Nantucket Coastal Resilience Plan – Mid Project Summary Report, April 2021

The Nantucket Coastal Resilience Planning process launched in October 2020 and will extend through September 2021. The Project Team consists of lead consultants Arcadis with sub-consultants Stoss, One Architecture, and The Craig Group. Initial phases of the project included community engagement and an island-wide risk assessment for coastal and near-coastal areas that are threatened by coastal flooding and erosion, threats that will grow with projected sea level rise in the decades ahead.

To summarize the work completed to date, the Project Team is releasing a Mid-Project Summary Report. The report documents the primary risks associated with flooding and erosion today and how these risks will grow in the decades ahead. By assessing these risks, Nantucket can understand the costs associated with inaction and establish a baseline for what we need to do to adapt as a community. Example adaption and resilience building measures could include new infrastructure (both traditional and green infrastructure), guidance and education for homeowners, and policies on building in flood prone or eroding areas. Specific recommendations will be developed through the next stages of the planning process.

The coastal risk assessment generated a number of key preliminary findings, including:

- At least 3,438 structures on Nantucket are at risk of coastal flooding or erosion through 2070. These risks result in $1.2 Billion in cumulative expected damages over that period. Of these at-risk structures,
  - At least 86% are residential, accounting for 68% of the total risk
  - At least 7% are commercial, accounting for 26% of the total risk
  - At least 41% are historic, accounting for 64% of the total risk
  - At least 7% support tourism, accounting for 26% of the total risk
- In addition, coastal flooding and erosion pose risk to essential infrastructure and services across Nantucket, including
At least 33 community facilities that ensure public safety and provide enjoyment and education for the community, with over $46 Million in expected damages

Approximately 29 miles of public and private roads that may be out of services at monthly high tide (today’s high tides will increase over time with sea level rise) and 23 miles at risk of loss due to erosion by 2070

Steamboat Wharf, a critical transportation facility, could be partially cutoff from access roads during monthly high tide by 2030 with even greater access concerns by 2050

Approximately, 1,200 acres of protected open space could be lost to erosion by 2070

These impacts will pose great costs to the Nantucket community over time and threaten to disrupt quality of life for all who live and visit Nantucket today and in the future. This is why we are investing in a Coastal Resilience Plan to provide the foundation for adaption and long-term resilience.

In addition to the risk assessment, the Mid Project Summary Report outlines key themes emerging from the community engagement that has taken place to date. The Project Team met with hundreds of people across Nantucket including numerous boards, committees, and commissions, as well as civic and advocacy organizations. Key priorities raised during the engagement included the needs to:

- Develop strategies for protecting the downtown area
- Align adaption measures with the historic and natural character of Nantucket
- Develop strategies for addressing erosion issues, particularly on the south shore
- Increase public awareness and understanding around coastal risks
- Protect natural resources and habitat across the island
- Develop new policy-based approaches to guide future development