CITIZENS ADVISORY COMMITTEE

TO THE SOUTH SHORE ESTUARY RESERVE COUNCIL

Final CAC Meeting Minutes

November 9, 2021 7:00-8:30 p.m. Virtual Meeting via Zoom

Present:

Maureen Dolan Murphy, Citizens Campaign for the Environment/Chair CAC Rob Weltner, Operation SPLASH/Vice-Chair CAC Jeremy Campbell, NYS DOS/Reserve Coordinator Alexa Annunziata, Peconic Baykeeper Judi Bird, League of Women Voters Brookhaven George Costa, Trout Unlimited/Art Flick Chapter Dorian Dale, Suffolk County Alli DePerte, Atlantic Marine Conservation Society (AMCS) Maureen Dunn, Seatuck Environmental Association Suzy Goldhirsch, Fire Island Association Emily Hall, Seatuck Environmental Association Sally Kellogg, NYS DOS/Reserve Office Artie Kopelman, Coastal Research and Education Society of Long Island (CRESLI) Bob Mozer, Citizen Scientist Chris Schubert, USGS

1. Introductions

M. Dolan Murphy called the meeting to order at 7:05 p.m. Introductions were made.

2. Chris Schubert, USGS: New USGS report

C. Schubert presented on the newly published USGS report, Delineation of Areas Contributing Groundwater and Travel Times to Receiving Waters in Kings, Queens, Nassau, and Suffolk Counties, New York. To assist resource managers and planners in developing informed strategies to address nitrogen loading to coastal water bodies of Long Island, New York, the U.S. Geological Survey and New York State Department of Environmental Conservation initiated a program to delineate areas contributing groundwater to coastal water bodies by assembling a comprehensive dataset of areas contributing groundwater, travel times, and groundwater discharges to streams, lakes, marine surface waters, and subsea discharge boundaries. Two steady-state conditions were simulated: recent conditions from 2005 to 2015 and predevelopment conditions of about 1900. Travel times ranged from less than 2 years to greater than 10,000 years. Areal delineation of travel-time intervals and areas contributing groundwater to water bodies were generated and are summarized with total groundwater outflow for each water body. Some findings include freshwater and wastewater from the south

shore being diverted from groundwater recharge to the bay/ocean due to sewering. Additionally, changing salinity levels of the bays contributes to HABs.

See publication link for further details https://pubs.er.usgs.gov/publication/sir20215047. Any questions should be emailed to Chris, schubert@usgs.gov.

Comment: D. Dale: The 2015 Suffolk County Comprehensive Water Resource Management Plan differs and stipulates there is greater water budget in present day then compared to 1900. Answer: C. Schubert: In unsewered areas, water pumped from the aquifers for public supply mostly makes its way back in the ground through onsite systems maintaining the water budget of the system. This is a contributing factor as to why groundwater levels have in general been maintained in Suffolk County.

Question: S. Goldhirsch: Why does the water flow a certain way? And could the flow change? Answer: C. Schubert: There is a relative divide when water generally flows into one waterbody or another waterbody. Yes, boundaries can change depending on factors which can alter the contributing areas to a waterbody.

C. Schubert illustrated the differences in groundwater discharge simulated under recent conditions from 2005 to 2015 and predevelopment conditions of about 1900. It was found that streams on the south shore in sewered areas have shortened since there is now less inputs to those systems which are primarily groundwater fed. However, areas out east may have lengthened as the land use has changed from a high water budget forested area to a lower water budget area like lawn or turf.

C. Schubert described the ongoing solute transport modeling work which identifies nitrogen sources, historical and present day, and the contribution of legacy land use issues. Changes in landcover from 1938 to 2015 were analyzed showing nitrogen inputs have been high overtime, but the sources have changed as the land use has evolved. At the beginning of the study period agricultural sources were a main contributor but now residential wastewater, atmostpheric deposition and others are an increasing contributor. It was also noted that streams are efficient at removing nitrogen from a subwatershed. Peconic Estuary Partnership and Long Island Sound Study are funding model scenarios based on the solute transport work.

Question: George Costa: Do we run on a water deficit as compared to received precipitation? Answer: C. Schubert: That is a current USGS study for the eastern part of Long Island.

Comment: C. Schubert: Treated effluent could theoretically be used to augment recharge of the aquifers from a water quantity budget point of view. However, this practice must be carefully considered if identifying where water is recharged into the ground, as it flows to coastal areas that may have short travel times it could exacerbate areas that are prone to flooding. One of the most powerful tools for water reuse is water conservation.

3. South Shore Estuary Reserve Office

The SSER draft CMP update is available for review on NYSDOS website: https://dos.ny.gov/system/files/documents/2021/10/draft-li-sser-cmp-update-2021.pdf. Comments can be emailed with "SSER CMP Update" in the subject line to sser@dos.ny.gov or mailed through December 6th to: Jeremy Campbell, Long Island South Shore Estuary Reserve Office, c/o New York State Department of State, Office of Planning, Development and Community Infrastructure, One Commerce Plaza, 99 Washington Avenue, Albany, NY 12231. J. Campbell reviewed the timeline of updating the CMP and the major changes to the document which includes formatting updates, new issues that have come to light, and the addition of the chapter on resilience. The new chapter addresses the ability of coastal communities to rebound after hazardous weather events (storms, flooding, etc.,), the increased risk due to low elevation of the area and the need to address current impacts and prepare for future disturbances. The key updates and new issues were outlined for each CMP chapter. The final CMP update is slated to be released in early 2022. See presentation for additional details. M. Dolan Murphy thanked DOS for addressing comments made in 2012 in the current draft CMP.

Comment: M. Dolan Murphy: Governor Hochul is proposing a \$4 billion Bond Act. The final SSER CMP will be good timing to support south shore projects.

7. Public Comment/Announcements

Jeremy Campbell asked if all the Suffolk County sewer projects had broken ground? Dorian Dale answered no, not yet. The Carlls River project has broken ground, details for the Patchogue project are being reviewed, and the Forge River project is more complex but will hopefully begin in early 2022.

George Costa – A Day in the Life on the Forge River event was successful with 30 kids at the site and the Swan River fish passage will be constructed soon.

The meeting adjourned at 8:40 p.m.