Climate Adaptation Action Survey Summary Report January 15, 2024

Background

The Pleasant Bay Alliance sponsored an online survey to gain community input into climate resilience issues of concern and gage response to various optional resilience strategies.

The survey was available on the Alliance website, from October through December, 2023. The survey was publicized through a media release, and through outreach to community stakeholders and through member outreach to other partnering organizations, including Friends of Pleasant Bay, Friends of Chatham Waterways, Orleans Pond Coalition, and Pleasant Bay Community Boating. One hundred sixty-four (164) people responded to the survey.

Q1. Local Residents and visitors were asked to indicate how they use and enjoy Pleasant Bay. Participants were asked to select all applicable activities from a list provided, and/or indicate other activities not listed.

The top three activities were beach walking (76%), enjoying the view from Route 28 (59%), and kayaking/canoeing/paddle boarding (55%), where more than a half of respondents enjoy these activities. Walking trails (50%) swimming (48%) and beach-going (46%) are activities enjoyed by roughly one-half of respondents. One quarter to more than one-third or more enjoy sailing (43%) use of town landing or ramp (32%), power boating (31%), fishing (27%), shellfishing (26%) or hold a mooring permit (27%). Almost one-third (30%) of respondents live on or near the waterfront.



Note: red bars denote use selected by more than half of respondents

Q2. Sea level is expected to rise in Pleasant Bay in the decades ahead and the intensity of storms is expected to increase. Please rate your level of concern about the following conditions that could result if sea level and storm intensity increase as expected.

Three-quarters or more of respondents are somewhat or very concerned about the following: loss of salt marsh (90%), loss of eelgrass (88%), shoreline erosion (85%), loss of public beach (79), loss of shellfishing areas (76%), loss of natural sediment movement (74%). Changes to these natural features rated of higher concern than loss of access for swimming (64%), boating (67%), overwash of roads (63%) and emergency services (63%), each of which are somewhat or very concerning to two-thirds of respondents.



Note: red bars denote somewhat or very concerning to three-quarters or more of respondents

Other areas of concern:

- Impacts to natural resources and loss of public access resulting from effects of shoreline protection/stabilization measures
- Decline of the natural productivity of shellfish resources due to pollution of water quality and overfishing; and the interference with Tribal Harvesting Rights
- Salt water intrusion of groundwater resources
- Cost of mitigation efforts to address damage
- Clear cutting of shoreline property, and resulting loss of views, increase in erosion and run-off
- Pollution from septic systems near the shoreline
- Loss of estuarine habitat
- Over-regulation due to climate change concerns

Q3. Respondents were asked to indicate whether they support or don't support various adaptation measures, or don't know. All measures had more than half of respondents in support, and all but two had two-thirds or more in support.



Note: red bars denote support from three-quarters or more of respondents

Other resilience measures respondents noted:

- Restrict development and redevelopment in the flood zone and require setbacks or buffers close to the shoreline
- Purchase land within close proximity of Pleasant Bay
- Replenish barrier islands and tidal flats to protect mainland shoreline
- Limit development in threatened areas, let nature take its course
- Un-harden shoreline and un-develop lots
- Encourage homeowners wishing to sell to sell properties close to the water to the Town
- Reduce fossil fuel use; restrict boat motors

Q4. Respondents were asked to pick their top three resilience priorities from among the list of measures in Q3.

The top three resilience priorities are: purchase of land to allow salt marsh to migrate landward (59%), restrict access to shoreline areas to restore salt marsh (43%), restrict access to areas of waterways to restore eelgrass (37%), and increasing stringency of shoreline management regulations to reduce hardening (37%). These priorities track the priority resilience issues of concern identified in Q2 and the most frequently supported resilience measures identified in Q2.



Note: red bars denote highest rated priorities by percentage

Q5 Preferred ways to receive information.



Q6 Primary zip code.

The majority of survey respondents reported a zip code in one of the Pleasant Bay Alliance communities as their primary zip code.

