Faithful flow

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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 religious observances through the eyes of a sewer.

Composite hydrographs of sewer use from a residential area in an Orthodox Jewish community in the United States and a residential area in a Muslim community in the United Kingdom are shown in figures (a) and (b), respectively. Weekdays (Mondays through Thursdays) are shown in green, and weekends are shown in blue. A typical Friday in each community is shown in red – revealing telltale signs of religious practice.

The Jewish Sabbath, or "Shabbat," begins at sundown on Friday evening, as shown in Figure (a). However, preparations, such as shopping, cooking, cleaning, and bathing, start much earlier and must be completed before sundown. The Jewish Sabbath is a time of worship, reflection, and rest. Other activities within an Orthodox Jewish community are limited during this period.

The Muslim Friday Prayer, or "Jumu'ah," is held at the local mosque just after 12 p.m., as shown in Figure (b). Attendance is required for all Muslim men, and ritual ablutions are performed with running water to cleanse the body before entering the mosque. Congregational prayers are offered and a religious message is provided by the resident imam.

Each Friday, preparations for both the Jewish Sabbath and Muslim prayers are reflected in sewer use patterns within these communities. The works of the faithful are manifest in many ways. Who knew that one of these ways was through sewer use data?

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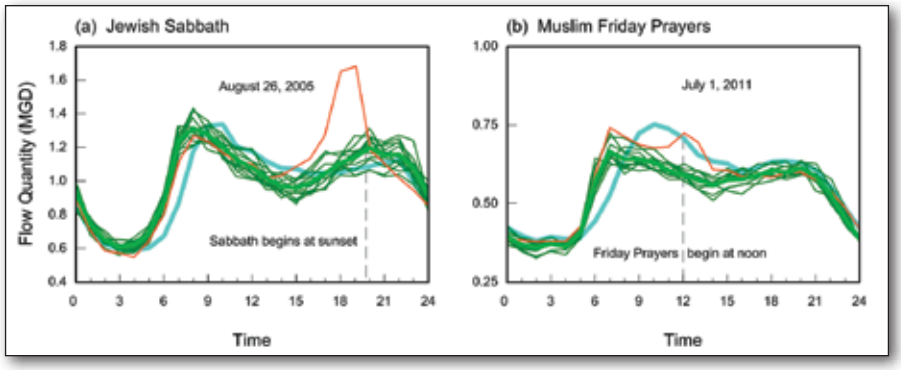
Sewer use patterns from various religious observances



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