

Briefing on:
DC CLEAN RIVERS PROJECT

Anacostia Partnership Steering Committee

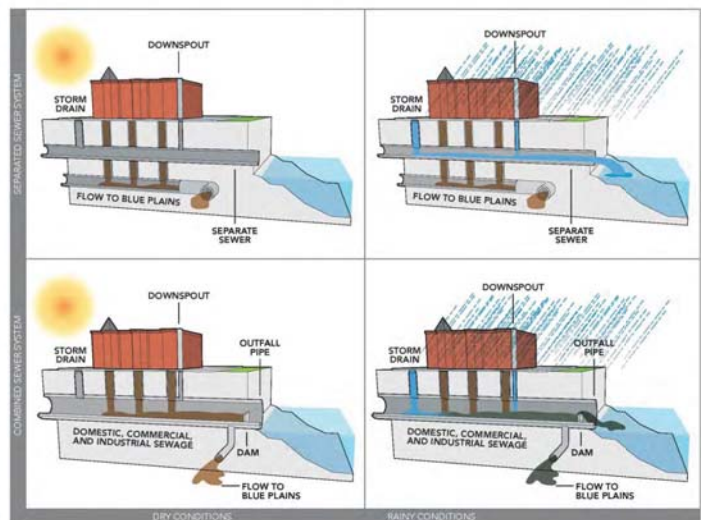
October 23, 2019

Carlton Ray
Director, DC Clean Rivers Project, DC Water



DCWATER.COM

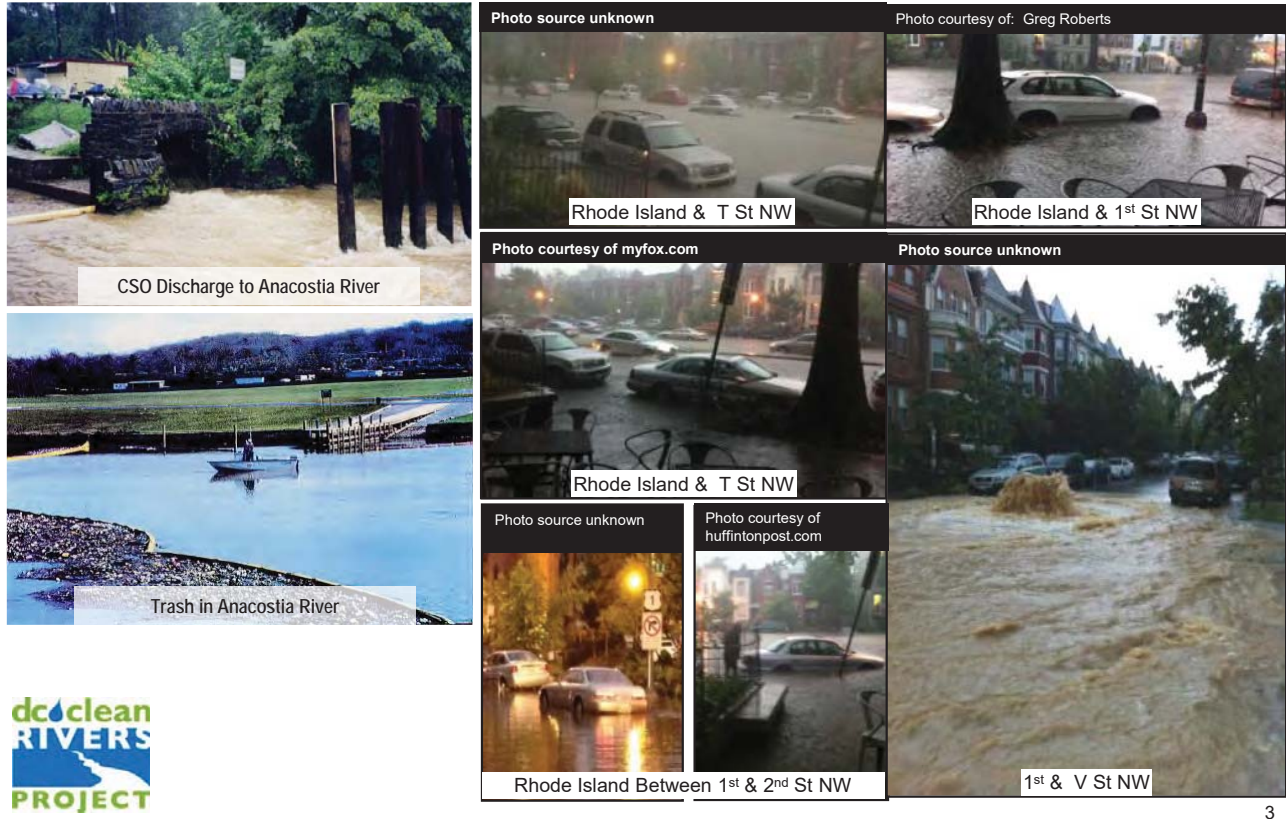
Separate and Combined Sewer Systems



- 1/3 of area within District is served by combined sewers
- 48 active Combined Sewer Overflow (CSO) outfalls
 - 15 to Anacostia River
 - 10 to Potomac River
 - 23 to Rock Creek



Magnitude of the Challenge: CSOs and Surface Flooding



3

What is the Purpose of the DC Clean Rivers Project?

- Control combined sewer overflows to the:
 - Potomac River
 - Anacostia River
 - Rock Creek
- Relieve flooding in the Northeast Boundary Area
- Implemented under a Federal Consent Decree among:
 - US Environmental Protection Agency (US EPA)
 - US Department of Justice (US DOJ)
 - District of Columbia and
 - DC Water
- Significant stipulated penalties for missing schedule deadlines
- Fully operational in 2030

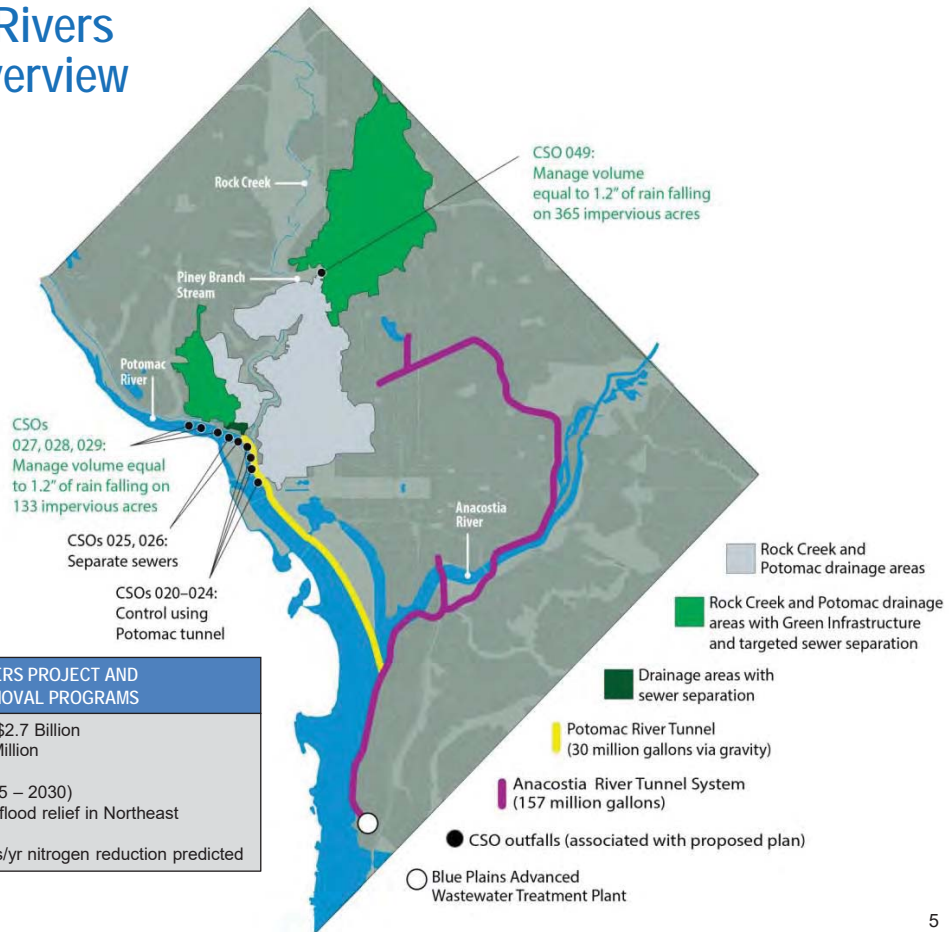


4

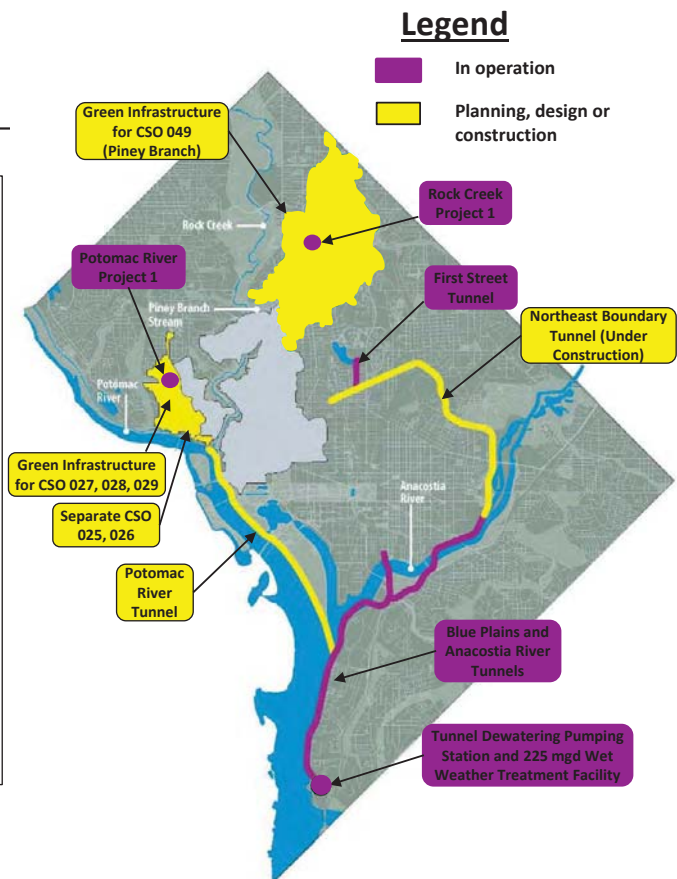
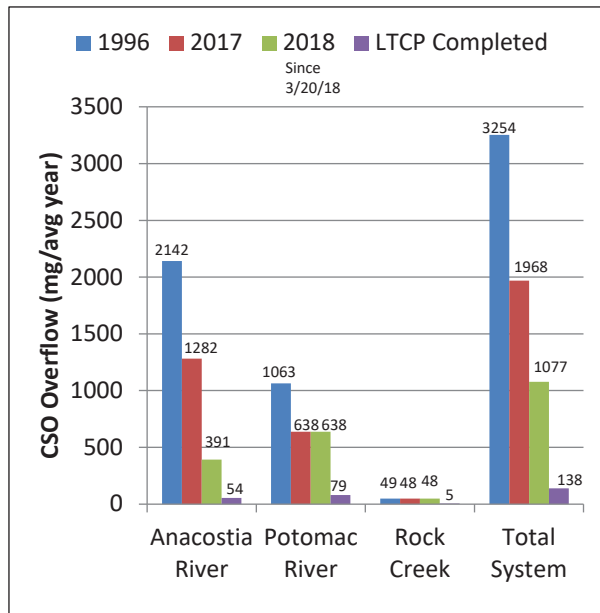
DC Clean Rivers Project Overview

DC CLEAN RIVERS PROJECT AND NITROGEN REMOVAL PROGRAMS

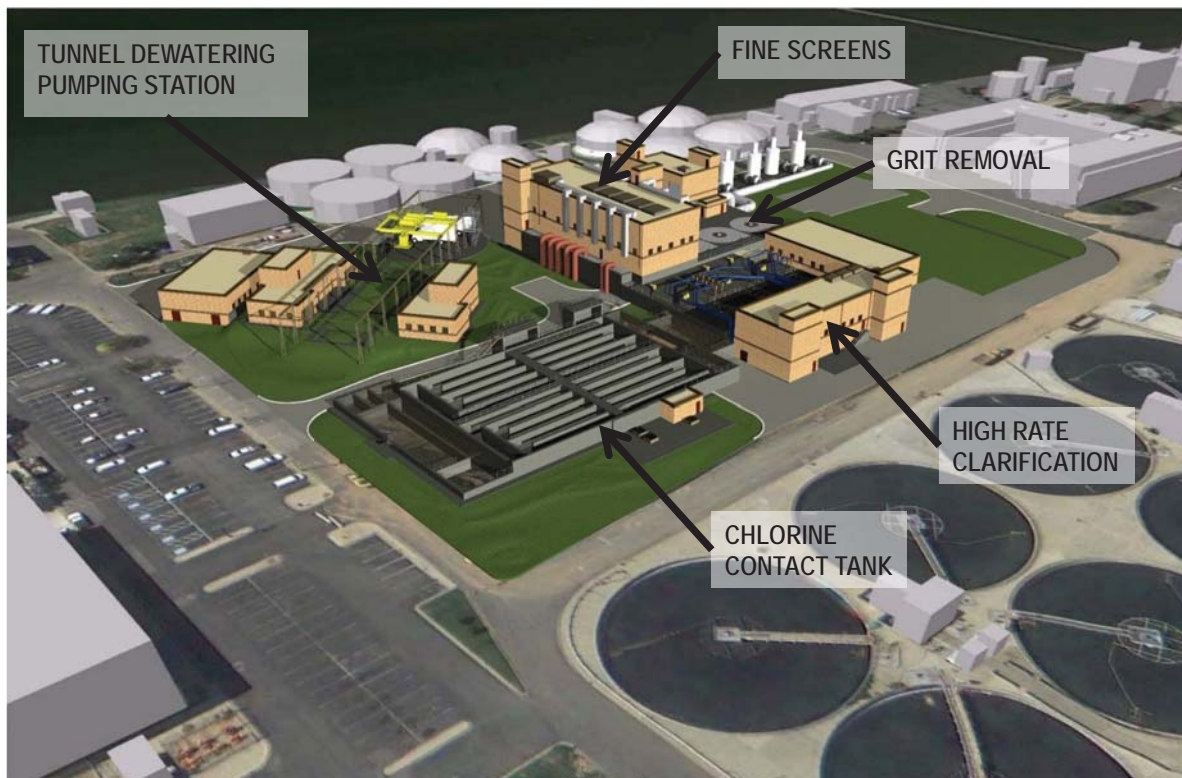
- DC Clean Rivers Project: \$2.7 Billion
- Nitrogen Removal: \$950 Million
- Total > \$ 3.5 Billion
- 25 yr implementation (2005 – 2030)
- 96% reduction in CSOs & flood relief in Northeast Boundary
- Approximately 1 million lbs/yr nitrogen reduction predicted



Current Status



Enhanced Clarification Facility



7

Anacostia River Tunnel System Performance to Date

Month	Rainfall (in)	Volume Captured by Tunnel (MG)	Measured Overflow (MG)	Total (captured + OF)	% captured
March 20 -31, 2018	1.48	20	0	20	100%
April 2018	3.59	249	10	259	96.0%
May 2018	8.73	860	13	873	98.5%
June 2018	5.21	265	47	311	85.0%
July 2018	9.73	679	260	939	72.3%
August 2018	5.19	334	14	349	95.9%
September 2018	9.73	784	116	900	87.1%
October 2018	3.06	164	0	164	100%
November 2018	7.57	777	5	782	99.3%
December 2018	5.82	468	100	568	82.3%
January 2019	3.30	259	0	259	100%
February 2019	3.52	74	0	74	100%
March 2019	4.00	337	46	384	87.9%
April 2019	2.24	77	0.1	77	99.9%
May 2019	5.36	311	1	312	99.7%
June 2019	4.27	134	0.1	134	100%
July 2019	6.49	339	77	416	81.4%
August 2019	1.99	186	22	208	89.3%
September 2019	0.25	18	0	18	100%
October 2019 (thru 10/18)	1.24	84	0	84	100%
Total	92.77	6418	714	7131	90%

- Over 6.4 billion gallons captured to date
- Over 2,700 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



8

Northeast Boundary Tunnel Project

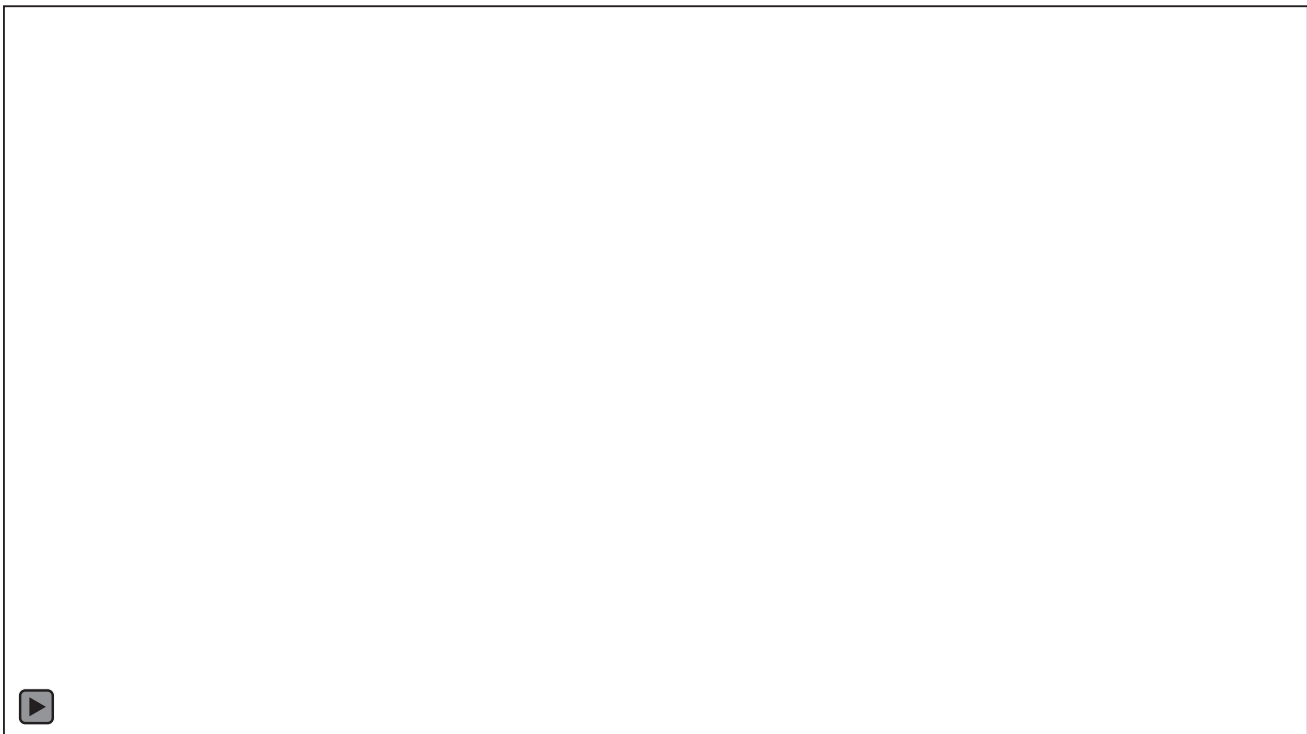
- 💧 23 foot diameter tunnel
- 💧 60 to 140 feet deep
- 💧 27,000 feet long
- 💧 7 shafts
- 💧 5 diversion chambers
- 💧 Construction value: \$580M

Schedule	
NTP	September 15, 2017
Construction Start	March 2018
Place in Operation	2023

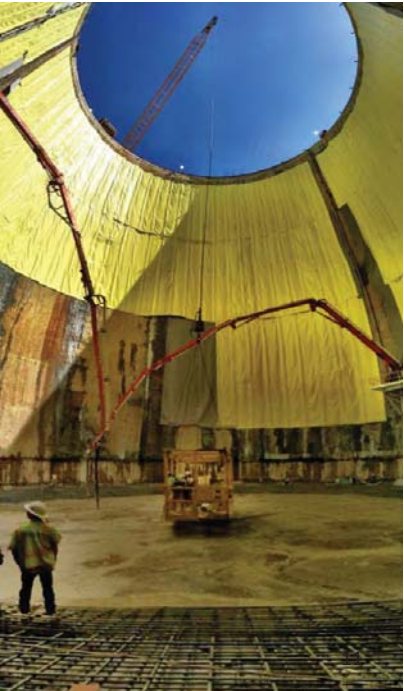
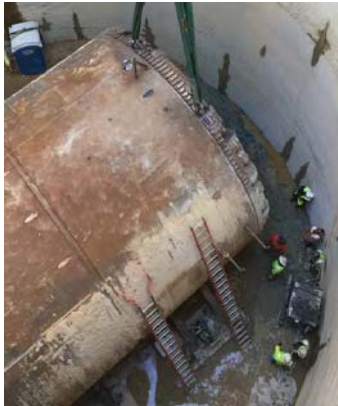


9

Northeast Boundary Tunnel Tour



Questions and Answers



CARLTON RAY
email: carlton.ray@DCWATER.COM
phone: 202-787-4469