

# Pollution estimates increased in Barton Creek study

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Admitting that computational errors were made in its Barton Creek watershed study, a consultant to the Austin City Council has significantly increased original estimates on pollution that could seep into the creek from adjacent sewer lines and septic tanks.

Several of the revised estimates, which are contained in a set of corrections to the Barton Creek report, are nearly 1,000 times higher than the original estimates.

But Duke Altman, senior staff engineer at Espey, Huston and Associates Inc., says the mistakes don't alter the consultant's recommendation that a sewer line be installed to serve future development on the Edwards Out-

crop area of the watershed.

"It's still obvious that a sewer system will transport most of the sewage out of the area and it won't be going into the ground water," Altman said.

But there were as many mistakes in the estimates of sewer-line pollution to the creek as there were in the estimates of septic-tank pollution. In most cases, the amount of pollution from both systems was underestimated.

Altman attributed the errors to the "short time frame" that Espey, Huston had to complete its report and said the City Council and Barton Creek Task Force were told when the report was delivered to them in December that some corrections were needed "and were forthcoming."

The consultant had about three months to complete its Barton Creek report, which recommends ways to control development in the Barton Creek watershed.

Most of the mistakes were made in estimating the amount of fecal coliform from human waste that would seep into the creek from septic tanks and sewer lines.

In the original report, Espey, Huston estimated that given a low-density development of .286 of a housing unit per acre, 3.2 organisms per day of fecal coliform would probably leak into the creek from septic tanks serving the development. That was corrected to 32 organisms per day.

An estimate that .02 organisms per day of fecal coliform would "exfiltrate" into the

creek from sewer lines under the same development scenario was upgraded to 19.7.

In the most dense development scenario used by Espey, Huston — three housing units per acre — it was estimated that 34 organisms of fecal coliform would daily leak into the creek from septic tanks on the Edwards Outcrop. That was revised to 340.

Using the same development scenario, the consultant originally estimated that one-tenth organism of fecal coliform would "exfiltrate" into the creek from a sewer line daily. That was upgraded to 72.1.

Altman said those examples of computational errors in the report occurred because the engineer making the calculations "incorrectly set up an equation."