



# Central Sewer line

# DEFINITIONS

- Cesspool means a covered pit, with a porous lining, into which wastewater is discharged and allowed to seep or leach into the surrounding soils with or without an absorption facility. **Note: Cesspools cannot be certified for real estate transfers.**
- Septic tank means a watertight receptacle which receives the discharge of wastewater from a structure and is designed and constructed so as to permit settling of solids from the liquid, digestion of the organic matter by detention, and discharge of the liquid portion into a leach field.
- Central Sewer means a series of sewer pipes, tunnels, and pumps to collect wastewater and to transport it to a central treatment plant.

# HISTORY

- 2012 – Recommendation from Delaware Sea Level Rise Advisory Committee in their report entitled “Preparing for Tomorrow’s High Tide – Recommendations for Adapting to Sea Level Rise in Delaware”, that coastal municipalities begin converting to a central sewer system
- 2014 – Delaware revised septic tank regulations.
  - All septic systems must be pumped out at least once every 3 years
  - Cesspools cannot be certified for transfer of title.
- 2014 – Town applied for and was awarded a grant from USDA Rural Development for performance of a feasibility study for a centralized sewage disposable system. After grant award the Town contracted with the engineering firm of Davis, Bowen & Friedel, Inc. to perform the study.
- 2015 – Town modified our 2007 Comprehensive Land Use Plan to incorporate centralized sewer line
- 2019 – Feasibility study was completed and DBF presented findings at a town council meeting
- 2021 – Town receives notice of ARPA funding
  - Town is placed on CWSRF short list for sewer and water infrastructure funding to mitigate risk posed by SLR
  - Town official informally notified that State regulations regarding septic systems will be modified in 1-2 years

WHY CHOSE THIS PATH?

# PREPARING FOR TOMORROW'S HIGH TIDE – RECOMMENDATIONS FOR ADAPTING TO SEA LEVEL RISE IN DELAWARE, DELAWARE SEA LEVEL RISE

ADVISORY COMMITTEE, JULY 2012

*"Recommendation 2.5: Facilitate the connection of individual septic systems to community wastewater treatment system with excess capacity when human safety and welfare are at risk".*

*"Potential Economic Impact: Concerning the economy, the failure of septic systems is a major challenge that property owners exposed to sea level rise will have to address. If this issue is not remedied, a home is rendered uninhabitable, and the property loses its value. In most cases, the property cannot be sold for other uses due to the level of development that has already altered the land (Maryland DNR, 2008) ... Failing septic systems may also force local governments to install costly central sewer systems for coastal communities."*

PREPARING FOR TOMORROW'S HIGH TIDE – RECOMMENDATIONS FOR  
ADAPTING TO SEA LEVEL RISE IN DELAWARE, DELAWARE SEA LEVEL RISE  
ADVISORY COMMITTEE, JULY 2012

*"Potential Social Impact: The changed functionality of septic tanks and disposal fields may impact the health and safety of communities that are exposed to untreated or partially treated waste. Sea level rise may cause some properties in coastal towns that rely on septic systems to become uninhabitable due to sewage backups. Microbial populations from septic waste that is able to enter the surface water may exceed the U.S. Environmental Protection Agency's body contact standards, abruptly halting recreational use of beaches, lakes, and streams and possibly contaminating groundwater supplies."*

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ADVISORY COMMITTEE, JULY 2012

*"Potential Environmental Impact: The presence of groundwater levels near the surface will affect the integrity of on-site septic disposal systems. Saturated ground conditions impair the soil's ability to infiltrate and filter sewage effluents. Sea level rise will decrease the soil filtration process allowing for additional contaminants to enter water resources."*

*"It is estimated that every failing septic system can discharge more than 76,650 gallons of untreated wastewater into Delaware's groundwater and surface waters per year (Lee, Jones, & Peterson, 2005). Untreated wastewater contains excessive nutrients (nitrogen and phosphorus) that can harm native plant and fish populations in surface waters."*

# FINDINGS OF THE DAVIS, BOWEN & FRIEDEL, INC. REPORT PREPARED FOR THE TOWN OF SLAUGHTER BEACH JUNE 2019

*"The Town has had several meetings to discuss new DNREC regulations regarding septic systems. As a result, residents are aware of the potential issues associated with individual septic systems and several have experienced them first hand."*

*"Upon the outcome of possible funding, the Town intends to issue, discuss and eventually pass a resolution in which the Town would officially request that Sussex County investigate the viability of establishing a Slaughter Beach Sewer District owned and operated by Sussex County, of which this PER is the first step."*

*"Given the increased likelihood of backups due to inundation from flooding and the direct impact on human safety and welfare as well as adverse environmental impacts to the surrounding area due to raw wastewater spills, this project is justified".*



# FINDINGS OF THE DAVIS, BOWEN & FRIEDEL, INC. REPORT PREPARED FOR THE TOWN OF SLAUGHTER BEACH JUNE 2019

*"Being a coastal town, many of the property elevations in Slaughter Beach are at or less than 5 feet above sea level. Rise in the sea level will raise the water table in the Town and will expand the floodplain ..."*

*"The current septic systems, cesspools, and/or drain fields are likely to fail due to age as they were installed 20 to 30 years ago and have reached the end of their useful life span."*

*"Given the reduction of sewage contamination by converting to wastewater collection as opposed to septic tanks and cesspools, the improvements will help to preserve the quality of these sensitive areas. This will also decrease the risk of contaminating the nearby habitats of conservation concern such as the Prime Hook Wildlife Refuge".*

WHY NOW?

# FINANCIAL CONSIDERATIONS

In an ecologically sensitive environment the cost of a new septic system is \$30-\$40,000

- Cost of “clean” sand has almost tripled in the past decade
- Costs are expected to rise as availability of sand decreases
- Flood events and salt-water intrusion can cut the life expectancy of septic systems by half

Historically home values INCREASE with a centralized sewer system

One funding source for a new central system is USDA Rural Development. This office provides both grants and loans to rural communities with a population of less than 10,000. The annual cost to homeowners is based on repayment of construction loans, to be repaid over a 40-year period at an annual cost of 1-1/2% of the community’s median annual household income as determined by the U.S. Census Bureau’s most recent estimate.

In 2010, the median household income of Slaughter Beach was just above \$36,000/year. The 2021 median household income is approximately \$70,000.

Should the Council decide to move forward, a cap on the amount that can be charged to homeowners for loan servicing should be included as part of the resolution

# NOW IS THE TIME TO MOVE FORWARD

Inevitably the Town will be forced to install a central sewage treatment system.

The higher the investment in a community, the more likely it is that community will receive monies from disaster recovery funds

Grant and low interest loan funding is available now and may not be available in the future.

- ARPA Grant

- The Town will receive \$130,000 over a two year period. Funds must be appropriated within two years of receipt of the first payment.
- ARPA monies can be used to repay municipalities for costs associated with Covid-19 or for water, sewer or broadband projects.
- Sussex County will receive approximately \$45 million in ARPA funds. The County Council will determine how those funds will be used but the same constraints apply. Our plan is to petition the County Council to use a portion of those funds to buy down the loan servicing fees.

- Additional infrastructure funding is currently under consideration by Congress.

# QUESTIONS