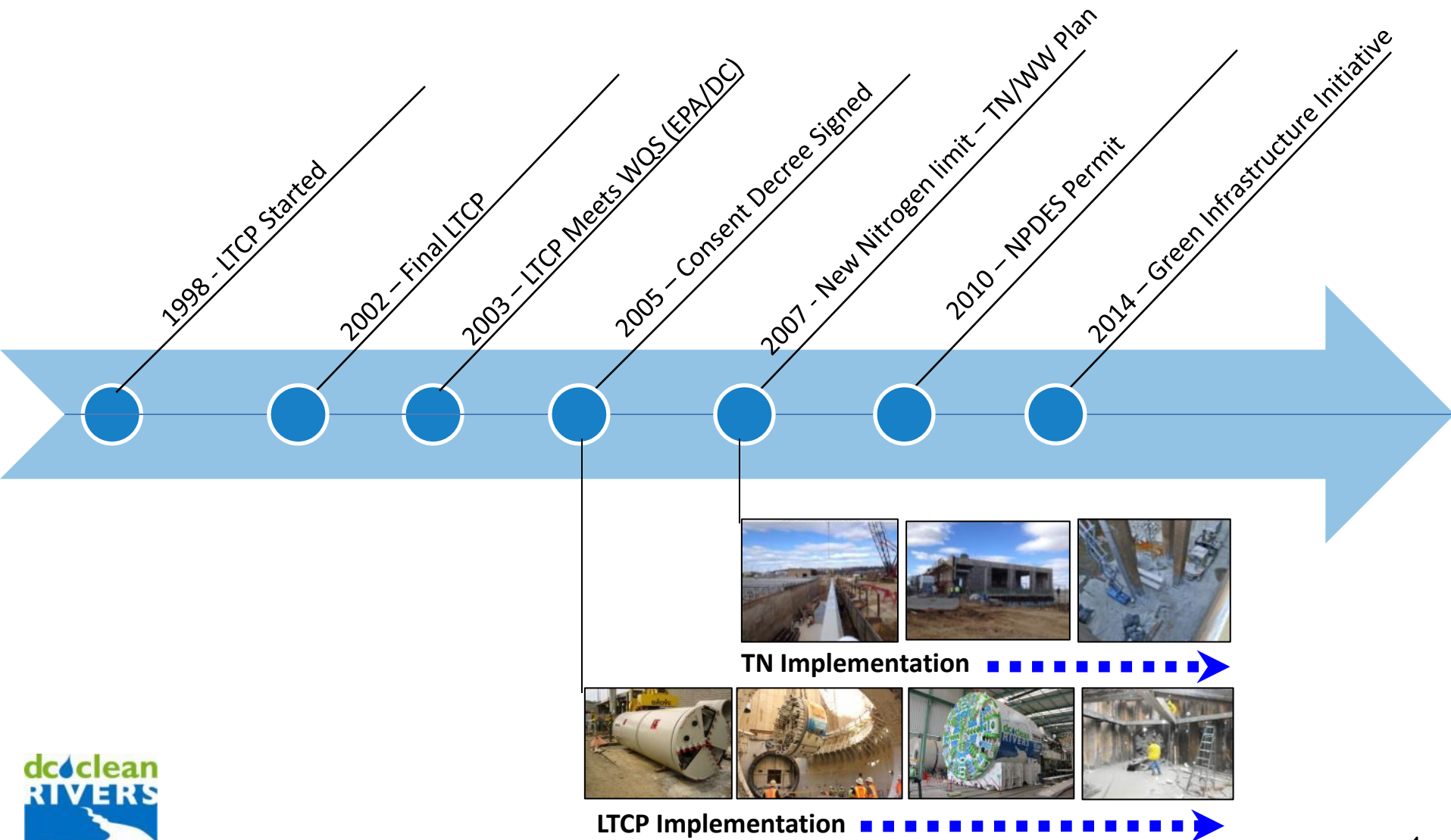


# Timeline





**Tunnel Mining Site at Blue Plains**

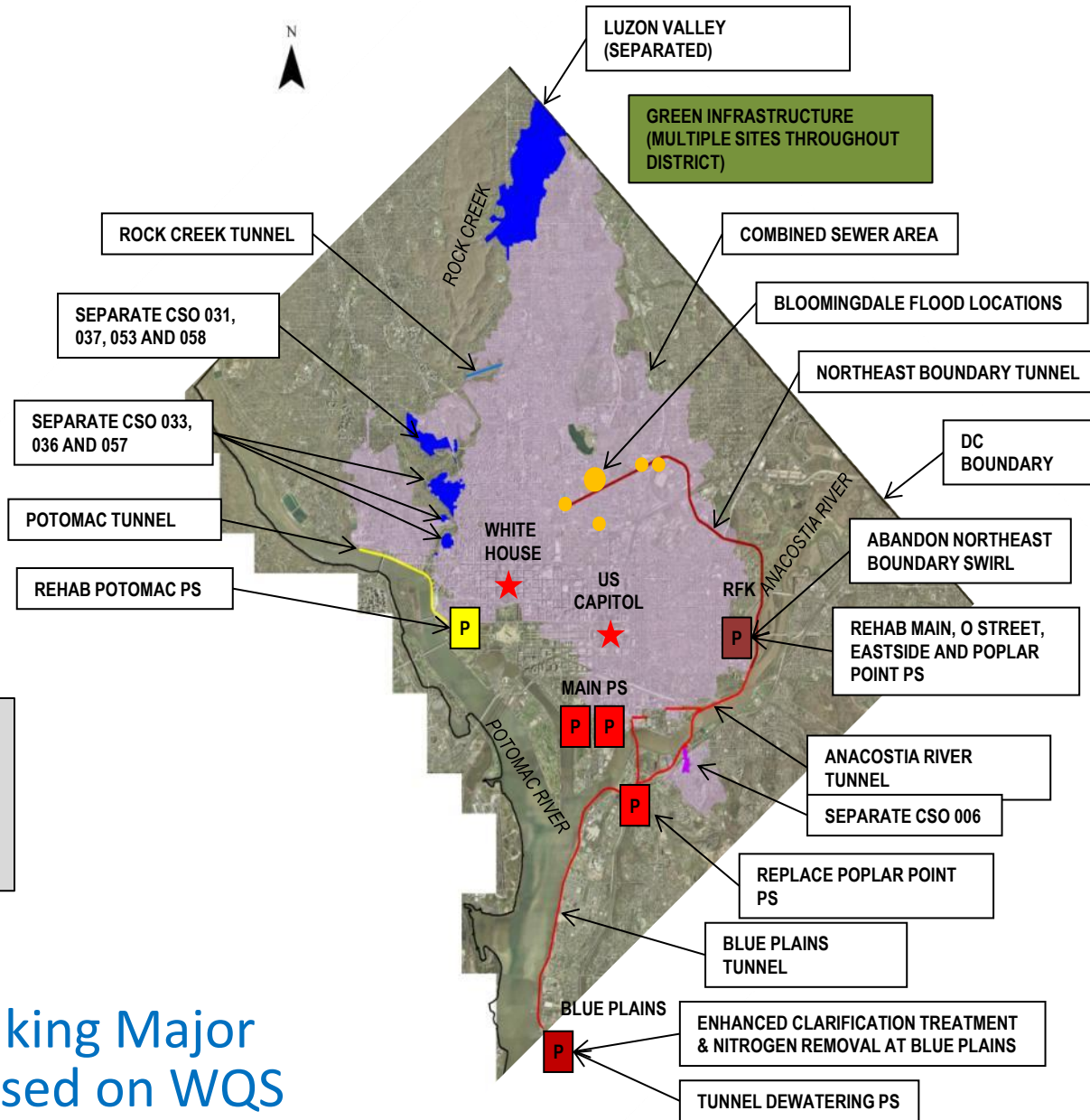


**TBM Fabrication**



**Slurry Wall Construction**

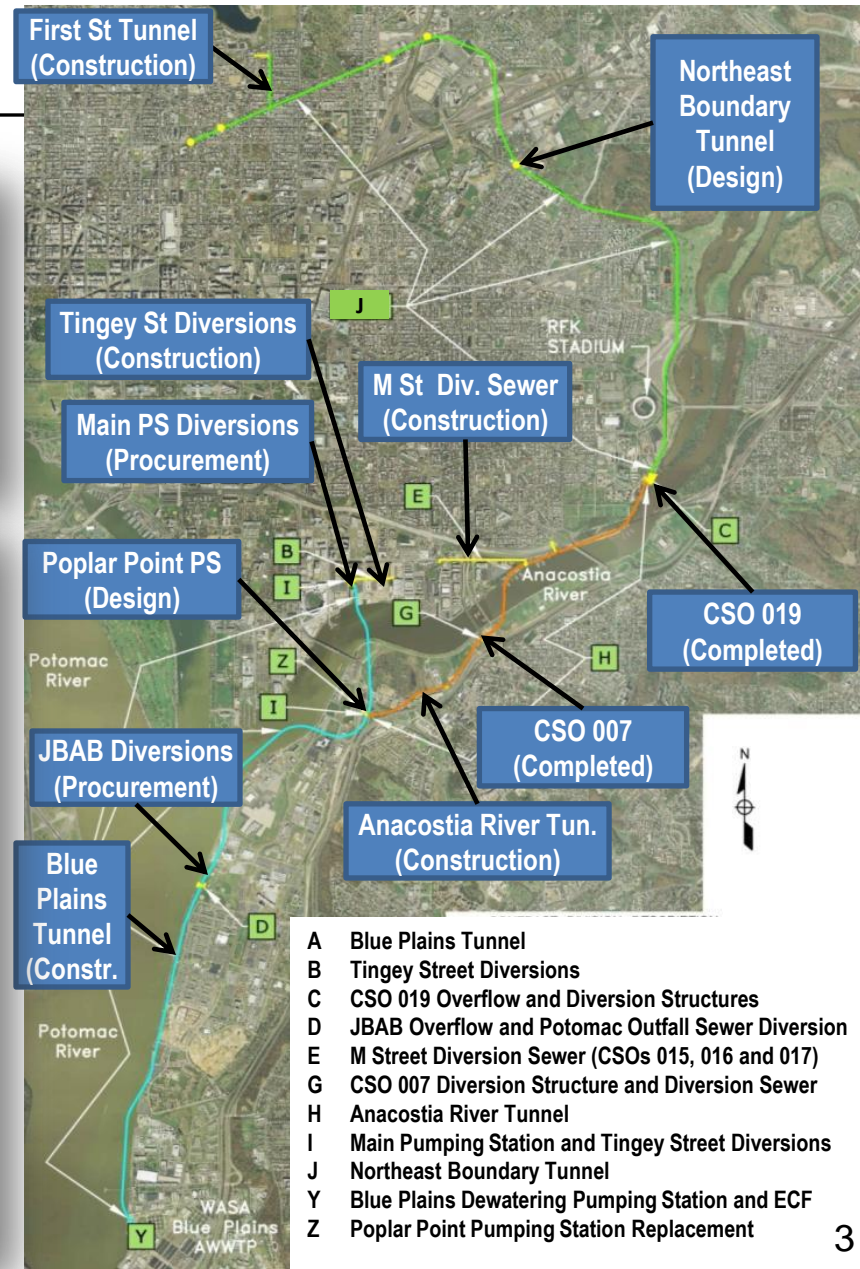
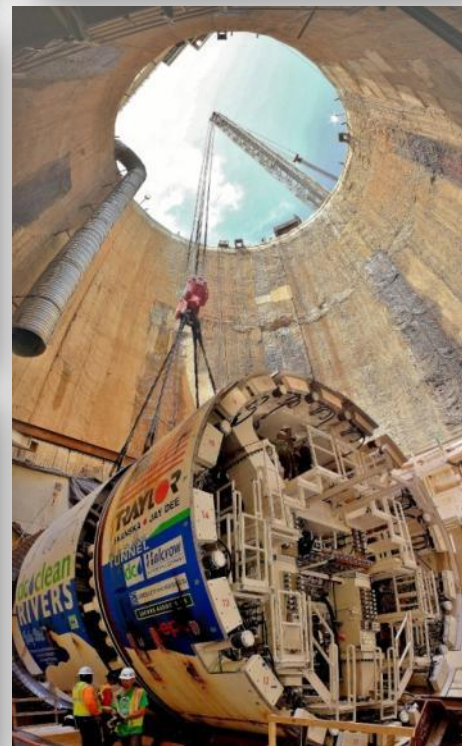
- DC CLEAN RIVERS PROJECT: \$2.6 BILLION
- NITROGEN REMOVAL: \$950 MILLION
- TOTAL > \$ 3.5 BILLION
- 20 YR IMPLEMENTATION (2005 – 2025)
- 96% REDUCTION IN CSO
- FLOOD RELIEF IN NORTHEAST BOUNDARY



**DC Water is Making Major Investments Based on WQS Compliance Determinations**

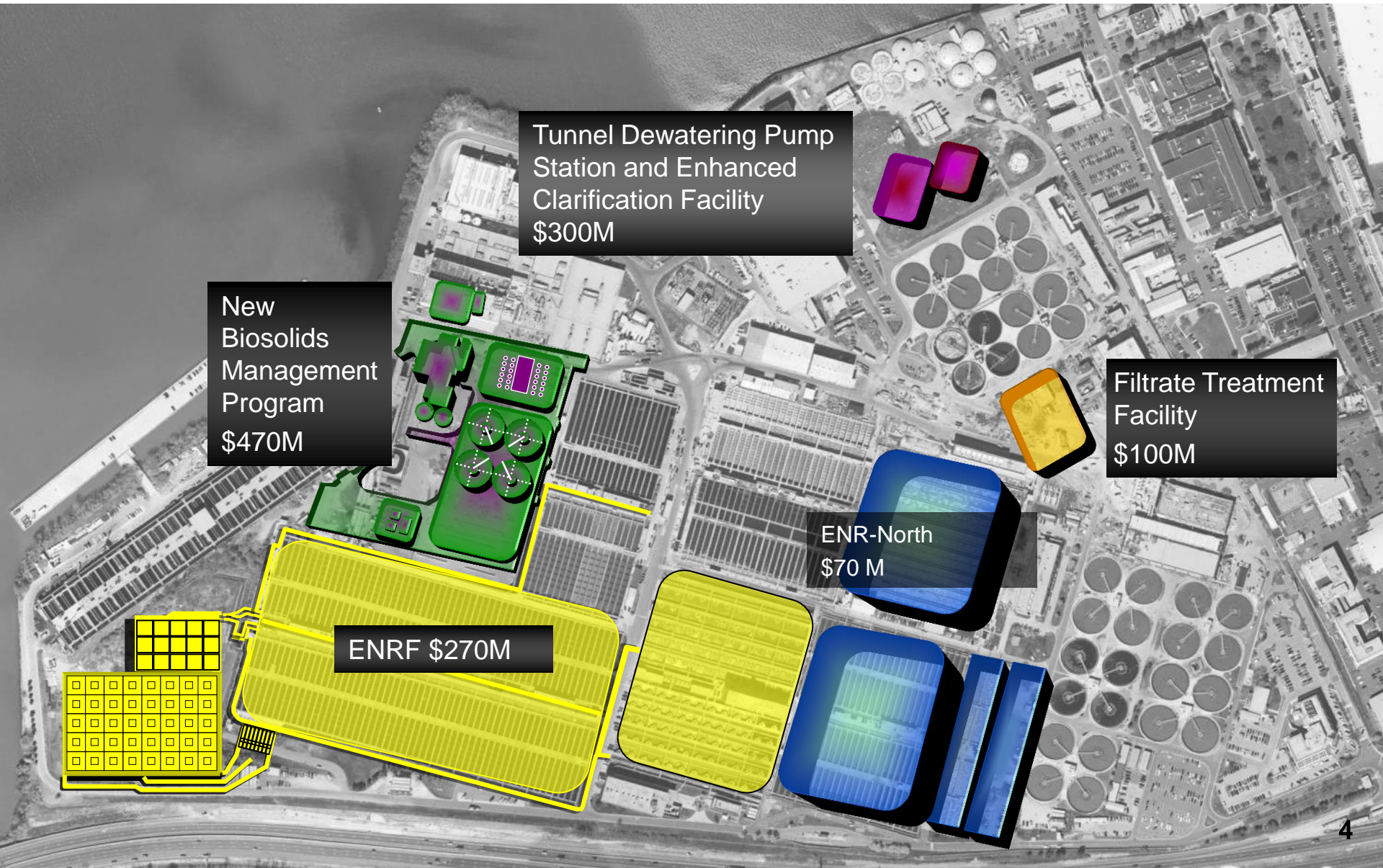


# Clean River Project has let more than \$1.12 Billion in Construction & Engineering Contracts





# DC Water has let more \$740 M in Contracts at Blue Plains for the TN/WW Plan (\$1.12 B with Biosolids)



# Predicted CSO Reduction in Average Rainfall Year

Item	Anacostia River	Potomac River	Rock Creek	Total
<b>CSO Overflow Volume (mg/avg.yr)</b>				
• 1996 – DC Water formed	2,142	1,063	49	3,254
• 2013 – After Inflatable Dams & Pump Sta. rehab	1,282	639	49	1,969
• 2025 – LTCP in Place	54	79	5	138
% Reduction	98%	93%	90%	96%
<b># of Overflows/Average Year</b>				
• 1996 – DC Water formed	82	74	30	
• 2013 – After Inflatable Dams & Potomac Sewage Pump Sta. rehab	75	74	30	
• 2025 – LTCP in Place	2	4	1 / 4 <sup>1</sup>	

## Notes:

1. One overflow/avg. yr at Piney Branch (major CSO), 4 overflows/avg. yr at other small Rock Creek CSOs

# DC Water's Consent Decree Compared to Other Recent Decrees

City	LTCP Time Frame (years)	Consent Decree w/ Green?	Annual Overflow Volume (MG)		
			Before LTCP (MG)	After LTCP (MG)	% Reduction
Kansas City (WSD)	25	Yes; 2010	6,400	768	88%
Cleveland (NEORSO)	25	Yes; 2010	4,500	500	89%
New York (DEP)	25	State approved; 2012	30,000	TBD – City wide LTCP due 2017	TBD – City wide LTCP due 2017
Philadelphia (PWD)	25	State approved (State – 2011) (EPA Admin order – 2012)	10,307 to 15,873	5,100 to 7,900	50% ±
<b>DC Water</b>	<b>20</b>	<b>Yes</b>	<b>3,254</b>	<b>138</b>	<b>96%</b>

# DC Water's Approach to Green Infrastructure

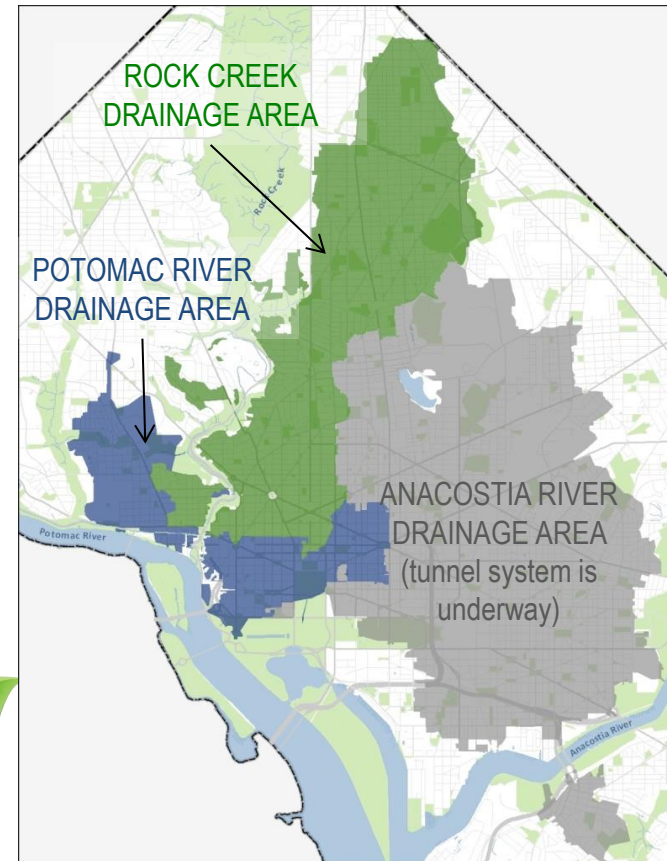


## Anacostia River Projects

- DC Water is implementing tunnels
- Most severely impacted by CSOs
- GI will provide additional control

## Potomac & Rock Creek Projects

- There is time to consider new approaches





# Clean Rivers Project

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# Clean Rivers Project

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# Clean Rivers Project

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# McMillan Sand Removal



# Thermal Hydrolysis

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# Clean Rivers Project

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