The Pump Station Effect

Pump stations keep sewage flowing in low areas but are expensive to operate and require a large amount of staff time. Hillsborough has more pump stations per customer basis than its surrounding water and sewer systems.

Background

A pump station is a collection chamber. It uses pumps to transfer or lift wastewater from a lower elevation to a higher elevation, where the wastewater then can flow by gravity toward the Wastewater Treatment Plant.

Hillsborough has more pump stations than a typical municipality because of its terrain and likely because the infrastructure was preferred decades ago due to its low upfront costs. Some of the pump stations were built by developers and turned over to the town to own and operate.

This building houses a pump station on Elizabeth Brady Road. A generator helps ensure it continues to operate, preventing spills.

Effect on Rates

Gravity is the most cost-effective way to transport water. Although capital costs to build gravity water lines are greater, gravity lines are less expensive to operate over the long haul.

Pump stations require electricity, maintenance on the pumps, and weekly inspections. Most pump stations also require expensive generators and spare pumps. Failures can result in much larger sewer overflows and subsequent fines from the state.

Customers who improperly dispose of grease, wipes, hygiene products and other trash into the system can clog the pumps. If a clog is not too severe, staff can clean the pumps. If it is severe, the pump can break or burn out, requiring a replacement.

Because Hillsborough's utilities system is small, the cost of operating the town's pump stations is spread over fewer customers.

Hillsborough has been working to reduce the number of pump stations it operates. Since 2005, two pump stations have been eliminated. Eliminating these stations is costly initially as gravity sewers also must be constructed.
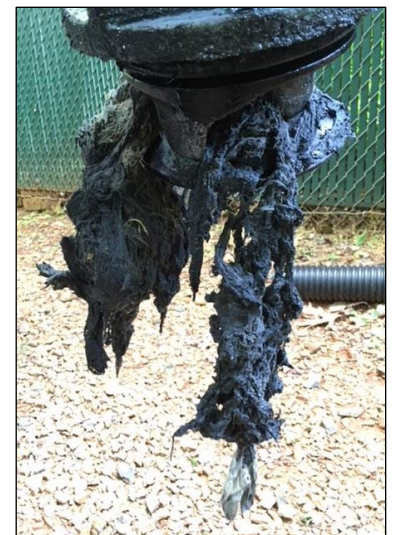
Improper disposal of rags and wipes into the sewer system can clog a pump, increasing costs.