CCOM
CONCERNED CITIZENS OF MONTAUK

Advancing Collaborative Solutions for Wastewater Management in Montauk

Introduction:

CCOM commissioned Dr. Christopher Gobler, Director of the New York State Center for Clean Water Technology at Stony Brook University, to consider the potential impacts of the proposed sewering plan for Montauk. Dr. Gobler's work was limited to an analysis of existing data; his report findings—available upon request—conclude that the proposed plan would not improve water quality in Fort Pond or Lake Montauk as it would not remediate wastewater flows in to Fort Pond from the eastern and western subwatersheds of Fort Pond, and additionally that in Lake Montauk, onsite wastewater is not a major source of pollution. The Gobler report advances questions raised in CCOM's Wastewater Position Paper, which outlines four areas in which the proposed plan is insufficient: defining the project scope, funding, addressing development concerns and siting. Given that the report indicates that the plan would not significantly improve Montauk's most impaired water body, Fort Pond, CCOM sees the need to focus on expediting existing solutions like septic and stormwater upgrades in this area.

Dr. Gobler's findings are summarized below and inform the CCOM recommendations that follow: However, because of the narrow scope of Dr. Gobler's report there are many questions unaddressed, and more work must be done to respond to Montauk's multiple environmental challenges. For example, CCOM believes that fixing the current downtown wastewater treatment systems is an essential component of implementing coastal resiliency solutions for the downtown as framed in both the Coastal Assessment and Resiliency Plan and the Montauk Hamlet Plan adopted by EHT. EHT has stated that these wastewater systems are non-compliant and currently operating at more than three times the permitted Suffolk County wastewater flow rates.

Summary of Report findings:

1. Fort Pond
    a. Fort Pond is an impaired water body that experiences annual harmful algal blooms, and the Suffolk County Subwatersheds Wastewater Plan calls for a 63% reduction in nitrogen loading to Fort Pond to improve water quality (SCSWP, 2020). The United States Geological Survey (USGS), the nation's authority on groundwater, recently completed comprehensive and detailed groundwater models for all of Long Island and one specifically for Fort Pond (USGS, 2021) which indicates the water from Fort Pond drains as groundwater flows south to the ocean and north to Fort Pond Bay. Therefore, it appears the proposed regions for sewering Main Street are not within the watershed of Fort Pond and as a result the proposed sewering of Main Street will not change the conditions within Fort Pond.

b. The subwatersheds of Fort Pond are on its eastern and western border only, therefore an aggressive plan to upgrade the septic systems and reduce fertilizer use within these subwatersheds of Fort Pond would improve water quality there. Suffolk County estimates 69% of the nitrogen entering Fort Pond comes from onsite wastewater and that 17% comes from fertilizer (SCSWP, 2020); Suffolk County recommends reducing nitrogen loading by 63% within this watershed to improve water quality.

2. Atlantic Ocean Outflow
    a. Groundwater and wastewater from downtown Montauk and Ditch Plains flow to the Atlantic Ocean. Comprehensive studies show no signs of algal blooms or low oxygen conditions in Montauk ocean waters, indicating that nitrogen reductions are not needed in this region. Furthermore, *Enterococcus* is rarely detectable and almost never (<1% of >700 observations) above NYSDOH standards suggesting wastewater draining to the ocean is not a significant public health threat.

3. Lake Montauk
    a. Suffolk County has identified Lake Montauk as being within the lowest priority category for mitigating wastewater, calling for a 6% reduction in nitrogen loads, the lowest percent given in the Subwatersheds report (Figure 9; SCSWP, 2020). This aligns with an absence of algal blooms and low oxygen conditions within this water body.
    b. A second water quality concern in Montauk is fecal bacterial contamination in Lake Montauk. Presently, isolated regions of this water body are permanently closed to shellfishing by NYSDEC, and other regions are seasonally closed, indicating some persistent fecal coliform bacteria contamination (Figure 10). However, the absence of fecal coliform bacteria and the human MST marker in all groundwater samples analyzed by USGS around Lake Montauk indicate limited transport of bacteria in the subsurface groundwater through the sandy aquifer material suggesting water from septic systems do not influence the water quality in Lake Montauk (USGS, 2022). The findings of the USGS also suggest that mitigating run-off from South Beach, Stepping Stones Pond and improving vessel handling of wastewater would be likely to improve fecal bacterial contamination issues in Lake Montauk.

Call to Action

In light of Dr. Gobler's findings, CCOM calls for the following actions:

- EHT should articulate the necessary wastewater improvements required for implementation of the adopted Coastal Assessment and Resiliency Plan (CARP) and Montauk Hamlet Plan and propose any wastewater treatment options based on meeting these requirements.
- We urge EHT to work with the East Hampton Water Quality Technical Advisory Committee to advance the following:

a) installing low nitrogen, I/A (Innovative/Alternative) systems across residential and commercial properties within the eastern and western watersheds of Fort Pond
b) improving the septic system upgrade process and funding to encourage residents' active participation in grant and loan programs
c) undertaking concerted efforts to mitigate all stormwater run-off entering Fort Pond, further safeguarding its water quality and ecological integrity

- Implement a fertilizer reduction program within these impaired watersheds, for example by mandating the use of low nitrogen and low phosphorus fertilizers.
- Mitigating run-off from South Beach, Stepping Stones Pond and improving vessel handling of wastewater to improve fecal bacterial contamination issues in Lake Montauk.
- Further investigation of potential bacteriological issues at the Ditch Plains ocean beach in light of occasional, anecdotal reports of effluent smells over the years.

CCOM urges a response from EHT on these proposed actions outlined above. We're aware that several of these are previously identified priorities and we encourage a dialogue and public forum to consider how best to advance these and potentially other mechanisms to address our urgent water quality concerns.

Despite the minimal impact to Fort Pond of improved wastewater management in Montauk's downtown CCOM recognizes the need for a comprehensive and implementable plan to address coastal resiliency in this area and this includes addressing wastewater needs to achieve this goal. It is important to recognize that wastewater management holds the key to our town's future. It is a multifaceted endeavor that encompasses environmental stewardship, the safeguarding of public health, climate resilience, sustainability, and regulatory adherence.

CCOM is committed to helping create a comprehensive wastewater plan for Montauk and looks forward to work with the Town and other community and government stakeholders to advance these outlined priorities.