The Coalition for Hither Woods™

REPORT & ANALYSIS
OF
PROPOSED MONTAUK SEWAGE TREATMENT PLANT

prepared by

The Coalition for Hither Woods

MARCH 2023 Rev 2

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Executive Summary

The information presented in this document will show that East Hampton Town's proposed sewer district for Downtown Montauk lacks a valid environmental purpose. Even in just its first phase, the sewer district would be the largest public works project ever undertaken by East Hampton Town, costing over $75 million of taxpayers' money. It would in time destroy 14 acres of County parkland in Hither Woods. Yet the project offers almost no demonstrable benefits to Montauk's environment.

Our examination of the Town's plan shows the following:

- Groundwater underlying Downtown Montauk is not used by private or public wells and does not migrate into other parts of Montauk which use well water. Hence, the purity of Downtown Montauk's groundwater is irrelevant to Montauk's drinking water resources.
- On the other hand, the Laurel Canyon County Park property has been recognized by State, County, and Town authorities as important for protecting its underlying aquifer. Pumping contaminated groundwater from Downtown Montauk to this parkland is a foolish risk that may endanger Montauk's future drinking water supplies.
- While groundwater beneath Downtown Montauk seeps into the Atlantic Ocean below the water line, there no evidence that this creates unsafe conditions for swimming or other human use of the ocean off Montauk's beaches. Installing sewers in Downtown Montauk will provide little to no improvement in Atlantic Ocean water quality, which is already excellent.
- The impact to Fort Pond from pollution underlying Downtown Montauk is minimal, as shown through analysis by the Town's own engineering consultants. Groundwater flow under the downtown area is southerly, away from Fort Pond and towards the ocean. At best, the reduction in nitrogen load to Fort Pond if sewers were installed in Downtown Montauk would be less than 15%. There is evidence that the reduction in nitrogen entering Fort Pond could be as little as 2%. Better results in reducing the nitrogen load to Fort Pond could be realized through increased use of low-nitrogen I/A septic systems by nearby homes and businesses.
- Most of the wastewater generated in Downtown Montauk is produced by motels, and these motels are predominantly located near the Atlantic Ocean, where there is no possibility that their septic wastewater could enter Fort Pond.
- The absence of provable environmental benefits associated with the proposed Downtown Montauk sewer project raises questions about East Hampton's true motives in promoting the sewer project. A detailed report prepared by the Town's consulting engineers, but never released to the public – the Coalition for Hither Woods obtained it through a FOIL demand – strongly suggests that the Town Board wants sewers in order to allow for increased growth and development in Downtown Montauk.
- The Town's desire for economic growth in Downtown Montauk is a manifestly insufficient reason for Suffolk County to trade away 14 acres of parkland, which will thereafter be largely destroyed.

A Brief History of Downtown Montauk

The commercial district commonly known today as "Downtown Montauk" is approximately 80 acres in size. For most of the recorded history of Montauk, since East Hampton's English settlers arrived in the area in 1648, this part of Montauk was known as the Great Plain.

The Great Plain was open grassland between Fort Pond and the Atlantic Ocean. It was relatively flat, fertile land, and was kept bare of shrubs and trees through grazing by cattle, sheep, and horses from about the mid-1600s to the beginning of the 20th century. In August 1898, at the close of the Spanish-American War, the US War Department established Camp Wikoff on Montauk to host recuperating soldiers. The camp was only in full operation for about two months, but during this time several infantry units which had fought in Cuba were encamped on the Great Plain.

The first real construction on the Great Plain took place in 1917, when the Montauk Naval Air Station was established on 33 acres of land there by the US Navy. The Montauk Naval Air Station operated dirigibles for coastal patrol and reconnaissance and functioned from August 1917 until August 1919. More than twenty individual buildings were constructed for the Naval Air Station, including an enormous hangar erected to house a dirigible. All of these buildings were demolished or moved away in 1920, after the station closed down.

In 1921 and 1922 the US Army established a summertime training base at Great Plain, known as Camp Welsh. Regular Army field artillery units lived here for parts of these two summers, while conducting maneuvers and engaging in artillery practice elsewhere on Montauk. Camp Welsh seems to have consisted mainly of tent housing.

In 1925 Carl Fisher bought around 9,000 acres of land on Montauk, including the Great Plain, as part of a plan to remake rural Montauk into a "Miami Beach of the North." On November 22, 1926, Fisher's Montauk Beach Development Corporation filed a subdivision map with the Suffolk County Clerk encompassing practically all of the Great Plain. This Map, commonly referred to as Map No. 174 from its filed map number, was intended to establish the Great Plain area as the business and commercial center of Fisher's Montauk. Downtown Montauk, in the sense of a commercial area, therefore dates to 1926.

The development of Map No. 174 was very slow until the 1950s, when Montauk really began to grow. Nearly all of the motels and restaurants which exist in Downtown Montauk today were built before 1981, when the modern County Health Department regulations took effect. In 1984 the present East Hampton Town Zoning Code was enacted, which practically ended motel development on Montauk. The businesses and condominium developments which produce most of Downtown Montauk's wastewater have thus existed for more than 40 years.

Environmental Impact of Groundwater on Drinking Water

Because of the density of development in Downtown Montauk, especially that of motels and residential condominiums or cooperatives, it is taken for granted that groundwater downtown does not meet County or State standards for drinking water. For this reason, as well as the availability of public water in Downtown Montauk, we are reasonably certain that all improved properties in the downtown area are served by public water.

Because no one is relying on groundwater under the 80-acre Downtown Montauk district, there is no adverse impact to human health due to drinking the groundwater in this area. Simply stated, contaminated groundwater in Downtown Montauk has ***zero*** impact on drinking water resources.

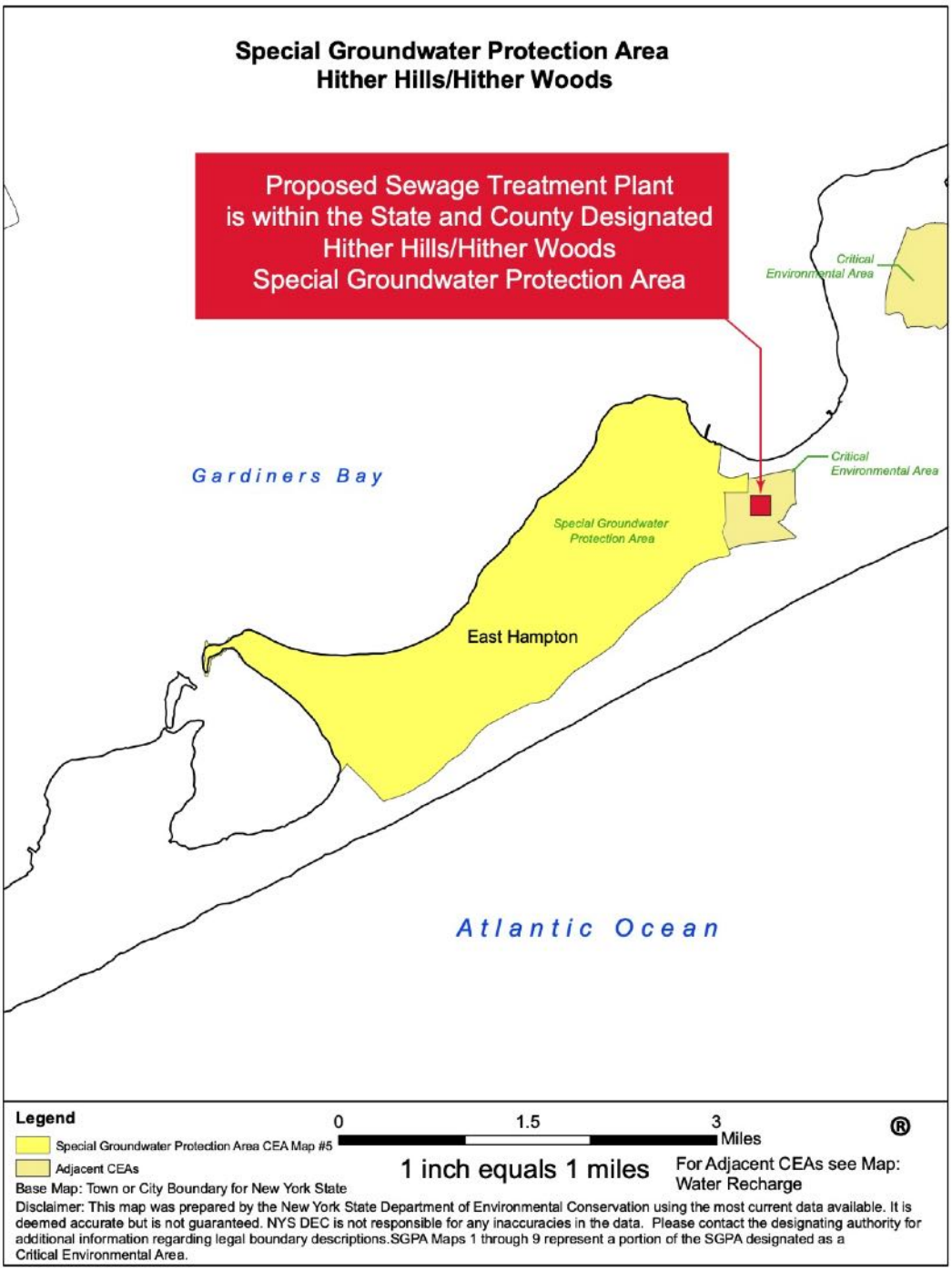
No business or residential property in Downtown Montauk uses Well-Water drawn from beneath this district. In addition, there no public water supply wells in the downtown area. Finally, because groundwater in Downtown Montauk is at a low elevation and is being pushed out to sea by the higher water table behind it, none of the groundwater under Downtown Montauk migrates into the other parts of Montauk, which comprise more than 12,000 acres.

The impact of Downtown Montauk groundwater on Montauk's drinking water supplies is therefore nil.

Nevertheless, the Town of East Hampton proposes to take polluted groundwater from Downtown Montauk and pump it to a sewage treatment plant atop one of Montauk's remaining clean aquifers, in Hither Woods. Even if the Town has faith in its ability to run a trouble-free sewage treatment plant, this seems incredibly risky. The parkland owned by Suffolk County, on which the Town wants to site its sewer plant, is in a State- and County- designated Special Groundwater Protection Area ("SGPA"). See **Exhibit 1.** SGPA's were established in parts of Suffolk County where groundwater resources were considered critical for the County's future water supply. See **Exhibit 2.** Downtown Montauk Contaminants will not be removed by the Wastewater Treatment Plant**.** See **Exhibit 3.** Sewage Treatment Plant Hydrology discusses, the amount of Recharge Water pushed into the Hither Woods Aquifer. The Town itself has zoned the Hither Woods land "Parks & Conservation" and has placed it in a "Water Recharge Overlay District," which was designed and intended to protect areas which are important to the Town's drinking water supply. See **Exhibit 4.**

In short, the Town proposes to take contaminated groundwater from beneath Downtown Montauk, which at present seeps harmlessly out into the Atlantic Ocean, and pump it to a sewer plant to be built atop one of Montauk's principal remaining drinking water aquifers. To call the Town's plan illogical is being very kind.

Exhibit 1 – Special Groundwater Protection Area



The proposed Montauk sewage treatment plant would be built over the easternmost part of the Hither Woods aquifer, which is easily the largest aquifer on Montauk. This land is located in a Special Groundwater Protection Area ("SGPA"), so designated by Suffolk County pursuant to Article 55 of the New York Environmental Conservation Law.

Exhibit 2 – Contaminants will NOT be Removed by the STP

Suffolk County Legislator Steve Flotteron:

….other things that people are flushing down the toilet, such as Meds or anything else, what are you going to do to solve that problem?

H2M Project Manager Nick Bono:

"The treatment plant technology is on the wastewater side…but they're not designed to remove pharmaceuticals…"

During the Suffolk County Parks Trustee meeting on February 23, 2023, a conversation between H2M's Project Manager Nick Bono, and Suffolk County Legislator Steve Flotteron occurred. This discussion at first focused on the Downtown Montauk Wastewater Recharge and the loss of the water out into the Atlantic Ocean. H2M's Project Manager suggested that by placing the Sewage Treatment Plant in Hither Woods, the Wastewater can instead be used to help recharge the Hither Woods Aquifer which led to a question by Suffolk County Legislator Steve Flotteron and the answer by H2M's Project Manager.

***Suffolk County Legislator Steve Flotteron* asked during this discussion:**

"… Ah … you are always pointing out the Nitrogen … ah, but my understanding … is the drinking water, it's more about other things that people are flushing down the toilet, such as Meds or anything else, what are you going to do to solve that problem?"

***H2M Program Manager Nick Bono* replied to *Legislator Steve Flotteren*:**

"The treatment plant … the treatment plant technology on the wastewater side…ah, there will be some inherent reduction on some things, but they're not designed to remove pharmaceuticals, ah no … it's taking care of the wastewater constituents not regulated in the area, nitrogen has a groundwater limit. Drinking water standards that we have to meet… there are other constituents and policies and things of that nature. But regulation wise the pharmaceuticals are not regulated, the emerging contaminants on the wastewater side are not regulated. We also need to think about areas out here (pointing to the map where septics are located) everyone's on septic … we are not treating it anyway."

In other words…when arguing about the benefits of refilling the Hither Woods aquifer with wastewater from downtown Montauk, H2M Program Manager acknowledges that all the contaminants that people flush down the toilet (chemicals, pharmaceuticals, drugs, estrogen, and all other things) are NOT

contained by the wastewater treatment plant and could make their way into the Hither Woods aquifer.

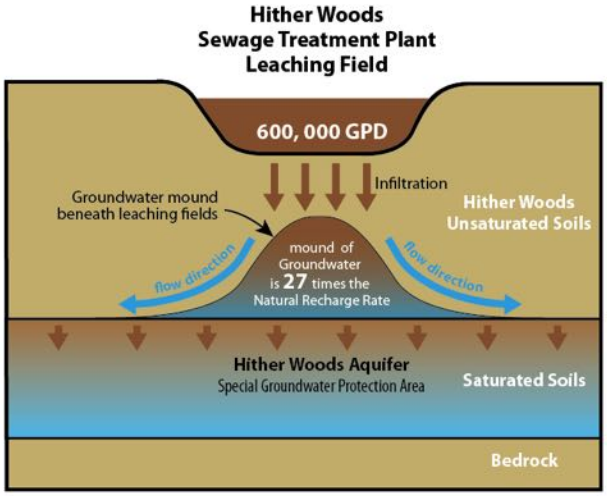
Typically, this is not an issue since Wastewater Sewage Treatment Facilities are never built on top of an aquifer. The Hither Woods aquifer is part of the Suffolk County Special Groundwater Protection Area and provides Montauk with its sole source of drinking water. Much of the water consumed on Montauk from public water supplies (SCWA) comes from the "mainland" part of the South Fork and is piped to Montauk across Napeague. This transport of water to Montauk should be minimized because it lowers the water table throughout the rest of the South Fork.

Exhibit 3 – Sewage Treatment Plant Hydrology

Percolation, or "the pace at which water drains through the earth" and "the direction that water will go," is a consideration in situating any Sewage Treatment Plant, particularly one built over an aquifer.

	Recharge GPD	1 Sq Mile is 640 Acres	Acreage Used for Sewer Plant	Total Recharge to Hither Woods Aquifer per acre (GPD)	Natural Rate of Recharge per acre for Long Island (GPD)	Increase of Recharge above Natural Level
Long Island Natural Recharge (GPD)	1,000,000	640	NA	NA	1,563	1
Proposed Montauk Sewer Plant (GPD)	600,000	NA	14	**42,857**	NA	**27**

The proposed Hither Woods Sewage Treatment Plant (STP) location has not addressed the underlying soil's capacity or incapacity to absorb the massive volume of anticipated effluent from the sewage treatment plant. The Table above illustrates that, once full capacity is reached, the rate of waste-water recharge to the aquifer from the Hither Woods STP may be 27 times higher than the normal recharge rate for Long Island from natural precipitation (rainwater, snowmelt). As previously shown in Exhibit 2, effluent from the STP will contain pollutants and containments that will not be removed by the treatment system. Moreover, "Forever Chemicals" and Heavy Metals have been linked to an increase in cancer rates.



According to a *Supervisory Hydrologist, U.S. Geological Survey - New York Water Science Center*, the water drainage from the leaching fields will cause **Mounding**. The massive outflow from the proposed STP (27 times larger than normal) will result in a localized column or mounding up of water in the subsoil. The water in this **Mound** must flow somewhere. This **Mounding** will create its own "groundwater divide" in the underlying aquifer, causing groundwater to flow in unpredictable directions until it reaches the sea or the bay.

The **Mounding** flow direction cannot be determined without a highly detailed analysis using multiple boreholes throughout the Hither Woods area.

27
Greater

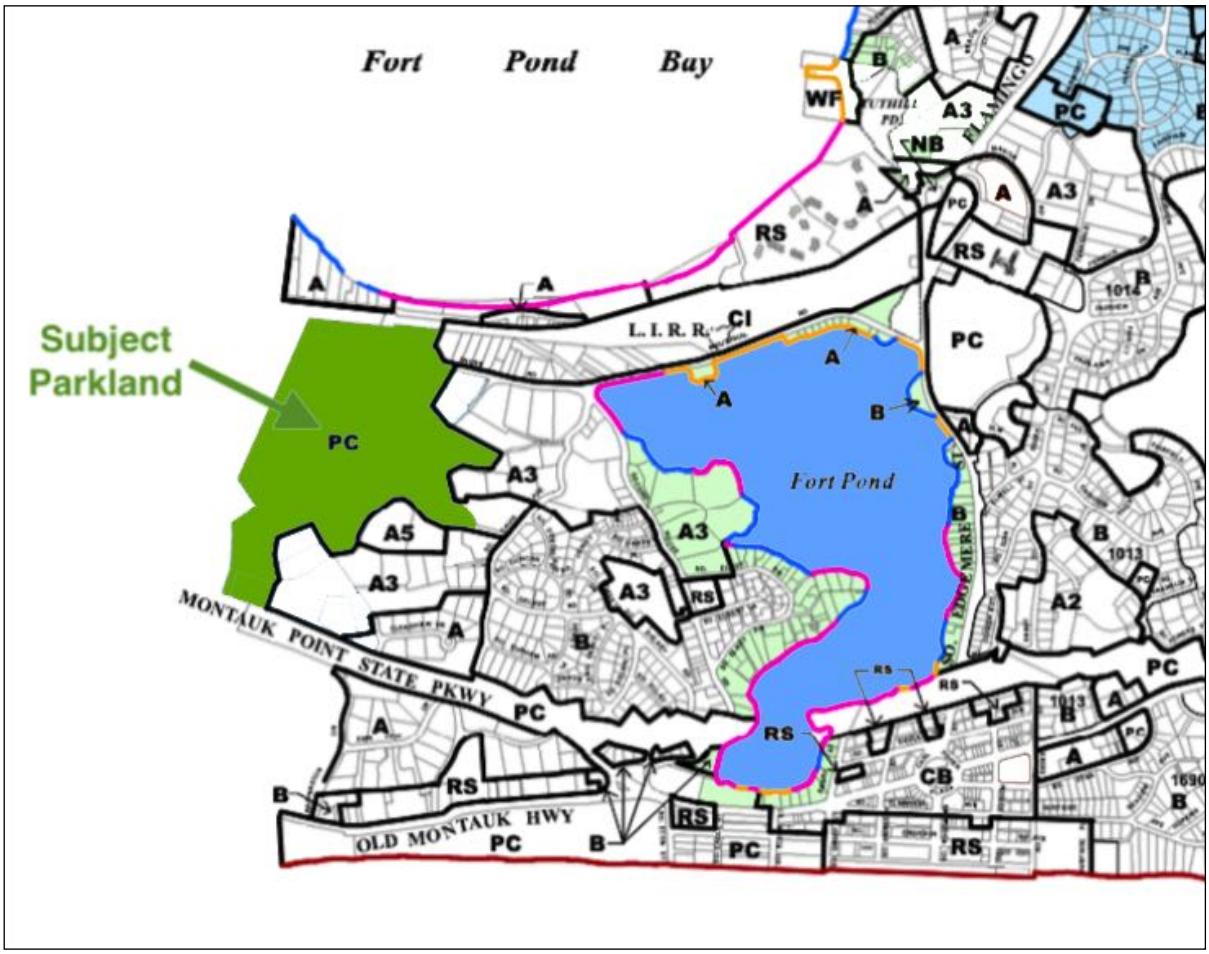
The calculated rate of Recharge Water percolating into the Hither Woods aquifer will be a gargantuan 27 times greater than the natural flow for Long Island.

Exhibit 4 – East Hampton Town Zoning Map

The East Hampton Town Zoning Map shows that Suffolk County's Laurel Canyon Park is zoned Parks & Conservation ("PC"). See map excerpt below. The map also shows that the County parkland is situated in the Town's Water Recharge overlay district (blue shading). Neither zoning designation is at all suitable for the construction of a sewage treatment plant and leaching field.

The Town Zoning Code states in § 255-3-61 that the purpose of the Water Recharge Overlay District is to stringently regulate "areas where disproportionately large quantities of rainwater are recharged into and stored in the underground aquifer, in order to help ensure the continued sufficiency and purity of the Town's irreplaceable groundwater supply and sole source of drinking water." The Water Recharge Overlay District is a Critical Environmental Area (CEA) as designated by the Town of East Hampton.

East Hampton Town's government seems to have forgotten that Montauk, and the Town as a whole, are dependent upon a sole source aquifer for all of the Town's drinking water supplies. These water supplies are – as the Town Zoning Code says – "irreplaceable."



Environmental Impact of Groundwater on Surface Waters (Atlantic)

The environmental impact of groundwater beneath Downtown Montauk migrating into the Atlantic Ocean is basically non-existent. Remember first that all Downtown Montauk businesses are required to periodically empty the sludge from their septic tanks and transport it out of the area to a regional sewage treatment plant. There are no "pipes" from downtown motels or businesses that carry septic waste directly into the ocean. So, the "pollutant" seeping into the ocean is primarily nitrogen-rich groundwater.

Unintentional discharges of septic waste from Downtown Montauk businesses, or "overflows," are exceedingly rare. At a June 2021 Town wastewater committee meeting the Town Natural Resources Director was only able to identify one recent septic overflow event in Downtown Montauk, and it did not reach public streets.

The volume of contaminated groundwater emanating from Downtown Montauk is insignificant in relation to the Atlantic Ocean, which is of course a very large and dynamic water body. This statement is corroborated by water quality data collected by the New York State Department of Environmental Conservation and by the Surfrider Foundation, a private organization. That data shows that water quality in the Atlantic Ocean off Downtown Montauk's beaches is generally excellent throughout the year. The very few examples of reduced water quality appear to be associated with heavy rain events, when surface water runoff from East Hampton Town roads flows directly onto Montauk's ocean beaches. An example can be found at Lowenstein Court, off Surfside Place, where the Town maintains a stormwater discharge pipe that empties right onto the beach.

See the attached from the Surfrider Foundation, **Exhibit 4**, and the NYS DEC, **Exhibit 5**.

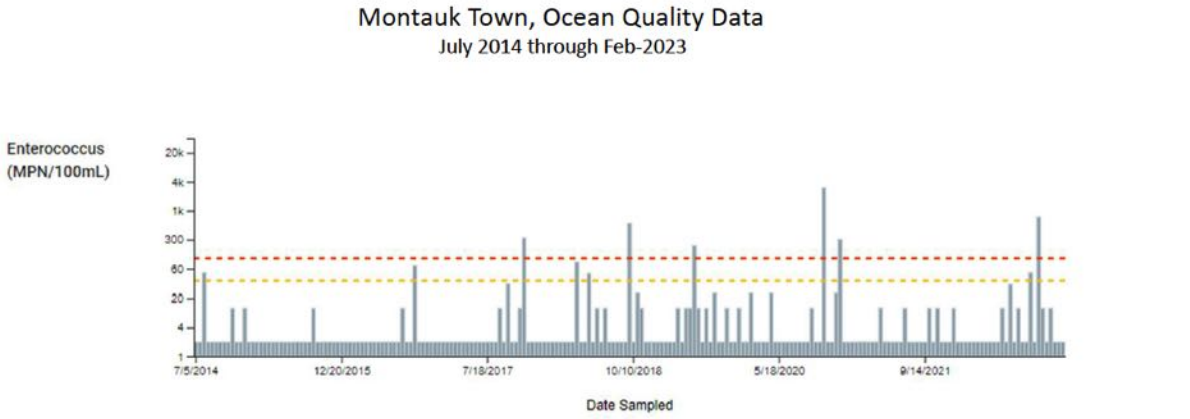
Above: Town stormwater outfall pipe empties onto ocean beach, at Surfside Place.

Exhibit 5 – Surfrider Foundation, Montauk Ocean Water Quality

July 2014 to February 2023

The Surfrider Foundation water samples are collected in the ocean off Surfside Place (near Lowenstein Court), at a surfing and surfcasting spot historically known as Atlantic Terrace. The Town of East Hampton has a discharge pipe onto the beach here (see photo on preceding page), which carries stormwater runoff from nearby roads and streets. This can lead to elevated levels of pollutants after major rain events.

The Surfrider data shows generally good water quality throughout the data collection period.



96% of samples collected at this site over the last 12 months meet water quality standards set by New York State Department of Health

6 high bacteria days in nearly eight years of data
Only 2 of those days in the peak summer months

Surfside Beach, Montauk

96% From 2014 through 2021, the Surfrider ocean quality data shows that Montauk beach water at Atlantic Terrace Beach, met NYSDOH standards 96% of the time during that period.

Exhibit 6 – NYS DEC Water Quality Data for Montauk Ocean Beach

The DEC Water Quality data for this report focuses on Downtown Montauk (Station 65-13E, Hero Beach). The DEC data indicates that for the period 2016-2021, ocean water quality was excellent and allowed the zone to remain open all year(s). There were three days during this period that water quality came close to being non-compliant with State standards due to storm flooding or heavy rainfall.

DEC Data: Division of Marine Resources Data Atlantic Ocean

Shellfishing Growing Area #65 Evaluation 2022

Area Description

The Atlantic Ocean (Shellfish Growing Area #65) is located on the south shore of Long Island and extends from the New York-New Jersey border in New York Bight to Montauk Point and includes the New York jurisdictional limit, extending out to three nautical miles from the shoreline.

The topography of the shoreline area directly adjacent to the Atlantic Ocean is composed mainly of low-lying sandy beaches or sandy-rocky bluffs ranging in height from 20'-100' near gravel-sand beaches. These sandy soils are very permeable and provide excellent drainage. The dunes along the Atlantic Ocean absorb much of the stormwater before it has a chance to reach the growing area.

The latest shoreline survey for SGA #65 Atlantic Ocean was completed in 2022 in conjunction with this triennial reevaluation. The shoreline survey describes the pollution sources of this growing area as those from **surface water inputs, sewage treatment plants, stormwater, domestic waste disposal, wildlife, and recreational use.**

The pollution sources of the Montauk Station are:

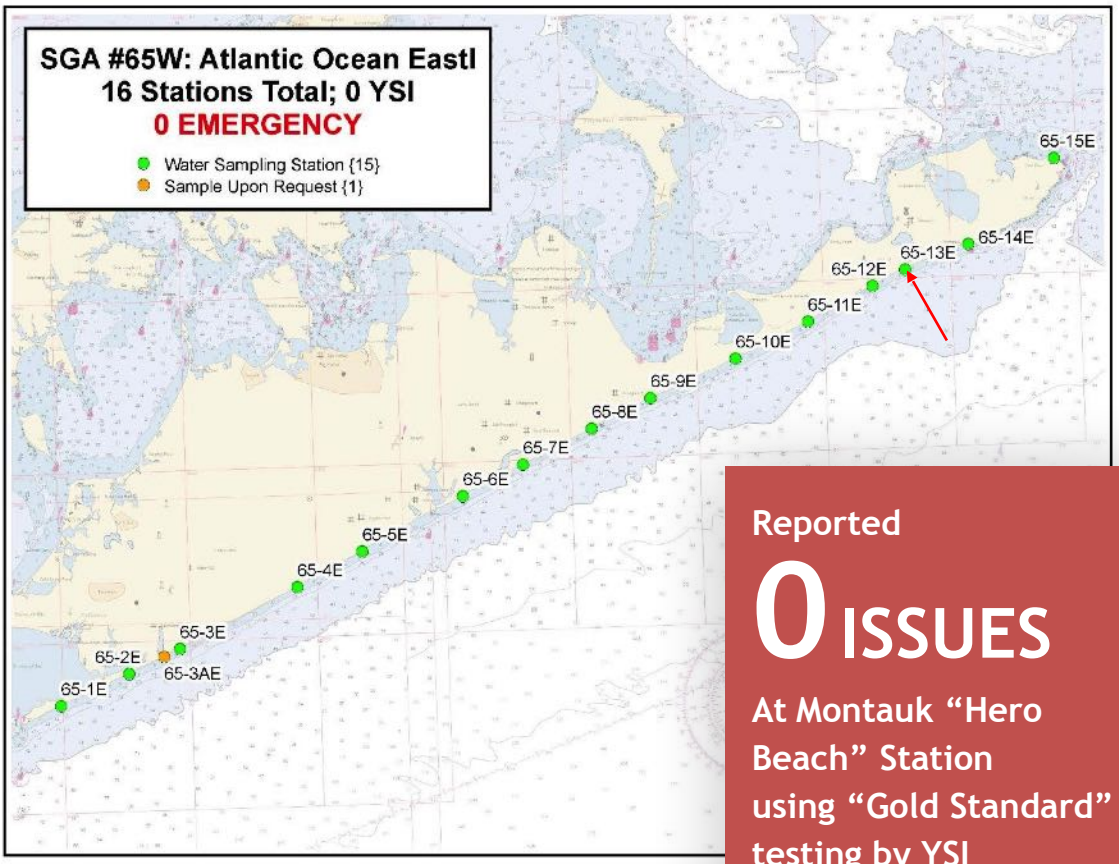
- Surface water inputs
- Stormwater
- Domestic Waste Disposal
- Wildlife
- Recreational use

Domestic Waste Disposal

There are approximately 60 residential properties and more than 15 motel, condominium or residential cooperative developments at or near the shoreline of the Atlantic Ocean on Montauk. These properties all rely on on-site septic systems and are potential sources of pollution for the ocean waters adjoining Montauk.

Sampling Plan

There are 48 total sampling stations in the Atlantic Ocean, as shown on the accompanying sampling charts. 41 stations in SGA #65 are certified year-round and must be sampled six times throughout the year, and seven stations are uncertified year-round and have no sampling requirements.



Reported

0 ISSUES

At Montauk "Hero Beach" Station using "Gold Standard" testing by YSI

YSI: "Yellow Springs Instrument" is a Water Quality Testing means.

YSI is the **"gold standard"** for water quality testing. It measures dissolved oxygen, total algae, turbidity, pH, ORP, conductivity conductance, salinity, TDS, ammonium, ammonia, chloride, nitrate, depth temp, and GPS Coordinates.

DEC Emergencies:

Events that immediately threaten life, health, property, general welfare or natural resources, and require a prompt response.

Previous Analyses:

The 2021 annual report indicated that the actual and potential pollution sources were being adequately monitored in the Atlantic Ocean and the area did not require any modifications to protect public health.

The 2020 annual report indicated that the actual and potential pollution sources were being adequately monitored in the Atlantic Ocean and the area did not require any modifications to protect public health.

NYS DEC Water Quality Data for Montauk Ocean (Hero Beach)

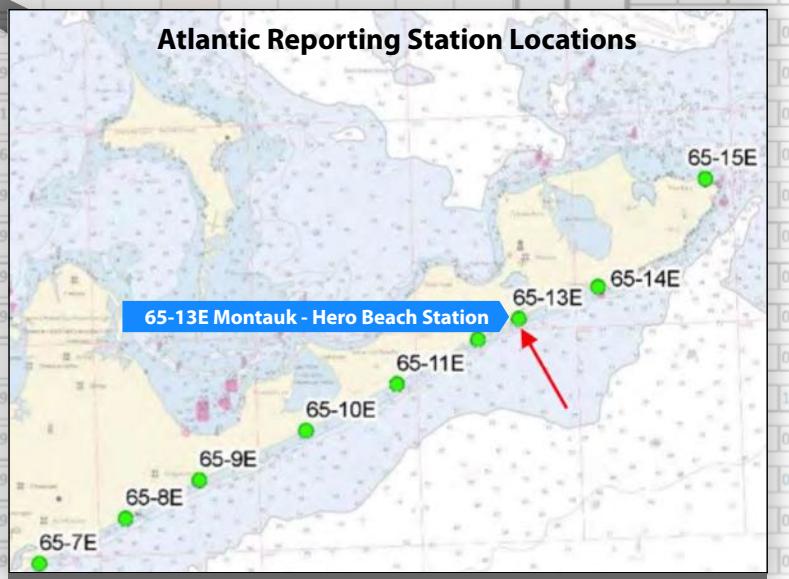
Mar/2016 to July/2019

sample date:	Water Quality	65-13E
3/28/2016	GOOD	2.9
4/25/2016	GOOD	2.9
5/10/2016	GOOD	2.9
6/8/2016	GOOD	9.1
7/25/2016	GOOD	9.1
8/8/2016	GOOD	2.9
1/4/2017	GOOD	2.9
2/13/2017	GOOD	2.9
4/25/2017		
5/3/2017	GOOD	2.9
5/17/2017	GOOD	2.9
6/13/2017	GOOD	2.9
7/11/2017	GOOD	2.9
4/3/2018	GOOD	2.9
5/7/2018	GOOD	2.9
6/20/2018	GOOD	2.9
7/16/2018	GOOD	2.9
8/1/2018	GOOD	2.9
9/24/2018	POOR	43.0
11/13/2018	GOOD	2.9
1/7/2019	GOOD	9.1
3/4/2019	GOOD	3.6
5/14/2019	GOOD	2.9
6/18/2019	GOOD	2.9
7/23/2019	GOOD	2.9
	APC	93.0

Montauk - Hero Beach Station

CAUSE: Tide was at Flood Stage

CAUSE: Heavy Rainfall, meeting standard for Adverse Polluting Conditions (APC)



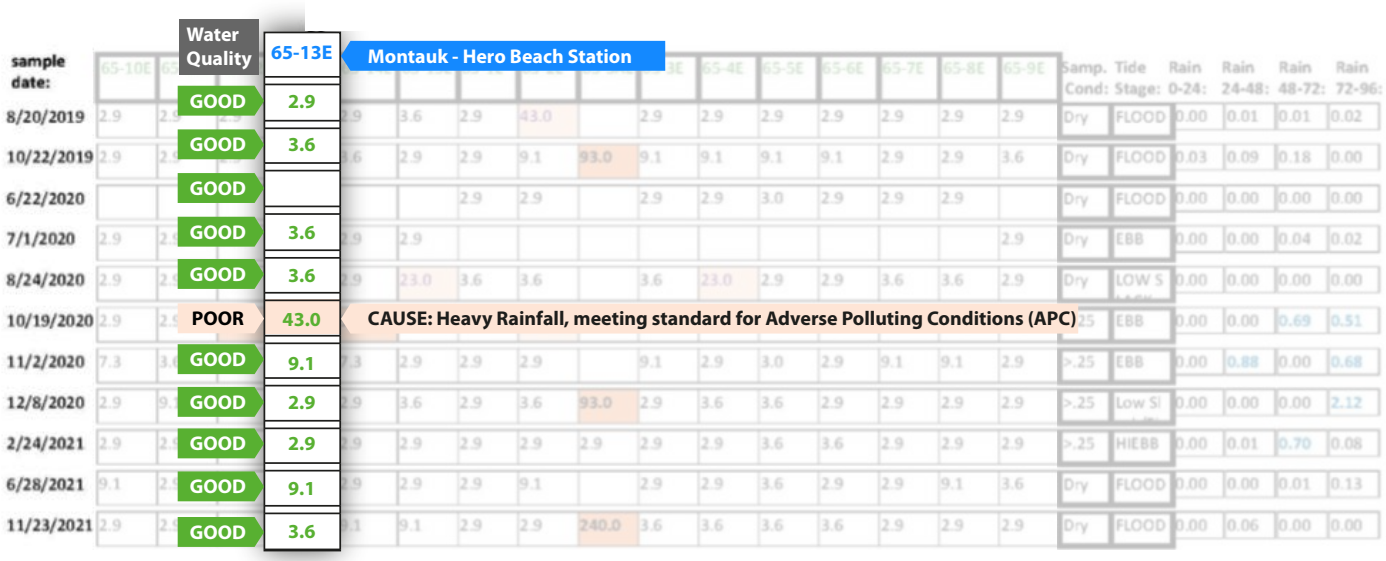
SUMMATION: Montauk Station reports good water quality except for two instances. Causes are Referenced.

GOOD

Summation for the period March 2016 to July 2019: Montauk Station at Hero Beach reports good water quality with no adverse conditions except for two instances caused by tidal flood or heavy rainfall. No beaches were closed.

NYS DEC Water Quality Data for Montauk Ocean (Hero Beach)

Aug/2019 to Nov/2021



sample date:	Water Quality	65-13E	Montauk - Hero Beach Station
8/20/2019	GOOD	2.9	
10/22/2019	GOOD	3.6	
6/22/2020	GOOD		
7/1/2020	GOOD	3.6	
8/24/2020	GOOD	3.6	
10/19/2020	POOR	43.0	CAUSE: Heavy Rainfall, meeting standard for Adverse Polluting Conditions (APC)
11/2/2020	GOOD	9.1	
12/8/2020	GOOD	2.9	
2/24/2021	GOOD	2.9	
6/28/2021	GOOD	9.1	
11/23/2021	GOOD	3.6	

GOOD

Summation for the period August 2019 to Nov 2021: Montauk Station at Hero Beach reports good water quality with no adverse conditions except for one instances caused by heavy rainfall. No beaches were closed.

Environmental Impact of Groundwater on Surface Waters (Fort Pond)

Fort Pond is a 184-acre freshwater pond situated just north of Downtown Montauk. Fort Pond is the only surface water body (or wetland) located anywhere near Downtown Montauk except for the Atlantic Ocean.

One of the premises underlying East Hampton Town's push for sewers in Downtown Montauk is that sewers in the downtown area will improve water quality in Fort Pond. Although water quality in Fort Pond is not bad, as of June 2020 it was classified as a "partially impaired water body" by the New York State DEC. See *https://www.dec.ny.gov/docs/water_pdf/section303d2018.pdf*. The cause of the impairment is occasional low dissolved oxygen in parts of Fort Pond. The DEC currently assesses the low dissolved oxygen events in Fort Pond as being a result of natural causes, and not driven by anthropogenic pollutants (i.e., pollutants produced by human activity). See Footnote 8 in the above-referenced webpage.

There seems to be limited public information concerning the amount of nitrogen to be found in Fort Pond. Nevertheless, nitrogen is not currently the basis of any regulation of Fort Pond by the DEC. The Town's own consulting engineers on the sewer project (H2M) have produced information showing that putting sewers in Downtown Montauk will cause only a very small reduction in nitrogen inputs to Fort Pond. This is chiefly because the direction of groundwater flow under Downtown Montauk is away from Fort Pond and towards the Atlantic Ocean. Most nitrogen entering Fort Pond undoubtedly comes from homes and businesses east and west of the pond.

2% If sewers are installed in Downtown Montauk, Nitrogen loading in Fort Pond would be reduced by only 2%.

Attached below is H2M's complete 2021 report (the "H2M Nitrogen Report") on nitrogen loading to Fort Pond (Exhibit 5) and H2M's Meeting Minute Summary on Downtown Montauk (Exhibit 5A). The report was prepared by Timothy J. Hazlett, Ph.D. Also attached is a map from the H2M Nitrogen Report which shows the very small part of Downtown Montauk actually situated in the Fort Pond watershed or groundwater catchment area (Exhibit 6). The map illustrates how little of the land designated for Downtown Montauk's sewer district actually lies within Fort Pond's catchment area, and thus helps to explain why only a fraction of the groundwater beneath downtown actually flows into Fort Pond. The most important factor is that groundwater flow under downtown is south, towards the Atlantic Ocean. In addition, most of Downtown Montauk is separated from Fort Pond by a buffer of New York State parkland.

Finally, data from the Suffolk County Water Authority shows that the properties which consume the most water (and thus presumably generate the most wastewater), are predominantly large motels and cooperatives fronting on or close to the Atlantic Ocean. (See Exhibit 7 below.) It is safe to say that none of the wastewater produced by these motels and co-ops ever finds its way to Fort Pond.

In reviewing the H2M Nitrogen Report, please focus on the report's Figures 1, 2, and 3. While Figure 1 suggests that nitrogen loading to Fort Pond would be reduced by less than 15% overall if Downtown Montauk were sewered, Figures 2 and 3 indicate that the nitrogen load to Fort Pond due to septic systems will only decline by two per cent (2%) if sewers are installed in Downtown Montauk. Either way, this is a derisory return on a $75-plus-million public investment that would, in the bargain, destroy 14 acres of forested parkland.

Exhibit 7 – H2M Fort Pond Watershed Assessment Report

FORT POND WATERSHED ASSESSMENT REPORT

Quantifying Nitrogen Loading to the Fort Pond Contributing Area and Impacts from Sewering the Downtown Montauk Area

H2M Project No. EHPT2101

NOVEMBER 2021

Prepared for:

Supervisor Peter Van Scoyoc and Town Board Members
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Prepared by:

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H 2 M architects + engineers

1.0 BACKGROUND & OBJECTIVES

Fort Pond is located north and west of downtown Montauk, a hamlet that is part of the Town of East Hampton. The location is on the easternmost tip of the southern fork of Long Island. Montauk Hamlet is separated from areas west by some low hills and surface water bodies, including Fort Pond.

The relative water quality of Fort Pond is of interest as a part of a larger project, which is planning to provide municipal sanitary wastewater collection, conveyance, and treatment infrastructure within downtown Montauk. The addition of this infrastructure will eliminate existing onsite wastewater disposal systems' (septic/cesspool) discharge to groundwater, where the flow will be diverted to a treatment plant. The goal of the nutrient loading analysis is to estimate the current nitrate loading to Fort Pond and then compare that to a post-sewering scenario to evaluate any reduction in nitrogen loading (via groundwater) to Fort Pond. Please refer to Gobler C. J., 2017 and Lloyd, S., 2014 for example applications of the approach employed here.

1.1 Geologic Setting

Fort Pond is situated on top of what is variously described in the literature as a Till Moraine (Caldwell, D.H., et. al., 1986). Long Island's two forks are remnants of its glacial past and it is thought that the south fork, where the site is located, is a feature near where the glacial ice sheets terminated some 10,000 years ago or more (Ronkonkoma Terminal Moraine).

The terrain formed by the till consists of several low rolling hills within the study area. The hills are comprised of unsorted deposits of boulders, gravels, sands, silts, and clays (Nemickas, B. and Koszalka, E., 1982). Fort Pond is situated in a topographic low, probably underlain by glacial materials that are relatively less permeable than sands or gravels, considering the perched (water table) nature of the pond. Fort Pond stretches nearly from the north (Fort Pond Bay) to south shore (Atlantic Ocean) and is 72 hectares (~178 acres) in area.

1.2 Groundwater Flow to Fort Pond

The study relies on groundwater flow as the mechanism for transporting nitrate from a source to a point of discharge, which in this case is Fort Pond. Groundwater flow direction and rates are not explicitly accounted for in the model spreadsheet. Instead, a catchment area is first designated for the receiving water body. H2M defined the Fort Pond catchment by subtracting depth-to-water[1] from the publicly available GIS-based LiDAR defined surface topography to define the groundwater (water table) elevation. The boundaries of the groundwater catchment to Fort Pond were calculated using GIS. The area of the groundwater catchment is calculated as 243 ha (~600 acres). Refer to Appendix A for an overview map of the modeled Fort Pond groundwater catchment area.

2.0 NUTRIENT LOADING MODEL (NLM)

The nutrient loading of the Fort Pond groundwater catchment is based on the use of a spreadsheet model known as the NLM (Nitrogen Loading Model), developed by researchers at the Marine Biological Laboratory in Woods Hole, MA. NLM has been used widely along the Northeast coast, in part because it can quantify sources of nitrogen with relative ease and accuracy and tie into land use and population. The NLM is for use in groundwater-driven systems and has been used on projects across Long Island. Inputs to the NLM specified by the user mostly include area values for different land uses, as these may reflect conditions of runoff versus infiltration to groundwater and potentially varying nutrient loading rates.

The Nitrogen Loading Model (NLM), created at the Marine Bio Lab in Woods Hole, Massachusetts, is a key component of this H2M analysis. NLM inputs can be customized by the user. This study of Fort Pond depends on a user-designed catchment area created from water depth and accessible GIS topographical data rather than groundwater flow direction or rates.

2.1 Major Components

There are three primary nutrient source categories considered in the NLM: atmospheric deposition, wastewater, and fertilizer. Given the area of study (defined by water table elevations as the groundwater area contributing to Fort Pond), and in most instances each of the primary categories applied in the model are comprised of sub-categories.

The Wastewater category contains loading input from cesspools and septic systems. In this specific case, it also contains documented discharges to groundwater from two sites with their own onsite wastewater treatment facility and effluent leach fields (i.e. Rough Riders Landing and Montauk Manor). The Atmospheric deposition category applies nitrogen loading distributed over the area on a weighted basis per land use type. Grassed land, for example, is assigned a higher atmospheric deposition rate than paved impervious areas, where runoff is dominant. Fertilizer is the remaining major loading category. It consists of an estimated loading rate of nitrate on park lands, sports fields, and lawns expressed in terms of mass (kg) per area (ha) per time (yr).

2.2 Limitations

The NLM is a so-called "lumped parameter" model that combines external inputs along with internal constants to generate output solutions. There are many assumptions inherent to the model, which in some cases will result in over- or underestimated nutrient loads. Limitations of the model for the reader to consider include:

- water table groundwater levels vary
  - with time,
  - from nearby pumping or injection,
  - from seasonal variations in rainfall or water use / wastewater infiltration,
  - atmospheric pressure (storms),
  - with sea level changes (tides – when near the shore), and
  - with spatially variable precipitation.

As a result, the groundwater contributing area will tend to change over time as well. The NLM area therefore is representing a moment in time that is likely close to average water table conditions but may not cover the full range of behavior of the groundwater system.

- loading rates (+/-)
  - may be known precisely in some areas but may have to be estimated or assigned textbook values elsewhere and
  - nitrogen fixing or other forms of affective removal from the system are all estimated and difficult to measure.
- areas over which some loads are distributed are inexact and based on GIS (or best available data) where possible

The NLM for Fort Pond should be viewed as a broad-brush tool to evaluate the relative nitrogen loading within the contributing area. As more or better data is available in the future, it could be used to replace current data in the model and refine the results of the model, decreasing uncertainty.

2.3 Fort Pond NLM Model

The three dominant nitrogen loading inputs used in the NLM are land area-weighted Wastewater, Atmospheric, and Fertilizer sources. The area-weighting means that all else being equal in each scenario, identical loading rates on different sized land areas will produce larger inputs to groundwater on the smaller parcel (higher concentration). Wastewater comprised the largest estimated loading component to Fort Pond, followed by Atmospheric Deposition, and Fertilizer (total).

The NLM is a "broad-brush" model that evaluates nitrogen loading in Fort Pond by using H2M user inputs and internal constants. Since the model depends on underlying assumptions that could result in overestimated or underestimated nutrient loads, it has limitations like all models.

2.3.1 Wastewater

For the septic and cesspool components of wastewater nitrogen loading, the mass is estimated by a combination of proximity to Fort Pond and (<200m vs >200m) the parcels are weighted equally between cesspool and septic systems. Denitrification is included in the wastewater calculation more than 200m from Fort Pond, as the inferred groundwater flow path and contact time for the nitrogen is longer.

Where specific data of nitrogen discharge was available, it was used in the model. Discharge permit data for maximum yearly loading rates to groundwater were used for the Rough Riders Landing and Montauk Manor properties (approximately 30,000 gpd at 10mg/L). This was a conservatively high estimate, given the season fluctuation of use and occupancy. At times during the year the loading may be at the highest rate, while at other times it may be negligible. The variation in source concentration over time will lag the arrival at the pond due to the groundwater travel time. The estimated wastewater nitrogen loading to Fort Pond is 6301 kg/yr, prior to sewering, and is reduced to 5342 kg/yr after the planned sewer installation (refer to **Figure 1, Figure 2 and Figure 3**). The model predicts an overall nitrogen budget reduction of about 2% of the current discharge to Fort Pond due to wastewater alone (~1000 kg/yr).

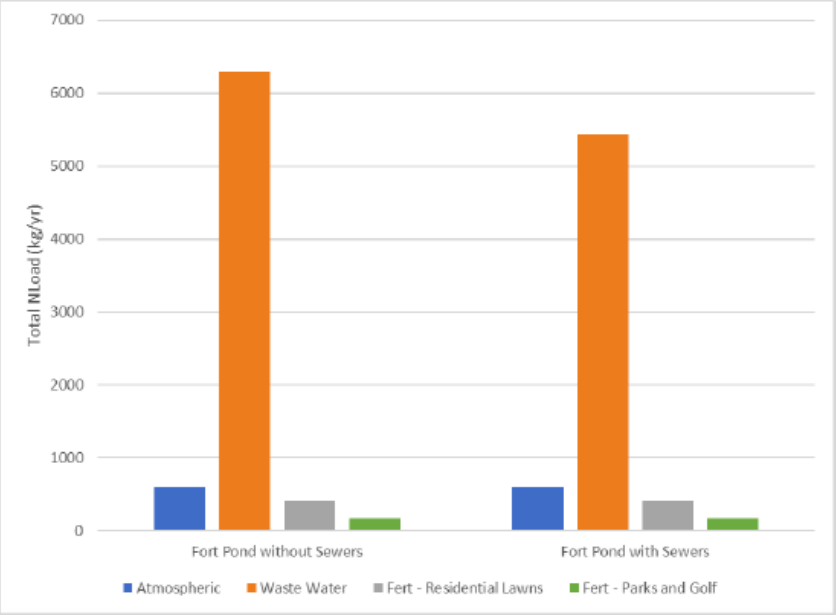


Figure 1 – Estimated Nitrogen Loading to Fort Pond Prior to and After Sewering

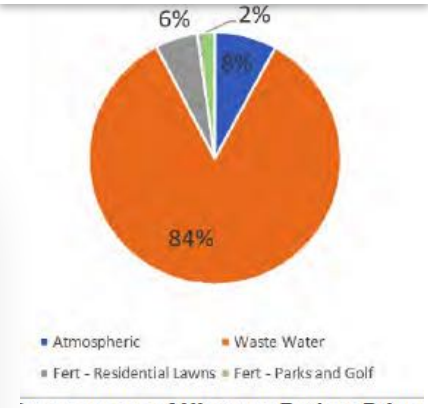
H2M's Nitrogen Report is internally inconsistent, suggesting in one place that sewering Downtown Montauk would reduct the Nitrogen load to Fort Pond by 15% – a very modest number – and in another place that downtown sewers would only reduce Fort Pond's Nitrogen load by 2%. It should be noted that nitrogen enters Fort Pond from sources other than septic wastewater, including lawn fertilizers, wildlife, stormwater runoff, and atmospheric deposition.

Adding Sewers Yields Only a

2%

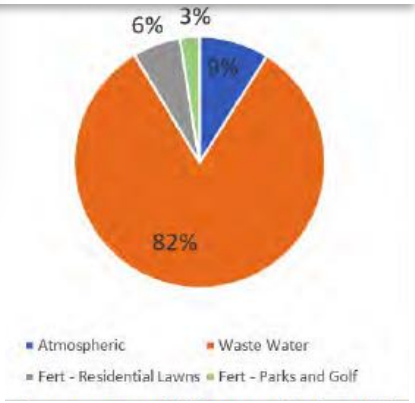
Nitrogen decrease

Figure 2 – Components off Nitrogen Budget prior to Sewers



The majority of the nitrogen in Fort Pond comes from septic system effluent. Currently, H2M estimates that 84% of Fort Pond's nitrogen budget is attributed to septic wastewater before the installation of Downtown Montauk sewers.

Figure 3 – Components off Nitrogen Budget after Sewers



According to H2M, installing sewers in Downtown Montauk would result in a **2% decrease** in the amount of nitrogen entering Fort Pond that is attributable to septic wastewater.

2.3.2 Atmospheric Deposition

Nitrogen gas comprises 78% of Earth's atmosphere while oxygen gas is approximately 21% of the atmosphere at sea level. Both are critical for life on earth. There are two main mechanisms by which atmospheric nitrogen is deposited on the land surface: wet and dry deposition (An excellent primer on nitrogen deposition can be found here - http://nadp.slh.wisc.edu/lib/brochures/nitrogen.pdf).

Dry deposition occurs via the chemical interaction between nitrogen compounds in the air and the surface of the earth. These can be complex and occur over many different time and spatial scales where nitrogen is removed from the atmosphere and chemically attached to water, plants, rocks and minerals, and many other types of materials. Wet deposition occurs primarily through precipitation (rain and snow). Refer to **Figure 4** for an overview of nationwide atmospheric nitrogen deposition variation.

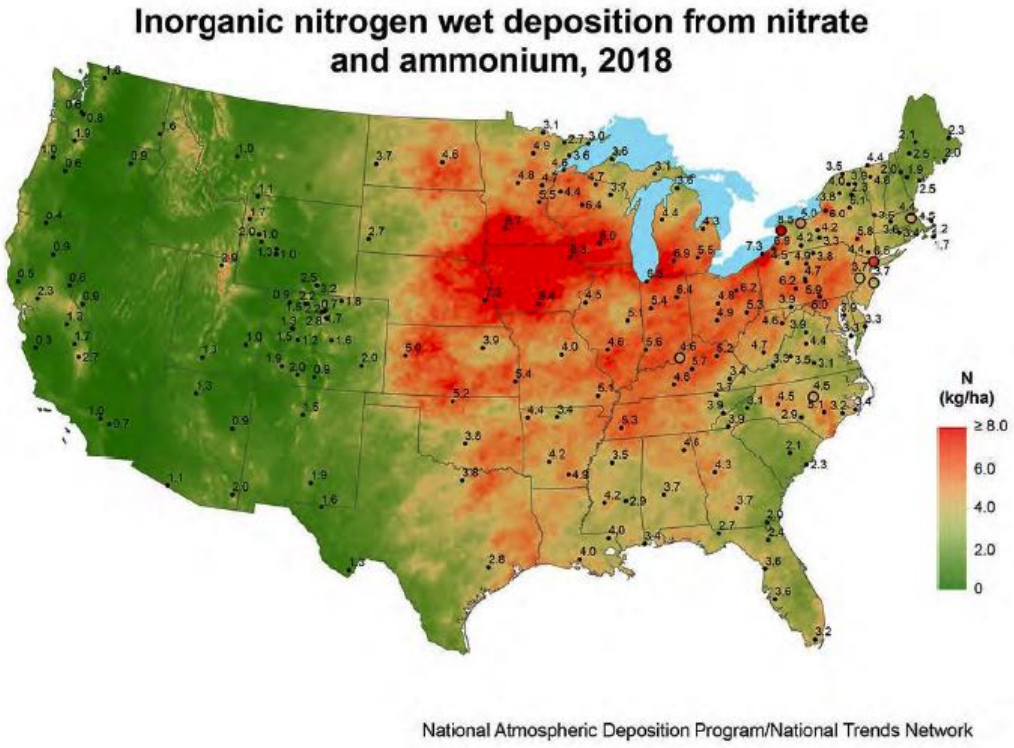


Figure 4 - Atmospheric N Deposition Variation

There are many factors affecting the overall atmospheric deposition of N. Broadly speaking, one can see that the eastern US and upper Midwest have much higher amounts of nitrogen deposited per hectare (ha) than from the Rocky Mountains and west. Agricultural, vehicular emissions, and other contributions to the atmospheric nitrogen load tend to fallout as precipitation in the east. The western half of the country benefits from prevailing westerly winds along with less arable land and lower population density, overall.

Atmospheric deposition of nitrogen over the Fort Pond groundwater catchment is not affected by sewering. The calculated nitrogen load in both cases is 594 kg/yr when denitrification and vadose zone release is included. Without these factors, the loading to Fort Pond is predicted to be 1,647 kg/yr. As a percentage of the calculated nitrogen budgets before and after sewering (refer to **Figures 2 and Figure 3**), atmospheric nitrogen deposition accounts for 8% and 9%, respectively. The percentage of the budget accorded atmospheric deposition increases slightly when the sewers have been installed because the overall nitrogen loading within the catchment is predicted to decrease.

2.3.3 Fertilizer

There are approximately 54 hectares of grassed areas (parks, lawns, golf courses) within the groundwater catchment of Fort Pond. It is assumed in the NLM that each of these categories of grassed land use apply fertilizer to the properties. Three different rates are used in the model, with the golf course rate being the highest at approximately 146 kg/ha/yr.

Because of the dominant westerly winds, the Eastern and Upper Midwest regions of the United States have larger atmospheric nitrogen deposition.

Fertilizer application overall has the least contribution to Fort Pond's nutrient budget totaling 573 kg/yr with or without the new sewer installed (**Figure 1**). The percentage contribution of fertilizer nitrogen increases from 8% to 9% (**Figures 2 & 3**) when the sewer is added, as the overall nitrogen budget is decreased.

3.0 SUMMARY & RECOMMENDATIONS

The Nutrient Loading Model (NLM) spreadsheet model was originally developed by Woods Hole Oceanographic Institute. It was employed here to evaluate and quantify what, if any, changes to Fort Pond water quality could be anticipated, given the installation of sewers within downtown Montauk. All nitrogen inputs to the model were distributed over the groundwater catchment for Fort Pond and often associated with a land use or cover. The model was populated with input that was known directly from permits and was otherwise derived from GIS datasets.

Three primary sources were categorized in the model: wastewater, atmospheric deposition, and fertilizers. All these categories are contributing nitrogen to the Fort Pond catchment. The wastewater component is by far the dominant one, accounting for more than 80% of both the before and after sewering nitrogen budget. The remainder of both budgets are comprised of nearly equal parts accounted for by atmospheric deposition and fertilizers (parks + golf courses). Even with about 10 parcels being added to the sewer system and removed from cesspools or septic.

It is clear that the definition of the problem as stated and the varying availability of data, there are uncertainties in the predictions made by the model. Fort Pond's nitrogen budget is most heavily influenced by wastewater via combination of leach field discharges, septic systems, and cesspools. Were the problem area of the groundwater catchment for Fort Pond changed in shape or size, it is not likely that either atmospheric deposition or fertilizer would come to dominate the nitrogen budget.

In terms of mitigation value, there is little that can be done locally as far as reducing the atmospheric deposition nitrogen loading to Fort Pond. The occurrence of atmospherically deposited nitrogen is complex and related to precipitation and how or where the nitrogen fixes to land surface materials or moves into groundwater. Wastewater nitrogen reduction via the addition of sewers, however, seems a relatively straightforward and valuable approach in terms of improving the relative water quality of Fort Pond or other points of discharge. The replacement of septic and cesspool systems with sewers, nearest to Fort Pond and within the identified groundwater contributing area, should be a priority if the pond's water quality is the focus.

The current model area does not contain a large area of land designated as fertilized. If Fort Pond water quality improvement is a key community objective, it is suggested that fertilizer plans be considered for properties like golf courses and parks, where fertilizer application is common.

Lastly, the seasonality of wastewater volume and nitrate loading should be considered when considering future actions. The distance within the Fort Pond catchment from a given source to the pond may be known and constant, but the travel time is not. Summer season high nitrogen levels at the pond may in fact reflect a combination of recent local sources and older, more distant sources. Managing nitrogen inputs based on both their source concentrations and locations will provide the best possible outcomes.

Septic system effluent which does **NOT** originate from Downtown Montauk has the greatest impact on Fort Pond's nitrogen levels.

Exhibit 8 – H2M Meeting Minute Summary on Downtown Montauk

Progress minutes from the Sept 2, 2021 meeting between H2M and the Town of East Ham

PROGRESS MEETING- MINUTES (DRAFT)

CLIENT:	Town of East Hampton
PROJECT:	Downtown Montauk Sewer Map and Plan
MEETING TOPIC:	Meeting with Town & Reps from Montauk Manor
DATE, TIME, LOCATION:	09/02/2021, 10:00 AM, Town Hall
MINUTES PREPARED BY:	H2M, 09/10/2021

ATTENDEES (PRESENT):

NAME	ORGANIZATION	PHONE	E-MAIL
Nicholas Bono (NB)	H2M Project Manager	631.392.5361	nbono@h2m.com
Amelia Veitch (AV)	H2M Staff Engineer	631.756.800	cweiss@h2m.com
Kimberly Shaw (KS)	Town of East Hampton Environmental Protection Director	631.324.0496	kshaw@EHamptonNY.gov
Peter Van Scoyoc (PV)	Town of East Hampton Supervisor	631.324.0496	pvanscoyoc@EHamptonNY.gov

SUMMARY:

These meeting minutes have been prepared to summarize the topics discussed during the 9/2/2021 progress meeting for the Downtown Montauk Map and Plan for a Wastewater Collection System for Downtown Montauk project between the above listed personnel from H2M and the Town of East Hampton. Personnel representing Montauk Manor were also in attendance but have not been included on the attendees list nor the distribution of these minutes. The focus of the meeting was to present updated information regarding the feasibility of locating central treatment and recharge facilities on each of the site locations identified in the final scope of work (i.e. Montauk Manor site, Landfill/Cell Tower site, and Docks site).

M1-4	NB reviewed the status of the Nitrogen Load Model progress and identified the preliminary findings that indicate nitrogen loading from onsite sanitary systems to the Fort Pond contributing area to mainly originate from parcels located to the East and the West of Fort Pond. NB further indicated that providing sewers to the downtown Montauk service area will not provide a significant decrease in nitrogen loading to Fort Pond; however, the final quantification has yet to be identified/confirmed via the ongoing modeling effort.	*Draft*

During the meeting, H2M Project Manager, Nick Bono, informs the town that the planned Wastewater System will have a negligible effect on nitrogen levels in Fort Pond.

The progress of the Nitrogen Load Model (NLM) was assessed by *H2M's Project Manager*, Nick Bono, who concluded that most of the nitrogen loading from on-site sanitary systems into the Fort Pond region comes from parcels to the east and west of Fort Pond.

Moreover, Mr. Bono stated that adding sewers to the Downtown Montauk area will **NOT** result in a large reduction in nitrogen loading to Fort Pond.

Exhibit 9 – H2M Map Showing Watershed Boundary for Fort Pond

The map below outlines the proposed Downtown Montauk sewer district with a yellow line. The watershed or catchment area for Fort Pond is depicted in green with a blue line.

As the map shows, depicted as purple area, very little of the Downtown Montauk sewer district is situated within the Fort Pond watershed area. In fact, the only place that the sewer district overlaps the pond's watershed is near the extreme southern end of Fort Pond, or the northwest edge of the sewer district. Businesses in this area include 7-Eleven, a Gas Station, Putt n Puff mini-golf, and the Harvest on Fort Pond restaurant. The restaurant has already upgraded to an I/A OWTS low-nitrogen septic system.

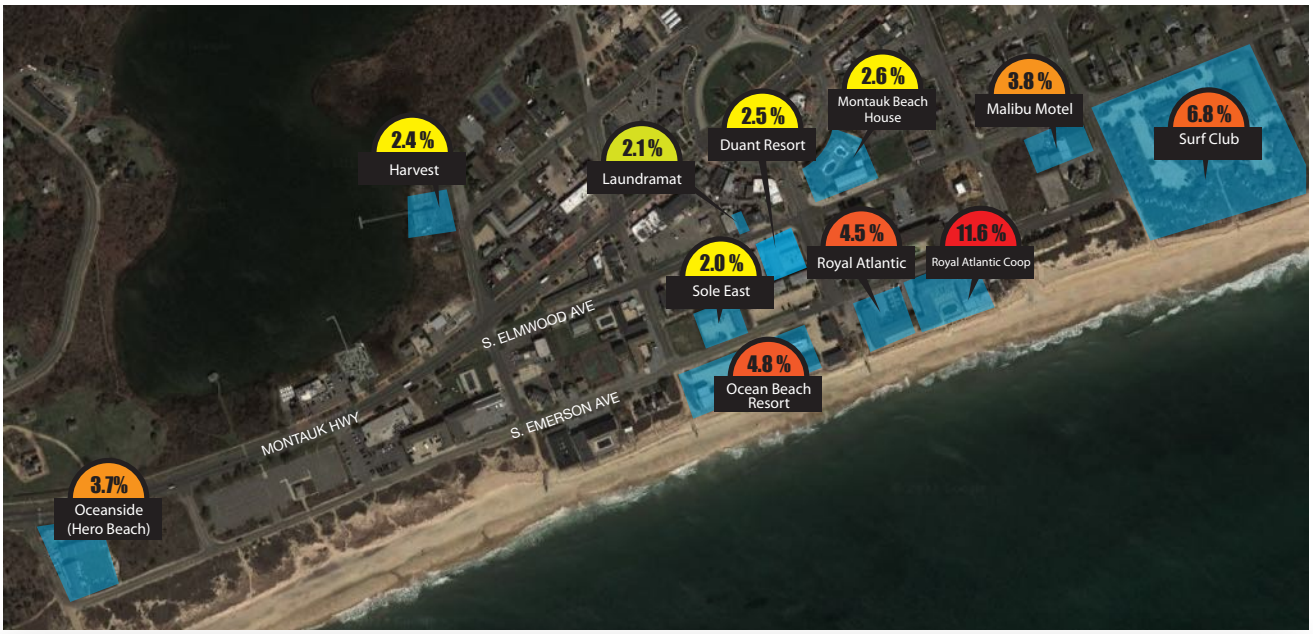
Only a small portion of the Fort Pond watershed, (shown in purple) is located within the Downtown Montauk area. Fort Pond receives a **negligible** amount of nitrogen from Downtown Montauk.

Exhibit 10 – Downtown Montauk Water Usage Data – For Top Users

The Montauk Water Usage table below identifies the businesses which were the largest consumers of public water in Downtown Montauk over the past 5 years, according to the Suffolk County Water Authority. Logically, water consumption closely parallels the generation of septic wastewater.

The accompanying map shows the locations of these high-consumption users in the downtown, which are mainly motels or cooperatives, and they tend to be located near the ocean. Remarkably, 47% of the public water delivered to Downtown Montauk over the past five years was consumed by just 11 property owners!

Rank	Address	Owner	2018	2019	2020	2021	2022	Total	% of Total
1	126 S. Emerson Ave.	Royal Atlantic Corp.	4,472,314	4,262,373	4,347,092	5,562,322	4,034,742	22,678,844	11.6 %
2	20 Surfside Ave.	Surf Club at Montauk Corp.	2,827,440	2,842,400	2,700,280	2,909,720	1,985,940	13,265,780	6.8 %
3	108 S. Emerson Ave.	Ocean Beach Resort (Blue Motel)	1,979,432	1,991,924	1,402,350	2,071,885	1,887,204	9,332,796	4.8 %
4	130 S. Emerson Ave.	Royal Atlantic Cooperative Corp.	1,706,240	1,862,527	1,759,363	1,935,196	1,600,526	8,863,852	4.5 %
5	88 S.Elmwood Ave.	88 S. Elmwood Owner LLC (Malibu Motel)	1,044,477	984,518	1,026,106	1,550,342	2,814,335	7,419,779	3.8 %
6	626 Montauk Hwy.	Oceanside Owners LLC (Hero Beach)	1,250,978	1,594,295	1,388,011	1,642,960	1,418,799	7,295,042	3.7 %
7	55 S. Emerson Ave.	Montauk Beach House, LLC	1,563,911	887,839	960,806	940,468	812,904	5,165,927	2.6 %
8	44 S. Emerson Ave.	Daunt Resort LLC (Albatross)	876,417	964,090	1,166,686	1,169,887	717,661	4,894,740	2.5 %
9	11 S. Emery St.	Fort Pond Partners LLC (Harvest Rest.)	947,215	1,001,647	753,438	980,613	975,990	4,658,903	2.4 %
10	45 S.Elmwood Ave.	Joan Lycke (Laundromat)	769,168	914,707	758,465	807,077	808,139	4,057,556	2.1 %
11	107 S. Emerson Ave.	Sole East LLC	562,646	454,634	783,605	1,071,809	1,055,802	3,928,496	2.0 %



47% Of downtown Montauk water was consumed by just these 11 property owners!

Exhibit 11 – Downtown Montauk Water Usage Data – For All Users

The Suffolk County Water Authority (SCWA) Usage Table, shown below, identifies all the consumers of public water in Downtown Montauk over the past five years, according to the SCWA, and shows the total volume of water supplied to these users for each year. Again, water consumption closely parallels the generation of septic wastewater.

H2M claims Downtown Montauk produces 173,720 GPD of septic wastewater. Yet the Suffolk County Water Authority data reveals only 93,013 GPD are actually consumed downtown.

87% Increase Wastewater has been overestimated by H2M to support Town growth.

H2M calculated that Downtown Montauk presently generates 173,720 gallons per day (GPD) of septic wastewater. This figure appears to be greatly exaggerated. The Suffolk County Water Authority's annual water consumption data reveals that over the past five years the average annual wastewater generation by all properties within the proposed sewer district has been approximately 93,013 GPD, after deducting 10% for leakage, irrigation, and evaporation.

Wastewater Usage Data for All Proposed Montauk Sewer Districts

115% Represents the Town's planned increase of wastewater for all four of the proposed sewer districts in Montauk.

The SCWA data discloses the water usage for the three additional proposed Montauk sewage districts. These are the Montauk Docks, Ditch Plains and the Railroad Station area. The table below compares H2M's full buildout estimate of 600,000 GPD of sanitary flow for all four prospective sewer districts to the actual SCWA water consumption. This translates to 278,792 GPD of sanitary output for all the sewer districts. The 115% increase between actual water consumption and H2M's estimates of existing sewage flow suggest the Town's real motivation for wanting to build a Centralized Sewage System for Montauk is to foster or promote future business expansion.

SCWA Actual Usage (5 year average) 37,721,757 GPD	SCWA Actual Usage	H2M Model Estimates	H2M% Increase
SCWA Downtown Montauk Usage GPD	103,347	n/a	
Less 10% evaporation, irrigation & leakage	10,335	n/a	
Downtown Montauk Estimated Wastewater	**93,013**	**173,720**	**87%**
Other Proposed Montauk Sewer Districts			
Fishing Docks	**109,252**	n/a	
Ditch Plains	**59,868**	n/a	
Transportation Hub	**37,302**	n/a	
Less 10% evaporation, irrigation & leakage	20,642	n/a	
Other Sewer Districts Estimated Wastewater	**185,780**	n/a	
All Sewer Districts Estimated Wastewater	**278,792**	**600,000**	**115%**

GPD - gallons per day, n/a - not available

Financial Impact to East Hampton Town Residents

According to the July 2022 H2M Report, all East Hampton Town residents outside the incorporated villages (not just residents of Montauk) will potentially pay for the construction, maintenance and servicing of the Montauk Sewer District infrastructure and buildings as well as debt service on the $75 million bond for the initial buildout of Phase 1. The Railroad Station area, Montauk Docks and Ditch Plains would be Phase 2, 3 and 4 of the Montauk sewer project. The cost of these sewer district expansions is unknown, but it will likely exceed the $75 million cost estimate for Phase 1 by a considerable margin.

Description	Annual Budget ($)
Superintendent & Staff (total comp)	$400,000
Contract Operator	$600,000
Sludge Hauling and Tipping Expense	$400,000
Utilities Expense	$800,000
Engineer of Record (EOR) Retainer Expense	$50,000
Sinking Fund Expense	$300,000
Consumable Expense (Vehicles, Tools, Fuel, etc.)	$300,000
Total Annual O&M Cost . . .	$2,850,000

Additionally, a new Town Sewers Department will need to be created. Alternatively, the Town could hire an outside firm to run the Montauk sewer system on a contract basis. Any new Town department would require, at a minimum, a full-time Superintendent to perform managerial functions required to oversee the sewer district. A minimum of two full-time employees would be needed to perform general maintenance activities at the STP facility.

$3 Million

H2M estimates that the annual operating and maintenance expense for the new Montauk STP facility will be just under $3 million.

H2M estimates the annual operating cost for the new Sewers Department would be around $3 million annually. It is reasonable to expect these costs to increase over time. In fact, given that the Phase 1 Downtown Montauk Sewer District is not projected to come online until 2030, these estimated departmental costs will likely be out of date before the sewer system even begins to operate.

Table 8 – Annual Charges for Typical Property in Town of East Hampton Sewer District No. 1

Typical Property 2022 A.V.	2022 Market Value[8]	Flow Allocation (gpd)	Annual Sewer Assessment (Tax)	Annual User Charge (Rent)	Total Annual Cost ($) (Tax + Rent)
$800	$177,776	587*	$2,023.88	$9,632.67	$11,656.55

*Based on highest flow allocation for a property in the district with an A.V. = $800.

According to H2M, without outside grants or subsidies the Tax Levy for a “typical” Montauk property within the sewer district would be $2,023 in taxes plus $9,632 for user fees, for a staggering yearly total of $11,656! Note, the “typical” Downtown Montauk property would be one with an estimated 2022 Market Value of only $177,776. East Hampton Town residents not in the sewer district could see their taxes raised if the Town Board decides that it is unfair for property owners in the sewer district to pay the full burden of capital improvements and operating costs for Montauk’s sewers.

$11,656
Taxes & Fees

The additional taxes for a typical Montauk home within the sewage district would be $2,023 in addition to $9,632 in user fees, for a stunning total of $11,656 in taxes & fees.

Town of East Hampton Reason to Build STP - Growth

Why does the Town of East Hampton continue to push forward with plans to build a $75 million Sewage Treatment Plant for Downtown Montauk that would require 14 acres of County parkland and would provide very little in environmental benefits?

The reasons for the Town's persistence regarding the Montauk sewer project might not be the ones the Town tells you. Here's a hint. In its July 2022 Report to the East Hampton Town Board – a report which to this day has never been released to the public – H2M wrote the following as to the Purpose of Forming the Sewer District:

> Business development and revitalization also hinge upon functioning sanitary systems. Every building, whether residential or commercial, designed for any specific use, has a certain amount of wastewater flow that its sanitary system is engineered to handle. In Suffolk County, the areas where failing on-site sanitary systems exist as the predominant method of wastewater disposal are losing value as they cannot be used to their fullest extent. This is seen in the Downtown Montauk Area where many buildings cannot accommodate mixed-use, cannot have a wet license, and are not able to increase their maximum occupancy ratings.
>
> To minimize the discharge of contaminants to the environment, Suffolk County Department of Health Services (SCDHS) enacted Article 4, Article 6, Article 7, and Article 12 of the Suffolk County Sanitary Code to form the rules and regulations on which to protect groundwater and public health in Suffolk County. Article 6 of Suffolk County Sanitary Code was enacted in 1980 to limit development density based on location relative to water resources. Any development initiated after 1980 that would exceed the density limitations specified in Article 6 would be required to install onsite sanitary wastewater treatment system(s) or connect to a centralized treatment system to ensure compliance with local regulatory requirements. It is for these reasons that the development of centralized sanitary infrastructure would be beneficial to the social, economic, and environmental sectors of the Downtown Montauk Area.
>
> Centralized sanitary wastewater collection, conveyance and treatment infrastructure will provide the property owners within the Downtown Montauk Area with the opportunity to expand their existing businesses in compliance with local zoning ordinance, as well as improve public perception associated with the reduction of nuisance odor emissions and potential back-ups that require pump-out activities of existing onsite sanitary wastewater disposal systems. Improvements to the Downtown Montauk Area will provide additional employment opportunities and may result in increased property valuations. The increase in property valuation within the Downtown Montauk Area and

H2M states that Downtown Montauk Sewer District may provide the following growth opportunities:

- Expansion of existing businesses
- Increased business property values
- Increased tax revenue and sales tax to the Town

surrounding properties will provide additional property tax revenues to the Town while increased business activity will provide additional sales tax and income tax revenue, thus increasing the overall valuation of Montauk hamlet and to the overall Town.

H2M states that Suffolk County wastewater flow regulations hinder downtown **growth of existing restaurants and nightspots.**

In other words, the Town wants a sewer district in Downtown Montauk so it can get around the constraints imposed by the Suffolk County Sanitary Code, and so that downtown businesses, including restaurants and nightclubs, can increase the numbers of patrons they serve. It is not inherently wrong for the Town of East Hampton to promote economic growth and development in Montauk. But it is dishonest to say that this is being done in the guise of "clean water" and environmental protection. The Town wants Suffolk County to sacrifice 14 acres of forested parkland in the middle of Hither Woods so that Downtown Montauk businesses can expand. Let's just call a spade a spade.

The Scope of Work

The Scope of Work issued by East Hampton Town, in specifying the objectives for a Downtown Montauk sewer study, identified Montauk "growth" as the central purpose of the Montauk Sewer District Proposal. Growth and Expansion in the downtown area is mentioned or discussed 22 times in H2M's response to the Town's RFP.

The Town purposely did NOT allow H2M to consider Innovative & Alternative On-Site Wastewater Treatment Systems (I/A OWTS) because that would **LIMIT GROWTH!**

As the July 2022 H2M Report states in Section 3.2, East Hampton Town expressly did NOT ALLOW H2M to consider the introduction of alternative wastewater treatment systems such as Innovative & Alternative On- Site Wastewater Treatment Systems (I/A OWTS) to address groundwater issues. The reason for this exclusion, it was explained, was because the use of Health Department-approved I/A OWTS systems would not allow for future business growth!

Once wastewater from Downtown Montauk is being handled by a sewage treatment plant, downtown businesses will no longer be subject to the density regulations of the Suffolk County Health Department. The only thing remaining to limit Downtown Montauk business expansion is the East Hampton Town zoning code, and that can be changed.

Suffolk County Parks Commission Trustee Meeting

Trustees Unanimously Vote 10 – 0 against Parkland Alienation

On February 23, 2023, the Suffolk County Park Trustees met in West Sayville to discuss East Hampton Town's proposal to swap 14 acres of County parkland in Hither Woods for an 18.8-acre parcel of Town land on East Lake Drive, which the Town purchased in December 2022 for the express purpose of conserving open space and protecting ground and surface water. The purpose of the land swap and subsequent parkland alienation would be to allow East Hampton Town to construct a Sewage Treatment Plant next to Laurel Canyon in Hither Woods.

When the Parks Trustees were asked to make a recommendation on the proposed parkland alienation, they did not flinch. The Trustees voted ten to nothing (including a written statement from the Trustee from Shelter Island), with two abstentions, against the proposed land swap and parkland alienation.

Parks Trustee Gil Cardillo told the East Hampton Town representatives who were present at the meeting, "We've never seen such a large turnout by supporting organizations for a single issue than we have here today. Can anyone from the town tell me what organizations are supporting your efforts for parkland alienation?" The room fell awkwardly silent. Finally, one of the Town's representatives said, "We have support from the CAC (Montauk Citizens Advisory Committee)." A chuckle emanated from the room. The Montauk CAC is an advisory committee appointed by the Town Board, and its informal vote was taken almost a year ago - on a different proposal involving different parkland. The Town had admitted the obvious: it has no substantial public support for this project.

On February 23, 2023, the Suffolk County Parks Trustees voted 10-0 to recommend against alienating County parkland in Hither Woods for a sewer plant.

William Sickles, another Trustee, opined that Suffolk County residents often come out in larger numbers to vote for open-space initiatives than they do for candidate elections. A vote for parkland alienation would usurp the will of all Suffolk County residents who have supported the preservation of parkland.

Conclusion

Fourteen acres of woodlands on the right in this photo would be bulldozed.

Fourteen acres in Hither Woods will eventually be bulldozed for a 22,500 square foot sewage treatment building, other structures, and up to 250 concrete leaching pools, each 12 feet deep, which will be emplaced in the ground to accept and recharge what might eventually be as many as 600,000 gallons per day of effluent from the sewer plant.

The Town has subsequently claimed that it will clear only 2.8 acres of land for the sewage treatment plant and leaching pools. It appears physically impossible to clear only 2.8 acres of land, given the sewage flows which the Town anticipates, and the Town has certainly not earned the benefit of the doubt. Whatever Town representatives might say today, it must be assumed that the Town will eventually clear all 14 acres of land if future circumstances seem to require it.

The underlying motivation behind the $75 million Downtown Montauk Sewer Project is apparent in the absence of any demonstrable environmental benefit. The Town's true goal seem to be to promote the growth and expansion of businesses in Downtown Montauk.

The underlying motivation behind East Hampton's $75 million Downtown Montauk sewer project is apparent, in the absence of any demonstrable environmental benefit.

The purpose of the Sewer District is to promote growth and expansion of businesses in Downtown Montauk.