



MEMORANDUM

Town of Nags Head

Planning & Development Department

To: Planning Board
From: Holly B. White, Principal Planner
Kate Jones, Senior Environmental Planner
Date: April 15, 2022
Subject: Update on Resilient Coastal Communities Program

***Items in red indicate updates.

BACKGROUND

Earlier in the year, the Town was notified that it was accepted into the [North Carolina Resilient Coastal Communities Program](#), a technical assistance program under the Division of Coastal Management that endeavors to “allow communities to develop an in depth understanding of their risk to coastal hazards. As a result, communities will be better prepared to take advantage of various future implementation funding opportunities.”

The objectives of the N.C. Resilient Coastal Communities Program include:

- Address barriers to coastal resilience in North Carolina at the local level, such as limited capacity, economic constraints, and social inequities.
- Assist communities with risk and vulnerability assessments and developing a portfolio of planned and prioritized projects.
- Advance coastal resilience projects to shovel-readiness, or ready for implementation; and
- Link communities to funding streams for project implementation.

The North Carolina Resilient Coastal Communities Program Planning Handbook is available [HERE](#) and describes the Phases of the program.

VHB has been assigned as the Town’s consultant under this Program, and the Town’s efforts under the development of the [VCAPS Report](#), [Comprehensive Plan](#), and [Hazard Mitigation Plan](#) have been recognized as satisfying the many of the initial requirements of the program.

PROJECT UPDATE

Candice Andre, Senior Project Manager with VHB, will be virtually attending the Planning Board meeting to give an update on the RCCP project as well as seek feedback from the Planning Board. The project team continues to meet with Town staff and project teams from other Town efforts and initiatives that relate to resiliency.

A community engagement survey was conducted and approximately 157 people participated in the online survey. The most concerning hazards to participants were hurricanes and tropical storms followed by beach erosion and flooding. Participants

further indicated that the Town should focus on infrastructure and nature based measures such as stormwater improvements, living shorelines, rain gardens, and beach nourishment to be more resilient. A complete analysis of the survey results is summarized in the attached document.

The team developed and presented the interactive map of critical assets and natural infrastructure in the Town at the last Planning Board meeting. Town staff have reviewed the viewer and provided feedback to the consultant in addition to the feedback provided by the Planning Board at their last meeting. The team continues to update the viewer based on feedback. The interactive critical assets and natural infrastructure map viewer can be viewed [HERE](#).

The team will present a list of potential projects developed from existing plans at the meeting. The Planning Board will be asked to review the project list and suggest potential projects where there could be overlooked gaps.

Project materials can be viewed on the Town's website [HERE](#).

Staff and the consultant will be available to answer any questions or discuss concerns.

Town of Nags Head Resilient Coastal Communities Program

Town Planning Board Meeting
APRIL 19, 2022

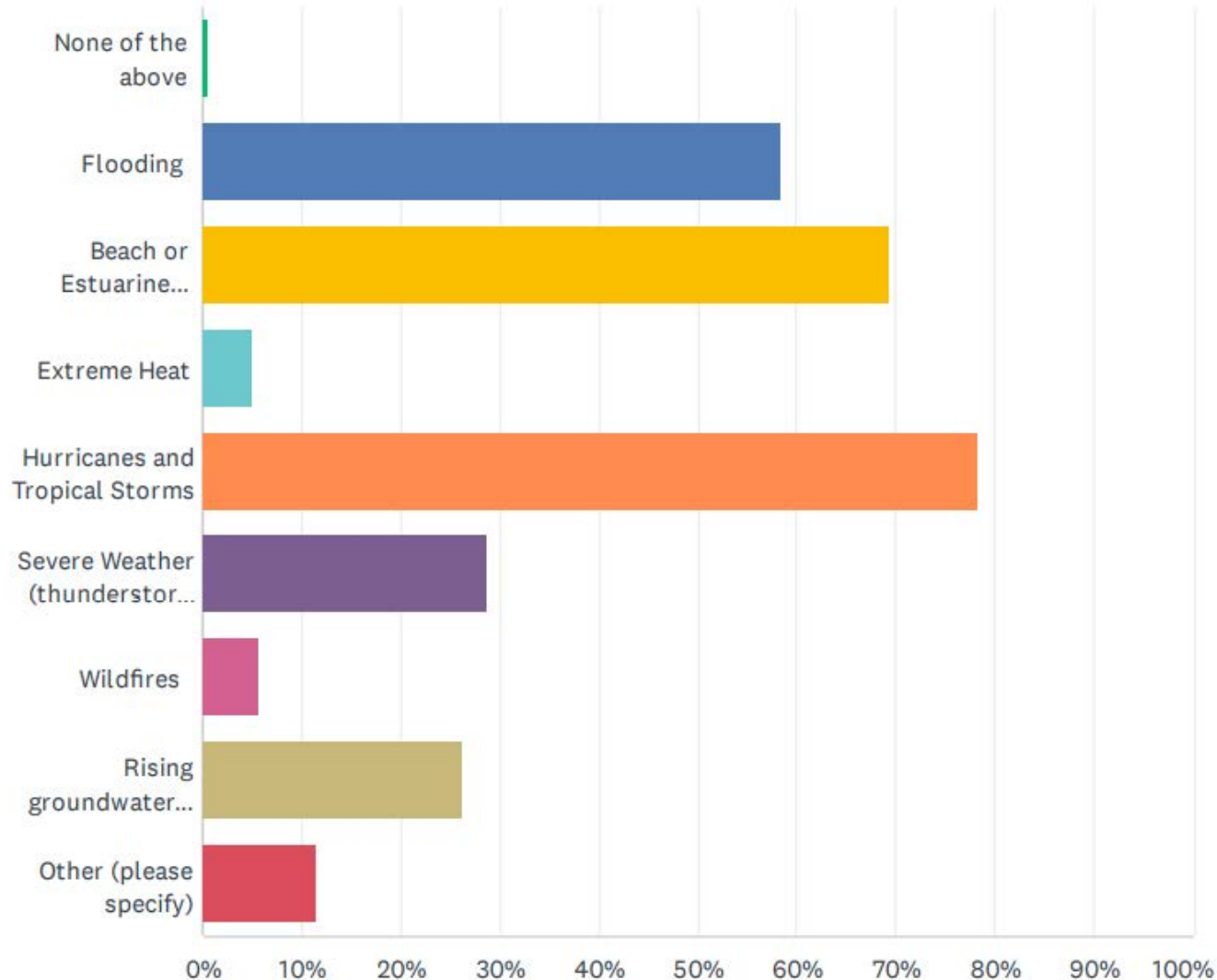
Presented by: Candice Andre, AICP



Community Engagement

- Advertised through Town website & social media
- 157 responses
- Most respondents: full-time resident or “own property and stay at my property periodically”
- **74%** of respondents have “experienced or been **impacted by a disaster** caused by a natural hazard (hurricane, nor’easter, flood, erosion, storm surge)”
 - Mostly hurricanes (close to 80%), nor’easters, flooding
- **Over 70%** of respondents are “**concerned about changes to the climate** including increased frequency and intensity of storm events and rainfall or rising groundwater levels”

Most Concerning Hazards



#1- Hurricanes & Tropical Storms

#2- Beach/Estuarine Erosion

#3- Flooding

Critical Assets Most Susceptible to Hazards

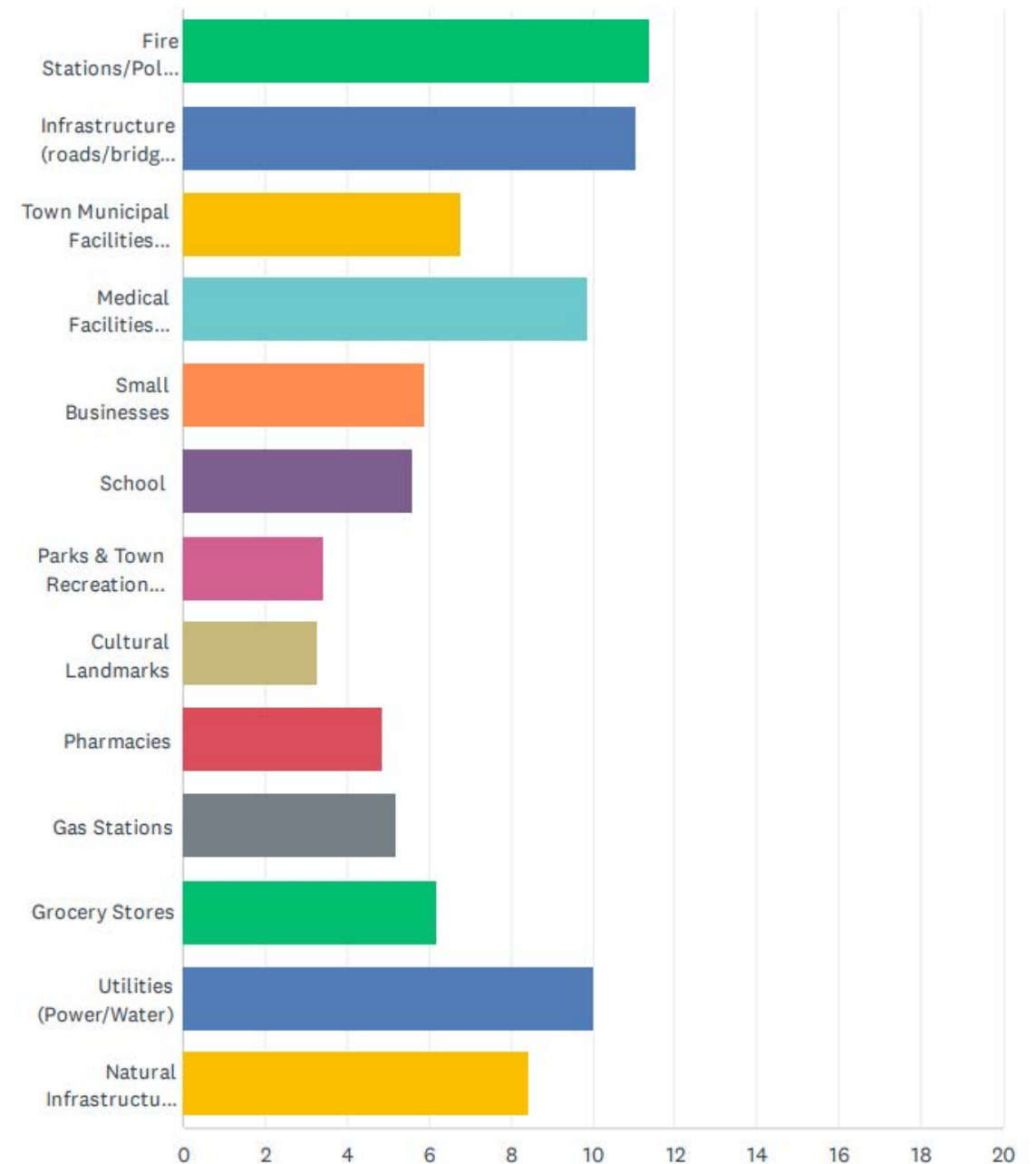
1. Environmental (ocean and estuarine shorelines, wetlands)
2. Infrastructure (roads, bridges)
3. People
4. Economic (local businesses)
5. Medical/Emergency Resources (hospital, nursing home, fire/police/EMS)
6. Cultural/Historical (state parks, local landmarks)
7. Municipal (parks, bike paths, municipal buildings)

Importance per Respondents

- **More than half** of the respondents rated the following as extremely important
 - Protecting critical facilities (fire and police station, hospital)
 - Managing development in areas known to flood
 - Protecting and reducing damage to utilities
- **Almost half** of the respondents rated “enhancing the function of natural resources to aid in property protection while preserving habitat” as extremely important

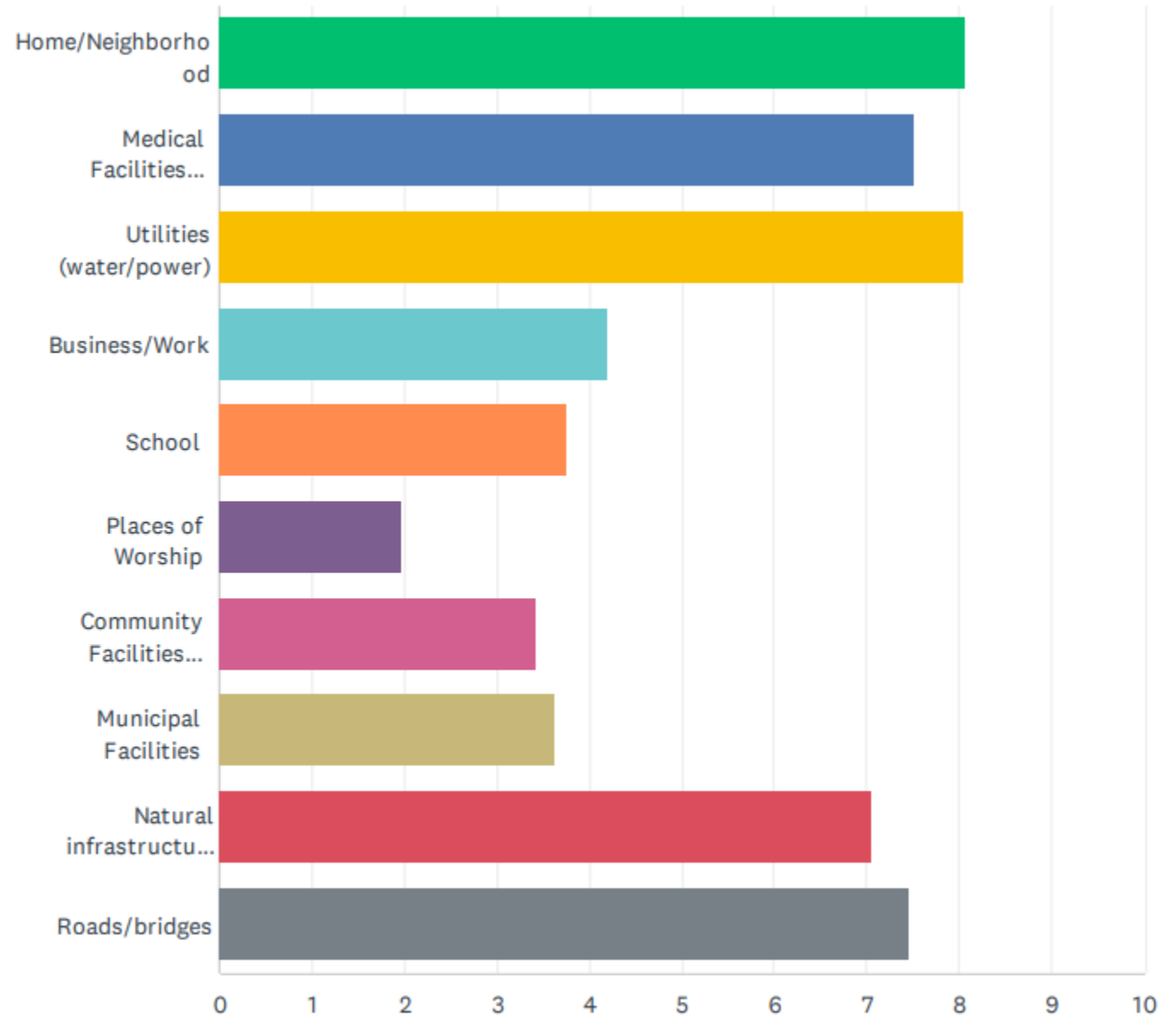
Most Important Community Assets

1. Fire stations/Police Stations/EMS
2. Infrastructure
3. Utilities
4. Medical facilities

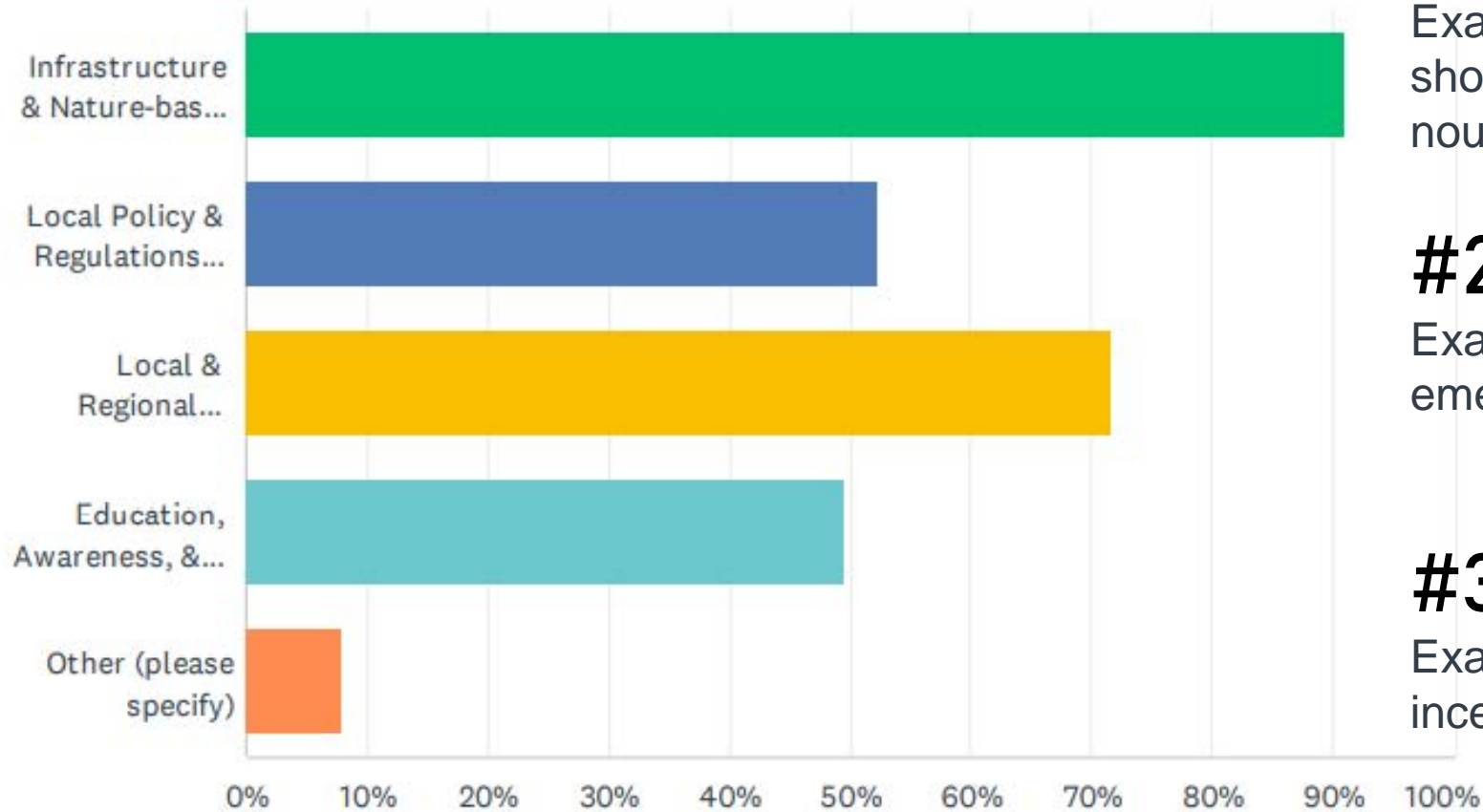


Places Most Interested in Protecting

1. Home/Neighborhood
2. Utilities
3. Roads/bridges
4. Medical facilities
5. Natural infrastructure



Types of Projects/Efforts the Town Needs to be More Resilient to Natural Hazards



#1- Infrastructure & Nature-based measures

Example- stormwater improvements, living shoreline project, rain garden projects, beach nourishment.

#2- Local & Regional Plans

Example- stormwater infrastructure plan, emergency operations plan

#3- Local Policy & Regulations

Example- explore policies, regulations, or incentives to promote resiliency

Top 3 Community-Wide Activities to Pursue

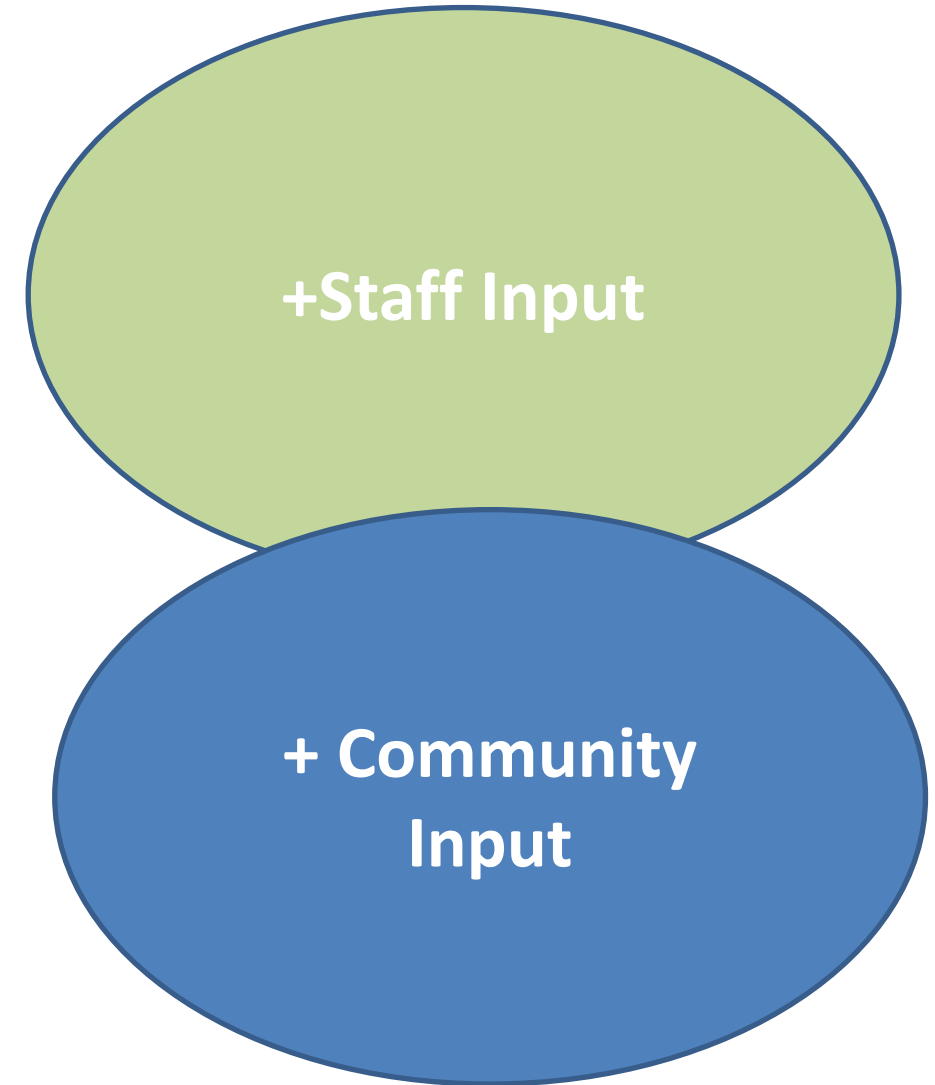
1. Prevention Planning
2. Emergency Services
3. Natural Resource Protection

Potential Solutions Project List

- Stormwater projects- various
- Stormwater Master Plan
- Emergency flood
- Beach nourishment
- Sea level rise scenarios
- Resiliency & Hazard awareness education
- Living shoreline education
- Water quality/septic health education & giveaways
- Estuarine Shoreline Management Plan Implementation- 3 priority projects
- Watershed Plan
- Infrastructure loss policy (Roads/Septic/Utilities)
- Repetitive loss mitigation
- Land prioritization study
- Open space preservation
- Seasonal population estimates
- Water quality/groundwater Loggers
- Future conditions septic viability Master Plan
- Historical septic system data collection
- GIS Data Platform- septic
- EV Chargers & equipment

Project Prioritization

- Informal cost-benefit (high, medium, low)
- Advances prior efforts
- Site specific
- Interdisciplinary
- Technical soundness
- Co-benefits
- Long-term impact
- Capacity to implement



List of Prioritized Projects

Project Name	<i>Come up with a brief title for the project</i>
Project Description	<i>Describe project, including information gathered during project development</i>
Hazard(s) addressed by project	<i>List hazards specific to this program which impact the project location</i>
Type of Solution	<i>Infrastructure, Plans and policies, Ordinances, Non-regulatory programs, Other (describe)</i>
Project Estimated Cost	<i>Estimate total cost of project</i>
Potential Implementation Funding Sources	<i>Identify potential sources for project/action implementation</i>
Projected Estimated Timeline	<i>Estimate length of time project will take to complete and any expected delays in the timeline</i>
Priority Rating	<i>High, Medium, Low</i>
Project Map	<i>Provide a map of the project site</i>

Next Steps

- Complete Resilient Strategy deliverable (end of April 2022)
 - Vulnerability Assessment
 - Project Prioritization
 - List of Priority Projects (at least 5)
- Complete application for Phase 3
 - June 2022
 - 1 Priority Project from Phase 2 List

Questions

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