



WASTEWATER DIVISION

Partnership Profile: New Jersey Environmental Infrastructure Trust

Among the MCUA's most important development partners is the New Jersey Environmental Infrastructure Trust. Part of the New Jersey Department of Environmental Protection (NJDEP), the Trust provides low-interest loans for the construction of a variety of water quality protection measures, ranging from wastewater treatment facilities to stormwater management facilities.

The Trust typically provides loans at 0% interest for approximately 20 years for up to one half of a project's costs, and loans at or just below the market rate for the remaining amounts.

The no-interest and low-interest loans enable New Jersey's wastewater managers to construct the required infrastructure for handling current and future wastewater flows.

Over the years, the MCUA has partnered with the Trust to finance projects including the upcoming construction of flood walls around the Sayreville and Edison Pump Stations, the installation of a new auxiliary regenerative thermal oxidizer (RTO), and improvements and upgrades to the Edison Force Mains. The MCUA also partnered with the Trust to



Financing from the New Jersey Environmental Infrastructure Trust supported repairs related to Hurricane Sandy at the Sayreville Pump Station.

finance the expansion of the Middlesex County Landfill in 2009.

Recognizing the importance of the partnership between the MCUA and the Trust, NJDEP Commissioner Martin last year chose the Sayreville Pump Station as the location for his announcement that the State would offer up to \$1.94 billion in financing through the Trust for projects across New Jersey to improve drinking

water and wastewater infrastructure, including two significant MCUA projects related to Hurricane Sandy rehabilitation.

The MCUA looks forward to its continued partnership with the New Jersey Environmental Infrastructure Trust, and to ensuring its facilities are well-equipped to provide excellent service for those in Middlesex County and beyond.

WASTEWATER DIVISION

New Screen at Thickener Tanks Prevents Clogs, Improves Efficiency

Clogs from items that do not belong in a wastewater treatment plant are not new a phenomena, yet there is a new culprit in the mix: nonwoven fabric wipes.

These disposable cleaning and hygiene wipes are convenient – especially for those with infants – but improper disposal, namely flushing the wipes down the toilet, can lead to serious problems in the collection system and, ultimately, the wastewater treatment plant.

The MCUA, like other facilities around the country, has seen an increase in the amount of fabric wipes

entering the Plant. The wipes collect in numerous parts of the Plant and lead to operational problems.

The overflow from the thickener tanks has been identified as a point at which the wipes are recycled back into the Plant. The Wastewater Division purchased and installed a specialized screen last summer in order to stop this

from occurring. To date, the screen has removed almost 17 tons of material and reduced countless clogs that would have impacted the final clarifiers' efficiency.

The MCUA will be installing an additional screen at the influent of the primary tanks to further reduce the impact of fabric wipes on plant operations.



The screen for the thickener tanks' overflow.



Solid Waste Division

August 2016 Tonnage Figures

	Monthly Tons	Cumulative Tons
2016	46,978	352,574
2015	46,736	371,096

An average of 247 trucks hauled a total of 1,740 tons of waste to the landfill facility each day.

Wastewater Division

August 2016 Statistics

- Average Influent flow – 86.35 mgd
- Average Effluent TSS – 28 mg/l
- Average Effluent BOD – 15 mg/l
- Biosolids production – 13,372 wet tons, a 13.1% decrease over the five-year average. The entire amount was processed through the dryers.

*Rainfall for the month was 0.76 inches as measured at the plant.