

Look and Listen Tour Notes



Coastal Lakeshore Economy and Resiliency Initiative

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| Project Name | Coastal Lakeshore Economy and Resiliency Initiative |
| Date: | May 19, 2021 |
| Meeting: | Cayuga-Oswego Region – Look and Listen Tour |
| Attachments | Cayuga-Oswego Interactive Map |

1. Introduction of Project Team

EDR (prime consultant): Jane Rice, Sam Gordon, Jane Nicholson, Erica Tauzer, Sarah Krisch
EcoLogic (subcontractor to EDR): Liz Moran, Sharon Anderson, Michelle McGinnis
Cameron Engineering (subcontractor to EDR): Michael Keane, Andrew Martini, David Tepper
NYS Department of State: Karen Catcher, Nancy Martel, and Chris Bauer

2. Introduction of Steering Committee

Participants in attendance introduced themselves and their affiliations.

3. Brief Introduction to Mapping Exercise

Jane Rice and Erica Tauzer explained and demonstrated the interactive map activity, noting that the goal of the Look and Listen Tour is to identify and discuss key areas that are of community and regional concern when it comes to extreme water levels (both high and low).

The map, including embedded notes from the Look and Listen Tour, can be viewed at <https://edrdpc.maps.arcgis.com/apps/webappviewer/index.html?id=26ba873ff1cf4f749c49bd1bd2199c27>.

4. Look and Listen Tour

Meeting participants were divided into two break-out rooms to focus on sub-areas of the region due to its extensive stretch of shoreline. Participants were assigned to a room based on their affiliation and area of expertise.

Participants in breakout room for Sub-area 1 (Southern municipalities): Town of Sterling, Village of Fairhaven, Town of Oswego, City of Oswego.

Participants in breakout room for Sub-area 2 (Northern municipalities): Town of Scriba, Town of New Haven, Town of Mexico, Town of Richland, Town of Sandy Creek.

4a. Discussion from sub-area 1 (southern municipalities)

- King Street Boat Launch – Turtle Cove Restaurant & Marina; Fairhaven Marina; Bayside Marina: Completely flooded; businesses and marina facilities rendered unusable. Low water today poses danger to water vessels.
- West Bay Road – within inches to having to be closed.

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- The new level of 250 ft is problematic when everyone has built to the previous elevation of 247.3 ft. People are used to occasional flooding, but the duration of flood events has greatly increased – now 3-4 months at a time. This year low water is the issue.
- Cottage Street – public and private uses. REDI funds available but some did not meet criteria.
- If property experienced no structural damage, funding not available. Must reinforce shoreline to prevent catastrophic event.
- Fair Haven Bay at risk if west barrier is lost.
- General comment: Grinder pumps for sewage had to be modified or turned off due to intake of flood water. Collection system was overwhelmed.
- West Bay Road terminus – injection feed system that treats sewage. Sewage pump station nearby. Shoreline protection initiative underway.
- Moon Beach area
 - Protective measures against erosion, mixed results. Four causes: surface runoff, wind, waves, and groundwater. Groundwater is biggest concern. Sheet piling and stone baskets (gabions) did not seem to work. Remnants of these remain along shoreline. Worked (in some areas): limestone boulders brought in from a quarry; trench dug at base of cliff, boulders inserted; tarped; backfilled with stone, then riprap. Willow plantings did not work.
 - Groundwater issue – groundwater seepage softens the soil, which leads to the soil being swept away when waves crash on the shore. Estimated 15-20 feet of shoreline have been eroded in the past 15 years.
 - Due to proximity of homes to the shoreline, some septic tanks, leach fields are becoming exposed
- Issues around bay are the hardened structures installed during the 1970s. Rocks along shoreline will not protect properties. Need to get engineered structures up to new higher flood elevation. Some received funding to raise structures; others did not.
 - Fair Haven - In some cases, many older seasonal cottages are being replaced with year-round homes – however, they were designed for the 247.3 ft elevation. Some received REDI funding to elevate those structures. Process to access REDI funding was unclear.
- Fair Haven popular summer destination. Economic impacts of high water. Lose repeat visitors. Fairhaven State Park was flooded. Parking lot recently raised. Vacation homes impacted.
- Oswego – Wrights Landing to reopen. Biggest concern is high water.
- Boat launches in Fair Haven and Oswego, but none in between. Public boat launches would be beneficial.
- Inconsistency in hardening of shorelines along bay. Break walls not continuous. Federal channel at Fair Haven: Siltation in channels needs to be dredged regularly; but, because it is not commercial, USACE does not routinely dredge. Need a long-term maintenance plan.

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- Loss of shoreline is as much as 100-150 ft in some areas, which is exposing septic systems. Critical need for a wastewater collection and treatment plan.
- Top Concerns Re-cap
 - Residential Areas/Private Properties – need funding.
 - Erosion
 - Economic Impacts – local tax base; tourism.
 - Infrastructure Impacts – protection and expansion- including wastewater collection and treatment
 - Public Safety/Emergency Access

4b. Discussion from sub-area 2 (northern municipalities)

- Survey comments noted that the channel between Sandy Pond and Lake Ontario should be considered an economic asset (active boating industry depends on the channel)
 - Low water levels contribute to a significant public safety issue; water levels are so low that the channel is not navigable
 - 2021 spring water level at 244 (246 is normal, 249.5 during 2019)
 - Typically, staff from NYS Office of Parks, Recreation and Historic Preservation mark the channel with buoys in spring, but boat needs at least 4 ft. overlying water. Buoys not deployed in 2021 thus far.
 - Rock pile is marked currently, but not the shallow areas of the channel.
 - Safety concerns for recreational boaters and tourists unfamiliar with the area; damage to boats, scouring of the channel
 - Ideally, Sandy Pond would be designated as a "Safe Harbor" on Lake Ontario. The eastern shore experiences storms that develop quickly. Not having that channel open is a safety concern in addition to the lost economic benefits of accessing the north and south ponds
 - Local emergency response (fire dept) utilizes a 26 ft boat, operations require access to navigable channel
 - Tourism/economy impacted
 - 3,000-4,000 vessels rely on channel for water access
 - Since the 1980s, area has lost fishing charters which have relocated to the Port of Ontario for dependable water access
 - Need a long-term funding source/management plan for this channel
 - Annual dredging has required huge local investment and time
 - REDI dredging project in 2020, Onerous permit requirements (piping plover habitat)
 - Are there other possible solutions/infrastructure that would help better manage the channel?
 - USACE conducted a study in 2019 exploring that question and sand dynamics. Storms and wave action can be very intense out here with

- wave heights of 23 ft offshore and up to 17 ft on shore, which limits infrastructure/engineered solutions. The area is most vulnerable during the wintertime and when the lake is stratified. The USACE study concluded that dredging is most efficient solution
- Concern that heavily engineered solutions/treatment of the channel would be expensive and not guaranteed to be as effective as dredging
 - Channel location has changed over the years. Examine where the best location would be for access to and from the pond (e.g., slightly north of the current channel where there is no piping plover habitat).
 - Dredge spoils placement
 - Issues: southern shore areas are already depositional areas
 - Plover habitat concerns (nesting on dredge spoils)
 - Tiger beetle may limit sand placement
 - Dune/channel dynamics
 - High dunes on W Shore Dr (both North and South)
 - Dunes are relics from 8000 years ago, reaching heights of 60'
 - 6,000 cubic yards of sand were moved to northern dunes to prevent over-washing, another 15 to 20,000 cubic yards added through natural means
 - Recent efforts to protect the dunes have been successful (preventing ATV access)
 - Northern dunes provide rich habitat area
 - Long-term management plan of dunes is essential – need broader perspective and larger & more secure funding to address
 - Caution against hardscape, hard engineering solutions to address this area; the ecosystem is too dynamic. Once you start inhibiting the movement of sand the effects are difficult to prevent and very damaging
 - Need to institutionalize successful efforts that have already been made
 - Area is labeled as high risk because of erosion, but erosion is a natural process. Risk of flooding and risk of erosion are two very different things.
 - Risk of erosion makes residential homes very vulnerable
 - Towns would benefit by protecting barrier dunes from development. Structures that are there now are reliant on heavy riprap.
 - Benefit of low water periods is that it provides an opportunity for dunes to build/rebuild, therefore promoting resiliency
 - 2019 Sea Grant report documents history of channel migration 1880 to present (changed about 1,000 feet)
 - Comment that risk map may overlay an outdated channel location
 - Sandy Pond
 - Natural assets
 - Significant warmwater fishery and wildlife habitat

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- Wetland complexes south of Sandy Pond are larger in size than you see elsewhere, should be protected
- Septic disposal issues
 - Legacy on-site wastewater systems (not all are engineered, some just buried barrels). Some systems have just been just barrels in the ground. Not engineered systems in all cases. Speculation to their contribution to algal blooms that occur here later in the summer (Sandy Pond)
 - The Town of Sandy Creek received REDI funds to complete the engineering plans for the development of a municipal collection and treatment system or a combination of mini "package plant" systems. In my mind this is the # 1 issue for the community.
- Algal blooms
 - Blooms start in southern part of the pond. At peak, bloom can extend from the southern end up to Green Point.
 - If delta builds up more, could further exacerbate problem by restricting flow of water
- Property access/personal dock access
 - Some residents have built up their property to raise elevation and reduce risk of flooding, now have trouble accessing the water during low water periods
- Economic impacts
 - Town of Sandy Creek is supported by tourism and second homes
 - Substantial contribution to local tax base
 - Tax assessment value \$145 million, Town of Sandy Pond wouldn't survive with residents of Sandy Pond (account for 47% of tax revenue)
 - Recent review of the total assessed value of the greater Sandy Pond area (county line along rt.3 to rainbow shores drive) came in at \$164,529,549.
- Shoreline planning
 - Would love to see towns be more involved in shoreline planning, preventing development, or promoting more resilient development. Need to regulate impervious surfaces, construction of camps and cottages
 - Riprap and hardscaping of shoreline
 - Need to balance protection of property and the need to provide a continuous stream of sediment. Riprap and hardscaping starve the area downstream of the structure from sand, causes erosion shadows in adjacent areas that receive more water energy (current/waves).
 - Local examples cited: Ramona Beach (cobbled), Rainbow Shores Drive north and south., Joe Fultz Blvd and others.

- T of Richland has lost 3,000 ft of shoreline due to shoreline hardening projects (study nearing completion)
- Current property trends
 - Filling low areas to raise elevation in response to flooding risk. Filling of wetland areas (in addition to hardscaping) can affect runoff, tributaries, and lake.
 - In the Salmon River estuary, landowners are putting in concrete seawalls and raising land elevation behind the seawalls – further increases the length/density of hardscape and increases water velocity which can further exacerbate erosion
 - Need for education and outreach regarding negative impacts of shoreline hardening and how it can contribute to erosion. Coastal management policies and permits should not allow activities that contribute to downdrift or erosion.

5. Group Discussion Summaries

- Sub-area 1 - Southern municipalities (T. Sterling, Fair Haven, T. Oswego, C. Oswego)
 - Diverse geology and geography of coastline- no single set of resiliency measures
 - Need for private property protection along the entire region: impacts of scouring and erosion, essential to the tax base and fiscal health of the community
 - Infrastructure challenges
 - Many lost/damaged private septic systems
 - Need to assess the ability to expand the public wastewater collection & treatment system
 - Economic impacts
 - Tourism – significant need to maintain access to water, roads, and parks
 - Erosion control – loss of the shoreline
 - Lots of discussion regarding hard vs soft engineering techniques, noting that techniques are not solutions in all areas (solutions dependent on unique factors)
 - Need for more robust communication channels
 - Role of emergency personnel
 - Consistent messaging among residents and emergency personnel (during and after events)
- Sub-area 2 – Northern municipalities: T. Scriba, T. New Haven, T. Mexico, T. Richland, T. Sandy Creek.
 - Critical importance of protecting barrier beaches on eastern Lake Ontario shoreline (protects Sandy Pond and points north and south)
 - Need to maintain the channel between Sandy Pond and Lake Ontario (to meet ecological and economical needs)

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- Septic systems and wastewater infrastructure
- Concerns related to the hardening of the shoreline in this portion of Lake Ontario (construction of revetments, proliferation of development)
- Low water impacts on navigation and property access

6. Next Steps

Our next Steering Committee Meeting will be June 16 at 2 PM. Look for registration link in advance.

Community Workshop #1 will be evening of June 30th (scheduled from 6 – 7:30 pm). This meeting will be virtual. The EDR project team will send an emailable 'Save the Date' postcard with information for pre-registration. PLEASE DISTRIBUTE WIDELY.

The SC survey will remain open until May 25. All are encouraged to add comments that may have been spurred by our discussion today. In addition, please continue to send photos of how fluctuating water levels affect your community.

Copies To: Members of the Cayuga-Oswego CLEAR Steering Committee, Consultant Team, NYSDOS representatives, and NYSDEC representatives.

Meeting notes were prepared by Michelle McGinnis of EcoLogic. If there are any discrepancies, please notify our office within three business days of receipt.