



# Jersey City's Sewer System: What's at Stake

### What's Happening:

Jersey City Municipal Utilities Authority (Jersey City MUA) is considering different options for improving its outdated sewer system.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 Jersey City were required by the New Jersey Department of Environmental Protection to evaluate options for reducing CSOs by July 2019. Jersey City MUA's evaluation of potential strategies has been published online as a draft "Development and Evaluation of Alternatives Report." After further review, Jersey City MUA will select and commit to a combination of some of the proposed strategies by June 1, 2020, the deadline for the utility'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.

## Summary of Jersey City MUA's "Development and Evaluation of Alternatives Report"

Ownership and Management of CSO System Serving Jersey City

- The Jersey City MUA owns the sewage collection system for Jersey City.
- The Passaic Valley Sewerage Commission treats the sewage. Jersey City MUA'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 Penhorn Creek (then to Hackensack River): 21
- Average annual number of systemwide combined sewer overflow events: 60





# Jersey City MUA 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**

## Green infrastructure (rain gardens & bioswales)

- Spending \$67 million would manage 7% of impervious surface with green infrastructure.
- (rain gardens & bioswales) Spending \$96.58 million would manage 10% of the area in Jersey City with green infrastructure.

## Green infrastructure (trees)

- Spending \$21 million would manage 7% with green infrastructure.
- Spending \$30 million would manage 10% with green infrastructure.

# Additional storage capacity (grouped storage tanks)

- Spending \$547 million would reduce the amount of CSOs from 60 to 20 a year, which is estimated to equate to capturing 85% of the stormwater.
- Spending \$859 million would reduce the number of combined sewer overflow occurences to 4
  a year.

# Additional storage capacity (tunnel)

- Spending \$584 million would reduce the amount of CSOs from 60 to 20 a year.
- Spending \$890 million would reduce the number of combined sewer overflow occurences to 4 a year.

### Sewer separation

• Spending \$6 billion would reduce the number of combined sewer overflow occurences from 60 to 0 overflows a year.

## Sewer separation (Bates Street)

• Spending \$16 million would separate the Bates Street combined sewer.

Inflow & infiltration

• Spending \$130 million on replacement of pipes and \$43 million on rehabilitation would reduce the amount of flow sent to the sewer treatment plant by 0.88 million gallons daily.

## **Community benefits Jersey City MUA 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:**

Six public presentations were held on the evaluation of alternatives. The report states that "special interest groups" stated that they want more green infrastructure including, but not limited to, bioswales, rain gardens, trees, and rain barrels or cisterns included in the JCMUA plan.

### For more information:

- Download the full report at: https://www.nj.gov/dep/dwq/cso.htm
- To see a map of Jersey City's outfalls, go to: bit.ly/2kpvpAg
- Jersey City MUA CSO contact: Richie Haytas; Chief Engineer; r.haytas@jcmua.com
- PVSC website on CSO Plan: https://www.njcleanwaterways.com/
- Visit SewageFreeNJ.org to sign up for our newsletter

