Fall flush

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sew´·ẽr sō·ci·ol´ō·gy, *the science of society, social institutions, and social relationships viewed through the eyes of a sewer; specifically, the systematic study of the development, structure, interaction, and collective sewer use of organized groups of human beings.*

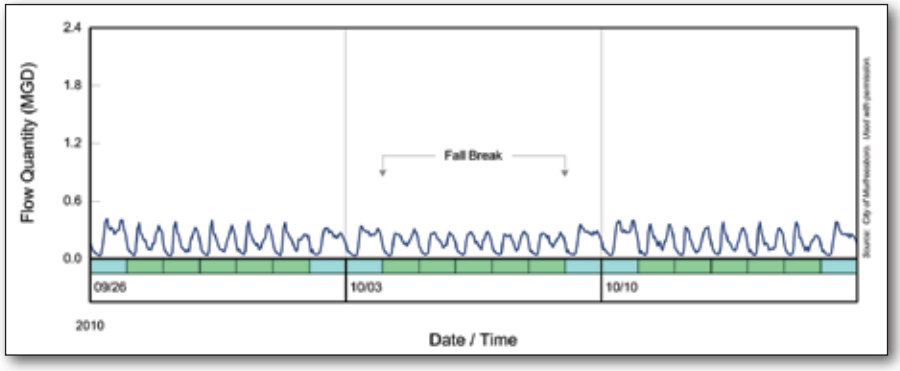
Most sewer flows are characterized by repeatable diurnal patterns that vary across weekdays, weekends, and holidays. Differences in land use also are apparent, and distractions and disruptions of daily life often can be observed.

This month we take a look at fall break through the eyes of a sewer.

When we were in grade school, there was no such thing as fall break. However, these days you would be hard pressed to find a school district without it.

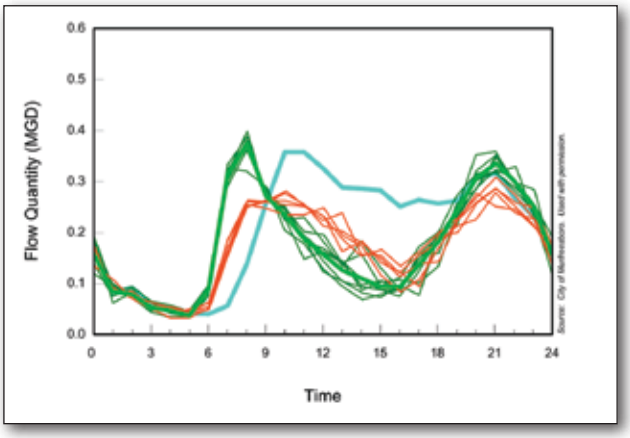
Sewer Sociology has taught us that when school is out, a subtle but distinct change occurs in residential sewer use patterns; and fall break provides a classic example. A hydrograph of sewer flow monitor data from a residential area in Murfreesboro, Tenn., is shown in Figure 1. The hydrograph depicts the 3 weeks of data before, during, and after fall break. Can you see the difference?

Figure 1. Hydrograph of sewer use from a residential area in Murfreesboro, Tenn.



Take a look at the composite hydrograph shown in Figure 2, and the difference becomes more readily apparent. Weekdays when school is in session are shown in green, and weekends are shown in blue. The weekdays during fall break are shown in red.

Figure 2. Sewer use during fall break



No school means no school routine. The kids do not have to get up quite so early to get going and get out the door. Although the average daily flow rate remains about the same, the timing is distinctly different.

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