             | 46         | ٣          |
| way Inu   |                          | L            | 2.5                  | 322       |            | 230       | 260      | 19             |              | 19         | 17            | 297            |             | 166                | 256     | 22       | 137      | 14       | 28            | 164           |            |                | 222   | 46          | 32        | 10            | 22          | 311      |             | 4       | 20             | 26         | 7          |
| of Road   |                          | 10-year      | 1.5                  | 322       |            | 230       | 231      | 19             |              | 79         | 17            | 297            |             | 166                | 238     | 11       | 133      | 14       | 28            | 164           |            |                | 216   |             | 32        | 10            | 22          | 303      |             | 4       | 20             | 26         | 2          |
| Length  |                          |              | 0.0                  | 322       |            | 230       | 228      | 19             |              | 62         | 17            | 297            |             | 166                | 238     | 7        | 133      | 14       | 28            | 164           |            |                | 216   |             | 32        | 10            | 22          | 303      |             | 4       | 20             | 56         | 7          |
| mary of   |                          |              | 2.5                  | 276       |            | 92        | 248      | 10             |              | 49         | 11            | 213            |             | 129                | 92      |          | 26       | 4        | 7             | 108           |            | 2              | 156   | 38          | 11        | 8             | 12          | 264      |             | 2       |                | 4          |            |
| Summary   |                          | 2-year       | 1.5                  | 276       |            | 74        | 208      | 10             |              | 49         | 11            | 213            |             | 129                | 09      |          | 26       | 4        | 7             | 108           |            | 2              | 152   |             | 11        | 8             | 12          | 256      |             | 2       |                | 4          |            |
|   |                          |              | 0.0                  | 276       |            | 99        | 199      | 10             |              | 47         | 11            | 213            |             | 129                | 09      |          | 26       | 4        | 7             | 108           |            | 2              | 120   |             | 11        | 8             | 12          | 256      |             | 2       |                | 4          |            |
|   | Scenario:                | Storm Event: | Sea Level Rise (ft): | Ranger Dr | Rattler Ln | Redell Ln | Renty Dr | Rev Heyward Rd | Rhumbline Rd | Richard Dr | Richardson Pl | Right Field Ct | Rivers Cres | Robert & Clara Trl | Rock Rd | Rocky Rd | Roman Ln | Rosa Cir | Rosa Scott Dr | Rose Petal Dr | Rosetta Dr | Roundabout Cir | Ru Ln | Saltwind Dr | Samuel Ln | Sandy View Ln | Sapphire Rd | Sarah Ln | Saturns Cir | Saul Ln | School Farm Rd | Seafoam Rd | Sehring Rd |

|   |           |              | 2.5                  | 8            | 290             | 32         | 274           | 203        | 774     | 53                 | 206         | 29              | 6182             | 22           | 20           | 30            | 2          | 95            | 88            | 304            | 69        | 195        | 62               | 9         | 93         | 372           | 163           | 329       | 42        | 495         | 30          | 2          | 230         |
|---|-----------|--------------|----------------------|--------------|-----------------|------------|---------------|------------|---------|--------------------|-------------|-----------------|------------------|--------------|--------------|---------------|------------|---------------|---------------|----------------|-----------|------------|------------------|-----------|------------|---------------|---------------|-----------|-----------|-------------|-------------|------------|-------------|
|   |           | 100-year     | 1.5                  | 8            | 284             | 32         | 274           | 203        | 774     | 51                 | 206         | 53              | 6134             | 22           | 20           | 56            | 2          | 92            | 88            | 304            | 69        | 195        | 62               | 9         | 93         | 372           | 163           | 325       | 42        | 376         | 30          | 2          | 230         |
|   |           | •            | 0.0                  | 8            | 272             | 32         | 274           | 203        | 774     | 51                 | 506         | 58              | 5152             | 22           | 20           | 30            | 2          | 62            | 88            | 304            | 69        | 195        | 62               | 9         | 93         | 370           | 163           | 325       | 42        | 339         | 28          | 2          | 230         |
|   |           |              | 2.5                  | 8            | 768             | 23         | 222           | 140        | 744     | 42                 | 117         | 27              | 2777             | 12           | 16           | 77            |            | 9             | 82            | 270            | 99        | 167        | 25               | 2         | 86         | 338           | 144           | 323       | 25        | 328         | 2           | 0          | 206         |
|   |           | 50-year      | 1.5                  | 8            | 259             | 23         | 224           | 140        | 744     | 40                 | 177         | 27              | 5745             | 12           | 16           | 24            |            | 9             | 28            | 270            | 99        | 167        | 25               | 2         | 98         | 323           | 144           | 319       | 25        | 238         | 2           | 0          | 206         |
| s (ft)  |           |              | 0.0                  | 8            | 253             | 21         | 224           | 140        | 743     | 40                 | 177         | 27              | 4704             | 12           | 16           | 24            |            | 9             | 78            | 270            | 99        | 167        | 25               | 2         | 98         | 320           | 144           | 319       | 25        | 232         | 2           | 0          | 206         |
| y of Length of Roadway Inundated at least 6 inches (ft) | SIGN      | ٠            | 2.5                  | 8            | 254             | 15         | 190           | 108        | 869     | 38                 | 169         | 25              | 5591             | 9            | 14           | 70            |            | 2             | 99            | 257            | 22        | 155        | 16               |           | 98         | 311           | 135           | 319       | 21        | 229         | 2           | 0          | 190         |
| ated at least 6 inch                                    |           | 25-year      | 1.5                  | 8            | 246             | 15         | 194           | 108        | 695     | 36                 | 169         | 25              | 5569             | 9            | 14           | 20            |            | 2             | 99            | 257            | 22        | 155        | 14               |           | 98         | 311           | 135           | 316       | 21        | 184         | 2           | 0          | 188         |
| ndated  |           |              | 0.0                  | 8            | 234             | 15         | 194           | 108        | 669     | 98                 | 169         | 52              | 4502             | 9            | 14           | 70            |            | 2             | 99            | 257            | 22        | 155        | 14               |           | 98         | 311           | 135           | 316       | 21        | 179         | 2           | 0          | 188         |
| way Inu   |           | _            | 2.5                  |              | 219             | 8          | 154           | 74         | 009     | 32                 | 135         | 17              | 5182             | 3            | 16           | 18            |            | 1             | 23            | 215            |           | 105        | 2                |           | 80         | 227           | 101           | 311       | 11        | 148         |             | 0          | 148         |
| of Road   |           | 10-year      | 1.5                  |              | 208             | 8          | 156           | 74         | 009     | 32                 | 135         | 17              | 5151             | 3            | 16           | 14            |            | 1             | 23            | 215            |           | 105        | 2                |           | 80         | 223           | 101           | 298       | 11        | 117         |             | 0          | 148         |
| Length  |           |              | 0.0                  |              | 198             | 8          | 156           | 74         | 009     | 32                 | 135         | 17              | 4038             | 3            | 16           | 14            |            | 1             | 23            | 215            |           | 105        | 2                |           | 80         | 223           | 101           | 298       | 11        | 101         |             | 0          | 148         |
| mary of   |           |              | 2.5                  |              | 163             | 2          | 146           | 30         | 388     | 22                 | 29          | 1               | 4567             |              | 9            | 10            |            |               | 39            | 131            |           | 20         |                  |           | 62         | 39            | 64            | 260       | 1         | 106         |             |            | 46          |
| Summary   |           | 2-year       | 1.5                  |              | 156             | 2          | 146           | 30         | 388     | 22                 | 29          | 1               | 4520             |              | 9            |               |            |               | 39            | 131            |           | 20         |                  |           | 62         | 34            | 64            | 244       | 1         | 28          |             |            | 46          |
|   |           |              | 0.0                  |              | 145             | 2          | 146           | 30         | 388     | 20                 | 29          | 1               | 3354             |              | 9            |               |            |               | 39            | 131            |           | 20         |                  |           | 62         | 34            | 64            | 244       | 1         | 28          |             |            | 46          |
| Scenario  | Scenario. | Storm Event: | Sea Level Rise (ft): | Sha Vasia Ln | Shipman Dock Rd | Shorter Ln | Sid & Lois Ln | Simmons Rd | Sims Rd | Singleton Ellis Rd | Solitude Dr | Spanish Oak Ave | St Helenville Rd | Stanchion Ln | Stonewood Rd | Streamside Dr | Sun Dog Ln | Sundance Blvd | Swingabout Ln | ह्य Talbert Dr | Taylor Dr | The Avenue | Thomas Atkins Rd | Thomas Dr | Tillman Dr | Tom & Mike Rd | Tom Polite Dr | Tombee Ln | Toomer Rd | Tornado Aly | Two Oaks Dr | Victory Dr | Vinewood Ln |

|              |                         |     | Sumr   | nary of | Summary of Length of Roadway Inundated at least 6 inches (ft) | of Road | vay Inu | ndated a | at least                 | 6 inches | : (ft) |         |      |      |          |      |
|--------------|-------------------------|-----|--------|---------|---|---------|---------|----------|--------------------------|----------|--------|---------|------|------|----------|------|
|              | Scenario:               |     |        |         |   |         |         | Futur    | <b>Future Conditions</b> | tions    |        |         |      |      |          |      |
|              | Storm Event:            |     | 2-year |         |   | 10-year |         |          | 25-year                  |          |        | 50-year |      | ,    | 100-year |      |
|              | Sea Level Rise (ft):    | 0.0 | 1.5    | 2.5     | 0.0   | 1.5     | 2.5     | 0.0      | 1.5                      | 2.5      | 0.0    | 1.5     | 2.5  | 0.0  | 1.5      | 2.5  |
|              | Vineyard Point Rd       | 19  | 19     | 19      | 28  | 28      | 29      | 35       | 35                       | 35       | 42     | 42      | 42   | 46   | 46       | 46   |
|              | W Cedar Rd              | 10  | 10     | 08      | 43  | 45      | 101     | 06       | 89                       | 141      | 115    | 109     | 156  | 149  | 147      | 193  |
| S            | Wallace Landing Retreat | 12  | 12     | 12      | 28  | 28      | 28      | 36       | 36                       | 36       | 40     | 40      | 40   | 9/   | 92       | 92   |
| pe           | Well House Rd           | 355 | 355    | 322     | 723   | 725     | 726     | 1062     | 1062                     | 1062     | 1188   | 1188    | 1188 | 1483 | 1485     | 1491 |
| Во           | Wharf Dr                | 3   | 2      | 2       | 10  | 13      | 13      | 14       | 14                       | 15       | 19     | 15      | 17   | 21   | 15       | 21   |
| pəu          | White Sands Cir         |     |        |         |   |         |         |          |                          |          | 2      | 2       | 2    | 18   | 18       | 18   |
| IWC          | Whitfield Ln            |     |        |         |   |         |         | 9        | 9                        | 9        | 46     | 46      | 46   | 02   | 70       | 70   |
| <b>γ</b> λ-( | Whitners Landing Rd     |     | 4      | 21      |   | 4       | 21      |          | 4                        | 23       |        | 4       | 25   |      | 9        | 27   |
| əţe          | Willie Gardner Rd       | 28  | 28     | 28      | 30  | 30      | 30      | 44       | 44                       | 44       | 48     | 49      | 48   | 29   | 29       | 29   |
| viyo         | Willow Whisp Ln         | 10  | 10     | 10      | 14  | 14      | 14      | 48       | 48                       | 48       | 68     | 68      | 89   | 72   | 72       | 72   |
| ı            | Wina Rd                 |     |        |         |   |         |         | 39       | 39                       | 39       | 79     | 79      | 79   | 131  | 131      | 131  |
|              | Wm Milton Ln            | 85  | 85     | 85      | 156   | 156     | 156     | 169      | 169                      | 169      | 178    | 178     | 178  | 249  | 249      | 249  |
|              | Yachtsman Dr            |     |        |         |   |         |         |          |                          |          |        |         |      | 7    | 2        | 4    |