Clean Rivers Project - Potomac River Tunnel
Watergate Tunnel Forums
March 17 & 25, 2026

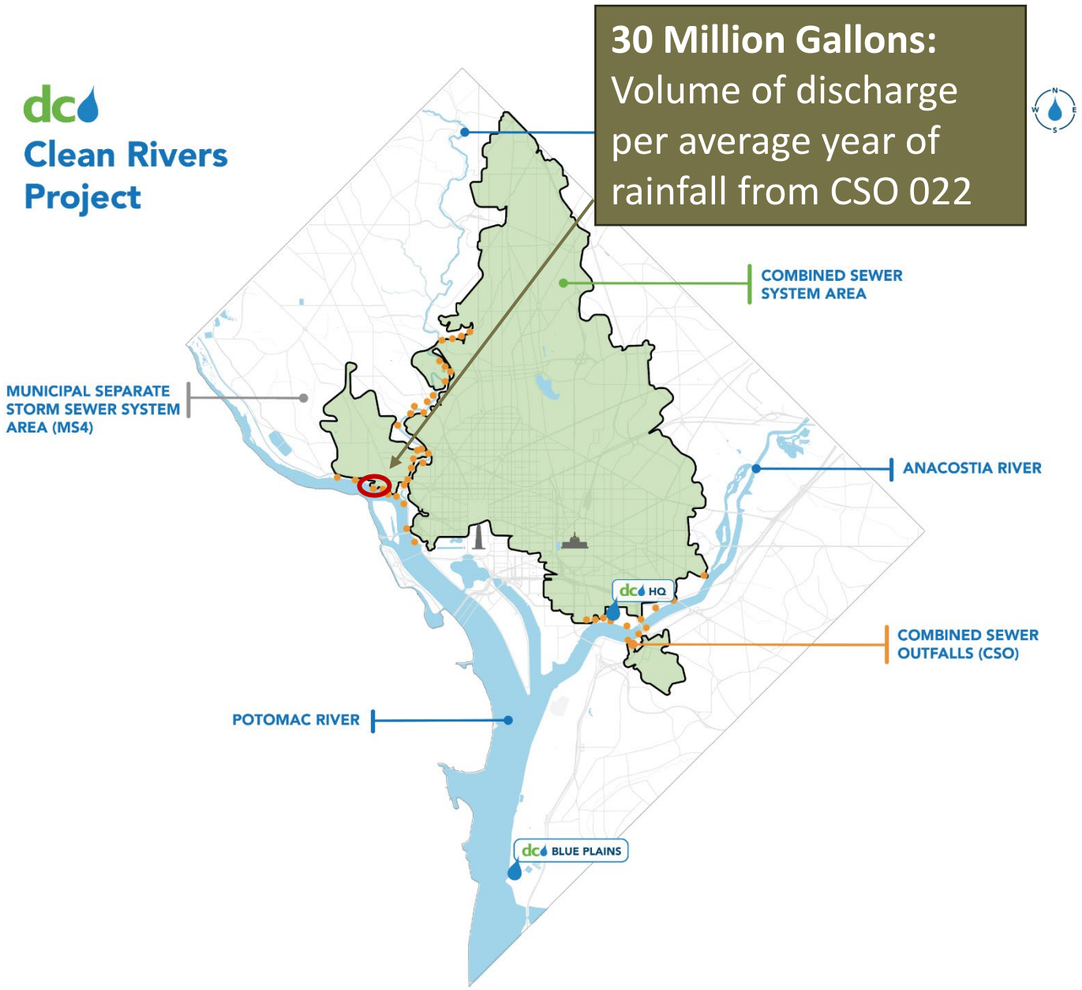
Moussa Wone, Chief Engineer and Vice President

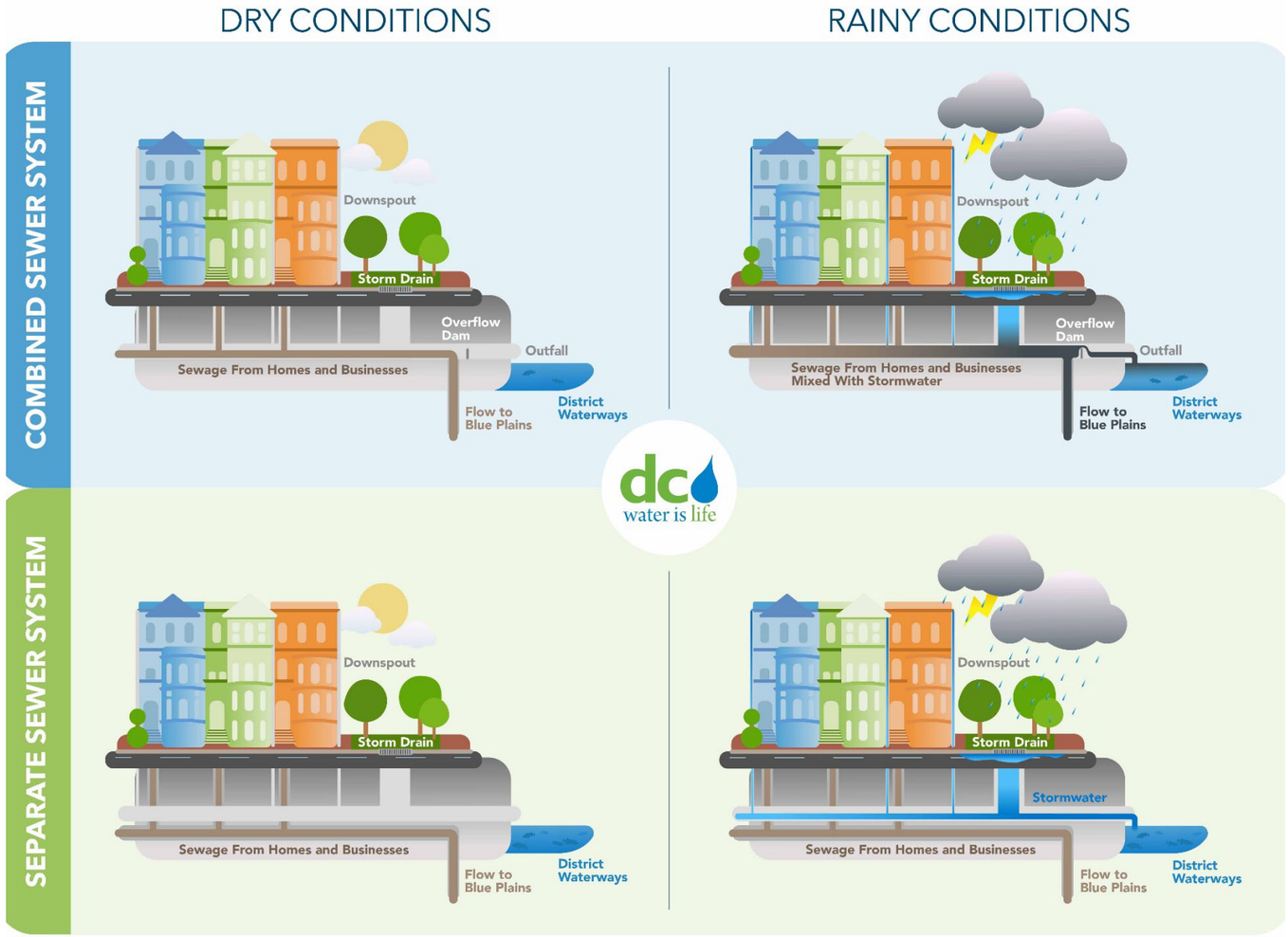
Agenda

01	DC Clean Rivers Project	Hadiah Jordan
02	Potomac River Tunnel	Steven Wheeler & Waleed Assaf
03	Rock Creek Trail (CSO 022) Construction Site	
04	dcwater.com/PRT	
05	Sign Up for Email Updates	Hadiah Jordan
06	Contact Information	
07	Questions and Answers	Project Team

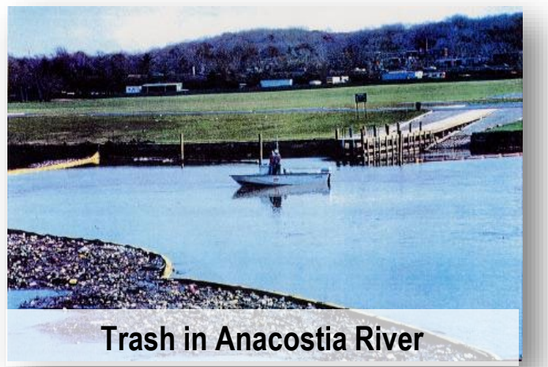
DC Clean Rivers Project

Combined Sewer System in the District





CSO 022 @ Potomac River



Trash in Anacostia River

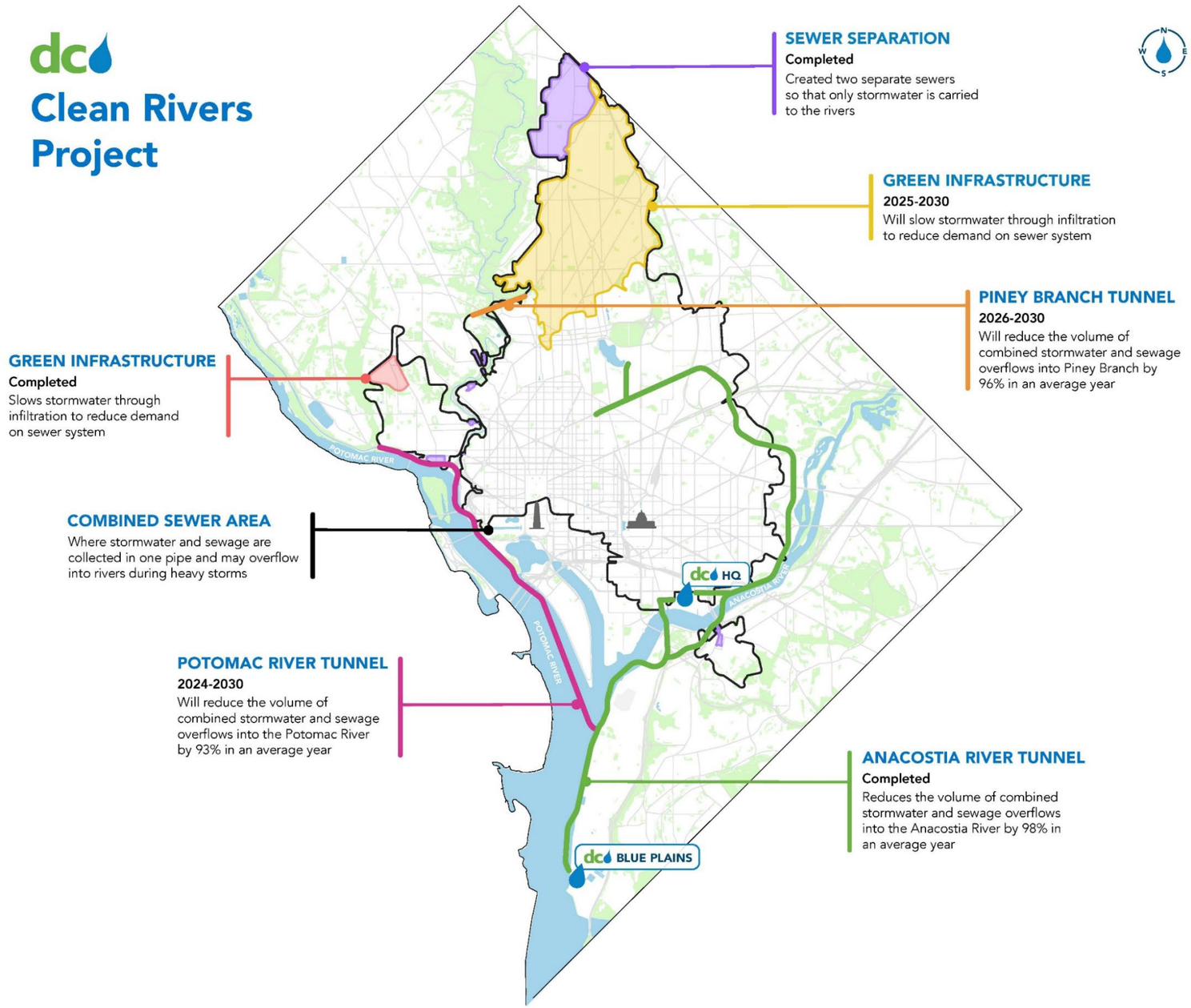
- 1/3 of District is served by combined sewers (12,478 acres)
- Combined Sewer Overflow (CSO) outfalls
  - 15 to Anacostia River
  - 10 to Potomac River
  - 23 to Rock Creek

Clean Rivers Project

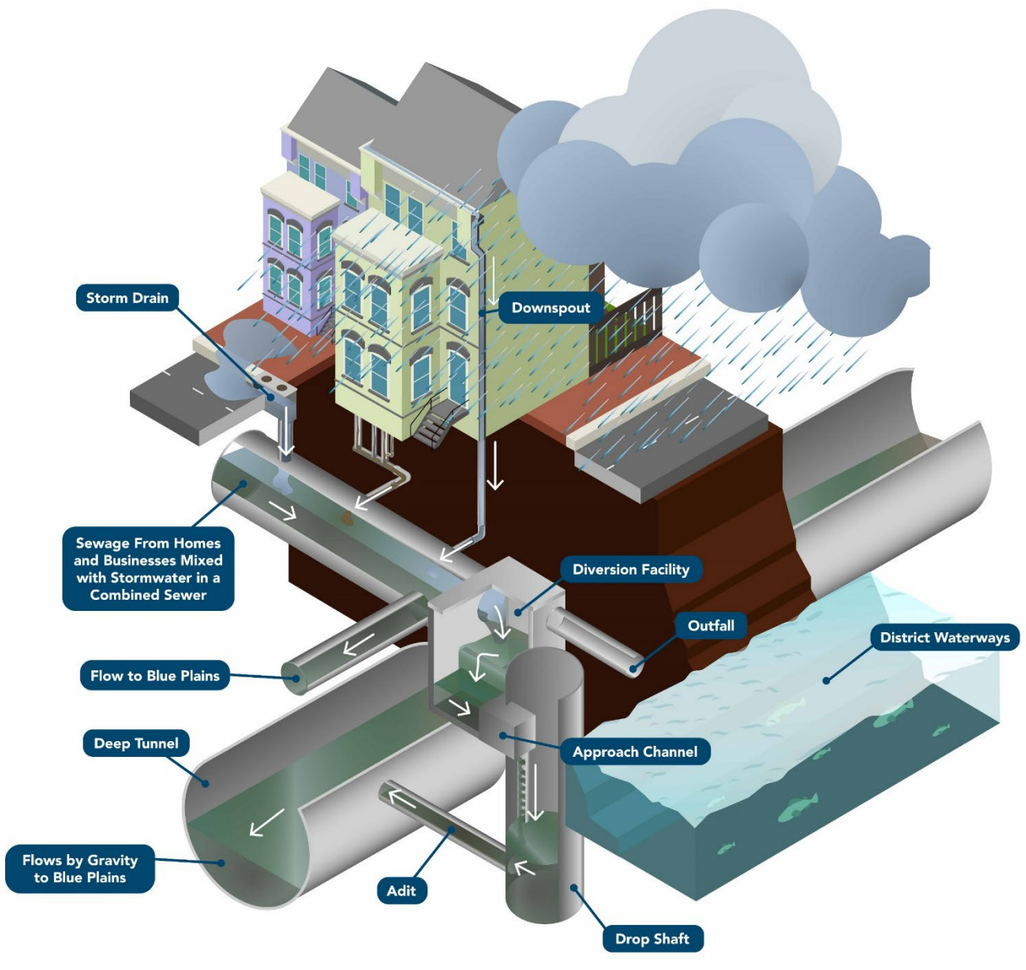
DC CLEAN RIVERS PROJECT AND NITROGEN REMOVAL PROGRAMS

- DC Clean Rivers Project: $3.29 Billion
- Nitrogen Removal: $950 Million
- Total > $4.2 Billion
- 25 yr implementation (2005 – 2030)
- 96% reduction in CSOs
- Approx. 1 million lbs/yr nitrogen reduction

The project is required by a *Consent Decree* signed by the Environmental Protection Agency, Department of Justice, District of Columbia, & DC Water

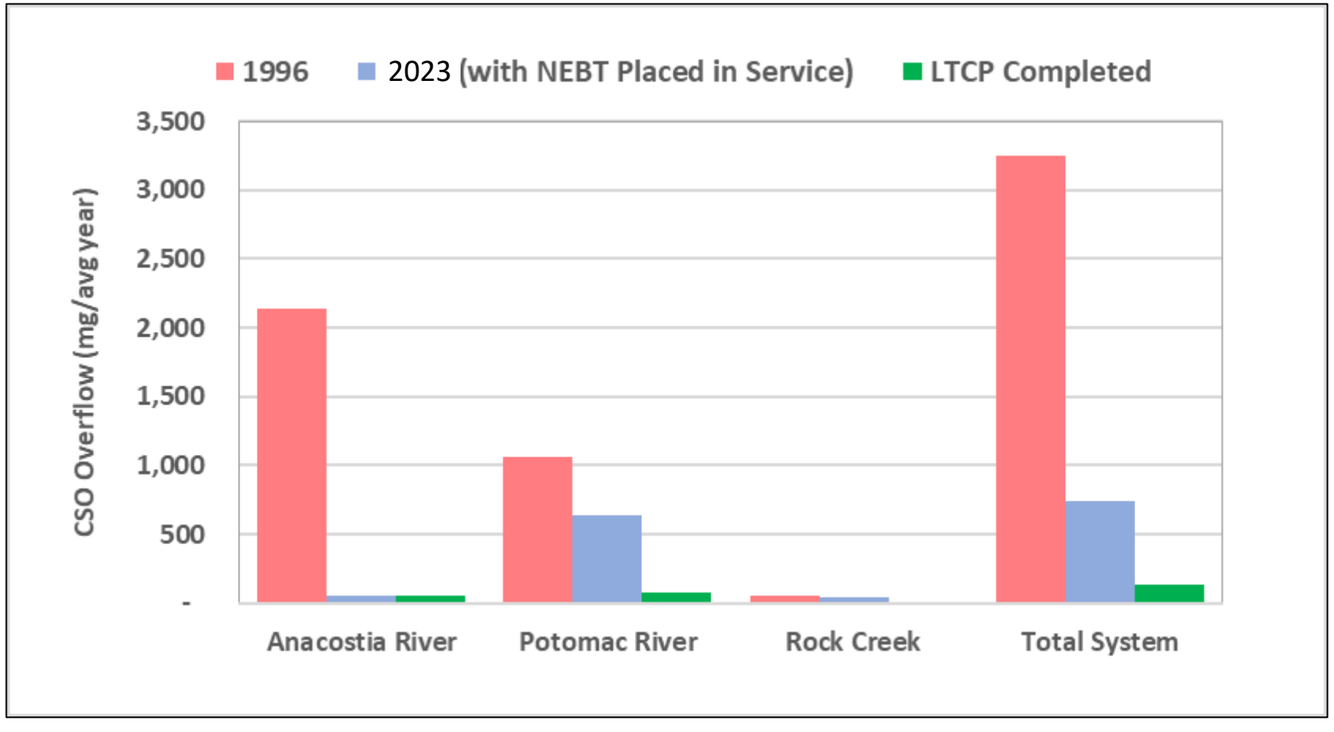


Clean Rivers Project Performance



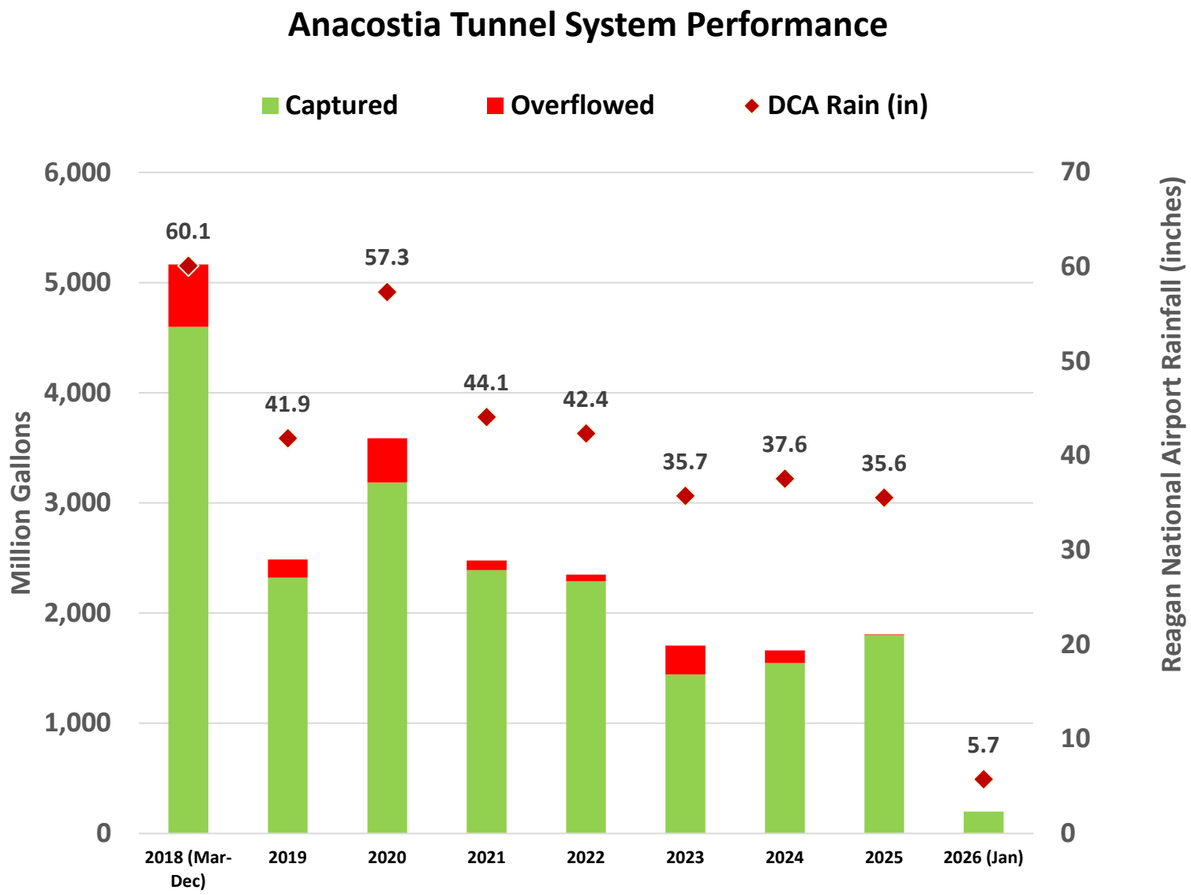
Parameter	Phase	Anacostia River	Potomac River	Rock Creek	Total
CSO Volume (mg/avg year)	DC Water created (1996)	2,142	1,063	49	3,254
	Clean Rivers complete	54	79	5	138
	% reduction	98%	93%	90%	96%
CSO Frequency (#/avg yr)	DC Water created (1996)	82	74	30	186
	Clean Rivers complete	2	4	1 / 4[1]	

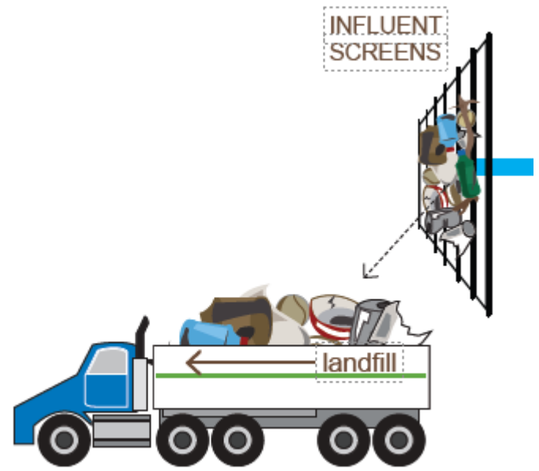
[1]One at Piney Branch, four at the other Rock Creek CSOs



Anacostia River Tunnel System Performance to Date

- Over **19.79 billion gallons** captured March 2018 – April 2026
- Over **12,555 tons of trash**, debris, and other solids captured



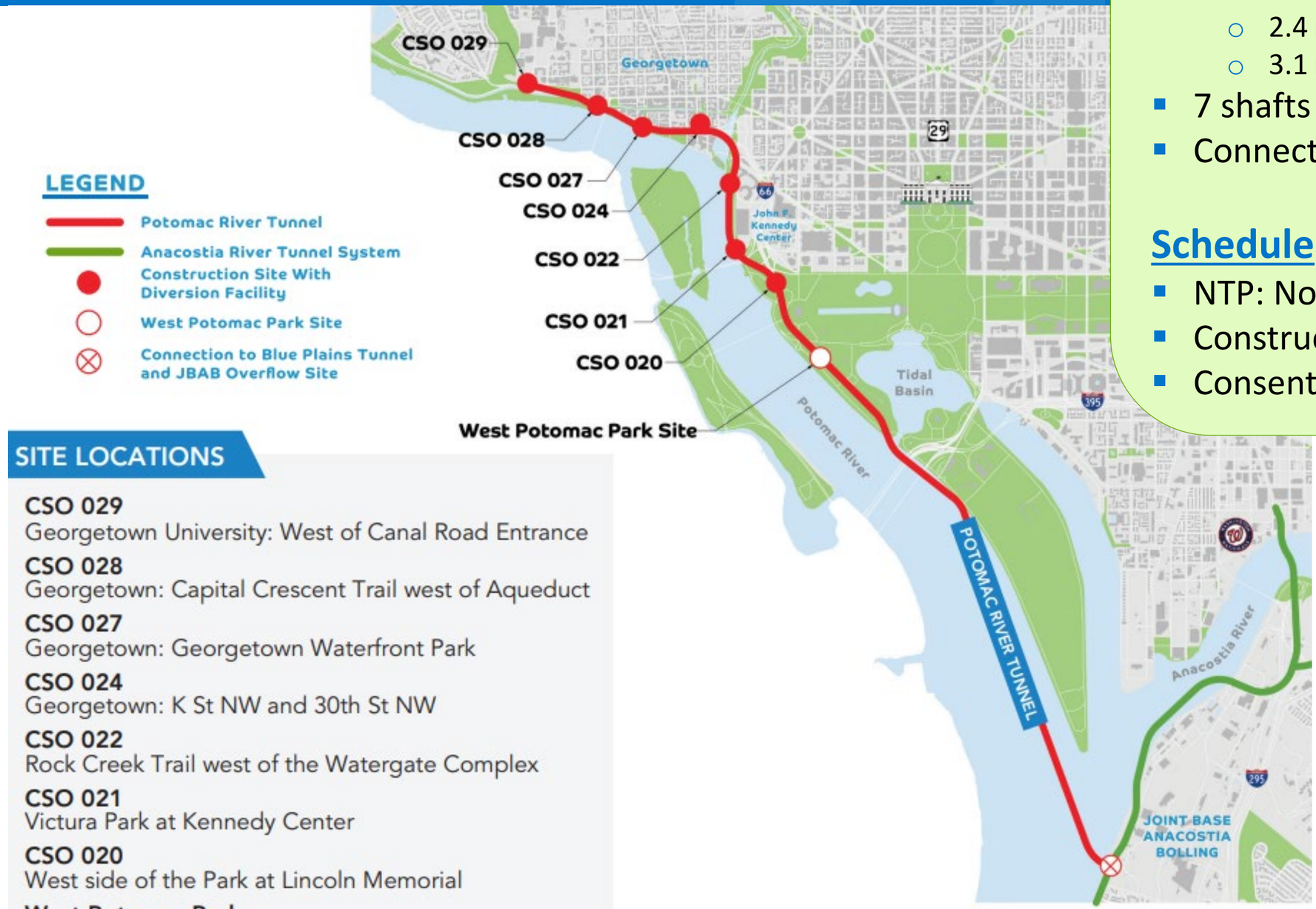


Anacostia River Tunnel

Trash, Debris and Solids Removed at Blue Plains from Anacostia Tunnel System

Potomac River Tunnel

Potomac River Tunnel



SITE LOCATIONS

CSO 029
Georgetown University: West of Canal Road Entrance

CSO 028
Georgetown: Capital Crescent Trail west of Aqueduct

CSO 027
Georgetown: Georgetown Waterfront Park

CSO 024
Georgetown: K St NW and 30th St NW

CSO 022
Rock Creek Trail west of the Watergate Complex

CSO 021
Victura Park at Kennedy Center

CSO 020
West side of the Park at Lincoln Memorial

West Potomac Park
West Potomac Park Field #7

Tunnel Connection to JBAB
Riverfront location at Joint Base Anacostia-Bolling

Project

- Approx 5.5 miles of 18 feet finished tunnel
  - 2.4 miles in rock (north)
  - 3.1 miles in soil (south)
- 7 shafts
- Connection to existing Tunnel System

Schedule

- NTP: Nov 2023
- Construction Start: 2024
- Consent Decree Deadline: 2030

Anticipated Schedule (simplified)

Legend

- Planned work
- Work may be performed pending construction progress/schedule adjustments

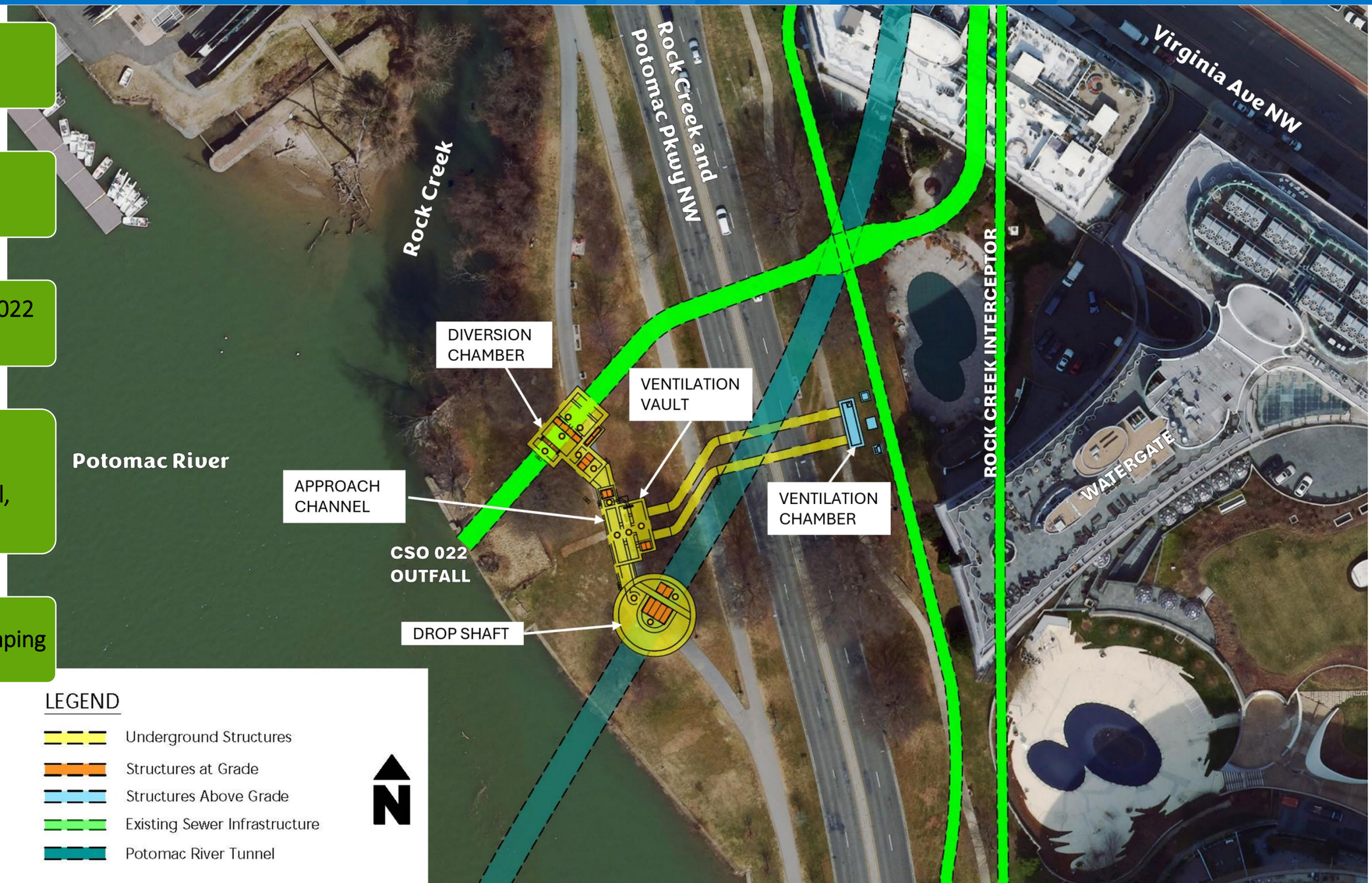
Activity	2024				2025				2026				2027				2028				2029				2030			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
West Potomac Park										Planned Tunnel Mining																		
CSO 022 (Watergate)																												
CSO 028 (C&O Canal at Key Bridge)																												
CSO 027 (Potomac and K St NW)																												
CSO 024 (30th and K St NW)																												
CSO 020																												
CSO 029 (Georgetown University)																												
CSO 021 (Kennedy Center)																												
Joint Base Anacostia-Bolling																												

Schedules subject to change

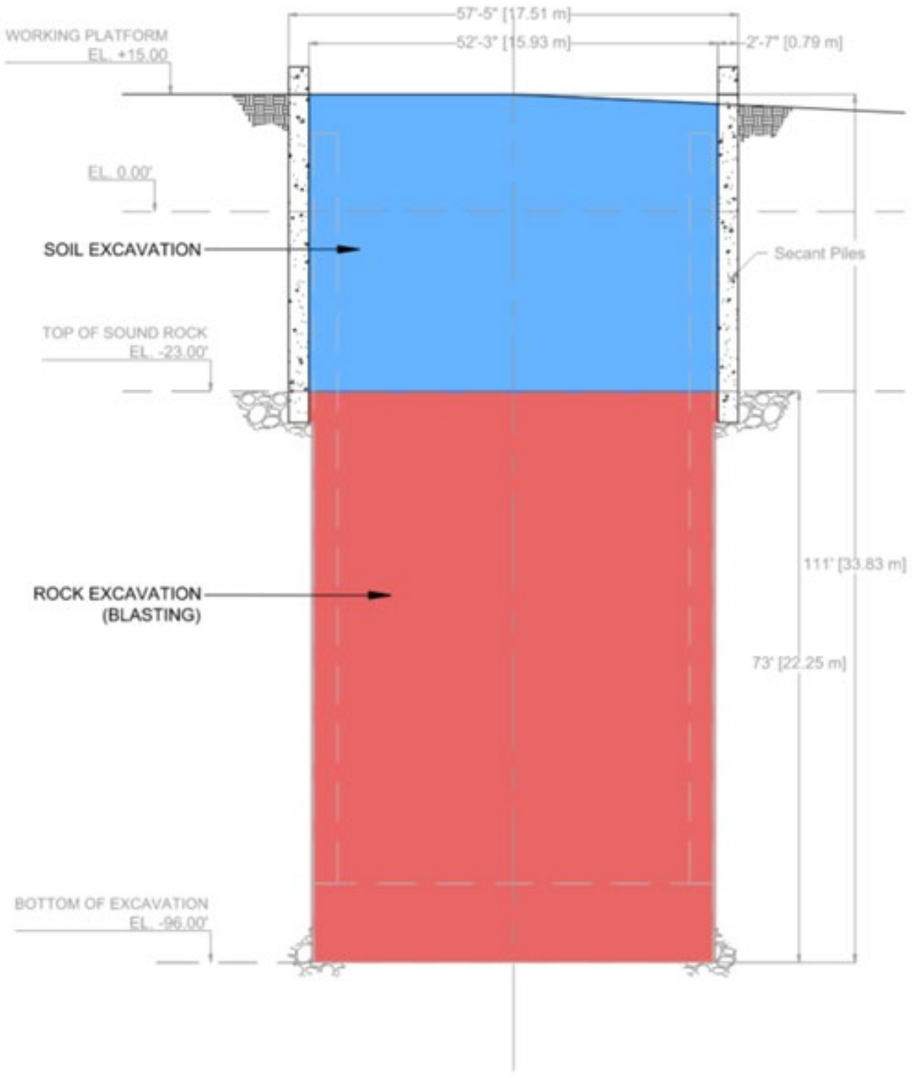
Rock Creek Trail (CSO 022) Construction Site

Rock Creek Trail (CSO 022) Construction Site

- Site Set-Up
- Construction of Drop Shaft (preparing for tunnel)
- Tunnel Passes Through CSO 022 Site
- Construction of supporting infrastructure (Diversion Chamber, Approach Channel, Ventilation Facility)
- Site Restoration and Landscaping



Excavating the Shaft



LEGEND

- Soil Excavation
- Rock Excavation (Blasting)

Controlled Underground Blasting

Details

- Scheduled approximately every two weeks between March and August 2026
- Monday through Friday, between 9 a.m. and 3 p.m.
- Carefully managed by experienced safety professionals, with oversight from local and federal agencies.
- Noise and ground vibrations are closely monitored to ensure safety and compliance.

What to Expect

- Before each blast, you'll hear an air horn signal and see flaggers temporarily close the nearby trail and, for about five minutes, briefly stop traffic on the parkway.
- After the blast, another air horn will let everyone know it's safe to resume normal activities.

Test Blast Schedule (UPDATED)

While we aim to keep the schedule as consistent as possible, test blast dates may shift as field conditions or coordination needs arise.

- Test Blast #1: March 16, 2026
- Test Blast #2: March 20, 2026
- Test Blast #3: April 3, 2026

Monitoring Noise & Vibration

- A monitoring program will measure and document movements.
- Instrumentation data is routinely reviewed by engineers from the Contractor and DC Water.
- A Right of Entry between DC Water and the Owner is required for survey targets to be installed and monitored on private property.
  - Survey targets will only be placed on the exterior of structures.
  - Survey targets will be measured daily when excavation occurs nearby.

- Noise and Vibration Specialist
  - Conducts daily monitoring
  - Implements mitigation measures
- Contractor held to DCMR limit of 80 dBA during weekday days
  - Nighttime limit 55 dBA
  - Weekend limit 60 dBA

Noise Mitigations

Rock Creek Trail (CSO 022) Construction Site Renderings

Existing

Project Completed

Rock Creek Trail (CSO 022) Construction Site Renderings

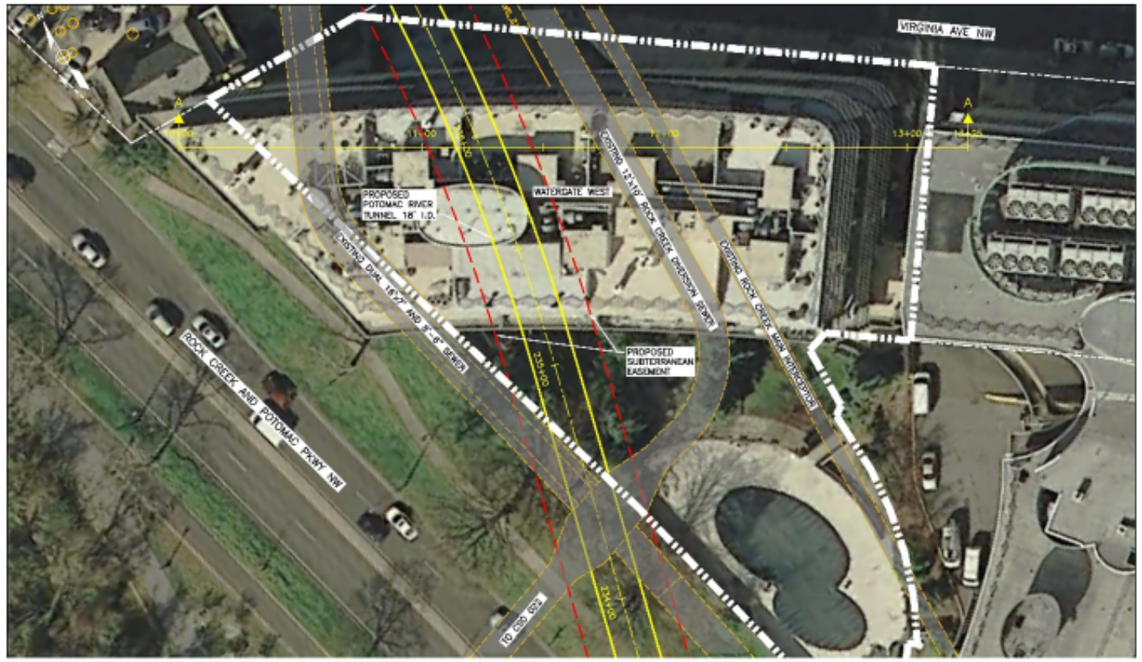
Existing

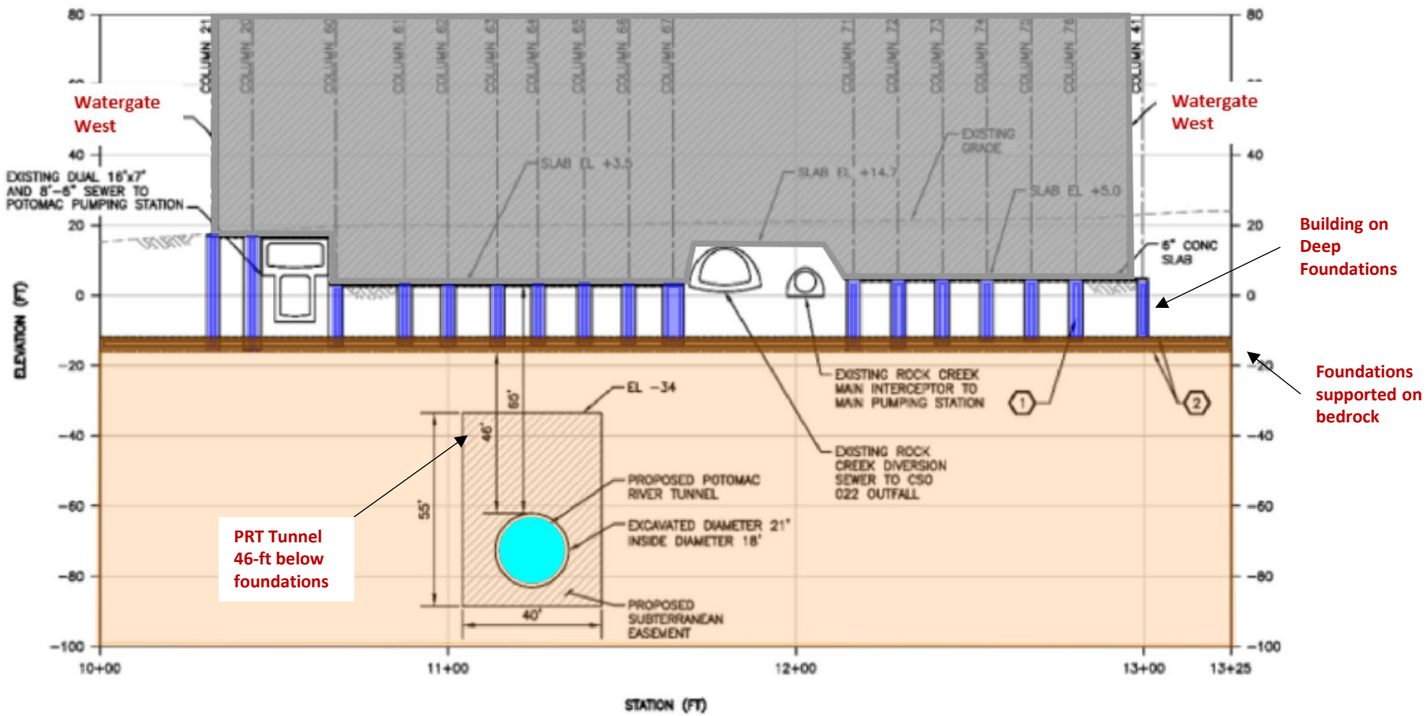
Project Completed

Watergate West Undercrossing

- Watergate West is supported on concrete foundation piles that bear on bedrock
- Potomac River Tunnel would pass:
  - ~65 feet beneath the basement floor
  - ~46 feet beneath the base of the foundation piles
- Construction Impact Assessment Report (CIAR) developed by DC Water engineers
- Findings: No construction impacts to the Watergate West Building are anticipated.
- Watergate West independent engineer (WJE) has reviewed and concurs with the assessment
- Numerous tunnels of this size have been constructed beneath existing structures on other projects in the U.S., including by DC Water
  - Example: Anacostia River Tunnel came within 6 feet of piles for a District Dept. of Transportation bridge. Tunnel was in soft ground.

dc clean RIVERS PROJECT





TBM Data Monitoring

Tunnel Boring Machine (TBM) data monitoring measures

- how hard it’s pushing,
- how fast it’s moving,
- the precise location,
- and + thousands of data points that the team uses to ensure a safe passage.

This ensures the TBM is running smoothly and performing as expected.

TBM Data Monitoring

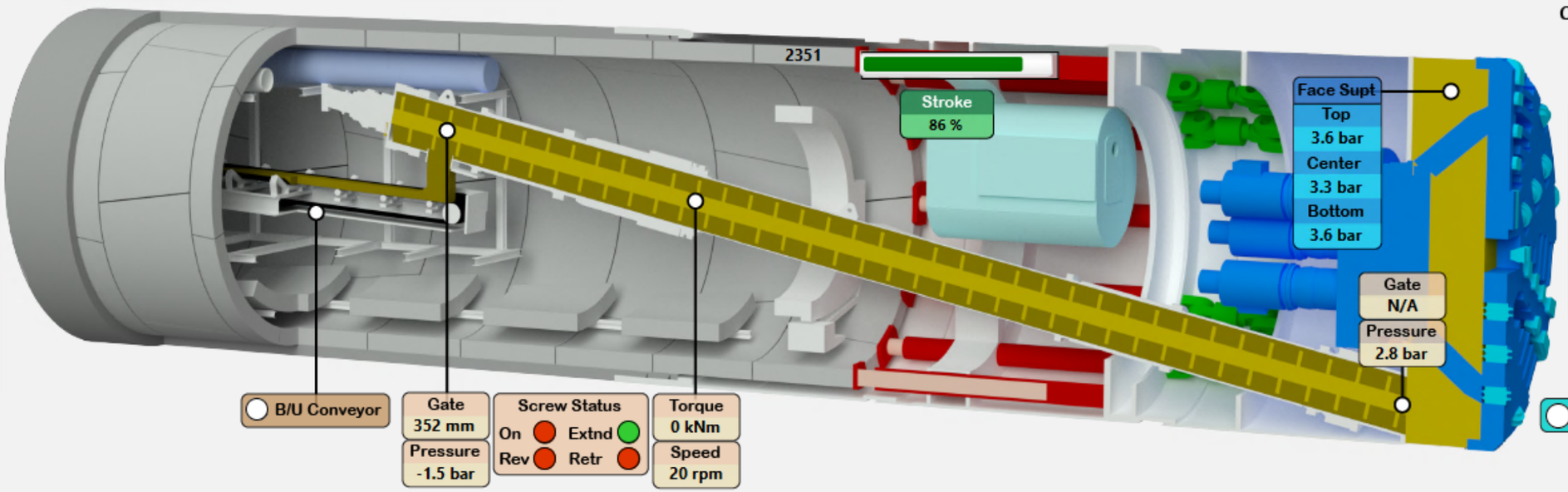
Last Update
02-21-2024 00:47:03 PM

Chainage	Station	Ring Advance	Net Stroke
10616.61 ft	116+35.08 ft.	2352	1186 mm

TBM PLC to Surface PLC

Ring 2352		00:19:19
TBM state mode Advance	00:19:19	00:19:19
TBM state mode ringbuild...	00:00:00	00:00:00
Waiting Time	00:00:00	00:00:00

TPC

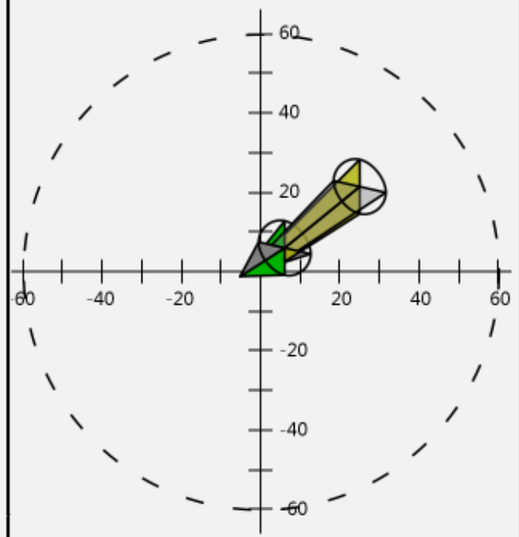


CCW CW

Cutterhead
Advance
61 mm/min
Speed
2.4 rpm
Penetration
25.1 mm/rev
Torque
0.6 MNm

Wear Detection

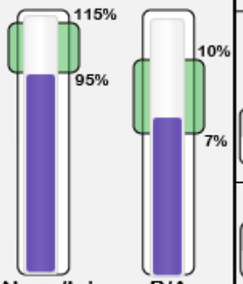
Guidance



Tail Void Grout

- ○ Automatic
- ○ Semi Automatic
- ○ Manual

Nom. Vol	Comp. A.
2.38 m³	2.07 m³
Act. Vol	Comp. B.
2.23 m³	0.15 m³
Nom / Act	Dosage B
94 %	7.5 %



Muck

Scales

Weight 1	Weight 2
45.35 t	44.75 t
Avg Wgt 1/2	Dev Wgt 1/2
58.8 t	1.3 %
Flow 1	Flow 2
85.0 t/h	82.3 t/h
Avg Flow 1/2	Dev Flow 1/2
83.6 t/hr	3.2 %

Nominal values

Theo Den
2.16 t/m³

Net Volume	Net Weight
18.48 m³	39.97 t

Deviation Nom vs Actual

Volume	Weight

Tail Seal Grease

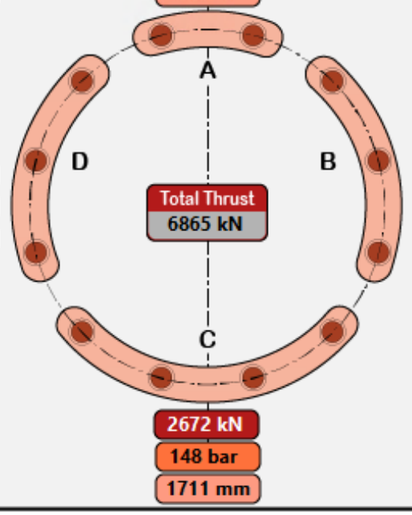
Quantity	Quantity
3.0 kg	2.64 kg

per m² Ring OD
2 kg/m²

Pump 1	Pump 2
Stroke	Stroke
516	516
Pressure	Pressure
1.6 bar	1.47 bar

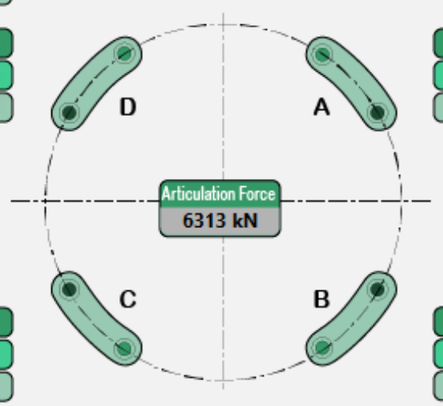
Thrust Cylinders

Thrust	Pressure	Stroke
819 kN	102 bar	1727 mm
2127 kN	157 bar	1705 mm
1090 kN	84 bar	1730 mm
2672 kN	148 bar	1711 mm



Forward Shield Articulation

Force	Pressure	Stroke
N/A	117 bar	50 mm
32 kN	253 bar	60 mm
N/A	174 bar	39 mm
N/A	153 bar	46 mm



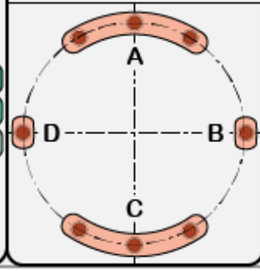
Tail Shield

Passive Articulation

Stroke

Group A	Group B
5 mm	6 mm
Group C	Group D
1 mm	2 mm
Art Pressure	Art Net Strk
0.0 bar	1 mm

TBM Strk - Art Strk
0 mm



Ground Conditioning

- ● Automatic
- ● Semi Automatic
- ● Manual

C_F1	C_F2

FER
1.8
FIR
1.1 %

Consumption / Ring

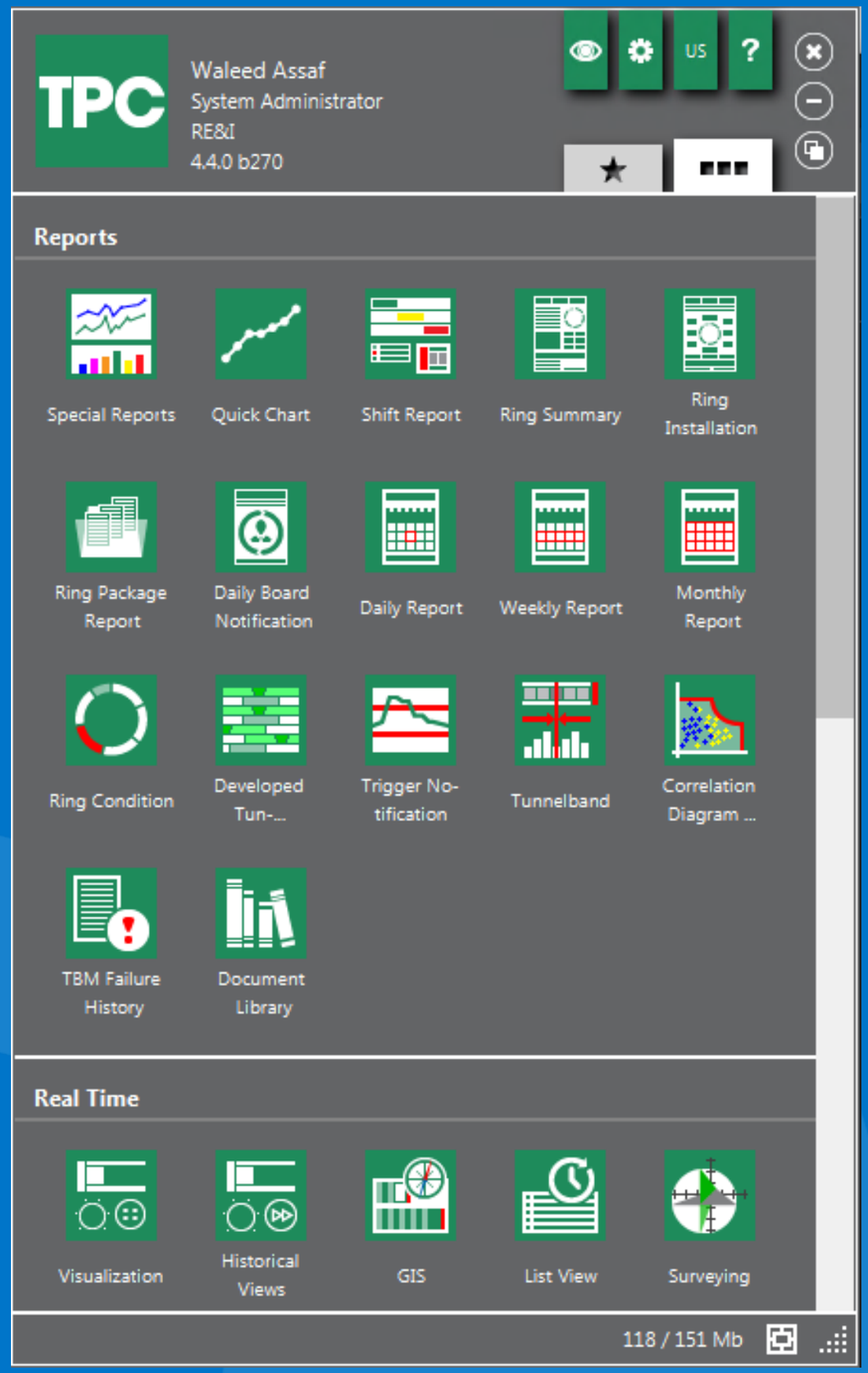
Foam	Tenside
7.2 m³	N/A
Polymer	Bentonite
-0 l	-0.0 m³
Water	Air
3.1 m³	4.1 m³

TBM Data Monitoring

Last Update
02-21-2024 00:49:41...

Guidance State

Tunnel Length (Ch...	Station	Ring Advance	Net Stroke
10617.16 ft	11635.66 ft	2352	1348 mm



Community Engagement

Community Mitigations

Impacts	Mitigation
Adjacent Properties	▪ Conduct preconstruction surveys of the project area before mobilization ▪ Provide advanced notifications to affected businesses and residents to facilitate adequate preparation for anticipated impacts ▪ Offer clear communication and pertinent information regarding construction activities to affected businesses.
Special Events	▪ Coordinate work with city event organizers to ensure safety.
Traffic	▪ Ensure that crews are setting up the traffic control as approved by DDOT/NPS ▪ Coordinate with DDOT/NPS on traffic advisory and detour notification ▪ Trucks will follow dedicated DDOT-approved haul routes ▪ Provide signage and barriers to safely direct motorists around work zones ▪ Provide safe access to businesses and residences ▪ Follow DDOT/NPS approved working and hauling hours ▪ Issue traffic advisories, including for lane closures
Work Hours	▪ Weekdays from 7:00 am to 7:00 pm ▪ Weekend/Night Work may occur during certain phases

Community Mitigations

Impacts	Mitigation
Sidewalk/ Trail Closure	▪ Segregate trails from construction to provide safe path ▪ Proactively notify the community of trail and sidewalk closures and duration ▪ Provide safe paths for pedestrians and bicyclists ▪ Ensure informative signage is posted. Work with NPS to determine any special needs areas
Noise & Vibration Monitoring	▪ Noise and vibration levels are monitored to meet DC Municipal & Regulations (DCMR) noise regulations during construction ▪ Implement noise and vibration mitigation measures as needed
Site Maintenance	▪ Implement site security measures ▪ Placement of dust and rodent control measures ▪ Install tree protections
Lighting	▪ Construction lighting shielded and directed away from residents
Community Engagement	▪ 24/7 Project Hotline ▪ Project Email and Webpage ▪ Project Outreach Team

dcwater.com/PRT

Potomac River Tunnel Project | dcwater.com/projects/potomac-river-tunnel-project

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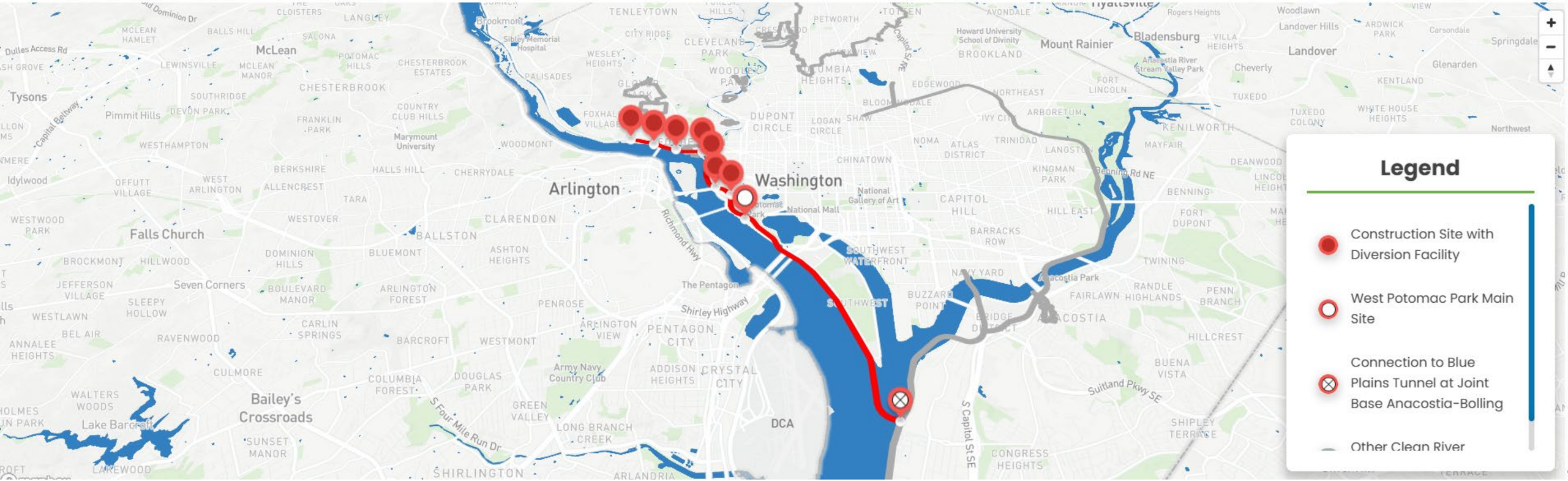
ALERT

DC Water's **Potomac River Tunnel Project**



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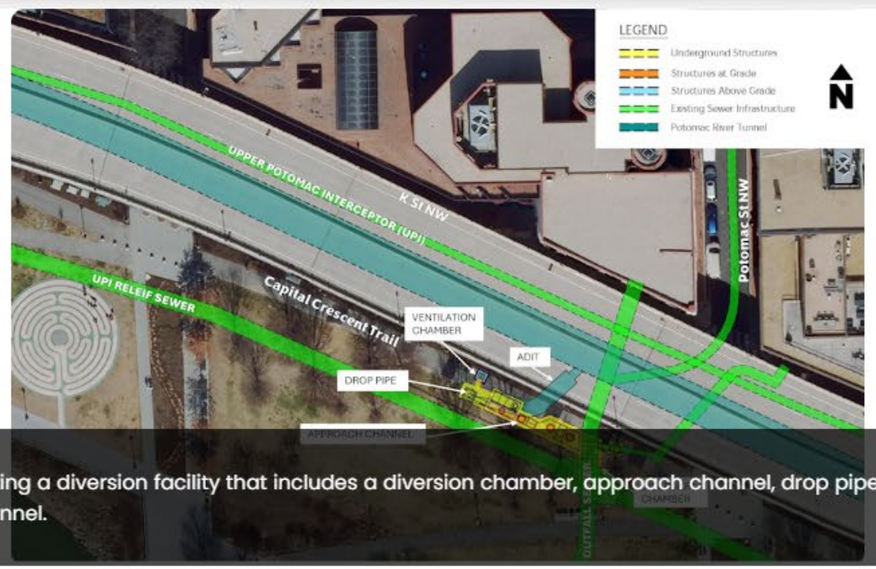
ALERT

DC Water's **Potomac River Tunnel Project**

Georgetown Waterfront Park (CSO 027)

The CSO 027 site is in Georgetown Waterfront Park near the intersection of K Street NW and Potomac Street NW. DC Water is constructing a diversion facility that includes a diversion chamber, approach channel, drop pipe, and other structures to direct flow to the tunnel.

Site at Completion | Traffic Pattern | Site Photos | Documents



DC Water is constructing a diversion facility that includes a diversion chamber, approach channel, drop pipe, and other structures to direct flow to the tunnel.

Previous Site | Next Site

Sign Up for Email Updates

Stay informed about progress on the Potomac River Tunnel.

To receive project updates directly from DC Water, email **dcpotomacrivertunnel@dcwater.com** and ask to join our email list.

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DC Clean Rivers - Potomac River Tunnel Project

Water Street Northwest at Georgetown Waterfront Park:
Travel Lane and Sidewalk Closures

Greetings, Neighbors.

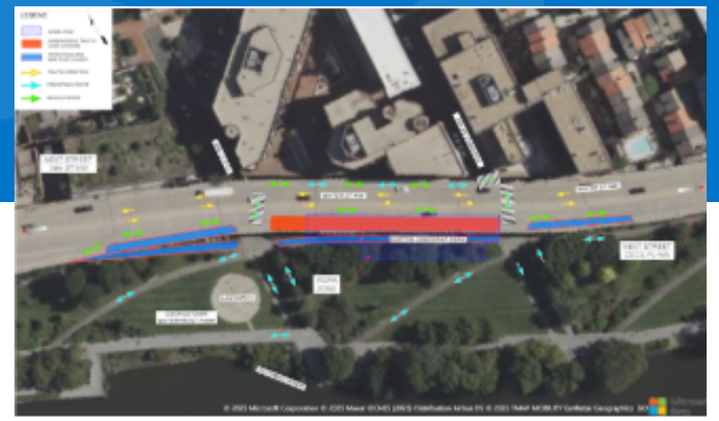
Beginning on or about November 17, 2025, DC Water will begin preparing for construction on the Potomac River Tunnel at the 3300 block of Water Street NW, beneath the Whitehurst Freeway.

Mobilization will take three to four months, weather permitting. During this time, crews will install fencing, signage, and erosion controls; clear and grade the site; and build the entrance. To keep everyone safe, there will be lane and sidewalk closures, parking restrictions, and a bike lane shift on Water Street. A temporary bike and pedestrian path will be installed in Georgetown Waterfront Park to help visitors navigate around the work zone.

During mobilization, some trees within the site must be removed to prepare for construction. DC Water and the National Park Service (NPS) have worked together to identify measures to protect trees that will remain. A tree restoration plan, approved by NPS, is in place. Replacement trees will be planted during the site restoration phase at the end of the project.

Water Street will remain open during construction, but you may notice changes to sidewalks and traffic patterns. Please follow posted signs and detours and consider alternative routes to avoid delays.

Georgetown Waterfront Park and the Capital Crescent Trail will be restored upon completion of construction.



Map: A portion of the Capital Crescent Trail and protected bike path between 33rd and Potomac streets will be closed. Bicyclist and pedestrians will be detoured around the work zone.

What to Expect During Mobilization

Date: November 17, 2025 – Mid-February 2026 (weather permitting).
Work Hours: Monday–Friday from 7 a.m.- 7 p.m.
Location: Water Street NW between 34th Street and Cecil Place

Traffic and Trail Changes:

- The bike lane on Water Street will shift north around the work zone.
- Parking will be restricted on Water Street between 34th Street and Cecil Place.
- The Capital Crescent Trail adjacent to the work zone will be closed.
- Pedestrians will be detoured to paths in Georgetown Waterfront Park.

Flaggers and signs will help guide you safely through the area. A temporary bike and pedestrian path will be built in the park to keep everyone moving.

Project Details

DC Water is building the Potomac River Tunnel to help reduce pollution in the Potomac River and Chesapeake Bay. The tunnel is designed to capture combined sewer overflows—stormwater mixed with sewage—and send them to the Blue Plains Advanced Wastewater Treatment Plant.

The tunnel is expected to be operational by 2030, and once complete, will reduce overflow events from about 74 to only 4 during an average year of rain and decrease the volume by 93%.

This work is part of a long-term commitment to cleaner waterways and ensures compliance with a Federal Consent Decree, as amended in 2016, with the District of Columbia, US Environmental Protection Agency, and the US Department of Justice.

Learn more at dcwater.com/prt.

Contact Us

Project Email: dcpotomacrivertunnel@dcwater.com
Project Hotline: 202-972-1388
DC Water 24-hour Emergency: 202-612-3400

Contact Information for Public

Contact Information

Project Email: dcpotomacrivertunnel@dcwater.com

Project Website: www.dcwater.com/prt

Dedicated Project Hotline: 202-972-1388

Questions?

Complete our Tunnel Forum Survey