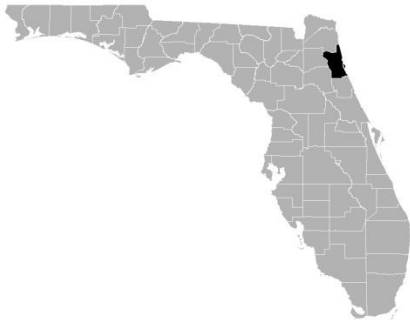


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 7



ST. JOHNS COUNTY, FLORIDA AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
ST. AUGUSTINE, CITY OF	125145
ST. AUGUSTINE BEACH, CITY OF	125146
ST. JOHNS COUNTY, UNINCORPORATED AREAS	125147



FEMA

REVISED:

DECEMBER 7, 2018

FLOOD INSURANCE STUDY NUMBER
12109CV001D

Version Number 2.3.3.2

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East Creek Main	13 P
East Creek North	14 P
Flora Branch	15 P
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Mill Creek No. 1	19 P
Mill Creek No. 2	20 P
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Tributary to Unnamed Drain No. 1	93-94 P
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Unnamed Ditch No. 3	98-99 P
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Unnamed Drain No. 3	103-104 P
Unnamed Drain No. 4	105 P
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Coastal Transect Profiles	<u>Panel</u>
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Coastal Transect Profiles	<u>Panel</u>
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Transect 17	40-41 P
Transect 18	42-44 P
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Coastal Transect Profiles	<u>Panel</u>
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Exhibits

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Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT ST. JOHNS COUNTY, FLORIDA

SECTION 1.0 – INTRODUCTION

1.1 The National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a voluntary Federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

For decades, the national response to flood disasters was generally limited to constructing flood-control works such as dams, levees, sea-walls, and the like, and providing disaster relief to flood victims. This approach did not reduce losses nor did it discourage unwise development. In some instances, it may have actually encouraged additional development. To compound the problem, the public generally could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

In the face of mounting flood losses and escalating costs of disaster relief to the general taxpayers, the U.S. Congress created the NFIP. The intent was to reduce future flood damage through community floodplain management ordinances, and provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection.

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which is a component of the Department of Homeland Security (DHS).

Participation in the NFIP is based on an agreement between local communities and the Federal Government. If a community adopts and enforces floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses. The community's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations (CFR) Part 60.3, *Criteria for Land Management and Use*.

SFHAs are delineated on the community's Flood Insurance Rate Maps (FIRMs). Under the NFIP, buildings that were built before the flood hazard was identified on the community's FIRMs are generally referred to as "Pre-FIRM" buildings. When the NFIP was created, the U.S. Congress recognized that insurance for Pre-FIRM buildings would be prohibitively expensive if the premiums were not subsidized by the Federal Government. Congress also recognized that most of these floodprone buildings were built by individuals who did not have sufficient knowledge of the flood hazard to make informed decisions. The NFIP requires that full actuarial rates reflecting the complete flood risk be charged on all buildings constructed or substantially improved on or after the effective date of the initial FIRM for the community or after December 31, 1974, whichever is

later. These buildings are generally referred to as “Post-FIRM” buildings.

1.2 Purpose of this Flood Insurance Study Report

This Flood Insurance Study (FIS) Report revises and updates information on the existence and severity of flood hazards for the study area. The studies described in this report developed flood hazard data that will be used to establish actuarial flood insurance rates and to assist communities in efforts to implement sound floodplain management.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. Contact your State NFIP Coordinator to ensure that any higher State standards are included in the community’s regulations.

1.3 Jurisdictions Included in the Flood Insurance Study Project

This FIS Report covers the entire geographic area of St. Johns County, Florida.

The jurisdictions that are included in this project area, along with the Community Identification Number (CID) for each community and the 8-digit Hydrologic Unit Codes (HUC-8) sub-basins affecting each, are shown in Table 1. The Flood Insurance Rate Map (FIRM) panel numbers that affect each community are listed. If the flood hazard data for the community is not included in this FIS Report, the location of that data is identified.

Table 1: Listing of NFIP Jurisdictions

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Marineland, Town of	120570	03080201	N/A	Flagler County FIS Report
St. Augustine, City of	125145	03080201	12109C0304J 12109C0311J 12109C0312J 12109C0314J 12109C0316J 12109C0318J 12109C0319J 12109C0377J 12109C0381J 12109C0382J	
St. Augustine Beach, City of	125146	03080201	12109C0381J 12109C0382J 12109C0384J	
St. Johns County, Unincorporated Areas	125147	03080103, 03080201	12109C0018J 12109C0019J 12109C0049J 12109C0063J 12109C0064J 12109C0082J	

Table 1: Listing of NFIP Jurisdictions, continued

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
St. Johns County, Unincorporated Areas (continued)	125147	03080103, 03080201	12109C0084J 12109C0085J 12109C0093J 12109C0095J 12109C0101J 12109C0103J 12109C0111J 12109C0113J 12109C0131K ¹ 12109C0132J 12109C0133J 12109C0134J 12109C0141K 12109C0142K 12109C0143K 12109C0144K 12109C0150K ¹ 12109C0151J 12109C0152J 12109C0153J 12109C0154J 12109C0157J 12109C0159J 12109C0160J 12109C0161K 12109C0162J 12109C0163K 12109C0164J 12109C0170J 12109C0178J 12109C0180J 12109C0185J 12109C0190J 12109C0195J 12109C0201J 12109C0202J 12109C0203J 12109C0204J 12109C0212J 12109C0214J 12109C0215J 12109C0250J ¹ 12109C0251J 12109C0252J 12109C0255J 12109C0256J 12109C0257J 12109C0258J 12109C0259J	

Table 1: Listing of NFIP Jurisdictions, continued

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
St. Johns County, Unincorporated Areas (continued)	125147	03080103, 03080201	12109C0265J 12109C0267J 12109C0270J 12109C0276J 12109C0277J 12109C0278J 12109C0279J 12109C0283J 12109C0285J 12109C0286J 12109C0287J 12109C0290J 12109C0291J 12109C0292J 12109C0293J 12109C0294J 12109C0301J 12109C0302J 12109C0303J 12109C0304J 12109C0306J 12109C0308J 12109C0311J 12109C0312J 12109C0313J 12109C0314J 12109C0316J 12109C0317J 12109C0318J 12109C0319J 12109C0350J 12109C0355J 12109C0357J 12109C0360J 12109C0365J 12109C0367J 12109C0370J 12109C0376J 12109C0377J 12109C0378J 12109C0379J 12109C0381J 12109C0382J 12109C0383J 12109C0384J 12109C0387J 12109C0389J 12109C0390J 12109C0391J	

Table 1: Listing of NFIP Jurisdictions, continued

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
St. Johns County, Unincorporated Areas (continued)	125147	03080103, 03080201	12109C0392J 12109C0393J 12109C0394J 12109C0413J 12109C0432J 12109C0434J 12109C0445J ¹ 12109C0455J 12109C0460J 12109C0465J 12109C0470J 12109C0480J 12109C0482J 12109C0484J 12109C0485J 12109C0490J 12109C0495J 12109C0501J 12109C0503J 12109C0511J 12109C0512J 12109C0535J ¹ 12109C0555J 12109C0560J	

¹ Panel Not Printed

1.4 Considerations for using this Flood Insurance Study Report

The NFIP encourages State and local governments to implement sound floodplain management programs. To assist in this endeavor, each FIS Report provides floodplain data, which may include a combination of the following: 10-, 4-, 2-, 1-, and 0.2-percent annual chance flood elevations (the 1% annual chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1% annual chance and 0.2% annual chance floodplains; and 1% annual chance floodway. This information is presented on the FIRM and/or in many components of the FIS Report, including Flood Profiles, Floodway Data tables, Summary of Non-Coastal Stillwater Elevations tables, and Coastal Transect Parameters tables (not all components may be provided for a specific FIS).

This section presents important considerations for using the information contained in this FIS Report and the FIRM, including changes in format and content. Figures 1, 2, and 3 present information that applies to using the FIRM with the FIS Report.

- Part or all of this FIS Report may be revised and republished at any time. In addition, part of this FIS Report may be revised by a Letter of Map Revision (LOMR), which does not involve republication or redistribution of the FIS Report. Refer to Section 6.5 of this FIS Report for information about the process to revise the FIS Report and/or FIRM.

It is, therefore, the responsibility of the user to consult with community officials by contacting the community repository to obtain the most current FIS Report components. Communities participating in the NFIP have established repositories of flood hazard data for floodplain management and flood insurance purposes. Community map repository addresses are provided in Table 31, “Map Repositories,” within this FIS Report.

- New FIS Reports are frequently developed for multiple communities, such as entire counties. A countywide FIS Report incorporates previous FIS Reports for individual communities and the unincorporated area of the county (if not jurisdictional) into a single document and supersedes those documents for the purposes of the NFIP.

The initial Countywide FIS Report for St. Johns County became effective on September 3, 2003. Refer to Table 28 for information about subsequent revisions to the FIRMs.

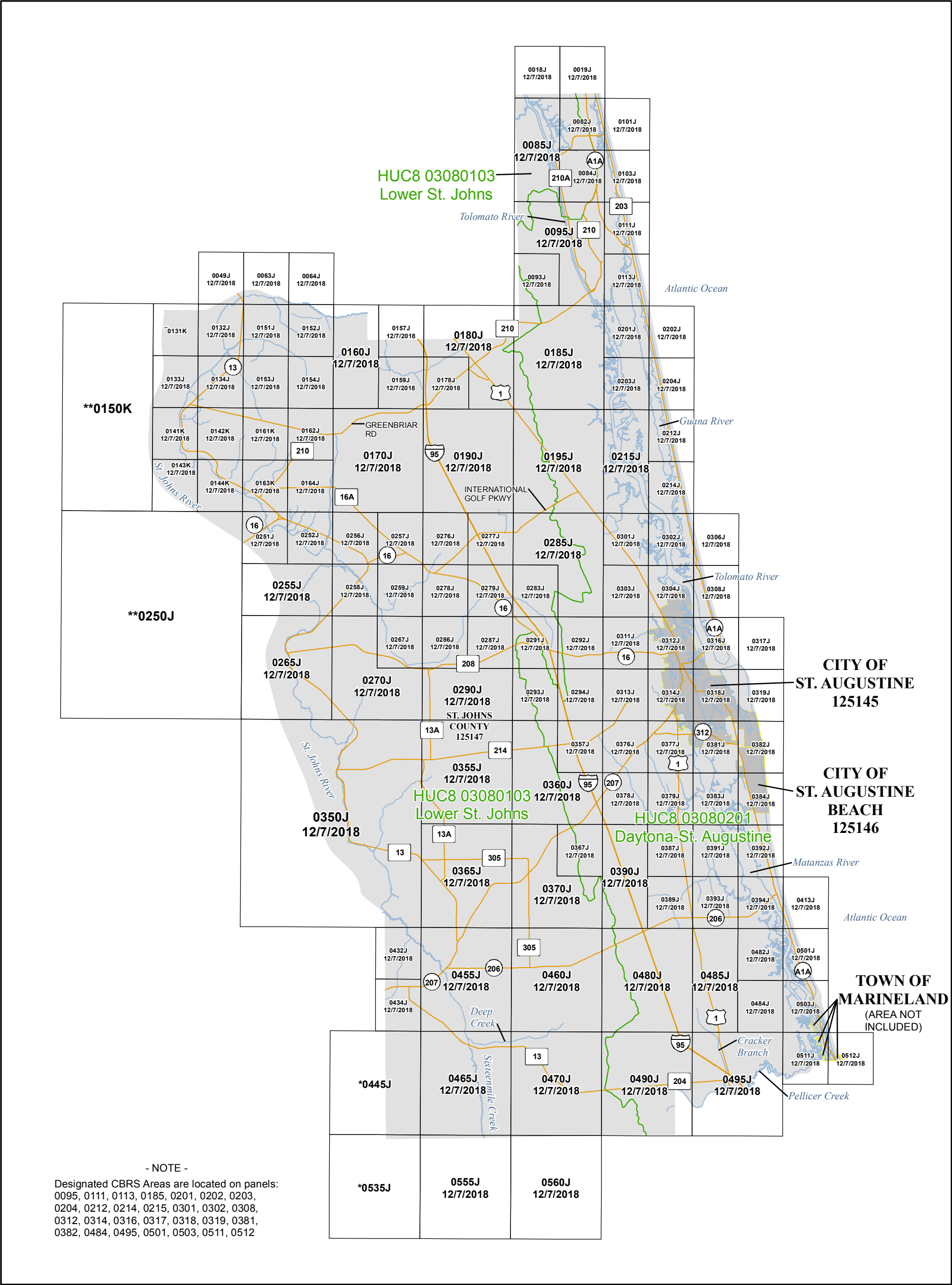
- FEMA does not impose floodplain management requirements or special insurance ratings based on Limit of Moderate Wave Action (LiMWA) delineations at this time. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. If the LiMWA is shown on the FIRM, it is being provided by FEMA as information only. For communities that do adopt Zone VE building standards in the area defined by the LiMWA, additional Community Rating System (CRS) credits are available. Refer to Section 2.5.4 for additional information about the LiMWA.

The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Visit the FEMA Web site at www.fema.gov/national-flood-insurance-program-community-rating-system or contact your appropriate FEMA Regional Office for more information about this program.

- FEMA has developed a *Guide to Flood Maps* (FEMA 258) and online tutorials to assist users in accessing the information contained on the FIRM. These include how to read panels and step-by-step instructions to obtain specific information. To obtain this guide and other assistance in using the FIRM, visit the FEMA Web site at www.fema.gov/online-tutorials.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within St. Johns County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries, flooding sources, watershed boundaries, and United States Geological Survey (USGS) Hydrologic Unit Code – 8 (HUC-8) codes.

Figure 1: FIRM Panel Index



1 inch = 20,833 feet 1:250,000

0 5,500 11,000 22,000 33,000 44,000 feet

Map Projection:
State Plane Transverse Mercator, Florida East
Zone 0901; North American Datum 1983

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
HTTP://MSC.FEMA.GOV

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS
** PANEL NOT PRINTED - OPEN WATER AREA



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP INDEX

ST. JOHNS COUNTY, FLORIDA and Incorporated Areas
PANELS PRINTED:

0018, 0019, 0049, 0063, 0064, 0082, 0084, 0085, 0093, 0095, 0101, 0103, 0111, 0113, 0132, 0133, 0134, 0141, 0142, 0142, 0144, 0151, 0152, 0153, 0154, 0157, 0159, 0160, 0161, 0162, 0163, 0164, 0170, 0178, 0180, 0185, 0190, 0195, 0201, 0202, 0203, 0204, 0212, 0214, 0215, 0251, 0252, 0255, 0256, 0257, 0258, 0259, 0265, 0267, 0270, 0276, 0277, 0278, 0279, 0283, 0285, 0286, 0291, 0292, 0293, 0294, 0301, 0302, 0303, 0304, 0306, 0308, 0311, 0312, 0313, 0314, 0316, 0317, 0318, 0319, 0350, 0355, 0357, 0360, 0365, 0367, 0370, 0376, 0377, 0378, 0379, 0381, 0382, 0383, 0384, 0387, 0389, 0390, 0391, 0392, 0393, 0394, 0413, 0432, 0434, 0455, 0460, 0465, 0470, 0480, 0482, 0484, 0485, 0490, 0495, 0501, 0503, 0511, 0512, 0555, 0560

FEMA
U.S. DEPARTMENT OF
HOMELAND SECURITY

MAP NUMBER
12109CIND0D
MAP REVISED
DECEMBER 7, 2018

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

Figure 2: FIRM Notes to Users

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to Table 28 in this FIS Report.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.

BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

Coastal Base Flood Elevations shown on the map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD88). Coastal flood elevations are also provided in the Coastal Transect Parameters table in the FIS Report for this jurisdiction. Elevations shown in the Coastal Transect Parameters table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on the FIRM.

FLOODWAY INFORMATION: Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the FIS Report for this jurisdiction.

Figure 2. FIRM Notes to Users

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.3 "Non-Levee Flood Protection Measures" of this FIS Report for information on flood control structures for this jurisdiction.

PROJECTION INFORMATION: The projection used in the preparation of the map was State Plane Transverse Mercator, Florida East Zone. The horizontal datum was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

*NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242*

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 31 of this FIS Report.

BASE MAP INFORMATION: Base map information shown on the FIRM was provided in digital format by St. Johns County GIS Department, dated 2009, 2013, and 2014; the U.S. Census Bureau, dated 2014; the U.S. Fish and Wildlife Service, dated 2015; the U.S. Department of Agriculture Farm Service Agency, dated 2013; and FEMA, dated 2011. For information about base maps, refer to Section 6.2 "Base Map" in this FIS Report.

Corporate limits shown on the map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

NOTES FOR FIRM INDEX

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within St. Johns County, Florida, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 28 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

Figure 2. FIRM Notes to Users

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

This Notes to Users section was created specifically for St. Johns County, Florida, effective December 7, 2018.

COASTAL BARRIER RESOURCES SYSTEM (CBRS): This map includes approximate boundaries of the CBRS for informational purposes only. Flood insurance is not available within CBRS areas for structures that are newly built or substantially improved on or after the date(s) indicated on the map. For more information see www.fws.gov/cbra/, the FIS Report, or call the U.S. Fish and Wildlife Service Customer Service Center at 1-800-344-WILD.

LIMIT OF MODERATE WAVE ACTION: Zone AE has been divided by a Limit of Moderate Wave Action (LiMWA). The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between Zone VE and the LiMWA (or between the shoreline and the LiMWA for areas where Zone VE is not identified) will be similar to, but less severe than, those in Zone VE.

FLOOD RISK REPORT: A Flood Risk Report (FRR) may be available for many of the flooding sources and communities referenced in this FIS Report. The FRR is provided to increase public awareness of flood risk by helping communities identify the areas within their jurisdictions that have the greatest risks. Although non-regulatory, the information provided within the FRR can assist communities in assessing and evaluating mitigation opportunities to reduce these risks. It can also be used by communities developing or updating flood risk mitigation plans. These plans allow communities to identify and evaluate opportunities to reduce potential loss of life and property. However, the FRR is not intended to be the final authoritative source of all flood risk data for a project area; rather, it should be used with other data sources to paint a comprehensive picture of flood risk.

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in St. Johns County.

Figure 3: Map Legend for FIRM

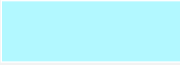
SPECIAL FLOOD HAZARD AREAS: <i>The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.</i>	
	Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)
Zone A	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
Zone AE	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.
Zone AH	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
Zone AO	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
Zone AR	The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
Zone A99	The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
Zone V	The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
Zone VE	Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.

Figure 3: Map Legend for FIRM

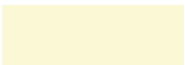
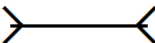
	Regulatory Floodway determined in Zone AE.
OTHER AREAS OF FLOOD HAZARD	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone.
	Area with Reduced Flood Risk due to Levee: Areas where an accredited levee, dike, or other flood control structure has reduced the flood risk from the 1% annual chance flood.
OTHER AREAS	
	Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.
	Unshaded Zone X: Areas of minimal flood hazard.
FLOOD HAZARD AND OTHER BOUNDARY LINES	
 (ortho)  (vector)	Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)
	Limit of Study
	Jurisdiction Boundary
	Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet
GENERAL STRUCTURES	
 <i>Aqueduct</i> <i>Channel</i> <i>Culvert</i> <i>Storm Sewer</i>	Channel, Culvert, Aqueduct, or Storm Sewer
 <i>Dam</i> <i>Jetty</i> <i>Weir</i>	Dam, Jetty, Weir
	Levee, Dike, or Floodwall
 <i>Bridge</i>	Bridge

Figure 3: Map Legend for FIRM

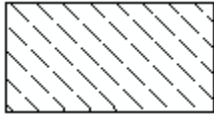
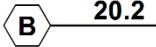
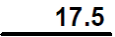
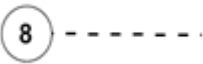
COASTAL BARRIER RESOURCES SYSTEM (CBRS) AND OTHERWISE PROTECTED AREAS (OPA): <i>CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas. See Notes to Users for important information.</i>	
 CBRS AREA 09/30/2009	Coastal Barrier Resources System Area: Labels are shown to clarify where this area shares a boundary with an incorporated area or overlaps with the floodway.
 OTHERWISE PROTECTED AREA 09/30/2009	Otherwise Protected Area
REFERENCE MARKERS	
 22.0	River mile Markers
 130A	Node – Flow accumulation point or hydraulic connection
CROSS SECTION & TRANSECT INFORMATION	
 20.2	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
 21.1	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
 17.5	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
 8	Coastal Transect
 	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation. Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
 513	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth

Figure 3: Map Legend for FIRM

ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES	
 <i>Missouri Creek</i>	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway
	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
⁴² 76 ^{000m} E	Horizontal Reference Grid Coordinates (UTM)
365000 FT	Horizontal Reference Grid Coordinates (State Plane)
80° 16' 52.5"	Corner Coordinates (Latitude, Longitude)

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1% annual chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2% annual chance (500-year) flood is employed to indicate additional areas of flood hazard in the community.

Each flooding source included in the project scope has been studied and mapped using professional engineering and mapping methodologies that were agreed upon by FEMA and St. Johns County as appropriate to the risk level. Flood risk is evaluated based on factors such as known flood hazards and projected impact on the built environment. Engineering analyses were performed for each studied flooding source to calculate its 1% annual chance flood elevations; elevations corresponding to other floods (e.g. 10-, 4-, 2-, 0.2-percent annual chance, etc.) may have also been computed for certain flooding sources. Engineering models and methods are described in detail in Section 5.0 of this FIS Report. The modeled elevations at cross sections were used to delineate the floodplain boundaries on the FIRM; between cross sections, the boundaries were interpolated using elevation data from various sources. More information on specific mapping methods is provided in Section 6.0 of this FIS Report.

Depending on the accuracy of available topographic data (Table 23), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1% and 0.2% annual chance floodplain boundaries, regulatory water surface elevations (BFEs), and/or a regulatory floodway. Similarly, other flooding sources may be mapped to show only the 1% annual chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1% and 0.2% annual chance floodplain boundaries are close together, only the 1% annual chance floodplain boundary is shown on the FIRM. Figure 3, “Map Legend for FIRM”, describes the flood zones that are used on the FIRMs to account for the varying levels of flood risk that exist along flooding sources within the project area. Table 2 and Table 3 indicate the flood zone designations for each flooding source and each community within St. Johns County, Florida, respectively.

Table 2, “Flooding Sources Included in this FIS Report,” lists each flooding source, including its study limits, affected communities, mapped zone on the FIRM, and the completion date of its engineering analysis from which the flood elevations on the FIRM and in the FIS Report were derived. Descriptions and dates for the latest hydrologic and hydraulic analyses of the flooding sources are shown in Table 13. Floodplain boundaries for these flooding sources are shown on the FIRM (published separately) using the symbology described in Figure 3. On the map, the 1% annual chance floodplain corresponds to the SFHAs. The 0.2% annual chance floodplain shows areas that, although out of the regulatory floodplain, are still subject to flood hazards.

Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data. The procedures to remove these areas from the SFHA are described in Section 6.5 of this FIS Report.

Table 2: Flooding Sources Included in this FIS Report

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Atlantic Ocean	St. Augustine, City of; St. Augustine Beach, City of; Marineland, City of; St. Johns County, Unincorporated Areas	Entire Coastline	Entire Coastline	03080201	42.3		N	VE	2015
Big Lige Branch	St. Johns County, Unincorporated Areas	Confluence with Cunningham Creek	Approximately 450 feet upstream of Tranquil Drive	03080103	0.8		Y	AE	*
Big Lige Branch	St. Johns County, Unincorporated Areas	Approximately 450 feet upstream of Tranquil Drive	Approximately 1,800 feet upstream of Tranquil Drive	03080103	0.3		N	A	*
Cabbage Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 3,290 feet upstream of Harbor View Drive	03080103	3.2		N	AE	2015
Capo Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 2 miles upstream of confluence with Tolomato River	03080201	2.0		N	AE	2015
Casa Cola Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 30 feet upstream of Unnamed Tributary	03080201	2.8		N	AE, VE	2015
Cracker Branch	St. Johns County, Unincorporated Areas	Confluence with Pellicer Creek	At Interstate 95	03080201	1.9		N	AE	*
Cracker Branch	St. Johns County, Unincorporated Areas	At Interstate 95	Approximately 5.3 miles upstream of Interstate 95	03080201	5.3		N	AE	2015
Cracker Branch Tributary 1	St. Johns County, Unincorporated Areas	Confluence with Cracker Branch	At unnamed road	03080201	0.7		N	AE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Cracker Branch Tributary 2	St. Johns County, Unincorporated Areas	Confluence with Cracker Branch	Approximately 2,460 feet upstream of confluence with Cracker Branch	03080201	0.5		N	AE	2015
Cunningham Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 1,550 feet upstream of State Road 13N	03080103	0.9		Y	AE	2015
Cunningham Creek	St. Johns County, Unincorporated Areas	Approximately 1,550 feet upstream of State Road 13N	Approximately 230 feet upstream of Julington Lakes Drive	03080103	3.6		Y	AE	1999
Cunningham Creek Tributary 1	St. Johns County, Unincorporated Areas	Confluence with Cunningham Creek	Approximately 0.8 mile upstream of confluence with Cunningham Creek Tributary 2	03080103	1.6		Y	AE	*
Cunningham Creek Tributary 2	St. Johns County, Unincorporated Areas	Confluence with Cunningham Creek Tributary 1	Approximately 0.4 mile upstream of confluence with Cunningham Creek Tributary 1	03080103	0.4		N	AE	*
Dave Branch	St. Johns County, Unincorporated Areas	County boundary	Approximately 5,000 feet upstream of county boundary	03080201	0.9		N	AE	2015
Dave Branch Tributary 1	St. Johns County, Unincorporated Areas	Confluence with Dave Branch	Approximately 1,500 feet upstream of confluence with Dave Branch	03080201	0.3		N	AE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Dave Branch Tributary 2	St. Johns County, Unincorporated Areas	Confluence with Dave Branch	Approximately 1,535 feet upstream of confluence with Dave Branch	03080201	0.3		N	AE	2015
Deep Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 3,380 feet upstream of State Road 207	03080103	4.8		Y	AE	2015
Deep Creek	St. Johns County, Unincorporated Areas	Approximately 3,380 feet upstream of State Road 207	Approximately 1,940 feet upstream of confluence of Sixteenmile Creek	03080103	2.8		Y	AE	*
Deep Creek	St. Johns County, Unincorporated Areas	Approximately 1,940 feet upstream of confluence of Sixteenmile Creek	To approximately 4.6 miles upstream of confluence of Sixteenmile Creek	03080103	4.3		N	A	*
Durbin Creek	St. Johns County, Unincorporated Areas	County boundary	Approximately 1.2 miles upstream of the county boundary	03080103	1.2		N	AE	2015
Durbin Creek	St. Johns County, Unincorporated Areas	Approximately 1.2 miles upstream of the county boundary	Approximately 100 feet upstream of U.S. Route 1	03080103	8.2		Y	AE	1999
Durbin Creek	St. Johns County, Unincorporated Areas	Approximately 100 feet upstream of US Route 1	Approximately 780 feet upstream of US Route 1	03080103	0.1		N	A	*
Durbin Creek Tributary	St. Johns County, Unincorporated Areas	Confluence with Durbin Creek	At Race Track Road	03080103	0.7		Y	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Durbin Creek Tributary No. 1	St. Johns County, Unincorporated Areas	Confluence with Durbin Creek	Approximately 1.4 miles upstream of confluence with Durbin Creek	03080103	1.4		N	AE	*
East Creek	St. Augustine Beach, City of; St. Johns County, Unincorporated Areas	Confluence with Matanzas River	Approximately 3,670 feet upstream of Tides End Drive	03080201	3.2		N	AE, VE	2015
East Creek Main	St. Johns County, Unincorporated Areas	Confluence with East Creek North	Approximately 2,000 feet upstream of the confluence with East Creek North	03080201	0.4		N	AE	*
East Creek North	St. Johns County, Unincorporated Areas	Approximately 470 feet downstream of Del Webb Parkway	Approximately 1.2 miles upstream of Del Webb Parkway	03080201	1.4		N	A, AE	*
Fish Drain	St. Johns County, Unincorporated Areas	Confluence with Stevens Branch	Approximately 6.6 miles upstream of confluence with Stevens Branch	03080201	6.6		N	AE	2015
Flora Branch	St. Johns County, Unincorporated Areas	Confluence with Durbin Creek	At Race Track Road	03080103	1.0		N	AE	2015
Flora Branch	St. Johns County, Unincorporated Areas	At Race Track Road	Approximately 3,230 feet upstream of Flora Branch Boulevard	03080103	1.2		Y	AE	1999
Guana River	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 10 miles upstream of Guana River Road	03080201	13.2	--	N	AE, AH	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
HYDRY02B1	St. Johns County, Unincorporated Areas	North Lower	20 Mile Road	03080201	--	0.005	N	AE	*
Indian Creek	St. Augustine, City of; St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 3,250 feet upstream of confluence with Tolomato River	03080201	0.6	--	N	VE	2015
ISOWET-01	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.004	N	AE	*
ISOWET-02	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.008	N	AE	*
Julington Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Confluence of Durbin Creek	03080103	3.6	--	N	AE	2015
Kendall Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	At State Route 13	03080103	0.2	--	Y	AE	2015
Kendall Creek	St. Johns County, Unincorporated Areas	At State Route 13	Approximately 1,780 feet upstream of Longleaf Pine Parkway	03080103	1.6	--	Y	AE	1999
Kendall Creek	St. Johns County, Unincorporated Areas	Approximately 1,780 feet upstream of Longleaf Pine Parkway	Approximately 1.6 miles upstream of Longleaf Pine Parkway	03080103	1.2	--	N	A	*
Kentucky Branch	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 2,245 feet upstream of State Road 13	03080103	0.5	--	Y	AE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Kentucky Branch	St. Johns County, Unincorporated Areas	Approximately 2,245 feet upstream of State Road 13	Approximately 4,300 feet upstream of confluence of Kentucky Branch Tributary	03080103	0.8	--	Y	AE	1999
Kentucky Branch	St. Johns County, Unincorporated Areas	Approximately 4,300 feet upstream of confluence of Kentucky Branch Tributary	Approximately 4,800 feet upstream of confluence of Kentucky Branch Tributary	03080103	0.1	--	N	A	*
Kentucky Branch Tributary	St. Johns County, Unincorporated Areas	Confluence with Kentucky Branch	Approximately 118 feet upstream of Greenbriar Road	03080103	0.7	--	Y	AE	1999
Kentucky Branch Tributary	St. Johns County, Unincorporated Areas	Approximately 118 feet upstream of Greenbriar Road	Approximately 344 feet upstream of Greenbriar Road	03080103	0.04	--	N	A	*
Lake Vedra	St. Johns County, Unincorporated Areas	At Pointe Verde Boulevard	Approximately 4,060 feet upstream of Seawalk Drive	03080201	--	0.18	N	AH	2015
Marshall Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 1.3 miles upstream of confluence with Tolomato River	03080201	1.3	--	N	AE	2015
Matanzas Inlet	St. Johns County, Unincorporated Areas	Confluence with Atlantic Ocean	Confluence of Matanzas River	03080201	0.2	--	N	VE	2015
Matanzas River	St. Augustine, City of; St. Johns County, Unincorporated Areas	Confluence with Tolomato River and Salt Run	County boundary	03080201	18.7	--	N	AE, VE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
McCullough Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 1.8 miles upstream of County Road 13	03080103	2.1	--	N	AE	2015
McCullough Creek	St. Johns County, Unincorporated Areas	Approximately 1.8 miles upstream of County Road 13	Approximately 1.4 miles upstream of County Road 13A	03080103	2.6	--	N	A	*
Mill Creek No. 1	St. Johns County, Unincorporated Areas	Mouth at St. Johns River	Approximately 2,700 feet upstream of mouth at St. Johns River	03080103	0.5	--	Y	AE	2015
Mill Creek No. 1	St. Johns County, Unincorporated Areas	Approximately 2,700 feet upstream of mouth at St. Johns River	At Greenbriar Road	03080103	2.8	--	Y	AE	*
Mill Creek No. 2	St. Johns County, Unincorporated Areas	Confluence with Sixmile Creek	Approximately 4,400 feet upstream of State Route 16	03080103	3.8	--	Y	AE	1999
Mill Creek No. 2	St. Johns County, Unincorporated Areas	Approximately 4,400 feet upstream of State Route 16	Approximately 1 mile upstream of State Route 16	03080103	0.1	--	N	A	*
Moses Creek	St. Johns County, Unincorporated Areas	At mouth	Approximately 530 feet upstream of confluence of Moses Creek Tributary No. 3	03080201	4.9	--	Y	AE	2015
Moses Creek	St. Johns County, Unincorporated Areas	Approximately 530 feet upstream of confluence of Moses Creek Tributary No. 3	Approximately 90 feet upstream of State Route 206	03080201	3.1	--	Y	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Moses Creek	St. Johns County, Unincorporated Areas	Approximately 90 feet upstream of State Route 206	Approximately 590 feet upstream of State Route 206	03080201	0.1	--	N	A	*
Moses Creek Tributary No. 1	St. Johns County, Unincorporated Areas	Confluence with Moses Creek	Approximately 30 feet upstream of State Route 206	03080201	1.0	--	Y	AE	*
Moses Creek Tributary No. 2	St. Johns County, Unincorporated Areas	Confluence with Moses Creek	Approximately 2,500 feet upstream of Shores Boulevard	03080201	1.1	--	Y	AE	*
Moses Creek Tributary No. 3	St. Johns County, Unincorporated Areas	Confluence with Moses Creek	Approximately 2,400 feet upstream of confluence with Moses Creek	03080201	0.4	--	Y	AE	*
Moses Creek Tributary No. 3	St. Johns County, Unincorporated Areas	Approximately 2,400 feet upstream of confluence with Moses Creek	Approximately 2,720 feet upstream of confluence with Moses Creek	03080201	0.06	--	N	A	*
Moses Creek Tributary No. 4	St. Johns County, Unincorporated Areas	Confluence with Moses Creek	Approximately 3,500 feet upstream of confluence with Moses Creek	03080201	0.6	--	Y	AE	*
Moses Creek Tributary No. 4	St. Johns County, Unincorporated Areas	Approximately 3,500 feet upstream of confluence with Moses Creek	Approximately 4,800 feet upstream of confluence with Moses Creek	03080201	0.2	--	N	A	*
Moses Creek Tributary No. 5	St. Johns County, Unincorporated Areas	Confluence with Moses Creek	Approximately 4,050 feet upstream of confluence with Moses Creek	03080201	0.7	--	Y	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Moses Creek Tributary No. 5	St. Johns County, Unincorporated Areas	Approximately 4,050 feet upstream of confluence with Moses Creek	Approximately 1 mile upstream of confluence with Moses Creek	03080201	0.3	--	N	A	*
Moses Creek Tributary No. 6	St. Johns County, Unincorporated Areas	Confluence with Moses Creek	Approximately 3,650 feet upstream of confluence with Moses Creek	03080201	0.7	--	Y	AE	*
Moses Creek Tributary No. 6	St. Johns County, Unincorporated Areas	Approximately 3,650 feet upstream of confluence with Moses Creek	Approximately 1.2 miles upstream of confluence with Moses Creek	03080201	0.5	--	N	A	*
Moultrie Creek	St. Johns County, Unincorporated Areas	Confluence with Matanzas River	Approximately 75 feet upstream of Osceola Trail	03080201	4.5	--	Y	AE, VE	2015
Moultrie Creek	St. Johns County, Unincorporated Areas	Approximately 75 feet upstream of Osceola Trail	At County Highway 214	03080201	3.8	--	Y	AE	1999
Moultrie Creek Tributary No. 1	St. Johns County, Unincorporated Areas	Confluence with Moultrie Creek	Approximately 50 feet upstream of Lewis Point Road	03080201	2.1	--	Y	AE	1999
Moultrie Creek Tributary No. 1	St. Johns County, Unincorporated Areas	Approximately 50 feet upstream of Lewis Point Road	Approximately 275 feet upstream of Lewis Point Road	03080201	0.04	--	N	A	*
Moultrie Creek Tributary No. 3	St. Johns County, Unincorporated Areas	Confluence with Moultrie Creek	Approximately 200 feet upstream of Willow Walk Place	03080201	1.1	--	Y	AE	1999

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Moultrie Creek Tributary No. 3	St. Johns County, Unincorporated Areas	Approximately 200 feet upstream of Willow Walk Place	Approximately 485 feet upstream of Willow Walk Place	03080201	0.05	--	N	A	*
Moultrie Creek Tributary No. 4	St. Johns County, Unincorporated Areas	Confluence with Moultrie Creek	Approximately 100 feet upstream of State Route 207	03080201	3.2	--	Y	AE	1999
Moultrie Creek Tributary No. 4	St. Johns County, Unincorporated Areas	Approximately 100 feet upstream of State Route 207	Approximately 320 feet upstream of State Route 207	03080201	0.04	--	N	A	*
North Lower	St. Johns County, Unincorporated Areas	Approximately 2,620 feet downstream of the confluence of Northeast Main	Confluence of Northeast Main	03080201	0.5	--	N	AE	*
Northeast East	St. Johns County, Unincorporated Areas	Confluence with Northeast Mid	Approximately 780 feet upstream of 20 Mile Road	03080201	0.9	--	N	AE	*
Northeast Main	St. Johns County, Unincorporated Areas	Confluence of North Lower	Confluence of Northeast East	03080201	0.4	--	N	AE	*
Northeast Mid	St. Johns County, Unincorporated Areas	Confluence of Northeast East	Approximately 4,940 feet upstream of confluence of Northeast East	03080201	0.9	--	N	AE	*
Northeast North	St. Johns County, Unincorporated Areas	Just upstream of Palm Valley Road	Confluence of North Lower	03080201	0.2	--	N	AE	*
Northwest 1 Lower	St. Johns County, Unincorporated Areas	Confluence with Northwest North	Approximately 2,520 feet upstream of confluence with Northwest North	03080201	0.5	--	N	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Northwest North	St. Johns County, Unincorporated Areas	Confluence of Northwest 1 Lower	Approximately 3,920 feet upstream of confluence of Northwest 1 Lower	03080201	0.7	--	N	AE	*
Orange Grove Branch	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 60 feet upstream of State Route 13	03080103	0.2	--	Y	AE	2015
Orange Grove Branch	St. Johns County, Unincorporated Areas	Approximately 60 feet upstream of State Route 13	Approximately 1.1 miles upstream of Orange Branch Trail	03080103	1.8	--	Y	AE	1999
Orange Grove Branch	St. Johns County, Unincorporated Areas	Approximately 1.1 miles upstream of Orange Branch Trail	Approximately 1.4 miles upstream of Orange Branch Trail	03080103	0.3	--	N	A	*
Oyster Creek	St. Augustine, City of; St. Johns County, Unincorporated Areas	At US Highway 1/ Ponce de Leon Boulevard	At Railroad	03080201	0.8	--	N	AE	2015
Pablo Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	County boundary	03080103	1.0	--	N	AE	2015
Pancho Creek	St. Augustine, City of	Confluence with Tolomato River	Approximately 1.2 miles upstream of confluence with Tolomato River	03080201	1.2	--	N	AE, VE	2015
Park Pond 1	St. Johns County, Unincorporated Areas	Downs Corner Road	State Route 16	03080103	--	0.002	N	AE	*
Park Pond 2	St. Johns County, Unincorporated Areas	Downs Corner Road	State Route 16	03080103	--	0.004	N	AE	*
Park Wetland A	St. Johns County, Unincorporated Areas	Downs Corner Road	State Route 16	03080103	--	0.02	N	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Park Wetland B	St. Johns County, Unincorporated Areas	Downs Corner Road	State Route 16	03080103	--	0.04	N	AE	*
Pellicer Creek	St. Johns County, Unincorporated Areas	Confluence with Unnamed Tributary	Approximately 1 mile upstream of confluence of Cracker Branch	03080201	8.5	--	N	AE	2015
Pellicer Creek	St. Johns County, Unincorporated Areas	Approximately 1 mile upstream of confluence of Cracker Branch	At County Road 204	03080201	3.2	--	N	A	*
Petty Branch	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 1,340 feet upstream of confluence with St. Johns River	03080103	0.3	--	Y	AE	2015
Petty Branch	St. Johns County, Unincorporated Areas	Approximately 1,340 feet upstream of confluence with St. Johns River	Approximately 2.1 miles upstream of State Route 13	03080103	2.0	--	Y	AE	1999
Petty Branch	St. Johns County, Unincorporated Areas	Approximately 2.1 miles upstream of State Route 13	Approximately 3.1 miles upstream of State Route 13	03080103	1.0	--	N	A	*
Pond L4	St. Johns County, Unincorporated Areas	At Town Plaza Avenue	Approximately 2,664 feet upstream of Town Plaza Avenue	03080103	--	0.02	N	AE	*
Pond M1	St. Johns County, Unincorporated Areas	At Crosswater Parkway	At Town Plaza Avenue	03080103 03080201	--	0.01	N	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Pond SWMF 1901	St. Johns County, Unincorporated Areas	At intersection of Breezy Bay Drive and Del Webb Parkway	At intersection of Breezy Bay Drive and Del Webb Parkway	03080201	0.02	--	N	AE	*
Pond SWMF 2001	St. Johns County, Unincorporated Areas	Approximately 650 feet upstream of intersection of Strolling Trail and Del Webb Parkway	Approximately 320 feet upstream of intersection of Breezy Bay Drive and Del Webb Parkway	03080201	0.2	--	N	AE	*
Pond SWMF 2701	St. Johns County, Unincorporated Areas	Approximately 590 feet northwest of intersection of Leaflet Lane and River Run Boulevard	Approximately 1,480 feet northwest of intersection of Leaflet Lane and River Run Boulevard	03080201	0.1	--	N	AE	*
Quarry Creek	St. Augustine, City of	Confluence with Matanzas River	Approximately 4,526 feet upstream of confluence with Matanzas River	03080201	0.8	--	N	AE, VE	2015
Red House Branch	St. Augustine, City of; St. Johns County, Unincorporated Areas	Confluence with San Sebastian River	Approximately 2,945 feet upstream of County Highway 16A/Lewis Speedway	03080201	1.9	--	Y	AE	2015
Red House Branch	St. Johns County, Unincorporated Areas	Approximately 2,945 feet upstream of County Highway 16A/Lewis Speedway	Approximately 77 feet upstream of Woodlawn Road	03080201	0.7	--	Y	AE	1999

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Red House Branch	St. Johns County, Unincorporated Areas	Approximately 77 feet upstream of Woodlawn Road	Approximately 990 feet upstream of Roaring Brook Drive	03080201	0.3	--	N	A	*
Robinson Creek	St. Augustine, City of; St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 1.5 miles upstream of confluence with Tolomato River	03080201	1.5	--	N	AE, VE	2015
Salt Creek Ditch	St. Johns County, Unincorporated Areas	At county boundary	Approximately 2.8 miles upstream of County Road 13	03080103	4.9	--	N	AE	2015
Salt Creek Ditch Tributary 1	St. Johns County, Unincorporated Areas	Confluence with Salt Creek Ditch	Approximately 1.1 miles upstream of confluence with Salt Creek Ditch	03080103	1.1	--	N	AE	2015
Salt Run	St. Augustine, City of	Confluence with Matanzas River	Approximately 2.8 miles upstream of confluence with Matanzas River	03080201	2.8	--	N	AE, VE	2015
Sampson Creek	St. Johns County, Unincorporated Areas	Confluence with Durbin Creek	Approximately 4,070 feet upstream of confluence with Durbin Creek	03080103	0.7	--	N	AE	*
San Julian Creek	St. Johns County, Unincorporated Areas	Confluence with Matanzas River	Approximately 2.3 miles upstream of confluence with Matanzas River	03080201	2.3	--	N	AE, VE	2015
San Sebastian River	St. Augustine, City of; St. Johns County, Unincorporated Areas	Confluence with Matanzas River	Approximately 1,200 feet upstream of confluence of Red House Branch	03080201	5.4	--	N	AE, VE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Schoolhouse Branch	St. Johns County, Unincorporated Areas	At County Road 204	Approximately 2.2 miles upstream of County Road 204	03080201	2.2	--	N	AE	2015
Sixmile Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 2,245 feet upstream of confluence of Mill Creek No. 2	03080103	3.4	--	Y	AE	2015
Sixmile Creek	St. Johns County, Unincorporated Areas	Approximately 2,245 feet upstream of confluence of Mill Creek No. 2	Approximately 2,900 feet upstream of Pacetti Road	03080103	4.0	--	Y	AE	1999
Sixteenmile Creek	St. Johns County, Unincorporated Areas	Confluence with Deep Creek	County boundary	03080103	4.7	--	Y	AE	*
SMF-E6	St. Johns County, Unincorporated Areas	North Lower	20 Mile Road	03080201	--	0.001	N	AE	*
SMF-E7	St. Johns County, Unincorporated Areas	North Lower	20 Mile Road	03080201	--	0.002	N	AE	*
SMF-E8	St. Johns County, Unincorporated Areas	North Lower	20 Mile Road	03080201	--	0.002	N	AE	*
SMF-10	St. Johns County, Unincorporated Areas	Northwest 1 Lower	Northwest North	03080201	--	0.003	N	AE	*
SMF-11	St. Johns County, Unincorporated Areas	Northwest 1 Lower	Northwest North	03080201	--	0.006	N	AE	*
SMF-TM-02	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.002	N	AE	*
SMF-TM-03	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.002	N	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
SMF-TM-04	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.003	N	AE	*
SMF-TM-05	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.002	N	AE	*
SMF-TM-37	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.002	N	AE	*
SMF-TM-38	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.001	N	AE	*
SMF-TM-39	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.003	N	AE	*
Smith Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River	Approximately 1.3 miles upstream of confluence with Tolomato River	03080201	1.3	--	N	AE	2015
Smith Creek Main	St. Johns County, Unincorporated Areas	Approximately 950 feet downstream of River Run Boulevard	Approximately 1.2 miles upstream of River Run Boulevard	03080201	1.3	--	N	AE	*
St. Johns River	St. Johns County, Unincorporated Areas	County boundary	County boundary	03080103	28.3	--	N	AE	2015
St. Johns River Tributary 1 (Hickory Slough)	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 50 feet downstream of Grove Bluff Road	03080103	0.5	--	Y	AE	2015
St. Johns River Tributary 1 (Hickory Slough)	St. Johns County, Unincorporated Areas	Approximately 50 feet downstream of Grove Bluff Road	Approximately 164 feet upstream of State Road 13N	03080103	0.2	--	Y	AE	1999
St. Johns River Tributary 1 (Hickory Slough)	St. Johns County, Unincorporated Areas	Approximately 164 feet upstream of State Road 13N	Approximately 454 miles upstream of State Road 13N	03080103	0.05	--	N	A	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
St. Johns River Tributary No. 2	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 50 feet upstream of State Road 13N	03080103	0.5	--	Y	AE	2015
St. Johns River Tributary No. 2	St. Johns County, Unincorporated Areas	Approximately 50 feet upstream of State Road 13N	Approximately 50 feet upstream of Remington Forest Drive	03080103	0.2	--	Y	AE	1999
St. Johns River Tributary No. 2	St. Johns County, Unincorporated Areas	Approximately 50 feet upstream of Remington Forest Drive	Approximately 640 feet upstream of Remington Forest Drive	03080103	0.1	--	N	A	*
St. Johns River Tributary No. 3, Branch No. 1	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 1,970 feet upstream of confluence with St. Johns River	03080103	0.4	--	Y	AE	2015
St. Johns River Tributary No. 3, Branch No. 1	St. Johns County, Unincorporated Areas	Approximately 1,970 feet upstream of confluence with St. Johns River	Approximately 2,120 feet upstream of confluence of St. Johns River Tributary No. 3, Branch No. 2	03080103	0.4	--	Y	AE	1999
St. Johns River Tributary No. 3, Branch No. 1	St. Johns County, Unincorporated Areas	Approximately 2,120 feet upstream of confluence of St. Johns River Tributary No. 3, Branch No. 2	Approximately 2,420 feet upstream of confluence of St. Johns River Tributary No. 3, Branch No. 2	03080103	0.05	--	N	A	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
St. Johns River Tributary No. 3, Branch No. 2	St. Johns County, Unincorporated Areas	Confluence with St. Johns River Tributary No. 3, Branch No. 1	Approximately 1,830 feet upstream of confluence with St. Johns River Tributary No. 3, Branch No. 1	03080103	0.3	--	Y	AE	1999
St. Johns River Tributary No. 3, Branch No. 2	St. Johns County, Unincorporated Areas	Approximately 1,830 feet upstream of confluence with St. Johns River Tributary No. 3, Branch No. 1	Approximately 2,570 feet upstream of confluence with St. Johns River Tributary No. 3, Branch No. 1	03080103	0.1	--	N	A	*
St. Johns River Tributary No. 4	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 2,680 feet upstream of confluence with St. Johns River	03080103	0.5	--	Y	AE	2015
St. Johns River Tributary No. 4	St. Johns County, Unincorporated Areas	Approximately 2,680 feet upstream of confluence with St. Johns River	Approximately 3,246 feet upstream of State Road 13N	03080103	0.6	--	Y	AE	1999
St. Johns River Tributary No. 4	St. Johns County, Unincorporated Areas	Approximately 3,246 feet upstream of State Road 13N	Approximately 3,846 feet upstream of State Road 13N	03080103	0.1	--	N	A	*
St. Johns River Tributary No. 5	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 1,600 feet upstream of State Road 13N	03080103	0.4	--	Y	AE	2015
St. Johns River Tributary No. 5	St. Johns County, Unincorporated Areas	Approximately 1,600 feet upstream of State Road 13N	Approximately 3,710 feet upstream of State Road 13N	03080103	0.5	--	Y	AE	1999

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
St. Johns River Tributary No. 5	St. Johns County, Unincorporated Areas	Approximately 3,710 feet upstream of State Road 13N	Approximately 3,916 feet upstream of State Road 13N	03080103	0.03	--	N	A	*
Stevens Branch	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 2.9 miles upstream of unnamed road	03080201	2.9	--	N	AE	2015
Stevens Branch Tributary 1	St. Johns County, Unincorporated Areas	Confluence with Stevens Branch	Approximately 1.8 miles upstream of confluence with Stevens Branch	03080201	1.8	--	N	AE	2015
Stokes Creek	St. Johns County, Unincorporated Areas	Confluence with Tolomato River Tributary No. 1	Approximately 1.9 miles upstream of confluence with Tolomato River Tributary No. 1	03080201	1.9	--	N	AE	2015
Swamp	St. Johns County, Unincorporated Areas	At Tall Timber Path	Approximately 4,360 feet upstream of Bluewater Drive	03080201	0.8	--	N	AE	*
TM Pond 7	St. Johns County, Unincorporated Areas	20 Mile Road	Signature Drive	03080201	--	0.0003	N	AE	*
TM Pond 14	St. Johns County, Unincorporated Areas	Deer Valley Drive	Deer Valley Drive	03080201	--	0.001	N	AE	*
TM Pond 15	St. Johns County, Unincorporated Areas	Deer Valley Drive	Deer Valley Drive	03080201	--	0.002	N	AE	*
TM Pond 41	St. Johns County, Unincorporated Areas	20 Mile Road	Deer Valley Drive	03080201	--	0.0008	N	AE	*
TM Pond 42	St. Johns County, Unincorporated Areas	20 Mile Road	Deer Valley Drive	03080201	--	0.0006	N	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Tocoi Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 5,660 feet upstream of County Road 13	03080103	2.7	--	N	AE	2015
Tolomato River	St. Augustine, City of; St. Johns County, Unincorporated Areas	Confluence with Matanzas River	County boundary	03080103 03080201	26.3	--	N	AE, VE	2015
Tolomato River Tributary No. 1	St. Johns County, Unincorporated Areas	At mouth	Approximately 50 feet upstream of Lakeshore Drive	03080201	1.9	--	Y	AE	2015
Tolomato River Tributary No. 1	St. Johns County, Unincorporated Areas	Approximately 50 feet upstream of Lakeshore Drive	At US Route 1	03080201	0.5	--	Y	AE	*
Tolomato River Tributary No. 2	St. Johns County, Unincorporated Areas	Confluence with Tolomato River Tributary No. 1	Approximately 63 feet upstream of US Route 1	03080201	1.0	--	Y	AE	*
Town Branch	St. Johns County, Unincorporated Areas	Confluence with Sixmile Swamp	At County Road 208	03080103	0.6	--	N	AE	*
Town Branch	St. Johns County, Unincorporated Areas	At County Road 208	Approximately 4.2 miles upstream of County Road 208	03080103	4.2	--	N	A	*
Tributary to Unnamed Drain No. 1	St. Johns County, Unincorporated Areas	Confluence with Unnamed Drain No. 1	Approximately 1.1 miles upstream of confluence with Unnamed Drain No. 1	03080201	1.1	--	N	AE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Tributary to Unnamed Drain No. 3	St. Johns County, Unincorporated Areas	Confluence with Unnamed Drain No. 3	Approximately 2,040 feet upstream of confluence with Unnamed Drain No. 3	03080103	0.4	--	N	AE	2015
Trout Creek	St. Johns County, Unincorporated Areas	Confluence with St. Johns River	Approximately 1.8 miles upstream of County Highway 16A	03080103	4.6	--	Y	AE	2015
Trout Creek	St. Johns County, Unincorporated Areas	Approximately 1.8 miles upstream of County Highway 16A	At County Highway 210	03080103	3.2	--	Y	AE	*
Turnbull Creek	St. Johns County, Unincorporated Areas	Approximately 2,900 feet upstream of Pacetti Road	Approximately 80 feet upstream of Interstate 95	03080103	4.9	--	Y	AE	1999
Turnbull Creek	St. Johns County, Unincorporated Areas	Approximately 80 feet upstream of Interstate 95	Approximately 1,250 feet upstream of Outlet Mall Boulevard	03080103	3.0	--	N	A	*
Unnamed Ditch No. 1	St. Johns County, Unincorporated Areas	At Interstate 95	Approximately 1.1 miles upstream of Interstate 95	03080201	1.1	--	N	AE	2015
Unnamed Ditch No. 2	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 3,240 feet upstream of unnamed road	03080201	0.6	--	N	AE	2015
Unnamed Ditch No. 3	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 1.9 miles upstream of unnamed road	03080103	1.9	--	N	AE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Unnamed Drain No. 1	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 1.2 miles upstream of unnamed road	03080201	1.2	--	N	AE	2015
Unnamed Drain No. 2	St. Johns County, Unincorporated Areas	At unnamed wetland	Approximately 2,600 feet upstream of unnamed wetland	03080201	0.5	--	N	AE	2015
Unnamed Drain No. 3	St. Johns County, Unincorporated Areas	At County Road 13	Approximately 1.8 miles upstream of County Road 13	03080103 03080201	1.8	--	N	AE	2015
Unnamed Drain No. 4	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 2,430 feet upstream of unnamed road	03080103	0.5	--	N	AE	2015
Unnamed Drain No. 5	St. Johns County, Unincorporated Areas	At Old Brick Road	Approximately 1 mile upstream of Old Brick Road	03080103	1.0	--	N	AE	2015
Unnamed Drain No. 6	St. Johns County, Unincorporated Areas	At unnamed wetland	Approximately 4,950 feet upstream of unnamed wetland	03080201	0.9	--	N	AE	2015
Unnamed Drain No. 7	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 2,140 feet upstream of unnamed road	03080201	0.4	--	N	AE	2015
Unnamed Drain No. 8	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 2,675 feet upstream of unnamed road	03080201	0.5	--	N	AE	2015
Unnamed Drain No. 9	St. Johns County, Unincorporated Areas	At unnamed road	Approximately 1.2 miles upstream of unnamed road	03080201	1.2	--	N	AE	2015

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
UPA 4	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.005	N	AE	*
UPA 5	St. Johns County, Unincorporated Areas	20 Mile Road	Valley Ridge Boulevard	03080201	--	0.001	N	AE	*
UPA 6	St. Johns County, Unincorporated Areas	20 Mile Road	Valley Ridge Boulevard	03080201	--	0.001	N	AE	*
UPA 7	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080201	--	0.041	N	AE	*
UPA 8	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.008	N	AE	*
UPA 9	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.002	N	AE	*
UPA 10	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.085	N	AE	*
UPA 11	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.0003	N	AE	*
UPA 12	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.001	N	AE	*
UPA 13	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.014	N	AE	*
UPA 14	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.027	N	AE	*
UPA 15	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.015	N	AE	*
UPA 16	St. Johns County, Unincorporated Areas	20 Mile Road	Wilson Lane	03080103	--	0.018	N	AE	*

Table 2: Flooding Sources Included in this FIS Report, continued

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Upper Deep Creek	St. Johns County, Unincorporated Areas	Approximately 3,500 feet downstream of Old Dixie Highway	Approximately 11,200 feet upstream of Old Dixie Highway	03080201	2.8	--	N	AE	*
Upper Smith Creek	St. Johns County, Unincorporated Areas	At Crosswater Parkway	Approximately 5,000 feet upstream of Preservation Trail	03080201	1.2	--	N	AE	*
West Run Cracker Branch	St. Johns County, Unincorporated Areas	At mouth	Approximately 70 feet upstream of Federal Point Road	03080103	1.7	--	Y	AE	2015
West Run Cracker Branch	St. Johns County, Unincorporated Areas	Approximately 3,700 feet downstream of Federal Point Road	County boundary	03080103	1.2	--	Y	AE	*
Wetland S15	St. Johns County, Unincorporated Areas	Bluewater Drive	Crosswater Parkway	03080201	--	0.02	N	AE	*
Wetland T9	St. Johns County, Unincorporated Areas	Bluewater Drive	Crosswater Parkway	03080201	--	0.0006	N	AE	*
Wetland WC 1	St. Johns County, Unincorporated Areas	Preservation Trail	Majestic Eagle Drive	03080201	--	0.05	N	AE	*

*Data not available

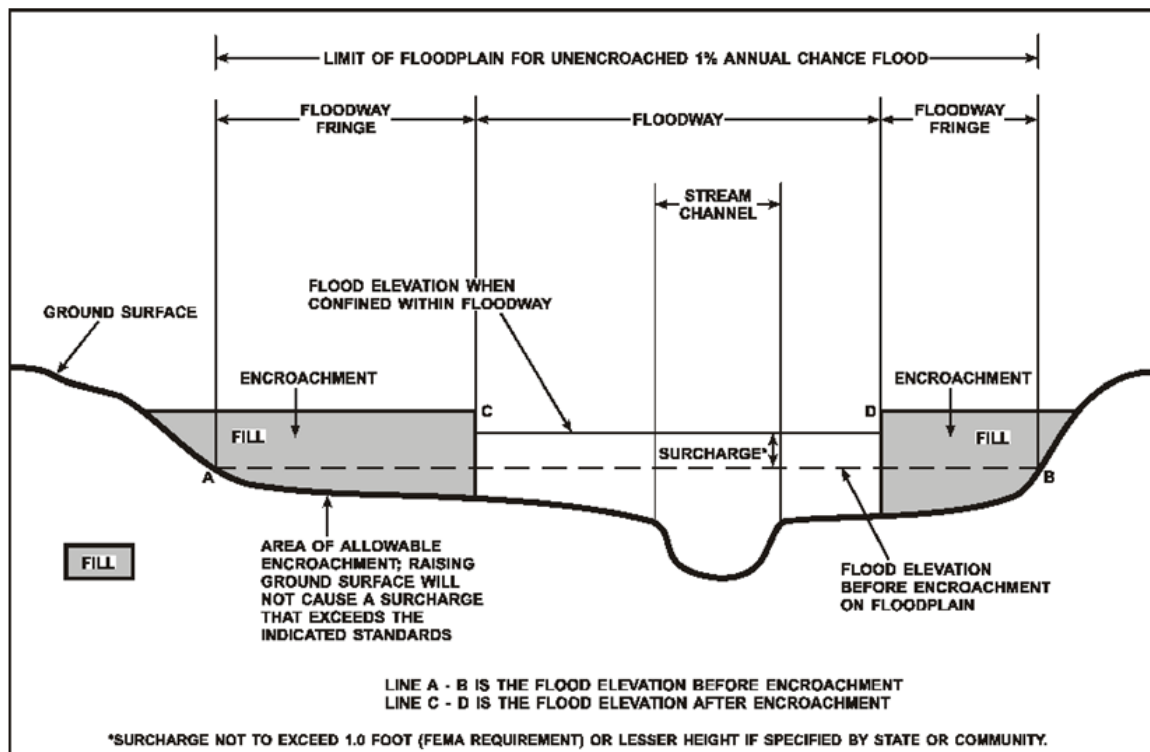
2.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard.

For purposes of the NFIP, a floodway is used as a tool to assist local communities in balancing floodplain development against increasing flood hazard. With this approach, the area of the 1% annual chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1% annual chance flood. The floodway fringe is the area between the floodway and the 1% annual chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1% annual chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 4.

To participate in the NFIP, Federal regulations require communities to limit increases caused by encroachment to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this project are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway projects.

Figure 4: Floodway Schematic



Floodway widths presented in this FIS Report and on the FIRM were computed at cross sections.

Between cross sections, the floodway boundaries were interpolated. For certain stream segments, floodways were adjusted so that the amount of floodwaters conveyed on each side of the floodplain would be reduced equally. The results of the floodway computations have been tabulated for selected cross sections and are shown in Table 24, “Floodway Data.”

All floodways that were developed for this Flood Risk Project are shown on the FIRM using the symbology described in Figure 3. In cases where the floodway and 1% annual chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown on the FIRM. For information about the delineation of floodways on the FIRM, refer to Section 6.3.

2.3 Base Flood Elevations

The hydraulic characteristics of flooding sources were analyzed to provide estimates of the elevations of floods of the selected recurrence intervals. The Base Flood Elevation (BFE) is the elevation of the 1% annual chance flood. These BFEs are most commonly rounded to the whole foot, as shown on the FIRM, but in certain circumstances or locations they may be rounded to 0.1 foot. Cross section lines shown on the FIRM may also be labeled with the BFE rounded to 0.1 foot. Whole-foot BFEs derived from engineering analyses that apply to coastal areas, areas of ponding, or other static areas with little elevation change may also be shown at selected intervals on the FIRM.

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in the Floodway Data table and Flood Profiles in this FIS Report. BFEs are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM.

2.4 Non-Encroachment Zones

This section is not applicable to this Flood Risk Project.

2.5 Coastal Flood Hazard Areas

For most areas along rivers, streams, and small lakes, BFEs and floodplain boundaries are based on the amount of water expected to enter the area during a 1% annual chance flood and the geometry of the floodplain. Floods in these areas are typically caused by storm events. However, for areas on or near ocean coasts, large rivers, or large bodies of water, BFE and floodplain boundaries may need to be based on additional components, including storm surges and waves. Communities on or near ocean coasts face flood hazards caused by offshore seismic events as well as storm events.

Coastal flooding sources that are included in this Flood Risk Project are shown in Table 2.

2.5.1 Water Elevations and the Effects of Waves

Specific terminology is used in coastal analyses to indicate which components have been included in evaluating flood hazards.

The stillwater elevation (SWEL or still water level) is the surface of the water resulting from astronomical tides, storm surge, and freshwater inputs, but excluding wave setup contribution or the effects of waves.

- *Astronomical tides* are periodic rises and falls in large bodies of water caused by the rotation of the earth and by the gravitational forces exerted by the earth, moon and sun.
- *Storm surge* is the additional water depth that occurs during large storm events. These events can bring air pressure changes and strong winds that force water up against the shore.
- *Freshwater inputs* include rainfall that falls directly on the body of water, runoff from surfaces and overland flow, and inputs from rivers.

The 1% annual chance stillwater elevation is the stillwater elevation that has been calculated for a storm surge from a 1% annual chance storm. The 1% annual chance storm surge can be determined from analyses of tidal gage records, statistical study of regional historical storms, or other modeling approaches. Stillwater elevations for storms of other frequencies can be developed using similar approaches.

The total stillwater elevation (also referred to as the mean water level) is the stillwater elevation plus wave setup contribution but excluding the effects of waves.

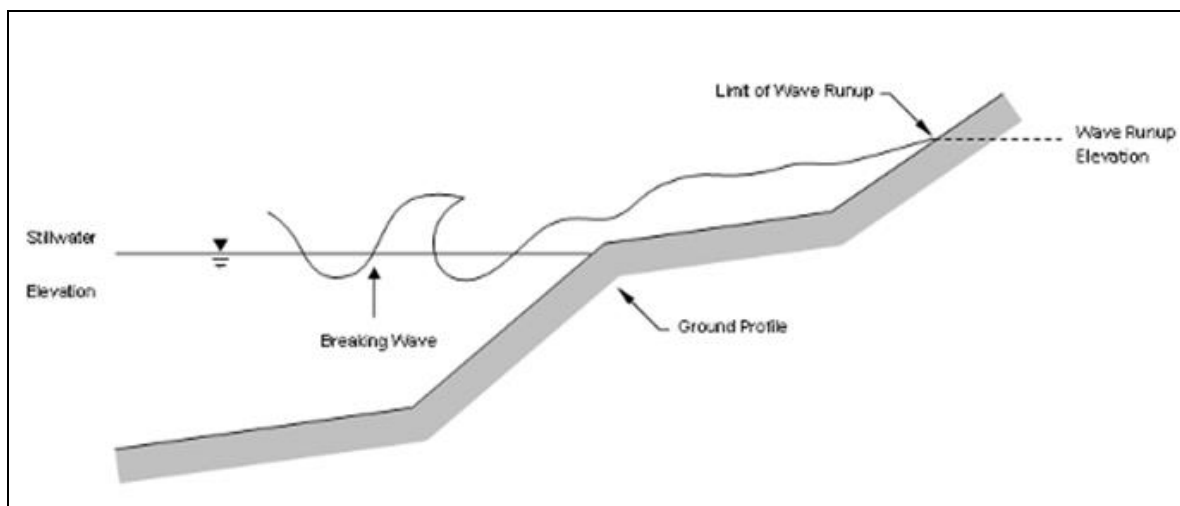
- *Wave setup* is the increase in stillwater elevation at the shoreline caused by the reduction of waves in shallow water. It occurs as breaking wave momentum is transferred to the water column.

Like the stillwater elevation, the total stillwater elevation is based on a storm of a particular frequency, such as the 1% annual chance storm. Wave setup is typically estimated using standard engineering practices or calculated using models, since tidal gages are often sited in areas sheltered from wave action and do not capture this information.

Coastal analyses may examine the effects of overland waves by analyzing storm-induced erosion, overland wave propagation, wave runup, and/or wave overtopping.

- *Storm-induced erosion* is the modification of existing topography by erosion caused by a specific storm event, as opposed to general erosion that occurs at a more constant rate.
- *Overland wave propagation* describes the combined effects of variation in ground elevation, vegetation, and physical features on wave characteristics as waves move onshore.
- *Wave runup* is the uprush of water from wave action on a shore barrier. It is a function of the roughness and geometry of the shoreline at the point where the stillwater elevation intersects the land.
- *Wave overtopping* refers to wave runup that occurs when waves pass over the crest of a barrier.

Figure 5: Wave Runup Transect Schematic



2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

For coastal communities along the Atlantic and Pacific Oceans, the Gulf of Mexico, the Great Lakes, and the Caribbean Sea, flood hazards must take into account how storm surges, waves, and extreme tides interact with factors such as topography and vegetation. Storm surge and waves must also be considered in assessing flood risk for certain communities on rivers or large inland bodies of water.

Beyond areas that are affected by waves and tides, coastal communities can also have riverine floodplains with designated floodways, as described in previous sections.

Floodplain Boundaries

In many coastal areas, storm surge is the principle component of flooding. The extent of the 1% annual chance floodplain in these areas is derived from the total stillwater elevation (stillwater elevation including storm surge plus wave setup) for the 1% annual chance storm. The methods that were used for calculation of total stillwater elevations for coastal areas are described in Section 5.3 of this FIS Report. Location of total stillwater elevations for coastal areas are shown in Figure 8, “1% Annual Chance Total Stillwater Levels for Coastal Areas.”

In some areas, the 1% annual chance floodplain is determined based on the limit of wave runup or wave overtopping for the 1% annual chance storm surge. The methods that were used for calculation of wave hazards are described in Section 5.3 of this FIS Report.

Table 26 presents the types of coastal analyses that were used in mapping the 1% annual chance floodplain in coastal areas.

Coastal BFEs

Coastal BFEs are calculated as the total stillwater elevation (stillwater elevation including storm surge plus wave setup) for the 1% annual chance storm plus the additional flood hazard from overland wave effects (storm-induced erosion, overland wave propagation, wave runup and wave overtopping).

Where they apply, coastal BFEs are calculated along transects extending from offshore to the limit of coastal flooding onshore. Results of these analyses are accurate until local topography, vegetation, or development type and density within the community undergoes major changes.

Parameters that were included in calculating coastal BFEs for each transect included in this FIS Report are presented in Table 17, “Coastal Transect Parameters.” The locations of transects are shown in Figure 9, “Transect Location Map.” More detailed information about the methods used in coastal analyses and the results of intermediate steps in the coastal analyses are presented in Section 5.3 of this FIS Report. Additional information on specific mapping methods is provided in Section 6.4 of this FIS Report.

2.5.3 Coastal High Hazard Areas

Certain areas along the open coast and other areas may have higher risk of experiencing structural damage caused by wave action and/or high-velocity water during the 1% annual chance flood. These areas will be identified on the FIRM as Coastal High Hazard Areas.

- *Coastal High Hazard Area (CHHA)* is a SFHA extending from offshore to the inland limit of the primary frontal dune (PFD) or any other area subject to damages caused by wave action and/or high-velocity water during the 1% annual chance flood.
- *Primary Frontal Dune (PFD)* is a continuous or nearly continuous mound or ridge of sand with relatively steep slopes immediately landward and adjacent to the beach. The PFD is subject to erosion and overtopping from high tides and waves during major coastal storms.

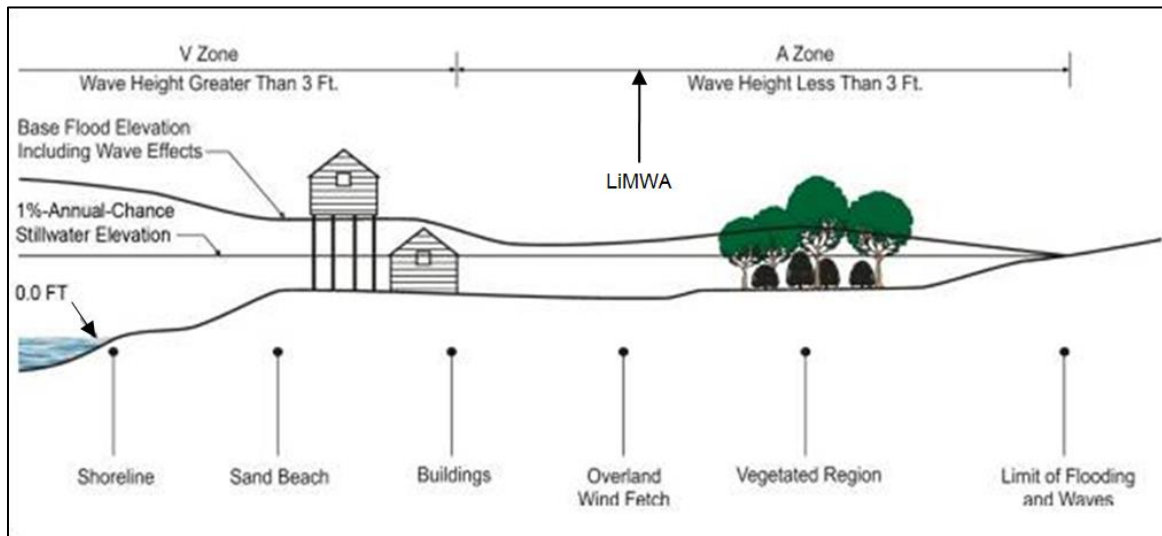
CHHAs are designated as “V” zones (for “velocity wave zones”) and are subject to more stringent regulatory requirements and a different flood insurance rate structure. The areas of greatest risk are shown as VE on the FIRM. Zone VE is further subdivided into elevation zones and shown with BFEs on the FIRM.

The landward limit of the PFD occurs at a point where there is a distinct change from a relatively steep slope to a relatively mild slope; this point represents the landward extension of Zone VE. Areas of lower risk in the CHHA are designated with Zone V on the FIRM. More detailed information about the identification and designation of Zone VE is presented in Section 6.4 of this FIS Report.

Areas that are not within the CHHA but are SFHAs may still be impacted by coastal flooding and damaging waves; these areas are shown as “A” zones on the FIRM.

Figure 6, “Coastal Transect Schematic,” illustrates the relationship between the base flood elevation, the 1% annual chance stillwater elevation, and the ground profile as well as the location of the Zone VE and Zone AE areas in an area without a PFD subject to overland wave propagation. This figure also illustrates energy dissipation and regeneration of a wave as it moves inland.

Figure 6: Coastal Transect Schematic



Methods used in coastal analyses in this Flood Risk Project are presented in Section 5.3 and mapping methods are provided in Section 6.4 of this FIS Report.

Coastal floodplains are shown on the FIRM using the symbology described in Figure 3, “Map Legend for FIRM.” In many cases, the BFE on the FIRM is higher than the stillwater elevations shown in Table 17 due to the presence of wave effects. The higher elevation should be used for construction and/or floodplain management purposes.

2.5.4 Limit of Moderate Wave Action

Laboratory tests and field investigations have shown that wave heights as little as 1.5 feet can cause damage to and failure of typical Zone AE building construction. Wood-frame, light gage steel, or masonry walls on shallow footings or slabs are subject to damage when exposed to waves less than 3 feet in height. Other flood hazards associated with coastal waves (floating debris, high velocity flow, erosion, and scour) can also damage Zone AE construction.

Therefore, a LiMWA boundary may be shown on the FIRM as an informational layer to assist coastal communities in safe rebuilding practices. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The location of the LiMWA relative to Zone VE and Zone AE is shown in Figure 6.

The effects of wave hazards in Zone AE between Zone VE (or the shoreline where Zone VE is not identified) and the limit of the LiMWA boundary are similar to, but less severe than, those in Zone VE where 3-foot or greater breaking waves are projected to occur during the 1% annual chance flooding event. Communities are therefore encouraged to adopt and enforce more stringent floodplain management requirements than the minimum NFIP requirements in the LiMWA. The NFIP Community Rating System provides credits for these actions.

Where wave runup elevations dominate over wave heights, there is no evidence to date of significant damage to residential structures by runup depths less than 3 feet. Examples of these areas include areas with steeply sloped beaches, bluffs, or flood protection structures that lie parallel to the shore. In these areas, the FIRM shows the LiMWA immediately landward of the

VE/AE boundary. Similarly, in areas where the zone VE designation is based on the presence of a primary frontal dune or wave overtopping, the LiMWA is delineated immediately landward of the Zone VE/AE boundary.

SECTION 3.0 – INSURANCE APPLICATIONS

3.1 National Flood Insurance Program Insurance Zones

For flood insurance applications, the FIRM designates flood insurance rate zones as described in Figure 3, “Map Legend for FIRM.” Flood insurance zone designations are assigned to flooding sources based on the results of the hydraulic or coastal analyses. Insurance agents use the zones shown on the FIRM and depths and base flood elevations in this FIS Report in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

The 1% annual chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (e.g. Zones A, AE, V, VE, etc.), and the 0.2% annual chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood insurance zones in St. Johns County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
St. Augustine, City of	AE, VE, X
St. Augustine Beach, City of	AE, AO, VE, X
St. Johns County, Unincorporated Areas	A, AE, AH, AO, VE, X

3.2 Coastal Barrier Resources System

The Coastal Barrier Resources Act (CBRA) of 1982 was established by Congress to create areas along the Atlantic and Gulf coasts and the Great Lakes, where restrictions for Federal financial assistance including flood insurance are prohibited. In 1990, Congress passed the Coastal Barrier Improvement Act (CBIA), which increased the extent of areas established by the CBRA and added “Otherwise Protected Areas” (OPA) to the system. These areas are collectively referred to as the John. H Chafee Coastal Barrier Resources System (CBRS). The CBRS boundaries that have been identified in the project area are in Table 4, “Coastal Barrier Resource System Information.”

Table 4: Coastal Barrier Resources System Information

Primary Flooding Source	CBRS/OPA Type	Date CBRS Area Established	FIRM Panel Number(s)
Matanzas River	CBRS	11/16/1990	12109C0312J 12109C0314J 12109C0316J 12109C0318J

Table 4: Coastal Barrier Resources System Information, continued

Primary Flooding Source	CBRS/OPA Type	Date CBRS Area Established	FIRM Panel Number(s)
Matanzas River	CBRS	11/16/1990	12109C0484J 12109C0495J 12109C0503J 12109C0511J 12109C0512J
Matanzas River	CBRS	10/01/1983	12109C0503J 12109C0511J 12109C0512J
Matanzas River	OPA	11/16/1991	12109C0501J 12109C0503J
Salt Run	CBRS	10/01/1983	12109C0316J 12109C0317J 12109C0318J 12109C0319J 12109C0382J
Salt Run	OPA	11/16/1991	12109C0318J 12109C0319J 12109C0381J 12109C0382J
Tolomato River	CBRS	11/16/1990	12109C0308J 12109C0312J 12109C0316J
Tolomato River	CBRS	10/01/1983	12109C0316J
Tolomato River	OPA	11/16/1991	12109C0093J 12109C0095J 12109C0111J 12109C0113J 12109C0185J 12109C0201J 12109C0202J 12109C0203J 12109C0204J 12109C0212J 12109C0214J 12109C0215J 12109C0301J 12109C0302J

SECTION 4.0 – AREA STUDIED

4.1 Basin Description

Table 5 contains a description of the characteristics of the HUC-8 sub-basins within which each community falls. The table includes the main flooding sources within each basin, a brief description of the basin, and its drainage area.

Table 5: Basin Characteristics

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Daytona-St. Augustine	03080201	Atlantic Ocean; Matanzas River; Toломato River	Basin extends from the southern county boundary to the northern county boundary along the coastline of St. Johns County.	251
Lower St. Johns	03080103	St. Johns River	Basin extends from the southern county boundary to the northern county boundary along the western side of St. Johns County.	418

4.2 Principal Flood Problems

Table 6 contains a description of the principal flood problems that have been noted for St. Johns County by flooding source.

Table 6: Principal Flood Problems

Flooding Source	Description of Flood Problems
Atlantic Ocean	Coastal areas are subject to inundation and erosion from ocean hurricane storm surges and waves, whereas inland areas become flooded when rainfall accumulates in low, flat areas. A transition region near the coast is vulnerable to both rainfall and ocean surge flooding. Major rainfall events occur from hurricanes, tropical storms, and thundershowers associated with frontal systems.
All Sources within St. Johns County	Much of the county's flood-prone areas feature poorly drained soil, a high water table, and flat terrain. These characteristics contribute significantly to flooding problems. Furthermore, the flat slopes and heavily vegetated floodplains promote backwater effects and aggravate the flood problems by preventing rapid floodwater drainage.

Table 7 contains information about historic flood elevations in the communities within St. Johns County.

Table 7: Historic Flooding Elevations

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Durbin Creek	At Race Track Road	11.0	1964	100	USGS gage No. 02246200
Durbin Creek	At Race Track Road	7.0	1994	*	USGS gage No. 02246200
Deep Creek	At Cowpen Branch Road	14.4	1995	*	USGS Gage No. 02245255
Deep Creek	At Florida East Coast Railway	4.5	1996	*	USGS Gage No. 02245260
Sixmile Creek	At State Road 13	2.9	1996	*	USGS Gage No. 02245328

*Data not available

4.3 Non-Levee Flood Protection Measures

Table 8 contains information about non-levee flood protection measures within St. Johns County such as dams, jetties, and or dikes. Levees are addressed in Section 4.4 of this FIS Report.

Table 8: Non-Levee Flood Protection Measures

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Atlantic Ocean	N/A	Rock Revetment	Highway A1A, South of Matanzas Inlet	*
Atlantic Ocean	N/A	Concrete Seawall Fronted by Rock Revetment	St. Augustine Beach Pier	*
Mill Creek No. 1	State Road 13N	Dam	At State Road 13N	*
Guana River	Guana Dam	Dam	At Guana River Road	*
Mill Creek No. 2	N/A	Wing Wall	At State Road 16	*
St. Johns River Tributary No. 2	State Road 13N	Wing Wall	At State Road 13N	*
Flora Branch	Race Track Road	Wing Wall	At Race Track Road	*

Table 8: Non-Levee Flood Protection Measures, continued

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Flora Branch	Flora Branch Boulevard	Wing Wall	At Flora Branch Boulevard	*

*Data not available

4.4 Levees

This section is not applicable to this Flood Risk Project.

Table 9: Levees
[Not Applicable to this Flood Risk Project]

SECTION 5.0 – ENGINEERING METHODS

For the flooding sources in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded at least once on the average during any 10-, 25-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2% annual chance, respectively, of being equaled or exceeded during any year.

Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedance) during the term of a 30-year mortgage is approximately 26 percent (about 3 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

The engineering analyses described here incorporate the results of previously issued Letters of Map Change (LOMCs) listed in Table 27, “Incorporated Letters of Map Change”, which include Letters of Map Revision (LOMRs). For more information about LOMRs, refer to Section 6.5, “FIRM Revisions.”

5.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak elevation-frequency relationships for floods of the selected recurrence intervals for each flooding source studied. Hydrologic analyses are typically performed at the watershed level. Depending on factors such as watershed size and shape, land use and urbanization, and natural or man-made storage, various models or methodologies may be applied. A summary of the hydrologic methods applied to develop the discharges used in the hydraulic analyses for each stream is provided in Table 13. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

A summary of the discharges is provided in Table 10. A summary of stillwater elevations developed for non-coastal flooding sources is provided in Table 11. (Coastal stillwater elevations are discussed in Section 5.3 and shown in Table 17.) Stream gage information is provided in Table 12.

Table 10: Summary of Discharges

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Big Lige Branch	At mouth	0.8	215	*	389	473	710
Cracker Branch	At Interstate 95 (2699)	11.35	732	984	1,128	1,538	1,696
Cracker Branch	At bridge of unnamed road (1980)	10.98	712	976	1,118	1,520	1,676
Cracker Branch	At confluence with Cracker Branch Tributary 1 (1979)	10.83	712	977	1,118	1,521	1,677
Cracker Branch	At bridge of unnamed road (1977)	9.02	609	901	1,035	1,417	1,565
Cracker Branch	Approximately 7,900 feet upstream of confluence with Cracker Branch Tributary 1 (2049)	7.91	408	495	533	660	710
Cracker Branch	At confluence with Cracker Branch Tributary 2 (2070)	7.79	408	494	531	643	686
Cracker Branch	Approximately 940 feet upstream of confluence with Cracker Branch Tributary 2 (1976)	7.32	364	438	473	595	646

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Cracker Branch	Approximately 12,300 feet upstream of confluence with Cracker Branch Tributary 2 (2043)	0.48	9	12	13	17	19
Cracker Branch Tributary No. 1	Approximately 2,400 feet upstream of confluence with Cracker Branch (2036)	1.45	91	110	119	150	163
Cracker Branch Tributary No. 1	Approximately 3,500 feet upstream of confluence with Cracker Branch (2708)	1.35	64	70	73	84	88
Cracker Branch Tributary No. 2	Approximately 2,460 feet upstream of confluence with Cracker Branch (2405)	0.36	71	253	325	514	577
Cunningham Creek	At confluence with the St. Johns River	7.62	911	*	1,464	1,701	2,364
Cunningham Creek	At State Road 13N	7.27	897	*	1,440	1,672	2,297
Cunningham Creek	Downstream of confluence of Big Lige Branch	6.42	707	*	1,172	1,368	1,892
Cunningham Creek	At confluence of Cunningham Creek Tributary 1	0.45	706	*	1,115	1,256	1,531

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Cunningham Creek	At confluence with Cunningham Creek Tributary 3	0.20	300	*	528	603	711
Cunningham Creek Tributary 1	At confluence with Cunningham Creek	0.67	159	*	224	248	345
Cunningham Creek Tributary 1	At Prince Albert Avenue	0.46	69	*	118	210	222
Dave Branch	At unnamed road (3255)	1.48	212	261	283	352	381
Dave Branch	At confluence with Dave Branch Tributary 1 (3260)	1.37	199	240	259	323	351
Dave Branch	At confluence with Dave Branch Tributary 2 (10547)	1.19	126	161	178	236	260
Dave Branch	Approximately 1,040 feet upstream of confluence with Dave Branch Tributary 2 (10282)	1.05	110	143	160	213	235
Dave Branch Tributary 1	Approximately 400 feet upstream of confluence with Dave Branch (3277)	0.13	67	71	73	81	84

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Dave Branch Tributary 2	Approximately 440 feet upstream of confluence with Dave Branch (4536)	0.09	31	41	45	62	68
Deep Creek	Above confluence of West Run Cracker Branch	62.8	2,404	*	4,176	5,070	7,661
Deep Creek	At Florida East Coast Railway	55.2	2,270	*	3,944	4,788	7,220
Deep Creek	At confluence of Sixteenmile Creek	42.7	1,779	*	3,117	3,795	5,793
Deep Creek	Above confluence of Sixteenmile Creek	12.7	1,158	*	2,024	2,449	3,617
Deep Creek	At gage (No. 02245255)	12.2	1,130	*	1,976	2,391	3,532
Durbin Creek	At Race Track Road	46.5	2,991	*	4,632	5,341	7,118
Durbin Creek	Downstream of confluence of Sampson Creek	37.09	2,254	*	3,542	4,081	5,461
Durbin Creek	Upstream of confluence of Sampson Creek	21.39	1,230	*	1,949	2,255	3,048
Durbin Creek	At U.S. Route 1	17.70	953	*	1,849	1,800	2,459
Durbin Creek Tributary	At mouth	0.6	152	*	279	341	519

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Durbin Creek Tributary No. 1	At Bishop Estates Road	0.67	*	*	*	209	*
East Creek Main	At River Run Boulevard	0.95	*	*	*	332	*
East Creek North	At confluence with East Creek Main	0.45	*	*	*	210	*
Fish Drain	At county Road 204 (2692)	4.94	157	214	239	345	402
Fish Drain	Approximately 35,000 feet upstream of confluence with Stevens Branch (10273)	0.43	53	65	69	82	87
Flora Branch	At confluence with Durbin Creek	2.26	424	*	701	818	1,117
Flora Branch	At Race Track Road	1.38	188	*	312	365	502
Kendall Creek	At confluence with St. Johns River	1.72	220	*	383	451	632
Kendall Creek	Upstream of unnamed tributary	1.31	164	*	285	335	471
Kentucky Branch	At confluence with the St. Johns River	1.74	432	*	677	789	1,037
Kentucky Branch	At confluence of Kentucky Branch Tributary	1.46	368	*	556	642	838

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Kentucky Branch Tributary	At confluence with Kentucky Branch	0.35	206	*	307	351	454
Mill Creek No. 1	At mouth	4.9	590	*	1,055	1,285	1,920
Mill Creek No. 1	At State Route 13	4.7	555	*	990	1,205	1,365
Mill Creek No. 1	At Greenbrier Road	0.7	130	*	245	305	480
Mill Creek No. 2	At confluence with Sixmile Creek	15.92	1,462	*	2,102	2,362	2,899
Mill Creek No. 2	At State Route 16	9.25	542	*	831	951	1,255
Moses Creek	At confluence of Moses Creek Tributary No. 1	15.8	987	*	1,744	2,120	3,163
Moses Creek	At confluence of Moses Creek Tributary No. 2	14.6	918	*	1,626	1,978	2,955
Moses Creek	At confluence of Moses Creek Tributary No. 5	10.6	810	*	1,436	1,748	2,622
Moses Creek	Upstream of confluence of Moses Creek Tributary No. 5	8.6	727	*	1,292	1,573	2,367
Moses Creek	Downstream of confluence of Moses Creek Tributary No. 6	7.1	642	*	1,145	1,394	2,105
Moses Creek	Upstream of confluence of Moses Creek Tributary No. 6	3.8	395	*	714	873	1,338
Moses Creek	At State Route 206	2.7	210	*	390	483	779

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Moses Creek Tributary No. 1	At mouth	0.5	135	*	248	304	466
Moses Creek Tributary No. 2	At mouth	0.8	60	*	115	143	223
Moses Creek Tributary No. 3	At mouth	0.6	78	*	148	182	278
Moses Creek Tributary No. 4	At mouth	1.6	239	*	436	535	830
Moses Creek Tributary No. 4	Approximately 3,500 feet upstream of mouth	1.4	151	*	281	349	568
Moses Creek Tributary No. 5	At mouth	0.9	173	*	318	390	601
Moses Creek Tributary No. 5	Approximately 4,000 feet upstream of mouth	0.5	71	*	134	168	278
Moses Creek Tributary No. 6	At mouth	3.3	377	*	682	834	1,276
Moultrie Creek	At U.S. Route 1	41.85	2,099	*	3,428	3,988	5,434
Moultrie Creek	At State Route 207	18.23	931	*	1,474	1,698	2,279
Moultrie Creek	At Florida East Coast Railway	15.71	863	*	1,361	1,564	2,094
Moultrie Creek Tributary No. 1	At confluence with Moultrie Creek	1.40	338	*	551	640	873
Moultrie Creek Tributary No. 1	At U.S. Route 1	1.01	259	*	425	493	671

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Moultrie Creek Tributary No. 3	At confluence with Moultrie Creek	2.44	199	*	313	359	480
Moultrie Creek Tributary No. 4	At confluence with Moultrie Creek	2.72	332	*	543	632	863
Moultrie Creek Tributary No. 4	At Kings Estate Road	2.22	294	*	469	543	732
Moultrie Creek Tributary No. 4	At State Route 207	1.81	261	*	414	477	640
North Lower	Approximately 2,620 feet downstream of the confluence of Northeast Main	0.05	*	*	*	157	*
North Lower	At 20 Mile Road	0.84	*	*	*	132	*
Northeast East	At the confluence of Northeast Mid	0.19	*	*	*	108	*
Northeast Main	At River Run Boulevard	0.12	*	*	*	397	*
Northeast North	At Palm Valley Road	0.01	*	*	*	257	*
Northwest Lower	At the confluence of Northwest North	0.08	*	*	*	46	*
Orange Grove Branch	At confluence with the St. Johns River	1.52	336	*	533	612	815
Orange Grove Branch	Approximately 1 mile upstream of confluence with the St. Johns River	0.99	209	*	337	388	523

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Petty Branch	At confluence with the St. Johns River	1.86	350	*	558	642	860
Petty Branch	Approximately 0.57 mile upstream of State Route 13	1.65	315	*	503	579	780
Petty Branch	Approximately 1.2 miles upstream of State Route 13	1.29	268	*	432	499	675
Red House Branch	At County Route 16A	5.4	864	*	1,353	1,552	2,050
Red House Branch	At Woodlawn Road	1.99	200	*	323	374	507
Salt Creek Ditch	Approximately 1,800 feet upstream of County Boundary (6454)	21.54	74	76	76	77	77
Salt Creek Ditch	At county Road 13 (6296)	16.47	437	609	711	865	886
Salt Creek Ditch	At confluence with Salt Creek Ditch Tributary 1 (6297)	14.72	142	148	150	153	154
Salt Creek Ditch	Approximately 14,700 feet upstream of County Road 13 (6423)	12.27	186	197	199	203	204

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Salt Creek Ditch Tributary 1	Approximately 870 feet upstream of confluence with Salt Creek Ditch (6400)	2.11	45	55	60	73	78
Schoolhouse Branch	At County Road 204 (2685)	2.63	207	322	381	597	702
Schoolhouse Branch	Approximately 11,800 feet upstream of County Road 204 (10129)	0.86	51	95	115	169	181
Sixteenmile Creek	At confluence with Deep Creek	30.0	1,386	*	2,443	2,980	4,576
Sixteenmile Creek	At Cedar Ford Boulevard	15.2	1,035	*	1,827	2,224	3,375
Sixmile Creek	Upstream of County Route 13	77.34	3,354	*	5,212	6,005	8,078
Sixmile Creek	Upstream of Mill Creek No. 2 confluence	56.55	2,463	*	3,858	4,454	6,022
Sixmile Creek	At State Route 13A	50.48	2,149	*	3,342	3,847	5,141
Smith Creek Main	At River Run Boulevard	0.41	*	*	*	508	*
St. Johns River Tributary No. 1 (Hickory Slough)	At confluence with the St. Johns River	1.03	331	*	515	600	790

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
St. Johns River Tributary No. 1 (Hickory Slough)	At State Route 13	0.13	76	*	115	133	174
St. Johns River Tributary No. 2	At mouth	1.36	291	*	446	519	682
St. Johns River Tributary No. 2	At State Route 13	1.16	277	*	426	496	652
St. Johns River Tributary No. 3, Branch No. 1	At mouth	0.94	291	*	457	525	697
St. Johns River Tributary No. 3, Branch No. 1	Downstream of confluence of St. Johns River Tributary No. 3, Branch No. 2	0.80	255	*	401	462	613
St. Johns River Tributary No. 3, Branch No. 1	Upstream of confluence of St. Johns River Tributary No. 3, Branch No. 2	0.38	85	*	133	153	203
St. Johns River Tributary No. 3, Branch No. 2	At confluence with St. Johns River Tributary No. 3, Branch No. 1 mouth	0.52	139	*	219	253	337
St. Johns River Tributary No. 4	At confluence with the St. Johns River	0.64	207	*	318	365	483
St. Johns River Tributary No. 4	At County Route 13N	0.5	151	*	232	266	356

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
St. Johns River Tributary No. 5	At confluence with the St. Johns River	0.87	198	*	311	358	478
St. Johns River Tributary No. 5	At State Route 13	0.82	193	*	304	351	468
Stevens Branch	At unnamed road (3219)	12.30	497	686	773	1,048	1,174
Stevens Branch	At confluence with Fish Drain (3229)	12.18	483	666	750	1,020	1,146
Stevens Branch	At County Road 204 (1284)	5.97	130	194	231	394	406
Stevens Branch	At confluence with Stevens Branch Tributary 1 (1315)	5.81	120	150	167	173	173
Stevens Branch	Approximately 500 feet upstream of confluence with Stevens Branch Tributary 1 (1294)	3.89	33	50	61	73	82
Stevens Branch	Approximately 7,000 feet upstream of confluence with Stevens Branch Tributary 1 (10459)	3.24	62	77	81	89	91
Stevens Branch Tributary 1	Approximately 1,000 feet upstream of confluence with Stevens Branch (1280)	1.92	87	100	106	105 ¹	104 ¹

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Stevens Branch Tributary 1	At unnamed road (1317)	1.85	18	17 ¹	17 ¹	17 ¹	18 ¹
Stevens Branch Tributary 1	Approximately 7,000 feet upstream of confluence with Stevens Branch (1309)	0.17	13	14	14	20	23
Swamp	At approximately 3,500 feet upstream of Old Highway Dixie	0.14	*	*	*	70	*
Tolomato River Tributary No. 1	At mouth	4.2	185	*	345	424	636
Tolomato River Tributary No. 1	At confluence of Tolomato River Tributary No. 2	3.1	126	*	238	294	444
Tolomato River Tributary No. 1	At U.S. Route 1	2.9	99	*	189	235	362
Tolomato River Tributary No. 2	At mouth	0.7	172	*	312	380	561
Tributary to Unnamed Drain No. 1	Approximately 1,000 feet upstream of confluence with Unnamed Drain 1 (2643)	0.31	50	69	78	107	118

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Tributary to Unnamed Drain No. 3	Approximately 2,040 feet upstream of confluence with Unnamed Drain 3 (6306)	0.22	33	56	66	100	128
Trout Creek	At mouth	23.5	1,470	*	2,569	3,117	4,668
Trout Creek	At County Highway 16A	20.8	1,458	*	2,543	3,080	4,578
Trout Creek	At confluence of tributary downstream of County Highway 210	17.9	1,272	*	2,228	2,703	4,043
Trout Creek	At County Highway 210	7.8	677	*	1,206	1,471	2,244
Turnbull Creek	Upstream of Sixmile Creek confluence	50.48	2,149	*	3,342	3,847	5,141
Turnbull Creek	At State Route 16	34.92	1,250	*	1,868	2,123	2,763
Turnbull Creek	At Interstate Route 95	29.56	1,016	*	1,557	1,783	2,358
Unnamed Ditch No. 1	At Interstate 95 (3643)	1.68	104	138	154	201	221
Unnamed Ditch No. 1	Approximately 1,850 feet upstream of Interstate 95 (3747)	0.67	99	130	144	187	204
Unnamed Ditch No. 1	Approximately 3,500 feet upstream of Interstate 95 (3737)	0.05	36	42	46	57	62
Unnamed Ditch No. 2	At unnamed road (800027)	0.14	15	19	22	30	34

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Unnamed Ditch No. 3	At unnamed road (800073)	6.14	109	165	184	227	242
Unnamed Ditch No. 3	Approximately 9,950 feet upstream of unnamed road (800056)	4.90	102	193	206	229	235
Unnamed Drain No. 1	At unnamed road (2635)	1.10	48	54	57	65	69
Unnamed Drain No. 1	Approximately 2,000 feet upstream of unnamed road (10409)	0.53	8	9	10	11	11
Unnamed Drain No. 2	At unnamed wetland (10444)	3.41	56	70	74	108	128
Unnamed Drain No. 3	At county Road 13 (6310)	3.46	58	70	80	126	150
Unnamed Drain No. 3	At unnamed road (6299)	2.86	58	83	83	103	110
Unnamed Drain No. 3	Approximately 4,350 feet upstream of County Road 13 (6305)	2.05	42	52	54	74	85
Unnamed Drain No. 3	At unnamed road (1282)	1.78	2	3	3	4	238
Unnamed Drain No. 4	At unnamed road (6303)	1.89	159	243	276	586	714

Table 10: Summary of Discharges, continued

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Unnamed Drain No. 5	At Old Brick Road (6192)	4.02	209	281	316	430	476
Unnamed Drain No. 6	At unnamed wetland (3649)	0.63	63	90	102	143	159
Unnamed Drain No. 7	At unnamed road (3664)	0.70	50	66	75	105	118
Unnamed Drain No. 8	Approximately 2,680 feet upstream of unnamed road (10363)	0.24	28	44	51	75	85
Unnamed Drain No. 9	Approximately 4,760 feet upstream of unnamed road (10306)	1.26	50	70	80	122	141
Upper Deep Creek	At approximately 3,500 feet upstream of Old Dixie Highway	2.14	*	*	*	618	*
Upper Smith Creek	At Crosswater Parkway	0.89	*	*	*	464	*
West Run Cracker Branch	At mouth	12.0	795	*	1,417	1,732	2,670
West Run Cracker Branch	At Florida East Coast Railway	9.7	732	*	1,306	1,594	2,446

*Not calculated for this Flood Risk Project

¹Flows from unsteady model

Figure 7: Frequency Discharge-Drainage Area Curves
[Not Applicable to this Flood Risk Project]

Table 11: Summary of Non-Coastal Stillwater Elevations

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Cracker Branch	At Interstate 95 (2699)	7.9	8.9	9.5	11.1	11.7
Cracker Branch	At bridge of unnamed road (1980)	10.4	11.3	11.8	13.2	13.7
Cracker Branch	At confluence with Cracker Branch Tributary 1 (1979)	11.7	12.6	13.1	14.4	14.9
Cracker Branch	At bridge of unnamed road (1977)	14.1	15.1	15.3	16.4	16.8
Cracker Branch	Approximately 7,900 feet upstream of confluence with Cracker Tributary 1 (2049)	21.3	21.6	21.8	22.2	22.4
Cracker Branch	At confluence with Cracker Branch Tributary 2 (2070)	23.1	23.4	23.5	23.8	24.0
Cracker Branch	Approximately 940 feet upstream of confluence with Cracker Branch Tributary 2 (2043)	24.7	25.0	25.2	25.6	25.7
Cracker Branch	Approximately 12,300 feet upstream of confluence with Cracker Branch Tributary 2 (2043)	26.4	26.5	26.6	26.8	26.9

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Cracker Branch Tributary No. 1	Approximately 2,400 feet upstream of confluence with Cracker Branch (2036)	17.1	17.3	17.3	17.6	17.7
Cracker Branch Tributary No. 1	Approximately 3,500 feet upstream of confluence with Cracker Branch (2708)	22.4	22.5	22.5	22.6	22.6
Cracker Branch Tributary No. 2	Approximately 2,460 feet upstream of confluence with Cracker Branch (2045)	24.4	24.7	24.8	24.9	25.0
Dave Branch	At unnamed road (3255)	24.7	24.8	24.9	25.1	25.1
Dave Branch	At confluence with Dave Branch Tributary 1 (3260)	27.1	27.3	27.4	27.7	27.8
Dave Branch	At confluence with Dave Branch Tributary 2 (10547)	27.6	27.9	28.0	28.4	28.5
Dave Branch	Approximately 1,040 feet upstream of confluence with Dave Branch Tributary 2 (10282)	29.0	29.3	29.5	29.9	30.0

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Dave Branch Tributary No. 1	Approximately 400 feet upstream of confluence with Dave Branch (3277)	27.9	28.0	28.1	28.3	28.4
Dave Branch Tributary No. 2	Approximately 440 feet upstream of confluence with Dave Branch (4536)	29.9	30.0	30.1	30.2	30.3
Fish Drain	At County Road 204 (2692)	21.7	22.2	22.4	23.1	23.4
Fish Drain	Approximately 35,000 feet upstream of confluence with Stevens Branch (10273)	37.2	37.4	37.4	37.6	37.6
HYDRY02B1	Approximately 1,750 feet southeast of the intersection of North Lower and Twenty Mile Road	*	*	*	13.6	*
ISOWET-01	Approximately 2,340 feet north and 1,390 feet west of the intersection of 20 Mile Road and Wilson Branch	*	*	*	25.0	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
ISOWET-02	Approximately 2,910 feet north and 730 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.2	*
Oakridge Pond 1	St. Johns County, Unincorporated Areas	*	*	*	21.6	*
Oakridge Pond 2	St. Johns County, Unincorporated Areas	*	*	*	21.1	*
Oakridge Pond 3	St. Johns County, Unincorporated Areas	*	*	*	19.4	*
Oakridge Pond 4	St. Johns County, Unincorporated Areas	*	*	*	20.6	*
Oakridge Pond 5	St. Johns County, Unincorporated Areas	*	*	*	20.6	*
Oakridge Pond 6	St. Johns County, Unincorporated Areas	*	*	*	20.6	*
Oakridge Pond 7	St. Johns County, Unincorporated Areas	*	*	*	19.0	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Oakridge Pond 8	St. Johns County, Unincorporated Areas	*	*	*	21.1	*
Oakridge Pond 9	St. Johns County, Unincorporated Areas	*	*	*	20.4	*
Oakridge Pond 10	St. Johns County, Unincorporated Areas	*	*	*	20.4	*
Oakridge Wetland	St. Johns County, Unincorporated Areas	*	*	*	20.6	*
Park Pond 1	Approximately 860 feet northeast of the intersection of Downs Corner Road and State Route 16	*	*	*	27.5	*
Park Pond 2	Approximately 630 feet north of the intersection of Downs Corner Road and State Route 16	*	*	*	29.4	*
Park Wetland A	Approximately 950 feet northwest of the intersection of Downs Corner Road and State Route 16	*	*	*	29.9	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Park Wetland B	Approximately 1,180 feet east of the intersection of Downs Corner Road and State Route 16	*	*	*	29.1	*
Pond L4	At south side of Nocatee Parkway	*	*	*	33.6	*
Pond M1	At south side of Nocatee Parkway	*	*	*	26.7	*
Pond SWMF 1901	Approximately 670 feet east of the intersection of Bluewater Drive and Crosswater Parkway	*	*	*	20.0	*
Pond SWMF 2001	Approximately 1,700 feet east and 660 feet north of the intersection of Bluewater Drive and Crosswater Parkway	*	*	*	20.0	*
Pond SWMF 2701	Approximately 1,200 feet south and 1,000 feet east of the intersection of Bluewater Drive and Crosswater Parkway	*	*	*	20.0	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Salt Creek Ditch	Approximately 1,800 feet upstream of County Boundary (6454)	24.6	24.7	24.7	24.8	24.9
Salt Creek Ditch	At County Road 13 (6296)	29.1	29.9	30.3	30.9	31.0
Salt Creek Ditch	At confluence with Salt Creek Ditch Tributary 1 (6297)	30.1	30.6	30.8	31.3	31.4
Salt Creek Ditch	Approximately 14,700 feet upstream of County Road 13 (6423)	33.7	34.0	34.0	34.2	34.2
Salt Creek Ditch Tributary No. 1	Approximately 870 feet upstream of County Boundary (6400)	29.1	29.9	30.3	30.9	31.0
Salt Run	St. Augustine, City of; St. Johns County, Unincorporated Areas	3.8	*	6.6	7.9	10.8
Schoolhouse Branch	At County Road 204 (2685)	16.0	17.1	17.7	19.8	20.0
Schoolhouse Branch	Approximately 11,800 feet upstream of County Road 204 (10129)	29.6	30.1	30.3	30.7	30.8

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
SMF-E6	Approximately 1,710 feet east of the intersection of North Lower and Twenty Mile Rod	*	*	*	13.1	*
SMF-E7	Approximately 1,460 feet east of the intersection of North Lower and Twenty Mile Road	*	*	*	13.8	*
SMF-E8	Approximately 940 feet east of the intersection of North Lower and Twenty Mile Road	*	*	*	14.0	*
SMF-10	Approximately 1,600 feet northeast of the confluence of Northwest 1 Lower and Northwest North	*	*	*	17.5	*
SMF-11	Approximately 1,100 feet east of the confluence of Northwest 1 Lower and Northwest North	*	*	*	18.5	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
SMF-TM-02	Approximately 2,700 feet north and 1,720 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	25.2	*
SMF-TM-03	Approximately 2,830 feet north and 720 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	24.7	*
SMF-TM-04	Approximately 2,660 feet north and 320 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	25.2	*
SMF-TM-05	Approximately 3,440 feet north and 380 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	24.5	*
SMF-TM-37	Approximately 2,410 feet north and 720 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	25.3	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
SMF-TM-38	Approximately 2,550 feet north and 620 feet east of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.2	*
SMF-TM-39	Approximately 1,520 feet north and 670 feet east of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.8	*
St. Johns River	Along Old Bull Bay	3.0	*	4.3	4.9	6.3
St. Johns River	Along Deep Creek	3.0	*	4.5	5.2	6.7
Stevens Branch	At unnamed road (3219)	16.9	17.2	17.4	17.9	18.6
Stevens Branch	At confluence with Fish Drain (3229)	21.3	21.7	21.9	22.5	22.7
Stevens Branch	At County Road 204 (1284)	28.4	29.1	29.6	31.0	31.0
Stevens Branch	At confluence with Stevens Branch Tributary 1 (1315)	30.7	31.0	31.1	31.8	31.9
Stevens Branch	Approximately 500 feet upstream of confluence with Stevens Branch Tributary 1 (1294)	30.8	31.1	31.2	31.9	32.0

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Stevens Branch	Approximately 7,000 feet upstream of confluence with Stevens Branch Tributary 1 (10459)	33.7	33.9	33.9	34.1	34.1
Stevens Branch Tributary No. 1	Approximately 1,000 feet upstream of confluence with Stevens Branch (1280)	31.3	31.6	31.7	32.1	32.1
Stevens Branch Tributary No. 1	At unnamed road (1317)	32.4	32.5	32.6	32.7	32.7
Stevens Branch Tributary No. 1	Approximately 7,000 feet upstream of confluence with Stevens Branch (1309)	33.0	33.1	33.2	33.4	33.5
TM Pond 7	St. Johns County, Unincorporated Areas	*	*	*	21.8	*
TM Pond 14	St. Johns County, Unincorporated Areas	*	*	*	20.0	*
TM Pond 15	St. Johns County, Unincorporated Areas	*	*	*	20.6	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
TM Pond 41	St. Johns County, Unincorporated Areas	*	*	*	22.0	*
TM Pond 42	St. Johns County, Unincorporated Areas	*	*	*	21.4	*
Tolomato River/ Guano River	St. Johns County, Unincorporated Areas	3.4	*	5.7	6.6	8.7
Tolomato River/ Intracoastal Waterway	Between Smith Creek and Palm Valley Landing	2.7	*	4.6	5.4	7.2
Tolomato River/ Intracoastal Waterway	Between Palm Valley Landing and the northern county boundary	2.6	*	4.6	5.4	6.9
Tributary to Unnamed Drain No. 1	Approximately 1,000 feet upstream of confluence with Unnamed Drain 1 (2643)	30.6	30.7	30.7	30.8	30.8
Tributary to Unnamed Drain No. 3	Approximately 2,040 feet upstream of confluence with Unnamed Drain 3 (6306)	32.8	33.0	33.0	33.2	33.3
Unnamed Ditch No. 1	At Interstate 95 (3643)	34.4	34.5	34.6	34.7	34.8

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Unnamed Ditch No. 1	Approximately 1,850 feet upstream of Interstate 95 (3747)	37.3	38.0	38.2	38.8	39.1
Unnamed Ditch No. 1	Approximately 3,500 feet upstream of Interstate 95 (3737)	37.9	38.4	38.6	39.2	39.3
Unnamed Ditch No. 2	At unnamed road (800027)	39.5	39.6	39.6	39.8	39.8
Unnamed Ditch No. 3	At unnamed road (800073)	35.1	35.3	35.3	35.4	35.4
Unnamed Ditch No. 3	Approximately 9,950 feet upstream of unnamed road (800056)	36.1	36.2	36.3	36.3	36.3
Unnamed Drain No. 1	At unnamed road (2635)	29.5	29.8	29.8	29.9	29.9
Unnamed Drain No. 1	Approximately 2,000 feet upstream of unnamed road (10409)	30.6	30.7	30.7	30.8	30.9
Unnamed Drain No. 2	At unnamed wetland (10444)	32.1	32.2	32.2	32.4	32.4
Unnamed Drain No. 3	At County Road 13 (6310)	29.1	29.9	30.3	30.9	31.0
Unnamed Drain No. 3	At unnamed road (6299)	31.0	31.2	31.2	31.5	31.6

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Unnamed Drain No. 3	Approximately 4,350 feet upstream of County Road 13 (6305)	32.1	32.4	32.4	32.8	33.0
Unnamed Drain No. 3	At unnamed road (1282)	32.5	32.8	32.8	32.9	33.0
Unnamed Drain No. 4	At unnamed road (6303)	29.1	29.9	30.3	30.9	31.0
Unnamed Drain No. 5	At Old Brick Road (6192)	31.8	31.9	31.9	32.0	32.0
Unnamed Drain No. 6	At unnamed wetland (3649)	38.4	38.5	38.5	38.9	39.1
Unnamed Drain No. 7	At unnamed road (3664)	38.1	38.4	38.4	38.5	38.5
Unnamed Drain No. 8	Approximately 2,680 feet upstream of unnamed road (10363)	38.6	38.8	38.8	39.0	39.1
Unnamed Drain No. 9	Approximately 4,760 feet upstream of unnamed road (10306)	31.2	31.3	31.4	31.6	31.7
Unnamed Flooding Area 1	St. Johns County, Unincorporated Areas	*	*	*	18.0	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
UPA 4	Approximately 1,830 feet north and 640 feet east of the intersection of 20 Mile Road and Wilson Lane	*	*	*	22.0	*
UPA 5	St. Johns County, Unincorporated Areas	*	*	*	24.1	*
UPA 6	St. Johns County, Unincorporated Areas	*	*	*	23.8	*
UPA 7	Approximately 3,720 feet north and 1,580 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.0	*
UPA 8	Approximately 4,380 feet north and 2,930 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.9	*
UPA 9	Approximately 4,920 feet north and 3,190 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.3	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
UPA 10	Approximately 3,220 feet north and 3,610 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	22.8	*
UPA 11	Approximately 2,230 feet north and 2,190 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	22.9	*
UPA 12	Approximately 2,090 feet north and 2,510 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	24.5	*
UPA 13	Approximately 1,570 feet north and 1,790 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	23.1	*
UPA 14	Approximately 660 feet north and 3,470 west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	24.6	*

Table 11: Summary of Non-Coastal Stillwater Elevations, continued

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
UPA 15	Approximately 700 feet north and 2,160 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	24.3	*
UPA 16	Approximately 830 feet north and 920 feet west of the intersection of 20 Mile Road and Wilson Lane	*	*	*	24.9	*
Wetland S15	Approximately 900 feet south and 1,200 feet east of the intersection of Bluewater Drive and Crosswater Parkway	*	*	*	19.0	*
Wetland T9	Approximately 650 feet east of the intersection of Bluewater Drive and Crosswater Parkway	*	*	*	20.0	*
Wetland WC1	Located within the northeast corner of Township 5 South, Range 29 East	*	*	*	32.7	*

*Not calculated for this Flood Risk Project

Table 12: Stream Gage Information used to Determine Discharges

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record	
					From	To
Durbin Creek	02246200	USGS	Durbin Creek at Race Track Road	*	*	*
Durbin Creek	02245255	USGS	Durbin Creek at Cowpen Branch Road	12.2	*	*
Deep Creek	02245260	USGS	Deep Creek at Florida East Coast Railway	*	*	*
Sixmile Creek	02245328	USGS	Sixmile Creek at State Road 13	*	*	*

*Data not available