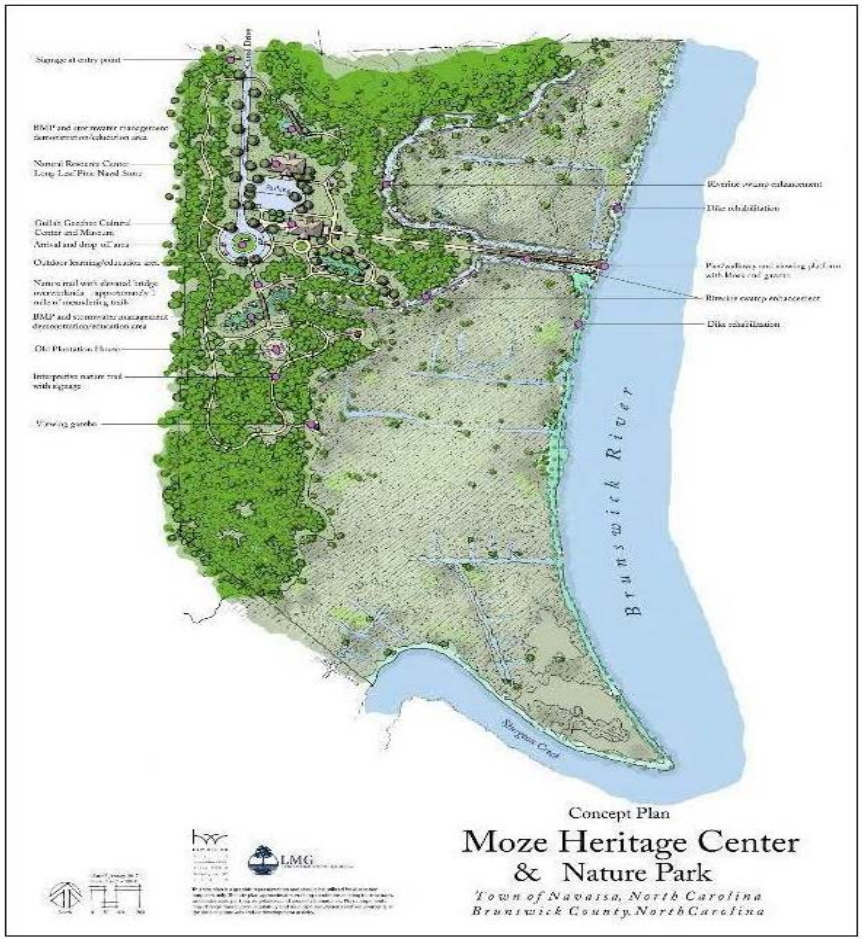
APPENDIX F

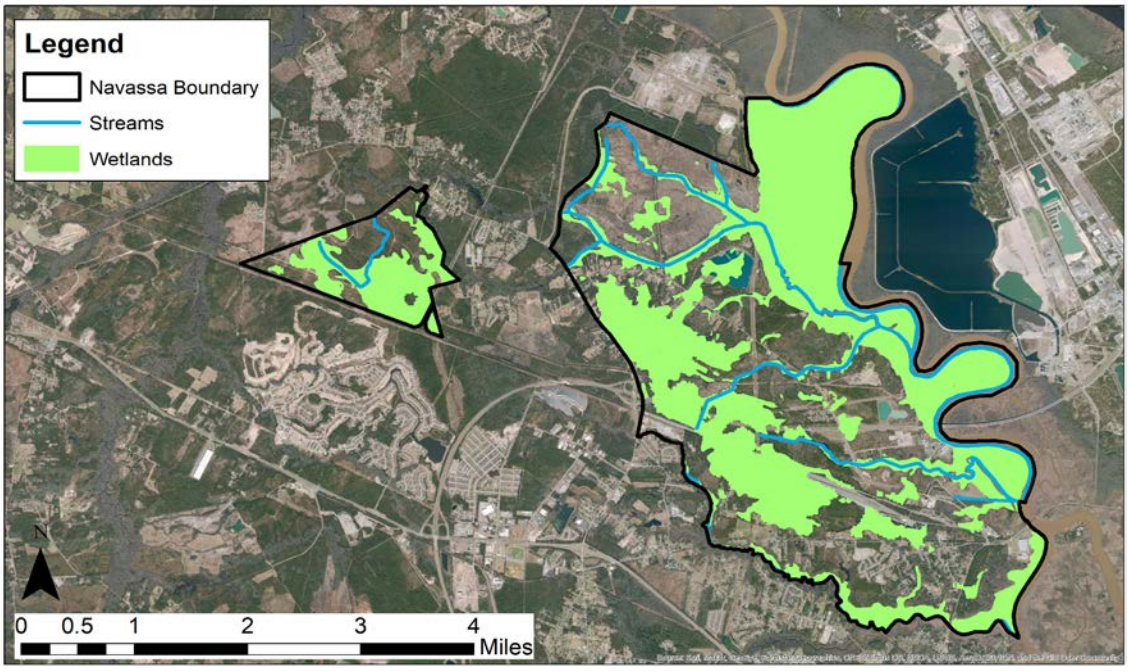
PROJECT PORTFOLIO

Town of Navassa Project Portfolio	
Project #	**Project Name**
1	Moze Heritage Site Tidal Restoration Project
2	Navassa Stormwater & Riparian Restoration Project
3	Future Land Use Feasibility Study for Critical Community Assets
4	Develop and Expand Housing Ordinance
5	Develop Cultural Resources Preservation Ordinance
6	Community Outreach and Education Program for Vulnerable Populations
7	Participate and Maintain Rating in the National Flood Insurance Program
8	Church Street Stream Crossing and Drainage Improvement
9	Indian Creek Stream Crossing and Drainage Improvement
10	Mill Branch Stream Crossing and Drainage Improvement
11	Cedar Hill Stream Crossing and Drainage Improvement
12	Miles Branch Branch Restoration and Debris Removal
13	Robin Court Branch Restoration and Debris Removal
14	Mill Creek Stream Crossing and Flood Mitigation Project
15	Stream Crossing Assessment to Improve Flood Risk and Barriers to Fish Passage

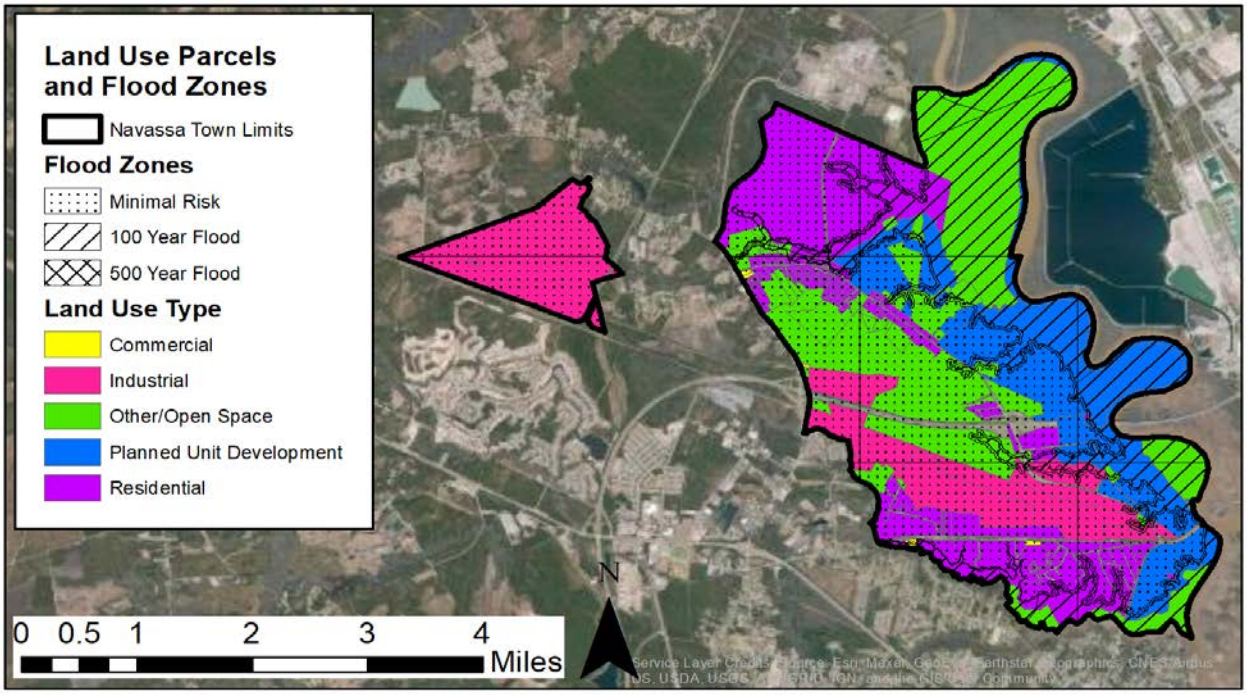
Project Name	Moze Heritage Site Tidal Restoration Project
Project Description	This proposed park will be located at the site of the former Moze Plantation along the Brunswick River. Project components include the enhancement of riverine swamp forest along the northeastern portion of the site and the enhancement and preservation of high marsh via the rehabilitation of histoic rice field dikes. This project would also incorporate walking trails, signage for self-guided tours, as well as the installation of a viewing dock and pier with a kayak launch, thereby providing benefits to multiple resources and services. At its current stage, it is in need of additional funding . *Recommended by Christian Preziosi, CAT Member*
Hazard(s) addressed by project	Flooding
Type of Solution	Nature-based solution
Project Estimated Cost	To be Determined (current funding is $250,000)
Potential Implementation Funding Sources	Kerr McGee NRDAR funding/state/local staff capacity
Projected Estimated Timeline	Preliminary Design in-progress
Priority Rating	High
Project Map	Conceptual Design for Moze Heritage Site Tidal Restoration (developed by LMG and included in the Kerr-McGee Final RP-EA



Project Name	Navassa Stormwater & Riparian Restoration Project
Project Description	The Navassa Stormwater and Riparian Restoration project includes development of a comprehensive stormwater management plan incorporating both stormwater best management practices (e.g. stormwater wetlands and bio-retention cells), and the conservation and restoration of riparian wetlands and buffers. The Town of Navassa currently does not have a comprehensive stormwater management plan for the retention and treatment of runoff draining to tidal tributaries of the Lower Cape Fear River. The project seeks to target initial stormwater areas of concern identified by the Town of Navassa. The project locations are located in different catch-basins of local watersheds susceptible to impairment via sediment and nurtient loading. Design and implementation include sites draining into (1) Molls Branch; (2) Indian Creek; (3) Redmon Creek; and (4) Sturgeon Creek. The plans and future construction of these site specific areas will be implemented with the idea of future stormwater design connectivity. As Navassa continues to grow, a fully comprehensive stormwater development plan will be needed, and the project will provide a solid foundation for the Navassa community.*Suggested by Christian Preziosi, CAT member and included in Kerr-McGee Trustees Final EA*
Hazard(s) addressed by project	Stormwater runoff/flooding
Type of Solution	Nature-based/Gray infrastructure
Project Estimated Cost	To be Determined
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Long-term
Priority Rating	High
Project Map	See map below of streams and wetlands in Navassa

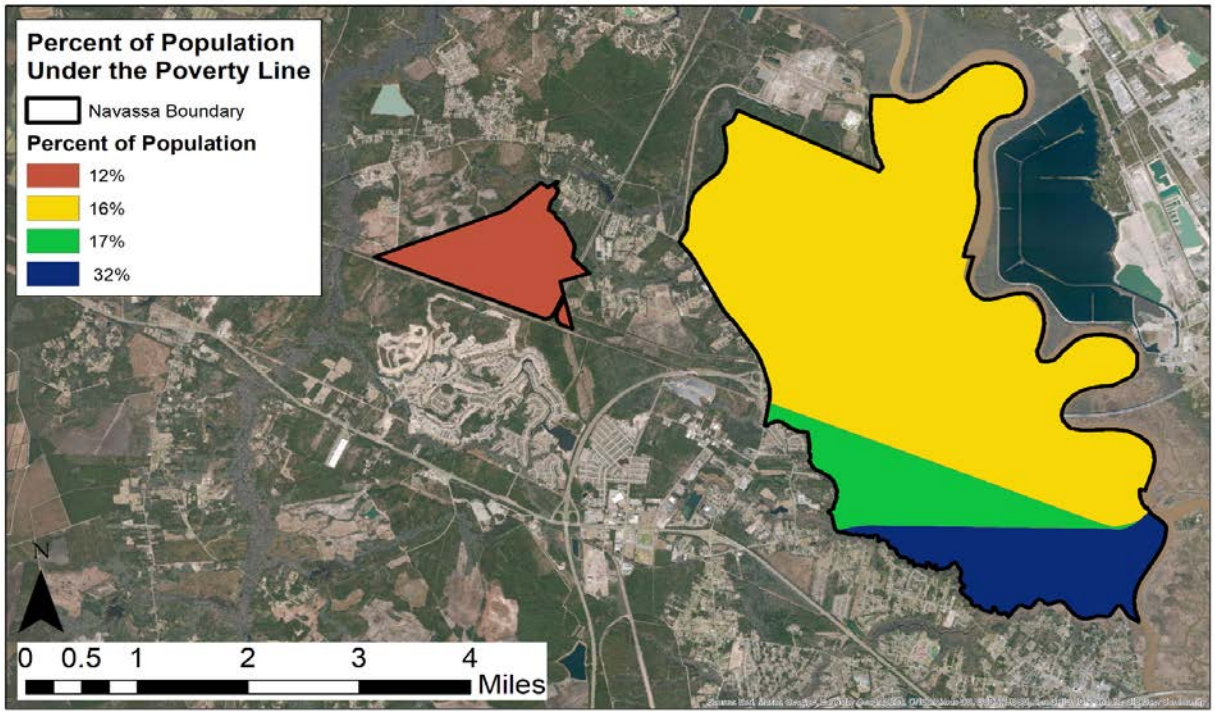


Project Name	Future Land Use Feasibility Study for Critical Community Assets
Project Description	Evaluate remaining parcels within the Town of Navassa municipal boundary not designated as wetlands. to be able to assess future locations for community assets including schools and critical facilities. Current schools in the area are at maximum capacity and will not be able to handle additional students with new development pressures. *Suggested by Sam Shore, Cape Fear COG, CAT Member*
Hazard(s) addressed by project	Flooding/Developmental Pressures
Type of Solution	Feasibility Study
Project Estimated Cost	To Be Determined
Potential Implementation Funding Sources	Federal/State/Local/Council of Government
Projected Estimated Timeline	Long-term
Priority Rating	High
Project Map	See map below of land use parcels and FEMA Flood Zones

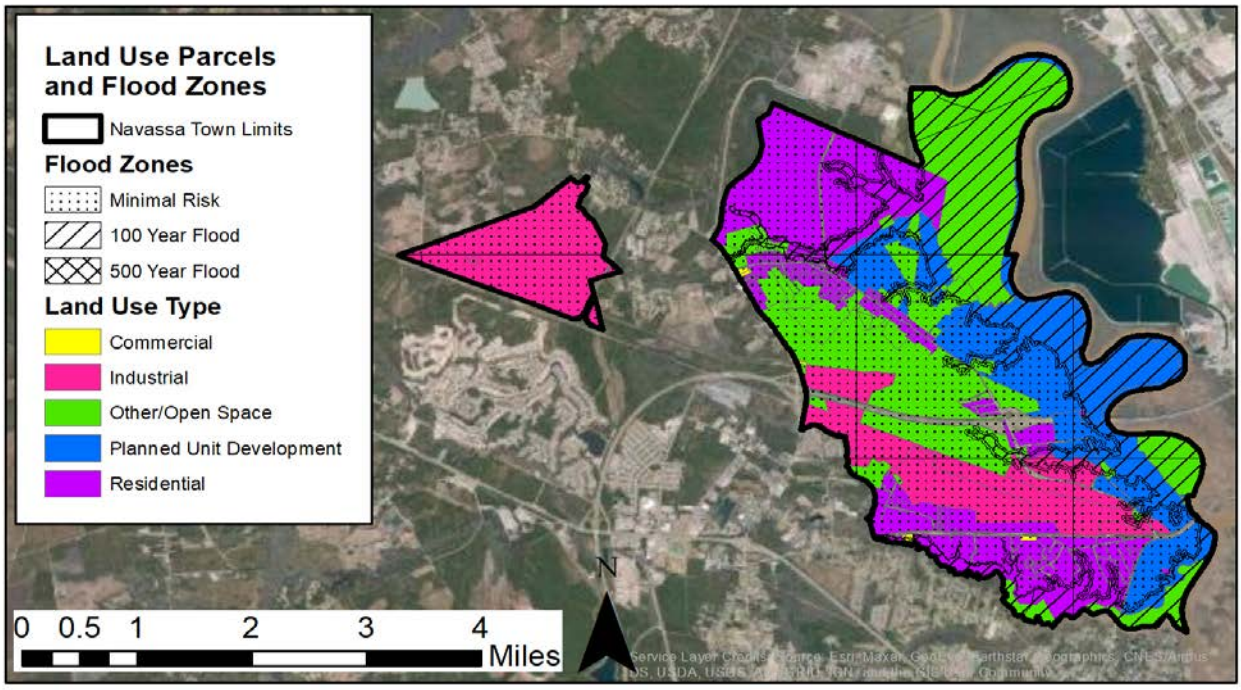


Project Name	Develop and Expand Housing Ordinance
Project Description	Address concerns related to displacement, including temporary housing issues, solutions, permanent replacement housing isuses, and other housing and small business concerns (ex. Have no-build buffers along high hazard areas)
Hazard(s) addressed by project	Flooding/ Developmental Pressures
Type of Solution	Plans/Ordinances
Project Estimated Cost	To be Determined
Potential Implementation Funding Sources	Federal/state/local
Projected Estimated Timeline	Long-term
Priority Rating	High

Project Map



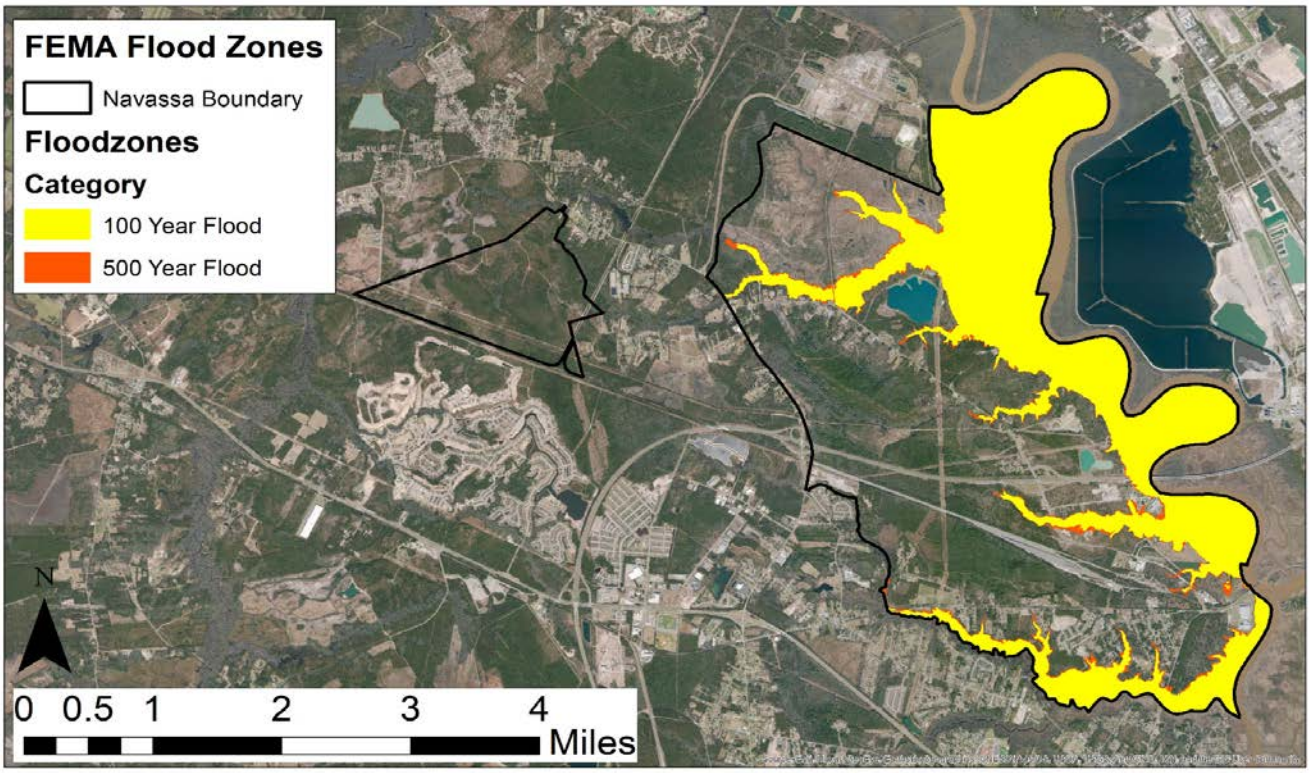
Project Name	Develop Cultural Resources Preservation Ordinance
Project Description	The Town of Navassa Protect Cultural Resources- Manage solutions for generational properties that are adjacent to waterways or low-lying areas so safe solutions can be reached for homes that have historical value to families (ex. Allow performance controls, allowances, exemptions, etc.). Reaves Chapel specifially prioritized to be protected.
Hazard(s) addressed by project	Flooding
Type of Solution	Cultural Resource Protection and Preservation
Project Estimated Cost	To be Determined
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Long-term
Priority Rating	Intermediate
Project Map	



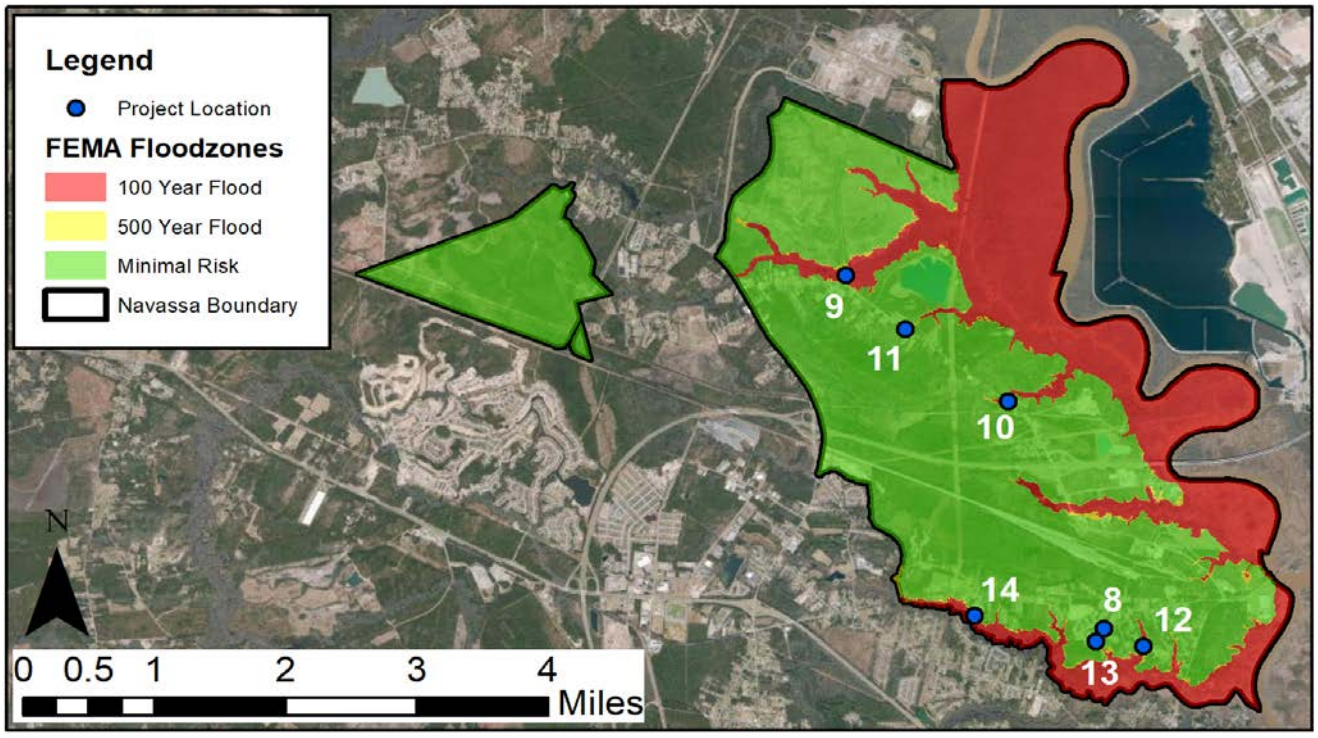
Project Name	Community Outreach and Education Program for Vulnerable Populations
Project Description	The Town of Navassa will expand community outreach and education opportunities for vulnerable populations including development and update of digital tools for all residents during storm and community events. Town staff will seek opportunities to partner withnon-profit groups (such as NC Sea Grant, The Nature Conservancy, SARP and Cape Fear River Watch), state agencies (NC Department of Emergency Management) and federal (EPA) to promote educational events for the community.
Hazard(s) addressed by project	Flooding/ Public Awareness
Type of Solution	Communicaton and Outreach
Project Estimated Cost	$25,000/year (staff capacity needs + materials)
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Annual
Priority Rating	Mid-Term
Project Map	Community-wide

Project Name	Participate and Maintain Rating in the National Flood Insurance Program
Project Description	The Town of Navassa is currently working on joining the Community Rating System (CRS) under the National Flood Insurance Program (NFIP). Town staff and resources will be needed on an annual basis to maintain and improve participation over time.
Hazard(s) addressed by project	Flooding
Type of Solution	Regulatory/Program/Ordinance
Project Estimated Cost	To be Determined for staff time and resources needed to maintain active participation
Potential Implementation Funding Sources	Local
Projected Estimated Timeline	Long-term
Priority Rating	High

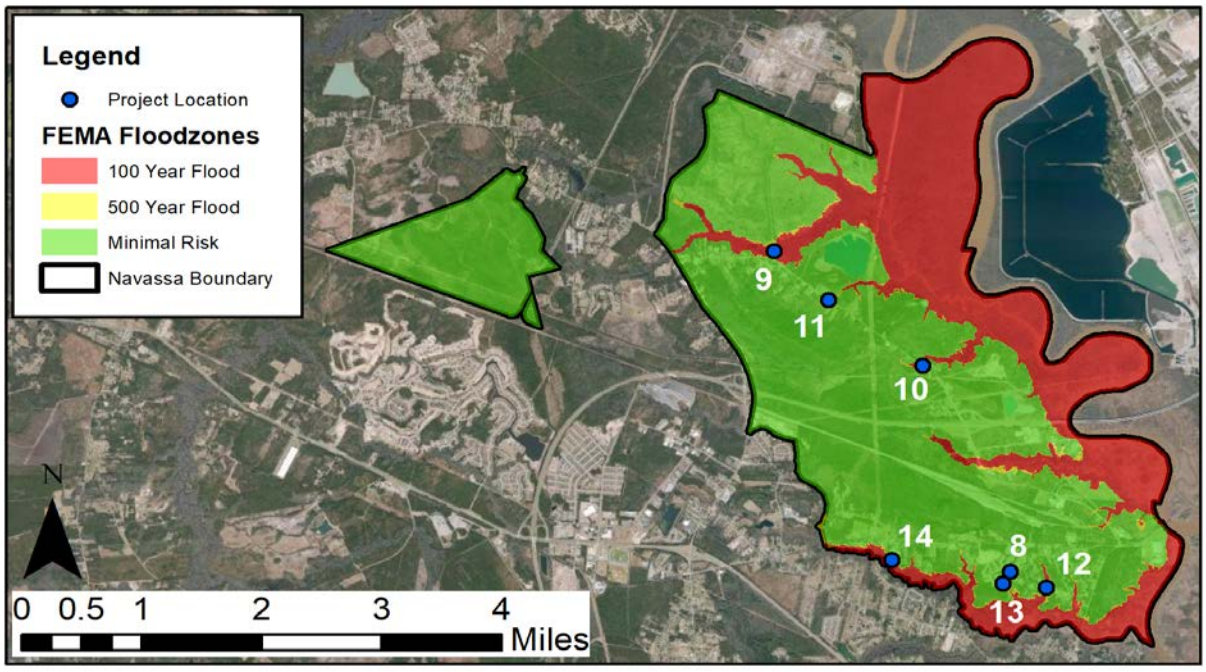
Project Map



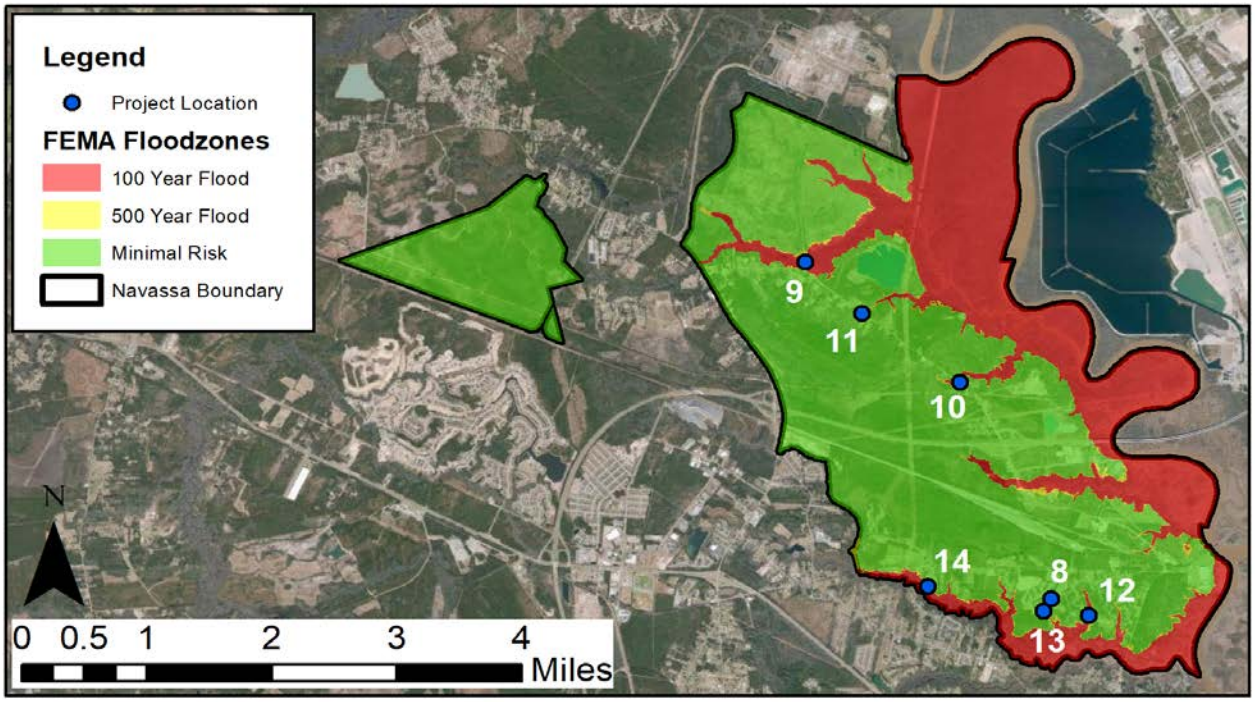
Project Name	Church Street Stream Crossing and Drainage Improvement
Project Description	The intersection at Church St. and M. Brown Lane exhibit consistent nuisance flooding during heavy rains and remains a transportation hazard for residents. This project plans to evaluate the feasibility of constructing drainage swales and adding culverts for flood mitigation and fish passage benefits.
Hazard(s) addressed by project	Flooding/Stormwater
Type of Solution	Green/Gray infrastructure
Project Estimated Cost	To Be Determined
Potential Implementation Funding Sources	Federal/State/Local (feasibility analysis included in SARP Barrier Assessment)
Projected Estimated Timeline	1 - 2 years for implementation once feasibility asssessment completed
Priority Rating	High (poses concerns for public safety)
Project Map	(34.253792, -78.010774)



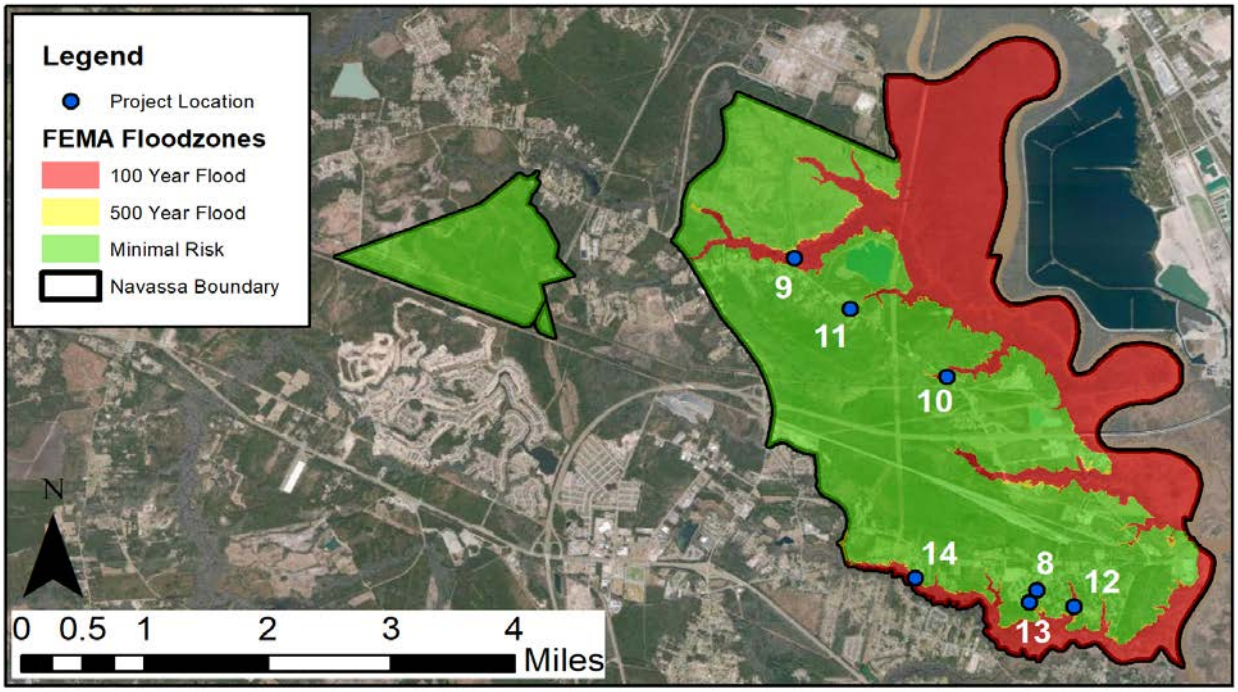
Project Name	Indian Creek Stream Crossing and Drainage Improvement
Project Description	The area of Indian Creek at Daniels Road inundated during Hurricane Florence and posed a serious transportation concern as it prevented access to the satellite fire station. This project would propose to assess the feasiblity of various gray infrastructure options to maintain conveyance under the road. This project, along with others identified in the project portfolio, would require coordination with the NC Department of Transportation to determine if this project could be included on the list for high priority.
Hazard(s) addressed by project	Flooding
Type of Solution	Gray/Green Infrastructure
Project Estimated Cost	To be Determined; Range of cost is dependent upon road elevation and water surface flow needs
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Two years (includes engineering/design/permitting/implementation)
Priority Rating	High (poses concerns for public safety)
Project Map	(34.295498, -78.044621)



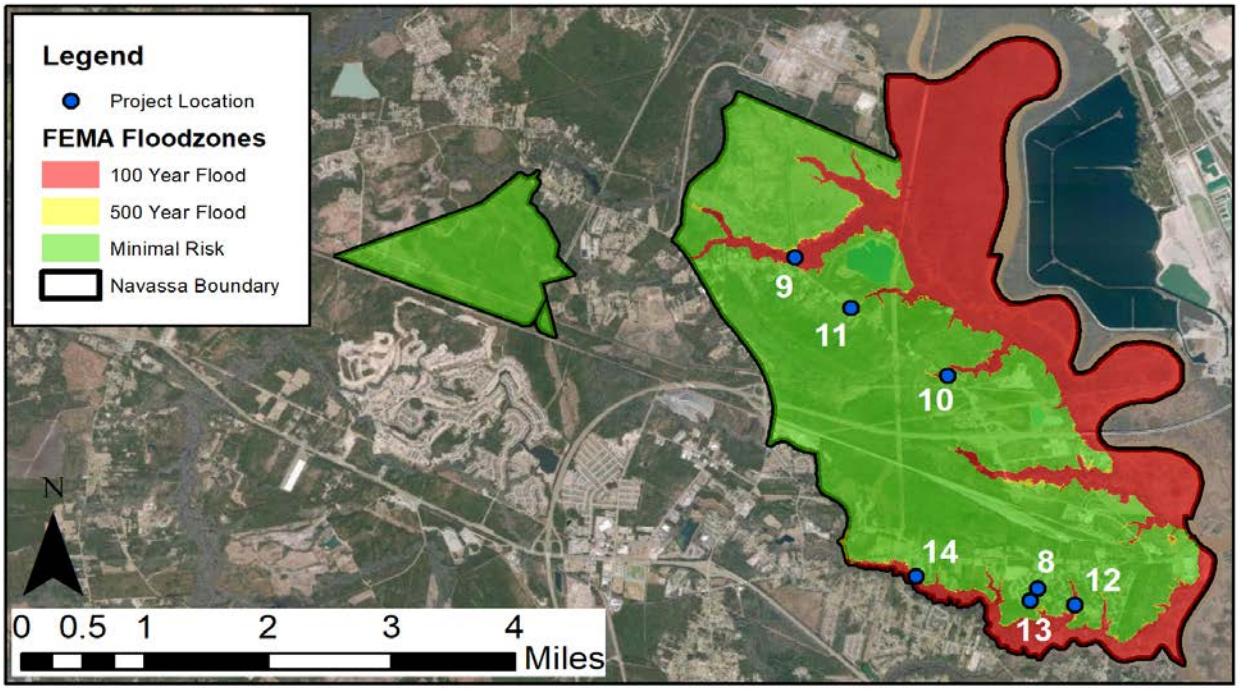
Project Name	Mill Branch Stream Crossing and Drainage Improvement
Project Description	Mill Branch at Cedar Hill Road flooded during Hurricane Florence and prevented direct access to I-140 to the north. This project proposes the feasiblity and construction of a stream crossing for flood mitigation and fish passage.
Hazard(s) addressed by project	Flooding
Type of Solution	Gray/Green Infrastrucutre
Project Estimated Cost	Assessment is being conducted by SARP with no funding needs by the Town other than staff capacity. Future design/engineering of barriers can range between $250,000 - $500,000.
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Two years to include design/engineering/permitting/implementation
Priority Rating	High (critical evacuation corridor)
Project Map	(34.280599, -78.023174)



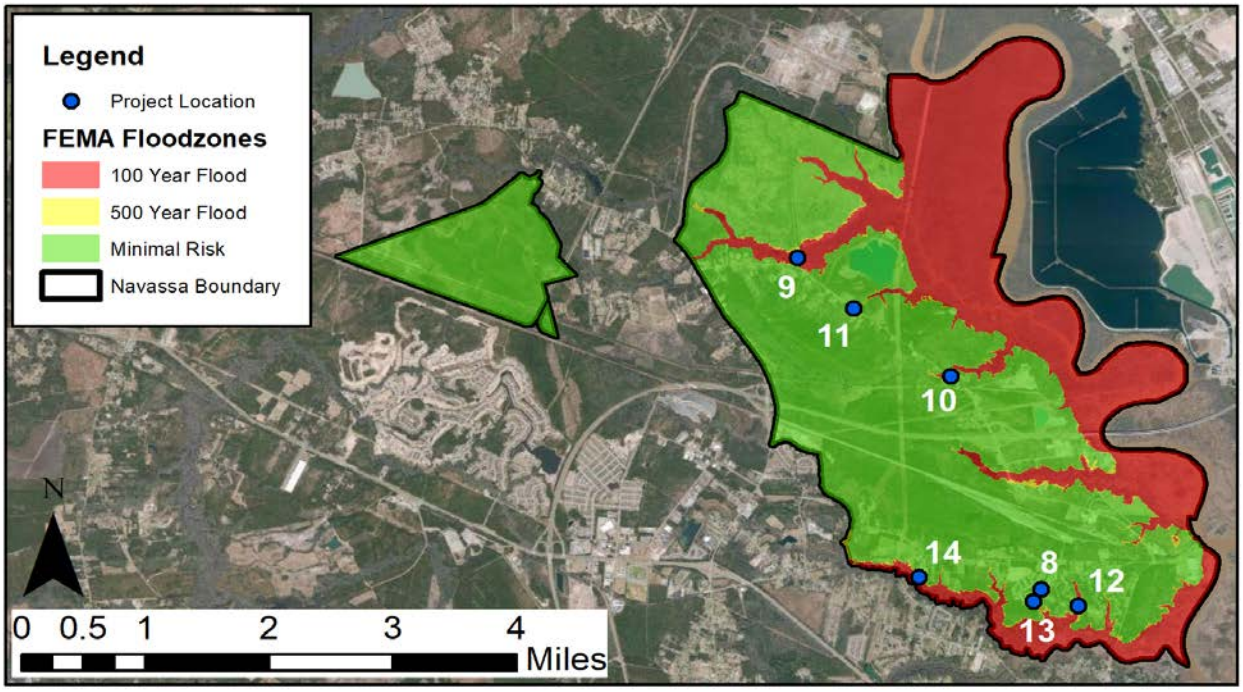
Project Name	Cedar Hill Stream Crossing and Drainage Improvement
Project Description	At Cedar Hill Road just south of Southerland Circle, the current culvert is overloaded during precipitation events and becomes a hazard to transportation due to flooding. This project would propose the feasibility of the design and construction of a stream crossing for flood mitigation and fish passage.
Hazard(s) addressed by project	Flooding
Type of Solution	Gray/Green
Project Estimated Cost	To be Determined once field analysis is conducted
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Two years to include design/engineering/permitting/implementation
Priority Rating	Intermediate
Project Map	(34.289176, -78.036840)



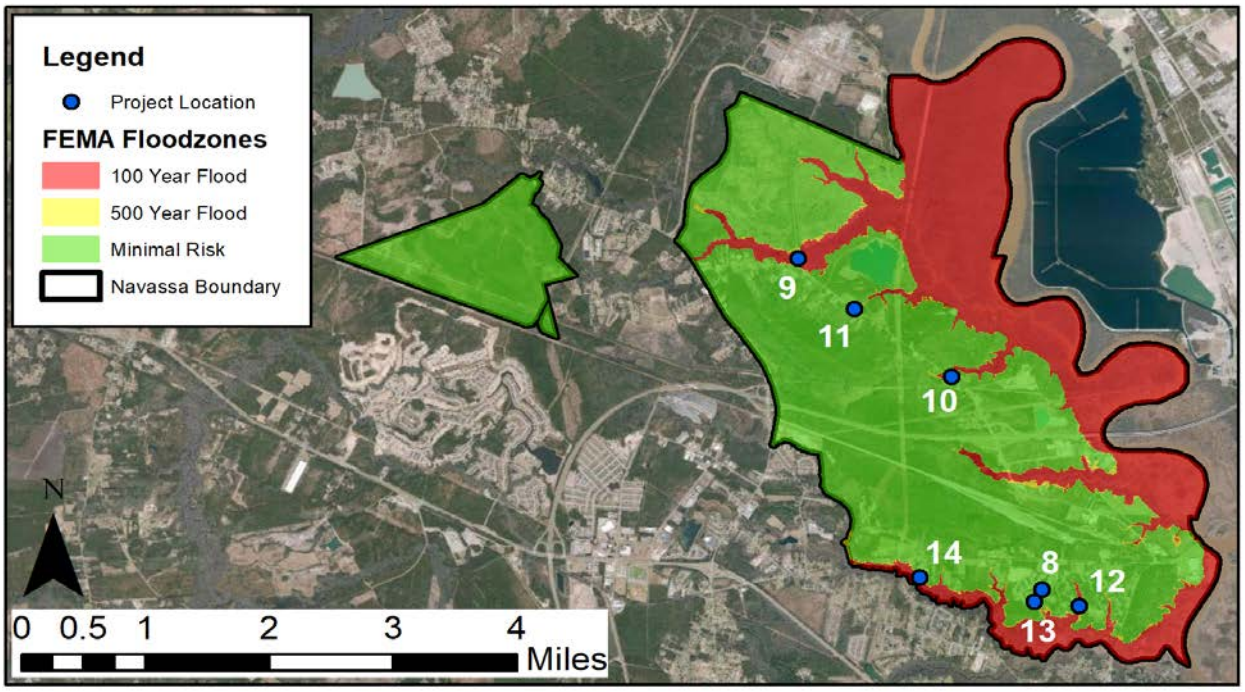
Project Name	Miles Branch Branch Restoration and Debris Removal
Project Description	The entirety of Miles Branch between Pine Valley and Miles Branch Drive is in need of restoration due to debris (specifically, piles of tires) acting as a barrier to water flow. This project would involve cleaning up this branch and restoring it to its natural hydrology.
Hazard(s) addressed by project	Flooding/Storm debris
Type of Solution	Gray/Green
Project Estimated Cost	To be Determined once field analysis is conducted
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Short-term (debris removal can be conducted by local partners such as Cape Fear River Watch)
Priority Rating	Intermediate
Project Map	(34.250777, -78.006447)



Project Name	Robin Court Branch Restoration and Debris Removal
Project Description	The entirety of the branch from Church Street and Robin Court to Sturgeon Creek is in need of restoration due to debris (i.e. tires) acting as a barrier to water flow. This project would involve cleaning up this branch and restoring it to its natural hydrology.
Hazard(s) addressed by project	Flooding/Storm debris
Type of Solution	Gray/Green
Project Estimated Cost	To be Determined once field analysis is conducted
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Short-term (debris removal can be conducted by local partners such as Cape Fear River Watch)
Priority Rating	Intermediate
Project Map	(34.252517, -78.012838) to (34.246902, -78.009013)



Project Name	Mill Creek Stream Crossing and Flood Mitigation Project
Project Description	During heavy rain events, there is frequent flooding at Old Mill Rd and Mill Creek parallel to the CSX rail bridge. This proposed project would conduct the feasibility of engineering, designing and permitting a stream crossing for flood mitigation and fish passage improvement.
Hazard(s) addressed by project	Flooding
Type of Solution	Green/Gray Infrastructure
Project Estimated Cost	Assessment is being conducted by SARP with no funding needs by the Town other than staff capacity. Future design/engineering of barriers can range between $250,000 - $500,000.
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Assessment to be completed by end of 2022
Priority Rating	Intermediate
Project Map	(34.257236, -78.037406)



Project Name	Stream Crossing Assessment to Improve Flood Risk and Barriers to Fish Passage
Project Description	The Southeast Aquatic Resources Partnership (SARP) aims to conduct barrier assessments within the Town of Navassa's water bodies to identify areas of restricted flow or culverts or other structures in poor condition.
Hazard(s) addressed by project	Flooding
Type of Solution	Gray/Nature-based
Project Estimated Cost	Assessment is being conducted by SARP with no funding needs by the Town other than staff capacity. Future design/engineering of barriers can range between $250,000 - $500,000.
Potential Implementation Funding Sources	Federal/State/Local
Projected Estimated Timeline	Short-term (to be completed by end of 2022)
Priority Rating	High
Project Map	Potential Stream Crossings Identified for Assessment by SARP