

# 3

## Phase 2: Planning, Project Identification, and Prioritization

### 3.1 Potential Solutions

Based on existing information, coordination with Town staff and other project teams, feedback from the Planning Board, and community input, a list of potential solutions was compiled, and each identified as:

- Infrastructure and nature-based measures
- Local policy and regulations
- Local and regional plans
- Education, awareness, and incentive programs

The community response to the project survey overwhelmingly (over 90% of survey respondents) supports infrastructure and nature-based projects for the Town to be more resilient. The matrix of potential solutions is included in Appendix B.

### 3.2 Prioritized Projects Portfolio

Many of the projects included in the project matrix were pulled from existing plans and initiatives. These projects aim to reduce exposure and sensitivity and increase adaptive capacity to hazards. It is

important to note that these other efforts included prioritization exercises for possible implementation.

The potential project solutions were evaluated based on feedback received from Town staff, the Town Council, and community input, in addition to how the potential solution addressed the critical asset type determined to be the most vulnerable. These projects were further characterized by high-level cost, advancement of prior efforts, technical soundness, co-benefits, long-term impact, and capacity to implement.

Below is the list of the prioritized projects based on community engagement and analysis in Phase 1 and 2 of the RCCP.

Project 1:

<b>Project Name</b>	Beach Nourishment – Project currently planned and funded
<b>Project Description</b>	Implement beach nourishment to improve and maintain the Town’s beaches as one of Duck’s most valuable natural resources.
<b>Hazard(s) addressed by project</b>	Erosion
<b>Type of Solution</b>	Natural Infrastructure
<b>Project Estimated Cost</b>	\$7,394,516
<b>Potential Implementation Funding Sources</b>	Dare County Beach Nourishment Fund, Federal and State Grants, Town Funds
<b>Estimated Timeline</b>	9/1/2022-10/31/2022
<b>Priority Rating</b>	High (1)
<b>Project Map</b>	See Appendix C

Project 2:

<b>Project Name</b>	Soundside Shoreline Management Study
<b>Project Description</b>	Identify ways to enhance the function and natural beauty of the Town’s soundside shoreline.
<b>Hazard(s) addressed by project</b>	Flooding, Erosion
<b>Type of Solution</b>	Natural Infrastructure
<b>Project Estimated Cost</b>	TBD
<b>Potential Implementation Funding Sources</b>	Grant funds, Town/County Match
<b>Estimated Timeline</b>	TBD
<b>Priority Rating</b>	High (2)
<b>Project Map</b>	Town’s soundside shoreline

Project 3:

<b>Project Name</b>	Neighborhood Stormwater Management Study
<b>Project Description</b>	Conduct a study to identify problem areas and make recommendations for solutions to localized flooding of the stormwater network.
<b>Hazard(s) addressed by project</b>	Flooding
<b>Type of Solution</b>	Infrastructure and Nature Based recommendations
<b>Project Estimated Cost</b>	\$103,000
<b>Potential Implementation Funding Sources</b>	Grant funds Town match
<b>Estimated Timeline</b>	FY 2022-2023 (12-month duration)
<b>Priority Rating</b>	High (2)
<b>Project Map</b>	See Appendix C

Project 4:

<b>Project Name</b>	Living Shoreline Opportunities
<b>Project Description</b>	Explore opportunities to implement living shoreline solutions within Duck.
<b>Hazard(s) addressed by project</b>	Flooding, Coastal and Soundside Erosion
<b>Type of Solution</b>	Natural Infrastructure
<b>Project Estimated Cost</b>	TBD
<b>Potential Implementation Funding Sources</b>	Grant funds Town match
<b>Estimated Timeline</b>	TBD
<b>Priority Rating</b>	High (4)
<b>Project Map</b>	TBD

Project 5:

<b>Project Name</b>	Sea Level Rise Analysis
<b>Project Description</b>	Analyze the effect of rising sea levels on the Town’s infrastructure to better prepare for mitigation and solutions to the problem.
<b>Hazard(s) addressed by project</b>	Sea Level Rise, Flooding
<b>Type of Solution</b>	Non-Regulatory Program
<b>Project Estimated Cost</b>	TBD
<b>Potential Implementation Funding Sources</b>	Grant funds Town match
<b>Estimated Timeline</b>	TBD
<b>Priority Rating</b>	High (5)
<b>Project Map</b>	Town-wide