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Paterson's Sewer System: What's at Stake

What's Happening:

Paterson is considering different options for improving its outdated sewer system. Decisions that can affect your neighborhood will be made between now and June 1, 2020. Get the facts by attending local meetings on solutions to reduce stormwater runoff and sewer overflows. Then contact your elected officials with your preferences. Sign up for the Sewage-Free Streets and Rivers campaign for updates on local meetings and other ways to get involved.

Cities like Paterson were required by the New Jersey Department of Environmental Protection to evaluate options for reducing CSOs by July 2019. Paterson's evaluation of potential strategies has been published online as a draft "Development and Evaluation of Alternatives Report." After further review, Paterson will select and commit to a combination of some of the proposed strategies by June 1, 2020, the deadline for the city's official CSO Long Term Control Plan.

Each option will cost millions of dollars and will impact neighborhoods for decades.

CSO permittees are required to review all of these options to reduce CSOs:

- **Green infrastructure** - Nature-based solutions that capture rain where it falls, before it enters and overwhelms the combined sewer system. Examples include street trees, rain gardens, and bioswales.
- **Storage capacity within the existing system** - Using existing pipes to store stormwater.
- **Additional storage capacity in the city and/or at the treatment plant** - New storage tanks within the city or at the wastewater treatment plant.
- **Reduction of inflow and infiltration** - Fixing pipes so water does not come in or seep out through cracks.
- **Sewer separation** - Adding a pipe for stormwater to divert rain from the combined sewer system, reducing how often it overflows.
- **Treatment of CSO discharge** - Constructing a mini wastewater treatment plant at the end of the pipe.
- **CSO-related bypass of the secondary treatment portion of the sewage treatment plant** - Creating more capacity at the sewage treatment plant by bypassing the secondary treatment process of cleaning the mixture of sewage and stormwater.

Additional options Paterson is considering:

A relief sewer is a sewer constructed for the purpose of carrying sewage which overflows from the original combined sewer system. A relief sewer would address flooding issues on 18th Avenue between East 28th Street and East 31st Street, on 19th Avenue between East 32nd Street and East 36th Street, on 20th Avenue between East 19th Street and East 22nd Street, and around the St. Joseph's University Medical Center.

Summary of Paterson's "Development and Evaluation of Alternatives Report"

Ownership and Management of CSO System Serving Paterson

- The City of Paterson owns the sewage collection system.
- The Passaic Valley Sewerage Commission treats the sewage. Paterson's report is nested within a larger document that contains PVSC's regional evaluation of alternatives report, which also has implications for the city.
- Number of combined sewer overflow pipes that discharge into the Passaic River: **19**
- Average annual number of systemwide combined sewer overflow events: **70**





Paterson selected these priority alternatives for reducing combined sewer overflows based on projected cost and the estimated reduction of overflows by volume or the number of overflows per year:

Options Considered

Projected Costs and CSO Reductions

A combination of:

- Partial sewer separation
- Relief sewer
- 2.5% green infrastructure
- Regional tunnel

- Spending \$78 million would reach the goal of reducing combined sewer overflows by 85% volume.

A combination of:

- Additional storage capacity (storage tanks and tunnels)
- 2.5% green infrastructure

- Spending \$268 million would reduce the number of overflows from 70 to 20 overflows a year.
- Spending \$819 million would reduce the number of overflows to 0 overflows a year

A combination of:

- Additional storage
- CSO discharge treatment
- 2.5% green infrastructure

- Spending \$272 million would reduce the number of overflows from 70 to 20 overflows a year.
- Spending \$645 million would reduce the number of overflows a year to 0.

A combination of:

- CSO discharge treatment
- 2.5% green infrastructure

- Spending \$172 million would reduce the number of overflows from 70 to 20 overflows a year.
- Spending \$637 million would reduce the number of 0 overflows a year.

Community benefits Paterson identified for green infrastructure:

Reduced surface flooding, reduced basement sewage flooding, improved air quality, reduced carbon emissions, reduced heat island effect, property value uplift, local jobs, passive and active recreational improvements, community aesthetic improvements, reduced crime, alignment with goals for a sustainable community, increased pedestrian safety through curb retrofits.

Community input gathered:

Not described in the report.

For more information:

- Download the full report at: <https://www.nj.gov/dep/dwq/cso.htm>
- To see a map of Paterson's outfalls, go to: bit.ly/2kpvpAg
- Paterson CSO contact: Fred Margron, City Engineer; fmargron@patersonnj.gov; DPW (973) 321-1488
- PVSC website on CSO Plan: <https://www.njcleanwaterways.com/>
- Visit SewageFreeNJ.org to sign up for our newsletter

