## MIDDLETOWN WASTEWATER TREATMENT ENHANCED NUTRIENT REMOVAL UPGRADE - PROJECT TIMELINE

East WWTP State Discharge Permit #13-DP-3182, NPDES Permit #MD0067628 West WWTP State Discharge Permit #18-DP-0462, NPDES Permit #MD0024406

State Mandated \$43k WWTP		\$375k WWTP Upgrade to Meet Permit		Facility Flooding & Increased Risk		Start of Planning & Design		
1957		1976		2004		2022		
•	•	•	•	•	•	•	•	
	1967		2000		2020		2023	
	State Mandates "Secondary Treatment"		\$4 Million East Plant Completed		\$4M East Plant Debt Service Completed		State Mandated \$40 Million Upgrade	

- 1957 STATE MANDATE #1: As mandated by the Maryland Department of Natural Resources, Middletown centralized wastewater treatment and built a \$43,000 primary wastewater treatment "Emhoff Tank" facility (West WWTP), discharging into the Catoctin Creek Watershed, a sub watershed of the Chesapeake Bay Watershed.
- 1967 STATE MANDATE #2: The Maryland Department of Natural Resources mandates that all permitted wastewater treatment facilities, discharging into the state waterways of the Chesapeake Bay Watershed, must upgrade and install secondary treatment.
- **TREATMENT UPGRADE**: After years of planning, design, and fund raising, Middletown installed a \$375,000 aerated lagoon facility with secondary treatment, to meet MD DNR's secondary treatment mandate.
- **2000 GROWTH & 2**<sup>ND</sup> **FACILITY**: To accommodate residential and commercial growth, Middletown installed a new \$4 million-dollar treatment plant, on the east side of town: East Treatment Plant.
- HAZARD TO ENVIRONMENTAL & PUBLIC HEALTH: West Lagoon Plant was built adjacent to a receiving stream (Catoctin Creek) and in a floodplain. Over time, with the effects of climate change, the risk of flood due to extreme weather significantly increased. The Lagoon is in a high-risk flood zone (FEMA Flood Zone AE), with a 26% chance of flooding over a 30-year period. The facility has flooded numerous times, but luckily flood waters haven't yet reached the lagoon ponds and contaminated the receiving stream with raw sewage.
- 2020 DEBT SERVICE COMPLETED: Middletown completed twenty years of debt service payments on the \$4 million-dollar East Treatment Plant.
- **BAY RESTORATION FUND ENHANCED NUTIRENT REMOVAL (ENR) UPGRADE**: With recommendation from the Maryland Department of the Environment, Middletown applies for, and is awarded, design funding to evaluate the replacement of the Legacy West Lagoon Plant.
- **PRELIMINARY ENGINEERING REPORT & \$40 MILLION PROJECT:** Middletown's consulting engineer presents draft preliminary engineering report, detailing a \$40 million-dollar overhaul of both the town's treatment facilities. The West Lagoon Plant's location in a floodplain necessitates its decommissioning and relocation of sewer flows / treatment to the East Treatment Plant, that must subsequently and prematurely undergo a capacity and treatment upgrade.

In an October 2023 letter to Middletown, MDE's Discharge Permits Division clarifies the West Lagoon Plant's 2026 permit limits will be tightened and require flood mitigation, and a "treatment process upgrade" is necessary for permit compliance.