

This is the second in a series of articles by ARSA (Augusta Regional Sewer Authority) intended to inform the citizens of Bracken County of the status of the planned construction of a new Regional Waste Water Treatment Plant (WWTP).

A quick review: The process to plan and construct a Regional WWTP was initiated by a 2005 study by the Kentucky Division of Water Facilities. This study had several recommendations. The first recommendation was that the facility be a regional plant to service Brooksville, Augusta and selected Bracken county citizens. It was believed that a regional facility was the only way grants and loan money would be received. The current treatment plants were built in 1970 (Brooksville) and 1978 (Augusta) and were designed with a twenty-year life cycle. Brooksville is twenty-seven years past its life cycle and Augusta nineteen years past its life cycle. Augusta's WWTP has been in violation of the Environmental Protection Agency's regulations ten out of the last twelve quarters; Brooksville, six of the last twelve quarters. It is not a matter of *if* they will have a catastrophic failure, but *when*. Before that occurs, we are trying to construct a new, single stage activated sludge plant, costing \$12.5 million with a twenty-year life expectancy. Once funding is received it is estimated it will take two years to complete. It will have a 690,000 gallon-a-day flow capacity with the ability to support 940 or more households within the region. Location was an initial concern but solved when land was found two miles north of Brooksville, at the intersection of RT 19 and Locust Creek. Bracken County has purchased this property. Earlier sites near Augusta were rejected due to flood elevation and/or the disturbance of ancient Native American burial grounds.

A second recommendation from the 2005 study was that a surcharge of \$7.00 per month be placed on the sewer bill to provide funds to curtail the inflow and infiltration of

rainwater into the sewer system. At the time, that surcharge was rejected by both cities. Inflow is the illegal connection of downspouts and sump pumps from buildings or residencies into the sewer system. Infiltration is the ground water seepage into the sewer system through joints or deficiencies in the sewer pipes or manholes. To provide an example of the extent of the problem, on June 23rd of this year, Bracken County received a 3-inch rainfall. Brooksville and Augusta's normal flow to their WWTP is 40/45 thousand gallons a day but during this rain event, over a four-day period, Brooksville's flow increased by over 350 thousand gallons. Augusta, over this same period, had an increased flow of over 667 thousand gallons!

So, what does this mean to our citizens? It means that thousands of gallons of rainwater are being pumped to the WWTP and then cleaned. Inevitably, this increases operating costs and those increases are passed along to the consumer. ARSA has briefed both City Councils on the inflow and infiltration problem and requested their help. ARSA requested they identify those structures with guttering connected to the sewer system and enforce their respective city ordinances that state this is illegal. The 2005 study identified suspect houses and buildings and a current smoke test could identify more violations. This test is accomplished by blowing smoke into the sewer system and if smoke comes out of a structure's downspout, there is a violation. Some people may not even know their downspouts are connected to the sewer system. All the more reason the cities should conduct a smoke test. Cost of disconnecting the guttering system would be incurred by the resident or owner of the building. Brooksville appears to be leading the way in this endeavor, having already purchased a smoke tester and prepared letters going to their citizens explaining the process and consequences of a violation.

Infiltration is a more difficult problem to solve since most of it is underground and the infrastructure pipes date as far back as the 1930's. The 2005 study also identified likely locations of problem areas and our experienced city workers also probably have a good idea of where the problem areas are. Unfortunately, little has been done to curtail the inflow and infiltration problem and if left uncorrected, a surcharge will be assessed to fix the infrastructure.

Understandably, pumping rainwater seven miles from Augusta to the planned WWTP and then cleaning it does not pass the common-sense test. We are currently working with the Engineers to fix a dollar amount to the inflow and infiltration problem and ARSA is committed to providing the lowest cost possible to the citizens of Brooksville, Augusta and Bracken County. Whether a surcharge or actual bill (or a combination of both) is placed upon the citizens to curtail the present inflow and infiltration, the cost will need to cover the operating costs and maintenance, loan repayments, and infrastructure upgrades. The current surcharge of \$12.79 a month, to repay an initial loan from KIA, will be eliminated once the new facility comes on-line.

ARSA, which was established in 2014 by the Councils of both cities and by the Judge Executive of Bracken County, has applied to fund this project through grants and loans from The Kentucky Community Development Block Grant Program, USDA Rural Development, and The Kentucky Infrastructure Authority (KIA). The respective city Mayors and Judge Executive recently received correspondence from KIA that stated that in order to continue with the necessary credit analysis and evaluation of the funding from their organization, the ARSA ordinance must be modified by the City Councils to allow the ARSA Board sole responsibility for setting and adjusting rates to maintain the financial viability of ARSA. This modification must be

received and approved before the KIA's next Board Meeting on October 5th to receive the requested funding package which includes an interest rate of 0.25% and \$1,300,000 of principal forgiveness. If that deadline is not met, and our request becomes part of fiscal year 2018, the interest rate rises to 0.5% with no guaranteed principal forgiveness.

We have known about this problem since 2005 yet nothing has been done. To ensure we receive funding for the WWTP, we can wait no longer. We must work on a plan now to reduce the sewer costs for the citizens of our community!