



A Newsletter of the North Hudson Sewerage Authority

Many communities in NJ operate Combined Sewer Overflow systems (CSOs) which annually discharge 23 billion gallons of minimally treated sewage and stormwater into our waterways. The North Hudson Sewerage Authority (North Hudson) is working closely with the NJ Department of Environmental Protection (NJDEP) to address this issue in North Hudson's service area.

Reducing CSO flows into the Hudson River presents enormous operational and financial challenges. In the past, the State has been a good partner in this effort. The NJDEP assures North Hudson that the State will continue to support wastewater infrastructure projects designed to reduce CSO discharges.

This newsletter is designed to familiarize customers and residents with NHSA's long-term plans to reduce CSOs. We urge you to learn more about our efforts to continue to improve the quality of the Hudson River. We look forward to your input and encourage you to visit NHSA's website at www.nhudsonsa.com for ongoing information and updates.

Let's make this a three-way effort: North Hudson, NJDEP and you!

Dr. Richard J. Wolff **Joe Mannick**
Executive Director, NHSA CSO Program Coordinator, NJDEP

THRIVE, HUDSON RIVER

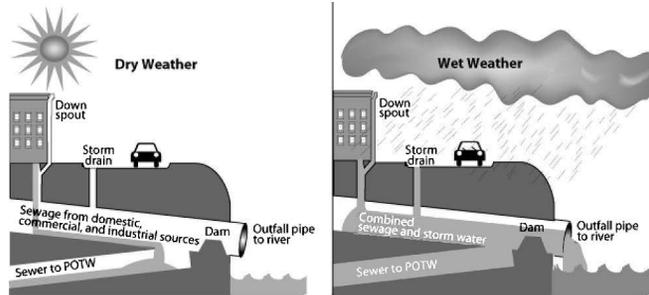


WHAT ARE CSOs?

“CSO” stands for Combined Sewer Overflow. But what does that mean? Let’s take the first two words: Combined Sewer. In a CSO system, sanitary sewers, which convey household and commercial wastewater to treatment plants to be sanitized, and storm sewers, which transport rainwater and melted snow to a waterway, are combined into one, single sewer. That’s where the “C” and the “S” come in.

Not all systems combine sanitary flow and stormwater in the same sewer pipe. A CSO system is normal in older urban areas, like Hudson County, where sewer infrastructure can date from the Civil War. In newer communities, there are separate sewer pipes for sanitary and storm flow.

During dry weather, CSO systems work just fine. The problem is when it rains. In wet weather, with the rain water and sanitary flow forced into a single sewer line, the combined flow can become too much to transport and treat at the wastewater plants. Consequently, the combined wastewater and stormwater is diverted from the plants into the Hudson River, a sort of “overflow” of the system. That’s where the “O” in CSO comes from. So, now you have it: CSO = Combined Sewer Overflow.



WHY REDUCE CSOs?

Do you care enough about the environment to want a cleaner and safer Hudson River? If so, then we have to reduce significantly the number of CSO discharges to the river.

In rain events, a combined system diverts flow from the treatment plants to the river. The flow is not treated at the plant. Although there is some basic treatment at the end of the overflow pipes, this just removes solid waste, like bottles and garbage. The minimally treated effluent that goes into the Hudson often has high levels of pollutants, like fecal matter and bacteria.

The Federal goal, embodied in the 1972 Clean Water Act, to make US rivers and waterbodies swimmable and fishable, depends on reducing CSO discharges. CSO communities, like Hoboken, Union City, Weehawken and West New York, are expected to reduce minimally treated CSO flows into waterways. In 2015, the NJDEP issued requirements that all CSO dischargers in New Jersey develop Long-Term CSO Control Plans (LTCP) by June 2020. For North Hudson, these plans will be the blueprint for what needs to be done in subsequent years to reduce dramatically CSO discharges into the Hudson River.



So, why reduce CSO discharges? To continue the rehabilitation of the Hudson River until it is virtually swimmable again!

WHAT'S IT GOING TO TAKE?

That’s the question that North Hudson is looking at right now. Engineering studies are underway to determine by 2020 what strategies and initiatives North Hudson will implement, with NJDEP approval, to reach its stated goal.

Controlling CSOs requires significant investment in infrastructure, some of which is over 100 years old. North Hudson has stayed ahead of the curve by making substantial capital investments in infrastructure and maintenance for the last 25 years. Thus, relative to other sewer systems around the State, North Hudson is in a strong position to successfully develop and implement its LTCP. To do so takes not only engineering expertise, but also considerable capital.

So far, the State provides low interest loans to support sewer infrastructure, but no outright grants. North Hudson has taken advantage of the low interest loans and has prudently managed its finances so that it is in the best possible position to implement its mandated LTCP after 2020. The infrastructure costs will be spread over decades which will minimize the impact on current customers. Meeting these environmental goals will be made even more difficult if the pending 2% cap on annual rate increases is ultimately found to be constitutional by the New Jersey courts.



WHAT HAVE WE DONE SO FAR?

- The work to reduce CSOs goes back many years, before the current 2015 Federal and State mandate.
- Over the last 20 years, North Hudson has eliminated three CSOs that discharge into the Hudson River. Today, it has nine.
- Over 5.5 miles of sewers have been relined, replaced and rehabilitated to increase capacity and flow to the treatment plants during rain events.
- Treatment systems have been upgraded.
- End-of-pipe controls have been put into place to provide basic treatment at the outfalls.
- Green infrastructure projects have been undertaken throughout the entire service area.
- Detention tanks have been built under public parks.
- Wet weather pump stations have been constructed.

All these initiatives – a \$65 million investment – have already made a difference in reducing the volume of CSO discharges during rain events.

WHAT CAN WE EXPECT?

In the next edition of this newsletter, we will focus on explaining in detail some of the LTCSO projects that are both underway and envisioned going forward. We are anxious that the public understand the goals, strategies and expected outcomes of North Hudson’s LTCP. Please check our website, www.nhudsonsa.com and the schedule of public meetings.



Join NHTSA to discuss the LTCP and its progress on the following dates in 2019: February 25th, May 20th, August 19th and November 18th. The February meeting is at NHTSA offices, 1600 Adams Street, Hoboken. Other locations, TBD.