



Enjoying, Restoring, & Protecting the Ipswich River Bank:

A Student
Informational Meeting



Overview Of Today's Presentation:

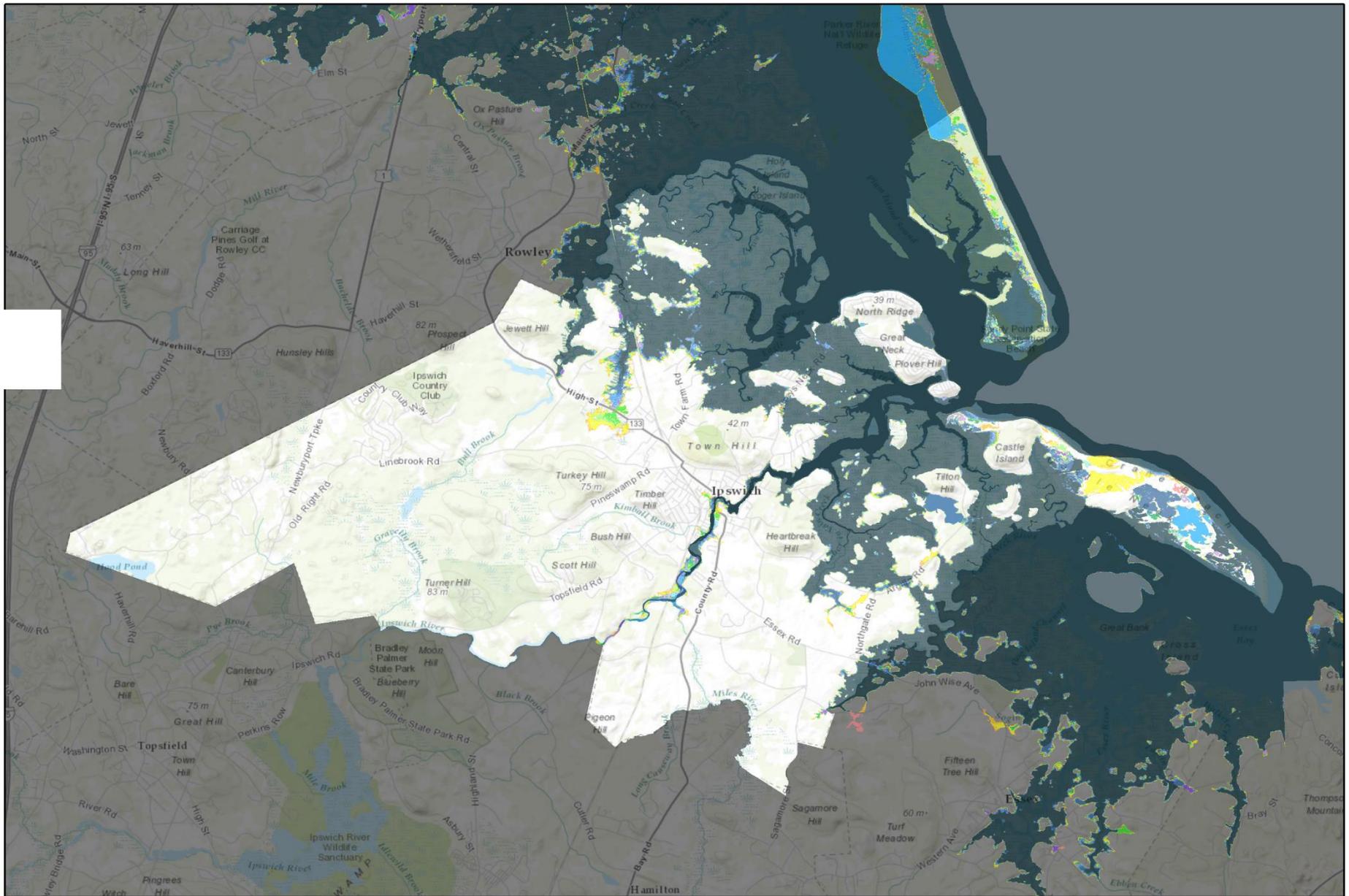
1. Impacts of climate change on coastal areas;
2. CZM Grant Project overview and project goals;
3. Findings on causes of coastal bank erosion;
4. How you can help reduce erosion of coastal bank;
5. Questions and comments.

Impacts Of Climate Change On Coastal Areas

- Warmer weather causes stronger storms, increasing flooding and erosion;
- Sea level rise increases flooding and erosion;

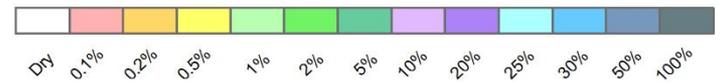


King Tide 10-19-2016

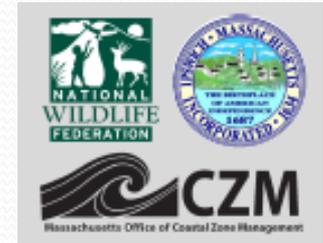


Town of Ipswich, Massachusetts

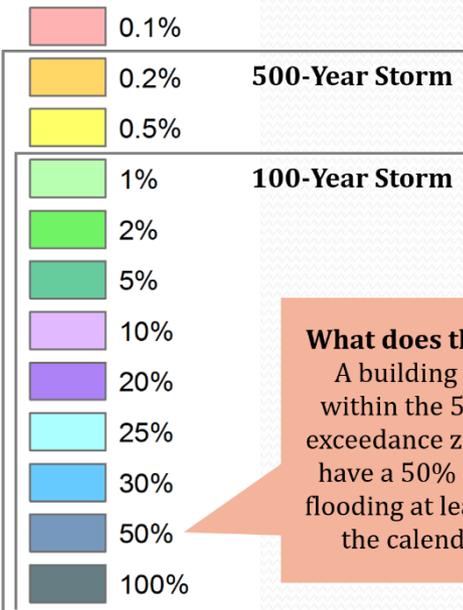
2070 Inundation Probability



Coastal Inundation Maps



Percent Risk of Coastal Flooding



What does this mean?

A building that lies within the 50% flood exceedance zone would have a 50% chance of flooding at least once in the calendar year.

Importance of Coastal Bank

- Coastal Bank is important because it protects people and infrastructure (water & sewer pipes, roads, utilities poles) from storm damage;



Importance of Coastal Bank (cont.)

- Hard structures like seawalls can protect a small area, but cause more erosion in other areas, whereas vegetated bank can protect bank without causing erosion elsewhere.



CZM Grant Project Overview and Project Goals

In June 2016, Ipswich awarded a \$63,000 grant from MA Coastal Zone Management (CZM) for:

- assessing erosion of coastal bank that threatens municipal infrastructure (sewer and water pipes, electric lines, roads), and
- exploring the possibility of nature-based solutions to stabilize bank.

Six Areas of Concern (AOCs) Identified:

1. Water Street from Ipswich Outboard club to Green Street Bridge;
2. Behind Town Hall at Green Street Bridge;
3. Along Riverwalk;
4. At Riverwalk at County Street Bridge;
5. Ipswich sewer under the River;
6. Riverwalk at EBSCO dam.



Coastal geologists and engineers have identified the following primary causes of erosion in the area

- Increased flooding (coastal and inland);
- Inadequately-managed rainwater and snowmelt running off roadways (called stormwater);
- Walking over the river bank and its associated wetlands to reach the water;
- Launching and storing small boats on coastal bank and wetlands.

How You Can Help Reduce Erosion Of Coastal Bank

- A. Never store boats on coastal bank. State regulations prohibit the storage of boats on tidal flats, salt marsh, and coastal bank. As of March 1, 2017, the Town is enforcing this prohibition.



How You Can Help Reduce Erosion Of Coastal Bank (cont.)

B. When accessing the river for canoeing, kayaking, or paddle boarding, launch at a public boat launching area whenever possible. Carry, don't drag, your boat. Step on rocks, not plants.

C. When walking anywhere along the river, always use dedicated public access areas to reach the water. Do not step on fragile wetland plants or tree roots.



How You Can Help Reduce Erosion Of Coastal Bank (cont.)

- D. Support the Ipswich Waterways Advisory Committee's efforts to improve public access to the river for non-motorized boating and other recreational uses.
- E. Get involved in invasive plant removal projects undertaken by conservation groups such as Mass Audubon and the Ipswich Open Space Program.



How You Can Help Reduce Erosion Of Coastal Bank (cont.)



F. Prevent stormwater runoff from rain and snowmelt by reducing pavement and other impervious surfaces. Establish vegetated areas that help water soak into the ground.



G. Always pick up dog waste and dispose of it properly.

Thanks for your attention.
Any questions?



For more information, go to: www.pie-rivers.org/ipswichriverbankproject

