



District of Columbia Water and Sewer Authority
David Gadis, Chief Executive Officer

*Clean Rivers Project
Northeast Boundary Tunnel*

*Briefing for
Commissioner Ryan Linehan, 5D01*

March 18, 2020



DCWATER.COM

Northeast Boundary Tunnel Construction Team

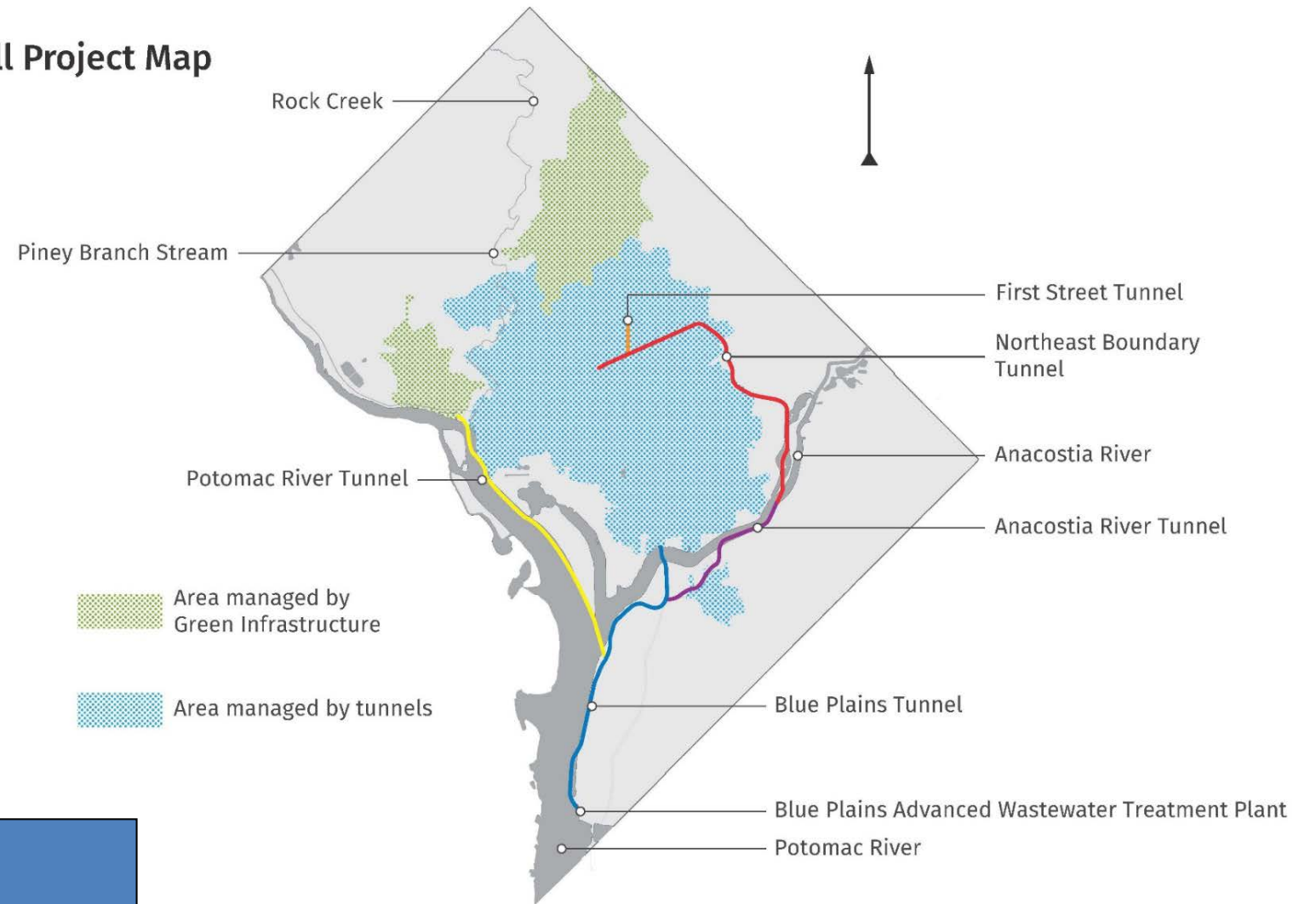
DC Water's Clean Rivers Project and Salini Impregilo Healy Joint Venture



Clean Rivers Project

Tunnel System	Status	Operation Date
First Street Tunnel	In Operation	2016
Blue Plains Tunnel	In Operation	2018
Anacostia River Tunnel	In Operation	2018
Northeast Boundary Tunnel	Construction	2023
Potomac River Tunnel	Planning	2030

Overall Project Map



Clean Rivers Project and Nitrogen Removal Programs
<ul style="list-style-type: none"> • DC Clean Rivers Project: \$2.7 Billion • Nitrogen Removal: \$950 Million • Total > \$ 3.5 Billion • 25 yr implementation (2005 – 2030) • 96% reduction in CSOs & flood relief in Northeast Boundary • Approx 1 million lbs/yr nitrogen reduction predicted



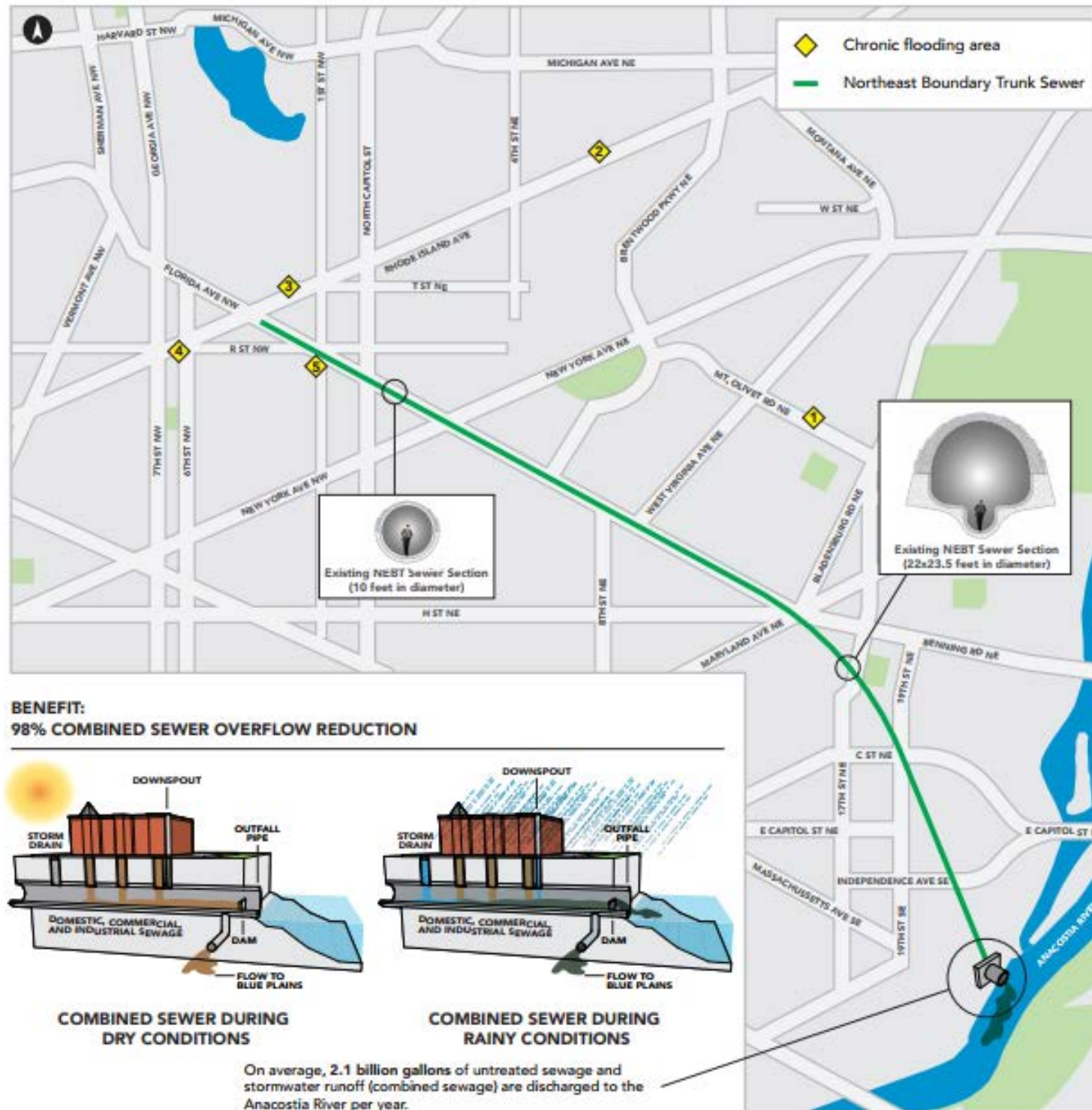
Anacostia River Tunnel System Performance to Date

- ❑ Approximately 7.2 billion gallons captured to date
- ❑ Nearly 3,300 tons of trash, debris, and other solids captured
- ❑ Exceeding predicted capture rate (90% > 80%)
- ❑ First year in operation was the wettest year on record for the District of Columbia



Trash and debris removed from CSO captured by tunnel at ECF Fine Screens

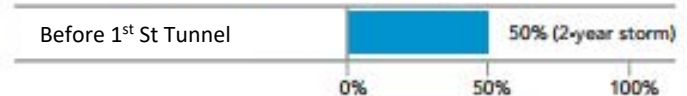
Northeast Boundary Tunnel – Problem



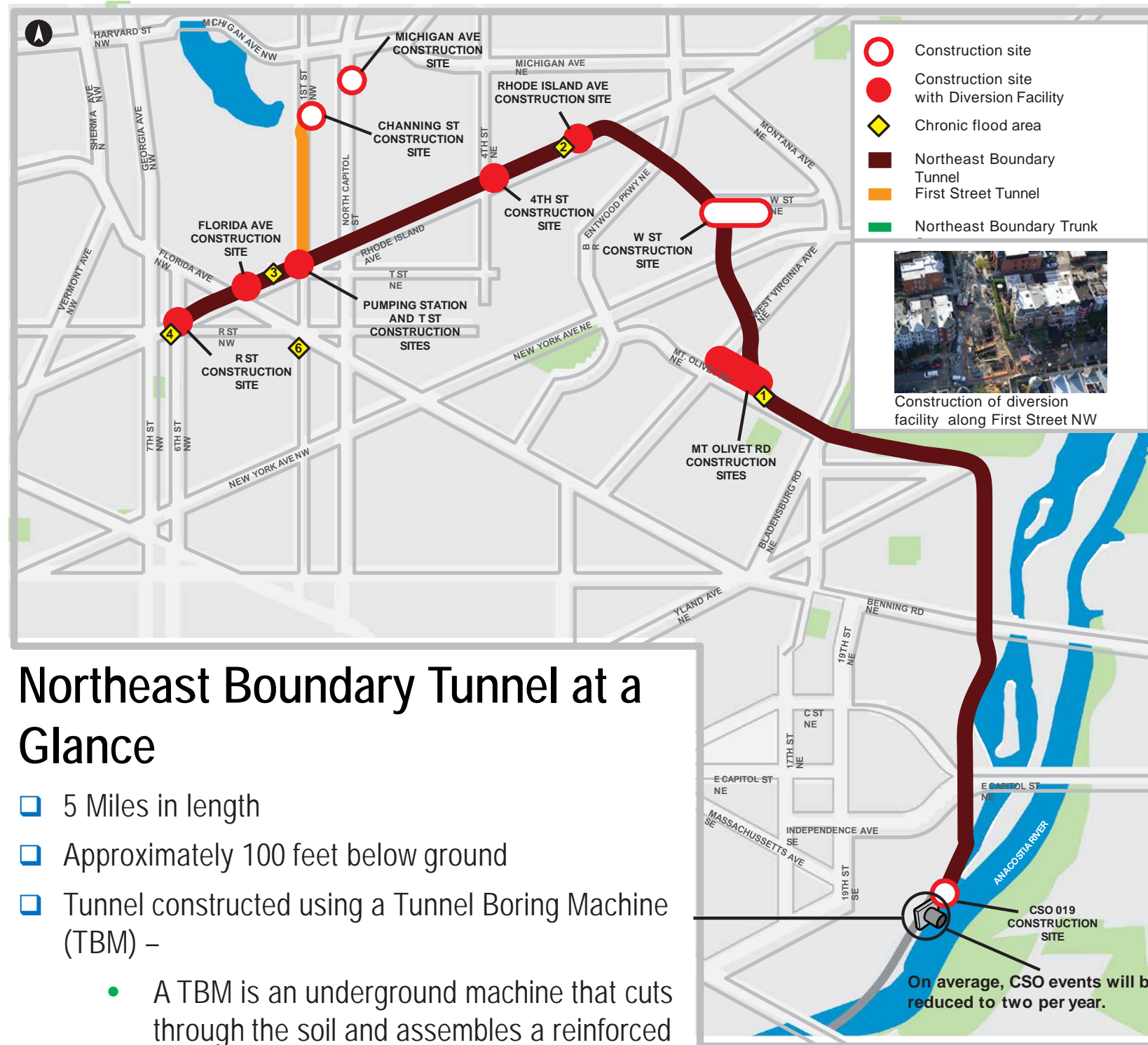
**THE PROBLEM:
CHRONIC SEWER FLOODING**



Chance of flood occurring in any given year



Northeast Boundary Tunnel – Solution



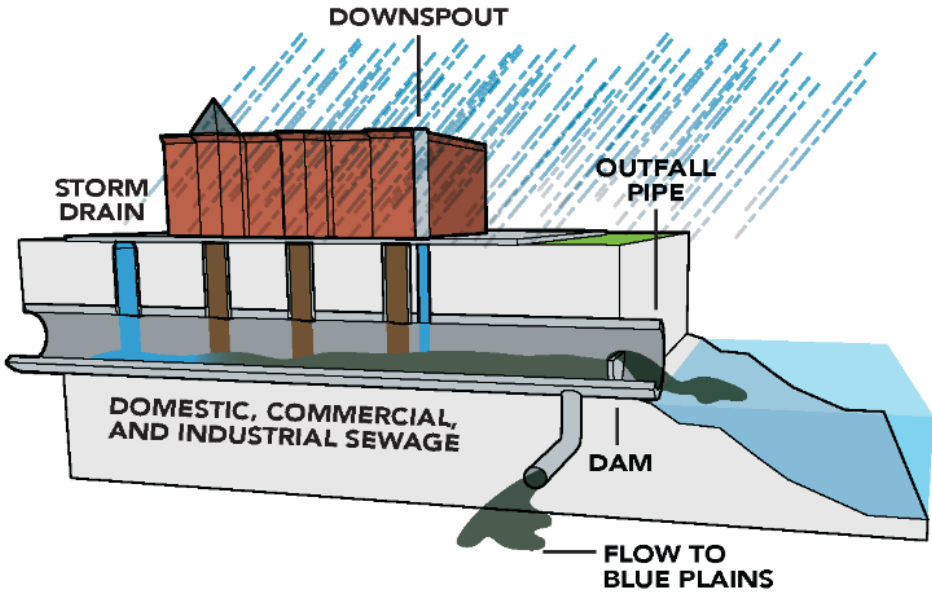
Northeast Boundary Tunnel at a Glance

- ❑ 5 Miles in length
- ❑ Approximately 100 feet below ground
- ❑ Tunnel constructed using a Tunnel Boring Machine (TBM) –
 - A TBM is an underground machine that cuts through the soil and assembles a reinforced concrete liner as it moves forward

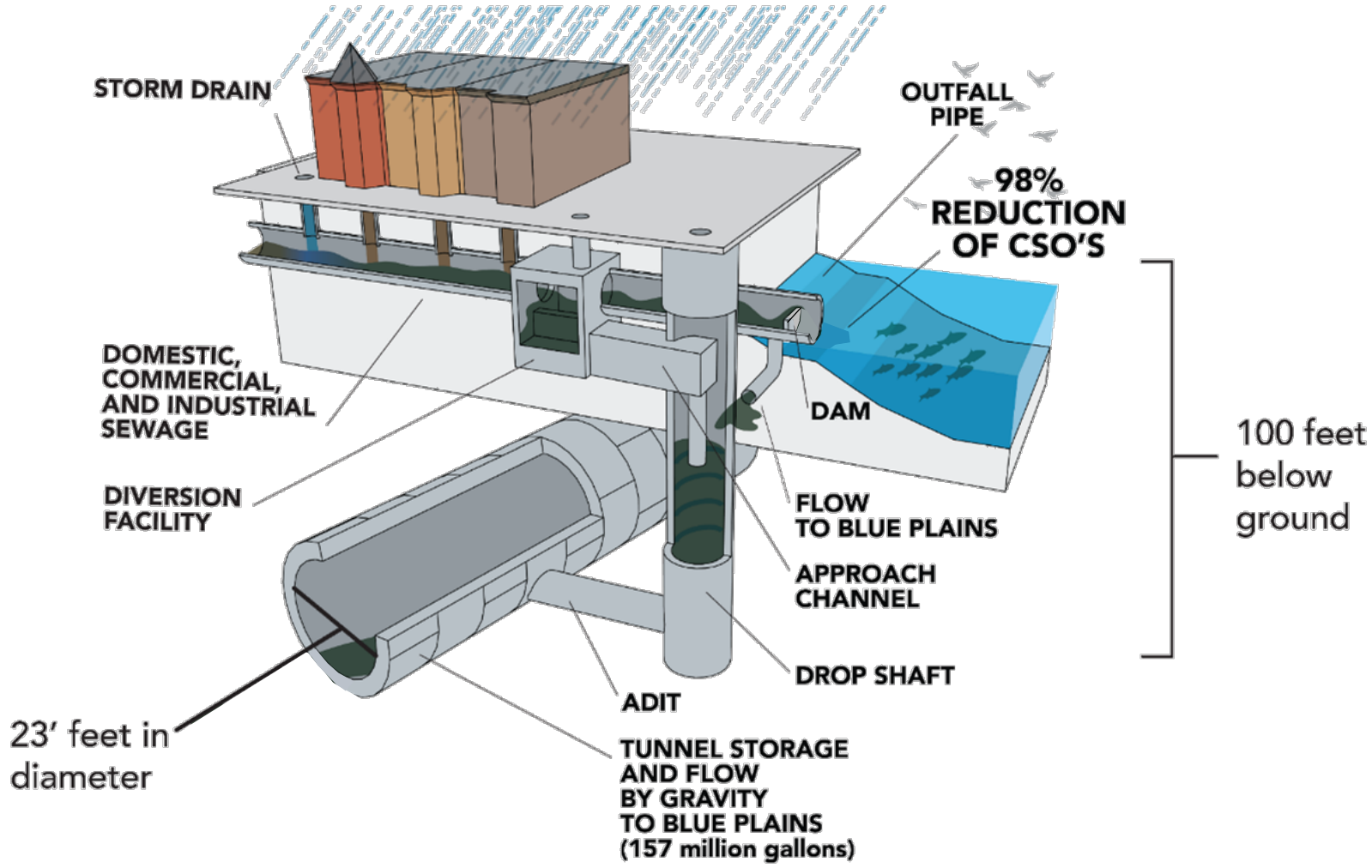
Tunnel Benefits

- ❑ Significantly mitigate the frequency, magnitude and duration of sewer flooding and basement backups in the Northeast Boundary drainage area
- ❑ Control CSO discharges to the Anacostia River, significantly improving water quality
- ❑ Minimize the nuisance and economic costs associated with flooding
- ❑ Reduce risks to human health

What Are We Building?



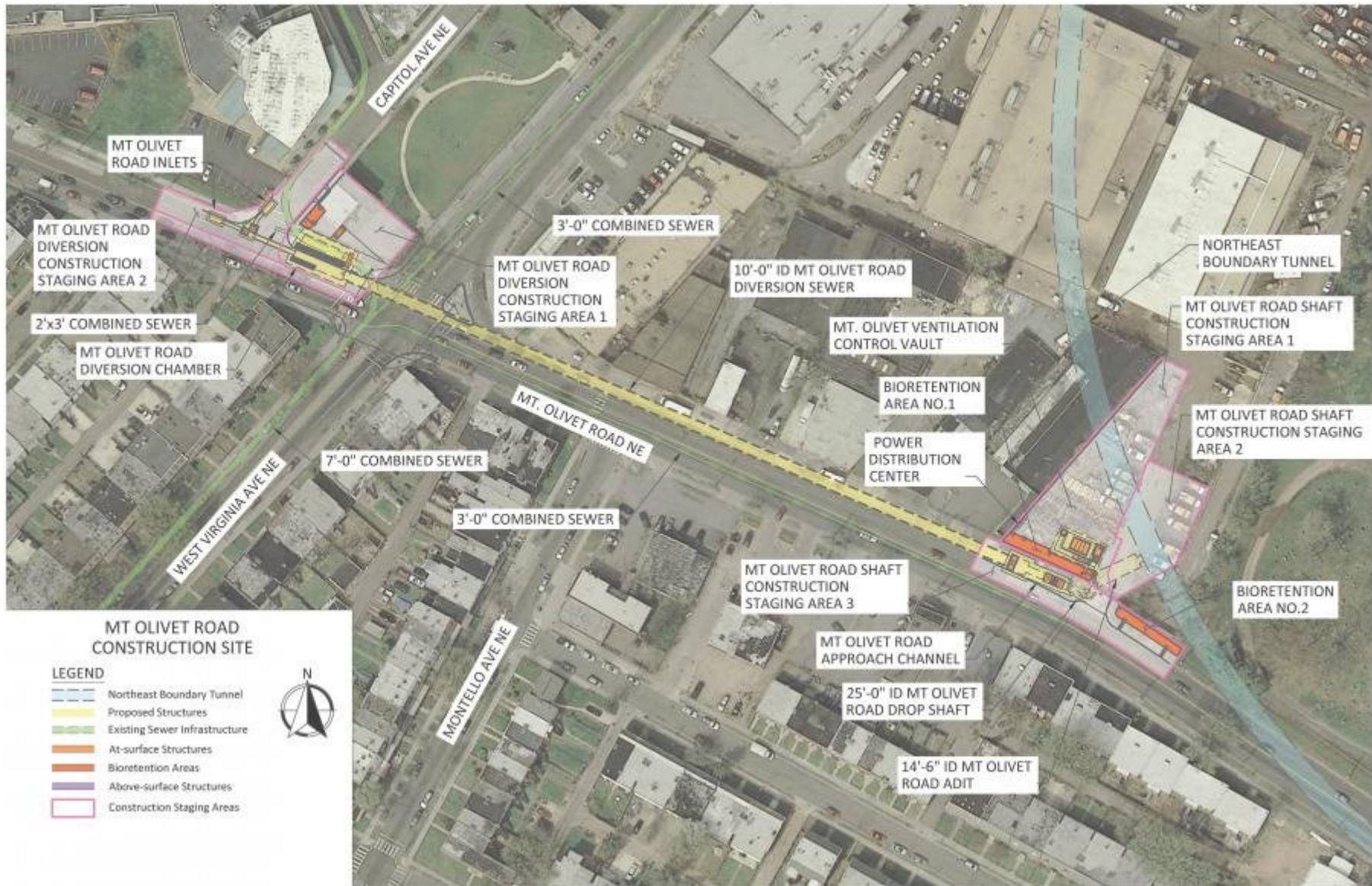
COMBINED SEWER DURING RAINY CONDITIONS



COMBINED SEWER AND TUNNEL RAINY CONDITIONS

Mount Olivet Road NE Construction Site

Dates are approximate and subject to change as construction progresses



There are two construction staging areas on Mount Olivet Road NE: Department of Public Works (DPW) parking lot on Mount Olivet Road; and the intersection of Mount Olivet Road and Capitol Avenue NE

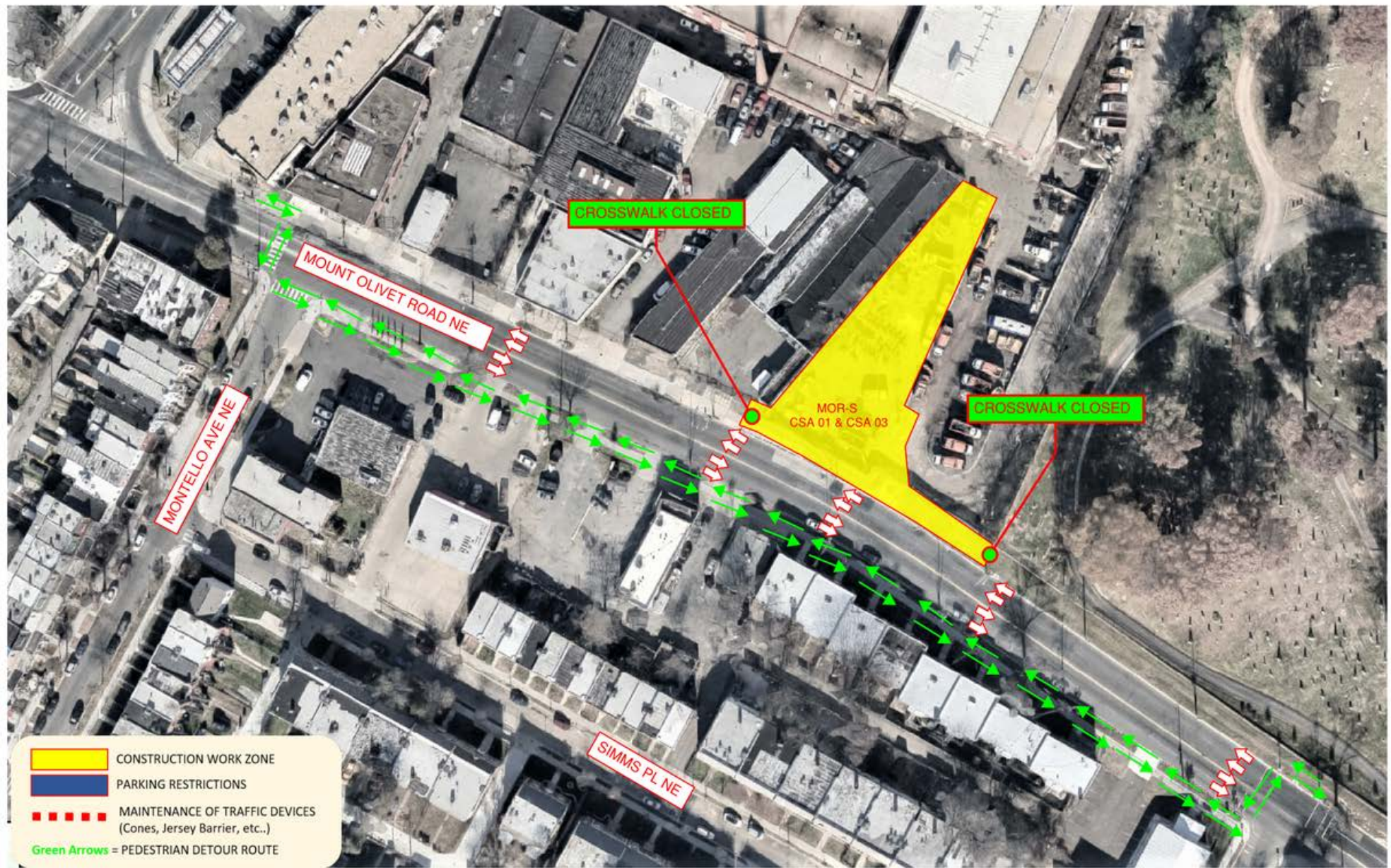
In order to relieve chronic sewer flooding, DC Water will construct a diversion facility which will include a diversion chamber, a 25-foot diameter drop shaft and other structures to convey flow from the existing sewer to the tunnel.

Schedule*		Work Hours	
Start	Finish	Start	Finish
April 2019	Fall 2022	7:00 AM	7:00 PM

Mount Olivet Road NE Construction Site Traffic Patterns and Pedestrian Detour

Dates are approximate and subject to change as construction progresses

MOUNT OLIVET ROAD NE	
IMPACTS:	Pedestrian detour between Trinidad Avenue NE & Montello Avenue NE
DURATION:	Anticipated through end of construction



Contact Us

- Email: dccleanrivers@dcwater.com
- 24/7 Hotline: 800-988-6151
- Northeast Boundary Tunnel Project webpage:
dcwater.com/nebt