Study selects sewer target areas

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MURDOCK — A study has identified top priority areas for the ongoing septic-to-sewer conversion in Mid-County.

In the analysis provided by the consulting firm Jones Edmunds, neighborhoods surrounding the Spring Lake pilot project — north to Cochran Boulevard, east to Tamiami Trail and west to the waterway along Pellam Boulevard — would be up next in the 5-Year Conversion Plan, based on the optimal economic sequence. Also included in the proposal are areas north of U.S. 41, up to Peachland Boulevard, and between the Ackerman and Countryman waterways south of Edgewater Drive.

These prime candidates for the wastewater expansion program share three main eligibility criteria: proximity to surface waters, older septic systems and evidence of nitrogen loading.

"This project is about sustaining and protecting the environment," said Chris Baggett, project manager for Jones Edmunds.

In addition, these areas have a high number of residences, adding to the amount of nitrogen being discharged.

"This is all related to density," he said. "Certainly the more density you have, the more cost effective it is to go in and actually sewer the area."

All septics discharge nutrients into the environment, aided by a high water table and sandy soil that is permeable. Across Florida, it has been estimated that nearly threequarters of the soils are not conducive to conventional septic-system usage.

There are 45,000 septic systems in Charlotte, including more than 27,000 where utility service is available. In Mid-County alone, there are 18,213 developed properties on septic and 27,755 on sewer. In the areas targeted for sewers over the next five years, the estimated average age of septic tanks is 26 to 40 years old.

Baggett said septics are dumping more than one ton of nitrogen into the environment every day. These nitrates, which are highly mobile and do not decay, end up in the aquifer and Charlotte Harbor, he said.

"Everything is flowing into the harbor. Nothing is escaping," he said.

Baggett added that water-quality tests have detected elevated concentrations of nitrogen, chlorophyll and fecal coliform being discharged into surface waters. The problem is particularly acute during the rainy season, when water flows over control structures directly into the harbor, he said.

Posing further runoff problems is the fact that one-third of the county's septics were installed prior to 1983, so they do not comply with current U.S. Environmental Protection Agency standards. For example, prior to 1983, the minimal depth for septics was set at 6 inches; today it is 2 feet.

In September 2015, after heavy summer rains, tests showed numerous fecal coliform hits. Water-sample testing just completed at 10 locations north of U.S. 41 found more evidence of nitrogen and fecal coliform.

"All samples showed fecal contamination," Charlotte County Utilities Director Gary Hubbard said.

If the County Commission approves the recommendations, implementation of the 5-Year Conversion Plan would proceed. At the end of that period, officials would then reassess what areas would then connect to central sewer.

It is estimated that the initial five-year conversion program would cost \$105 million, excluding onsite costs, to make sewer available for 6,166 developed lots and about 9,000 total parcels. Under that plan, 72 percent of that cost, or \$76 million, would be paid by affected homeowners, with the remaining 28 percent coming from outside funding, including \$25 million from 1 percent sales tax revenue.

According to the study, the cost per residential unit would be \$11,200 for sewer infrastructure, plus a one-time, on-lot connection fee of about \$2,200 to hook up to the central sewer system. That would bring the total estimated cost per residence to \$13,400.

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