

STREET CSO GREEN INFRASTRUCTURE PROJECT

STATE PROGRAM: New Jersey Environmental Infrastructure Bank

ASSISTANCE RECIPIENT: The City of Elizabeth

ASSISTANCE AMOUNT: \$6.25M



PROJECT DESCRIPTION

The City of Elizabeth has a combined sewer system that was becoming overwhelmed from excessive rain events that occasionally resulted in stormwater and sewage flowing into areas of the community. As a result, the City received a \$6.25 million loan from the New Jersey Water Bank, with \$1.67 million in principal forgiveness, to implement a green infrastructure project designed to reduce flooding and increase CSO abatement for the community. The City installed additional inlets on streets that allowed the existing drainage system to function during smaller storms and diverted any excess stormwater into a 1-million gallon concrete vault. This structure was wrapped in an impermeable pond liner beneath a property acquired for this project and equipped with a pump station that is activated by sensors after wet weather events. When triggered, discharge is transported from the tank to the sewer system when there is sufficient capacity for treatment. In addition, the City utilized a combination of green and gray infrastructure by constructing a rain garden and a public plaza for the City residents.

Thanks to the strategic financing offered by the NJ Water Bank, the City provided a unique approach to CSO abatement while engaging the public in collaborative discussions about the project. In doing so, the quality of life for its residents improved simultaneously with environmental and human health conditions.

To read more about this case study, please visit https://www.epa.gov/sites/default/files/2021-02/documents/2020_pisces_compendium.pdf.