

Ownership Category	Number of Assets at Risk	Total Asset Value at Risk (\$)
Town of Como	1	85,728
Town of Murfreesboro	7	59,242,216
Town of Winton	1	311,239

7 PROJECT PORTFOLIO

7.1 Identification and Prioritization of Resilience Projects

The overall purpose of the RCCP is to support coastal communities to identify and pursue priority resilience projects that reduce and minimize risks posed by coastal hazards. The CAT referenced the following criteria (based on those in the RCCP Handbook) as well as their vision and goals in reaching agreement on a set of eight high-priority resilience projects for the County.

- Impact
 - Overall benefit to the community as a whole
 - Advances prior efforts/aligns with other plans
 - Has potential co-benefits, e.g., provides a recreational amenity, contributes to local economy, preserves a habitat, strengthens resilience to non-climate stressors like pandemics
 - Important for long-term resilience (i.e., taking climate change, sea level rise, and other future conditions into account)
 - Reduces vulnerability of key assets to coastal hazards
 - Reduces economic risk posed by coastal hazards in one or more sectors
 - Supports social equity
- Feasibility
 - Capacity to implement
 - Technical soundness
 - Likely positive benefit-cost ratio
 - Identifiable sources of funding

7.2 Prioritization Process

To develop a priority list of resilience projects for Hertford County, SWCA first created a list of potential projects based on review of existing documents including the Albemarle Regional Hazard Mitigation Plan Update (North Carolina Emergency Management Division [NCEM] 2020) and the Hertford County Hurricane Matthew Resilient Redevelopment Plan (NCEM 2017).

Project prioritization proceeded in three rounds. In the first round, the CAT reviewed the full list of potential projects compiled from existing resources to remove projects already completed or no longer relevant to the county and add any additional projects for consideration. In the second round, CAT members added or refined some project ideas based on the criteria above and selected a short list to bring to the second public meeting for review and feedback (Figure 8). In the third round, CAT members refined and adjusted their high priority list based on the criteria above and to better reflect public input and the vulnerability assessment results.



Figure 8. County staff and community members discuss potential projects at the January public meeting.

The eight high-priority projects agreed upon by the CAT are described in more detail in the tables below. Generally, these projects were understood by the CAT to have broad community-wide risk reduction benefits or to benefit vulnerable populations, to be feasible, to align with the county’s long-term resilience goals, to build upon other plans, and to link to efforts already underway.

All other projects considered by the CAT are documented in [Appendix G](#). Some of the other projects considered were not prioritized because they had been completed or were already in progress since being identified in previous planning efforts. Others were very localized and not perceived by the CAT to have sufficient benefit to the community at large to be considered high priority. Others would not substantially contribute to reducing coastal hazard risks or were considered infeasible by the CAT for any of the reasons noted in the criteria above, and so were not prioritized.

7.3 High-Priority Projects

The following eight projects were identified as high priority by the Hertford County CAT. Projects are *not* listed in order of priority; they are all high priority projects. Click the links below to jump to more details for each project:

- 7.3.1 [Hydrologic Watershed Assessment](#)
- 7.3.2 [Clearance of Debris from Waters](#)
- 7.3.3 [Countywide Water Storage Upgrades](#)
- 7.3.4 [Shriners Road Well](#)
- 7.3.5 [Wastewater Treatment Plant Upgrades](#)
- 7.3.6 [Communication and Information Sharing](#)
- 7.3.7 [State Game Land Purchases](#)
- 7.3.8 [Regulatory Updates](#)

7.3.1 Hydrologic Watershed Assessment

Project Description	Hydrologic assessment of watersheds to identify best “bang for buck” infrastructure improvements to reduce flooding and water management and maintenance priorities.
Location	Almost county-wide, except for watersheds already evaluated in the Southwest portion of the County.
Source	Discussion with CAT
Scoping Questions	
Hazard(s) Addressed by Project	Precipitation-based flooding, runoff
FEMA Community Lifelines	Safety and Security
Type of Solution	Local Plans and Policies
Project Estimated Timeline	1 year
Responsible Entity	County Planning Department with a Consultant
Potential Partners	Coordinate with NRCS/Soil & Water, Towns
Existing Funding	None identified by CAT
Potential Funding Sources	Building Resilient Infrastructure and Communities (BRIC) State Allocation, WaterSMART Cooperative Watershed Management Program (CWMP)
Project Estimated Cost	Medium - \$100,000–\$150,000
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High

7.3.2 Clearance of Debris from Waters

Project Description	Inspect debris blockage problems and secure funds for the clearance of debris from rivers, streams, and tributaries, where indicated based on the hydrologic watershed assessment
Location	Countywide
Source	Albemarle Region Hazard Mitigation Plan 2020
Scoping Questions	Hydrologic watershed assessment is an important first step to confirm where debris is actually causing problems and ensure debris removal would have flood risk reduction benefit that justifies the expense and ecosystem disturbance
Hazard(s) Addressed by Project	Precipitation-based flooding, runoff
FEMA Community Lifelines	Safety and Security
Type of Solution	Non-regulatory Programs
Project Estimated Timeline	Ongoing
Responsible Entity	Soil and Water Conservation District?
Potential Partners	Hertford County, NC DOT
Existing Funding	None identified by CAT
Potential Funding Sources	<u>Streamflow Rehabilitation Assistance Program (StRAP)</u> - includes debris removal:
Project Estimated Cost	High – \$200,000–\$500,000 recurring as needed to maintain waterways
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High

7.3.3 Countywide Water Storage Upgrades

Project Description	The county could face water shortages if wells are forced to go offline during storms. Identify suitable sites and the install wells, storage tanks, or other means of retaining water. This redundancy will make the county more resilient during future emergencies.
Location	
Source	Hurricane Matthew Resilient Redevelopment Plan - Hertford County
Scoping Questions	
Hazard(s) Addressed by Project	Precipitation-based flooding, storm surge, sea level rise
FEMA Community Lifelines	Safety and Security; Food, Water, Shelter
Type of Solution	Infrastructure
Project Estimated Timeline	
Responsible Entity	Hertford County Public Utilities / Rural Water
Potential Partners	
Existing Funding	None identified by CAT
Potential Funding Sources	Drinking Water State Revolving Fund, Building Resilient Infrastructure and Communities (BRIC)
Project Estimated Cost	High – \$500,000–\$1 million
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High

7.3.4 Shriners Road Well

Project Description	This well flooded during Hurricane Matthew and had to be taken out of service. Install elevated generators and a remote access system so the well can be monitored by personnel even when surrounding roads are impassable.
Location	Shriners Road, Ahoskie
Source	Hurricane Matthew Resilient Redevelopment Plan - Hertford County
Scoping Questions	Type of generator may be a determining factor in overall cost.
Hazard(s) Addressed by Project	Precipitation-based flooding
FEMA Community Lifelines	Safety and Security; Food, Water, Shelter
Type of Solution	Structure and infrastructure
Project Estimated Timeline	1 year
Responsible Entity	Hertford County Public Utilities / Rural Water
Potential Partners	
Existing Funding	None identified by CAT
Potential Funding Sources	Hazard Mitigation Grant Program (HMGP)
Project Estimated Cost	Depends on exact specifications of the systems to be installed.
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High



Figure 9. Location of Shriners Road Well.

7.3.5 Wastewater Treatment Plant Upgrades

Project Description	Upgrade to prevent flooding impacts to wastewater treatment plant and reduce risk of releasing untreated wastewater during flood events. Murfreesboro (280 ft from riverbank) has flooded in the past, Winton retention ponds are about 500 feet from the waterway.
Location	Winton and Murfreesboro
Source	Public Meeting Input
Scoping Questions	
Hazard(s) Addressed by Project	Precipitation-based flooding, sea level rise
FEMA Community Lifelines	Safety and Security; Hazardous Materials
Type of Solution	Infrastructure
Project Estimated Timeline	2-5 Years
Responsible Entity	Towns of Winton and Murfreesboro
Potential Partners	
Existing Funding	Winton just received 100k for a wastewater study (Howard Hunter Proposal) – Kelly can provide more details
Potential Funding Sources	To be determined
Project Estimated Cost	Medium – \$200,000
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High

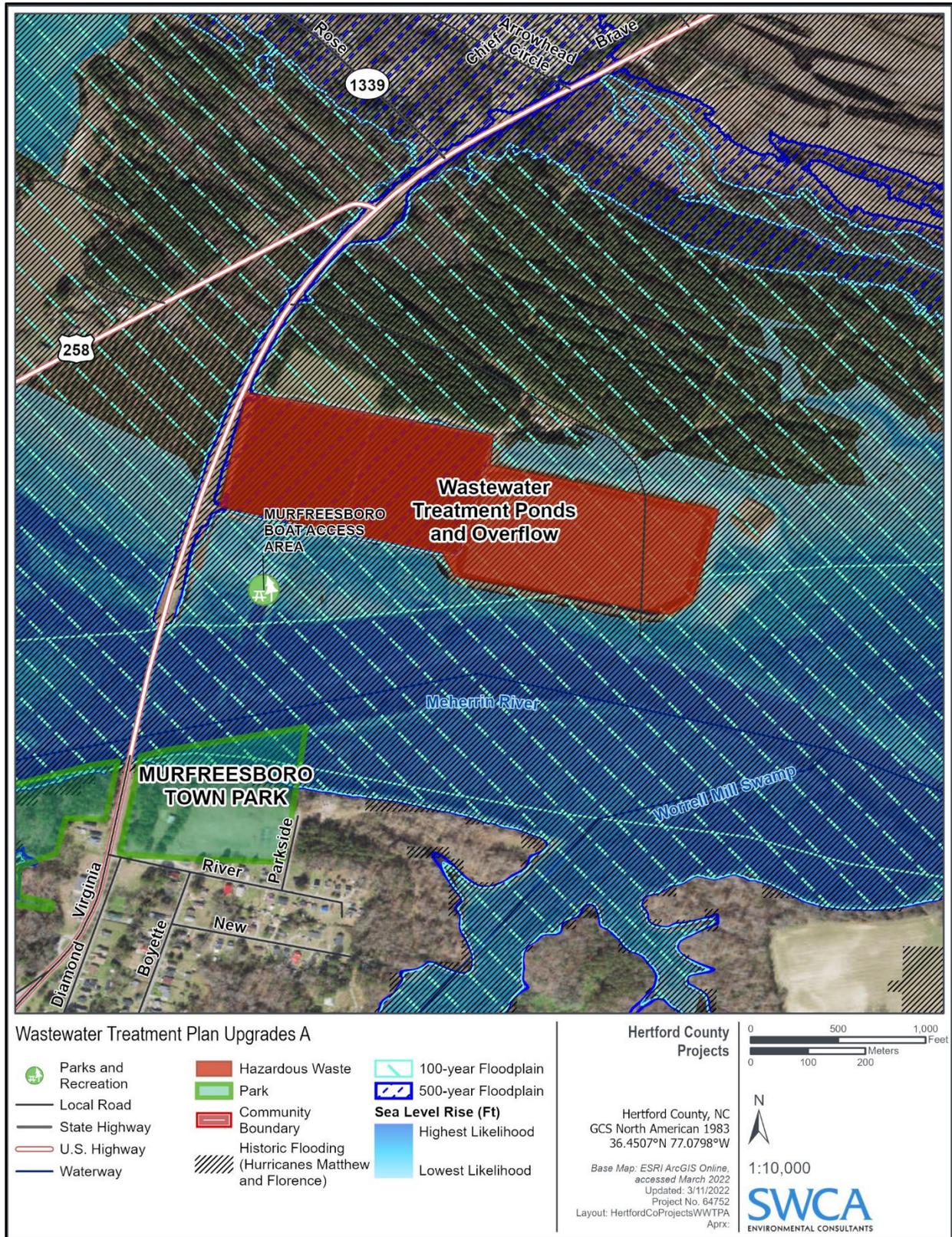


Figure 10. Location of wastewater treatment plant upgrades, 1 of 2.

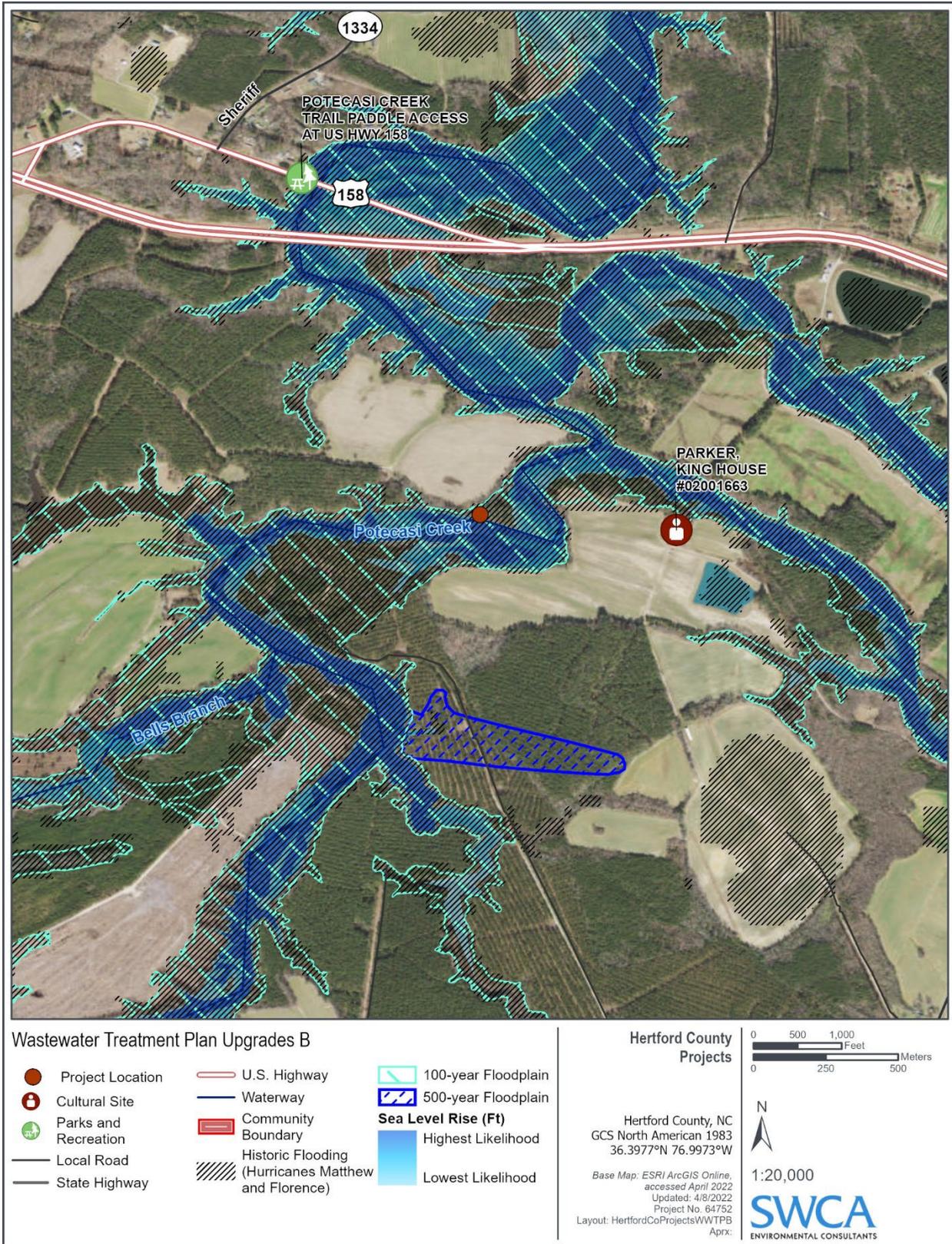


Figure 11. Location of wastewater treatment plant upgrades, 2 of 2.

7.3.6 Communication and Information Sharing

Project Description	<p>A collaborative effort to create clear and consistent information for county residents about flooding related issues, including:</p> <ol style="list-style-type: none"> 1. Education/outreach to encourage maintaining vegetation along ditch banks to prevent erosion and maintain runoff capability 2. Annual notice to all property owners within a special flood hazard area that clearly states the property is susceptible to flooding. The County will also maintain a flood map information service, whereby County residents can call or come by to receive information regarding their property in relation to the defined floodplain. 3. Make information regarding hazards and development regulations within the floodplain available. The County Planning Director will ensure that the local library maintains information relating to flooding and flood protection (maintain dates of distribution and librarian certification of availability). The County will provide a link on their website to FEMA resources addressing flooding and flood protection. This information will be made available to citizens, realtors, developers, and contractors. 4. Improved Coordination on Drainage and Flooding Issues. Clarify who residents should contact about various drainage or flooding questions/concerns including emergencies, and ensure corresponding linkages between departments at local, county, state, and federal levels.
Location	Countywide and online
Scoping Questions	
Hazard(s) Addressed by Project	Precipitation-based flooding, Storm Surge, Sea Level Rise, Runoff, Erosion
FEMA Community Lifelines	Safety and Security; Communications
Type of Solution	Education and Outreach
Project Estimated Timeline	1 year
Responsible Entity	NRCS Soil and Water Conservation District, Floodplain Administrator, County Planning Department
Potential Partners	Albemarle-Pamlico National Estuary Partnership
Existing Funding	None identified by CAT
Potential Funding Sources	Albemarle-Pamlico National Estuary Partnership Engagement and Stewardship grants: https://apnep.nc.gov/engagement-and-stewardship-fy2021-request-proposals ; NCAG Environmental Enhancement Grant Program
Project Estimated Cost	Low – \$5,000–\$10,000
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High

7.3.7 State Game Land Purchases

Project Description	Put flood-prone lands in conservation to maintain flood capacity, prevent construction of structures that would be at risk, and reduce maintenance costs for flood-prone areas
Location	Two potential locations include Chowan riverfront north of Winton and easements along "Vaughns Creek" on the Meherrin (herring run area).
Source	Public Meeting input
Scoping Questions	Could this incorporate easements for Vaughns Creek for fisheries conservation?
Hazard(s) Addressed by Project	Precipitation-based flooding, sea level rise, storm surge, erosion
FEMA Community Lifelines	Safety and Security
Type of Solution	Natural/Nature based
Project Estimated Timeline	2-5 years
Responsible Entity	Hertford County
Potential Partners	Division of Coastal Management, Coastal Land Trust
Existing Funding	None identified by CAT
Potential Funding Sources	Infrastructure Investment and Jobs Act (IIJA) funding to DCM through NOAA (DCM, on behalf of the state, will be able to apply for 3 projects (acquisitions or restoration) per year for the next 5 years).
Project Estimated Cost	TBD depending on areas selected
Anticipated Benefit	Medium – Action would have an impact on risk reduction.
Priority Rating	High

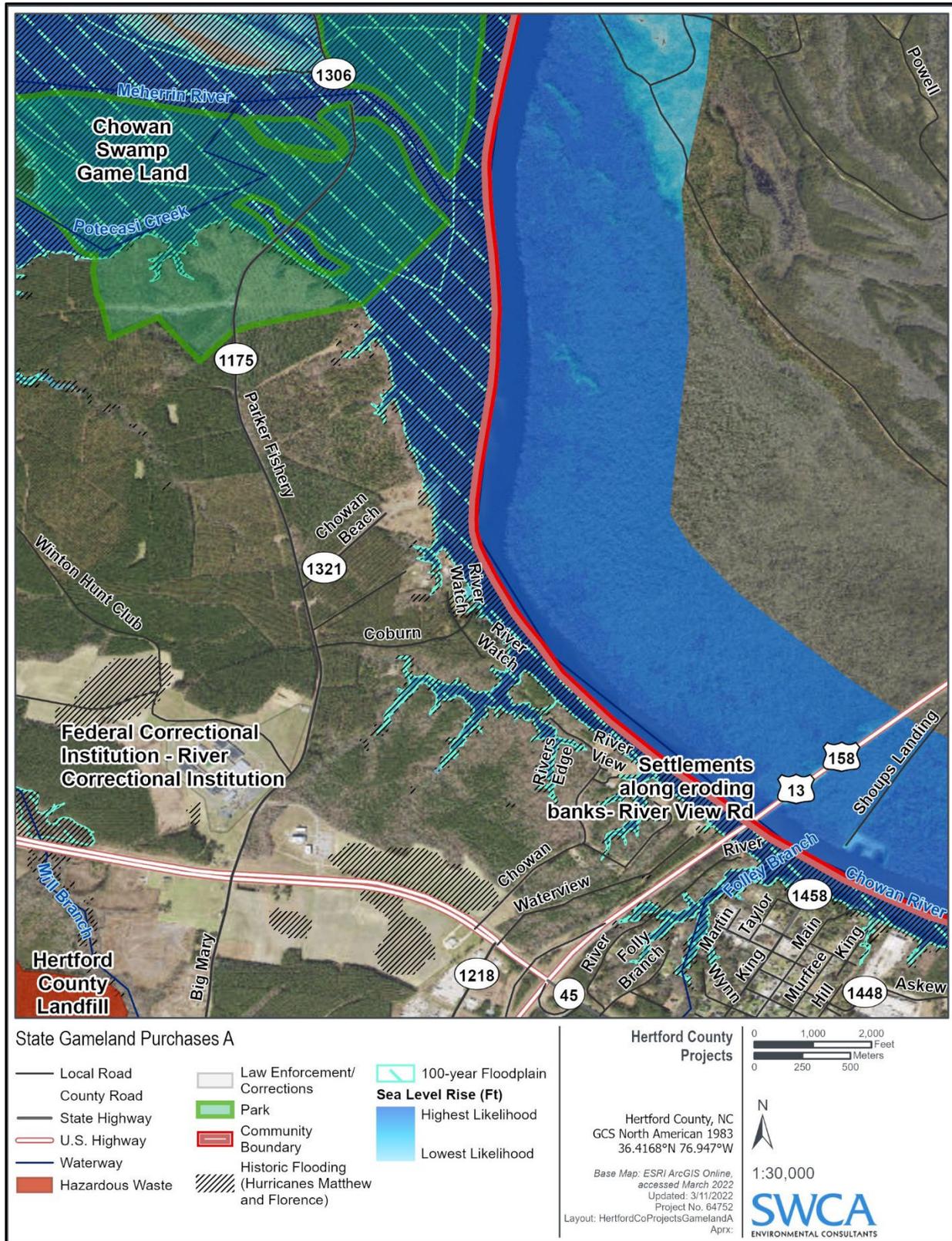


Figure 12. Location of potential state game land purchases, 1 of 2.

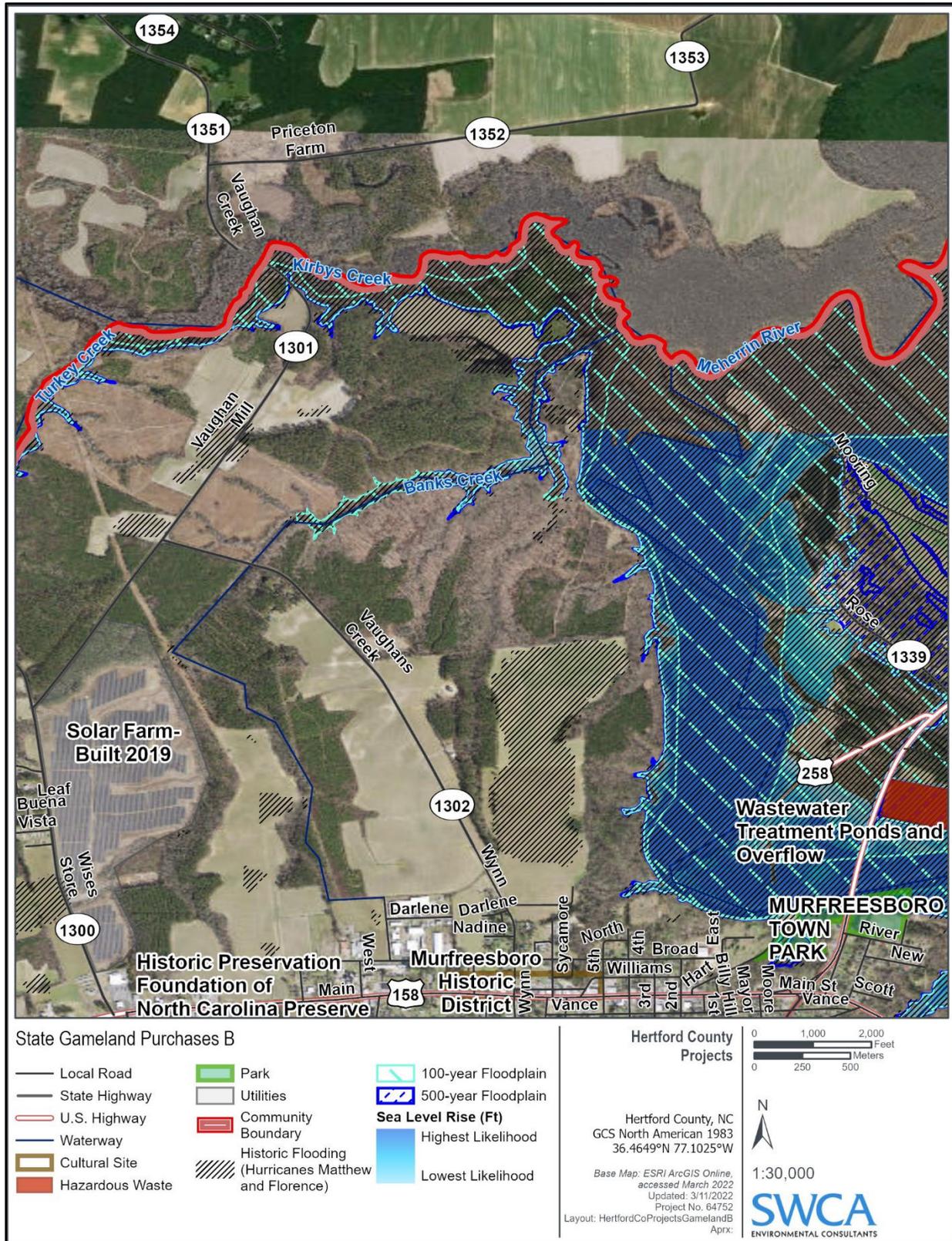


Figure 13. Location of potential state game land purchases, 2 of 2.

7.3.8 Regulatory Updates

Project Description	<p>1. Provide annual review of development restrictions in floodplain areas and maintain initiatives to ensure limited residential and commercial development in the floodplain and optimal protection of critical facilities.</p> <p>2. Review County and municipal zoning, subdivision, and flood damage prevention ordinances for improved control of flooding hazards and improvement of drainage.</p> <p>3. Adopt and annually update a capital improvements plan with an emphasis on mitigation for critical facilities.</p>
Location	Countywide
Source	Albemarle Region Hazard Mitigation Plan 2020
Scoping Questions	In case the team is not already aware, NC has developed an updated Model Flood Damage Prevention Ordinance (2021) that includes state-recommended / higher regulatory standards for the County and municipalities to consider adopting: https://flood.nc.gov/ncflood/documentcenter.html?type=11
Hazard(s) Addressed by Project	Precipitation-based flooding, sea level rise, storm surge
FEMA Community Lifelines	Safety and Security
Type of Solution	Local Policy and Plans
Project Estimated Timeline	Ongoing
Responsible Entity	Flood Plain Administrator
Potential Partners	Hertford County, County Commission
Existing Funding	None identified by CAT
Potential Funding Sources	Building Resilient Infrastructure and Communities (BRIC) State Allocation
Project Estimated Cost	Low – \$15,000-\$50,000
Anticipated Benefit	High – Action would have a significant impact on risk reduction.
Priority Rating	High