

Purpose - Meeting stricter regulatory requirements from the Maryland Department of the Environment, as part of the State of Maryland's Chesapeake Bay restoration plan, triggered the need for Metro to construct a new water treatment building at the Largo pumping station. The new facility pumps 27,000 gallons of water per day from Metrorail tunnels near the Largo Town Center station.

**Sustainability**- The Largo water treatment facility supports the Authority's drive towards reducing energy consumption and minimizing operating costs. It will help the Authority move towards achieving the energy reduction, renewable energy, and stormwater management targets of Metro's Sustainability Initiative.



## KEY PROJECT DATA

## TREATMENT SYSTEM

To minimize power consumption in the water treatment process, water flows through gravity fed treatment system. Chemical mixing is performed using bubbles of compressed air to "circulate" the water, instead of traditional high energy pumps.

## SOLAR SYSTEM

It is estimated that the primary 9.7kW solar system at the facility will produce 13,767 kWh of electricity per year and will prevent an estimated 3 tons of carbon emissions per year.

## **NET ZERO**

The facility is designed to be net zero. This means the total amount of energy used by the building for the pumping and water treatment process is equal to the amount of renewable energy created on the site from the solar system on an annual basis.

