The rush to 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 holiday shopping through the eyes of a sewer.

Black Friday – the day after Thanksgiving – is one of the busiest shopping days of the year. Many retailers offer special sales and incentives to attract consumers. Retailers also have been opening stores earlier and earlier on Black Friday in an attempt to encourage more consumers to shop and spend.

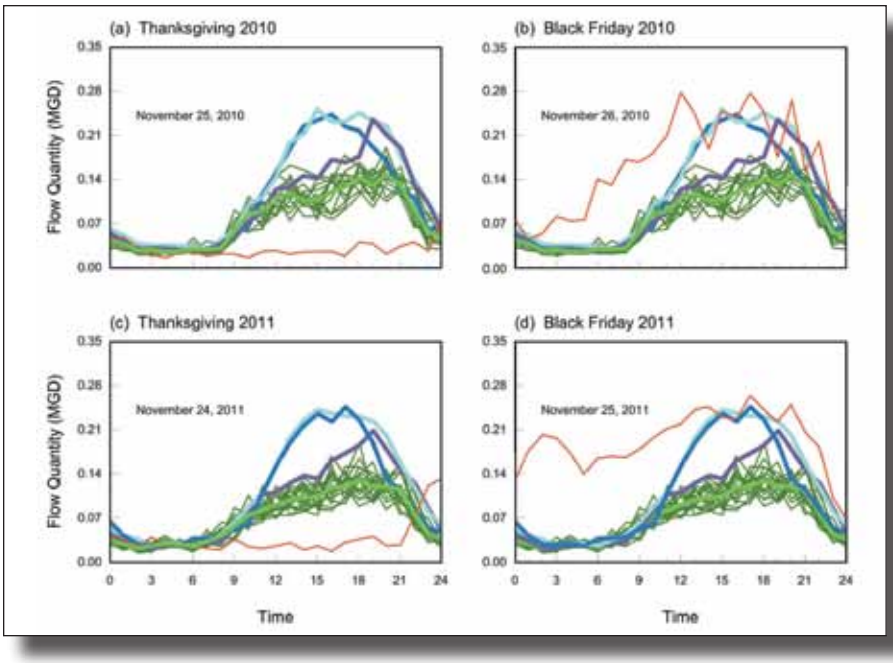
Do these earlier sales really generate more traffic and drive more revenue for retailers? We wondered ourselves and decided to use sewer sociology to investigate.

The composite hydrographs of sewer use data from a shopping mall in Southern California show weekdays (Mondays through Thursdays) in green, Fridays in purple, Saturdays in light blue, and Sundays in darker blue. Thanksgiving and Black Friday in 2010 and 2011 are shown in red.

Note that Black Friday sewer use is much greater than a typical Friday, and how the start of Black Friday has changed from year to year. In 2011, it even started before midnight – encroaching into Thanksgiving for the first time.

The National Retail Federation reported that from 2010 to 2011 Black Friday spending per shopper increased by 9.1%, and the number of retail shoppers increased by 6.6%. Sewer use data at this shopping mall increased by a whopping 17% from 2010 to 2011 and validate the advantage of earlier Black Friday start times now espoused by retailers.

Sewer use patterns at a shopping mall during Thanksgiving and Black Friday



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