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New Smyrna Beach, Florida

052819 Deliverable – Quick Start Document

The following document is intended to help end users get started with the provided deliverable content.

Step 1. Base Level – Quick reference and base level documentation. See the following:

Map Book Appendix.pdf

Compilation of assessment map series

Individual JPEGs

Compilation of assessment map series

Individual PDFs

Compilation of assessment map series

Animations

Time-lapse animation of sea level rise projection scenarios

Step 2. Mid Level – Quick, dynamic reference web based utility. See the following:

ArcGIS Online Story Map.pdf

Public access URL and embed code used in web development

Step 3. High Level – ArcMap GIS resources used to conduct the assessment. Note data WILL have to be relinked/repaired using the provided Geodata. See the following:

Geodata

NSB_VA_FMD.gbd

New Smyrna Beach Vulnerability Assessment: Flood Model Database

N17 references NOAA 2017 projection

SLR references just a sea-level rise projection

SLRHAZUS references sea-level rise + 100-year flood event calculated via HAZUS

Shallow Coastal Flooding provided from NOAA High Tide Flooding

StormSurge FDEM 2017

US13 references USACE 2013 projection

NSB_VA_RBD.gbd

New Smyrna Beach Vulnerability Assessment: Reference Base Database

Compiled features used in the assessment

NSB_VA_GAD.gbd

New Smyrna Beach Vulnerability Assessment: GIS Assessment Database

FutureLandUse – Clips of 100-Year Risk and N17 2100 Scenario

Parcels – Clips of various SLR and 100-Year projections

Streets – Clips of various inundation scenarios

FEMA National Flood Hazard Layer.lyr

FEMA Provided National Flood Hazard Layer available at

<https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS>

New Smyrna Beach 12127C_20180827

Publicly available FEMA shapefiles

MXDs

Partner Logos



Top Vulnerabilities

(As reported by respondents of the Resilient New Smyrna Beach online survey)

VULNERABILITIES

#1—Hurricane and Storm Surge (1.821)



#2—Growth and Development (1.864)



#3—Aging infrastructure (2.027)



#4—Flooding (2.030)



#5—Sea level Rise (2.086)

#6—Funding (2.391)

#7—Erosion (2.429)

Top Resilience Strategies

(As reported by respondents of the Resilient New Smyrna Beach online survey)

STRATEGIES

- #1—Developing a resilience education program for public and private officials;
- #2—Focusing on green infrastructure by setting aside open space for water capture and flood mitigation;
- #3—Reassess land use patterns and plans based on future hazards;
- #4—Create solutions including swales, permeable surfaces & green infrastructure;
- #5—Require sea oats or other native vegetation along surge prone shorelines;
- #6—Improve water supply infrastructure to be resilient to salt water impacts;
- #7—Implement resilient standards in codes/policies (ex: elevate structures);
- #8—Create avenue to make public aware of local candidate voting practices;
- #9—Strengthen on-site stormwater management techniques on all development;
- #10—Implement policies/codes to direct development away from high risk areas.



Opportunity Rankings

(As reported by respondents of the Resilient New Smyrna Beach online survey)

#1—Low Impact Development Techniques

Update codes and policies to incentive low impact development techniques that emphasizes use of on-site natural features to protect water quality and manage stormwater run-off on the property.



#2—Pre & Post Storm Planning

Work with City departments, elected officials and others to be proactive for pre-storm planning and enhance educational opportunities for the public concerning hurricane preparedness and debris management.



#3—Green Infrastructure

Assess & prioritize opportunities to use larger, natural resilient strategies or acquire vulnerable, strategic properties to transition into natural areas for green infrastructure & provide eco-tourism activities.



#4—Designate Adaptation Action Area

AAA is an area that experiences coastal flooding due to extreme tides and surge and is vulnerable to sea level rise designated for prioritizing funding for adaptation and infrastructure planning and needs.



#5—Mixed Use Development

Focus on redevelopment of the downtown core to be more mixed-use with resilient building designs and incorporate more mixed-use development west of I-95 through code and policy changes or a master plan.



#6—Resilience Action Plan

Develop an action plan to determine appropriate measures to mitigate, adapt or relocate critical assets and population vulnerable to extensive flooding and sea level rise, and identify other necessary activities.

#7—Funding

Identify or create funding mechanisms that focus on specific sustainable projects within the City such as infrastructure improvements and mitigation and adaptation projects.

#8—Mangrove Education

Create an educational campaign about the importance of mangroves and implement stronger code enforcement for destruction of mangroves

