

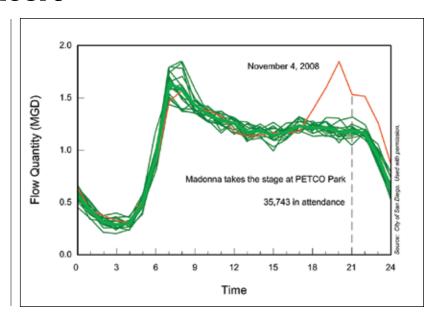
sew' er so ci ol'o gy, the science of society, social institutions, and social relationships viewed through the eyes of a sewer; specifically the systematic study of the development, structure, interaction, and collective sewer use of organized groups of human beings.

Madonna in Concert

Kevin L. Enfinger and Patrick L. Stevens

ost sewer flows are characterized by repeatable diurnal patterns that vary across weekdays, weekends, and holidays. Differences in land use are also apparent, and distractions and disruptions of daily life can often be observed. This month, we take a look at Madonna in concert.

Pop superstar Madonna took San Diego by storm Nov. 4, 2008, when she performed in concert at PETCO Park before a sellout crowd of 35,743. The concert was part of her "Sticky and Sweet" tour promoting her studio album "Hard Candy." No sewer sociologists were in



AD INDEX

| Advertiser | Page Number | Website |
|----------------------------|--------------------|--------------------------------|
| Aero-Mod, Inc. | 8 | www.aeromod.com |
| Aerzen USA | 16 | www.aerzenusa.com |
| Analytical Technology Inc. | 17 | www.analyticaltechnology.com |
| BDP Industries | 11 | www.bdpindustries.com |
| Bioscience | 27 | www.bioscienceinc.com |
| Black & Veatch | 19 | www.bv.com/consult |
| Bord na Mona | 23 | www.bnm-us.com |
| Huber Technology | 5 | www.huber-technology.com |
| Insite IG | 5 | www.insiteig.com |
| Invent | 10 | www.mixeraerator.com |
| ITT Wedeco | 14-15 | www.wedeco.com |
| JWC Environmental | 1 | www.jwce.com |
| Kruger Inc. | 7 | www.krugerusa.com |
| Lakeside Equipment Co | 9 | www.lakeside-equipment.com |
| Peace Corps. | 18 | www.peacecorps.gov |
| PerkinElmer | 24 | www.ecoanalytix.com/wet |
| Siemens Water Technologies | Back Cover | www.siemens.com/waterandenergy |
| Thomas & Betts | 12&13 | www.tnb.com |
| Vaughan Company, Inc | Inside Back Cover | www.chopperpumps.com |
| Veolia Environment | 21 | www.veolianorthamerica.com |
| VerderFlex | 25 | www.gpmpump.com |
| Westech Engineering | Inside Front Cover | www.westech-inc.com |
| YSI | 20 | www.ysi.com/proODO |

attendance, but a sewer flow monitor was conveniently located downstream from the concert venue. A composite hydrograph is shown in the figure (p. 71) and offers its own review. The red line is the flow measured on concert day. The concert began at 7 p.m., and sewer flows peaked before Madonna took the stage around 9 p.m.

According to *Billboard* magazine, the concert generated \$5,097,515 in gross receipts, and according to the local newspaper, it contributed more than \$200,000 to the city's general fund from stadium rent and concession sales. According to the flow monitor, the concert also contributed 405,000 L (107,000 gal) of wastewater. Based on the reported attendance, this results in a sewer use rate of 11 L (3 gal) per concertgoer.

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Looking Ahead

Coming up in the November issue ...

Steady Flow

Two-thirds of the challenge in effective wastewater treatment is collecting and transporting the water from where it's generated to where it's cleaned. To that end, find out how green infrastructure projects are emerging as a complementary technology to deep-tunnel storage and conveyance systems for curbing CSOs and SSOs. Making the most of rehabilitation dollars also is a must; read about how the proper application of assessment technologies makes the investment in system rehabilitation more cost-effective. Pumps and force mains form a third part of the transport issue; so don't miss the second part of the article "How To Troubleshoot an Underperforming Pump Station."

Also in this issue:

- In Search of a Sustainable Future: Population, water issues prompt southern Florida to expand water reuse.
- Thinking Inside the Box: Using a shipping container as a low-cost alternative to traditional building construction.
- Worried About Wireless Networks? Today's technologies and practices provide much better security.

