

15 billion gallons of sewage-polluted water flows annually into Philly's rivers and streams, report says

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Each year, Philadelphia's waterways are forced to swallow a dirty mix containing 15 billion gallons of untreated sewage and rainwater during storms because of an antiquated city system, according to a report



released Thursday by PennEnvironment.

The waterways include the Delaware and Schuylkill Rivers, as well as Cobbs, Frankford, Tacony, and Pennypack Creeks.

The outflow is no threat to drinking water because <u>river water</u> gets treated before residents drink it, but it does create health threats for aquatic life and recreational users, said the study by the nonprofit advocacy group. Last year, for example, Philadelphia residents lost at least 162 days of water recreation on the Schuylkill because overflows created too much pollution to make the river safe to use—and that was before the recent torrent of downpours.

At issue is Philadelphia's combined sewer system where storm water and sewage flow through the same pipes during a storm. The volume overwhelms the city's three treatment plants and allows untreated water to flow directly into combined sewer overflows (CSOs) that empty into the waterways. The combined system serves roughly 60% of the city.

Though there are 164 CSOs, 10 have accounted for roughly half the pollution discharged. Municipalities upstream also send as much as 125 million gallons of wastewater a day into the Philly sewage system, the report states.

Local contamination

PennEnvironment's report credits the Philadelphia Water Department for reducing the overflows over the last decade through its Green City, Clean Waters program, which includes hundreds of green infrastructure projects and repairs to leaky pipes. The program has helped reduce outflows by more than three billion gallons, the report states.

"What our report shows is that on all too many days of the years, our



local waters are being contaminated and depriving residents of safe opportunities for water recreation, and also, of course, harming the environment," said John Rumpler, the report's lead author. "We could not be more thrilled by the fact that the city has completed hundreds of projects on green infrastructure. We think that's fantastic. But it's just not getting us where we need to be."

Stephanie Wein, clean water advocate at PennEnvironment Research & Policy Center, said people walk, hike, boat, fish, paddle, and sometimes even swim in and around Philly's waterways. So while the city has made efforts to "address the massive flow of raw sewage, this problem still puts <u>public health</u> at risk on far too many days of the year."

"The Tidal Schuylkill is a great location for people to get introduced to the river because it tends to be a calmer portion of the river," said Valerie Onifade, River Program director at Bartram's Garden, who spoke at a media event Thursday for the study. "At Bartram's we have a public, ADA-accessible dock that makes launching out even easier. Unfortunately, because of the CSOs that impact the river around us, the sewage and pollutants create unsafe river conditions and require us to cancel on a frequent basis—about a quarter of our programs."

The water department has been under order by the U.S. Environmental Protection Agency to cleanup the system, and has another 12 years to do so.

Brian Rademaekers, a spokesman for the Philadelphia Water Department, issued a lengthy response to the report, saying that while the agency is "thrilled" to see PennEnvironment is so invested in <u>water quality</u>, the nonprofit's "assertions do not consider the reality of implementing the current Green City, Clean Waters plan in addition to more infrastructure projects, done at a greatly accelerated rate."



He said the water department has, for example, multiple projects under construction designed to reduce combined sewer overflows by 600 million gallons more annually in the next three years. But, he said the agency needs to keep ratepayers in mind.

"Replacing the entire combined <u>sewer system</u> would be prohibitively expensive," Rademaekers said.

More rain, more pollution

The report notes that progress is likely checked by increased rainfall due to climate change. It cites figures from the Pennsylvania Department of Environmental Protection that annual precipitation totals from 2000 to 2020 were nearly five inches higher than during the 1971 to 2000 period and that annual rainfall could increase by 8% by midcentury.

A recent report by the nonprofit First Street Foundation concluded that Philadelphia is one of the top cities already experiencing more extreme precipitation than government estimates would suggest.

PennEnvironment said that stopping sewer overflows will require "significantly more resources" than the city water department has committed, but that there is some hope from the 2022 federal Infrastructure Law. Pennsylvania is getting \$700 million for sewer and storm water projects. It's not yet clear how much of that will come to Philadelphia.

PennEnvironment compiled data from annual reports issued by the Philadelphia Water Department between 2010 and 2022. Rumpler said the span of years was chosen to smooth out differences between dry and wet years.

The data show which CSOs are most problematic and how the



waterways are impacted. The study includes an interactive map showing locations of the worst sewage discharges in the city.

For example, a CSO off Ramona Avenue in Crescentville averaged a little more than 1.5 billion gallons of outflow a year into Tacony Creek, and a CSO off 43rd and Locust in West Philadelphia that flows into the Schuylkill averaged a little less than that amount.

But some waterways can get much of their overflows from a single combined sewer overflow. For example, the P5 in Holmesburg accounts for 63% of all CSO discharges into Pennypack Creek. And the F21 at Wakeling Street in Frankford accounts for nearly half of all discharges during a storm into Frankford Creek.

Programs canceled because of pollution

Regardless of where the CSOs empty, the pollution eventually makes its way to the Delaware River. The report found that the worst 10 of the 164 CSO outfalls accounted for roughly half of all pollution.

Philadelphia City Councilmember Mark Squilla said, "I appreciate all the work PWD is doing to reduce combined sewage overflows. We must do more so that our generations to come can recreate on safe, clean waters."

The group called on the city to "dramatically" accelerate and expand efforts to stop the discharges, and suburban and industrial users to curb their wastewater flows.

"Philadelphia is a river city, and being able to access and use it for recreation will bring tremendous benefits to our communities," said Tim Dillingham, executive director of the American Littoral Society, a nonprofit advocacy group that promotes study conservation of marine



life and habitat. "We can ensure that every day is a river day by cleaning up the sewage pollution from CSOs. We must take advantage of the current federal funding for this effort, which can provide us with clean water, jobs and justice."

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