

PROJECT PORTFOLIO

The assembled project portfolio details six (6) high priority projects, addressing hazards, type of strategy area and approach, priority rating, potential sources of funding, cost and project duration estimates, project map(s), project description, and project scope. These projects were developed to coincide with the top priority solution that would help make the community more resilient to the hazards identified: riverine flooding, nuisance flooding, sea level rise, storm surge, drought, wildfire, and coastal erosion. One nature-based or hybrid solution project is eligible to move forward into Phase 3 of the RCCP, Engineering and Design. The Town of Washington Park CAT, along with stakeholders, choose to move forward with the Living Shoreline at Public Shoreline Areas project, the most popular project based upon Phase 2 Open House input, to advance to RCCP Phase 3. Steps taken to assemble the project portfolio that led to the community and the CAT choosing this project are outlined below.



IDENTIFY A SUITE OF POTENTIAL PROJECT SOLUTIONS

The first step to assembling the project portfolio was to identify a suite of potential solutions. The contractors helped the CAT identify 36 potential solutions. The Pamlico Sound Hazard Mitigation Strategies identified an additional 26 potential solutions that could also be carried forward. These solutions were categorized by Planning/Policy, Green and Hybrid Infrastructure Solutions, and Hard/Grey Infrastructure Solutions and presented to the CAT at Meeting 4. Each CAT member then identified their top solutions.

CONSOLIDATE AND PRIORITIZE PROJECTS

The second step in assembling the project portfolio was to consolidate and prioritize the project solutions. The CAT identified nine (9) solutions from the suite of potential solutions that could move forward based on the STAPLEE Method and a simple benefit/cost rating system to help consolidate and prioritize all the potential project solutions. The STAPLEE Method assesses the social, technical, administrative, political, legal, economic, and environmental aspects and potential impacts of each project solution. The benefit/cost rating system used a high/medium/low scoring system to predict benefits and costs of each project solution.

Potential priority projects were presented to the CAT during the 5th meeting where the STAPLEE and benefit/cost rating metrics were reviewed and finalized. These projects were then brought to the community for additional feedback at the Phase 2 Public Open House. The Town of Washington Park along with the CAT identified six (6) priority projects to be presented in the project portfolio.

Priority Projects

- Living Shoreline at Public Shoreline Areas (project chosen to advance to RCCP Phase 3)
- Stormwater Action Plan – Stormwater System Upgrade
- Riverside Drive Flood Attenuation Park
- Green Stormwater Infrastructure at Riverside Drive and W. Isabella Avenue
- Develop a Sanitary Sewer System
- Tributary Improvements East of Isabella Avenue

Living Shoreline at Public Shoreline Areas



TOWN OF WASHINGTON PARK

Living Shoreline at Public Shoreline Areas

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| Project Summary | |
| Project Description | <p>Incorporate a living shoreline along approx. 2,500 feet of public shoreline within Washington Park to reduce shoreline erosion.</p> |
| Project Scope | <p><u>Engineering/Design</u> This will include a detailed shoreline assessment and engineering/design of chosen alternative(s). Multiple shoreline options, including expanding the existing terminal groins, will be presented. Swimming and paddling access will be maintained. Concept planning completed by East Carolina University students will be referenced.</p> <ul style="list-style-type: none"> - Survey - Shoreline assessment - Concept Design/ Alternatives (3) - Engineering/design - SEPA Documentation (Archaeological Survey) - Permitting Due Diligence <p><u>Implementation</u> Construct a living shoreline along public shoreline areas within Washington Park to reduce shoreline erosion. The engineering/design phase will determine the type of living shoreline project that is implemented. There is the potential for multiple project types on different shoreline areas. Swimming and paddling access will be maintained.</p> <ul style="list-style-type: none"> - Permitting - Construction - Construction Administration - Construction Inspections |
| Hazard(s) Addressed by Project | <p>List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping)</p> <ul style="list-style-type: none"> ▪ Coastal Erosion |
| Type of Solution/Strategy Area | <p>List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure)</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> ▪ Green and Hybrid Solutions |

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| | <p><u>Implementation</u></p> <ul style="list-style-type: none"> ▪ Green and Hybrid Solutions | | | | | |
| <p>Type of Strategy Approach</p> | <p>List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity)</p> <ul style="list-style-type: none"> ▪ Protect | | | | | |
| <p>Project Estimated Cost</p> | <p><u>Engineering/Design</u> - \$225,000 (\$90/ft.) <u>Implementation</u> - \$1,125,000 (\$450/ft) - \$2,500,000 (\$1000/ft)</p> | | | | | |
| <p>Potential Implementation Funding Sources</p> | <p>Potential Sources for Project/Action Implementation</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Division of Coastal Management Public Beach and Coastal Waterfront Access Grant ▪ NC Parks and Recreation Trust Fund (PARTF) Grant ▪ Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant ▪ National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund <p><u>Implementation</u></p> <ul style="list-style-type: none"> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Division of Coastal Management Public Beach and Coastal Waterfront Access Grant ▪ NC Parks and Recreation Trust Fund (PARTF) Grant ▪ Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant ▪ National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund | | | | | |
| <p>Project Estimated Timeline</p> | <p>2-3 years (engineering/design and construction)</p> | | | | | |
| <p>Priority Rating</p> | <p>High</p> | | | | | |
| <p>Potential Submission for RCCP Phase 3</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">◆</td> <td style="width: 15%; text-align: center;">Yes</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">No</td> <td style="width: 45%;"><i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i></td> </tr> </table> | ◆ | Yes | | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> |
| ◆ | Yes | | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> | | |
| <p>Project Map</p> | <div style="background-color: black; height: 20px;"></div> | | | | | |



Stormwater Action Plan – Stormwater System Upgrade



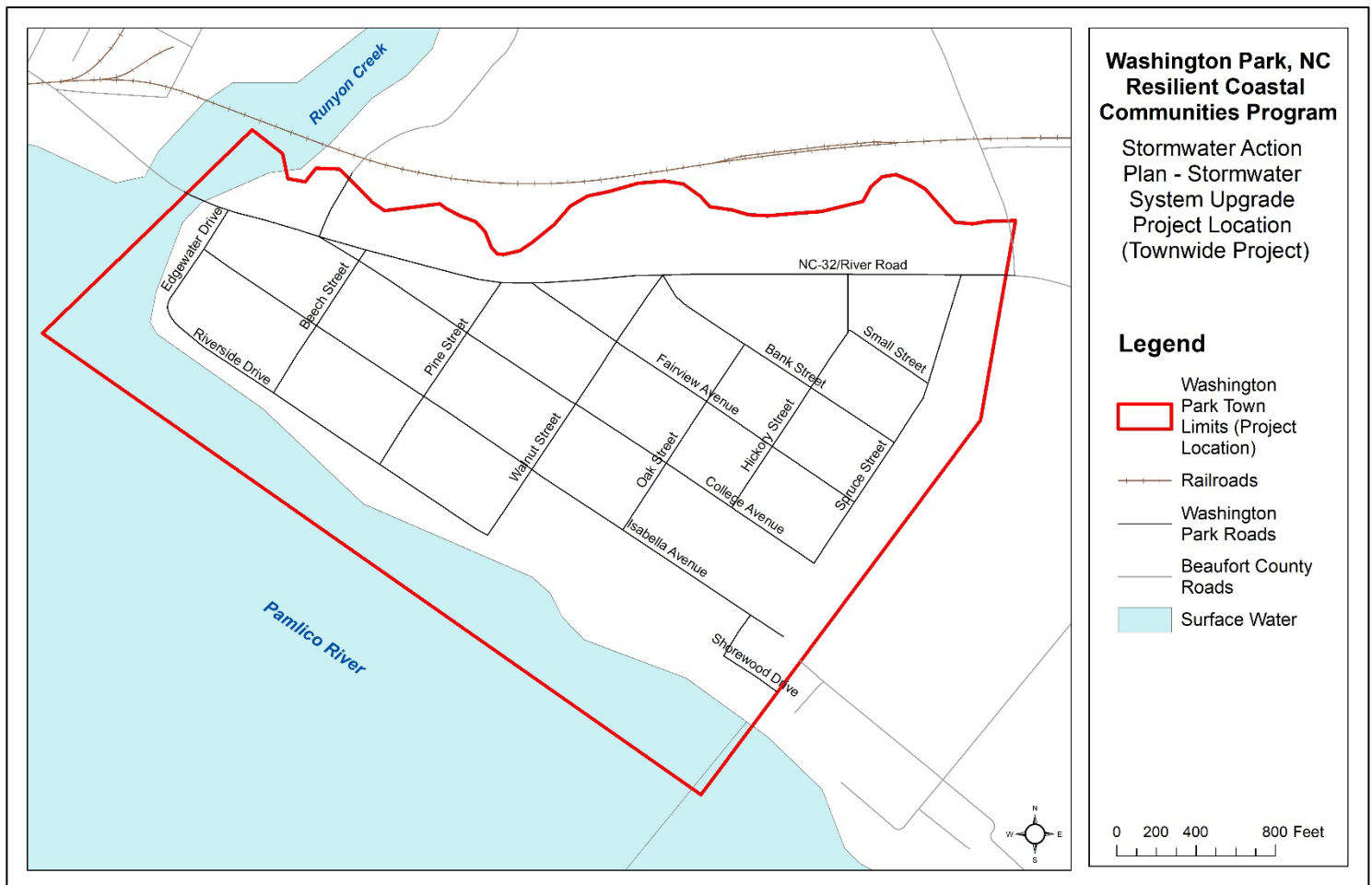
TOWN OF WASHINGTON PARK

Stormwater Action Plan – Stormwater System Upgrade

| Project Summary | |
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| Project Description | <p>Develop a Stormwater Action Plan combined with strategically upgrading the stormwater system through improved and expanded infrastructure. The project will establish mapping and condition assessments for stormwater system components and outfalls with a focus on known problem areas and areas identified via a desktop analysis. The project will promote proactive stormwater maintenance through development of interactive mapping tools and maintenance guidance. The project will encourage stormwater quality awareness through public outreach efforts and produce construction drawings for a priority project.</p> |
| Project Scope | <p><u>Engineering/Design</u> - Develop a Stormwater Action Plan. This plan will complete a stormwater ground assessment and surface hydrology analysis that will be incorporated into an online mapping system that can submit real-time data to analyze, prioritize, and take action on potential problem areas. The plan will also incorporate a maintenance plan that will be tracked by the online tool. The plan will include assessing and documenting the type and location of stormwater infrastructure, collecting and analyzing data on the hydraulic flow, assessing stormwater system capacity and functionality, and identifying projects to upgrade the system and improve the ability of the system to convey water, improve backwater conditions, and/or improve water quality. Both hard/grey infrastructure and green/nature-based solutions will be considered in the Stormwater Action Plan. The project will include design and construction documents for a high priority project chosen in partnership with the community.</p> <ul style="list-style-type: none"> - Hydro Analysis - Field Work - Natural Resources Assessment - Project Prioritization/Recommendations - Design - Arc Online Tool - Stormwater Maintenance Manual - Public Education <p><u>Implementation</u> - Strategically upgrade the stormwater system through pipe replacements (upsizing where needed), increasing the size and quantity of culverts and catch basins, redefining ditches, implementing backflow</p> |

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| | <p>preventors, installing bioswales, bioretention cells, etc. The previously developed Stormwater Action Plan will determine project prioritization.</p> <ul style="list-style-type: none"> - Permitting - Construction - Construction Administration - Construction Inspections |
| <p>Hazard(s) Addressed by Project</p> | <p>List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping)</p> <ul style="list-style-type: none"> ▪ Flooding (Nuisance, Riverine) |
| <p>Type of Solution/Strategy Area</p> | <p>List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure)</p> <p><u>Stormwater Action Plan</u></p> <ul style="list-style-type: none"> ▪ Planning ▪ Green and Hybrid Solutions <p><u>Stormwater System Upgrade</u></p> <ul style="list-style-type: none"> ▪ Green and Hybrid Solutions |
| <p>Type of Strategy Approach</p> | <p>List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity)</p> <ul style="list-style-type: none"> ▪ Accommodate ▪ Build Adaptive Capacity |
| <p>Project Estimated Cost</p> | <p><u>Engineering/Design</u> - \$375,000</p> <p><u>Implementation</u> - \$150,000 - \$500,000 (per local stormwater retrofit project)</p> |
| <p>Potential Implementation Funding Sources</p> | <p>Potential Sources for Project/Action Implementation</p> <p><u>Stormwater Action Plan</u></p> <ul style="list-style-type: none"> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Capability and Capacity Building (C&CB) Grant ▪ NC Department of Environmental Quality Water Resources Development Grant (WRDG) <p><u>Stormwater System Upgrade</u></p> <ul style="list-style-type: none"> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant ▪ Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance (FMA) Grant ▪ NC Environmental Enhancement Grant (EEG) ▪ NC Land and Water Fund Grant |

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| | <ul style="list-style-type: none"> NC Department of Environmental Quality Water Resources Development Grant (WRDG) NC Department of Environmental Quality 319 Grant HUD Community Development Block Grant – Mitigation (CDBG-MIT) | | | | |
| Project Estimated Timeline | 3 – 5 years (project may be completed in phases) | | | | |
| Priority Rating | High | | | | |
| Potential Submission for RCCP Phase 3 | <table border="1"> <tr> <td>◆</td> <td>Yes</td> <td>No</td> <td><i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i></td> </tr> </table> | ◆ | Yes | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> |
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| Project Map | | | | | |



Riverside Drive Flood Attenuation Park



TOWN OF WASHINGTON PARK

Riverside Drive Flood Attenuation Park

| Project Summary | |
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| Project Description | Create a flood attenuation park along Riverside Drive that will provide a storage facility and treatment devices that can dually serve as a community gathering and /or event space. |
| Project Scope | <p><u>Engineering/Design</u> Design a flood attenuation park along Riverside Drive. This park would be designed to capture water as the first barrier from the river. See ‘WEDG’ (Waterfront Edge Design Guidelines) rating system for parks. ‘WEDG guidance’: https://wedg.waterfrontalliance.org/resources/</p> <p>Rain gardens, stormwater wetlands, and other concepts which improve the aesthetics of the park will be utilized. Public recreational uses will be maintained.</p> <ul style="list-style-type: none"> - Survey - Concept planning - Landscape Design - Engineering/Design <p><u>Implementation</u> Construct a flood attenuation park along Riverside Drive. The engineering/design process will determine specific improvements. Rain gardens and other concepts which improve the aesthetics of the park will be utilized. Public recreational uses will be maintained.</p> <ul style="list-style-type: none"> - Permitting - Construction - Construction Administration - Construction Inspections |
| Hazard(s) Addressed by Project | <p>List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping)</p> <ul style="list-style-type: none"> ▪ Flooding (Riverine) |
| Type of Solution/Strategy Area | <p>List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure)</p> <p><u>Engineering/Design</u></p> |

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| | <ul style="list-style-type: none"> Green and Hybrid Solutions <p><u>Implementation</u></p> <ul style="list-style-type: none"> Green and Hybrid Solutions | | | | |
| Type of Strategy Approach | List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) <ul style="list-style-type: none"> Accommodate | | | | |
| Project Estimated Cost | <p><u>Engineering/Design</u> - \$100,000</p> <p><u>Implementation</u> - \$200,000 - \$500,000</p> | | | | |
| Potential Implementation Funding Sources | <p>Potential Sources for Project/Action Implementation</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> NC Resilient Coastal Communities Program Phase 3 NC Environmental Enhancement Grant (EEG) NC Division of Coastal Management Public Beach and Coastal Waterfront Access Grant NC Parks and Recreation Trust Fund (PARTF) Grant Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant NC Land and Water Fund Grant NC Department of Environmental Quality 319 Grant NC Department of Environmental Quality Water Resources Development Grant (WRDG) <p><u>Implementation</u></p> <ul style="list-style-type: none"> NC Resilient Coastal Communities Program Phase 4 NC Environmental Enhancement Grant (EEG) NC Division of Coastal Management Public Beach and Coastal Waterfront Access Grant NC Parks and Recreation Trust Fund (PARTF) Grant Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant NC Land and Water Fund Grant NC Department of Environmental Quality 319 Grant NC Department of Environmental Quality Water Resources Development Grant (WRDG) | | | | |
| Project Estimated Timeline | 2-3 years (engineering/design and construction) | | | | |
| Priority Rating | High | | | | |
| Potential Submission for RCCP Phase 3 | <table border="1"> <tr> <td>◆</td> <td>Yes</td> <td>No</td> <td><i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i></td> </tr> </table> | ◆ | Yes | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> |
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| Project Map | | | | | |



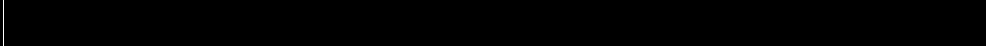
Green Stormwater Infrastructure at Riverside Drive and W. Isabella Avenue

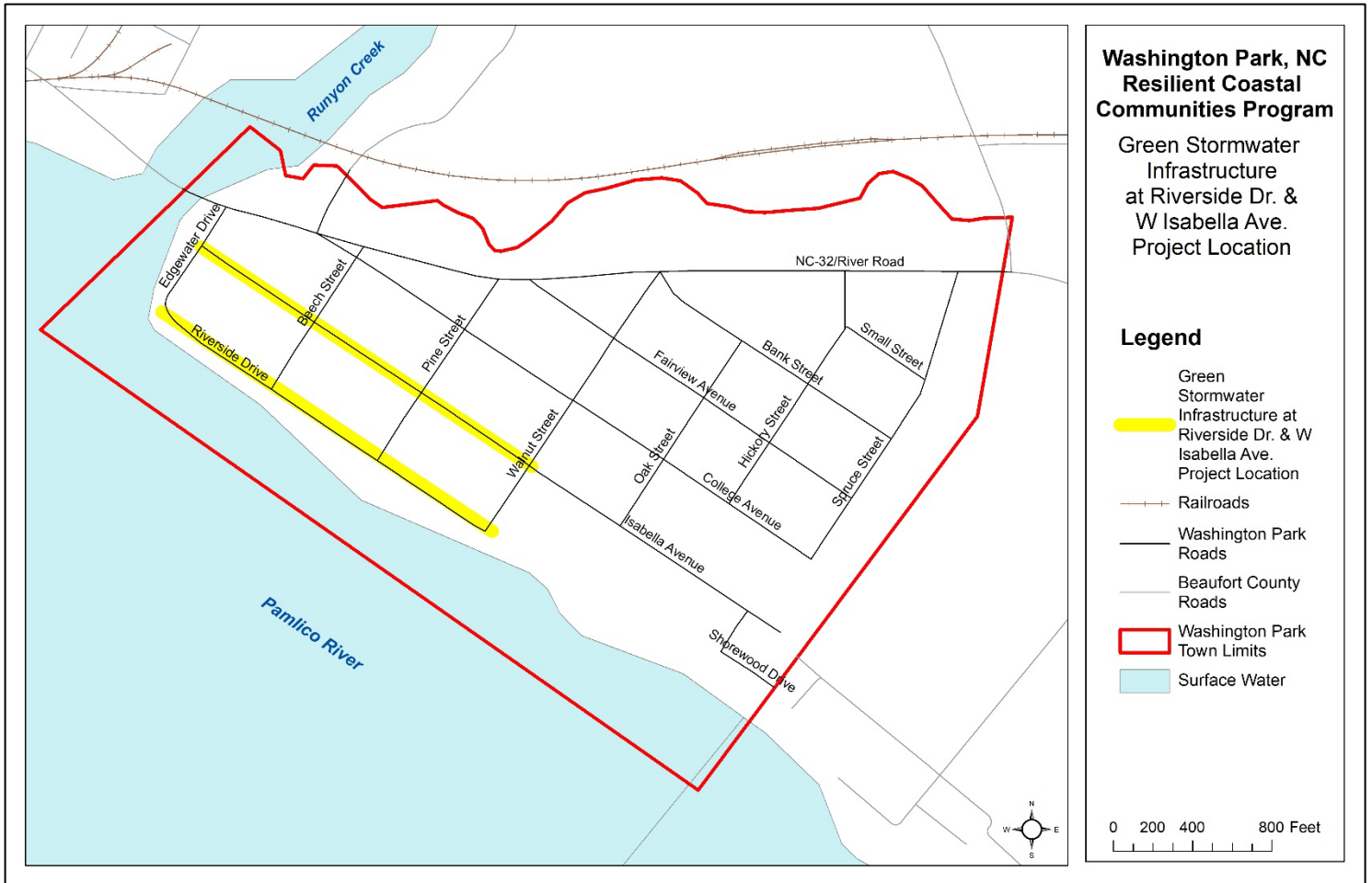


TOWN OF WASHINGTON PARK

Green Stormwater Infrastructure at Riverside Dr. and W. Isabella Ave.

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| Project Summary | |
| Project Description | <p>Implement green stormwater infrastructure along Riverside Drive and West Isabella Avenue. The projects will connect green practices into the existing stormwater conveyance systems without major modifications. Practices for consideration are bioretention, permeable pavement, or a submerged gravel wetland. Projects will be developed with a goal to improve aesthetics within the community.</p> |
| Project Scope | <p><u>Engineering/Design</u> – Identify appropriate projects and complete engineering/design for green stormwater infrastructure along Riverside Drive and West Isabella Avenue.</p> <ul style="list-style-type: none"> - Survey - Concept planning - Engineering/Design - Permitting Due Diligence <p><u>Implementation</u> – Construct green stormwater infrastructure along Riverside Drive and West Isabella Avenue. Specific projects and placement will be determined during engineering/design phase. Improvements could include stormwater infiltration medians, bioswales, permeable pavement, bioretention cells, etc.</p> <ul style="list-style-type: none"> - Permitting - Construction - Construction Administration - Construction Inspections |
| Hazard(s) Addressed by Project | <p>List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping)</p> <ul style="list-style-type: none"> ▪ Flooding (Nuisance) |
| Type of Solution/Strategy Area | <p>List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure)</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> ▪ Green and Hybrid Solutions <p><u>Implementation</u></p> |

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| | <ul style="list-style-type: none"> Green and Hybrid Solutions | | | | |
| <p>Type of Strategy Approach</p> | <p>List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity)</p> <ul style="list-style-type: none"> Accommodate | | | | |
| <p>Project Estimated Cost</p> | <p><u>Engineering/Design</u> - \$70,000</p> <p><u>Implementation</u> - \$60,000 - \$250,000 (per green stormwater infrastructure project)</p> | | | | |
| <p>Potential Implementation Funding Sources</p> | <p>Potential Sources for Project/Action Implementation</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> NC Resilient Coastal Communities Program Phase 3 NC Environmental Enhancement Grant (EEG) NC Land and Water Fund Grant NC Department of Environmental Quality Water Resources Development Grant (WRDG) NC Department of Environmental Quality 319 Grant <p><u>Implementation</u></p> <ul style="list-style-type: none"> NC Resilient Coastal Communities Program Phase 4 NC Environmental Enhancement Grant (EEG) NC Land and Water Fund Grant NC Department of Environmental Quality Water Resources Development Grant (WRDG) NC Department of Environmental Quality 319 Grant | | | | |
| <p>Project Estimated Timeline</p> | <p>2-3 years (engineering/design and construction)</p> | | | | |
| <p>Priority Rating</p> | <p>High</p> | | | | |
| <p>Potential Submission for RCCP Phase 3</p> | <table border="1"> <tr> <td style="text-align: center;">◆</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> <td><i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i></td> </tr> </table> | ◆ | Yes | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> |
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| <p>Project Map</p> |  | | | | |



Develop a Sanitary Sewer System



TOWN OF WASHINGTON PARK

Develop a Sanitary Sewer System

| Project Summary | |
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| Project Description | <p>Develop a sewer system or tie into the City of Washington’s sewer system. The project will convert septic properties to a collection system. The collection system, a lift station, and force main will need to be evaluated, designed, and constructed to serve the over 150 homes in the community. Connecting to the City of Washington’s wastewater treatment plant is preferred because of staffing issues and the logistics of the town maintaining their own WWTP. Multi-tank septic collection systems or advanced septic systems are a potential alternative if sewer is determined to not be feasible.</p> |
| Project Scope | <p><u>Engineering/Design</u> – Complete a feasibility study for development of a sewer system or tying into the City of Washington’s sewer system. Complete engineering/design in preparation for construction. The town’s wastewater is currently provided by privately owned on-site septic systems. The town is at risk for future septic system failure due to sea level rise, saltwater intrusion and associated rising groundwater tables.</p> <ul style="list-style-type: none"> - Feasibility study - Survey - NEPA/SEPA - Engineering/design - Permitting Due Diligence <p><u>Implementation</u> - Construct a sewer system or tie into the City of Washington’s sewer system.</p> <ul style="list-style-type: none"> - Permitting - Construction - Construction Administration - Construction Inspections |
| Hazard(s) Addressed by Project | <p>List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping)</p> <ul style="list-style-type: none"> ▪ Sea level rise ▪ Saltwater intrusion ▪ Economic and social resilience |
| Type of Solution/Strategy Area | <p>List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure)</p> |

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| | <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> ▪ Planning ▪ Hard/Grey Infrastructure <p><u>Implementation</u></p> <ul style="list-style-type: none"> ▪ Hard/Grey Infrastructure | | | | | |
| <p>Type of Strategy Approach</p> | <p>List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity)</p> <ul style="list-style-type: none"> ▪ Avoid ▪ Build Adaptive Capacity | | | | | |
| <p>Project Estimated Cost</p> | <p><u>Feasibility Study</u> - \$75,000</p> <p><u>Engineering/Design</u> - \$750,000 - \$900,000</p> <p><u>Implementation</u> - \$11,000,000 - \$14,000,0000</p> | | | | | |
| <p>Potential Implementation Funding Sources</p> | <p>Potential Sources for Project/Action Implementation</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> ▪ US Environmental Protection Agency (EPA)/US Dept. of Agriculture Rural Development (USDA-RD) - Closing America's Wastewater Access Gap Grant ▪ Southeast Rural Community Assistance Program (SERCAP) – Community Planning Program ▪ NC Dept. of Environmental Quality (DEQ) – Clean Water State Revolving Fund <p><u>Implementation</u></p> <ul style="list-style-type: none"> ▪ US Dept. of Agriculture Rural Development (USDA-RD) ▪ NC Dept. of Environmental Quality (DEQ) – Clean Water State Revolving Fund ▪ Community Development Block Grant – Infrastructure (CDBG-I) | | | | | |
| <p>Project Estimated Timeline</p> | <p>4-6 years (feasibility study/engineering/design and construction)</p> | | | | | |
| <p>Priority Rating</p> | <p>High</p> | | | | | |
| <p>Potential Submission for RCCP Phase 3</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 10%; text-align: center;">◆</td> <td style="width: 10%; text-align: center;">No</td> <td style="width: 40%;"><i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i></td> </tr> </table> | | Yes | ◆ | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> |
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| <p>Project Map</p> | <div style="background-color: black; height: 20px;"></div> | | | | | |



Tributary Improvements East of Isabella Avenue



TOWN OF WASHINGTON PARK

Tributary Improvements East of Isabella Avenue

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|--------------------------------|--|
| Project Summary | |
| Project Description | <p>Increase flood capacity along the tributary east of Isabella Avenue and Shorewood Drive. Assess effects of stormwater discharge from North Shores Drive.</p> |
| Project Scope | <p><u>Engineering/Design</u> Design solutions to increase the flood capacity along the tributary east of Isabella Ave. and Shorewood Dr. Potential projects include bioswales, stream restoration, floodplain restoration and/or wetland creation.</p> <ul style="list-style-type: none"> - Survey - Concept planning - Natural Resources Documentation - Engineering/Design - Permitting Due Diligence <p><u>Implementation</u> Construct project(s) to increase the flood capacity along the tributary east of Isabella Ave. and Shorewood Dr. The engineering/design process will determine specific improvements which could include bioswales, stream restoration, floodplain restoration and/or wetland creation.</p> <ul style="list-style-type: none"> - Permitting - Construction - Construction Administration - Construction Inspections |
| Hazard(s) Addressed by Project | <p>List Hazards Specific to the Community Which Impact the Project Location (Refer to Hazard Mapping)</p> <ul style="list-style-type: none"> ▪ Flooding (Riverine) |
| Type of Solution/Strategy Area | <p>List Strategy Area Column(s) from Matrix (e.g., Policy, Planning, Green and Hybrid [Nature-Based] Solutions, Hard/Grey Infrastructure)</p> <p><u>Engineering/Design</u></p> <ul style="list-style-type: none"> ▪ Green and Hybrid Solutions <p><u>Implementation</u></p> <ul style="list-style-type: none"> ▪ Green and Hybrid Solutions |

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| Type of Strategy Approach | List Strategy Approach from Matrix (e.g., Avoid, Accommodate, Protect, Retreat, Build Adaptive Capacity) <ul style="list-style-type: none"> ▪ Accommodate | | | | |
| Project Estimated Cost | <u>Engineering/Design</u> - \$150,000 <u>Implementation</u> - \$300,000 - \$650,000 | | | | |
| Potential Implementation Funding Sources | Potential Sources for Project/Action Implementation <u>Engineering/Design</u> <ul style="list-style-type: none"> ▪ NC Resilient Coastal Communities Program Phase 3 ▪ NC Environmental Enhancement Grant (EEG) ▪ Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant ▪ NC Land and Water Fund Grant ▪ NC Department of Environmental Quality Water Resources Development Grant (WRDG) ▪ NC Department of Environmental Quality 319 Grant ▪ National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund <u>Implementation</u> <ul style="list-style-type: none"> ▪ NC Resilient Coastal Communities Program Phase 4 ▪ NC Environmental Enhancement Grant (EEG) ▪ Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure in Communities (BRIC) Grant ▪ NC Land and Water Fund Grant ▪ NC Department of Environmental Quality Water Resources Development Grant (WRDG) ▪ NC Department of Environmental Quality 319 Grant ▪ National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund | | | | |
| Project Estimated Timeline | 2-4 years (engineering/design and construction) | | | | |
| Priority Rating | High | | | | |
| Potential Submission for RCCP Phase 3 | ◆ | Yes | | No | <i>Project must be a nature-based solution or hybrid solution to be considered for RCCP Phase 3.</i> |
| Project Map | | | | | |

