Long Range Planning for Sea Level Rise

Scituate, Marshfield and Duxbury Coastal Hazard Adaptation Workshop





A District Local Technical Assistance (DLTA) funded project

KEY PAD QUESTIONS

Let your voice be heard!

This exercise is optional and anonymous

What is your favorite Fall activity?

Apple picking

 23%

 Attending children's sports games
 3%
 Gardening

 19%

 Cleaning the gutters

 13%

 Other
 42%

Which category below best describes you?

1. Resident

56%

2. Local business owner

3%

3. Resident and local business owner

11%

4. Municipal or elected official

22%

5. Other

Where do you live?

1. Scituate

25%

2. Marshfield

50%

3. Duxbury

7%

4. Elsewhere

14%

5. Other

How long have you lived in Scituate, Marshfield, or Duxbury?

0 - 1 year 2% 2-5 years 2% 6 – 10 years 11-20 years 37% 5. 20+ years 35% I live in another municipality 17%

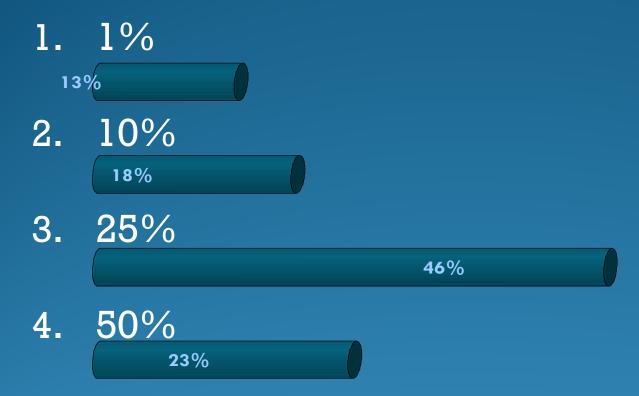
What is your age?

```
0 - 19
 0%
     20 - 29
   10%
     30 - 39
 8%
     40 - 49
4.
      13%
     50 – 59
5.
                       26%
     60 - 69
6.
                              31%
     70 or better
7.
      13%
```

Which of the following natural hazards do you think is the highest concern/threat to your neighborhood?

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1. Fire
8%
2. Flooding
73%
3. Earthquake
0%
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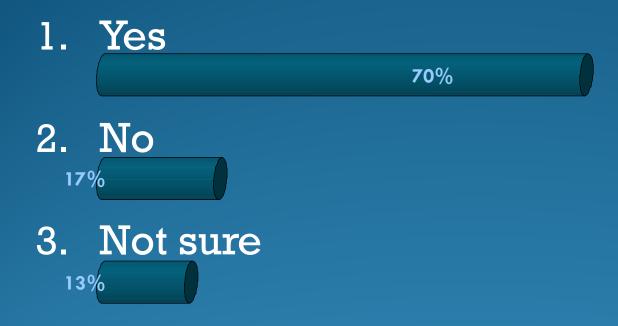
If a home is in a mapped 100-yr storm area, what is your risk of experiencing this level of storm during a typical 30-year mortgage?



Have you taken actions in the past to minimize the risk of damage to your home during storms?

Yes
 84%
 No
 16%

Over time, have you noticed changes such as movement in the high tide line or stronger ocean waves?



Over time, have you observed changes such as changes in the beach profile or changes to the land in front of sea walls?

1. Yes 89%

2. No

3. Not sure

Are you familiar with potential impacts of a changing climate along the coastlines?

1. Very familiar

- 2. Somewhat familiar
- 3. Not familiar

How significant do you think the potential impacts of Climate Change could be along the coastlines?

1. Very significant

- 2. Moderately significant
- 3. Somewhat significant
- 4. Not significant
- 5. Not sure

If sea levels continue to rise, which of the following do think is the most appropriate response along the coastlines?

- 1. Build stronger seawalls and coastal structures to protect existing properties
 - 9%
- 2. Accommodate new conditions by elevating roads and buildings
- 3. Purchase open space and undeveloped land
- 4. Move roads and buildings back from vulnerable areas
- 5. A mixture of the responses above

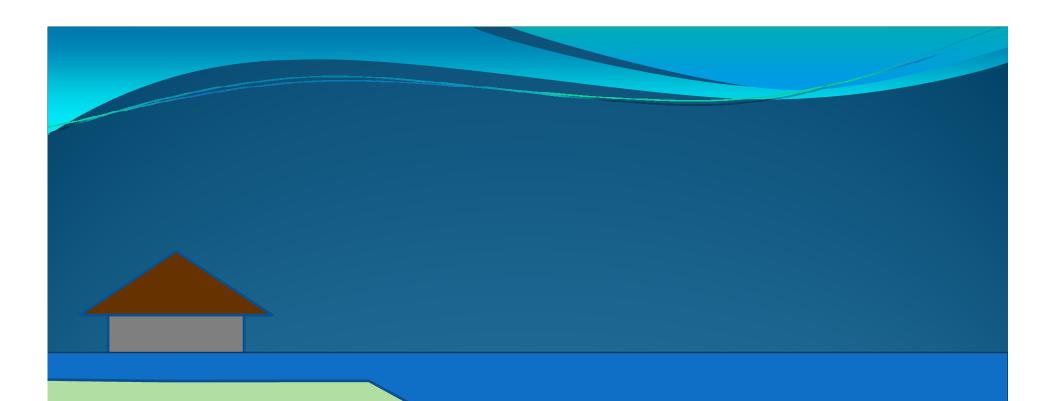
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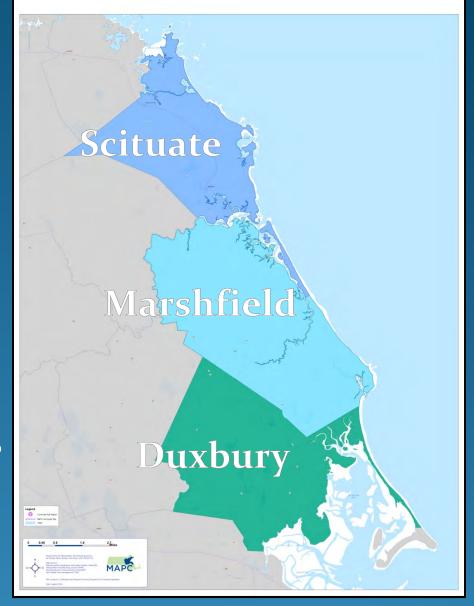
As it continues to rise, what are the potential impacts to infrastructure and property? To our natural resources? How do we respond?

The Sea Level has been rising

Modified from: Adapting to Sea Level Rise Presentation, Slovinsky/Lockman

Background

- Exploring current and potential future coastal vulnerabilities
- Identifying a range of possible adaptation options
- Inventorying resources that could support adaptation strategies



The Coastline now and in the future

Existing conditions for Coastal Structures



The Coastline now and in the future

Awareness of natural coastal features

