

# Nannie

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## About the *Nannie* Tunnel Boring Machine (TBM) and the DC Water Clean Rivers Project

The TBM is named in honor of **Nannie Helen Burroughs**, a prominent African-American educator and one of the most distinguished residents of the communities along the Anacostia River. Ms. Burroughs founded the National Training School for Women and Girls in Northeast Washington, which she operated until her death in 1961. The school emphasized both vocational and professional skills under the motto, "We specialize in the Wholly Impossible."

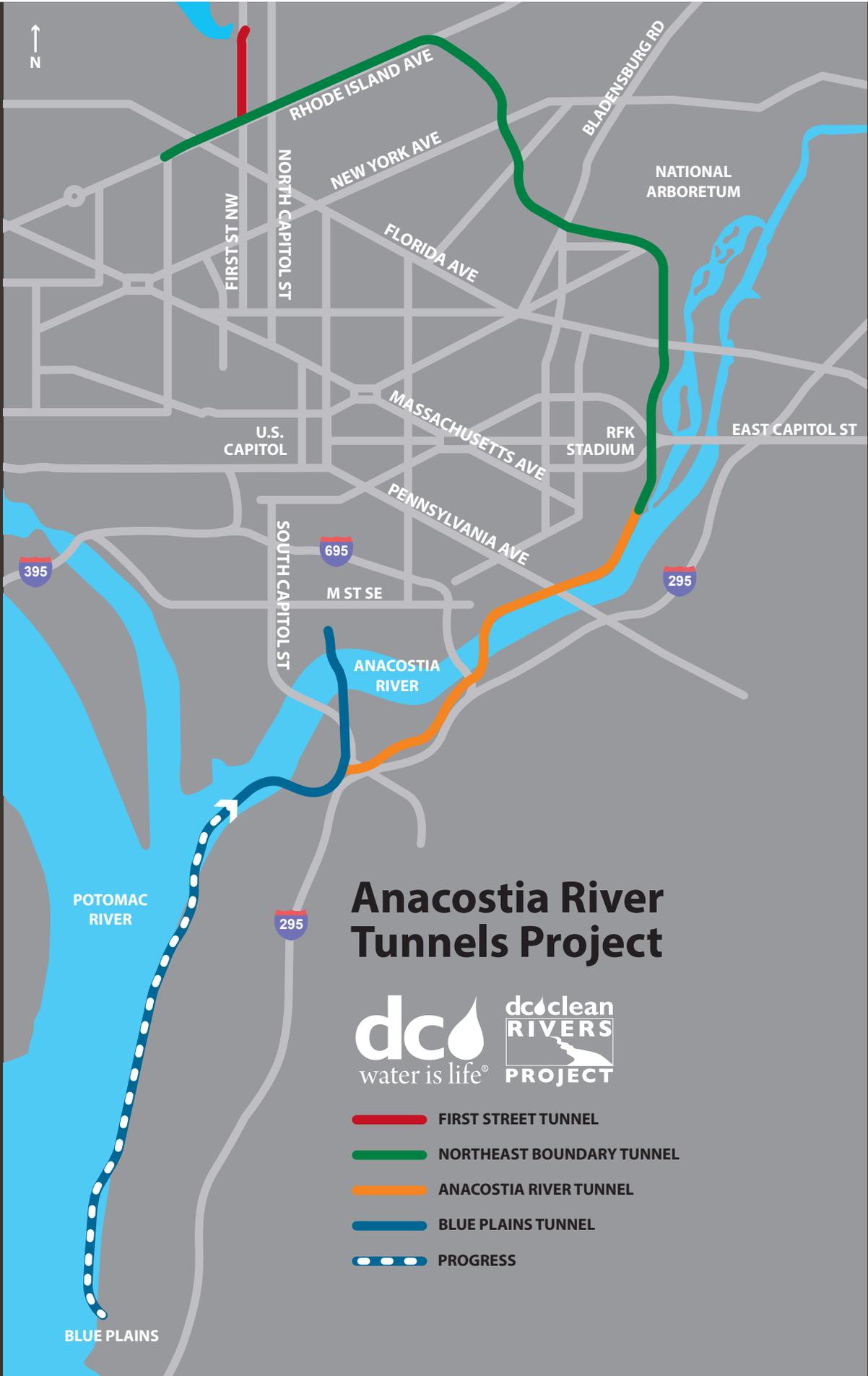
### Nannie – The TBM for the Anacostia River Tunnel

- A football field is 360 feet long including the endzones. The total length of this TBM is 350 feet (107m).
- The TBM weighs 1,248 Tons (the equivalent of nearly six Boeing 747s).
- This TBM was built specifically for this project in Schwanau, Germany at the Herrenknecht Factory.
- It cost \$25 million to build.
- The cutterhead diameter is 26 feet.
- At full production, the TBM is capable of tunneling up to 100 feet per day. It is expected to average 52 to 64 feet per day.
- It will move approximately 6.5 million cubic feet of soil (240,000 cubic yards). That's enough material to fill the reflecting pool 7 times.
- To haul away the soil it will require 3 dump truck loads every 1 foot of tunnel advancement. Over the entire length of the tunnel, that is more than 36,000 truckloads.
- The front sections of the TBM as seen here, weigh over 560 tons. They will be lifted as one piece and lowered into the shaft.
- A specialty heavy lifting contractor will lower the TBM in one pick using a high capacity 650 ton strand jack gantry system.
- The TBM will initially launch with the first four (4) of seven (7) trailing gear gantries. In this configuration, the TBM has all the basic utilities needed to begin tunneling. The excavated dirt will be delivered to a muck box at the back of the TBM and lifted out with a crane. As the TBM advances forward, the remaining sections will be added in-line one at a time. After the entire TBM has exited the southern launch shaft, the northern shaft will be fitted with muck handling equipment and the full-scale tunneling operation can begin.

### Clean Rivers Project

- The Clean Rivers Project will reduce combined sewer overflows (CSOs) to the District's waterways-- the Anacostia River, the Potomac River and Rock Creek.
- It will cost approximately \$2.6 billion and is scheduled for completion in 2025, though portions of the Anacostia River will have relief even sooner—in 2018.
- The Clean Rivers Project will reduce CSOs to the Anacostia River by 98 percent and to all three water bodies by 96 percent overall.
- DC Water is starting the project with the most impaired water body, the Anacostia River, a slow-moving and shallow water body. The 13-mile tunnel system for the Anacostia is broken into three segments. This segment, the Anacostia River Tunnel project will extend from Robert F. Kennedy Stadium in northeast DC to the Poplar Point Pumping Station in southeast DC at a depth of approximately 100 feet.
- The tunnel system ends at Blue Plains Advanced Wastewater Treatment Plant where the combined sewage will be treated before being discharged back to the Potomac River.
- Therefore, construction and tunneling began at the end of the tunnel system at Blue Plains and is moving upstream. That way, the lower portion can be operational before the entire tunnel system is built.

for more information visit:  
[dcwater.com/cleanrivers](http://dcwater.com/cleanrivers)



# Anacostia River Tunnels Project



- FIRST STREET TUNNEL
- NORTHEAST BOUNDARY TUNNEL
- ANACOSTIA RIVER TUNNEL
- BLUE PLAINS TUNNEL
- - - PROGRESS