# PREPARING FOR CLIMATE CHANGE IN RYE GAINING INSIGHTS AND CHARTING A COURSE

"Given the trends in increased frequency of storms, coastal flooding, and sea-level rise, how might these impacts affect (people, infrastructure or natural resources) in Rye?"

## Summary of group discussions from Project Kick-off April 1, 2014 6:30-8:30pm – Rye Junior High School

Highlights indicate issues that will be addressed in Tides to Storms (TTS).

#### (11) Freshwater resources

- Water supply on 1A and public health (6)
- Water quality, supply, and aquifer (3)
- Erosion of freshwater streams NH DES is studying Fluvial Erosion Hazards.
- Salinity affecting fish and salt water intrusion

#### (8) Impacts to Salt Marshes

- (5) More runoff into marshes coupled with increase in impervious surface, more contamination – Not a significant issue if adequate flushing of marshes.
- (1) Upland changes to marsh and wetlands
- (1) Increase wetlands flooding
- (1) Marshes may flood and change over time
- People pressure on existing natural resources
- Marsh buffer change and limitation
- One participant indicated that of Rye's approximately 36 square miles of land there are about 24 square miles of marsh, which is a resource for Rye.

### (7) Roads (Wash outs, temporary loss of access, long term costs of repair)

- (1) Beach Club road flooding
- Bridge Impacts (both State and locally controlled bridges)
- Marsh Road inundation.

#### (6) Public Health

- (6) Public health resulting from septic issues
   Future action
- **(5) Sea walls –** Refer to Living Shorelines Conference, 12/11/2014. Also, this area is something for an engineering study.

- (3) Incoming tides undermining earthen berms (shale piles) tidal drainage that accommodates the changing tides.
- (1) Damage to Shale Piles, sea walls and earthen berms
- (1) Jenness Beach impacts, degradation of the seawalls
- Rye Harbor infrastructure—the jetty/sea walls: the improvement of the jetty in light of sea level rise...potentially raising it; possible harbor dredging
- Earthen berms are damaged by tidal activity and storms

#### (4) Stormwater management Future action

- (2) Water runoff intensity
- (1) Pollution
- Stormwater management infrastructure currently stressed; Increased upland flooding due to clogged stormwater devices.
- Culvert Inundation, especially the Eel Pond culvert; Eel Pond to harbor drainage system is ineffective.

#### (4) Beach erosion

- Changes in recreational use of beaches will we lose them or will they move?
- Changes in shoreline habitat, shifting of sand bars
- Harbor

#### (4) Economic loss

- (1) Seafood, shellfish fewer available, harder to reach, increased \$
- Fishing industry
- Business might help but Rye has less of a business community – See Roger Stephenson

- Less beach, fewer tourists? See Roger Stephenson
- Tax base and flooding, loss of access, taxes (increase)
- (3) Nuclear plant risks? Evacuations See Rye Emergency Management plans. See Newfields PING alert system.
- (1) Already poor cell coverage (voters not for towers) See Broadband Effort. Follow-up for

Planning/Zoning and Emergency Management efforts.

(1) Food supply (increase? Decrease?)
Refer to Food Solutions New England and new plan,
NH Drought Plan, Seacoast Eat Local, Energy
Committee suggested a Food/Ag Committee in draft
Master Plan.

#### How was this summary made?

The number in parenthesis is the number of sticky dots or "votes" the item received at the April 1<sup>st</sup> meeting. The "votes" were combined into broader categories, shown in bold. In some cases, the category was a topic identified by participants and received votes in addition to the bulleted items. For additional context, bulleted items without a "vote" are included that were related to that category.