

Sustainable Resource Recovery

An exciting project at the Piscataway Water Resource Recovery Facility (WRRF) is transforming the way WSSC Water handles waste from all of its treatment plants. The Piscataway Bioenergy Project – the largest and most technically advanced project ever constructed by WSSC Water – will employ innovative technologies to recover resources and produce green energy.

In the coming years, our Piscataway WRRF will evolve into a bioenergy production facility that uses efficiency, technology and sustainability to enhance the financial and environmental health of the region. This \$271 million project will serve our customers for the next 100 years.

The cutting-edge process reduces the amount of biosolids that WSSC produces, so there is much less material to dispose. Biosolids are the nutrient-rich organic materials resulting from the wastewater treatment process and are treated to remove odors and disease-causing bacteria. This project will help us produce safer, Class A biosolids, thus mitigating future risks in handling lower quality biosolids.

We also save money by eliminating the use of lime to control odor. This new material will be significantly cleaner, which makes the disposal process much easier. Unlike the current material, the quality of the biosolids produced at the Piscataway WRRF will be so good it can be sold and distributed as fertilizer. Additionally, the Piscataway Bioenergy Project is a “clean” project – meaning WSSC Water will reduce its greenhouse gas emissions, while saving customers money.

Another enhancement through this innovative project is the ability to turn poop to power by transforming sewage into renewable fuel and producing energy to help run the plant. This new process produces methane gas, which is captured and used as a source

of electricity to run engines and generators. This provides the Piscataway WRRF with a reliable power source that is completely off the grid, sustainable, and environmentally friendly.

In addition to critical sustainability benefits, WSSC Water’s investment in bioenergy is a conscientious investment decision to spend now in order to save going forward. Bioenergy will demonstrate significant cost savings over the long term by reducing power consumption from fossil fuels and reducing disposal costs. The Piscataway WRRF will become WSSC Water’s showcase for achieving optimal value by investing in a green future.

Project Timeline



Planning
Completed
June 2018



Testing
Fall 2022



Design
Completed
March 2020



Completion
Late 2024



Construction
Summer 2019



The Future is Now
Rendering of future bioenergy facilities at the Piscataway Water Resource Recovery Facility.