

Waynesville's sewer treatment plant is on its last leg and then some — saddled with environmental violations, worn-out parts, overflows, leaky collection lines and subpar storage capacity.

It handles sewage for a large central swath of the county, from Lake Junaluska to Clyde to Iron Duff, as well as greater Waynesville. More than 10,000 households and businesses on four different sewer systems will see their rates go up to pay for the rebuild.

Waynesville is four years into the process of rebuilding the plant, but has at least three more to go with a target completion of 2023.

The town has been navigating a maze of moving parts that have to happen before the first screw or shovel of dirt can be turned.

HOW TO FIX THIS



MOVING PARTS IN A SEWER PLANT REBUILD



The rebuild will cost big bucks, now pushing \$20 million. Negotiating the best deal on a loan has been a complex process. The town has been bargaining with both state and federal loan funds to find the optimum interest rate and pay-off period. The better the rate and longer the pay-off period, the lower the annual loan payments and the less sewer bills will have to go up.



Waynesville has been in the crosshairs of state environmental regulators who got fed up with repeated pollution violations. Regulators threatened to stop all new development from hooking on to the sewer system until the plant was fixed, which would bring the local economy to a screeching halt. Added regulatory scrutiny has meant more hoops and hurdles during the already onerous permitting requirements.



It takes the right mix of compounds and live organisms to clean the sewage. Waynesville has run afoul of pollution limits due to high concentrations of salt getting into its system, presumably from epsom salt manufacturer Giles Chemical.

The salt kills the bacteria that are supposed to neutralize ammonia, leading to violations for high levels of ammonia. The town and Giles continue to try to trouble-shoot the problem.



Flash storms with intense rainfall have been overwhelming the plant's capacity, causing violations. Rain is getting into the sewer system either from leaky sewer pipes or gutters.

Other sewer systems feeding the plant are part of the problem, but Waynesville is the one getting dinged by regulators. Line work to identify where the rain is getting into the system is now part and parcel to the rebuild itself.



Planning and designing will ultimately take longer than the rebuild itself. The town has been in the study phase and planning process for almost five years. There is another year of final engineering to map out what needs to be done — from concrete thickness on the holding basin to bolt sizes on new mechanical equipment. The project can then finally go out to bid. The town's engineering firm of McGill is entering the final stage of the engineering, and within a year, should be able to take the project out to bid.