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

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

The number in parenthesis is the number of sticky dots or "votes" the item received at the April 1st meeting. The "votes" were combined into broader categories, shown in bold. In some cases, the category was a topic identified by participant and received votes in addition to the bulleted items.

Natural Resources

Topics and Areas of Concern

Impacts to Salt Marshes (8)

- (5) More runoff into marshes coupled with increase in impervious surface, more contamination
- (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

Beach erosion (4)

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

Water runoff intensity (2)

Erosion of freshwater streams

Water quality, supply, and aquifer (3)

Seafood, shellfish – fewer available, harder to reach, increased \$ (1)

Agricultural changes to water could be a plus for food supply

Forests and risk of fire

Isles of Shoals

Invasives and changes in species composition

Pests we don't know about

- Jellyfish
- Mosquitos and greenheads
- Imbalance of predator bats/pray insects
- Changes in tree species and what comes into the area (invasive species)
- Wildlife habitat loss
- Salinity affecting fish and salt water intrusion

Septic

Who can help and what level?

<u>Local</u>

- Local resilience from citizen leaders, individuals, faith groups (2)
- Building (Code enforcement)
- Conservation commission
- Economic Development Council new and sustainable ways of revenue
- Planning board
- Teachers, local schools, UNH
- Zoning board

<u>Regional</u>

- Insurance companies
- Larger NGOs (conservation)
- Rockingham Planning Commission
- Utility companies

<u>State</u>

<u>Federal</u>

- Federal government and state government agencies (1)
- Technologies from international consortium (1)

People

Topics and Areas of Concern

Water supply on 1A and public health (6)

Public health resulting from septic issues (5)

Economic loss (3)

- Business might help but Rye has less of a business community
- Less beach, fewer tourists?
- Tax base and flooding, loss of access
- Taxes (increase)
- Fishing industry

Nuclear plant risks? Evacuations (3)

Already poor cell coverage (voters not for towers) (1)

Food supply (increase? Decrease?) (1)

Pollution (1)

Access to town/destinations (day to day)

- Mobility (decrease)
- New transportation systems
- Educating new routes for power lines/cell towers
- Travel challenges
- Displacement

Emergency services

- Evacuation routes
- Emergency personnel leave/care for own families
- When do you tell people to leave?
- More police and fire
- Hospital access
- Fire secondhand from flood

Communications

• Access to communication channels and internet

Property damage

Increased cost of flood insurance, property

Lack of help from others

Adaptable -> need eachother, volunteer system

Power supplies

- Power sources
- Generators, generator manufacturers

Asthma/health, tick population

Bidding process on projects against long-term/more expensive option

Building consensus under stress

Homeless shelters/low income populations

How to take incremental steps?

Insecurity/fear, emotional toll

Look to other places (Netherlands)

Militarization/control

More polarized decision-making, choosing timeframes, different opinions about risk

Planning ahead more

Public infrastructure - water and sewer

Recreational space affected/rebuilt/relocated

Schools/kids vulnerable, school flood closure, shut down, working parents

Stock of resources, food/water

Who can help and at what level?

Local

- Planning board (1)
- Schools/educators (1)
- Churches
- Citizens/Volunteers
- Harbormaster
- Individuals
- Library
- PDA (Harbor)
- Public Safety (watercraft)
- Selectmen

Regional

- 3 water companies
- architects/engineers
- Cell phone companies/voters
- Grantmakers (Unitil, foundations)

- Neighboring communities
- PSNH change comm on foot
- Seabrook Nuclear

<u>State</u>

- DES
- State DOT
- State reps

<u>Federal</u>

- FEMA change rules (4)
- Congress

Infrastructure

Topics and Areas of Concern

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

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

Sea walls

- Incoming tides undermining earthen berms (shale piles) tidal drainage that accommodates the changing tides. (3)
- *Damage to Shale Piles, sea walls and earthen berms
- *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
- Earthen berms are damaged by tidal activity and storms
- Possible harbor dredging

Stormwater management (4)

- Stormwater management infrastructure currently stressed
- Culvert Inundation especially the culvert found at Eel Pond
- Increased upland flooding due to clogged storm water devices.
- Eel Pond to harbor drainage system is ineffective.

Septic and water

- Sewer pump station on Old Beach Road.
- Wells, sewer lines, and septics
- 1-A sewer line replacement
- Use of deep wells vis a vis shallow wells

Emergency preparedness planning at the local level.

One participant indicated that of Rye's approximately 36 square miles of land there are 24 square miles are marsh, which is a resource for Rye.

Who can help and what level?

Local

- It is the Town's responsibility for construction standards for new buildings with respect to storm water management and energy efficiency. (5)
- Setting appropriate town policies through the local master plan (planning board) and zoning and land use regulations. (1)

- Use the Town's regulatory structure to control the location of new structures. (1)
- On Town maintained roads culverts should be increased in size to be able to handle larger storm events.
- The Rye Department of Public Works is beginning to map culvert locations
- The Town of Rye maintains one bridge and several culverts
- Vulnerable residences might be bought back by the community to lesson repeat damage. The Rye Conservation Commission could spearhead this activity.

<u>Regional</u>

- Improving inland infrastructure that may need to replace inundated coastal infrastructure.
- Regional perspective for existing municipal sewer system.

<u>State</u>

- Cooperation between Town and State of NH with respect to road construction in the future.
- Eel Pond requires Town of Rye, State of New Hampshire and private property owners' cooperation in developing a management plan for operating the existing infrastructure in place at the pond.
- Shifting traffic patterns may need to result in increased spending for the infrastructure located in-land. This would require Town and State of New Hampshire cooperation.
- State of New Hampshire and Town of Rye cooperation for culvert maintenance and repair.
- State of New Hampshire and Town of Rye to cooperate in alleviating the restrictive water flow conditions at Wallis Road.
- The State of New Hampshire Department of Transportation maintains three bridges in Rye

<u>Federal</u>

 Insurance companies working with private landowners to better prepare for storm events.