



www.jsonline.com | [Return to regular view](#)

Original Story URL:

<http://www.jsonline.com/story/index.aspx?id=575726>

JOURNAL SENTINEL WATCHDOG REPORT

Sewers may be polluting rec areas

Human fecal bacteria found in storm water pipes

By **DON BEHM** and **DAN EGAN**
dbehm@journalsentinel.com

Posted: March 10, 2007

Throughout Milwaukee County, bacteria from human feces is pouring into creeks, rivers and Lake Michigan, where families fish, swim, wade or search for tadpoles.

From Miller Park on the Menomonee River to Honey Creek and the Kinnickinnic River, and from Big Bay Park in Whitefish Bay to Bay View Park on the lake's shoreline, the genetic marker for a human fecal bacteria has been found at 27 of 45 storm sewer pipes tested that discharge to recreational waters, records reviewed by the Journal Sentinel show.

Dye will be poured into toilets and sinks at Miller Park this week as the first step in an investigation of whether sanitary sewers there are leaking or are improperly connected to storm sewers, causing human waste to be discharged regularly into the Menomonee River. The pipe, which is the responsibility of the Miller Park stadium district, empties into a stretch of the river south of I-94 that is a popular spot for anglers of trout and salmon.

Tests found the genetic marker in each of 12 water samples taken from the Miller Park pipe in 2006.

Water samples taken from 18 other municipal and private storm sewers tested positive more than 50% of the time. The human bacteria could be coming only from sanitary sewers. The testing was done in 2005 and 2006.

"Any sanitary sewage is more likely to carry human pathogens and is more of a health risk to the public than storm water washing off the streets," said Sandra McLellan, a scientist with the University of Wisconsin-Milwaukee's Great Lakes WATER Institute. McLellan's laboratory tested the storm sewers for the human bacteria.

At State Fair Park, on Honey Creek, a camera is to be sent into some of the park's sewer lines within two weeks, checking for breaks or unknown connections, and then follow that with tests of water flowing in

its main storm sewer emptying into Honey Creek.

Those tests would be done before, during and after the State Fair, the park's biggest event, park Executive Director Randy Prasse said.

Human fecal bacteria was found in 80% of storm water samples collected last year immediately downstream from State Fair Park.

Whitefish Bay is in the midst of an \$11 million project to replace aging sanitary sewer pipes that was started before the testing was done. One benefit of the work would be to eliminate pipes that leak into storm sewers. The project also will identify any misconnections between sanitary and storm sewers.

Village Engineer Mary Jo Lange estimates that 20% of the village's surface area drains into the final storm sewer pipe at Big Bay Park, operated by Milwaukee County.

Four of the seven water samples from the Big Bay pipe tested positive for the genetic marker, indicating the presence of human waste.

The secluded park is a popular lakeside retreat from summer heat. There are no signs warning families that they might be swimming or wading in more than water.

Lange doubts it will be easy to find the root of the problem because the outfall at Big Bay is just the tip of a network of pipes fanning back from the beach like the roots of a tree.

"It's like looking for a needle in a haystack," she said.

For now, scientist McLellan says she would not swim there after it rains and the pipe discharges storm water and whatever else it contains.

Milwaukee to run tests

Milwaukee City Engineer Jeff Polenske will be looking for a similar needle in a haystack in a few weeks.

The marker for human fecal bacteria was found in 19 of 20 water samples collected last summer from the storm sewer at N. 79th St. and W. Mount Vernon Ave. in Milwaukee. The pipe empties into Honey Creek as it flows through a residential neighborhood about a half-block south of W. Blue Mound Road.

As soon as the frost is out of the ground, city crews will begin pumping smoke into sanitary sewers. Any smoke rising through the ground would show a possible break in a pipe or a misconnection, Polenske said.

"This is something we've suspected was happening because cross-connections between sanitary and storm sewers have been found in other cities," said Lynn Broaddus, executive director of Friends of Milwaukee's Rivers.

"It's discouraging," Broaddus said of the investigation so far. "But now we've got the public energy to start solving the problem," she said.

In limited testing beyond Milwaukee County, the waste marker was found in one test of a storm sewer

pipe that discharges into a stream at Katherine Kearney Carpenter Park on W. Zedler Lane in Mequon.

Ahead of other cities

The Milwaukee metropolitan area has been thrust onto the cutting edge of environmental science in the last two years as the WATER Institute began testing storm water for the presence of human fecal bacteria.

No other American cities have attempted to identify whether human sewage is contaminating routine storm water discharges, McLellan said.

Testing in 2006 focused on storm sewer lines discharging into the Menomonee and Kinnickinnic rivers; Honey, Underwood and Lincoln creeks; and Lake Michigan, under a contract with the Milwaukee Metropolitan Sewerage District.

Although MMSD is not responsible for storm sewer systems, which are maintained by municipalities or property owners, the testing follows several years of intensive storm water quality monitoring done by district scientists.

The contract recently was extended for two years, and McLellan and her co-workers will continue watching last year's sites even as they expand the investigation.

Mike Duckett wants to eliminate any problems at Miller Park now instead of waiting for McLellan's study to end.

Water lines throughout the stadium and adjacent Helfaer Field, a youth baseball diamond, will be turned on earlier than usual to accommodate the dye tests, said Duckett, executive director of the stadium district. An MMSD crew wants to complete the study before opening day, April 2.

The surface of the entire 230-acre property drains into three storm sewer pipes. McLellan's testing shows that the pipe immediately east of two Milwaukee water storage tanks along U.S. Highway 41 is regularly discharging human waste and contaminants washed off parking lots east of Helfaer Field and north of the stadium.

On Tuesday, dye will be poured into toilets and sinks; then workers will open manholes to determine whether there is an improper connection allowing dye in a sanitary pipe to flow into a storm water pipe.

"We're going to test all possibilities, and if we find a problem, this district is committed to fixing it immediately," Duckett said.

If a contractor during Miller Park or Helfaer Field construction inadvertently connected a sanitary pipe to a storm sewer, that could provide the answer to where the human fecal bacteria is coming from.

"If everything was built according to plan, we should be OK," Duckett said.

MMSD crews also will test whether there is an improper connection between one of its former construction trailers near Miller Park and the storm sewer.

In addition, MMSD will ask Milwaukee for permission to use dye to test for any improper connections between its small office building near the water storage tanks and the storm pipe.

Wherever human sewage is found in storm water pipes, MMSD will notify municipalities or private property owners of the problem, said Peter Topczewski, the district's water quality protection manager.

"It's likely a problem throughout this region," he said, "and throughout the country."

[Buy a link here](#)

From the March 11, 2007 editions of the Milwaukee Journal Sentinel
Have an opinion on this story? [Write a letter to the editor](#).

Don't miss one more day of local news and money-saving offers! [Subscribe Today!](#)
© 2006, Journal Sentinel Inc. All rights reserved. | Produced by [Journal Interactive](#) | [Privacy Policy](#)
Journal Sentinel Inc. is a subsidiary of [Journal Communications](#).