Wetland Protection for New Castle





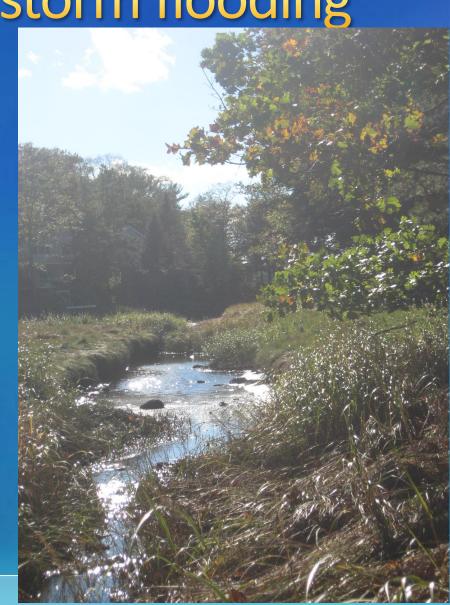
Tracy Degnan

Rockingham County Conservation District

April/May 2016

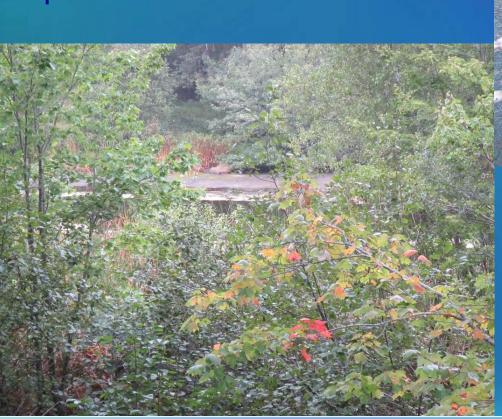
New Castle is vulnerable to sea-level rise and storm flooding

- Inform and engage about importance of wetlands and buffers
- Designating Prime Wetlands and 100' buffer to better protect Lavenger Creek
- Reclassify 4 contiguous freshwater wetlands buffers to better handle additional water flow



Wetland Functions

 Provide flood control by storing floodwaters and reducing downstream flood peaks





- Trap sediments and reduce impacts of excessive nutrients
 - Provide wildlife and fisheries habitat

Wetland Functions

 Protect upland areas from erosion by absorbing and dissipating impacts of storms or wave events



- Filter out silt and pollutants
- Aesthetic and recreational values

Wetland Buffer Functions

- Prevent Erosion
- Stabilize stream banks
- Shade streams/wetlands
- Protect wetlands integrity





- Remove silt and pollutants
- Maintain stream/wetland ecology
- Provide flood control
- Wildlife habitat and corridors

Salt Marshes Flood Storage and Migration



Important to protect areas to allow salt marsh to potentially migrate inland and to handle flood waters.

Good low-cost strategy to protect property and assets.

Lavenger Creek saltmarsh, 2015

Water Quality and Habitat Protection

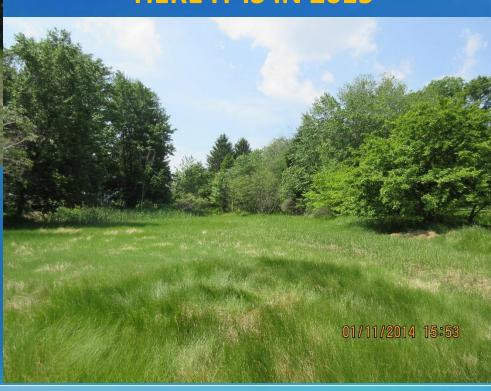


Property values are preserved when adjacent water bodies and natural resources are protected

RIVER ROAD RESTORED IN 2012 HERE IT IS IN 2015

Degraded marshes cannot:

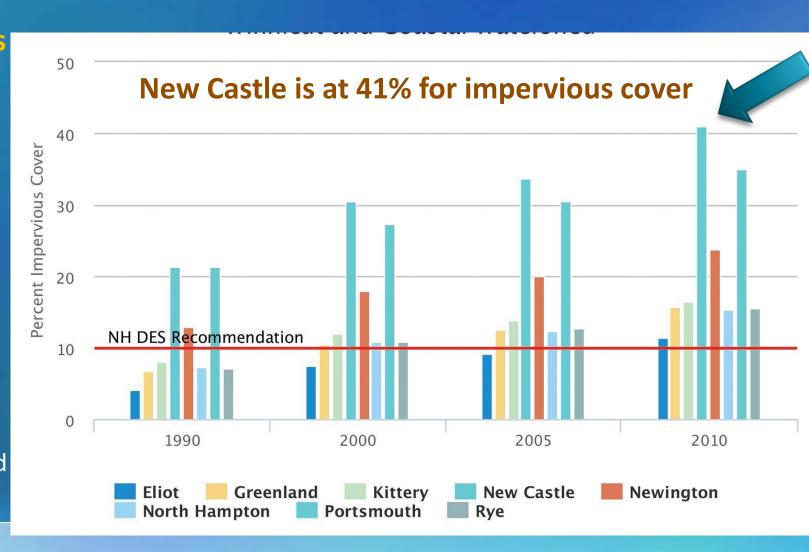
- Store flood waters
- Absorb stormwater
- Remove pollutants



Why are Wetland Buffers Important?

Impervious Surfaces:

Structures that prevent rain water from penetrating into the ground, such as parking lots, roads, patios, sidewalks and roofs.





Impervious Surfaces in New Castle

41% impervious cover

The more impervious surfaces

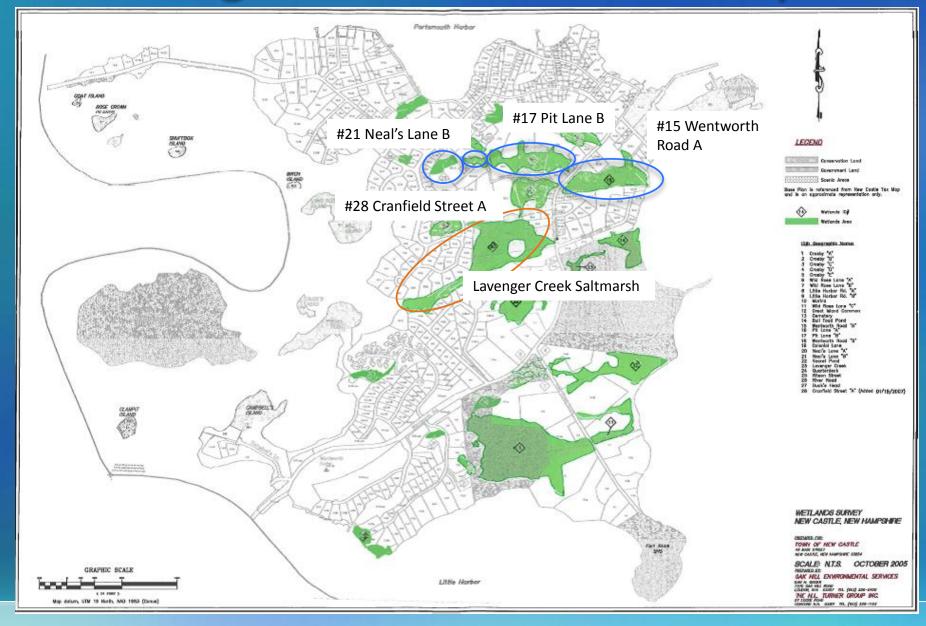
- the lower the water quality of the local wetlands and streams
- the less natural/green surface area available to handle flooding events



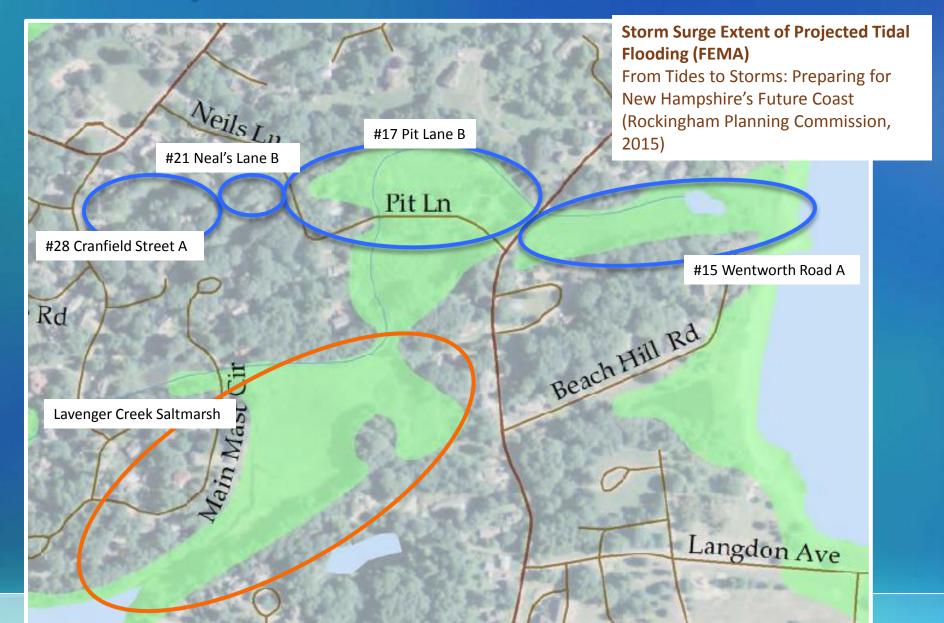
Good news for New Castle....



Existing 2005 Wetlands Survey



Why is New Castle Vulnerable?



Designation of Lavenger Creek as a Prime Wetland

Wetlands of highest quality and ecological function. Lavenger Creek provides the following benefits:

- Protects shoreline from eroding
- Clean water
- Important wildlife habitat rare plants
- Healthy scenic landscapes
- Flood absorption



Prime Wetlands Designation

Does not impact existing and grandfathered structures

Normal homeowner activities such as gardening, mosquito control, lawn maintenance, brush cutting etc., are not regulated

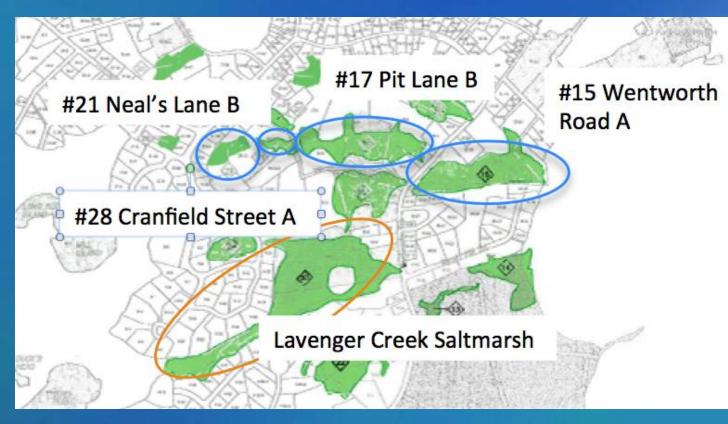
Local Conditional Use
Permit within the 100'
wetland buffer – already
exits & NH DES Standard
Dredge & Fill Permit, with
Standard Review time



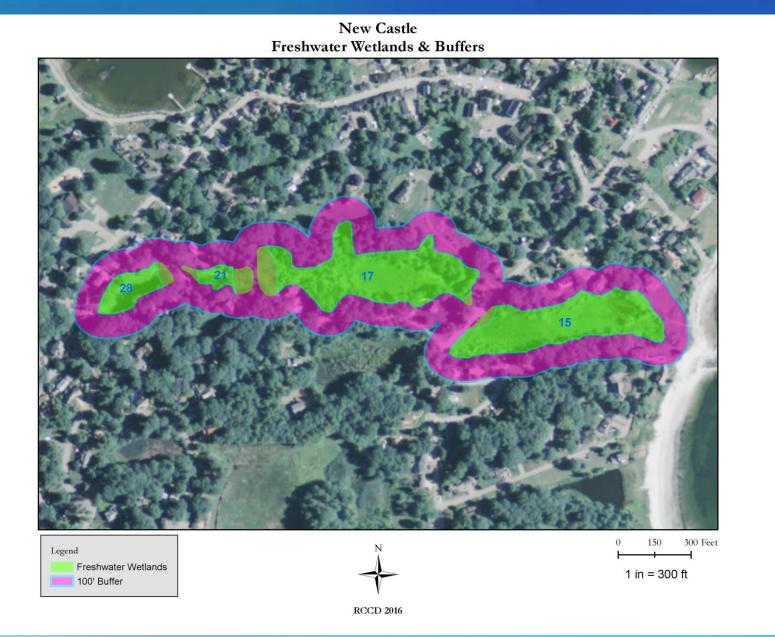
Connectivity to Freshwater Wetlands

This area is vulnerable to flooding from storm surge and sea-level rise.

Places island at risk of road closure and prevents access by emergency responders.



Contiguous Freshwater Wetlands



Action Needed by Community

Anticipate moving proposed warrant articles for vote by all residents.

These actions are important to protect public resources, critical infrastructur e and private property



Acting today will provide cost savings tomorrow and reduce flood risks.

3 Public Information Workshops

How can New Castle be better prepared for coastal flooding and extreme weather events?

- Learn what wetland buffers are and why they are critical to protect against the impacts of impervious surfaces, nutrients, and erosion.
- Understand how wetland buffers can mitigate the potential damage of extreme weather events and flooding.
- Learn about the Lavenger Creek salt marsh area as an example of a pristine wetland resource, and ways to help keep it unspoiled.
- Review existing wetland regulations, and updated recommendations from a 2015 analysis.







The New Castle Conservation Commission will be hosting multiple workshops this spring. We encourage everyone in our community to attend.

Sunday, April 3rd at 4pm at the New Castle Public Library

Tuesday, April 12th at 7pm at the New Castle Public Library

This meeting will include a preparedness activity sponsored by FEMA as part
of America's PreparAthon – get tips on how to survive a natural disaster!

Monday, May 2nd at 4pm at the Portsmouth Yacht Club



For more information, please contact Theresa Walker of the Rockingham Planning Commission at 603-534-3913, twalker@rpc-nh.org
or Tracy Degnan at the Rockingham County Conservation District at 603-679-2790 x 59; rccdted@comcast.net