## **Resilient Martin**

## **Project Summary**

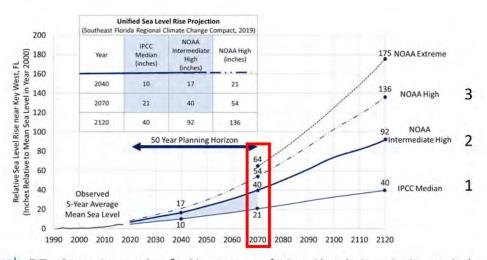
- Continues partnership with the Florida Department of Environmental Protection (FDEP) to plan for sea level rise
- Creates Resiliency and Watershed Management Plan for Martin County consistent with the National Flood Insurance Program's Community Rating System (CRS)
- Analyzes sea level rise projections for 2040, 2070, and 2100 based on the NOAA Intermediate High Projection (2) with an emphasis on 2070 planning horizon
- · Assesses vulnerability for critical facilities, public works, utilities, roads, other infrastructure
- Identifies economic and business impacts

About the County: Martin County sits on the east-central coast of Florida where it occupies 543 square miles and approximately 22 miles of Atlantic Ocean. The County has a complex of interior waterways, with the main system draining from Lake Okeechobee in the west and flowing through the St. Lucie Inlet to the east. Many smaller rivers and creeks flow through the County and also connect to this main waterway. The interconnection of these extensive waterways to the Atlantic ocean make large areas in Martin County especially vulnerable to the effects of climate change and sea level rise. With the majority of the County's 160,000 residents and businesses concentrated along these waterfront areas, the need to establish a resilient path forward is essential.

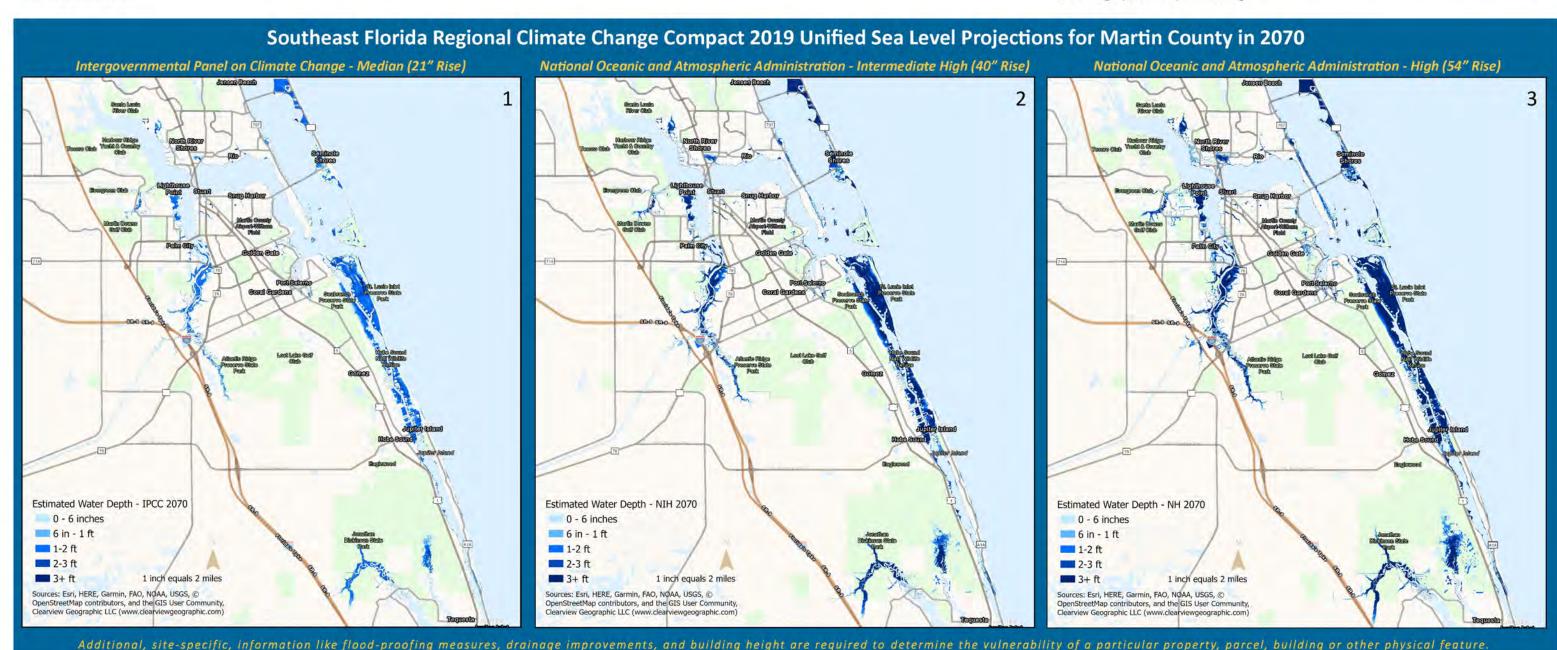
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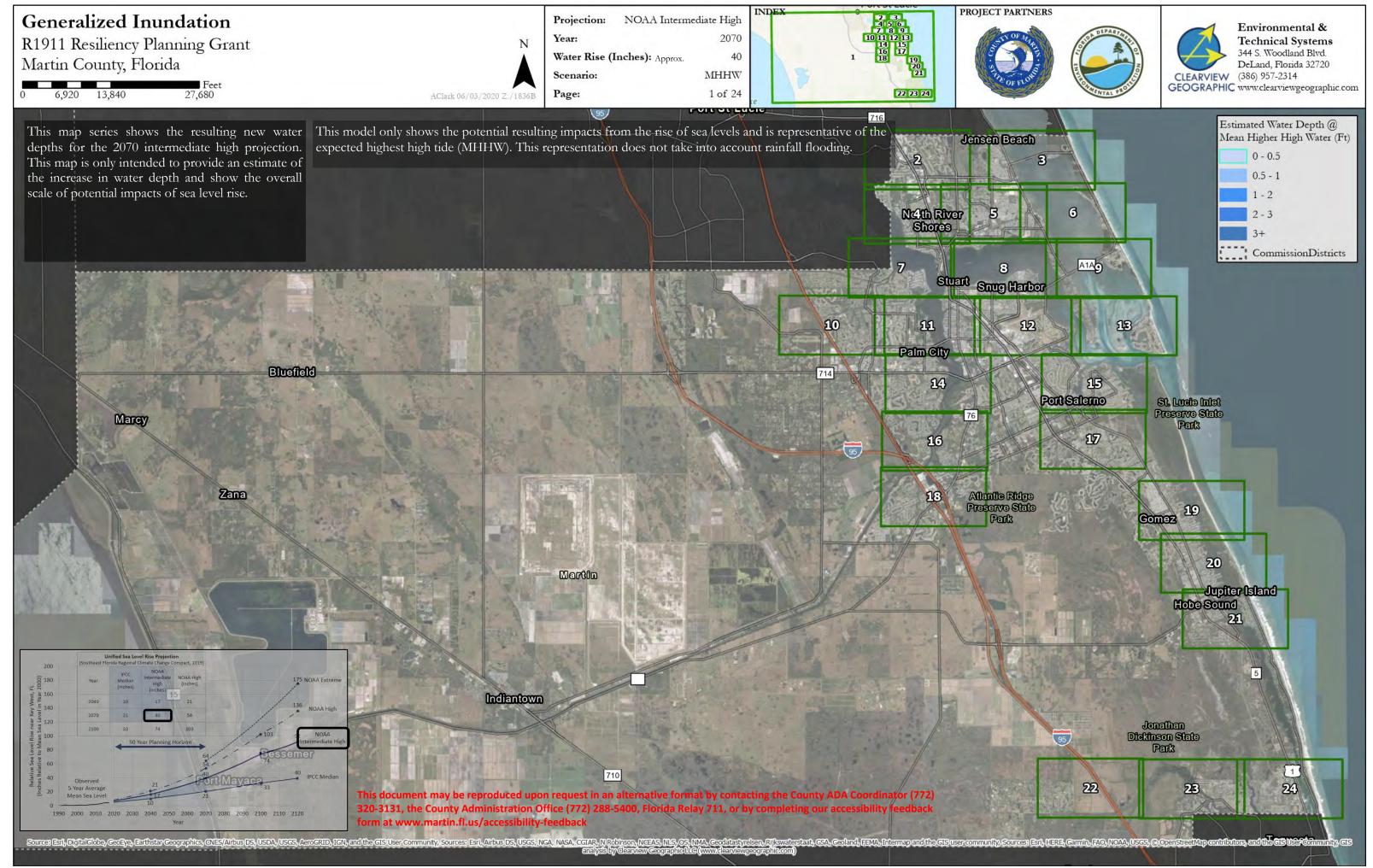
The image to the right shows the 2019 Southeast Florida Regional Climate Change Compact Unified Sea Level Rise Projections, developed by Palm Beach, Broward, Miami-Dade, and Monroe Counties to plan for sea level rise. Martin County has adopted these projections for use as a tool to predict future impacts, identify potential vulnerabilities, and prioritize capital project planning efforts. The Projections incorporate four sea level rise curves from the Intergovernmental Panel on Climate change and NOAA: the difference in the curves for a given year demonstrates the variability in potential scenarios. Each curve is generated using different assumptions about the future including land use, ice melt, population growth and atmospheric conditions.

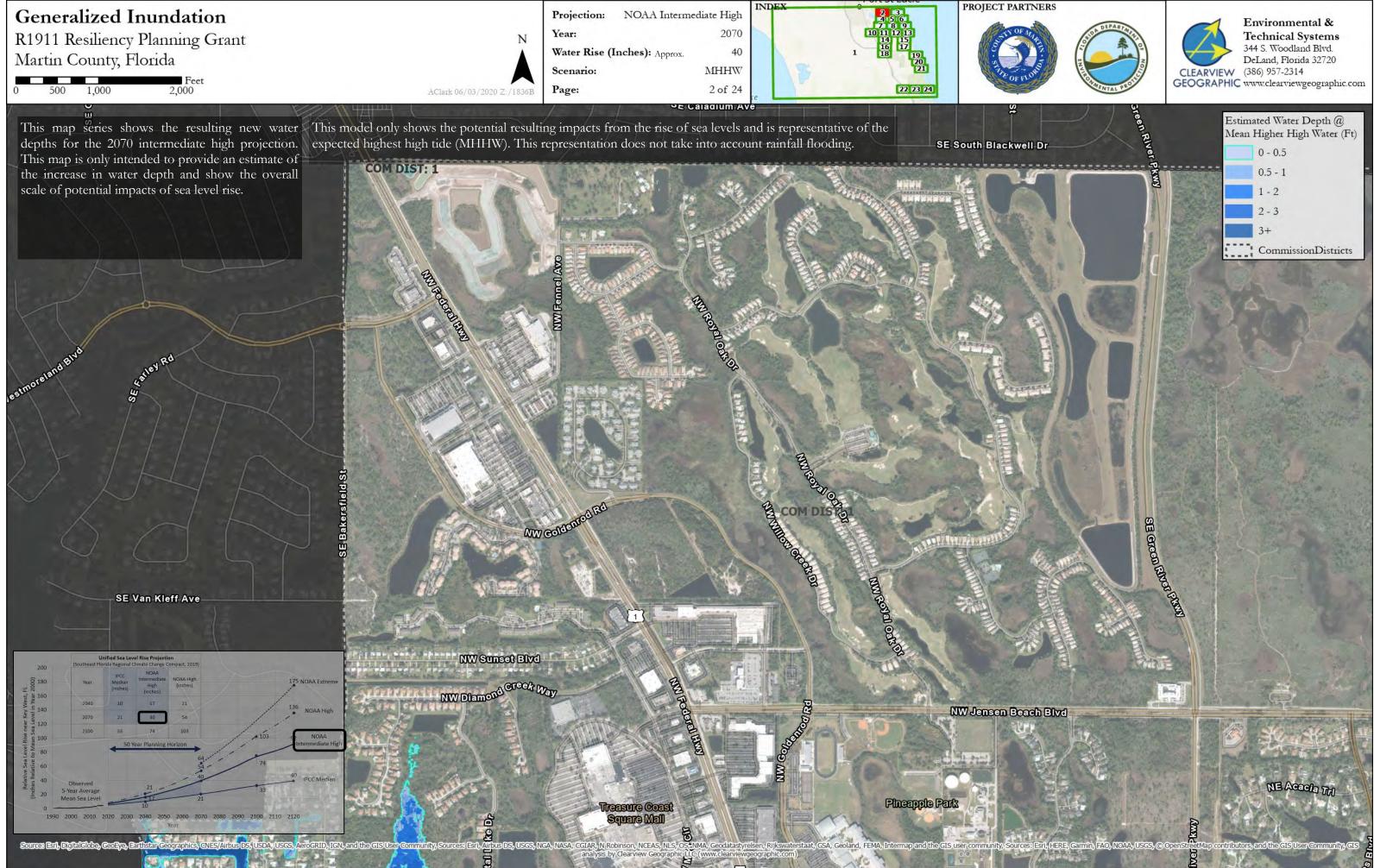
Planning Efforts: In 2018, the County applied for and was awarded a grant from FDEP's Office of Resilience and Coastal Protection, CM933, to begin its resilience efforts. This second Resilience Planning Grant R1911, awarded in 2019, builds upon that work. The County has now completed extensive vulnerability analysis and planning, as well as resident engagement and community education. The culmination of this work is a Resilience and Watershed Management Plan, which will integrate current and future projects using an interdisciplinary resiliency-based approach.

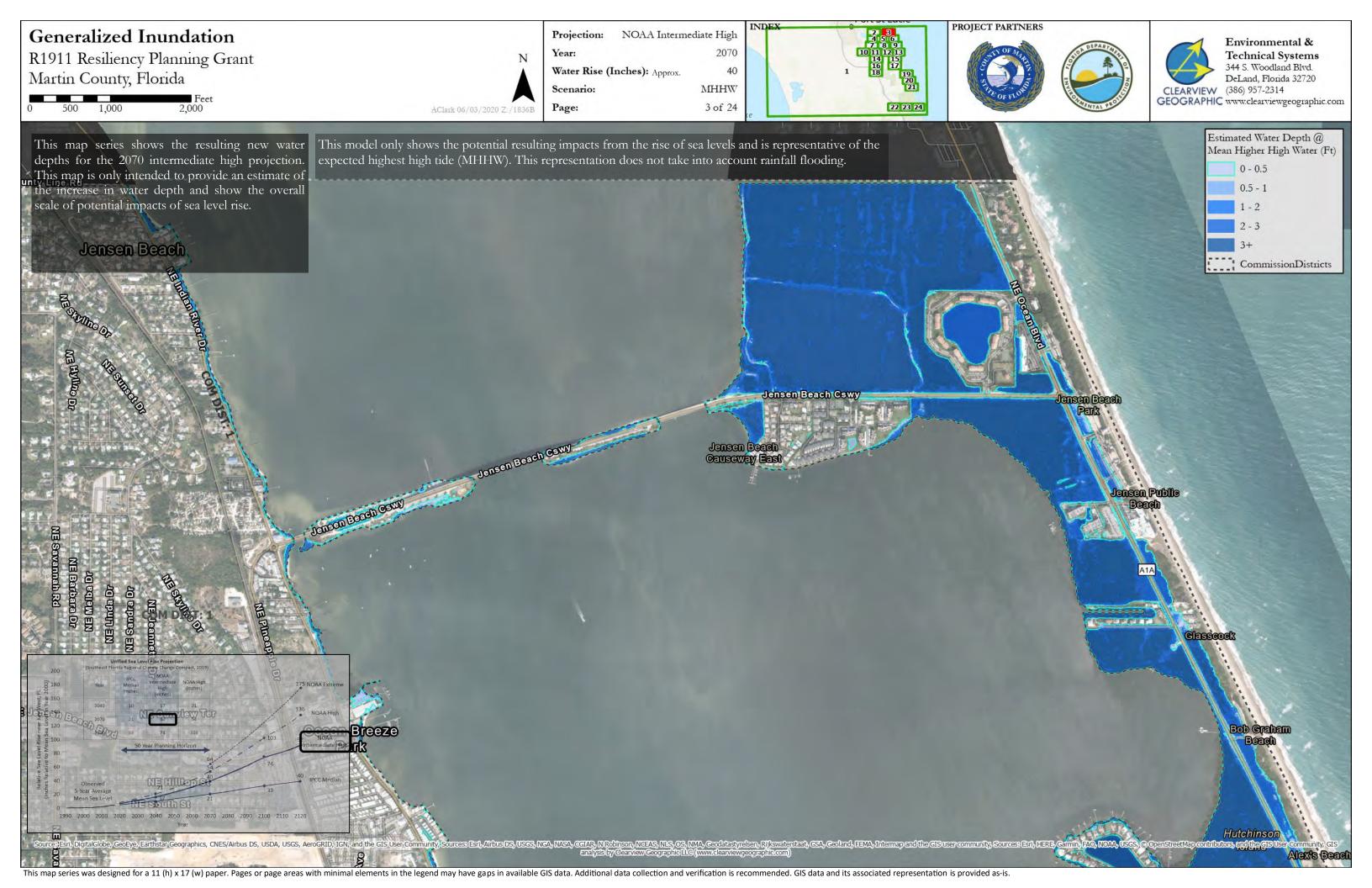


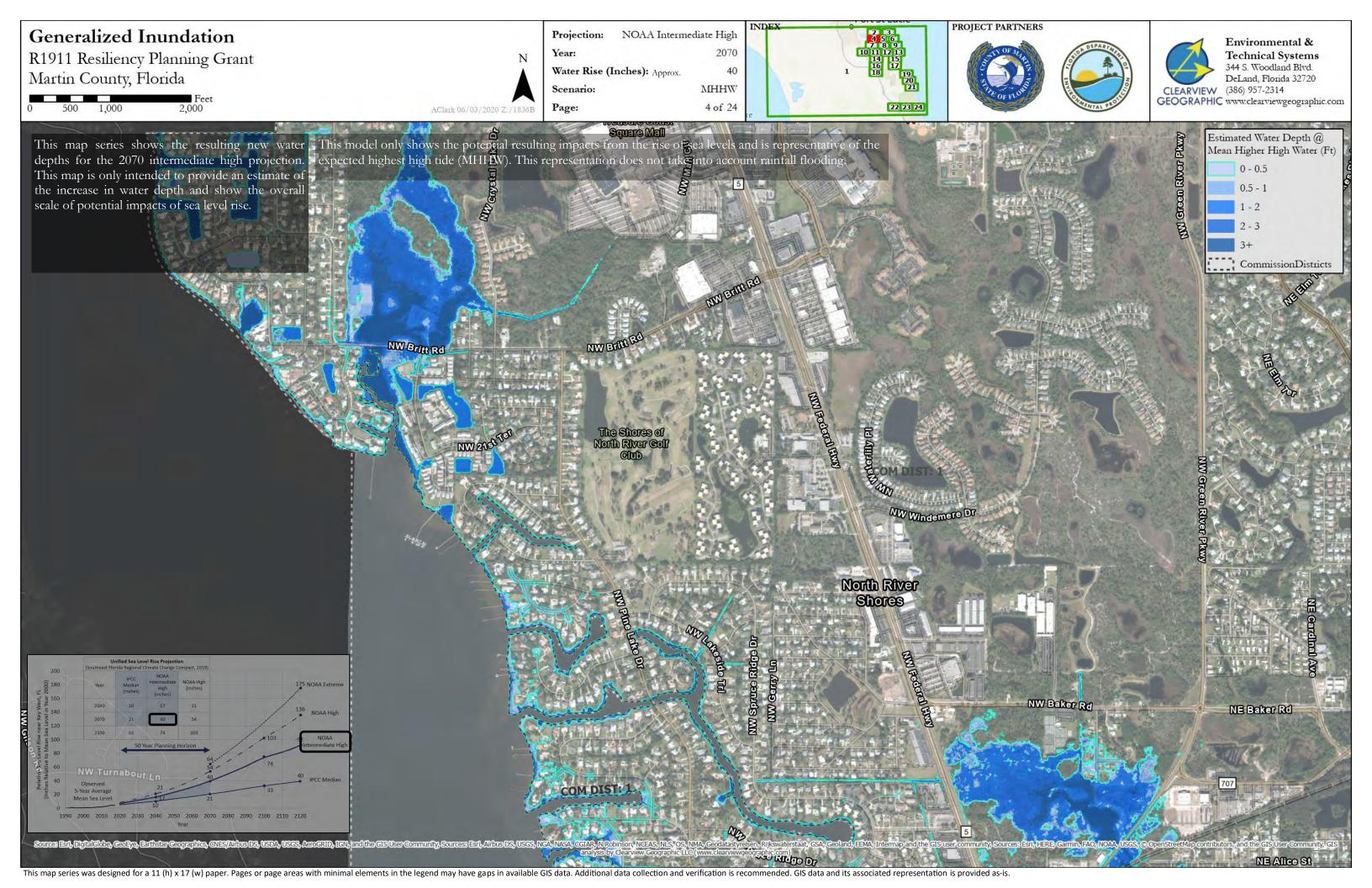
Goals: T The County aims to reduce flood insurance rates for its residents by improving its score in the National Flood Insurance Program Community Rating System (CRS) administered by the Federal Emergency Management Agency (FEMA). The sea level rise planning efforts described in this graphic are compliant with program requirements and will earn the County credits toward its ranking in the program. The associated Resilience and Watershed Management Plan is the product of the two grant awards from FDEP's Office Resilience and Coastal Protection; accordingly, the County continues to coordinate with its partners at FDEP, NOAA, the South Florida Water Management District, and other relevant agencies to work toward meeting the challenges presented by climate change.

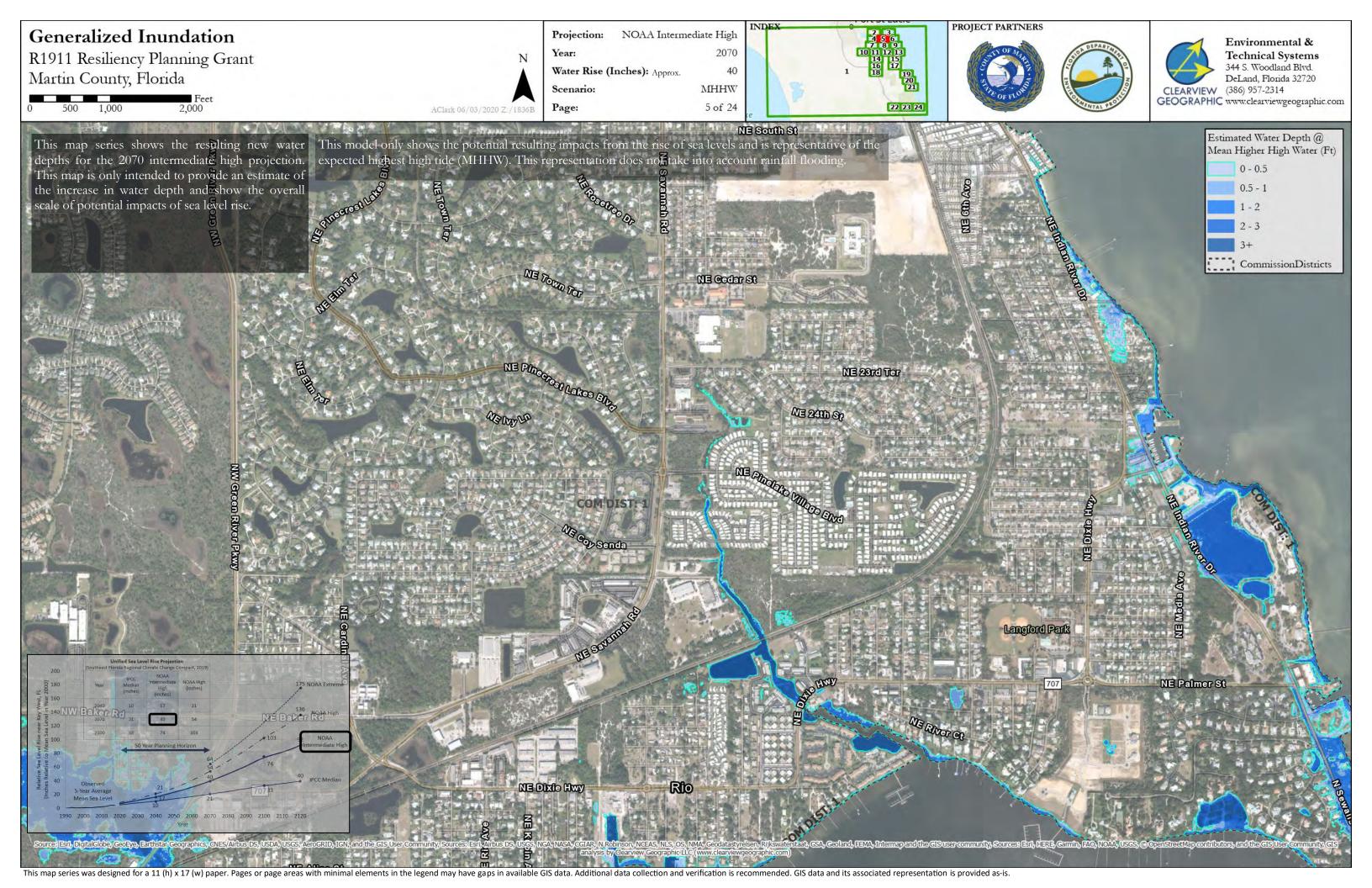






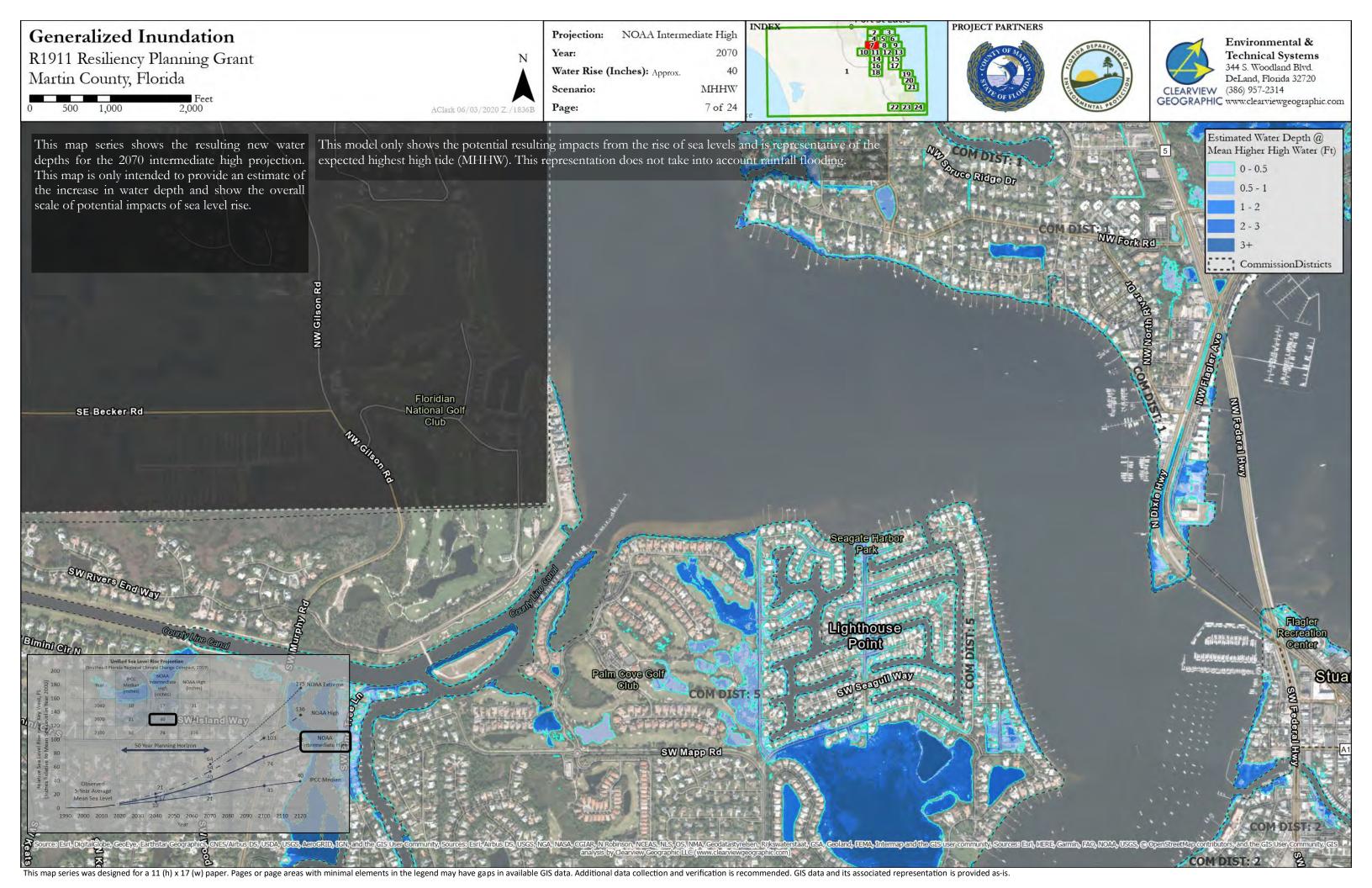


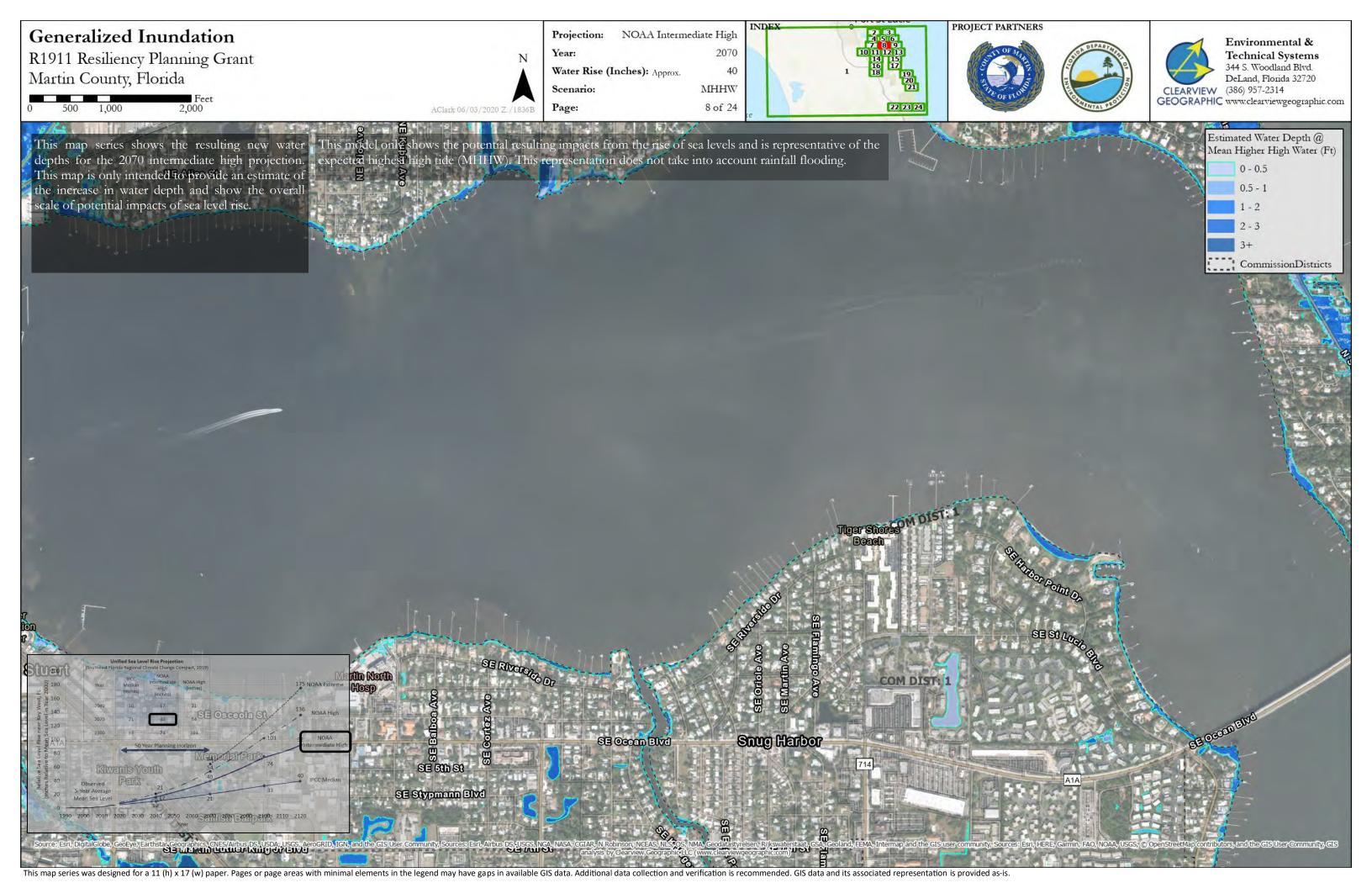


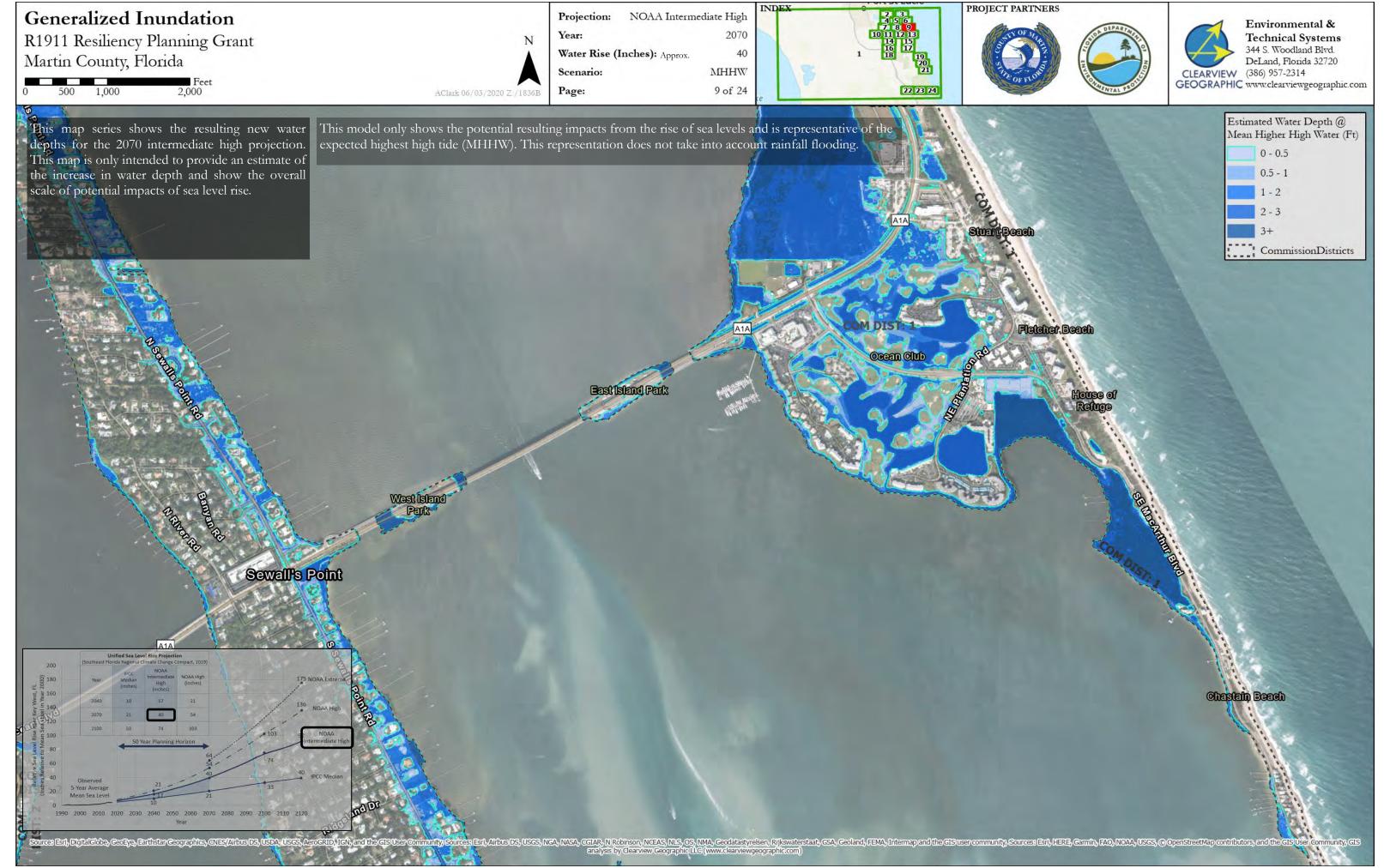


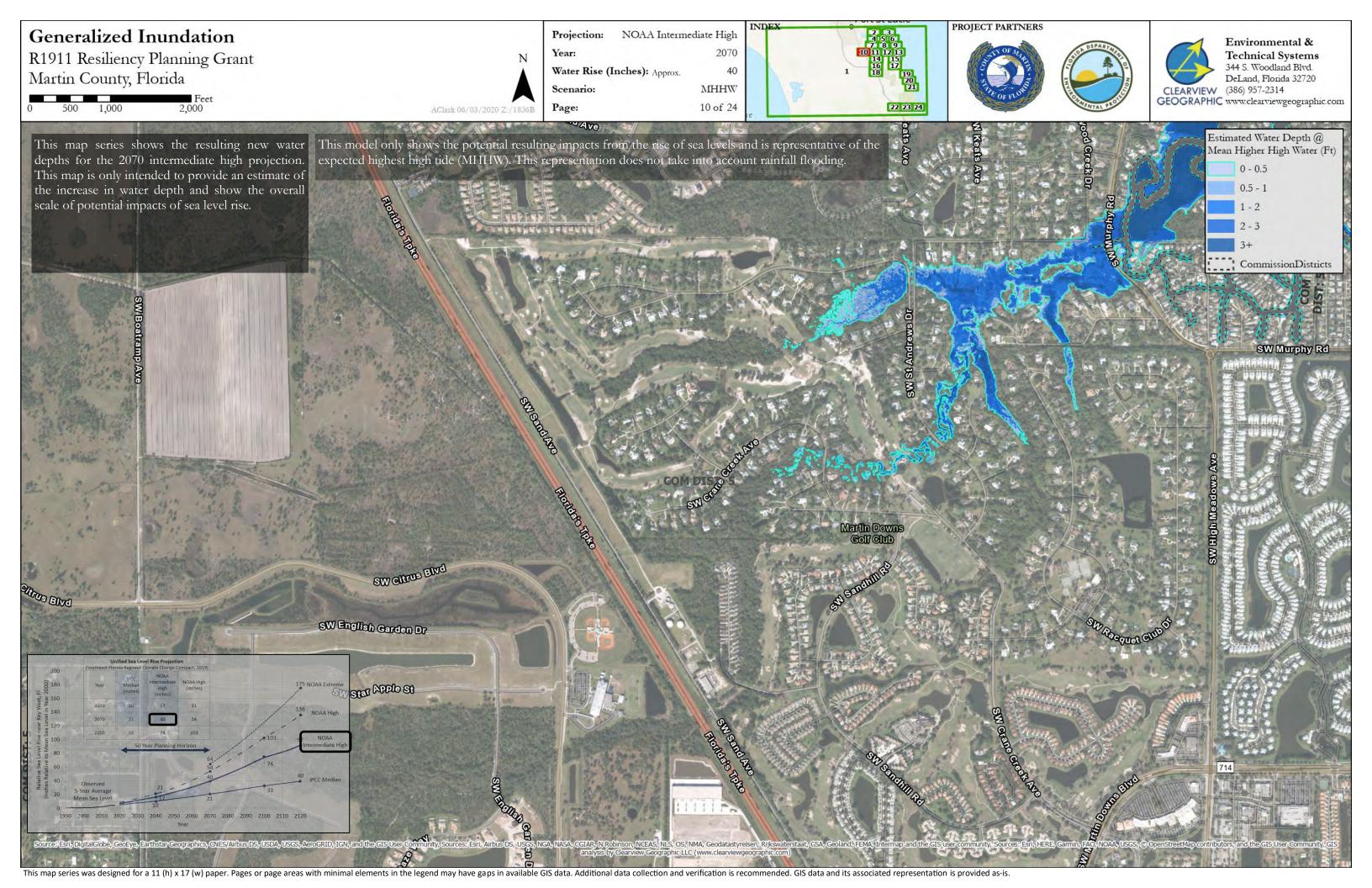
## PROJECT PARTNERS **Generalized Inundation** Projection: NOAA Intermediate High Environmental & Year: R1911 Resiliency Planning Grant **Technical Systems** 344 S. Woodland Blvd. Water Rise (Inches): Approx. Martin County, Florida DeLand, Florida 32720 MHHW CLEARVIEW (386) 957-2314 GEOGRAPHIC www.clearviewgeographic.com Scenario: Page: 6 of 24 AClark 06/03/2020 Z:/1836B Estimated Water Depth @ This model only shows the potential resulting impacts from the rise of sea levels and is representative of the This map series shows the resulting new water Mean Higher High Water (Ft) expected highest high tide (MHHW). This representation does not take into account rainfall flooding. depths for the 2070 intermediate high projection. 0 - 0.5 This map is only intended to provide an estimate of 0.5 - 1 the increase in water depth and show the overall Alex's Beach scale of potential impacts of sea level rise. 1 - 2 2-3 NE Joes Point Rd CommissionDistricts Bryan Mawr Virginia.Forest Seminole

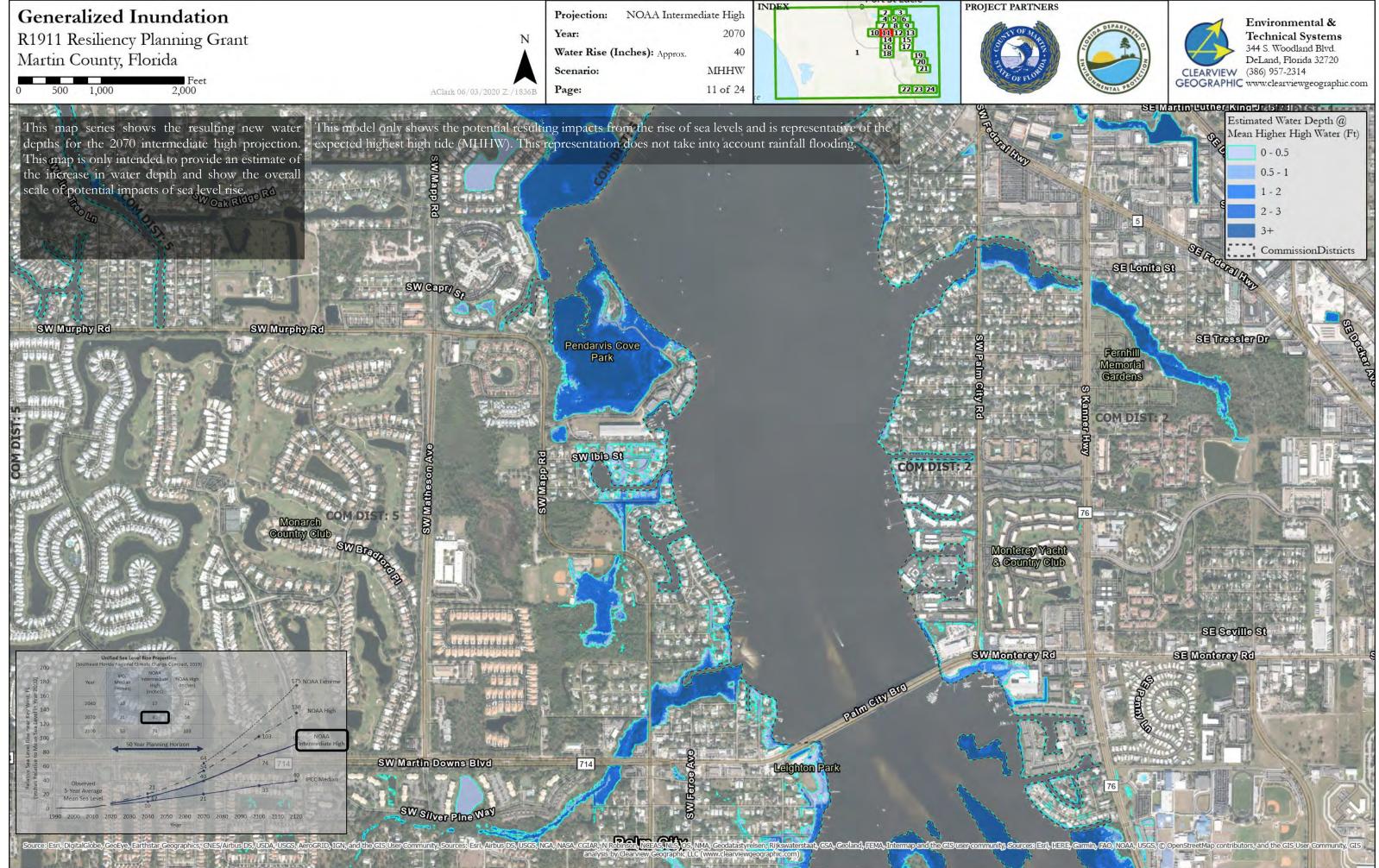
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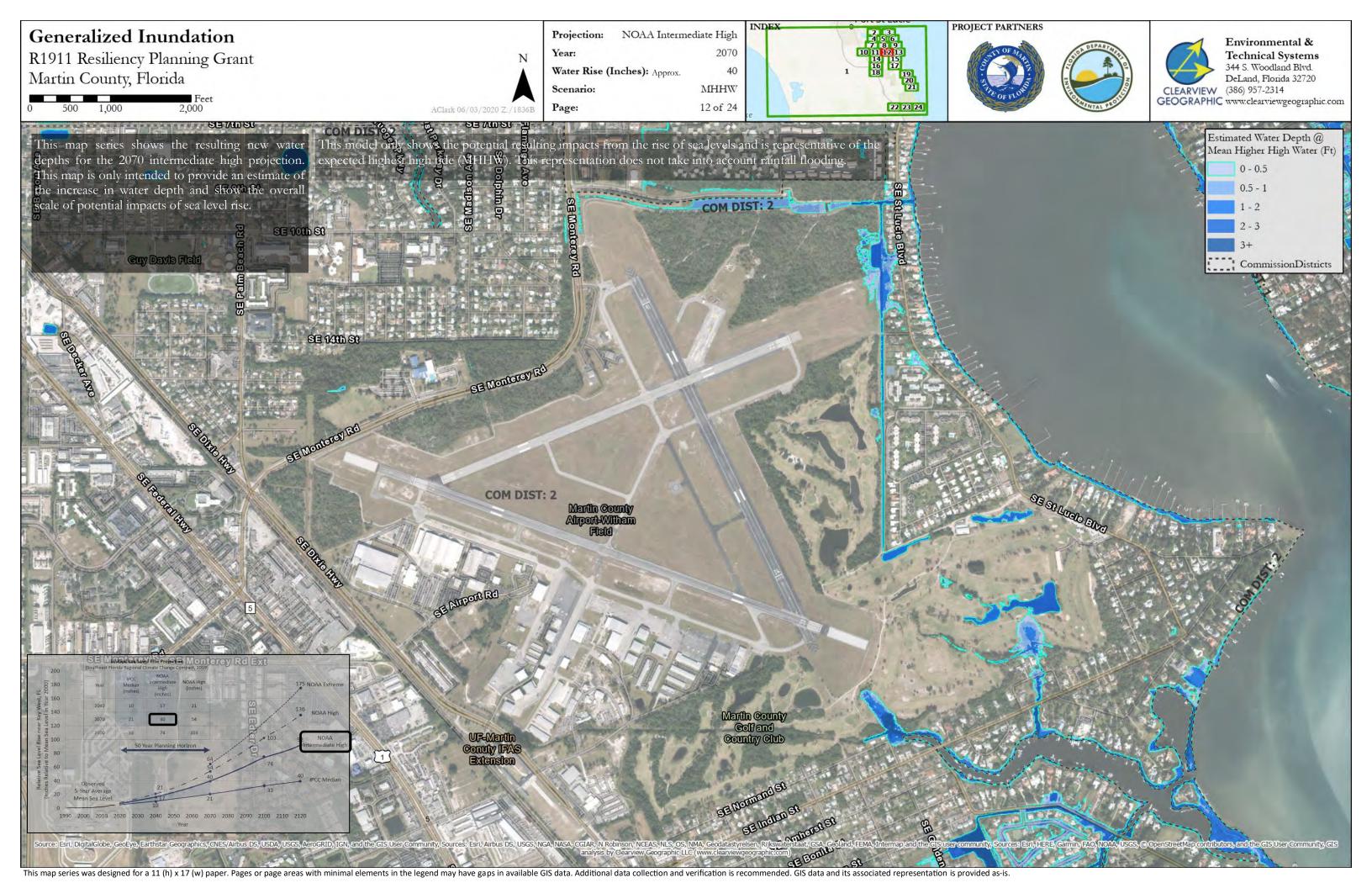




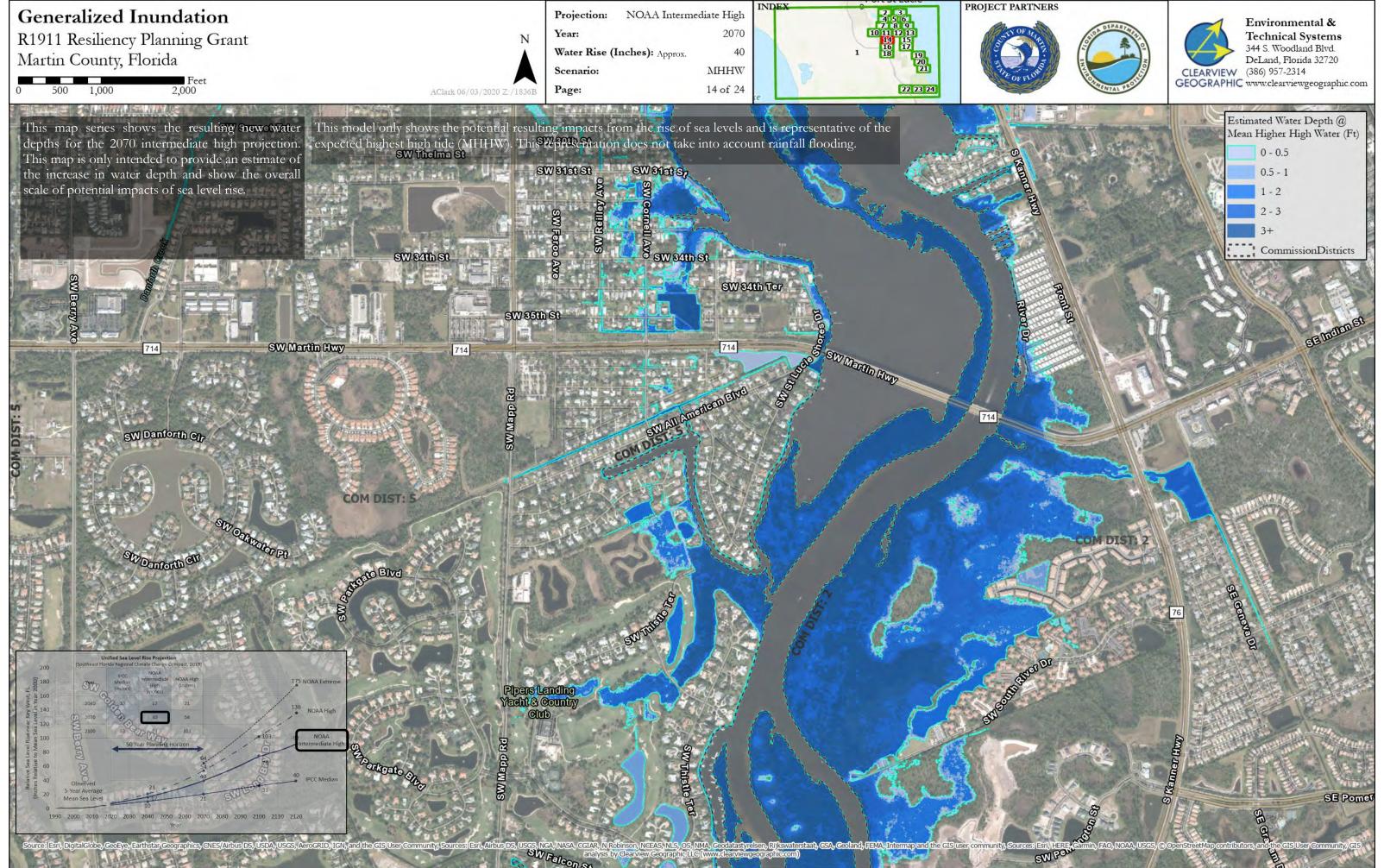


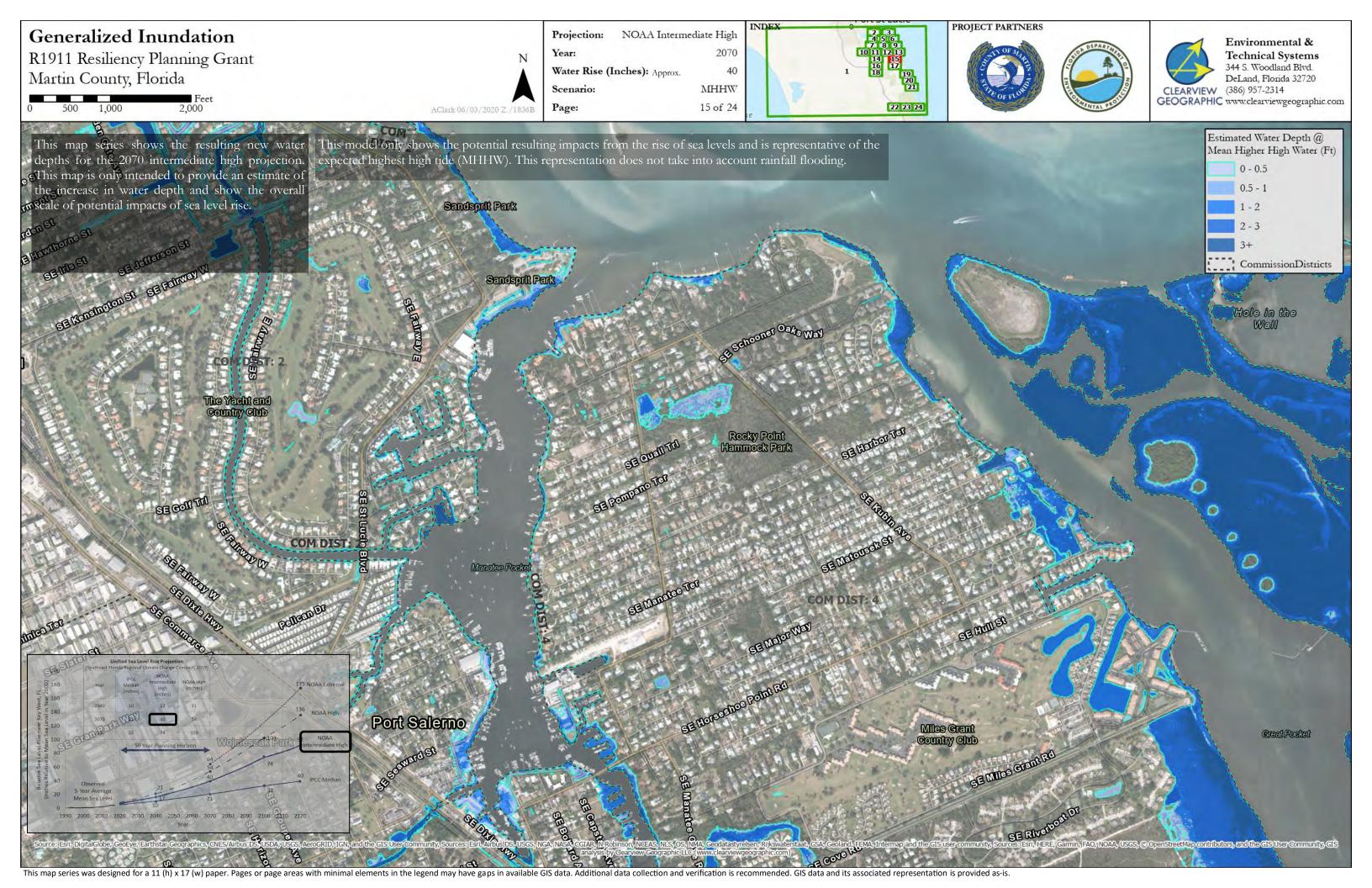


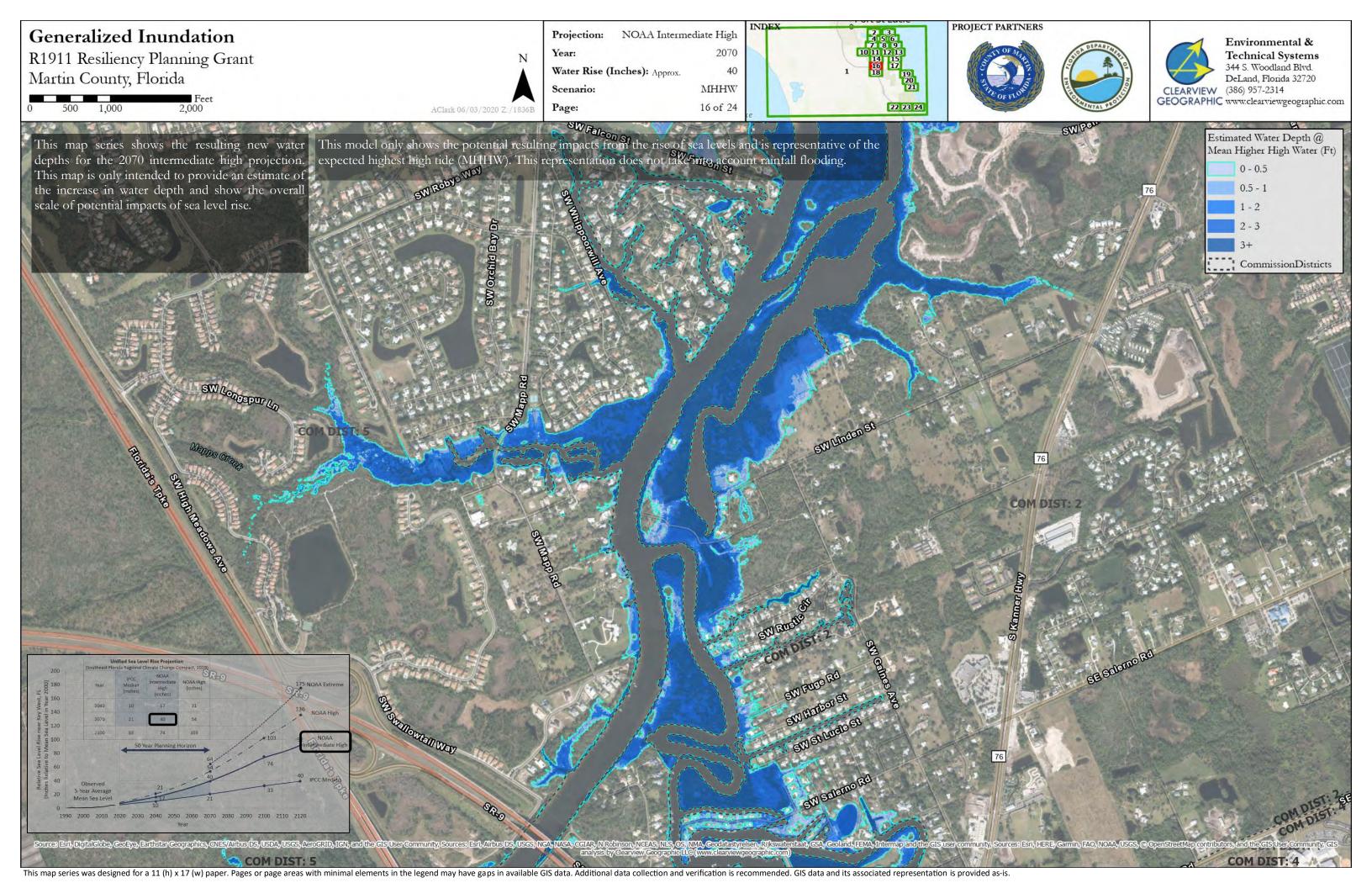


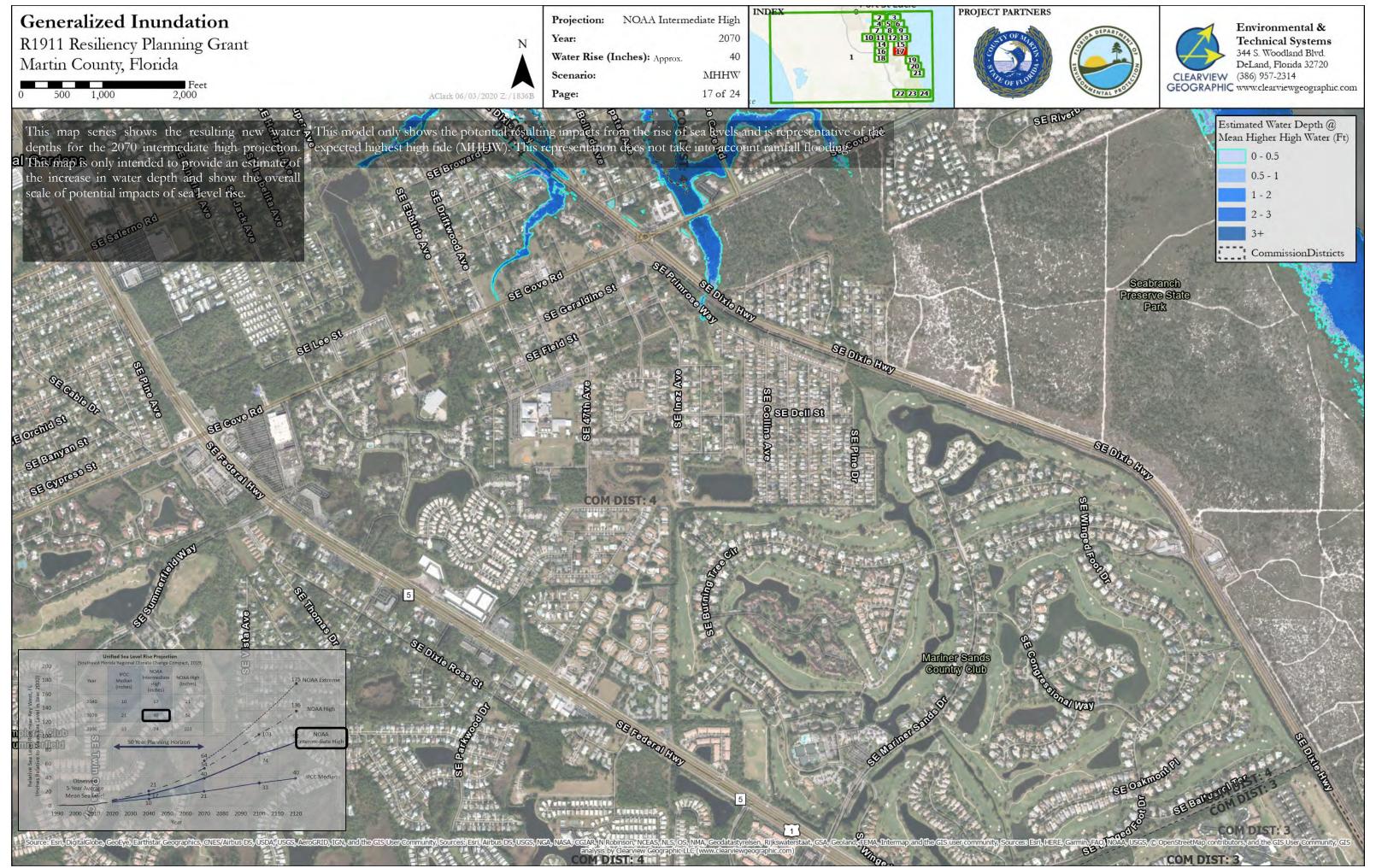


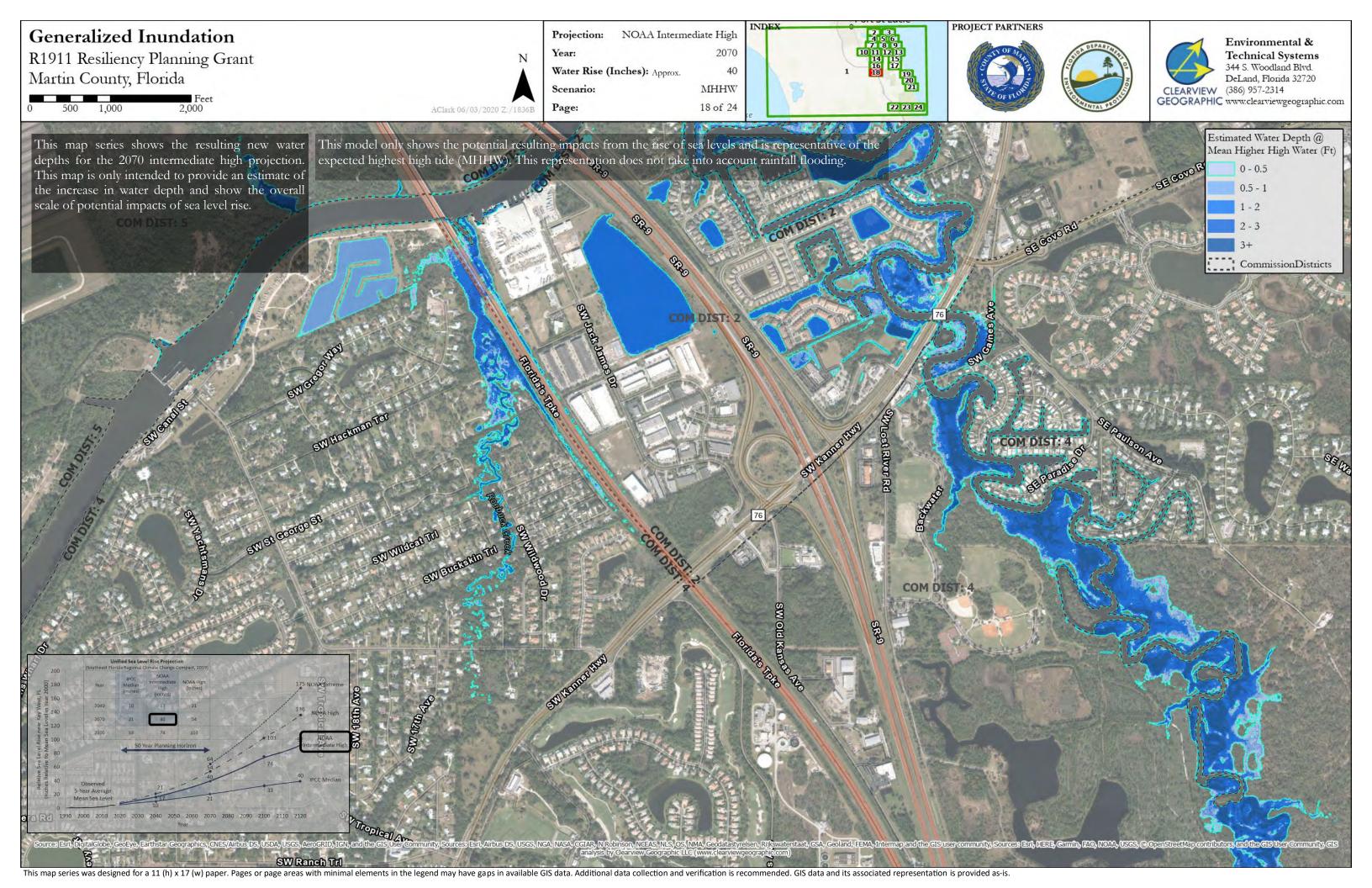
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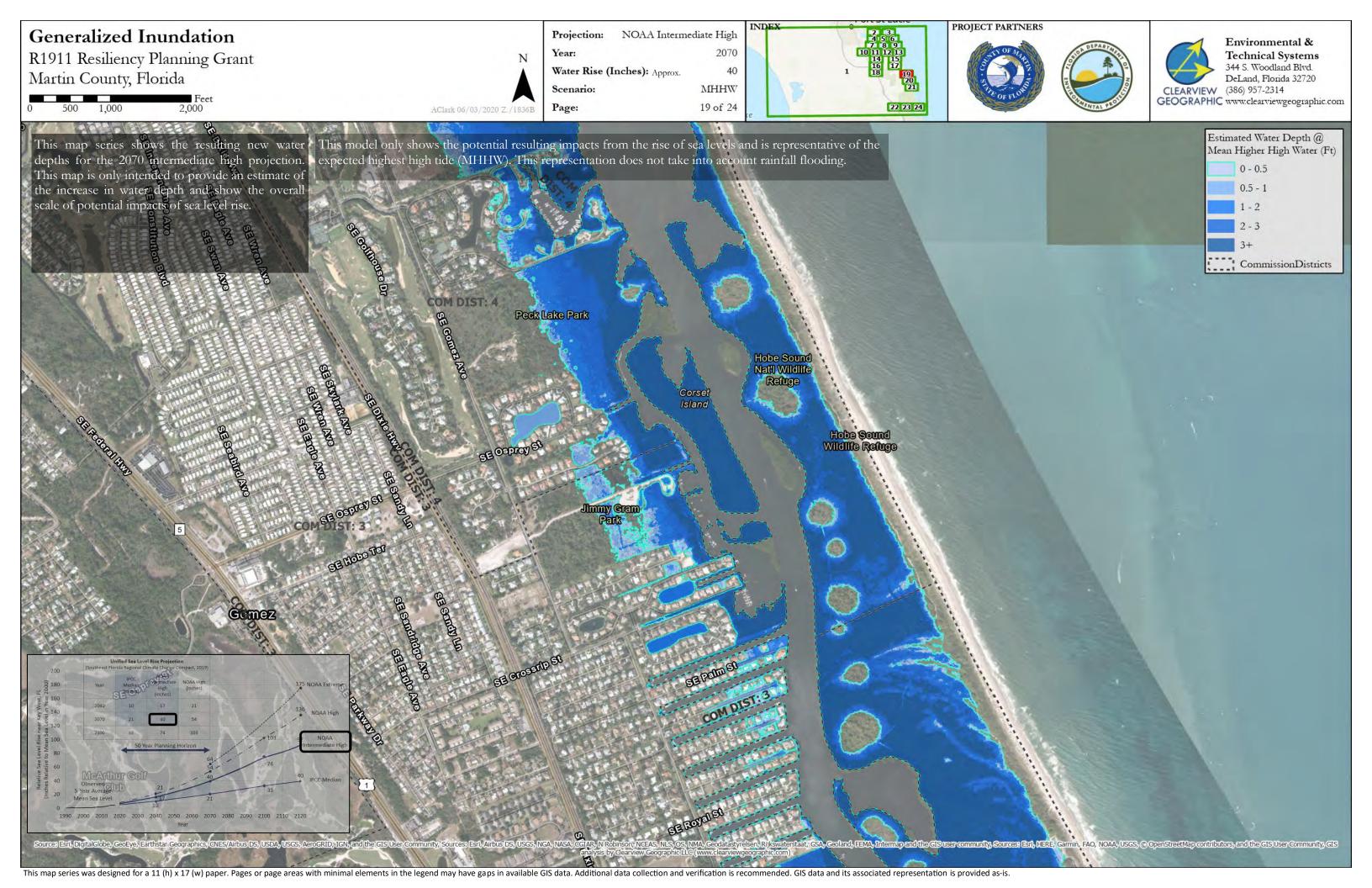


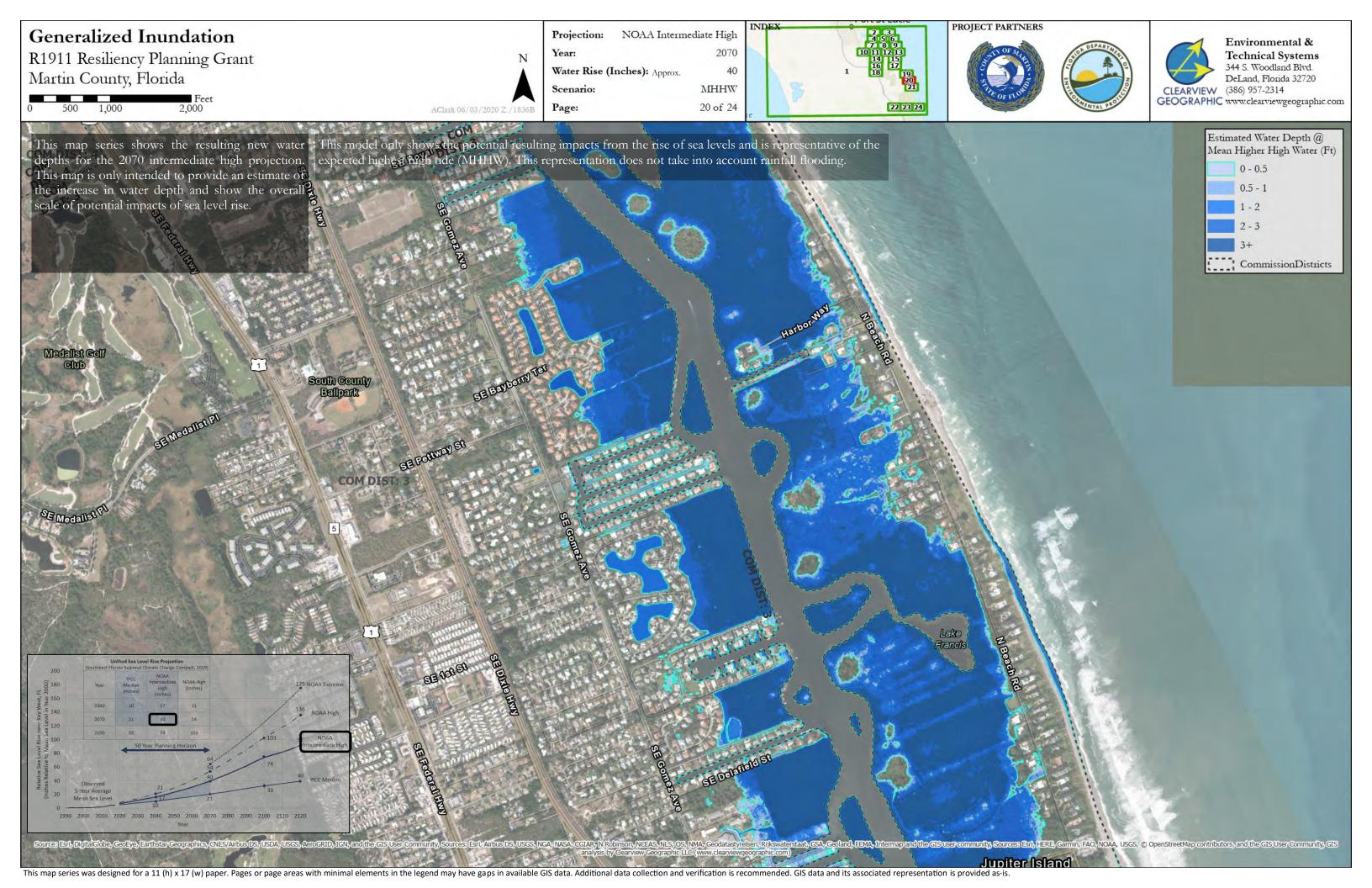


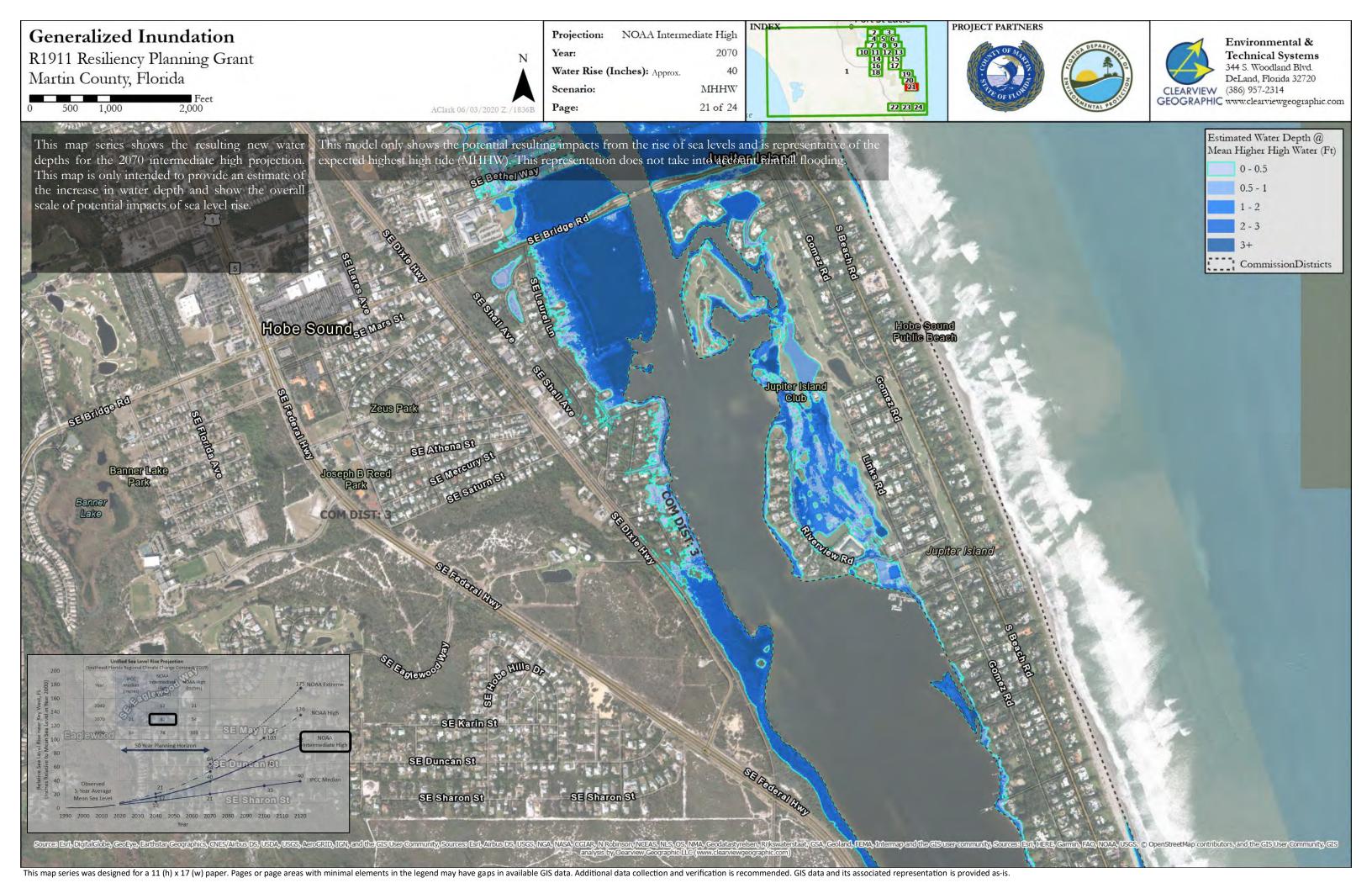


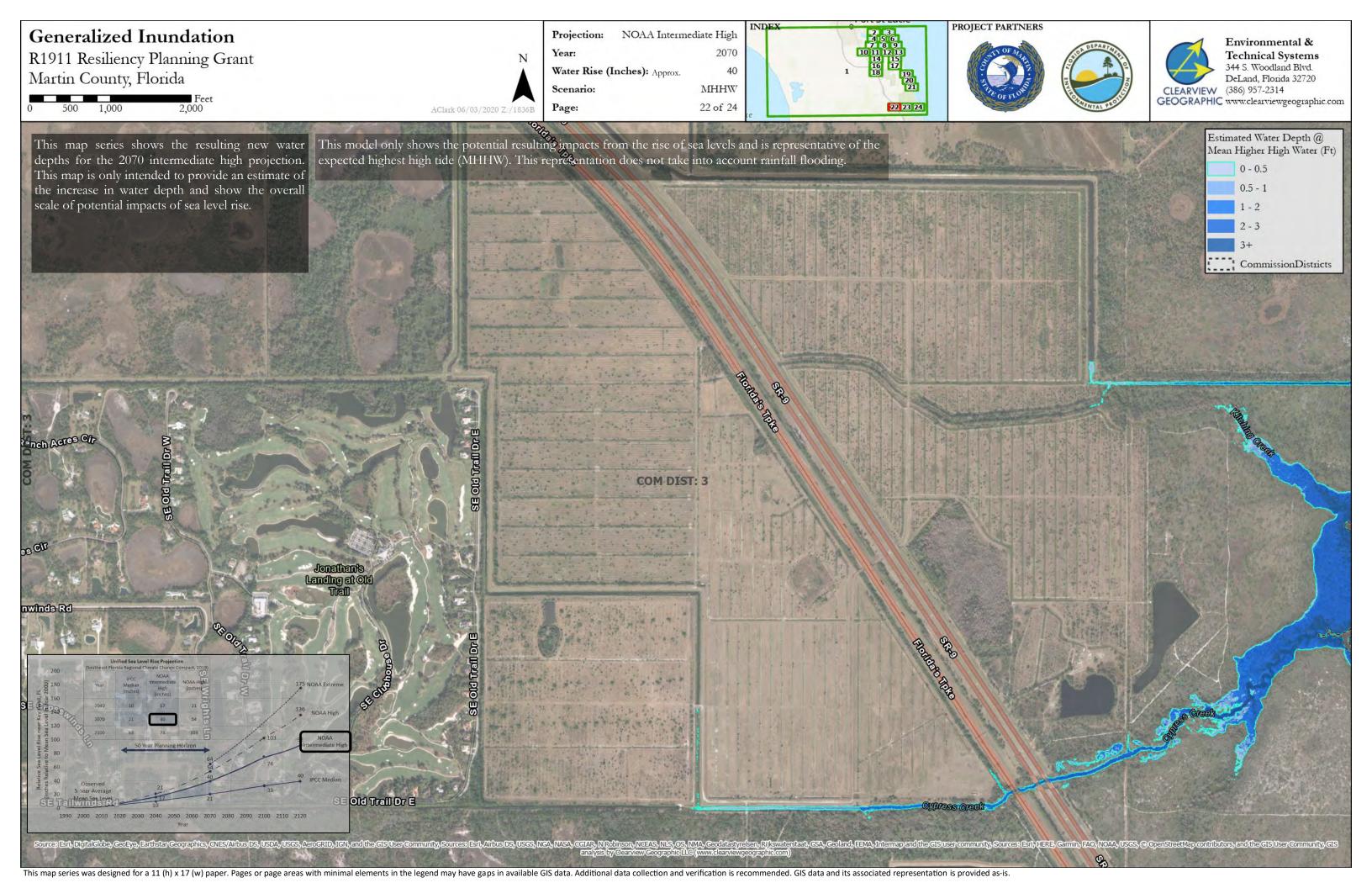


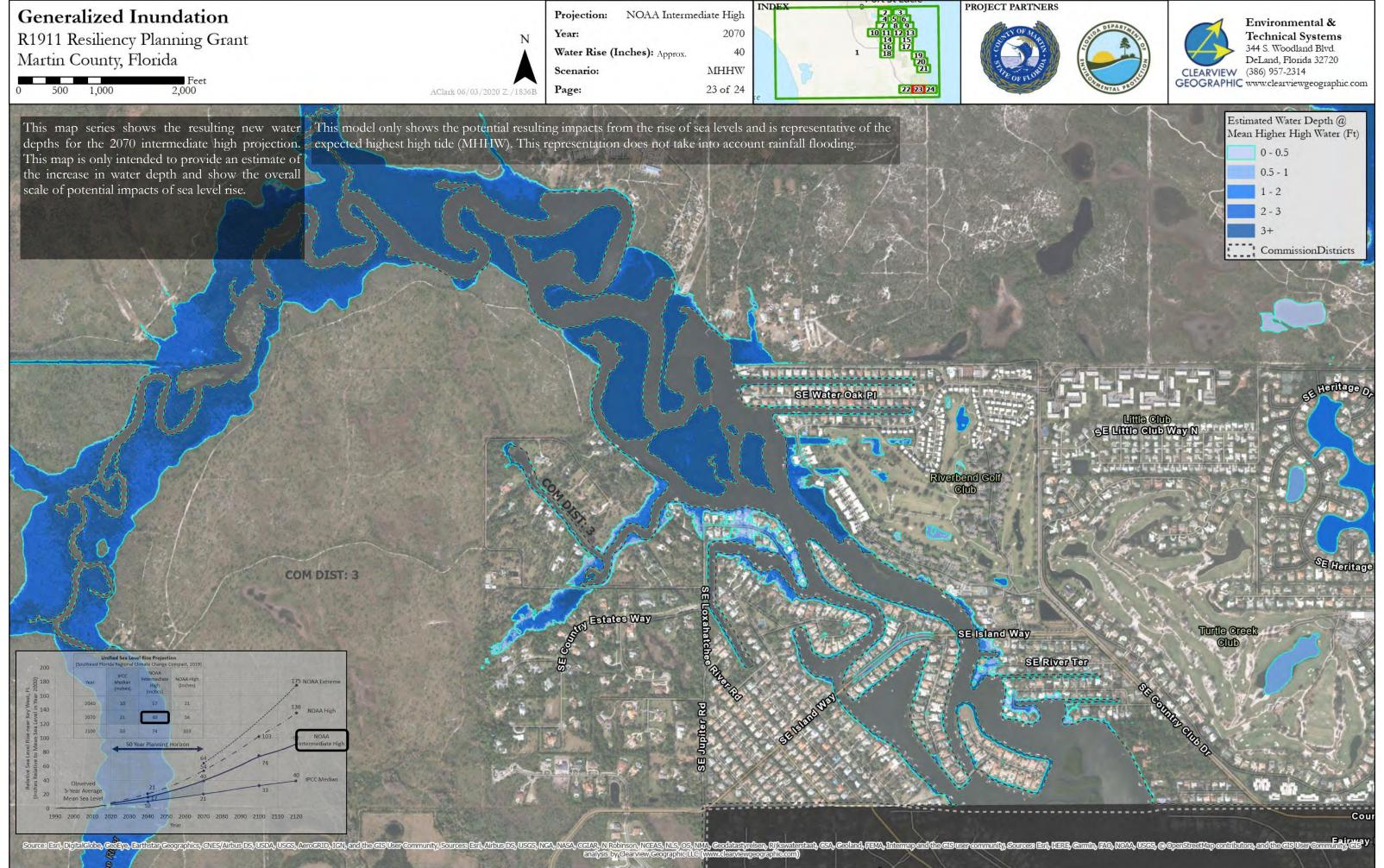


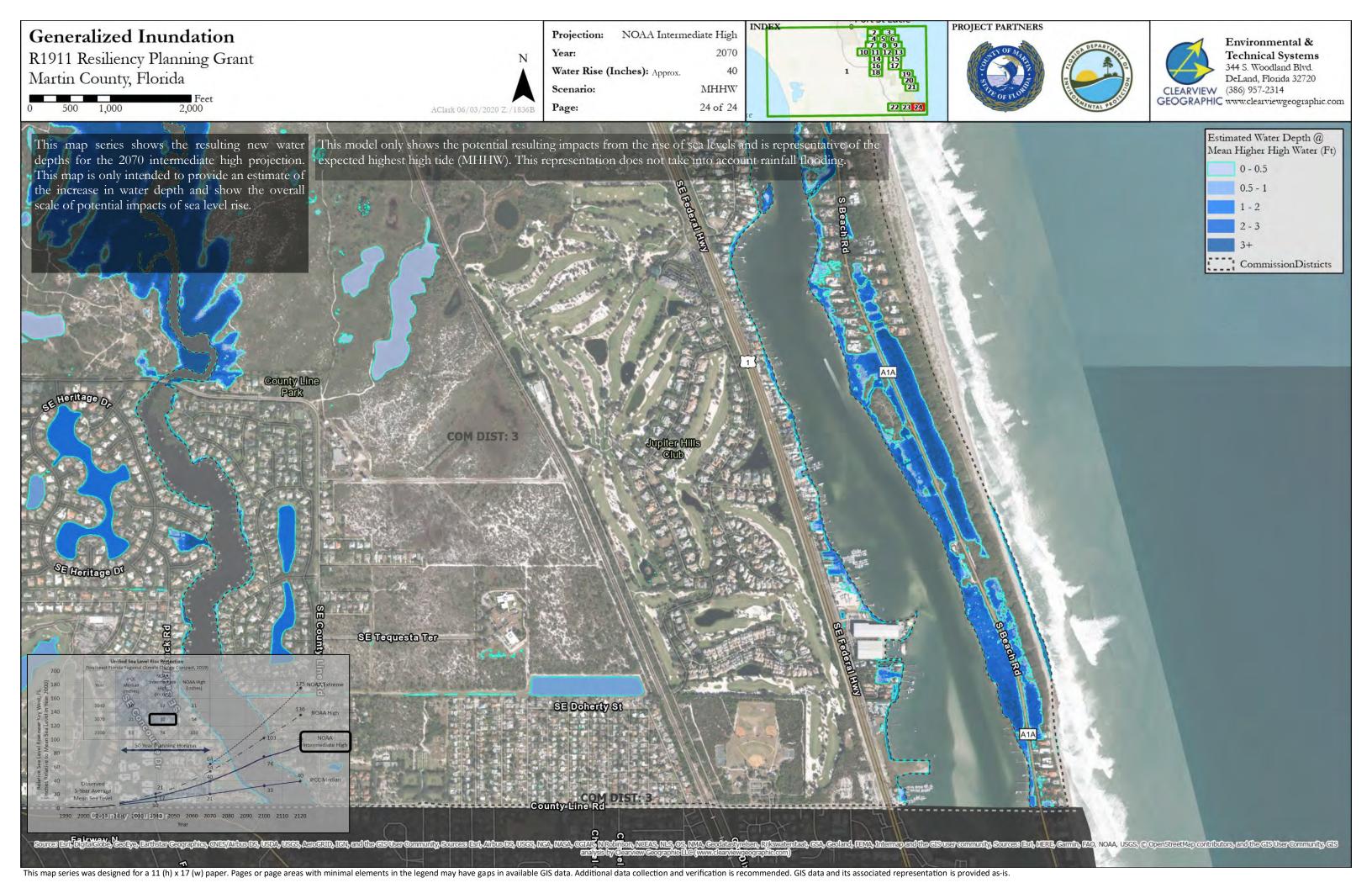


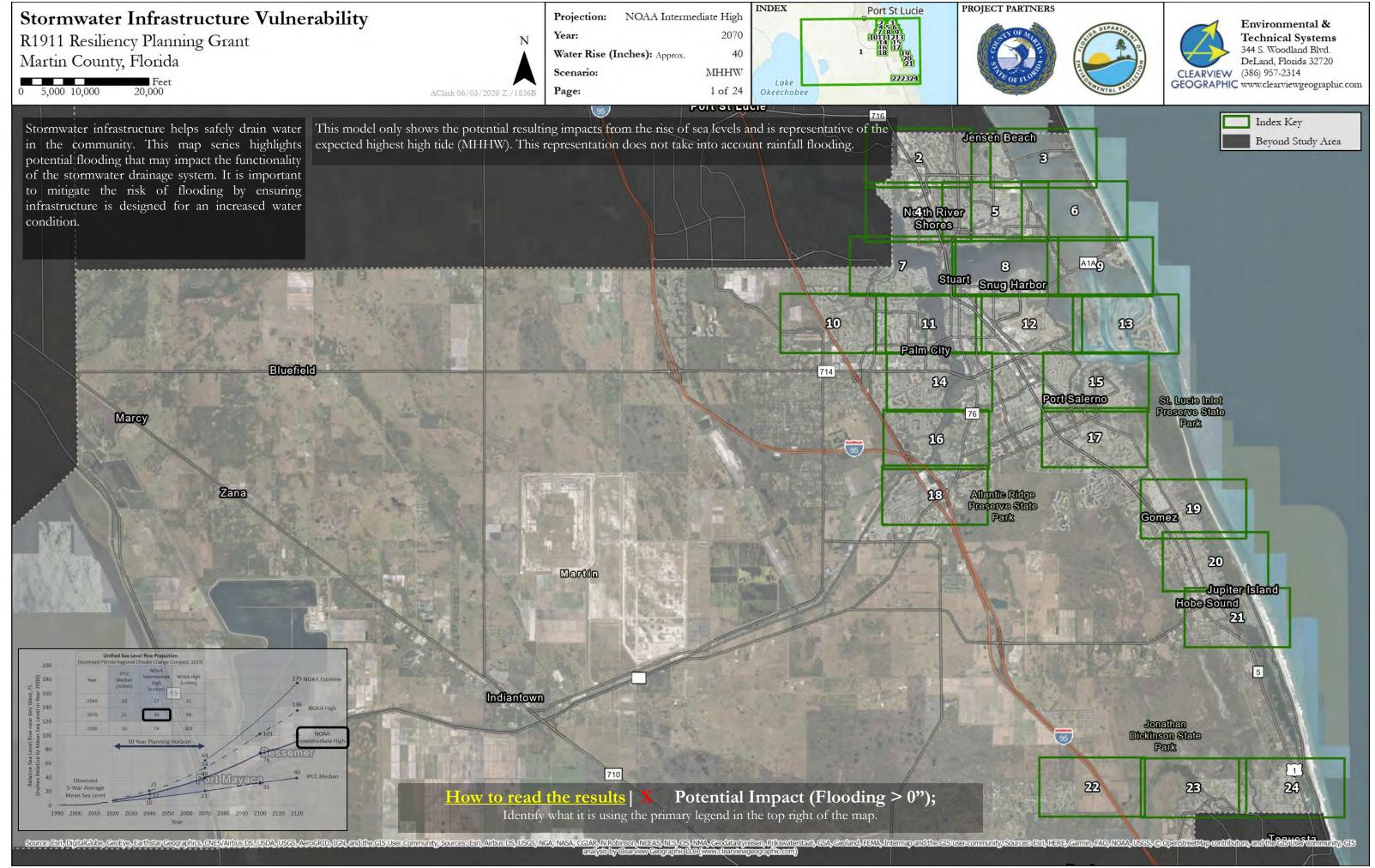


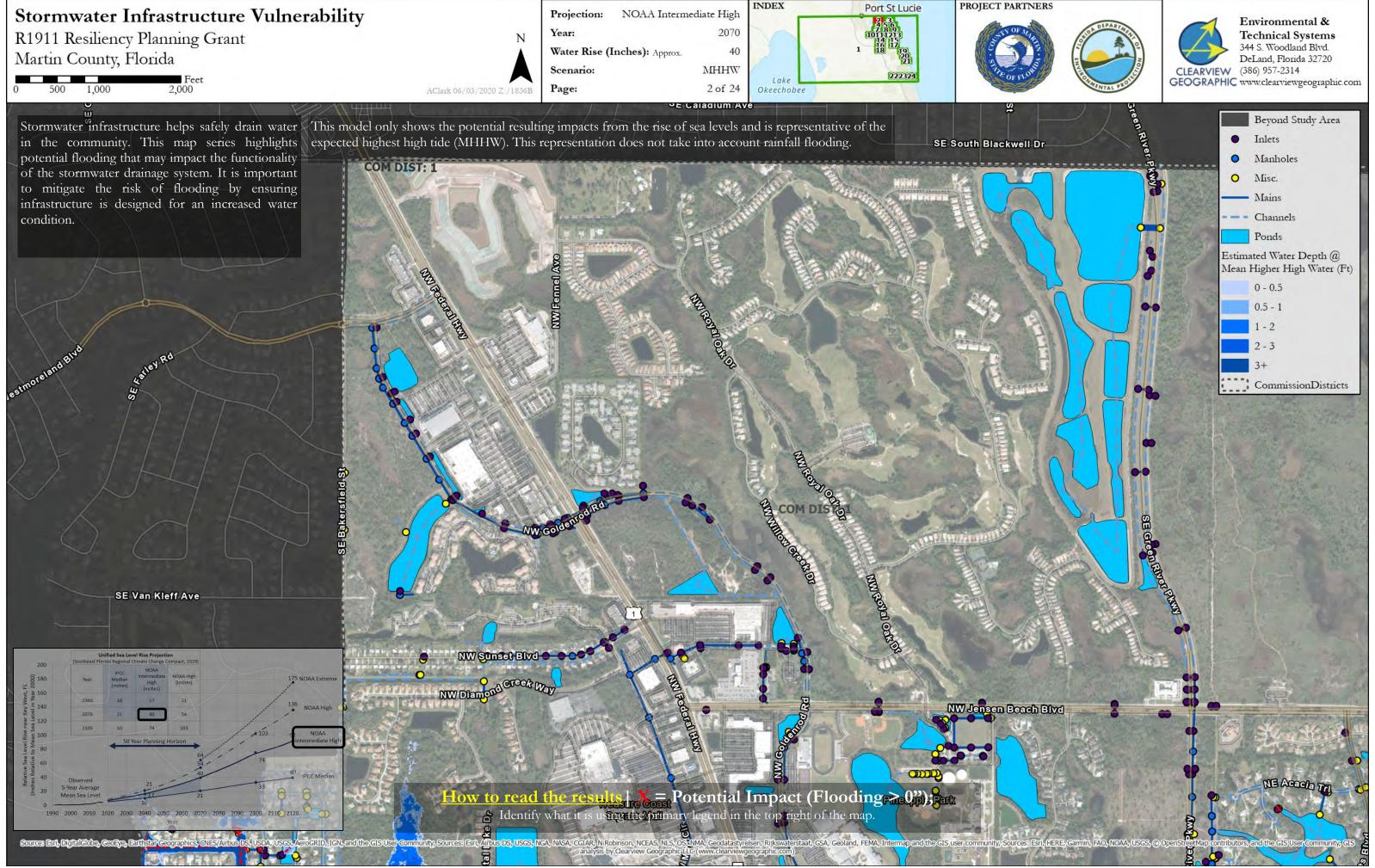


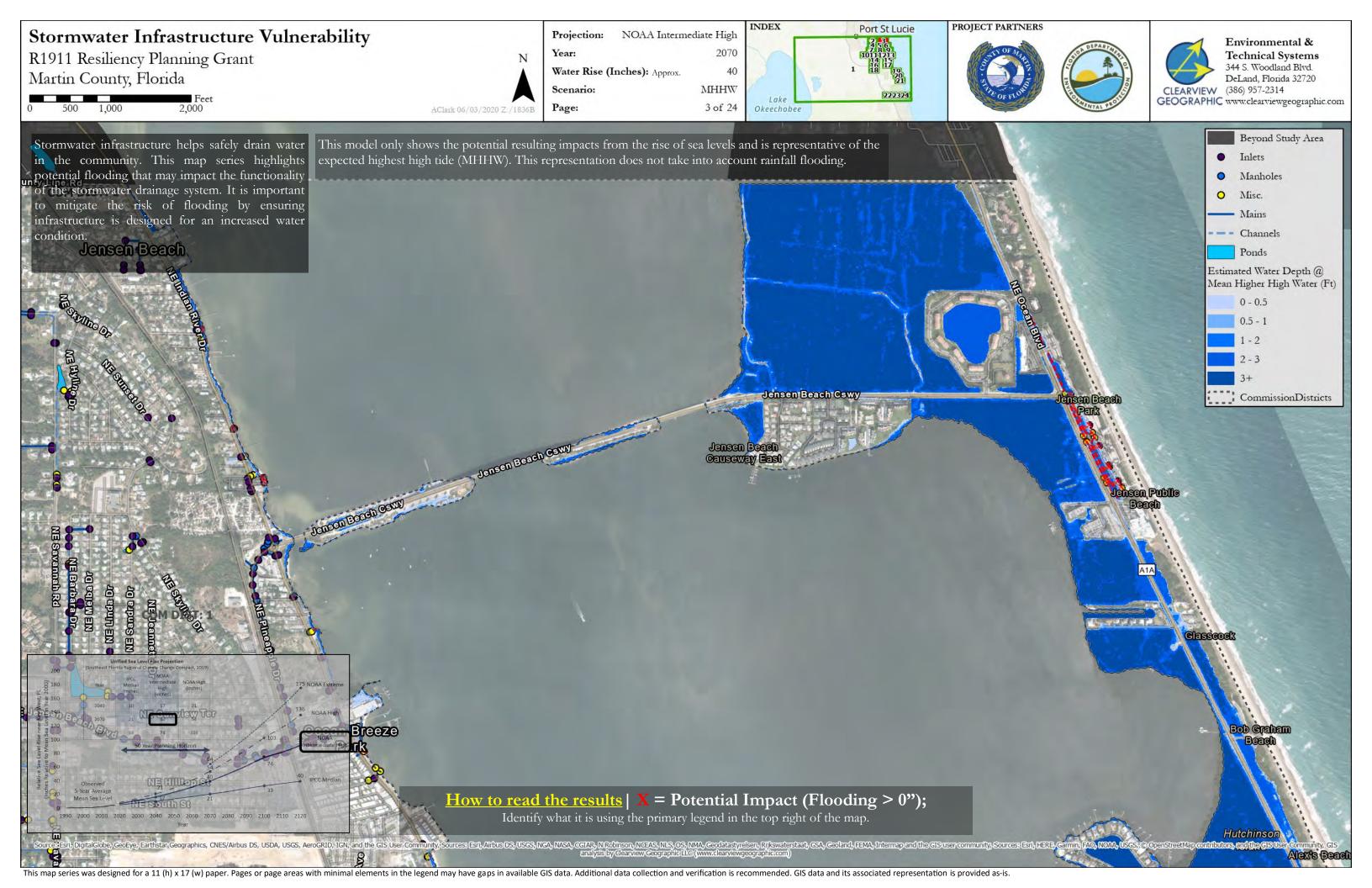


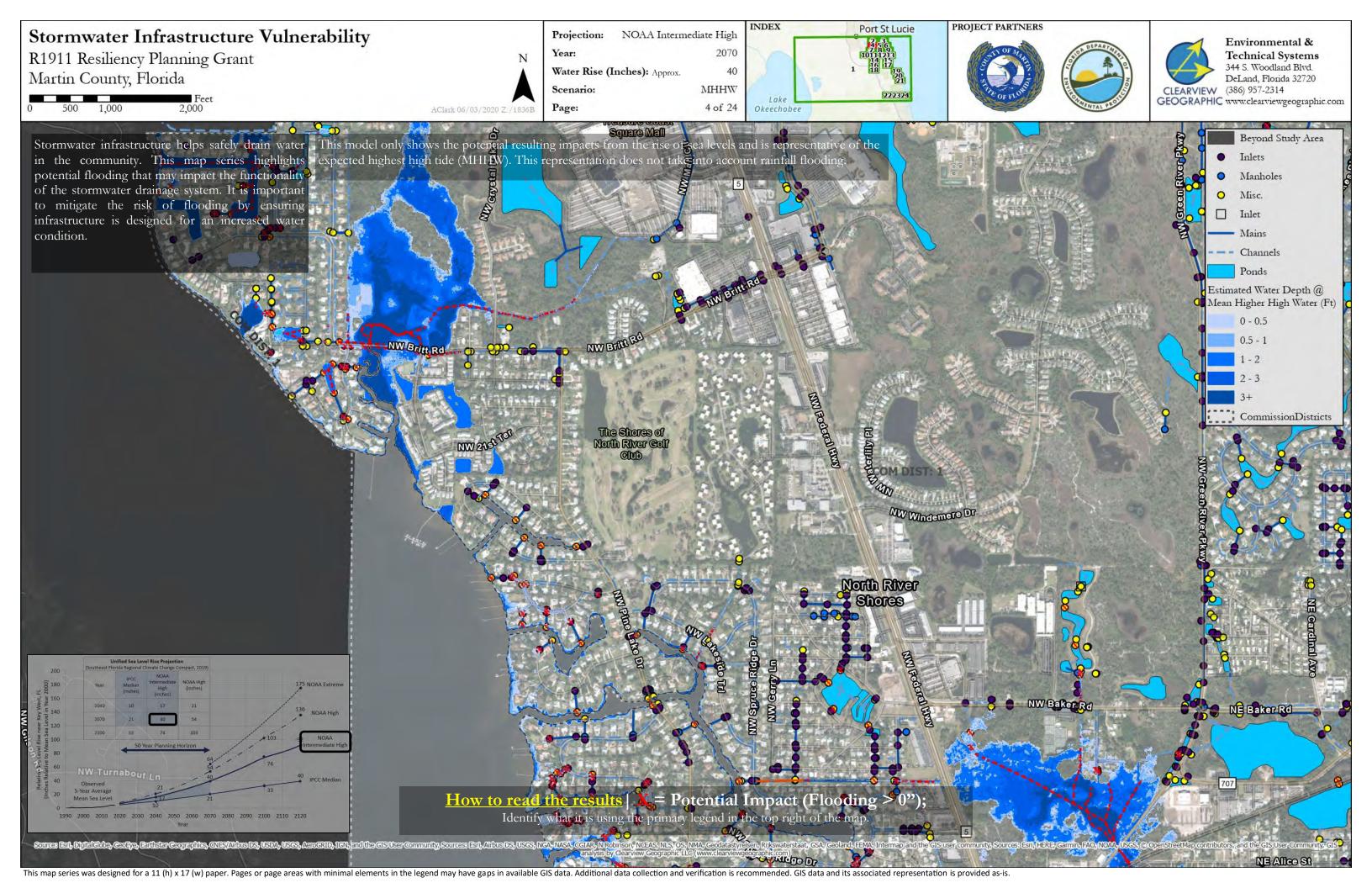


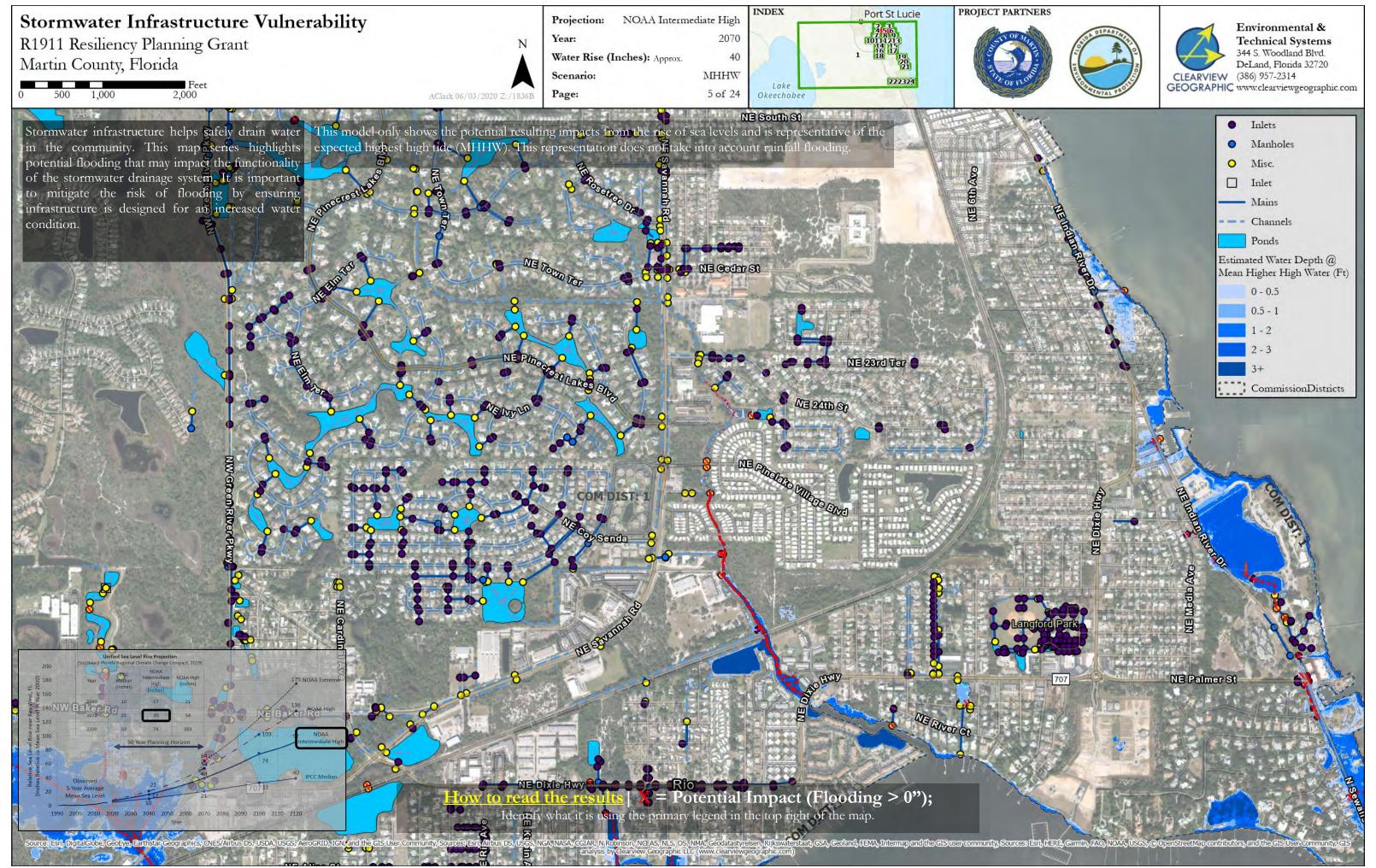




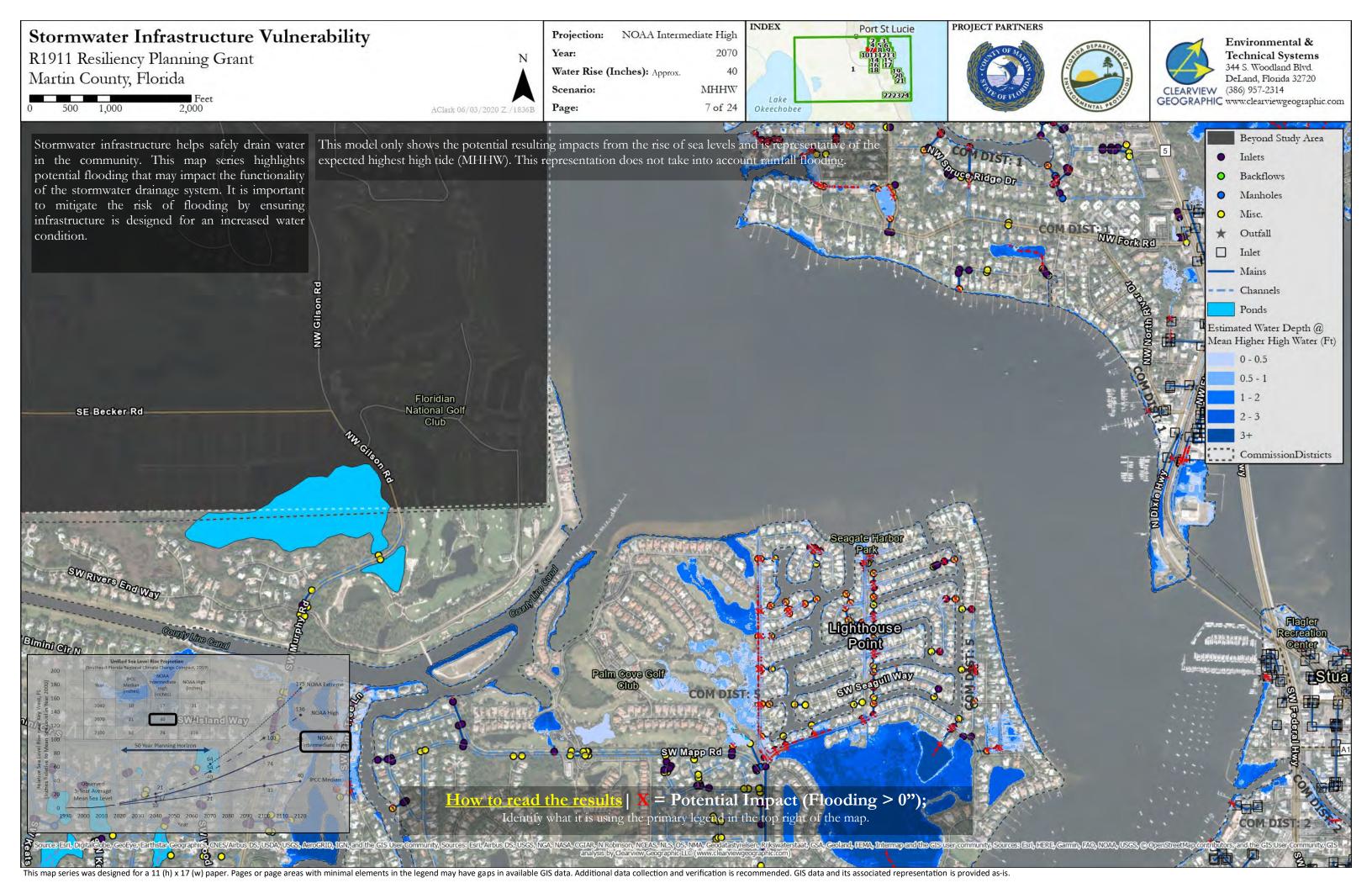


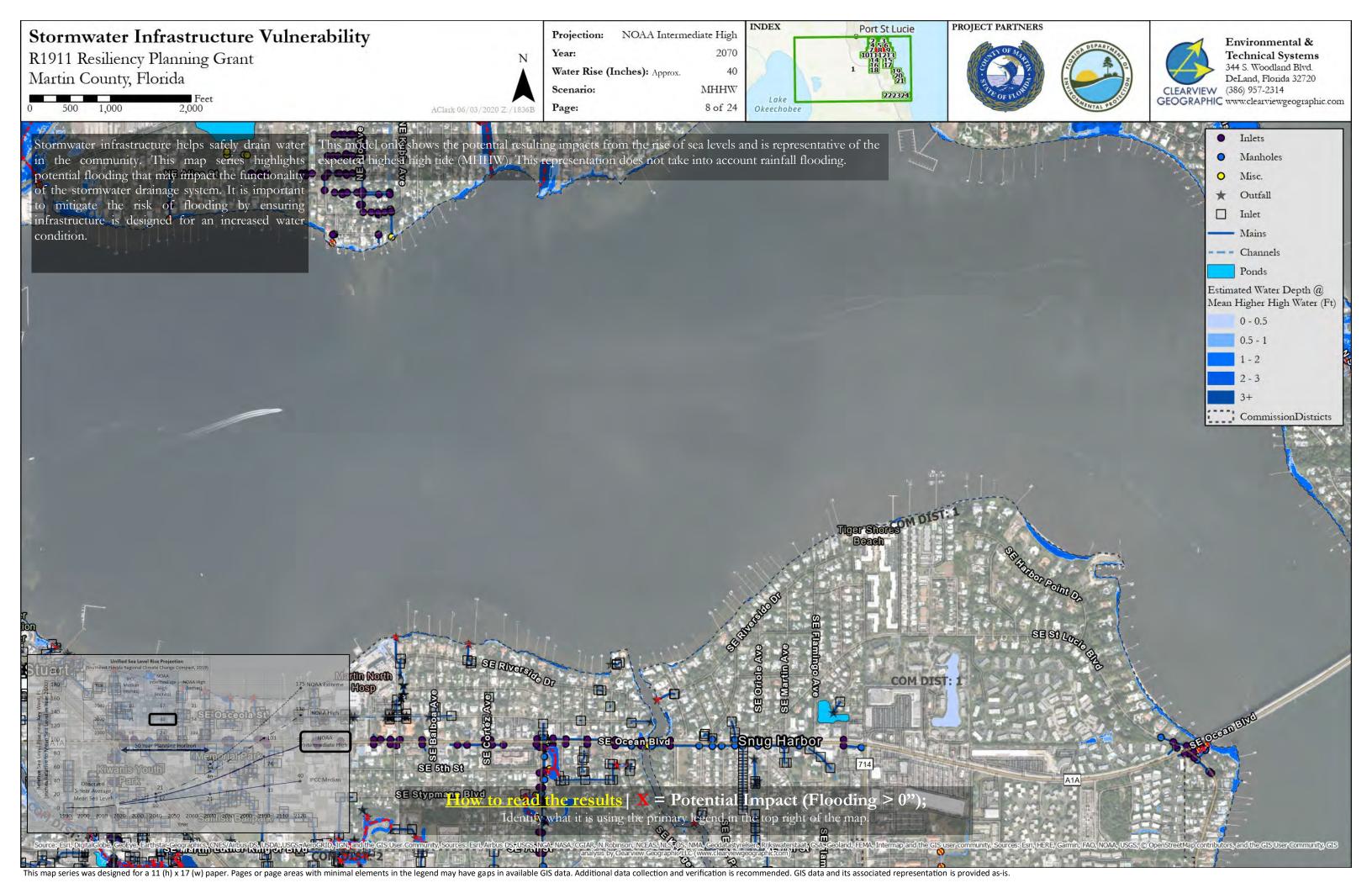


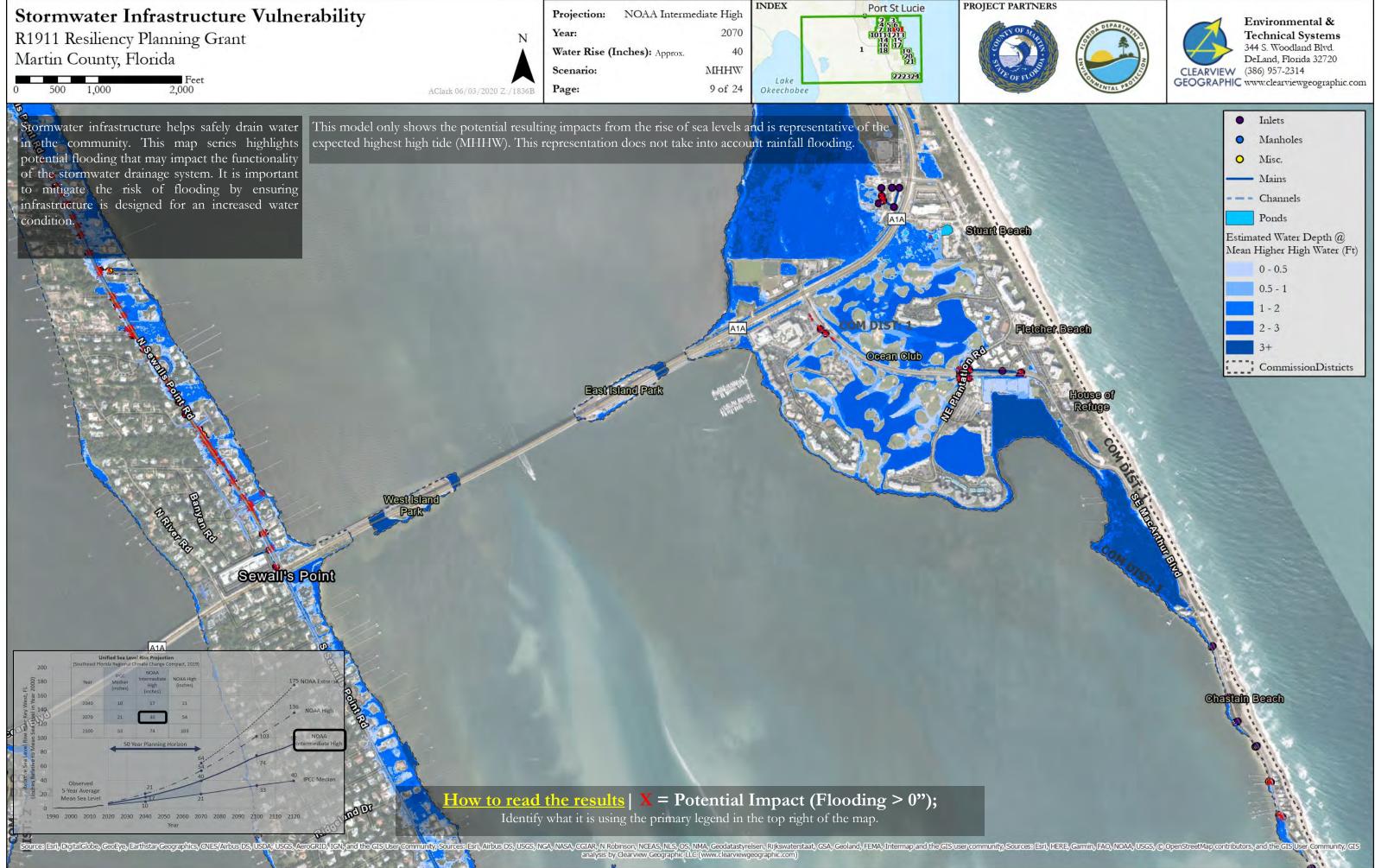


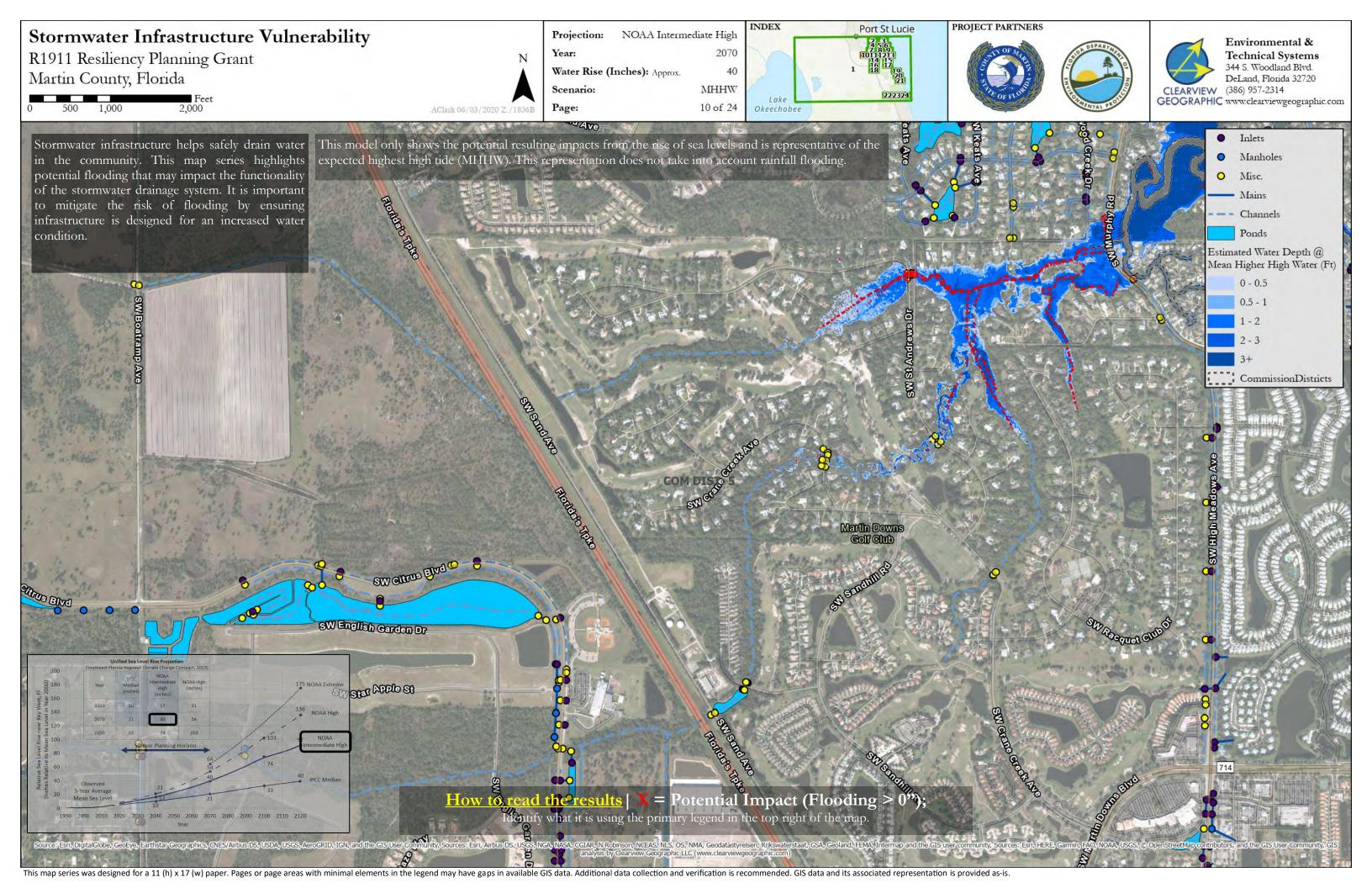


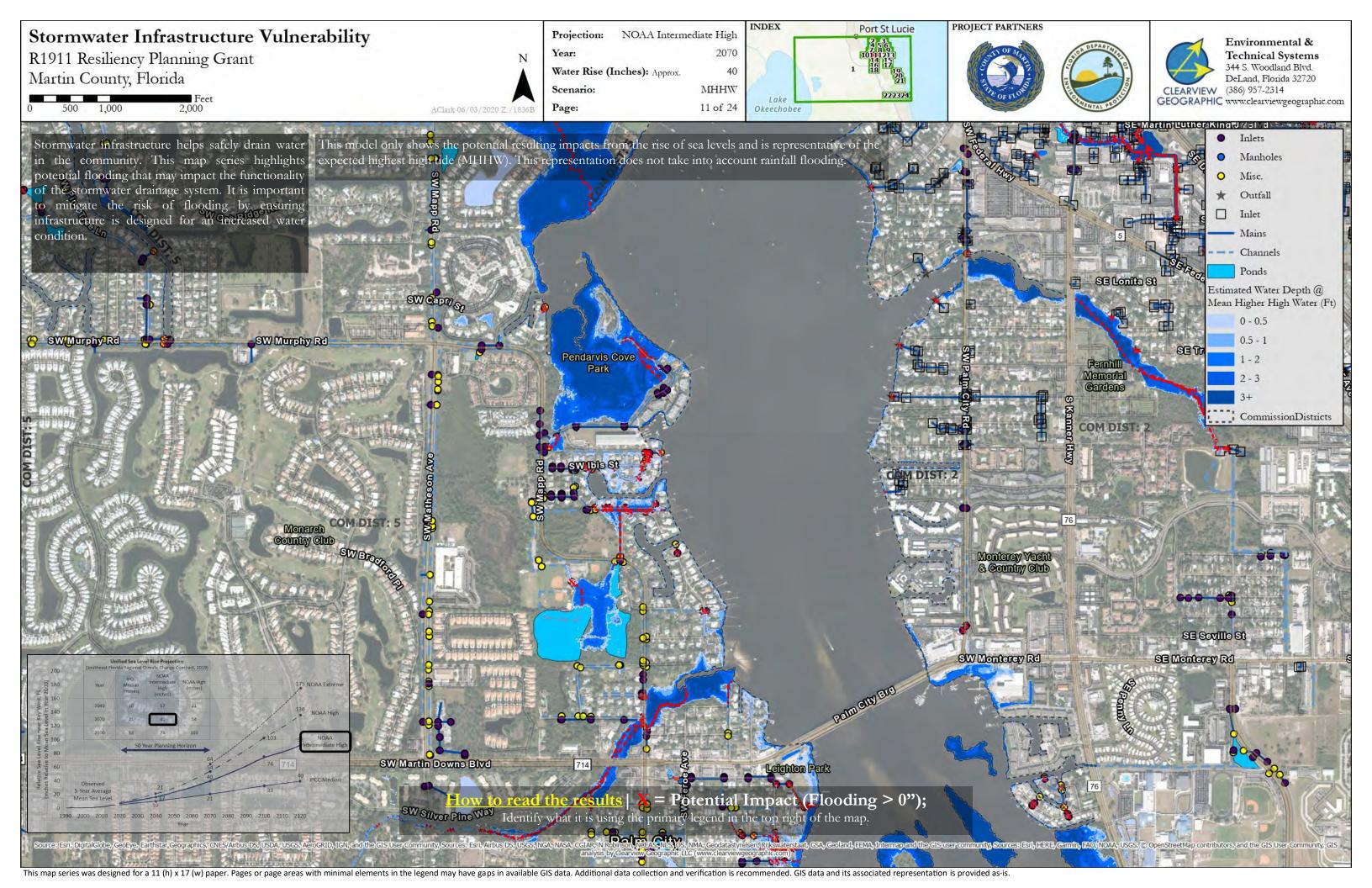
## PROJECT PARTNERS Port St Lucie Stormwater Infrastructure Vulnerability NOAA Intermediate High Projection: Environmental & Year: R1911 Resiliency Planning Grant **Technical Systems** 344 S. Woodland Blvd. Water Rise (Inches): Approx. Martin County, Florida DeLand, Florida 32720 **CLEARVIEW** (386) 957-2314 Scenario: MHHW GEOGRAPHIC www.clearviewgeographic.com Page: 6 of 24 AClark 06/03/2020 Z:/1836B Okeechobee Inlets Stormwater infrastructure helps safely drain water This model only shows the potential resulting impacts from the rise of sea levels and is representative of the expected highest high tide (MHHW). This representation does not take into account rainfall flooding. Manholes in the community. This map series highlights potential flooding that may impact the functionality O Misc. of the stormwater drainage system. It is important Mains to mitigate the risk of flooding by ensuring Channels infrastructure is designed for an increased water Ponds condition. Estimated Water Depth @ NE Joes Point Rd Mean Higher High Water (Ft) 0 - 0.5 Bryan Mawr 0.5 - 11 - 2 CommissionDistricts COM DIST Virginia.Forest <u>How to read the results</u> | X = Potential Impact (Flooding > 0");Seminole Identify what it is using the primary legend in the top right of the map.

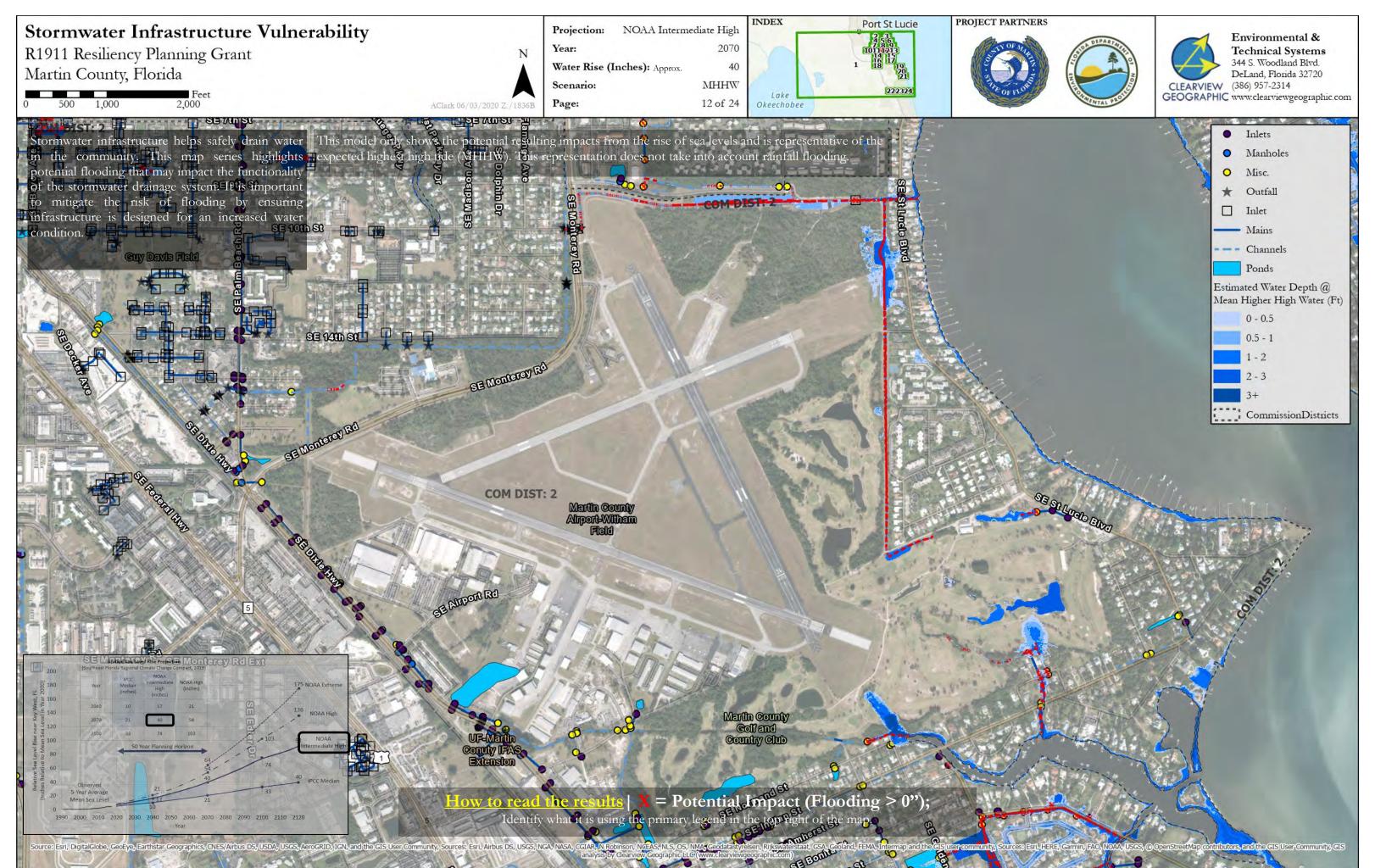


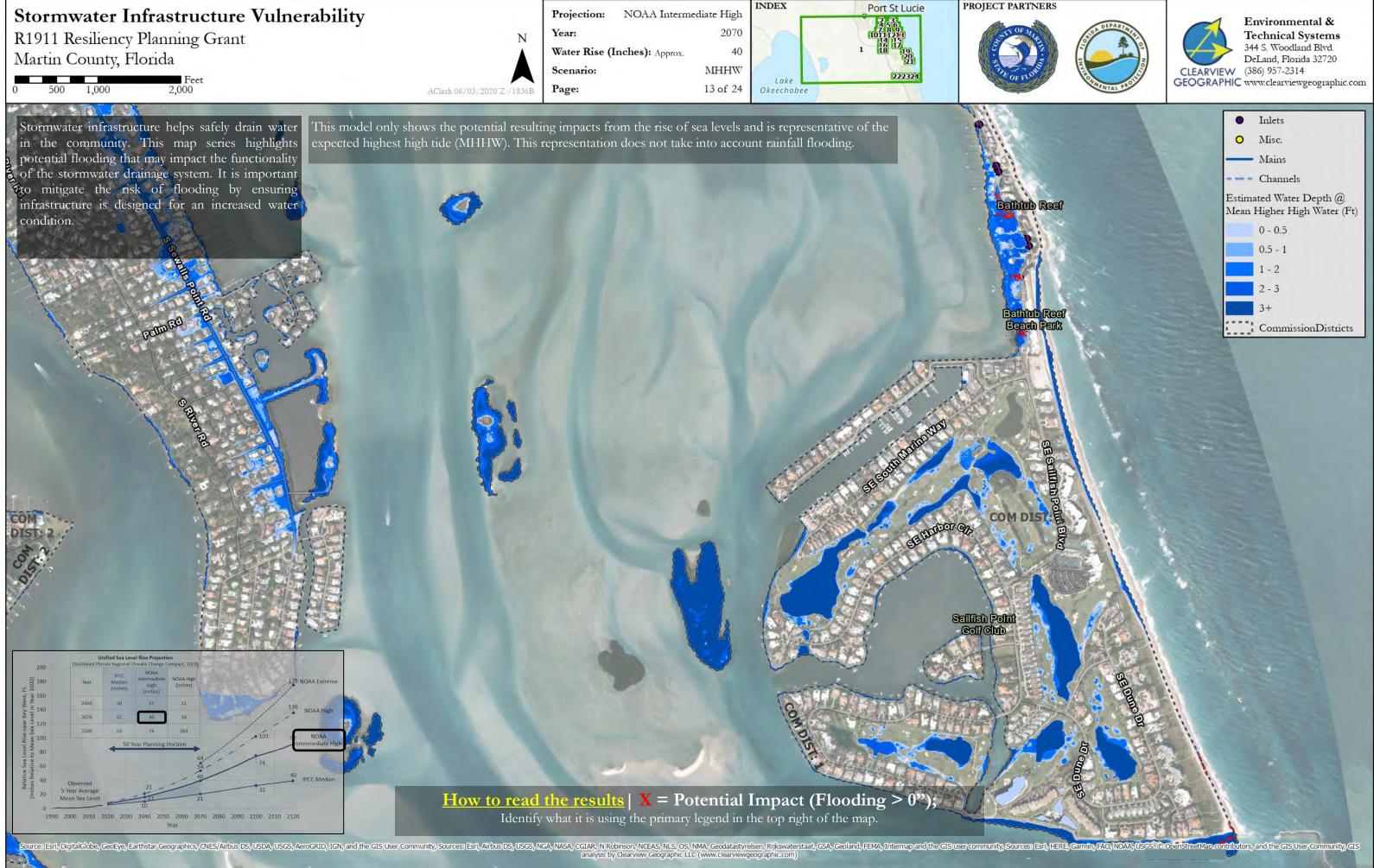


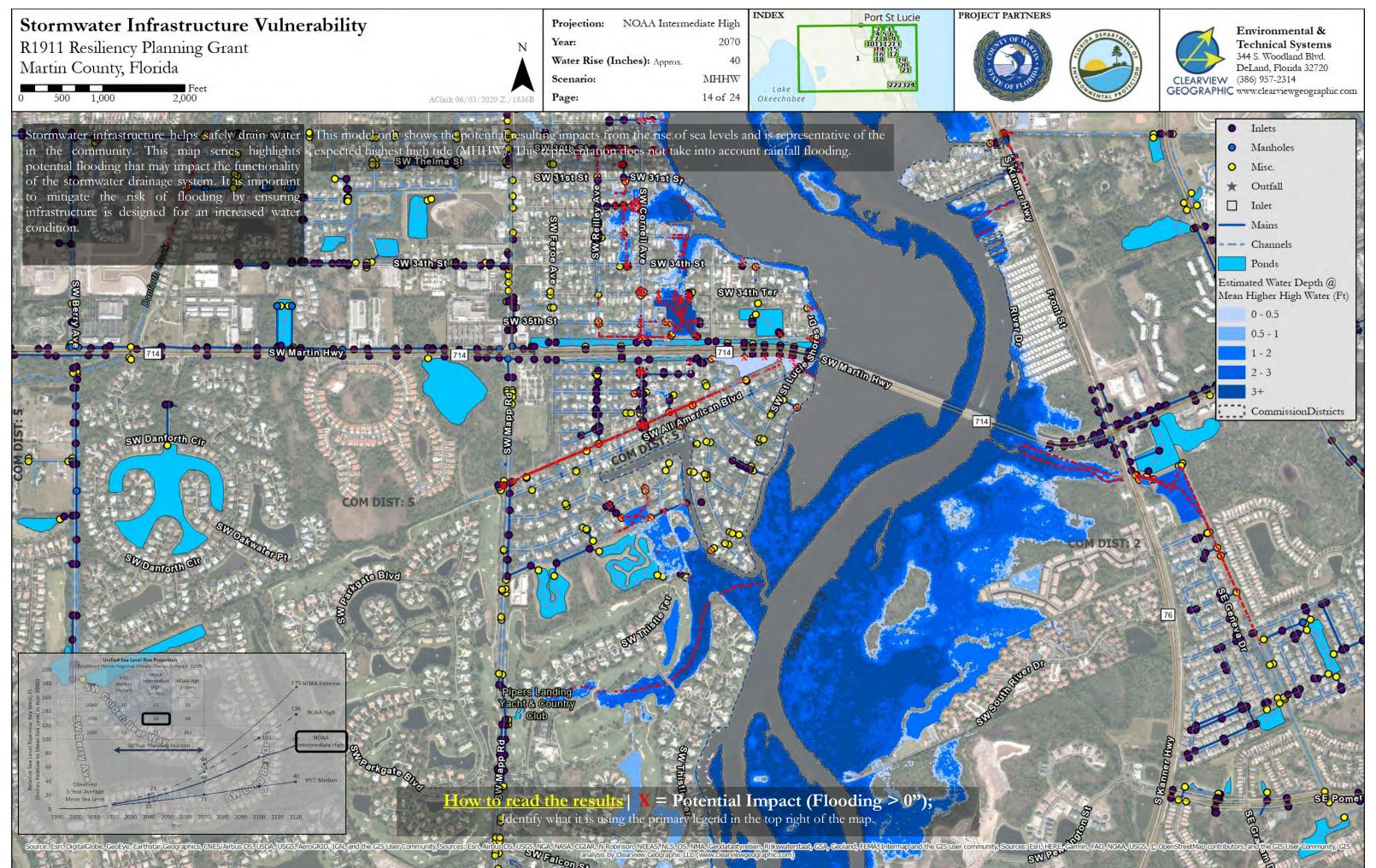




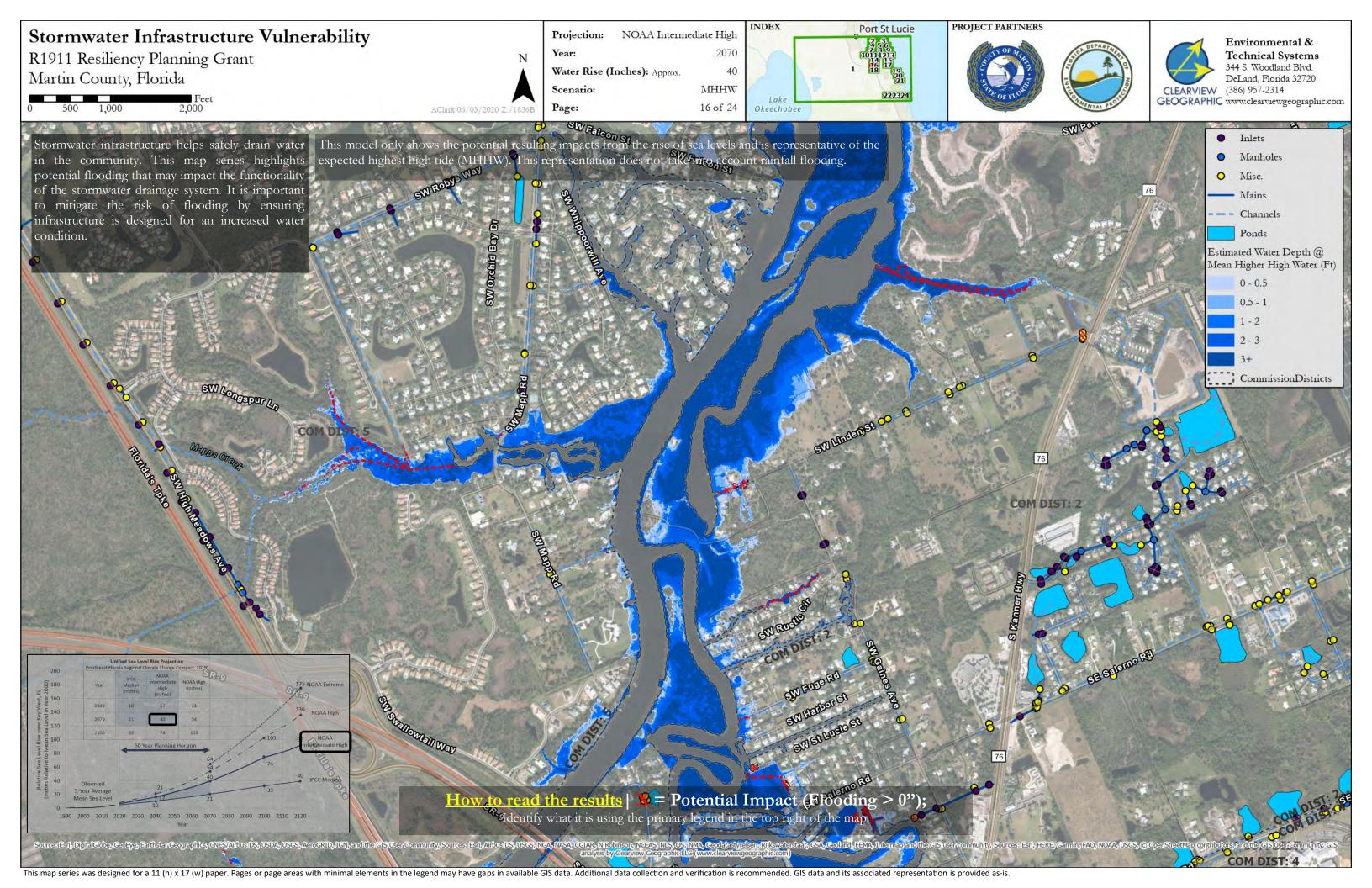


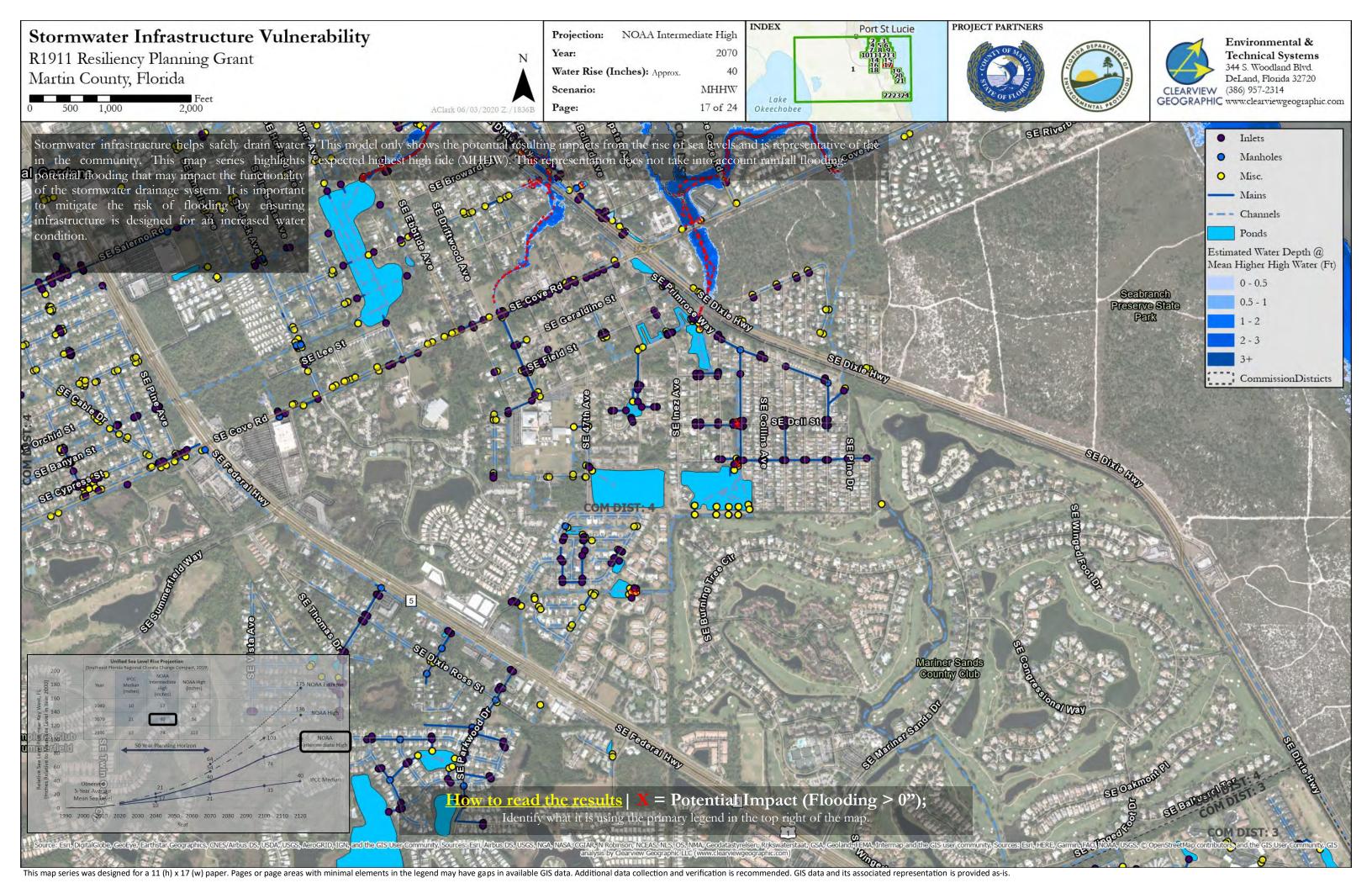


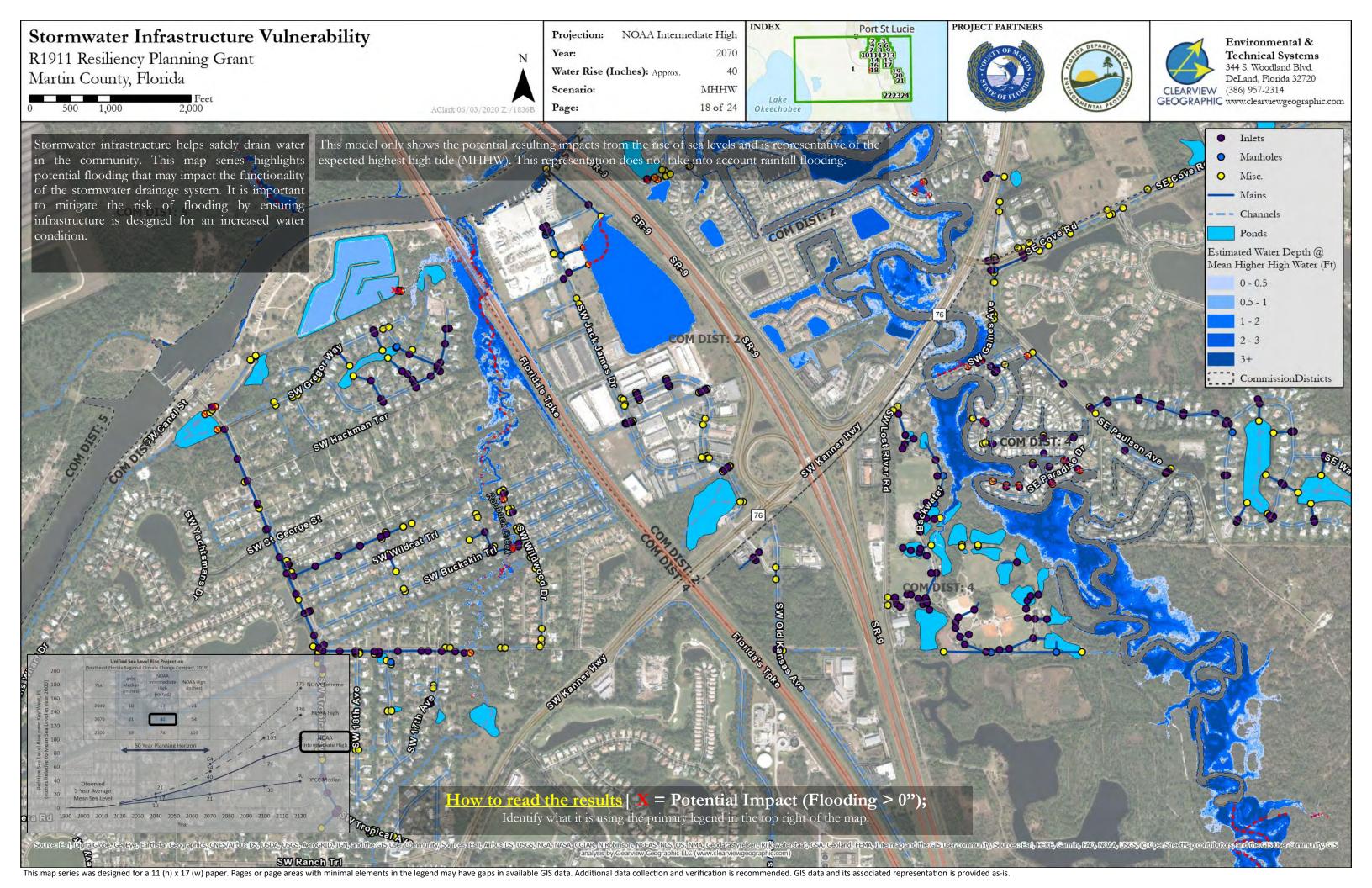


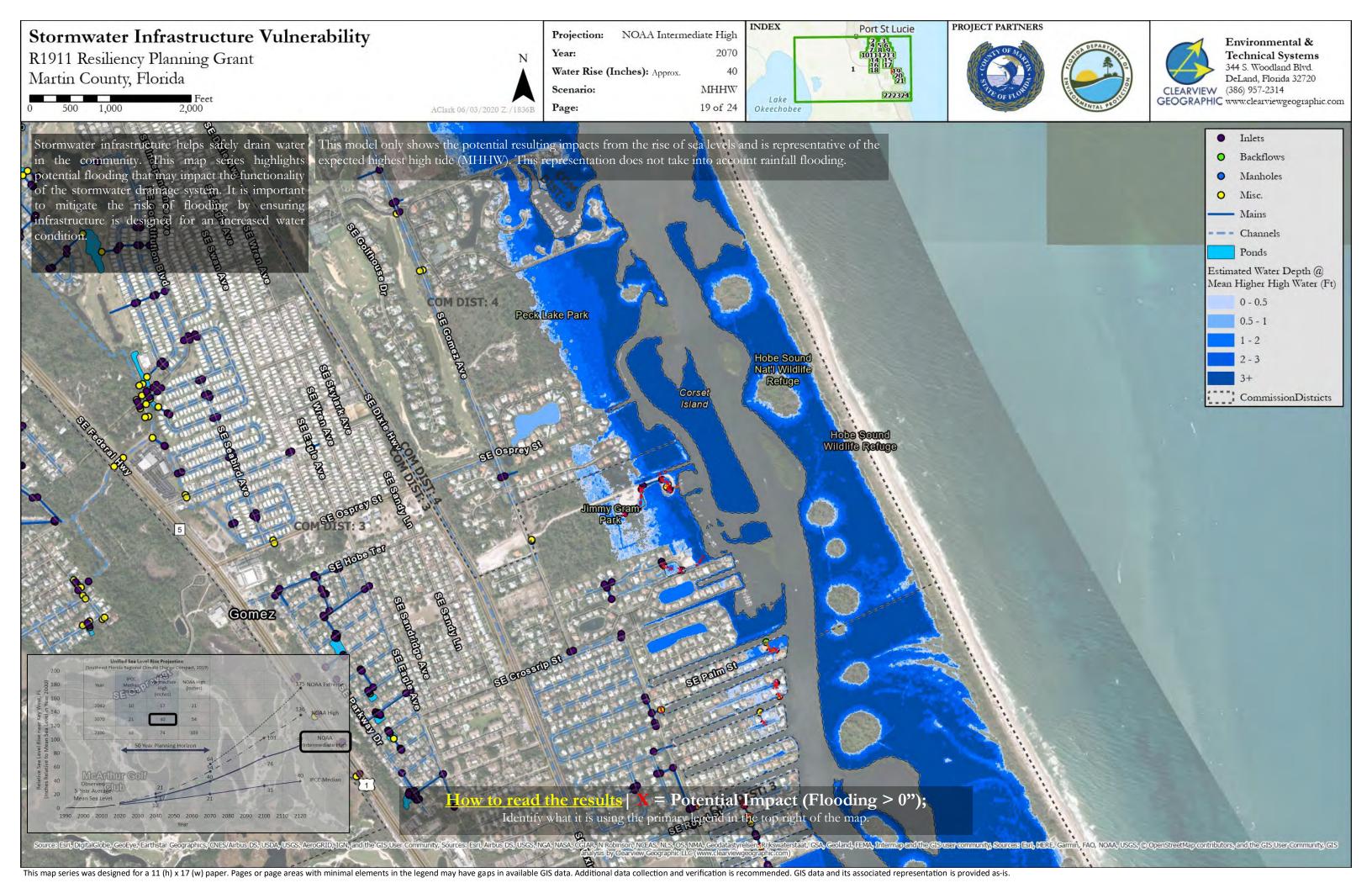






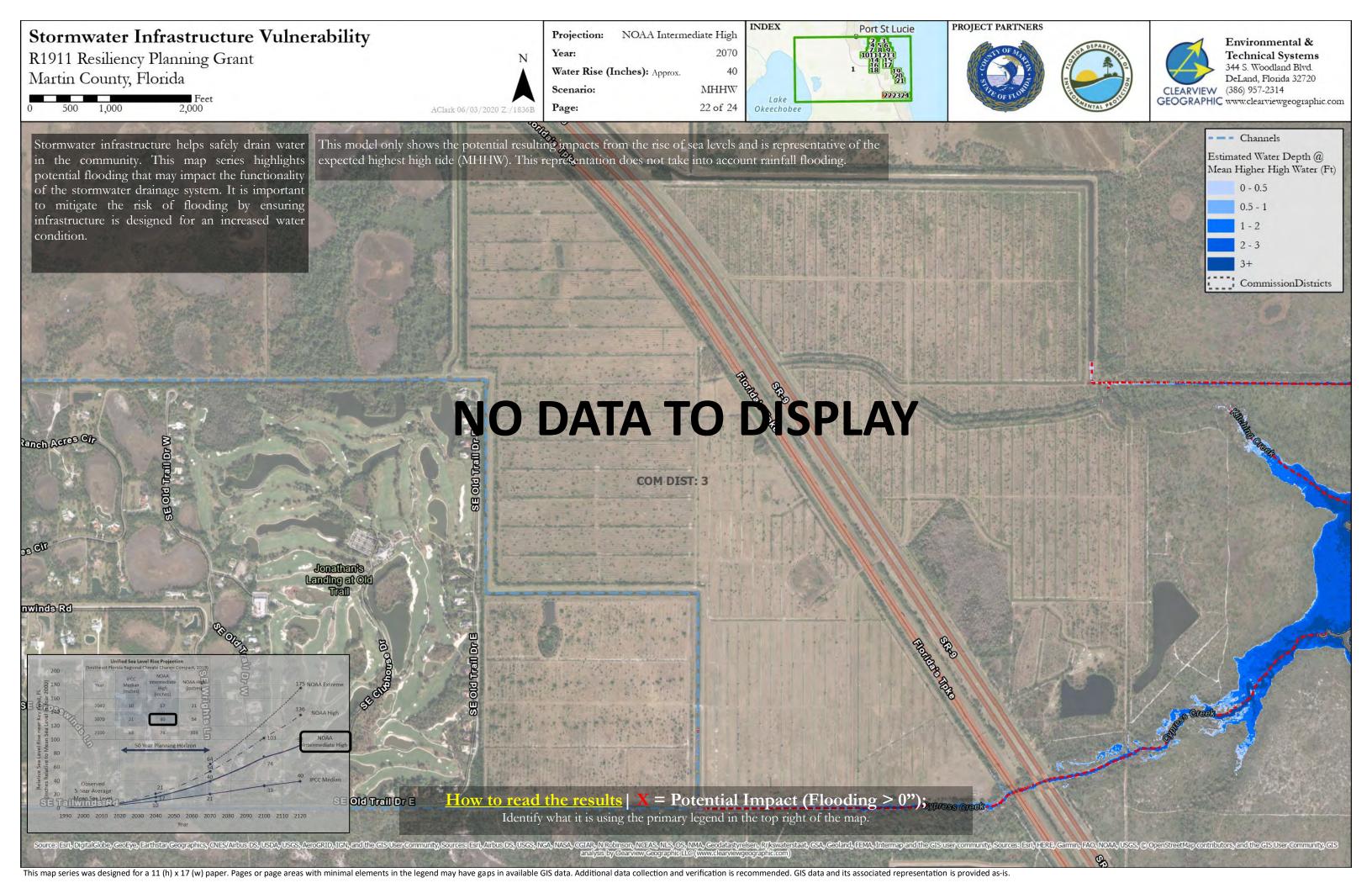


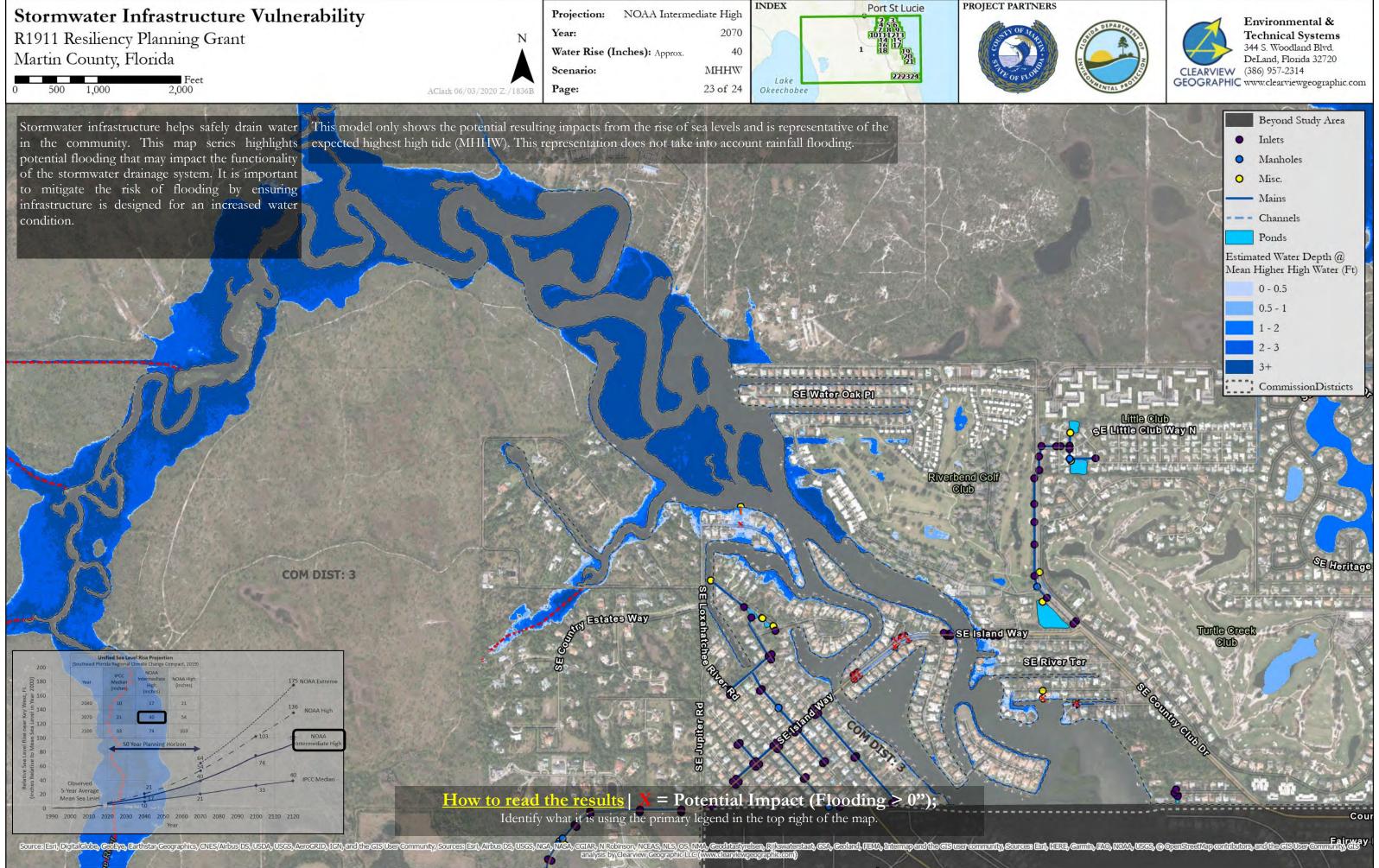


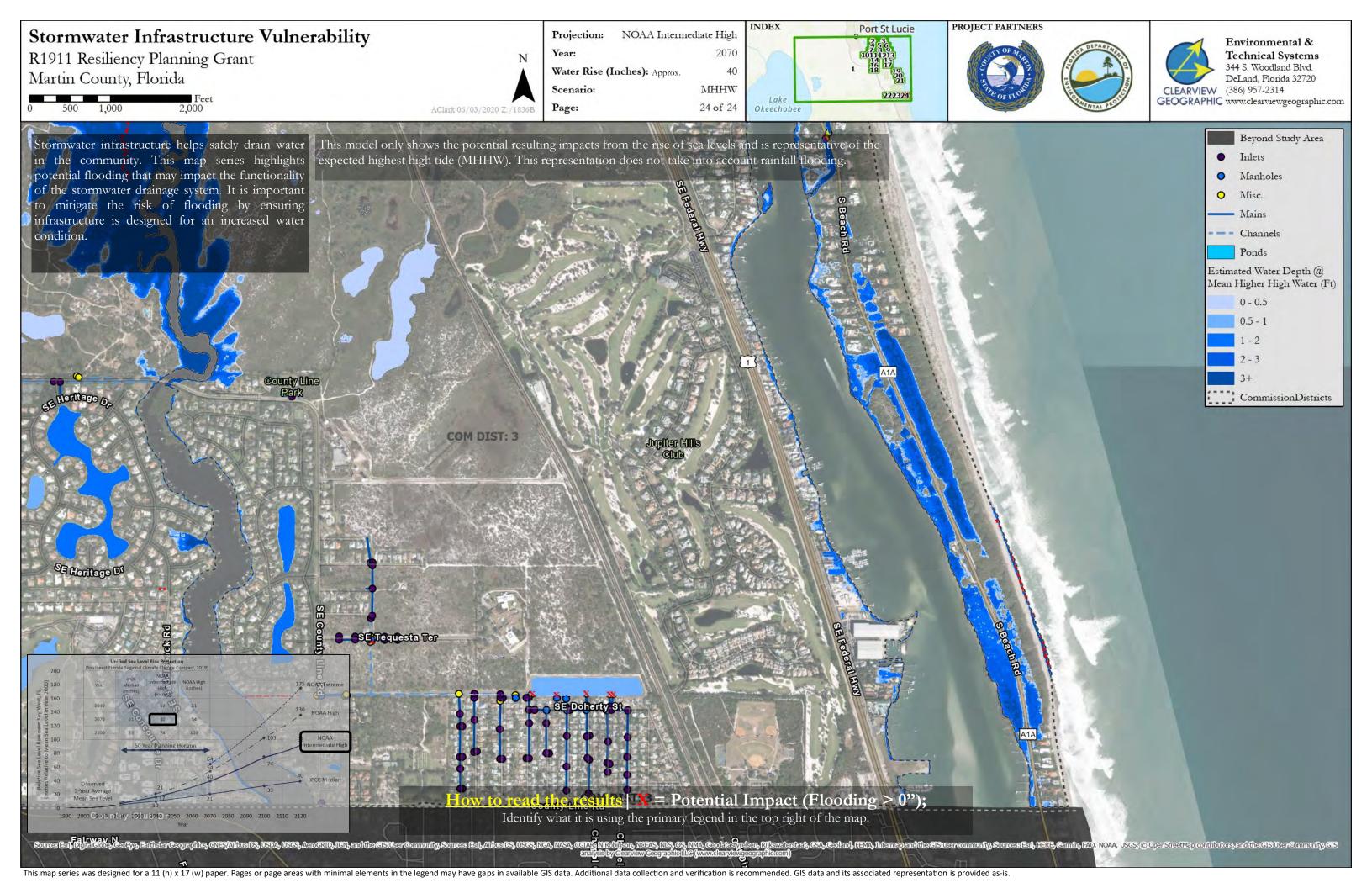


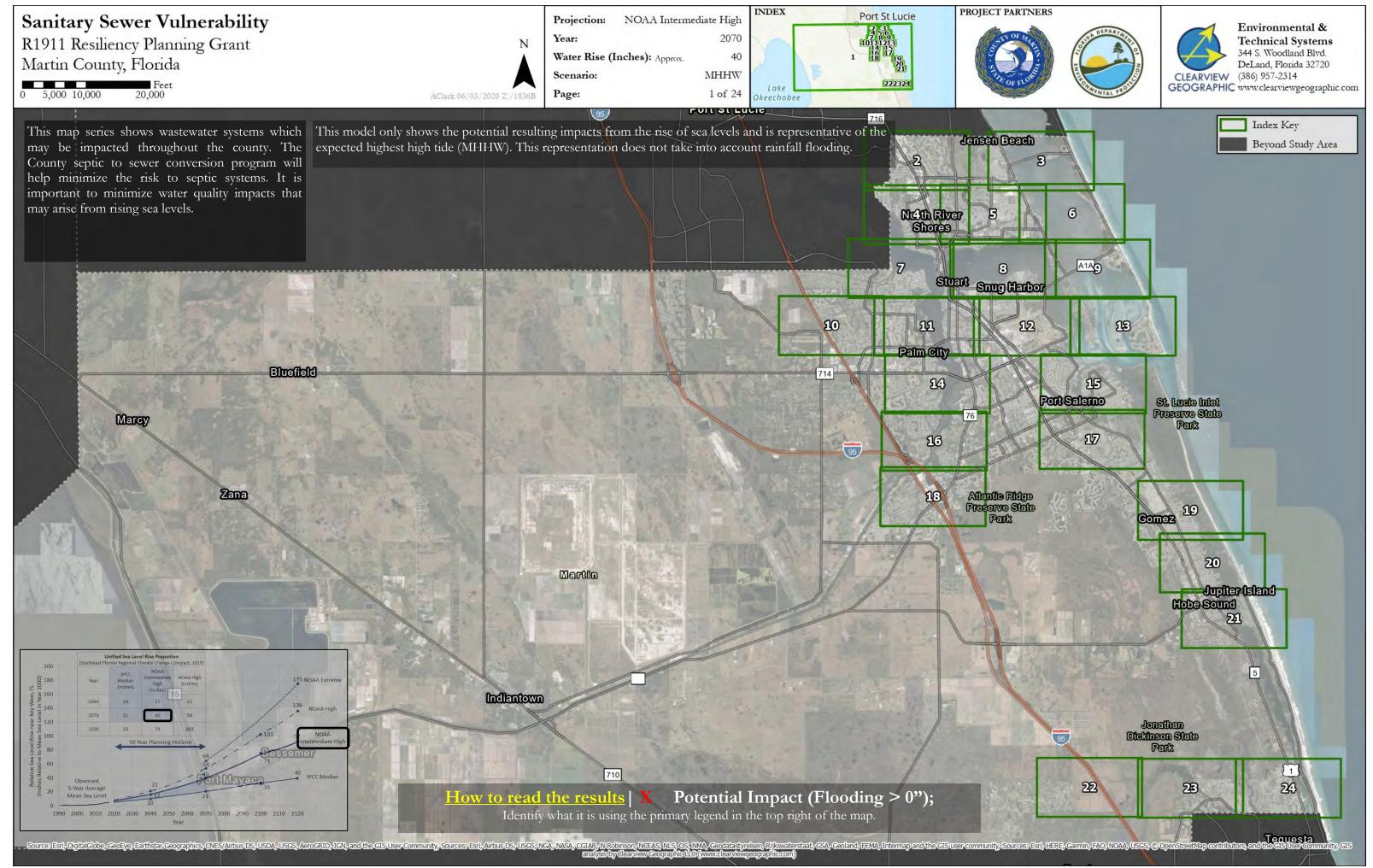


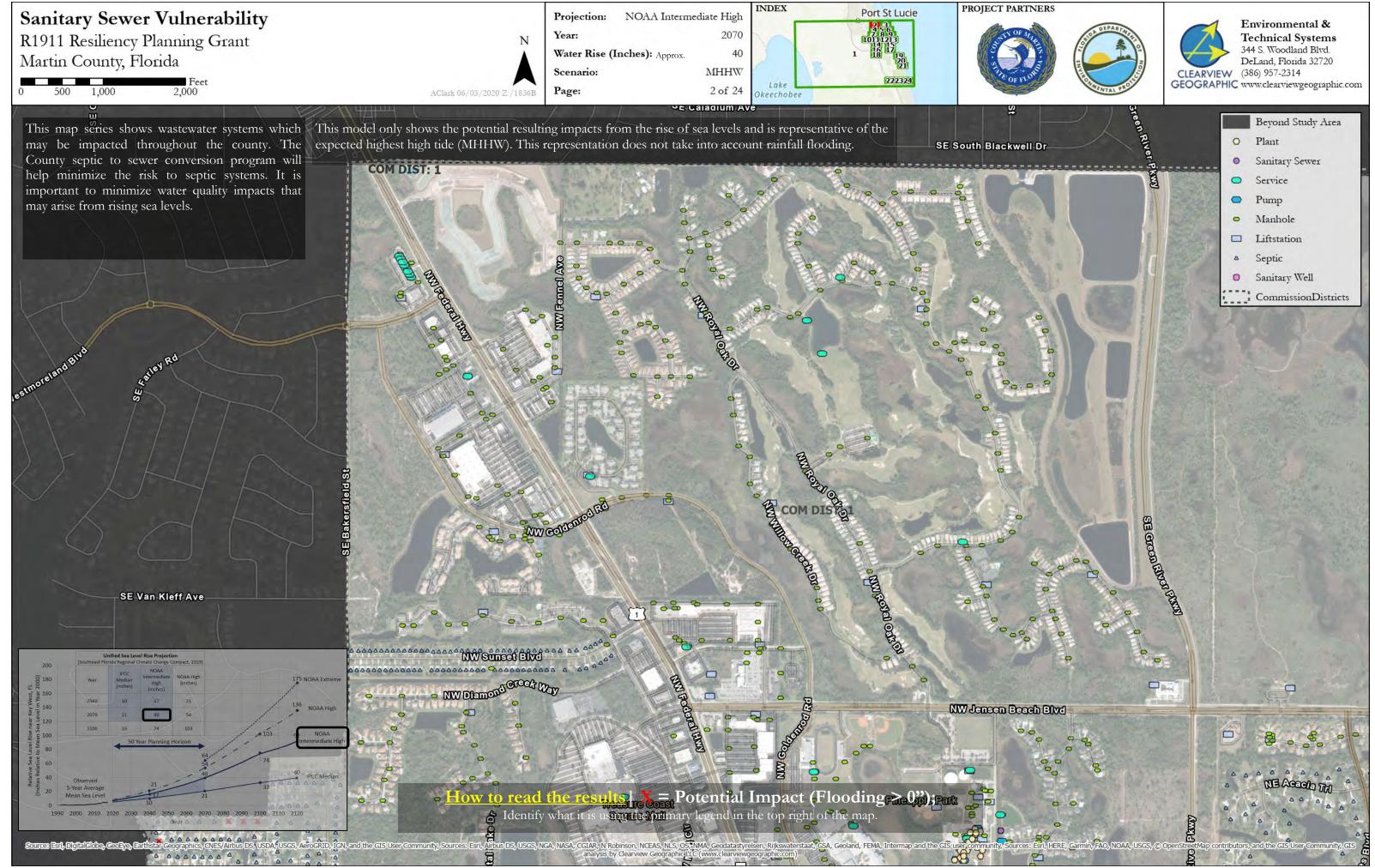


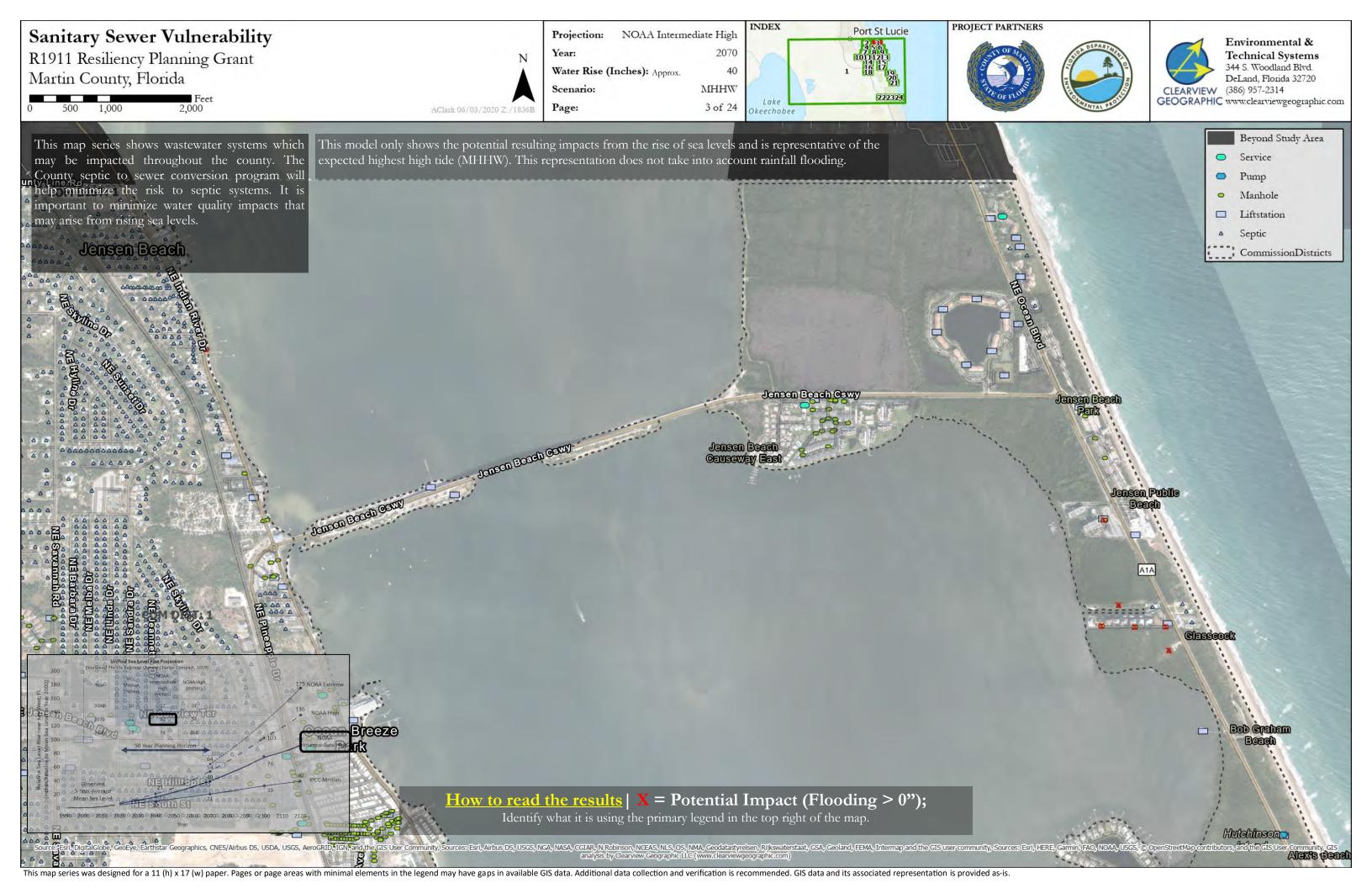


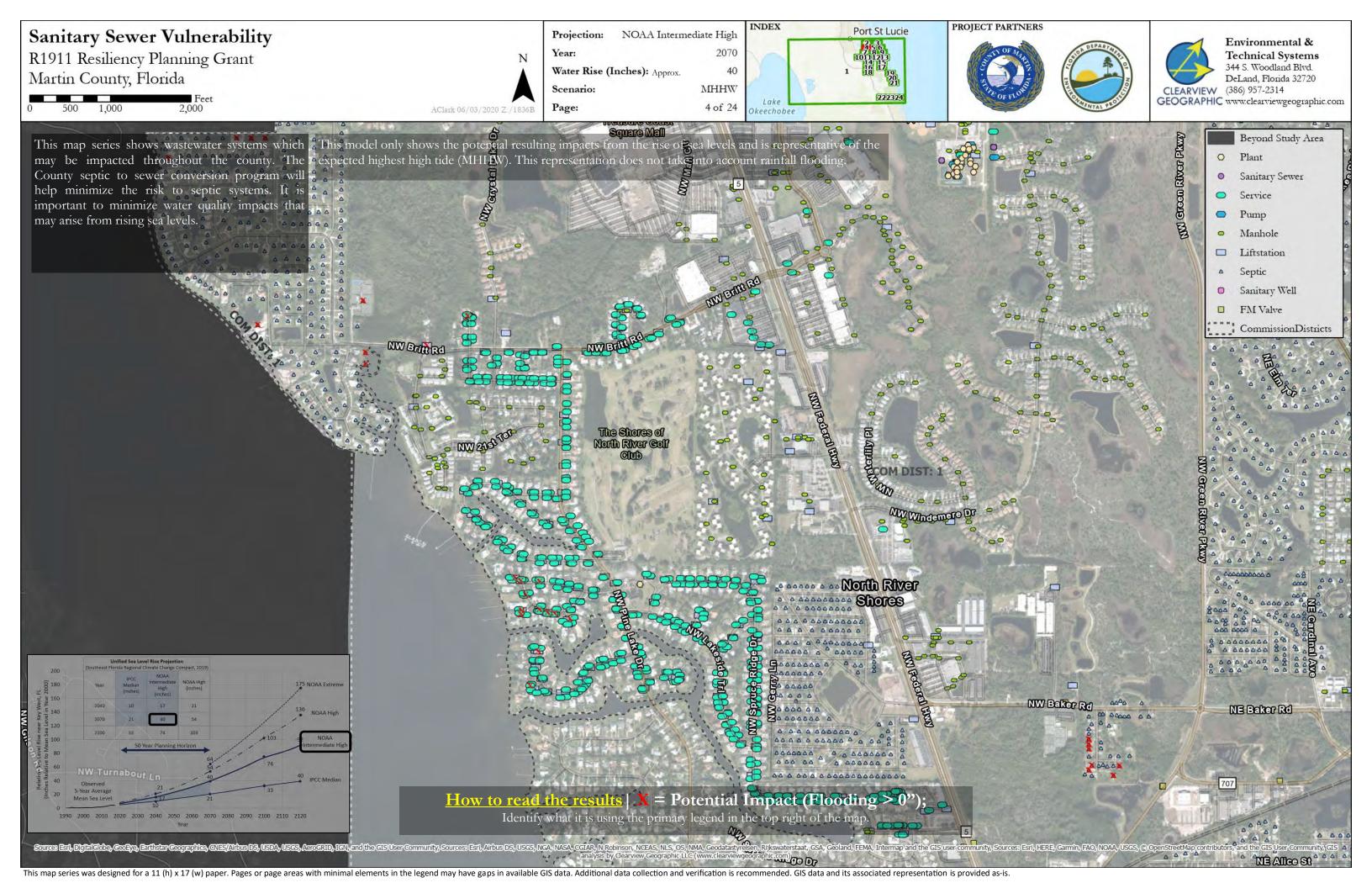


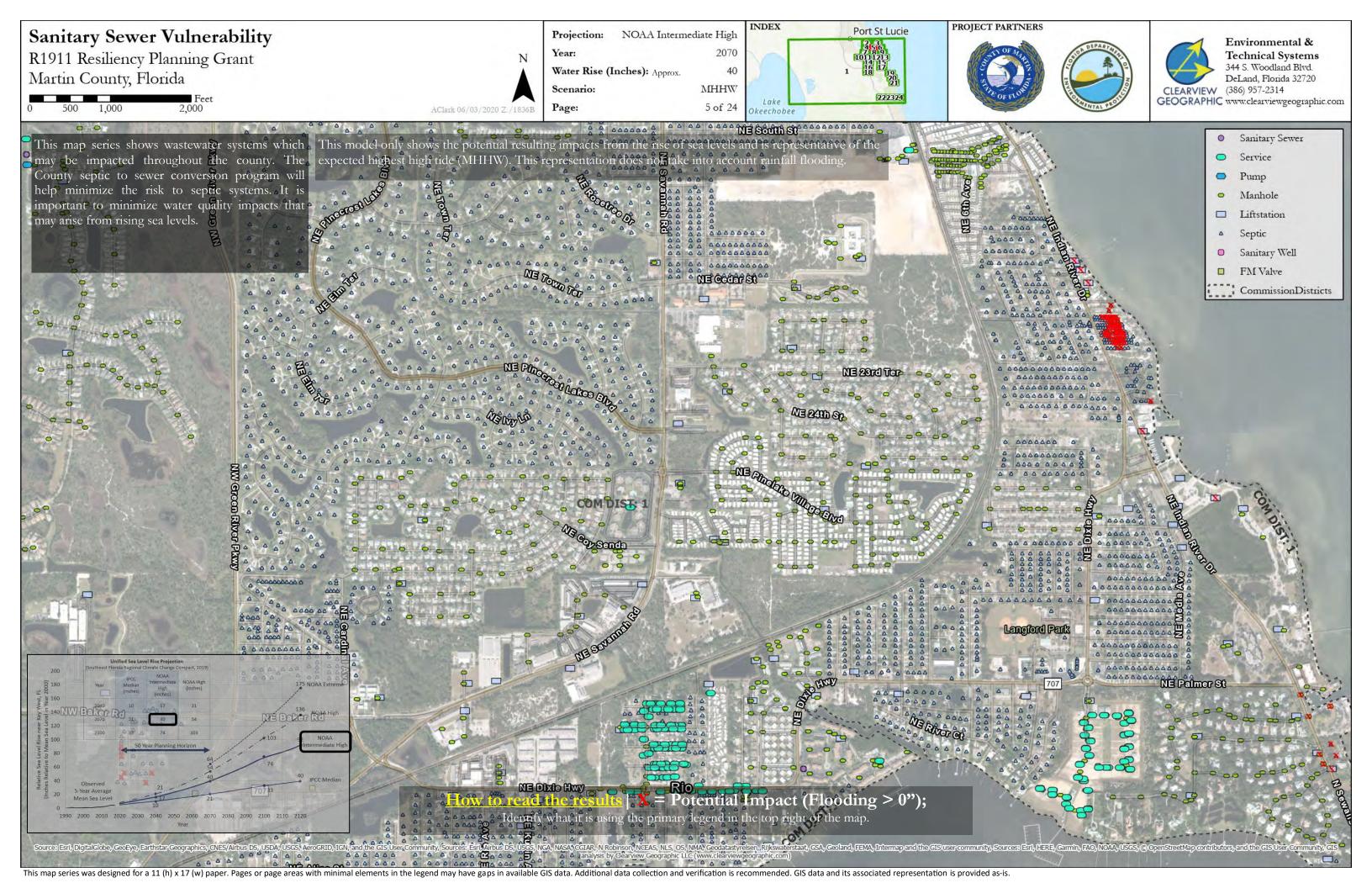


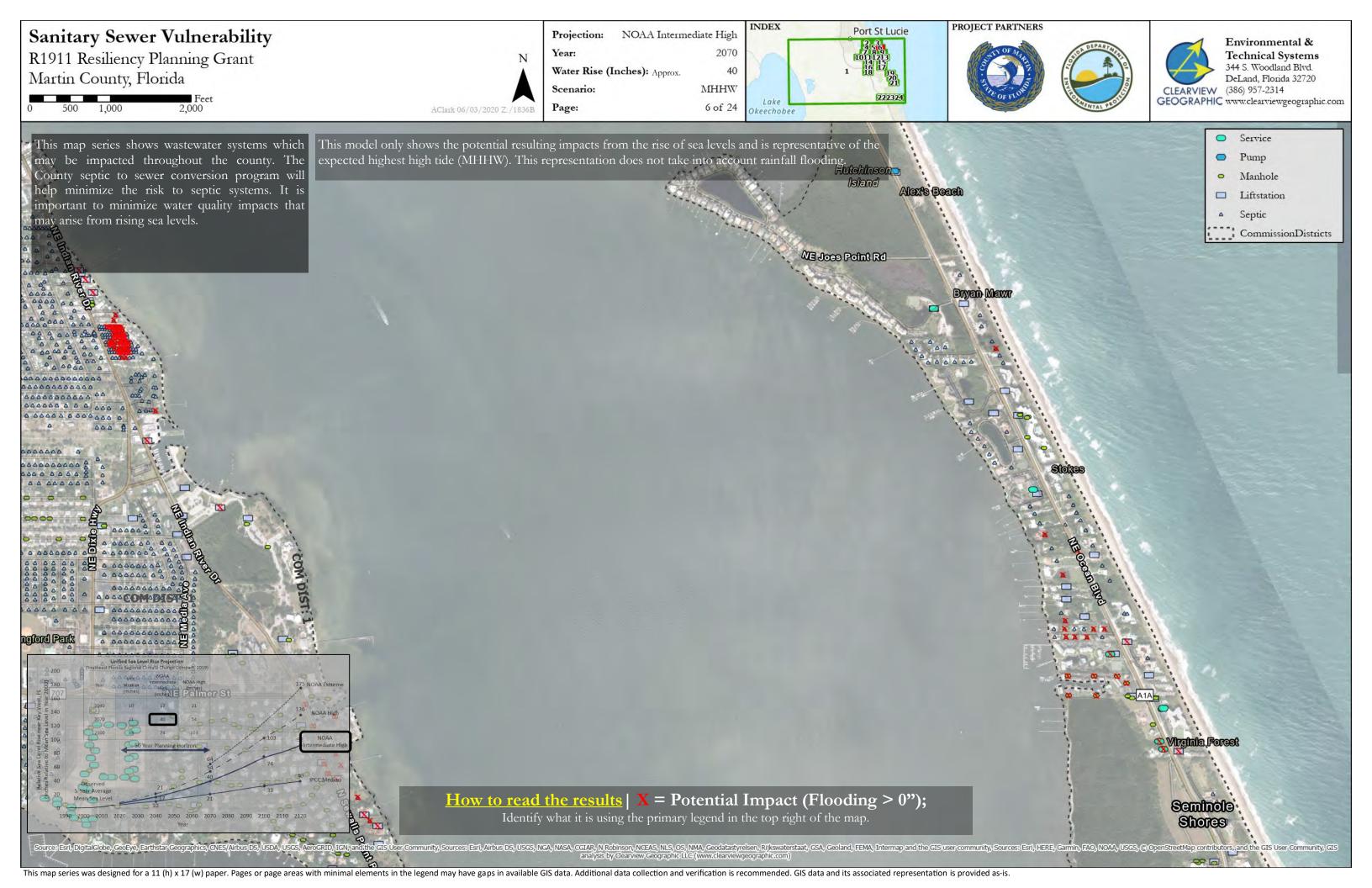


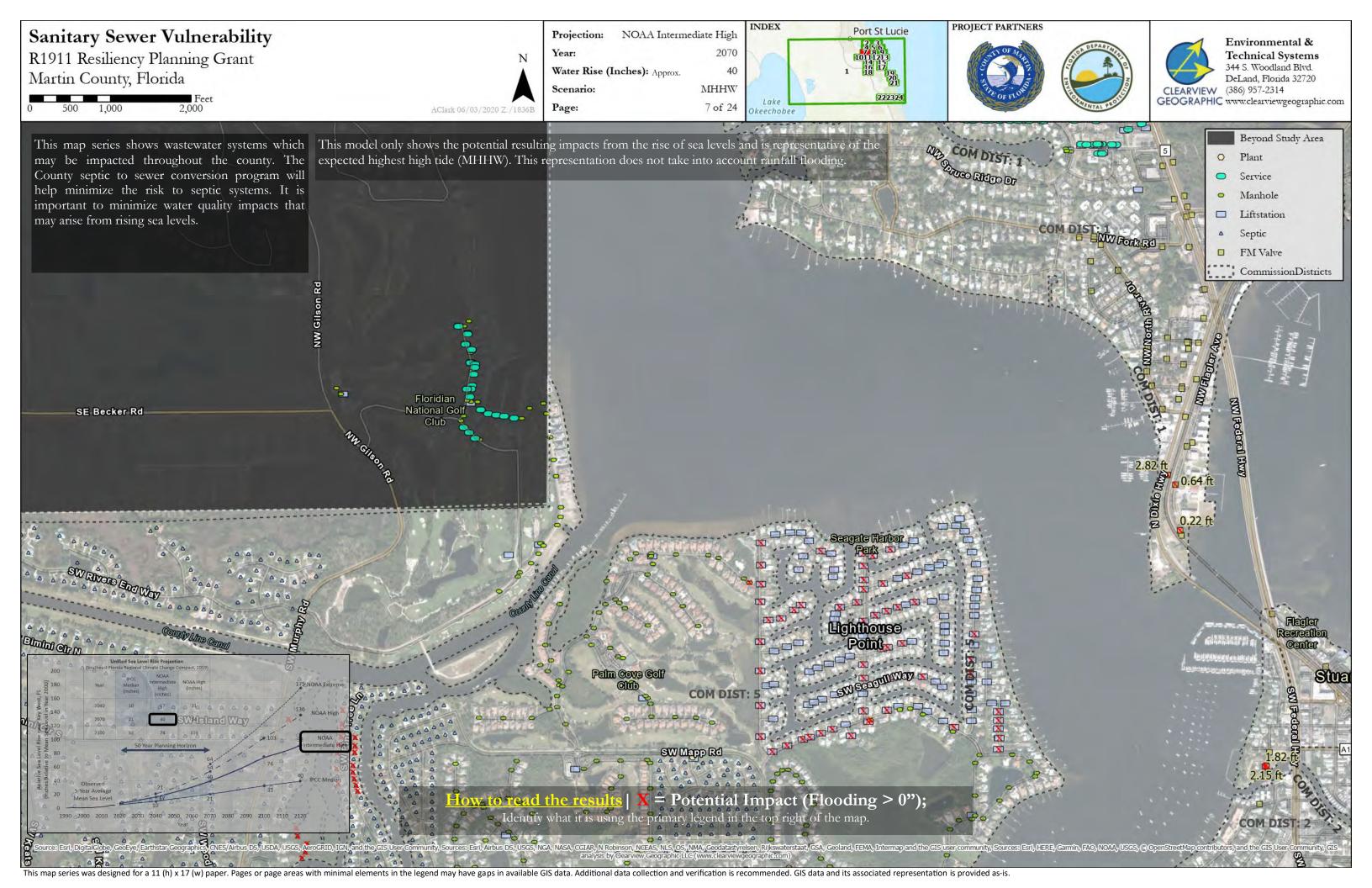


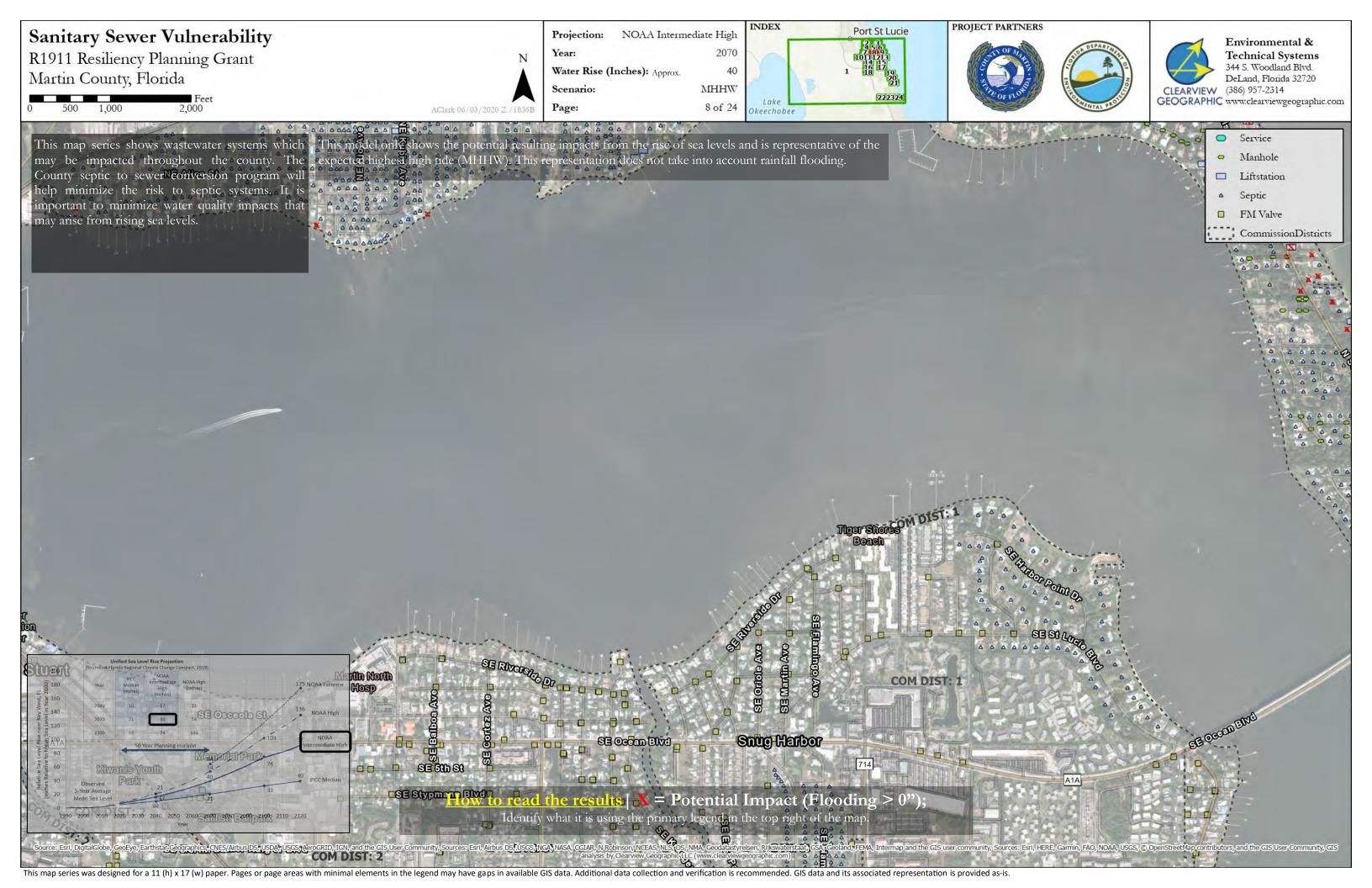


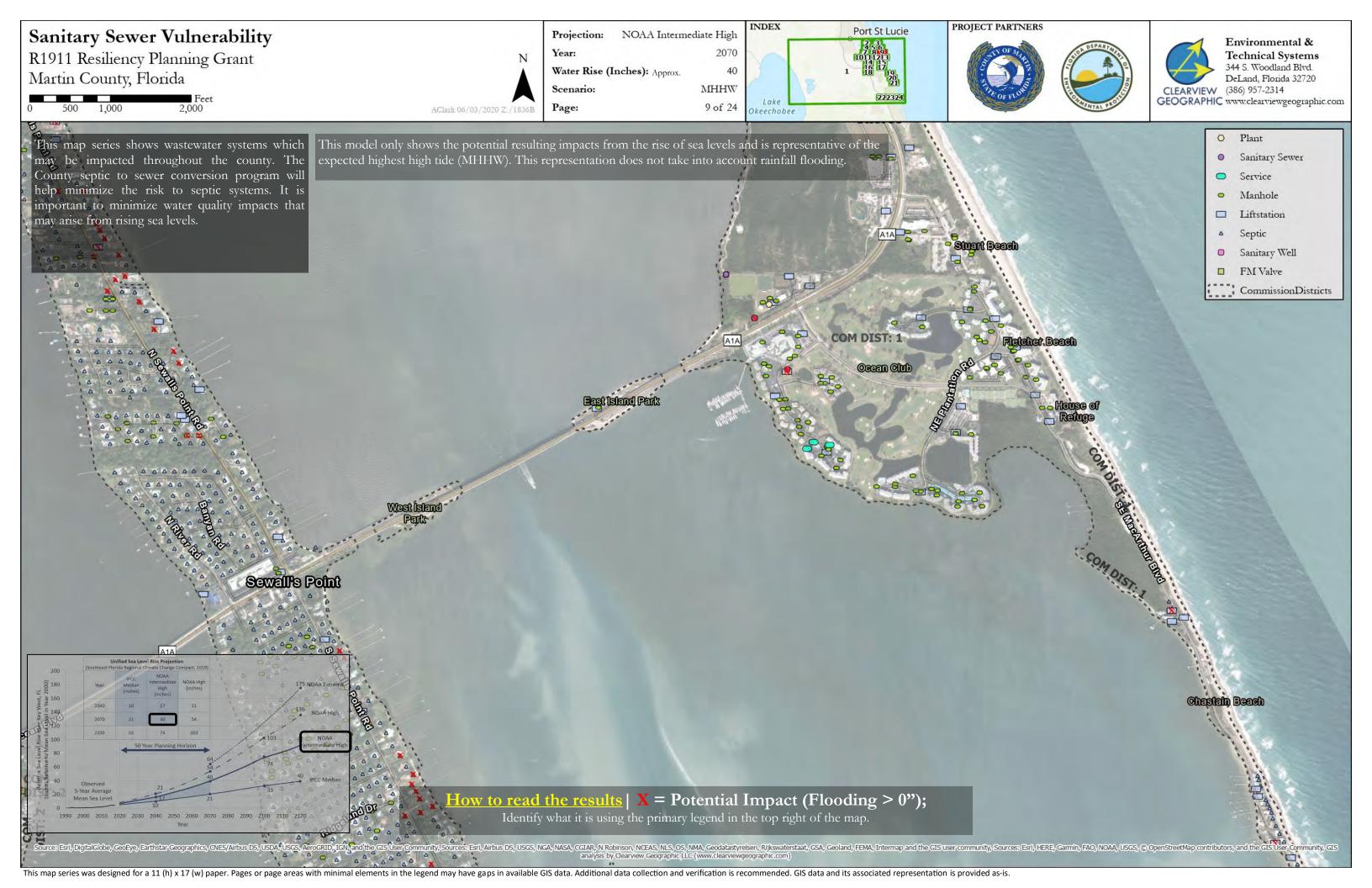


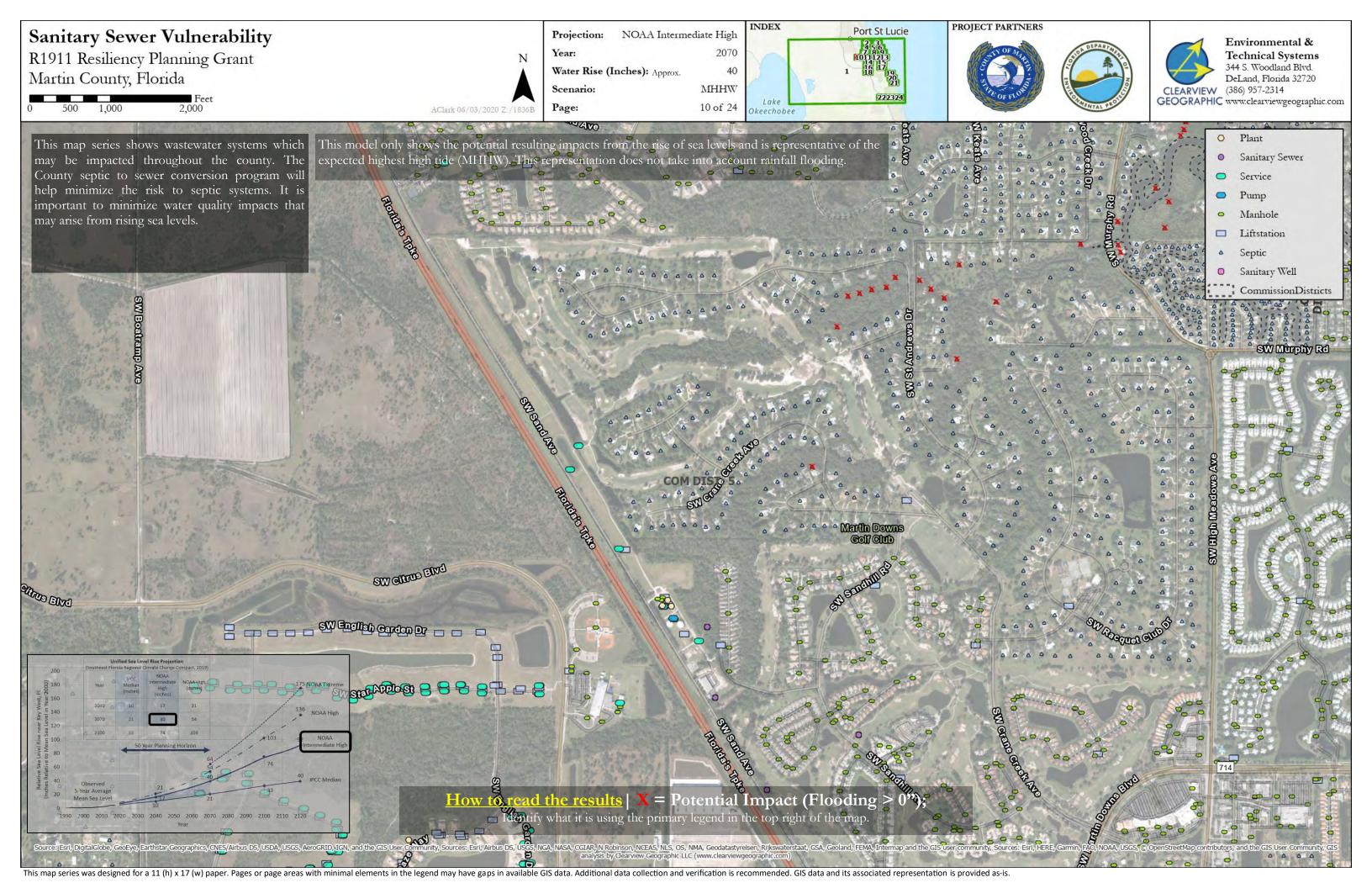


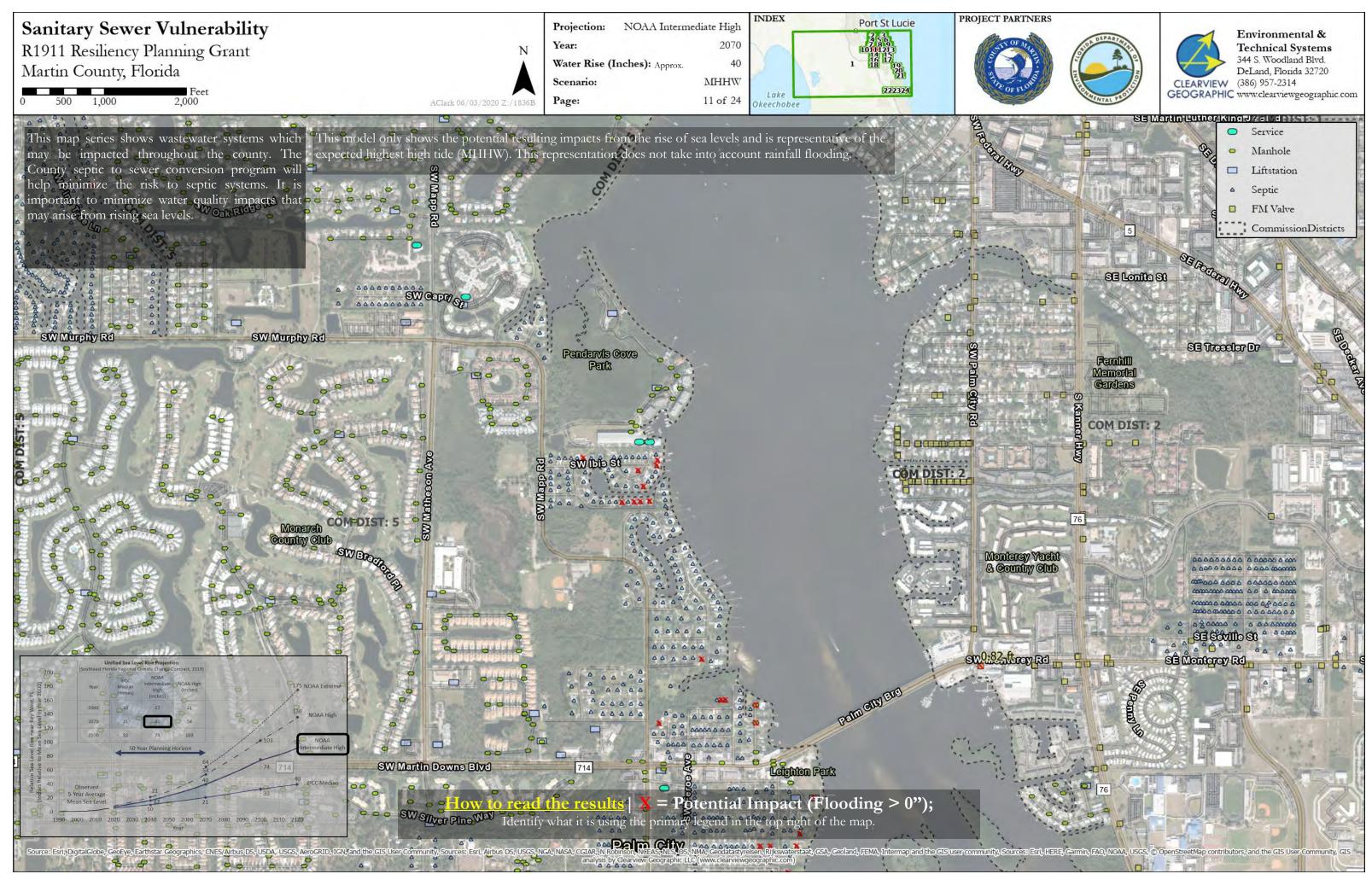


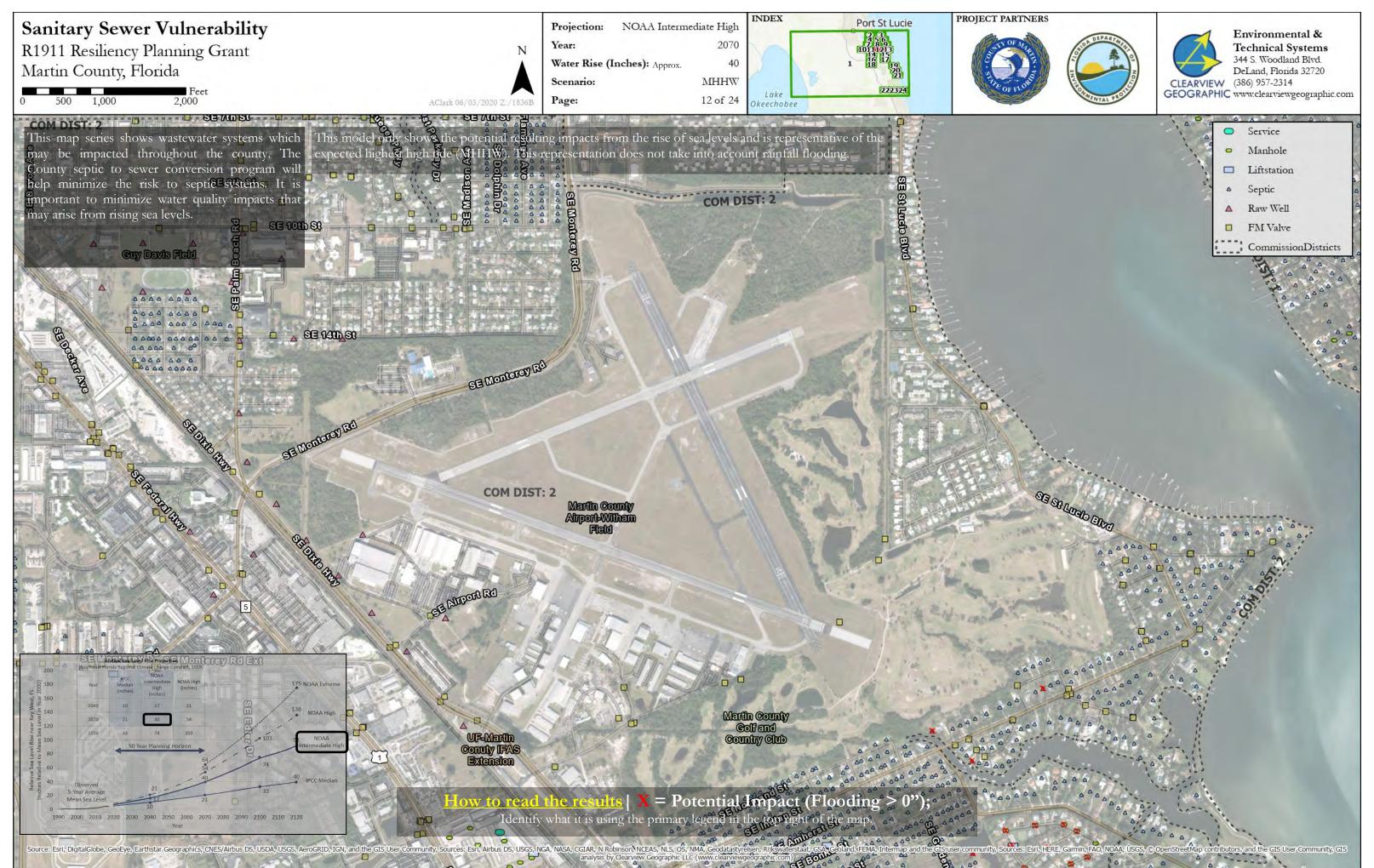


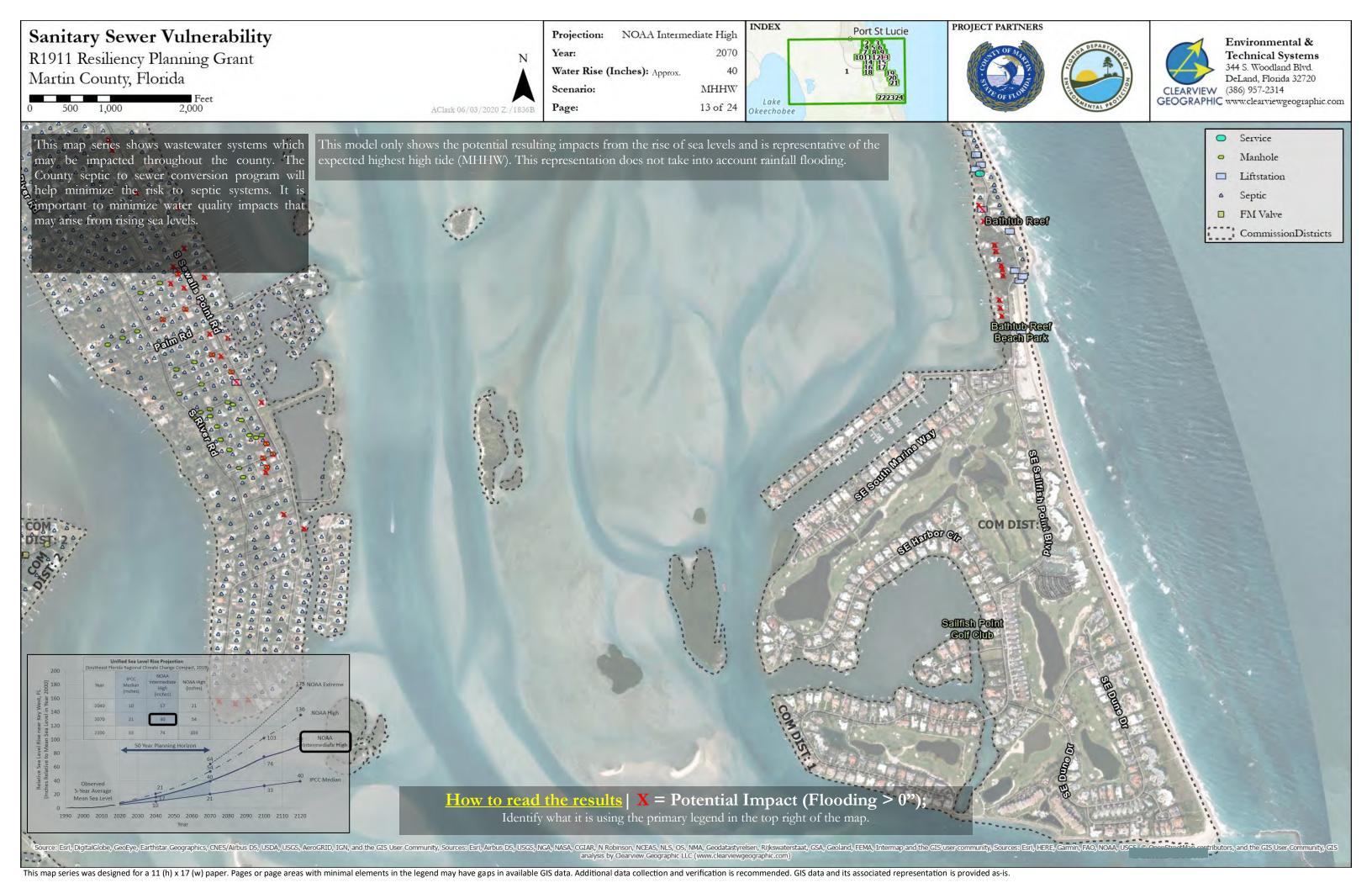


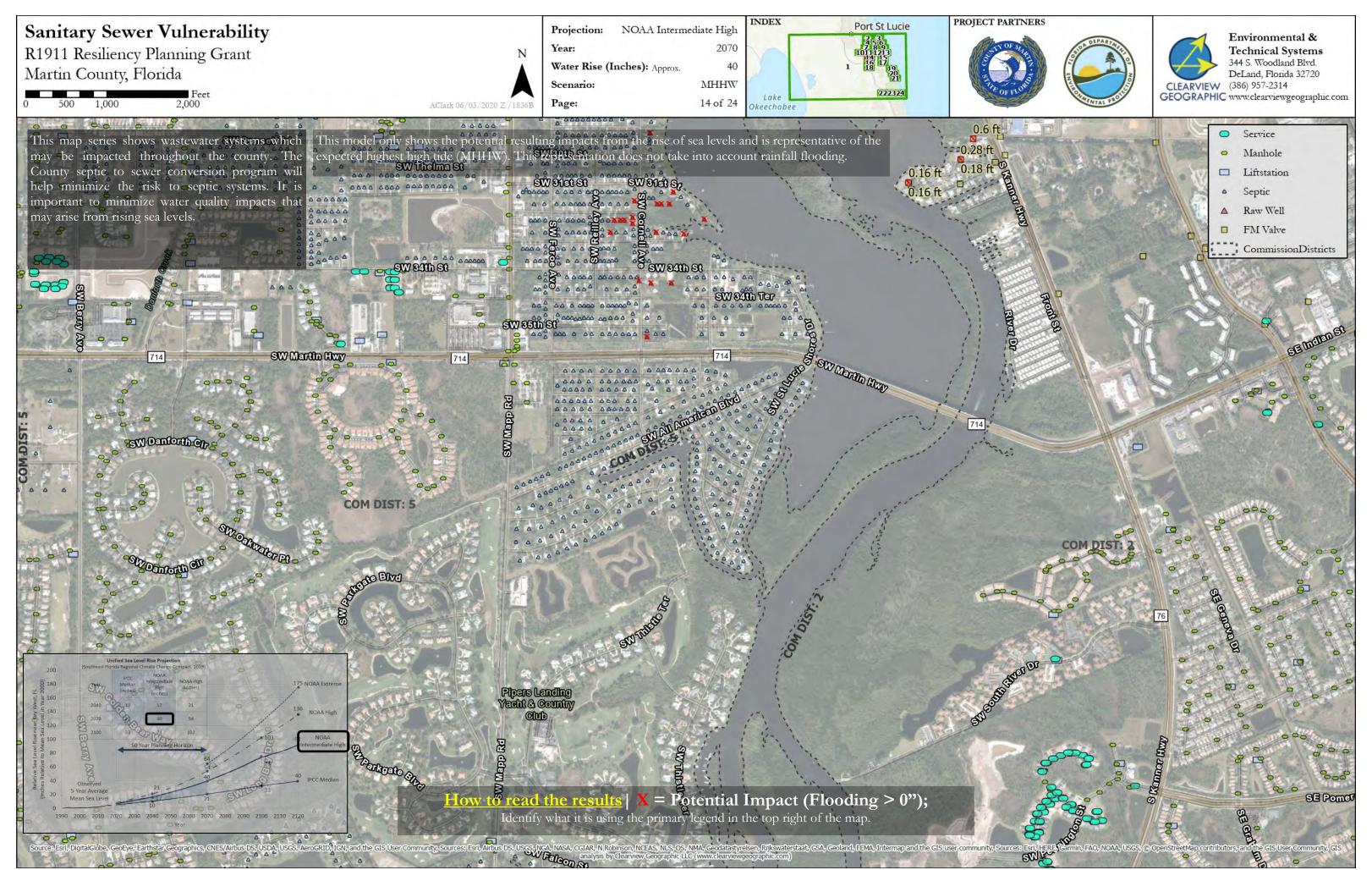




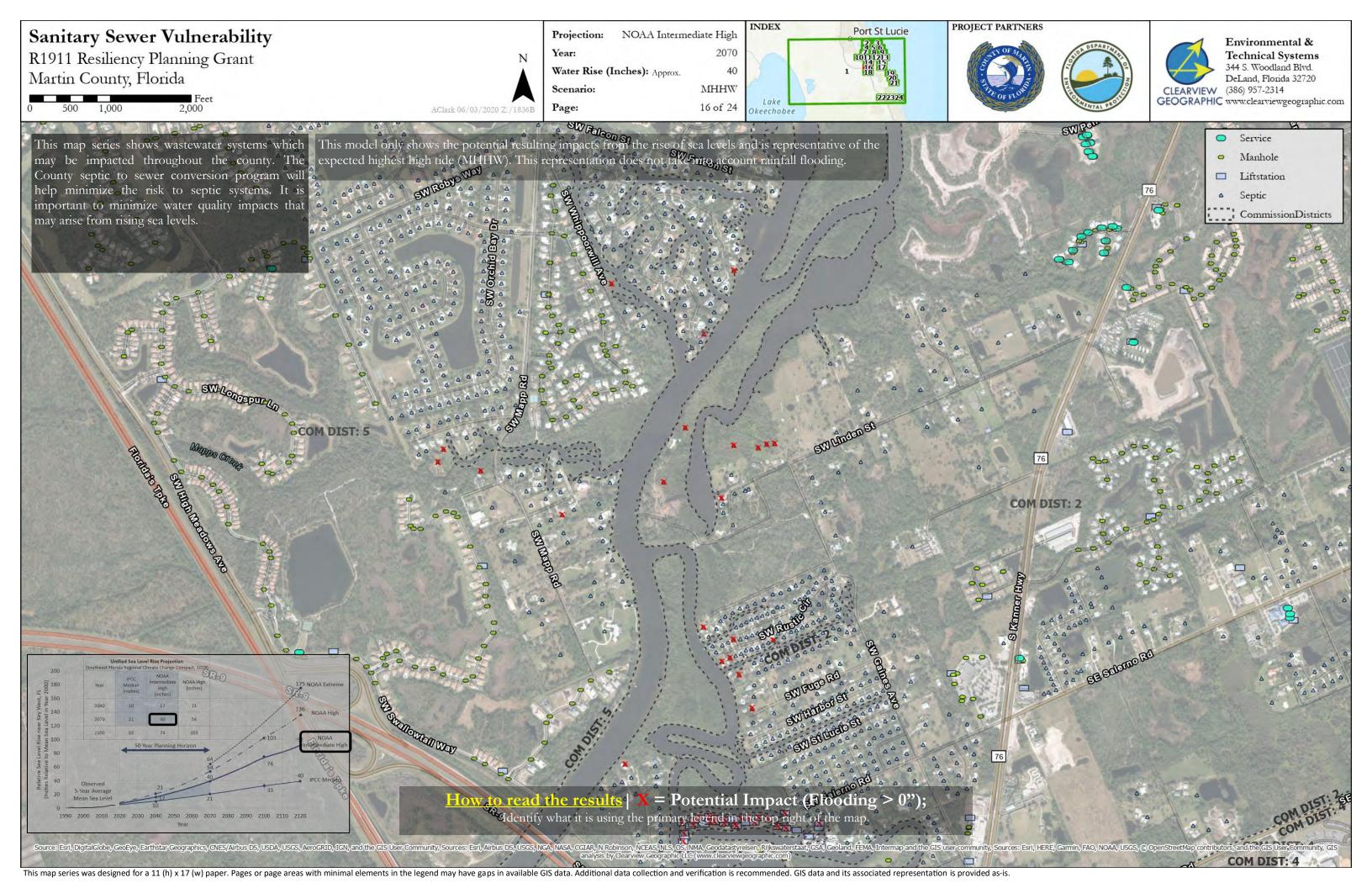


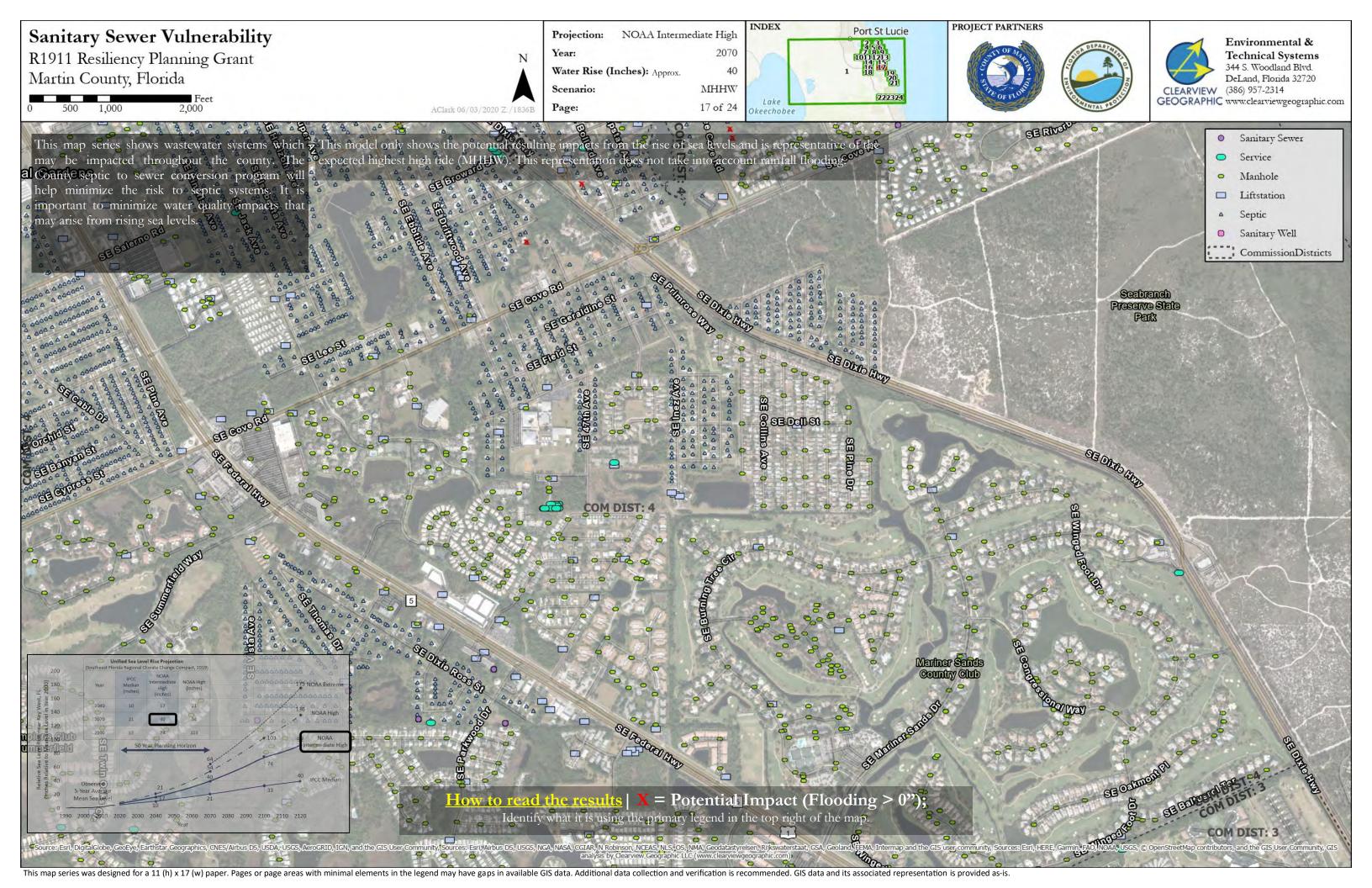


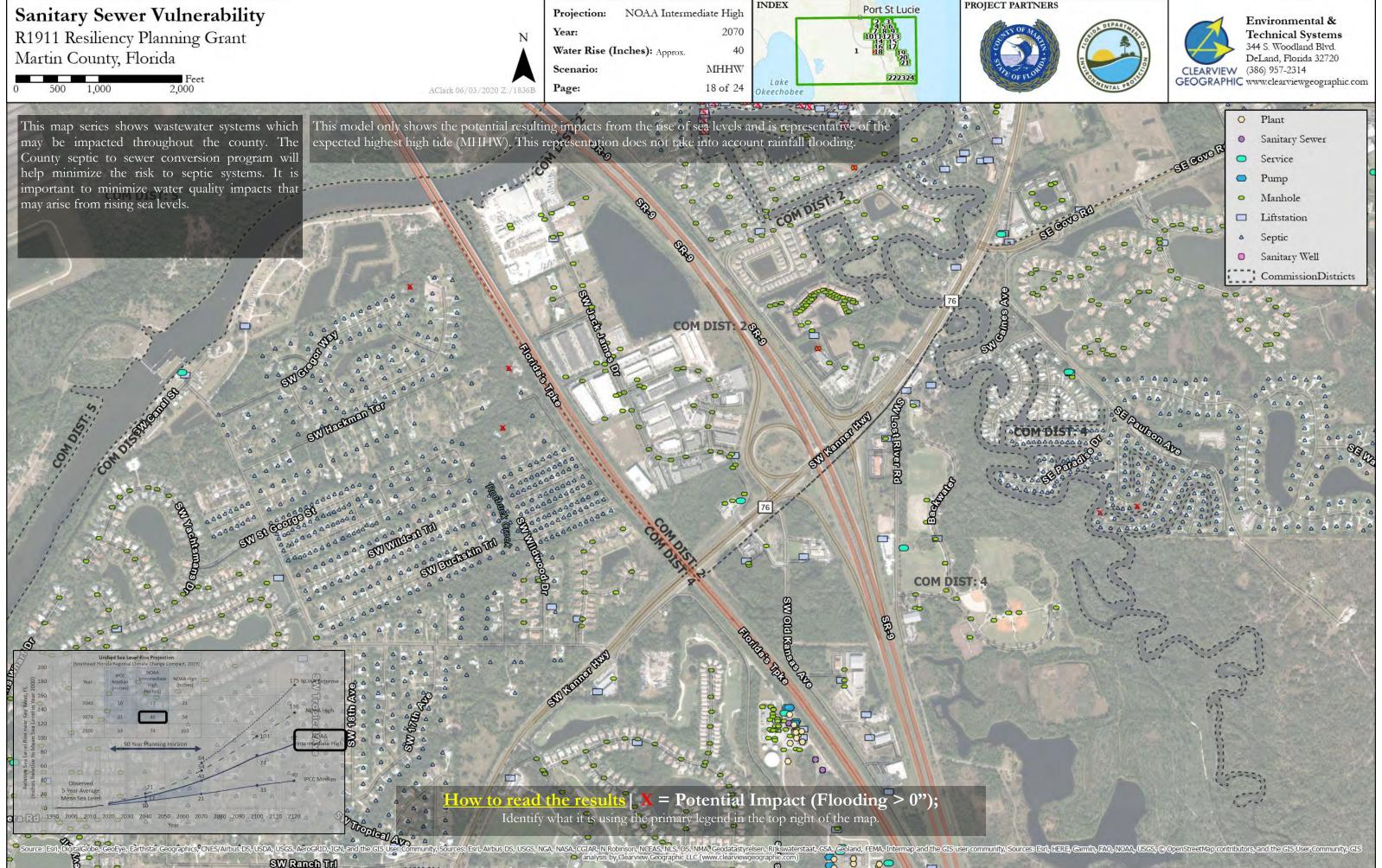


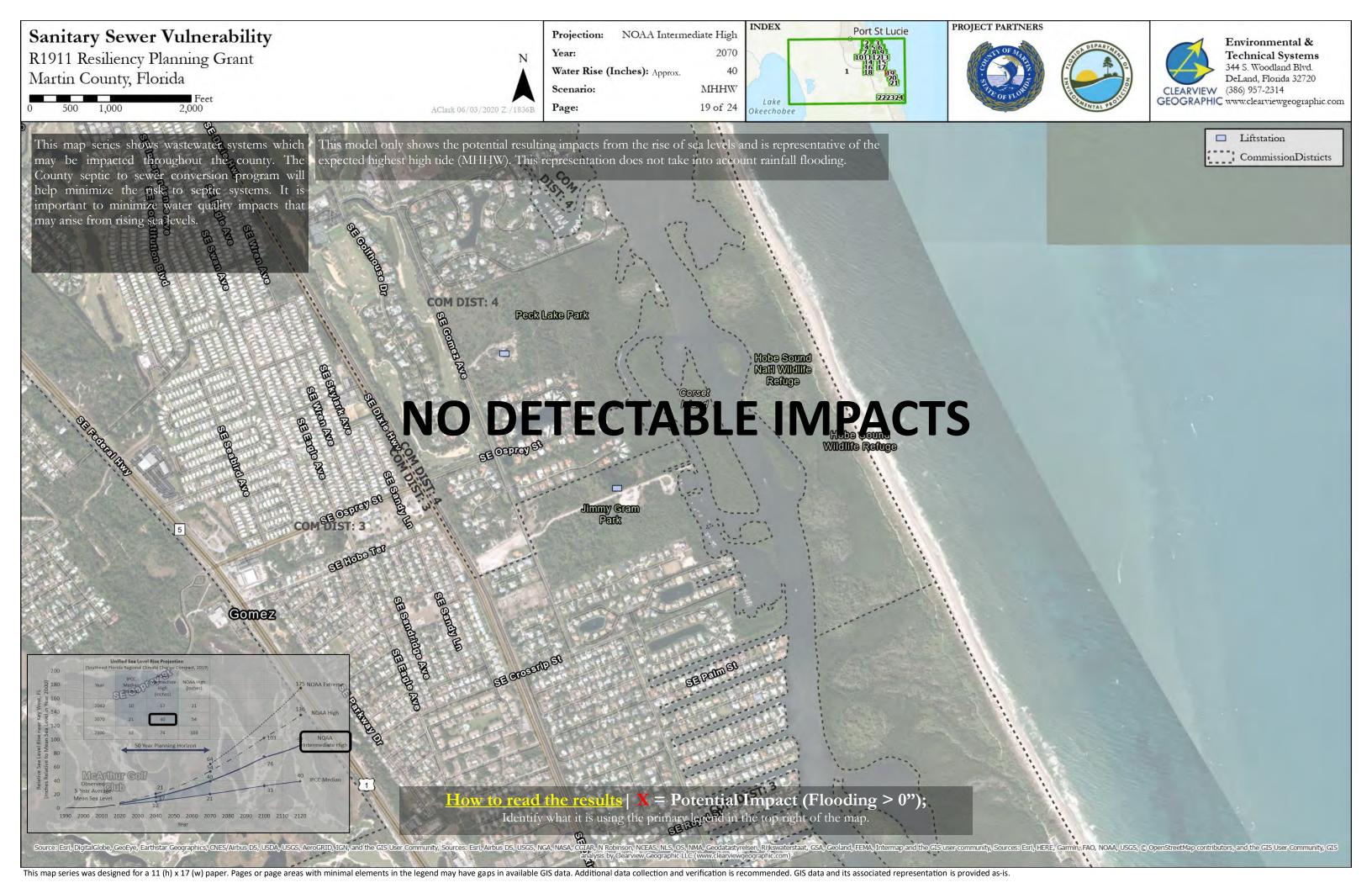


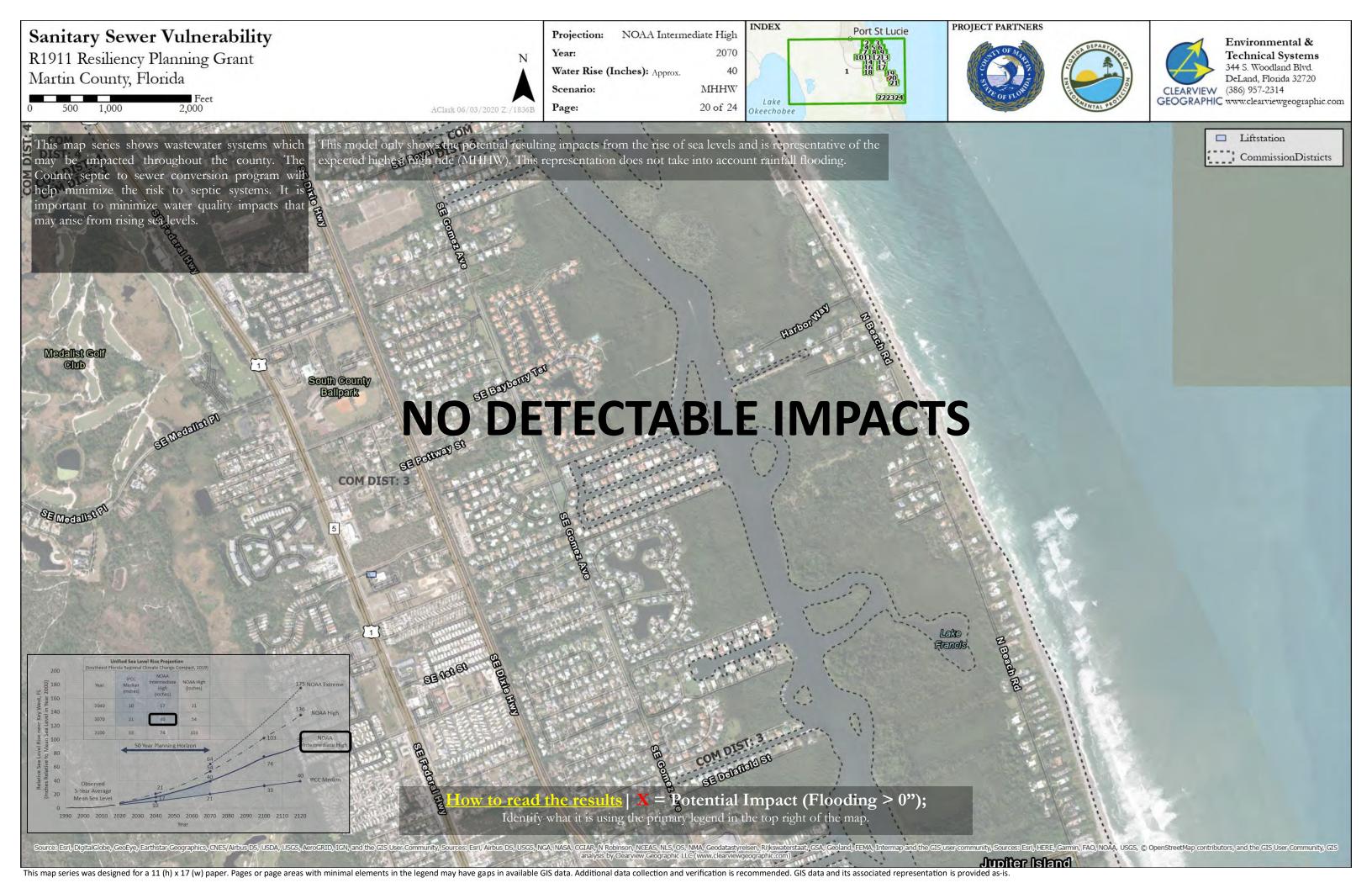


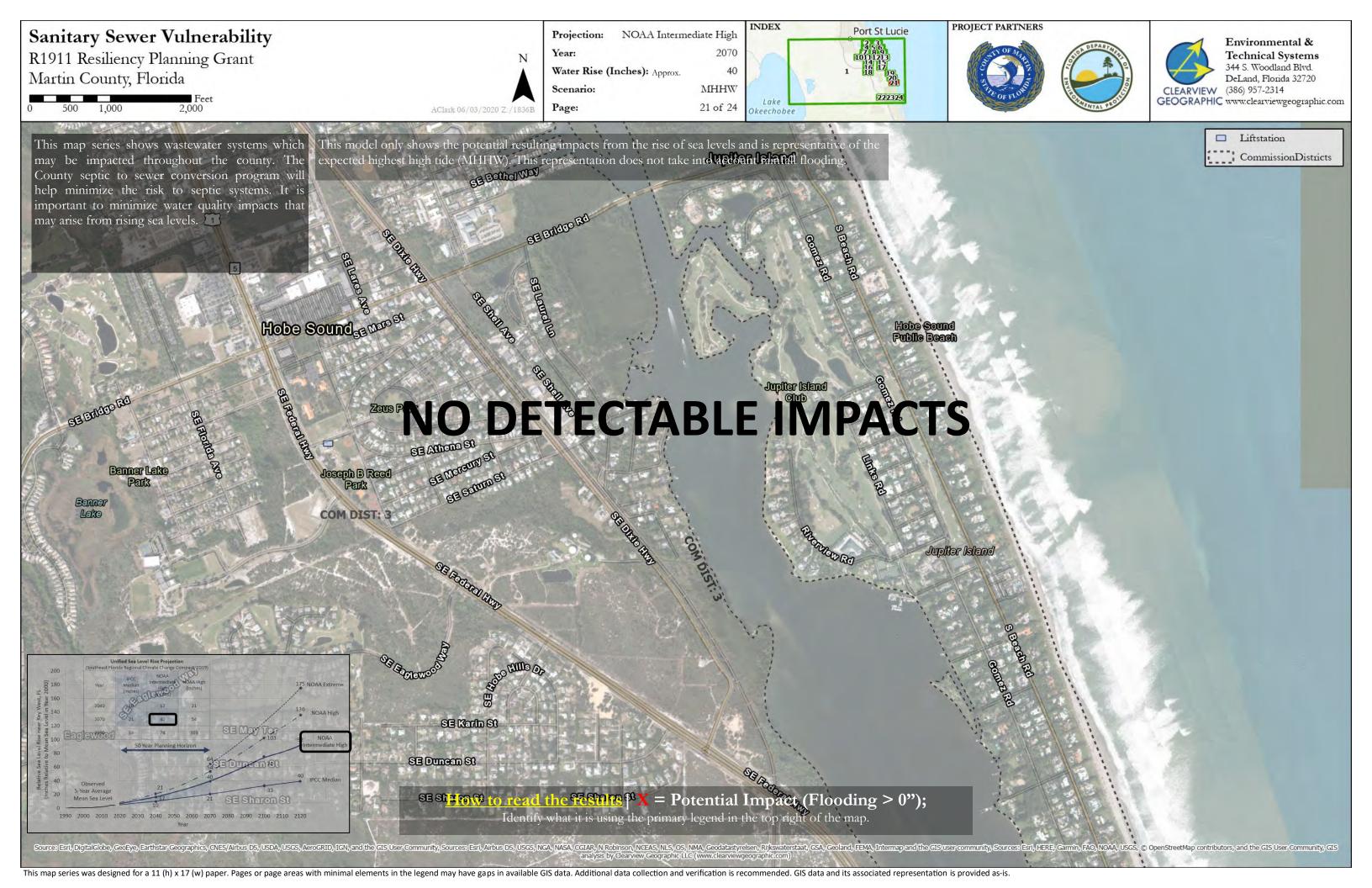


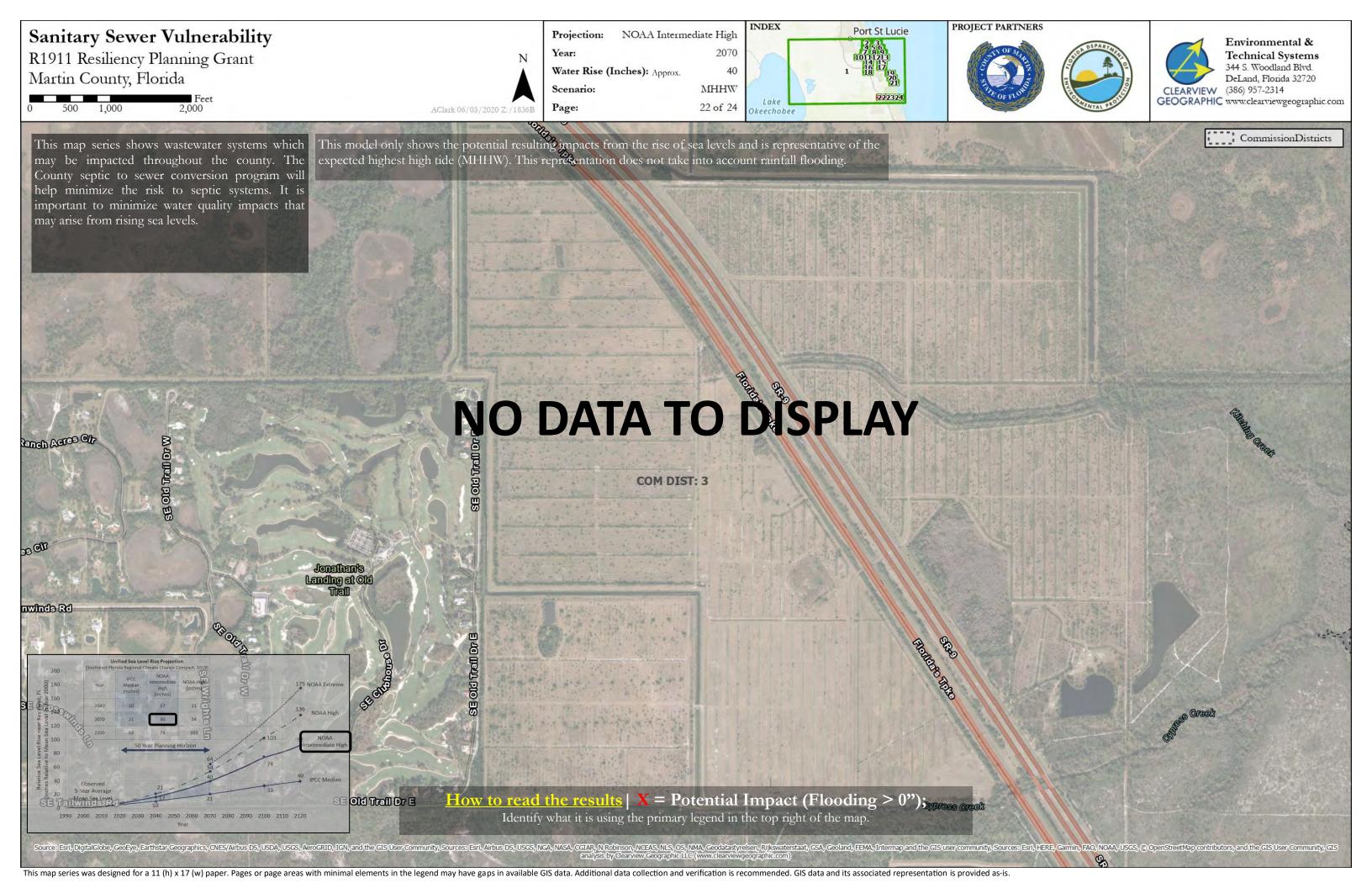






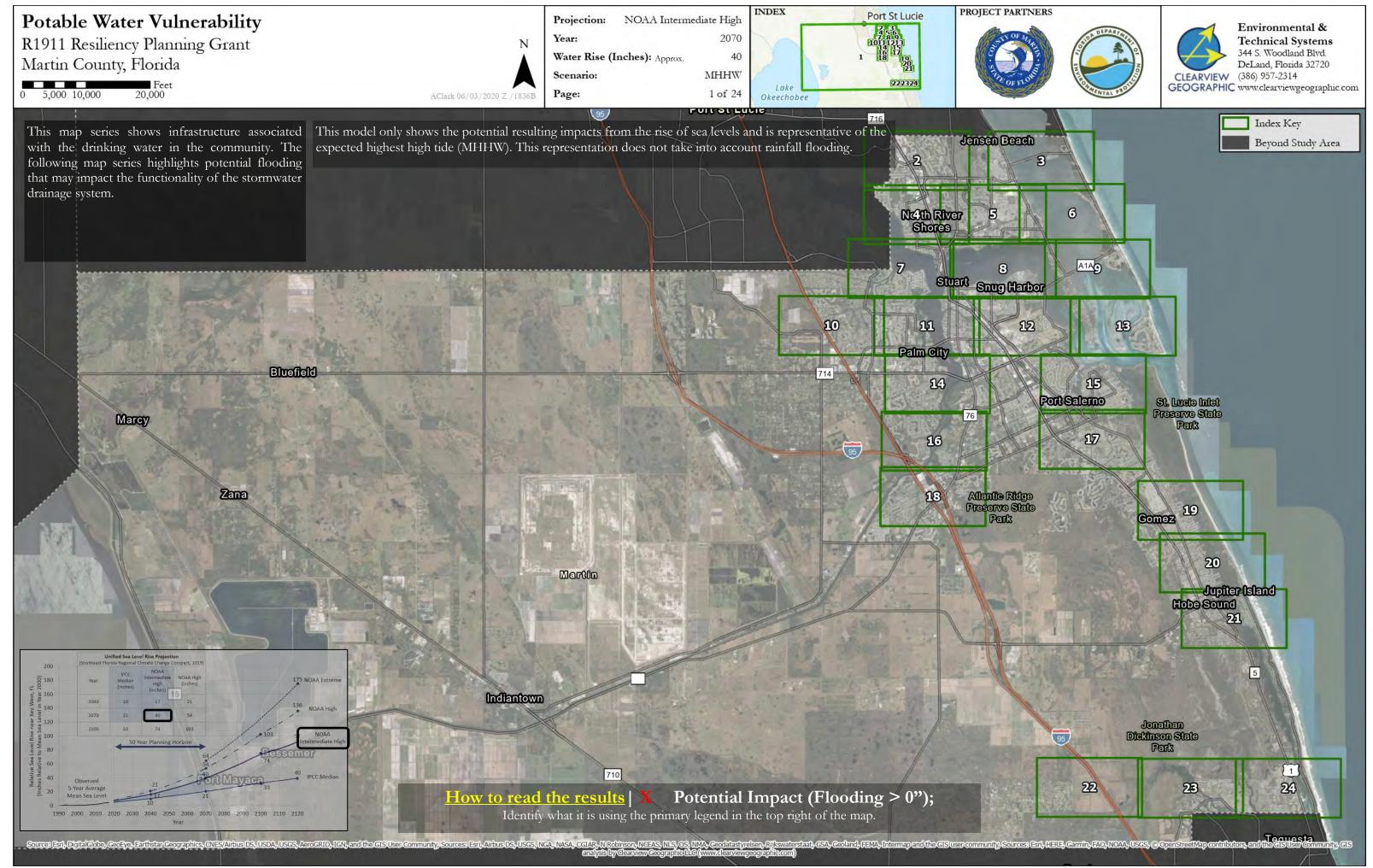


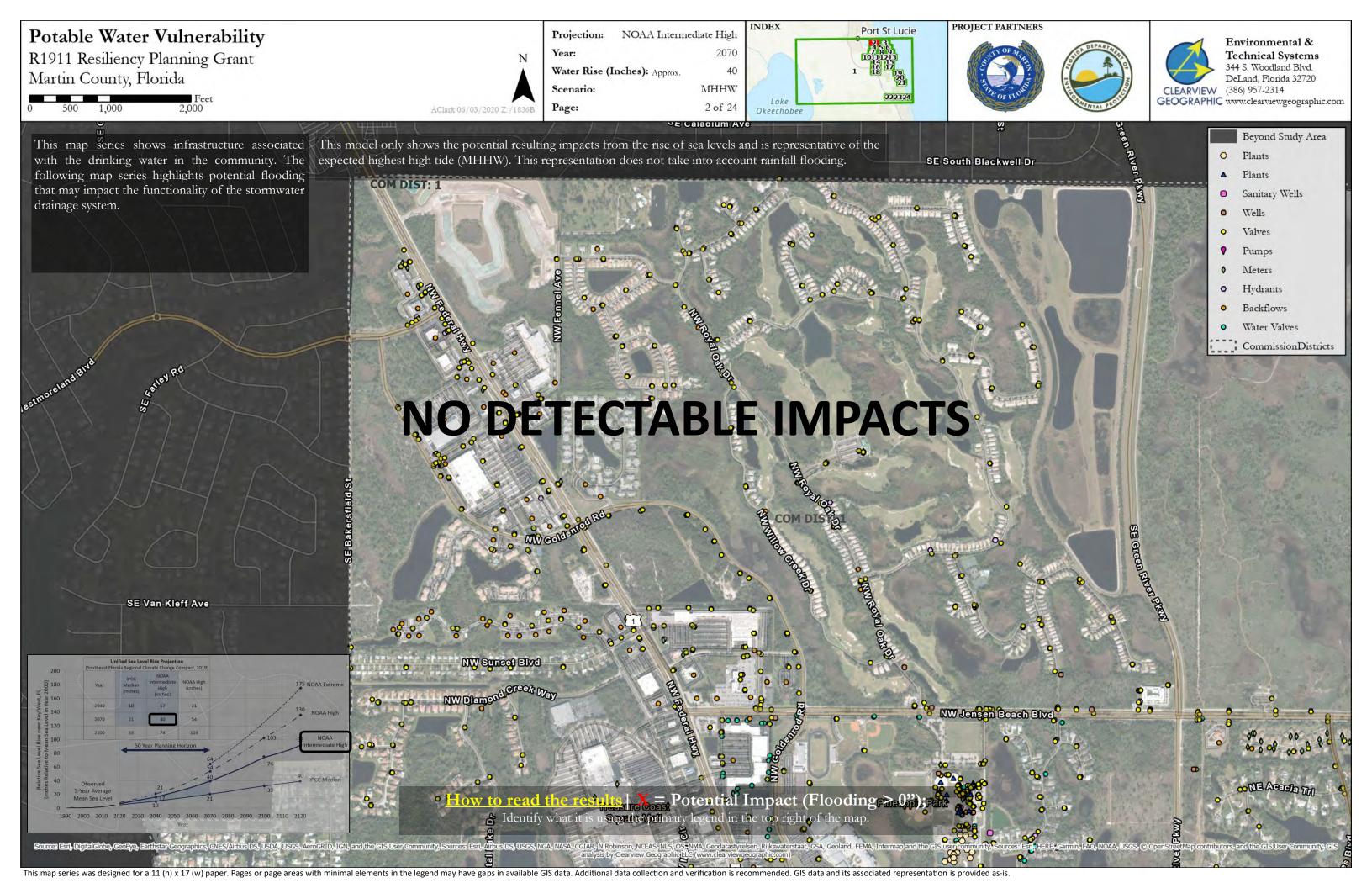


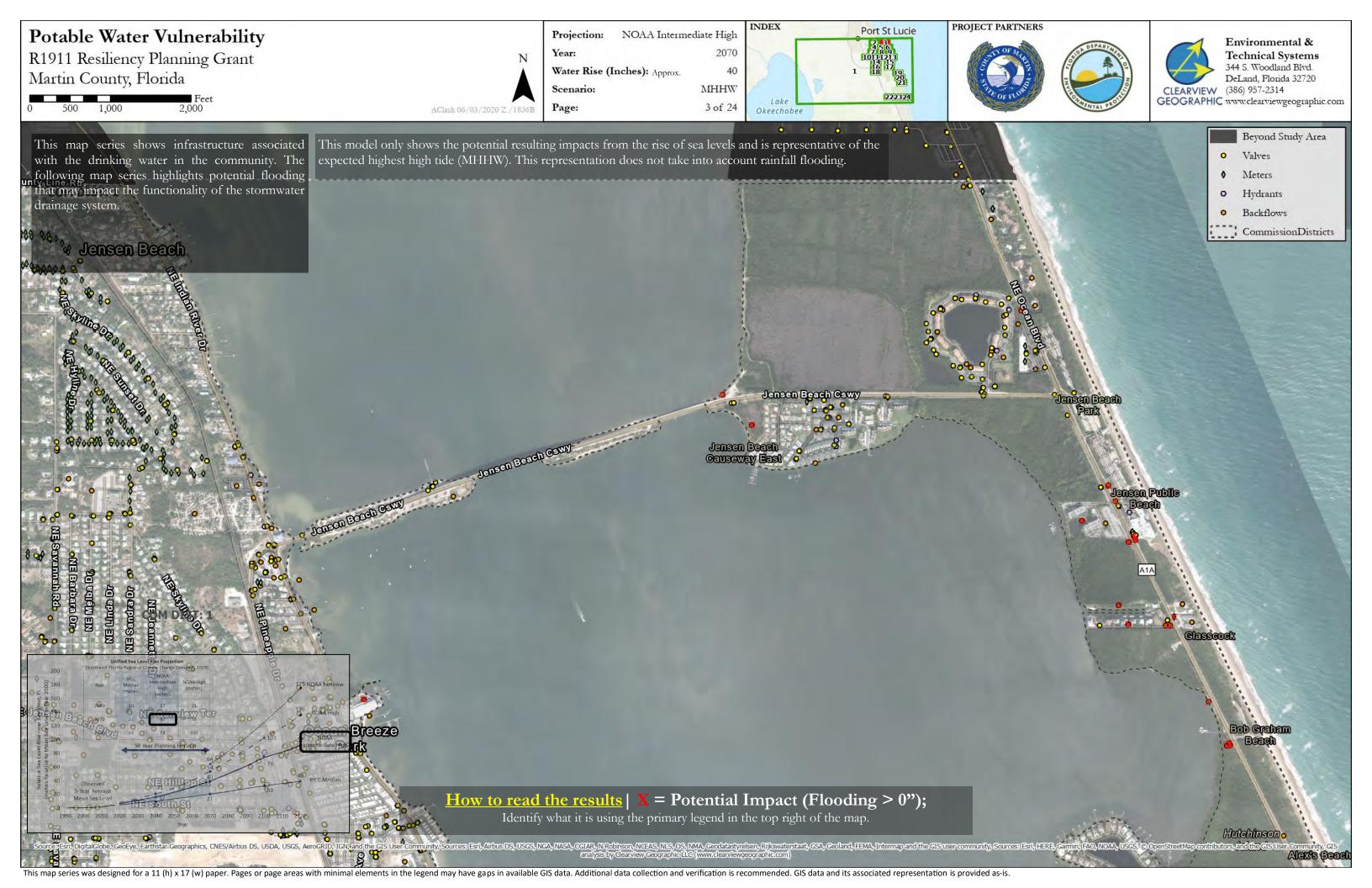


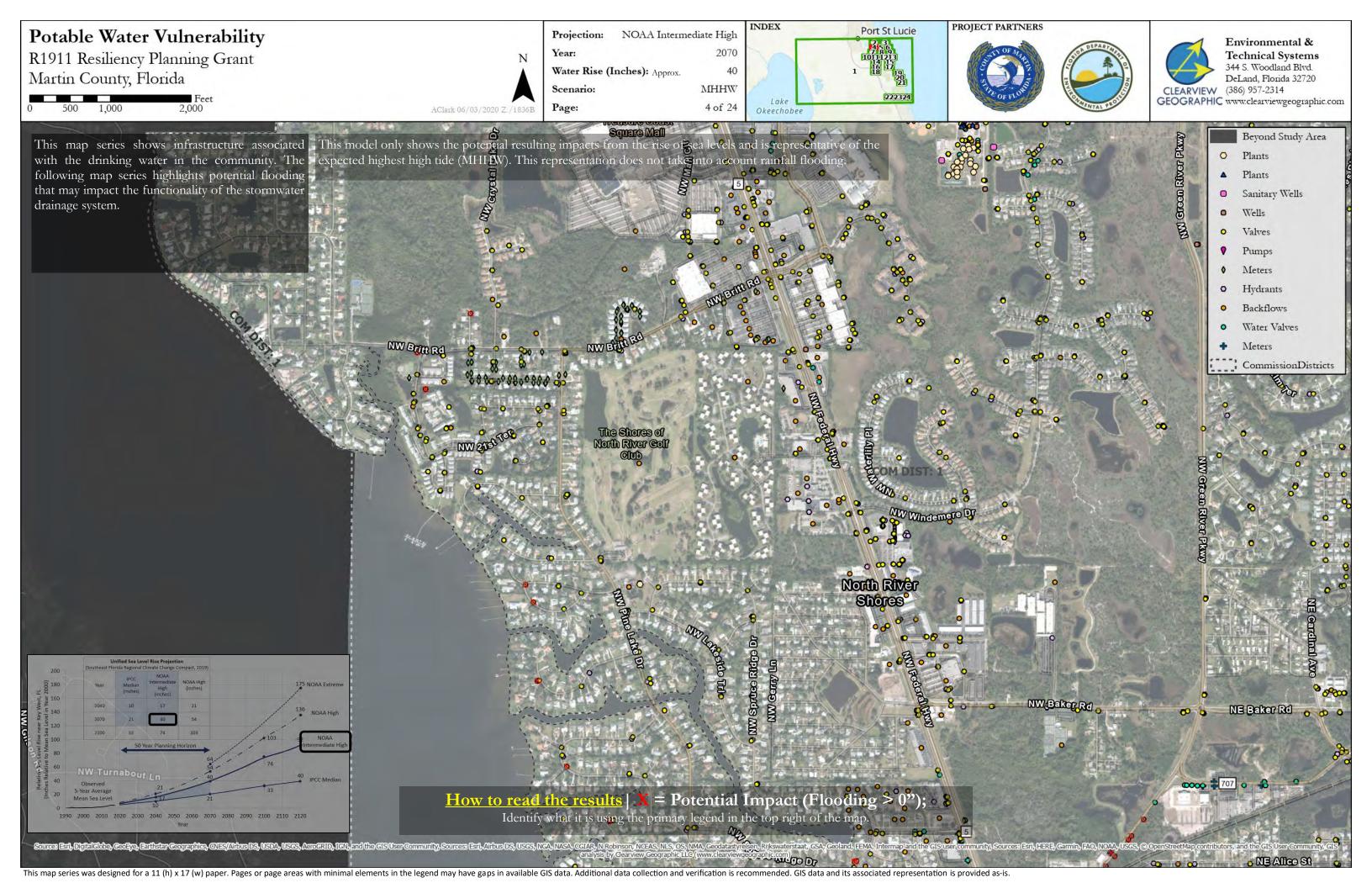


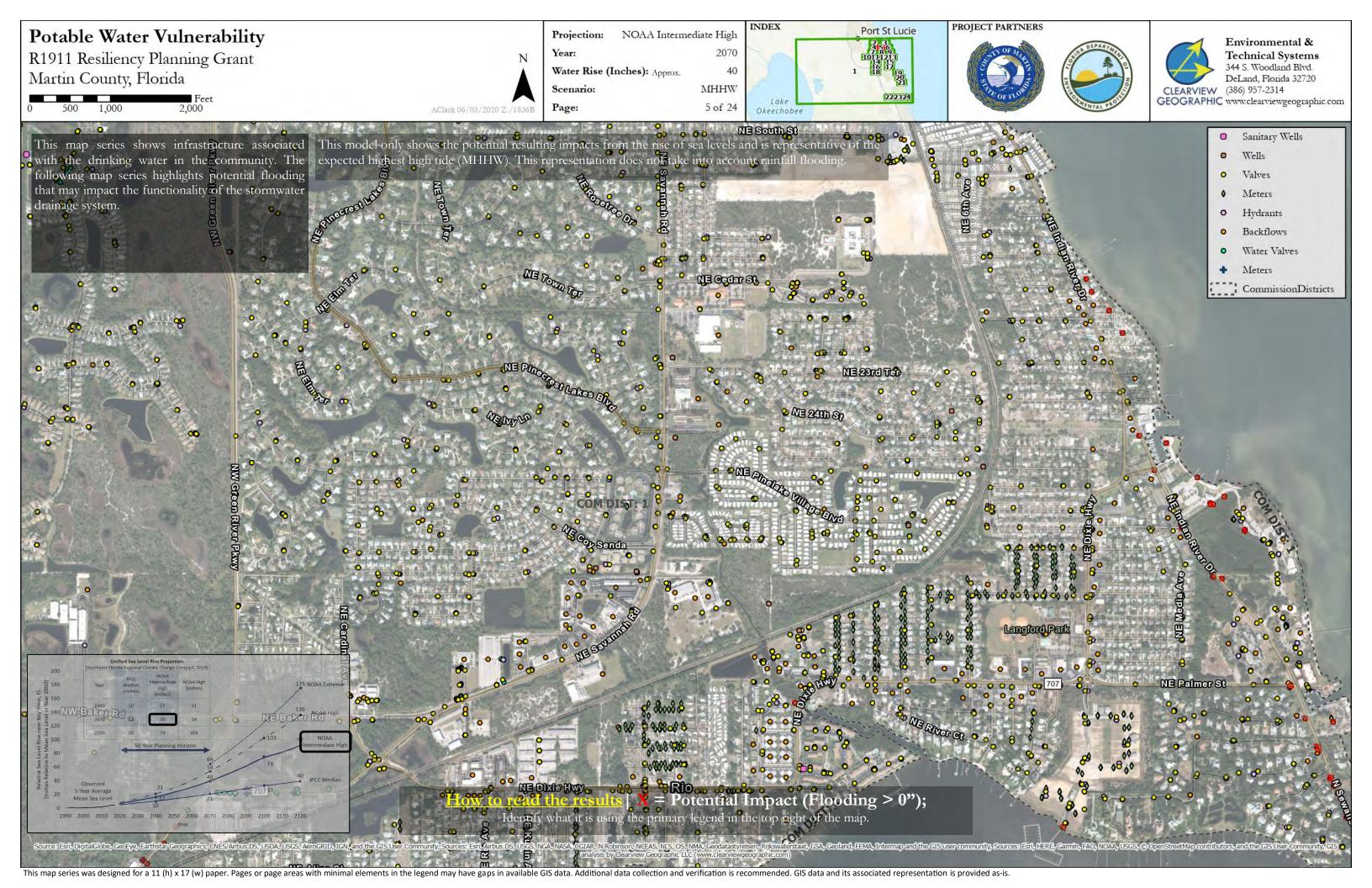




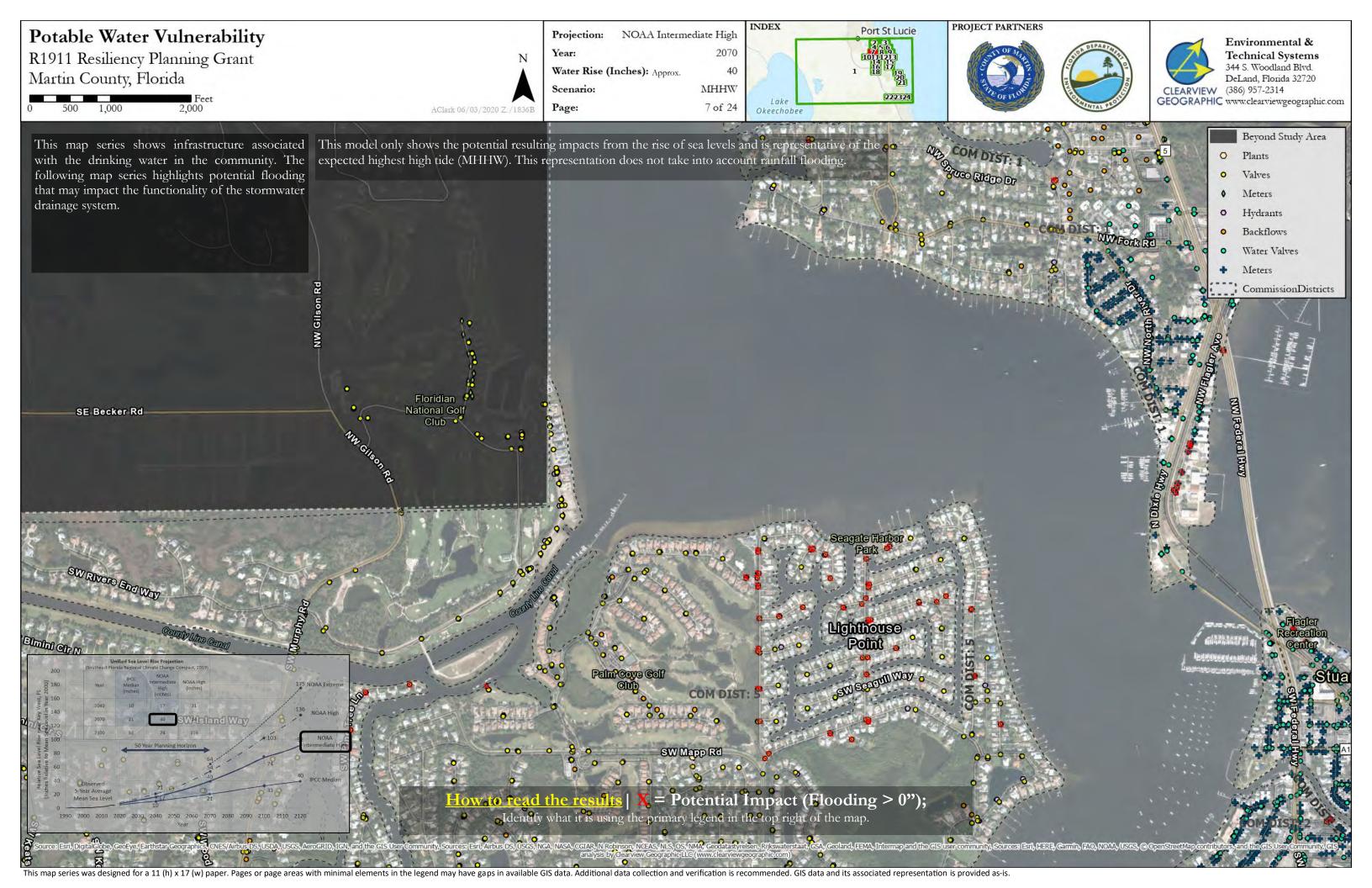


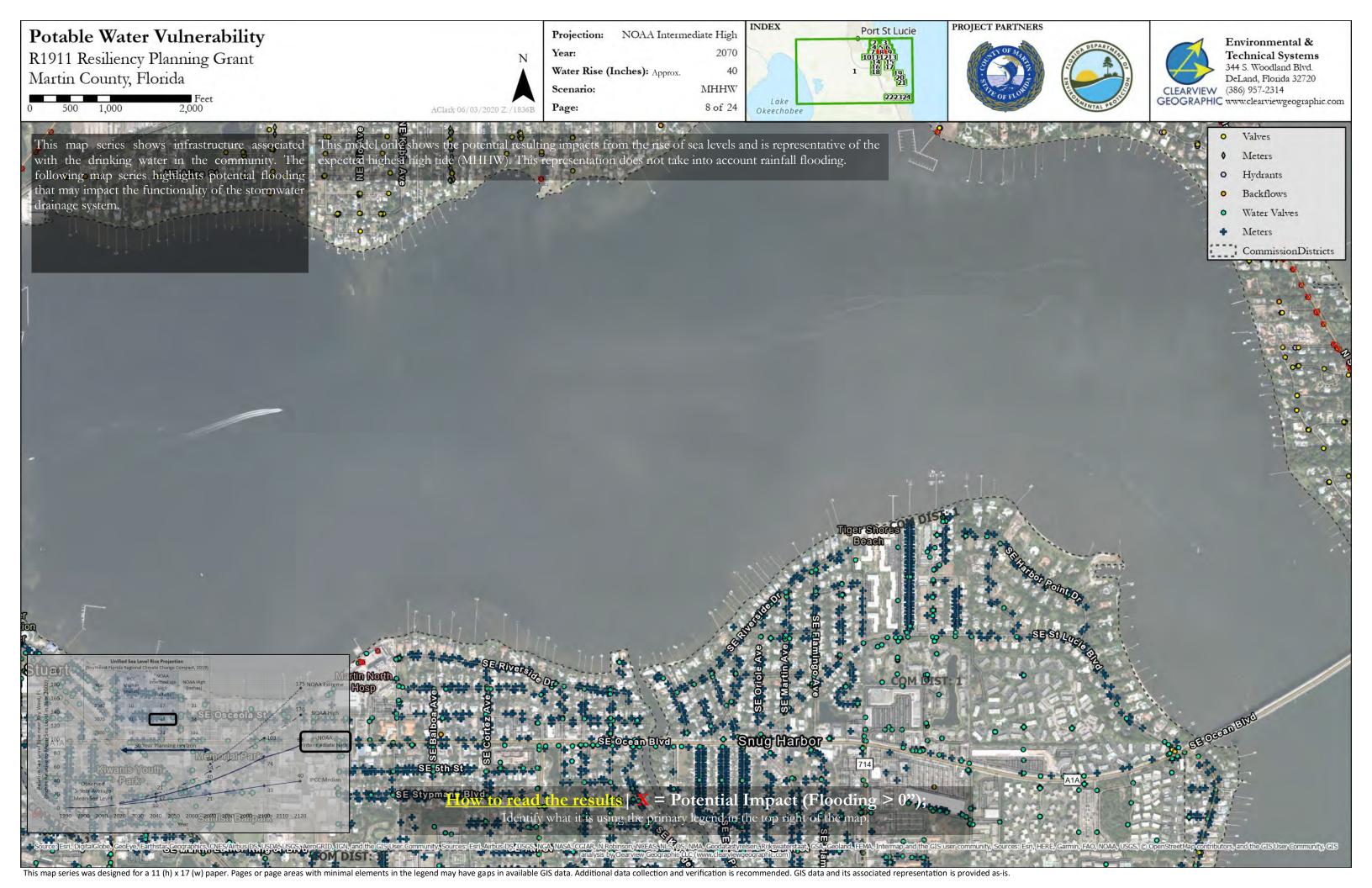


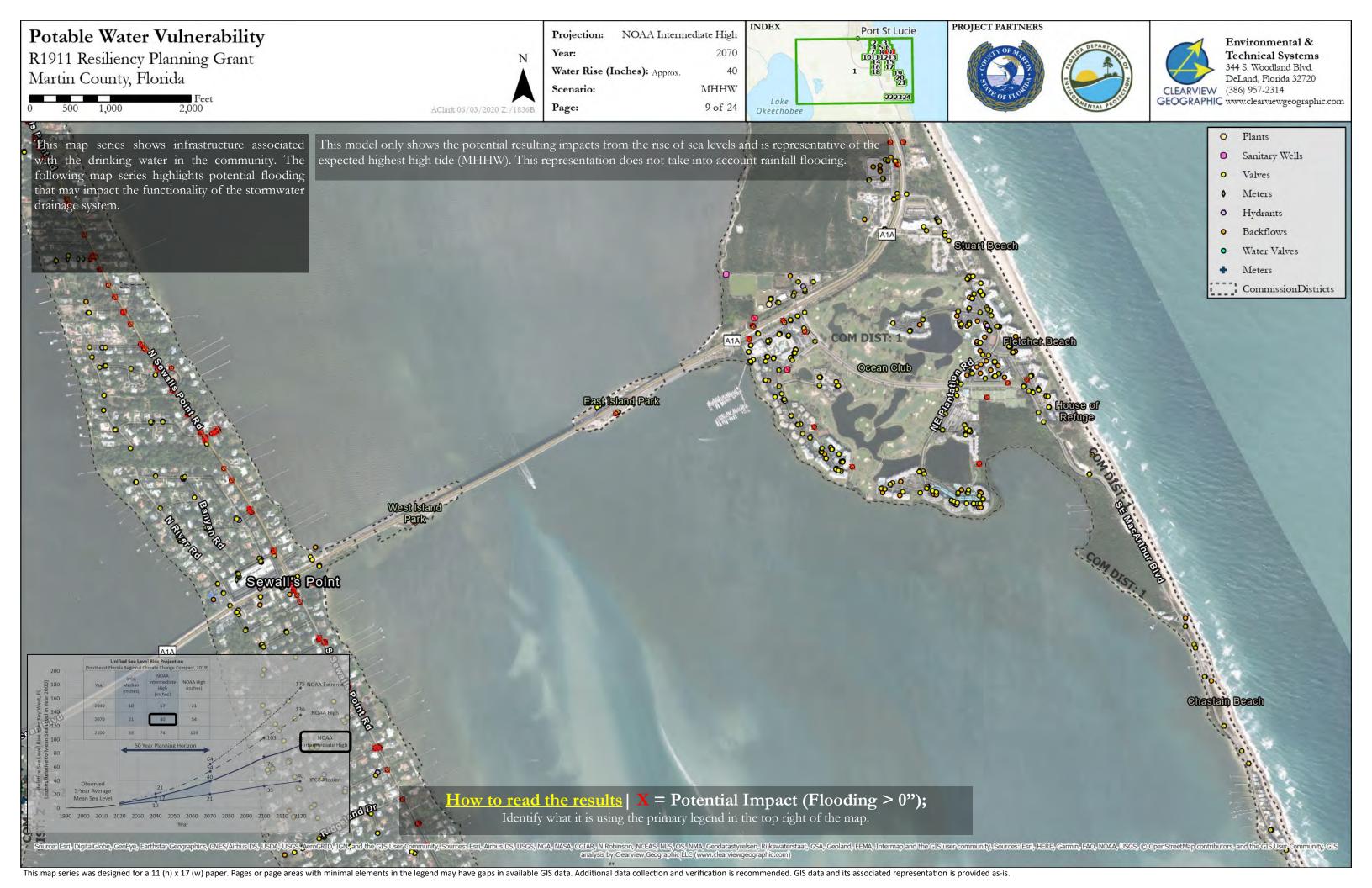


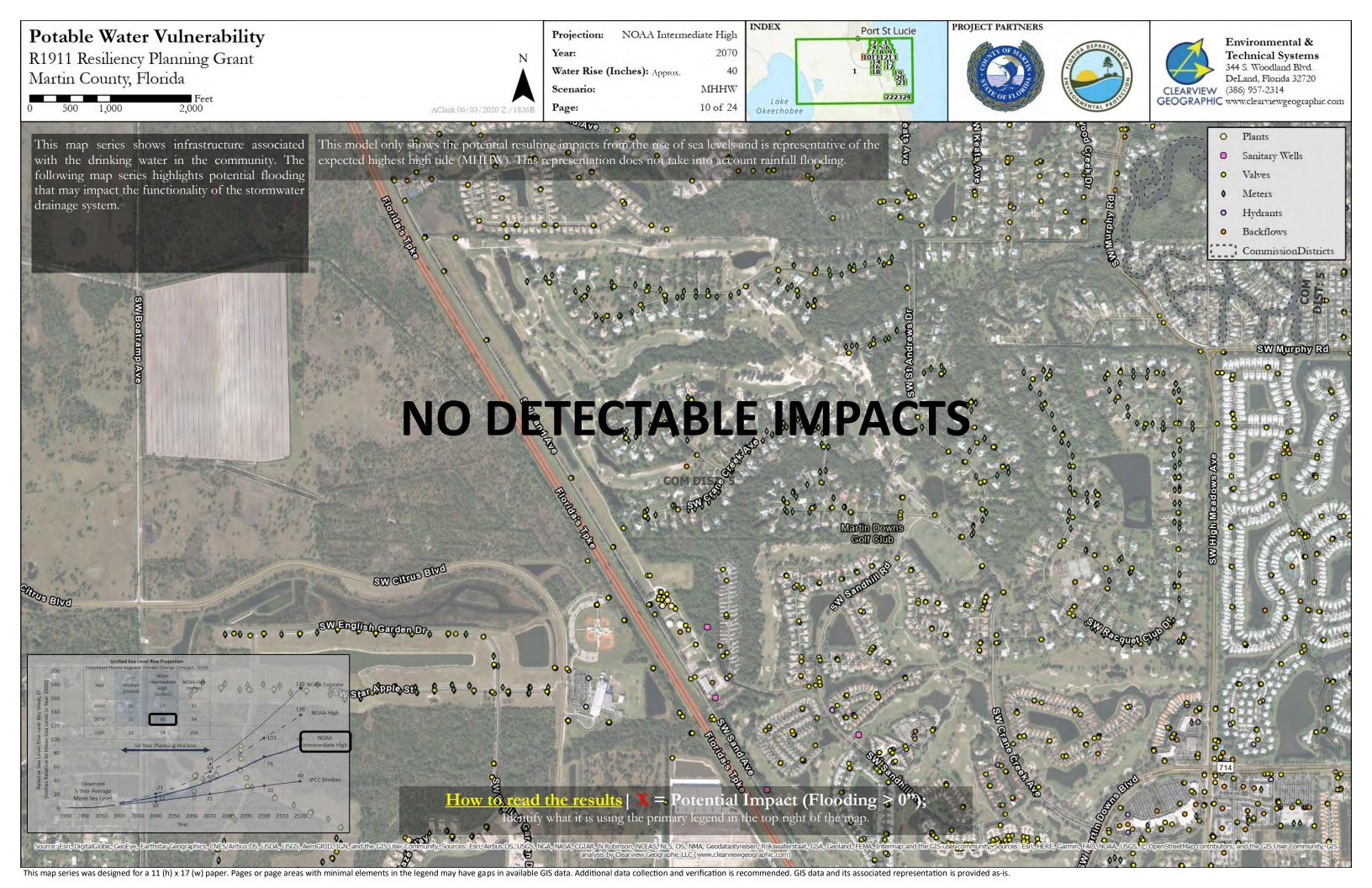


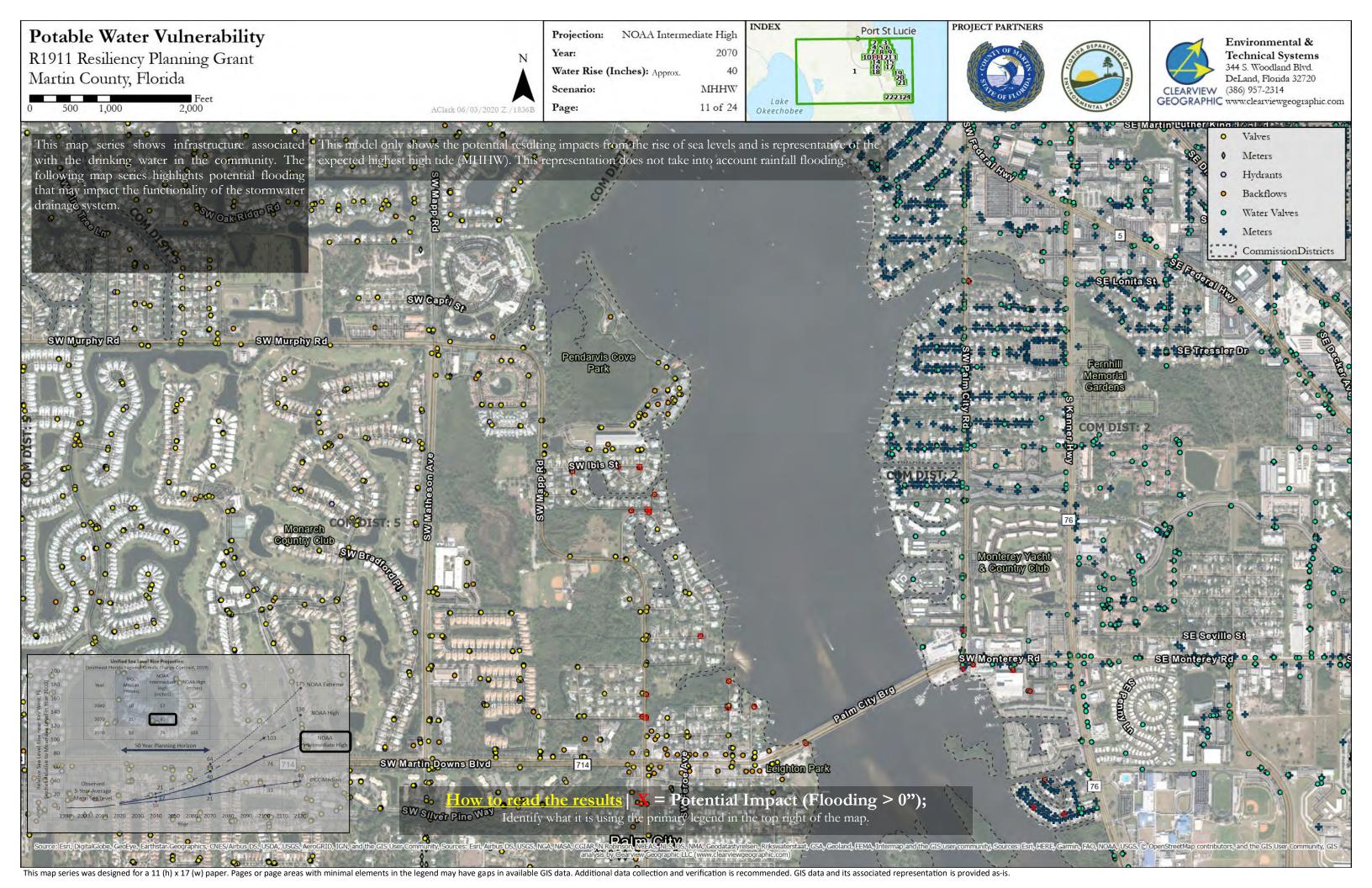
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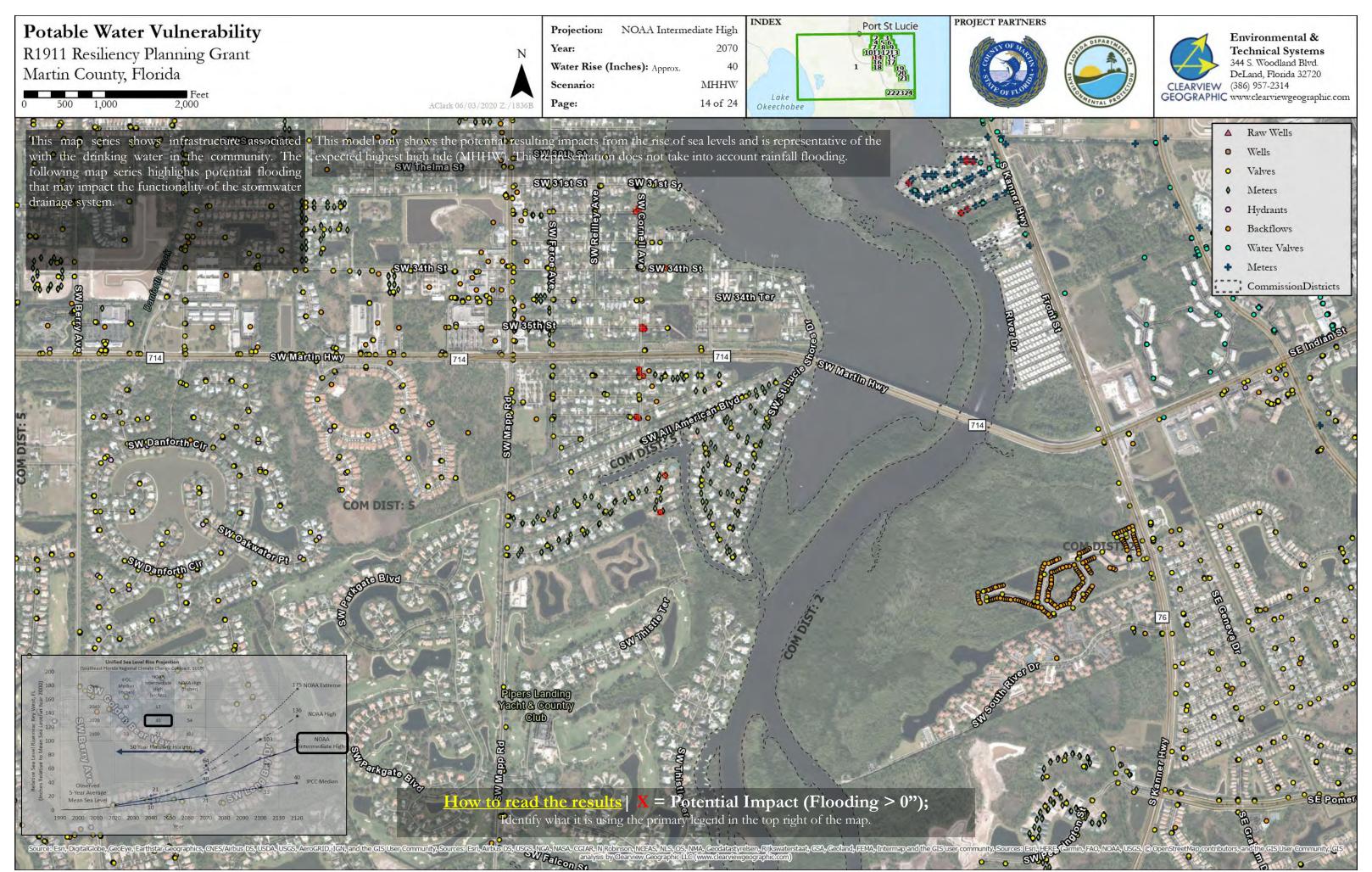




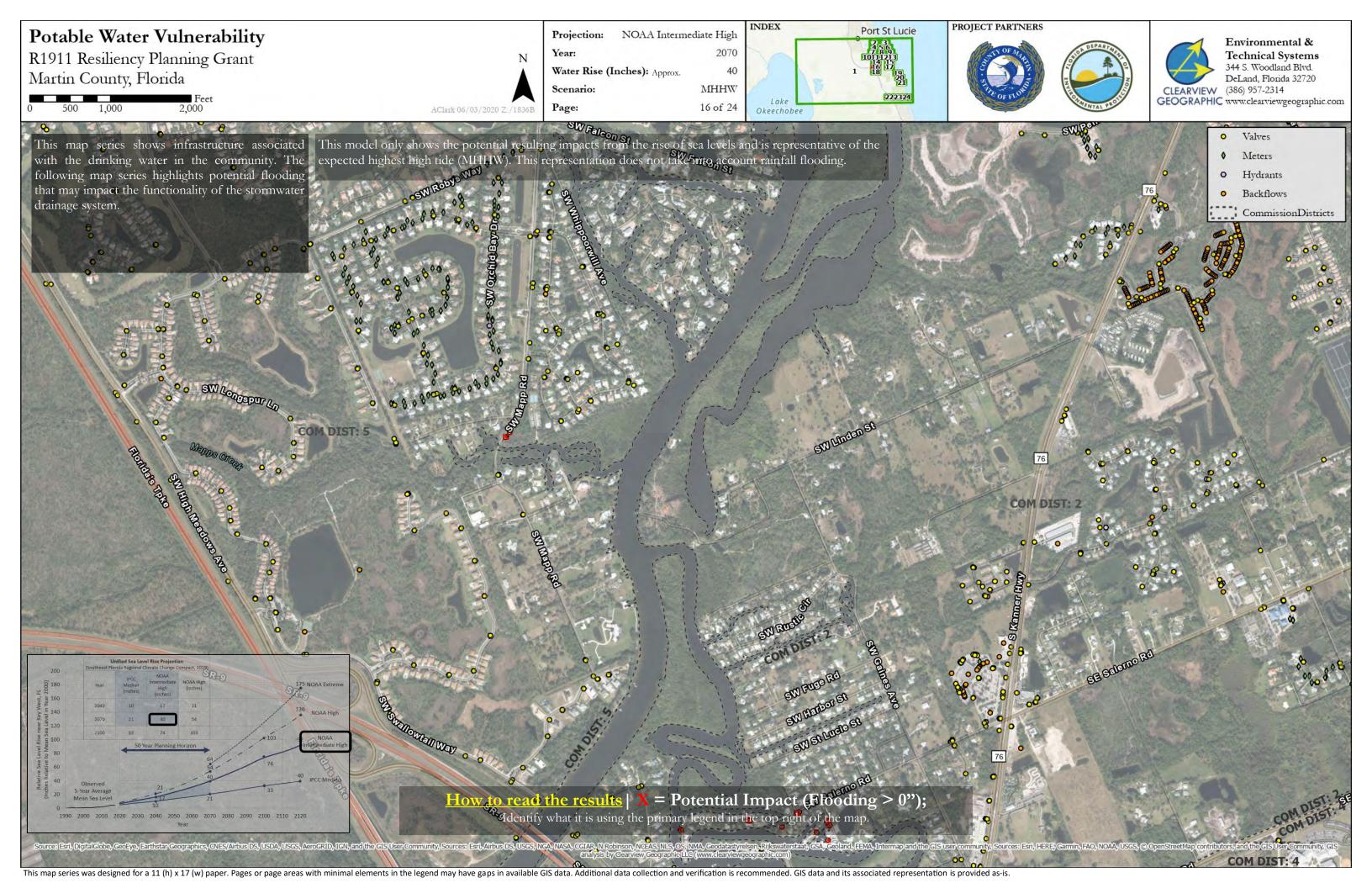




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## PROJECT PARTNERS Port St Lucie Potable Water Vulnerability Projection: NOAA Intermediate High Environmental & Year: R1911 Resiliency Planning Grant **Technical Systems** 344 S. Woodland Blvd. Water Rise (Inches): Approx. Martin County, Florida DeLand, Florida 32720 CLEARVIEW (386) 957-2314 GEOGRAPHIC www.clearviewgeographic.com Scenario: MHHW Page: 15 of 24 AClark 06/03/2020 Z:/1836B Okeechobee O COM- Sanitary Wells This model only shows the potential resulting impacts from the rise of sea levels and is representative of the This map series shows infrastructure associated Wells with the drinking water in the community. The expected highest high tide (MHHW). This representation does not take into account rainfall flooding. cfollowing map series highlights potential flooding that may impact the functionality of the stormwater Meters ordrainage system. Hydrants Backflows Water Valves CommissionDistricts 4 octobre has desconsultant of o Great Pocket = Potential Impact (Flooding > 0") dentify what it is using the primary legend in the top right of the map





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