Inside The
East Bank Wastewater
Treatment Plant
New Orleans Water System

The East Bank Wastewater Treatment Plant (EBWWTP) was originally constructed in 1973 and upgraded in 1980, expanding treatment capacity from 23 million gallons per day (MGD) to 122 MGD. The plant is located on the east bank of the Mississippi River, near the St. Bernard Parish line, and serves the entire East Bank of Orleans Parish. The facility sits near an abandoned landfill to the east, undeveloped wetlands to the north and west, and a residential neighborhood to the south. A smaller facility, the 20 MGD West Bank Plant, lies on the other side of the river. Both facilities are owned by the Sewerage & Water Board of New Orleans and are operated by Veolia North America.

Two 54-inch and one 60-inch sewer mains deliver wastewater to the plant for initial treatment, where screens remove trash and debris. Oxygen is added and a biological reaction takes place, causing solid material to bind together.

Water is transferred to large basins called clarifiers, half a football field across and 14 feet deep, where further treatment takes place. Thickened biosolids are removed during this process, then pressed to remove excess water, and finally incinerated on-site or taken off-site for disposal. (Biosolids from wastewater treated at the West Bank Plant are also pressed here.)

At the final step of the process, chlorine is added to disinfect the treated water before it is discharged to the Mississippi River. The plant is capable of providing full treatment to more than 120 million gallons of wastewater every day, though on average, the plant receives and treats approximately 105 million gallons.

Hurricane Katrina Recovery

In August 2005, Hurricane Katrina devastated the Gulf Coast and left the East Bank Plant under 20 feet of water. Coast Guard helicopters airlifted on-site staff to safety after two days. Immediate recovery efforts were successful with treatment restored in just three months. Long-term planning and recovery continues to this day.

- After 30 days: Plant was dewatered
- After 45 days: Facility was receiving 30 MGD
- After 90 days: Secondary treatment was restored

Since Katrina, the Federal Emergency Management Agency (FEMA) has obligated $244 million in wastewater system recovery projects, including the continued rehabilitation of the plant and repair or replacement of pumping stations and other key infrastructure. Water, drainage, and wastewater projects total $739 million, representing the most aggressive and important rebuilding effort in the 110-year history of the Sewerage & Water Board.

Wetlands Assimilation

The Sewerage & Water Board of New Orleans and Veolia have worked with Tulane University since 2011 on a wetlands assimilation project. The project incorporates chemically-treated biosolids into wetlands for nutrient enhancement and long-term stabilization. The goal is to raise the elevation of the wetlands by one meter, facilitating the growth of cypress and tupelo tree seedlings, and restore an urban-degraded wetland to a lavish cypress forest. Considering that 80% of the nation’s wetlands loss occurs in Louisiana, this is a significant venture. The wetlands sequester 100,000 tons of carbon annually—equivalent to removing exhaust from 18,000 automobiles each year.

Select Awards

- Excellence in Public-Private Partnerships Award, U.S. Conference of Mayors (2012)
- Cold Peak Performance Award – West Bank, National Association of Clean Water Agencies (2010-2011)
- Infrastructure Award, National Council for Public-Private Partnerships (2010)

East Bank: By the Numbers

- 122 MGD design flow
- 240 MGD design peak flow
- 250 mg/l or 254,370 lbs/day design BOD
- 250 mg/l or 254,370 lbs/day design TSS
- 105 MGD current average flow
- 86 mg/l, Effluent 15 mg/l current average influent BOD
- 101 mg/l, Effluent 10 mg/l current average influent TSS
As the global leader in optimized resource management, Veolia offers the most complete range of energy, water, and waste solutions to meet the challenges of 550 communities and more than 50,000 businesses, campuses, and organizations in North America. During a 22-year partnership with the Sewerage & Water Board, Veolia has optimized wastewater treatment processes, met stringent regulatory requirements, identified an estimated $26 million in cost savings, and delivered award-winning environmental compliance.

About the Sewerage & Water Board

The Sewerage & Water Board has been serving citizens and protecting the environment since 1899. Originally formed to combat disease by providing safe drinking water and eliminating the health hazards of open sewer ditches, today the S&WB continues its mission using 21st-century technology.

Mission

To provide safe drinking water to everyone in New Orleans; to remove waste water for safe return to the environment; to drain away storm water; to provide water for fire protection; to provide information about products and services; and to do all of this continuously at a reasonable cost to the community.

swbno.org