

Appendix C

DC Water Clean River Initiative

Nonmotorized Boathouse Zone Feasibility Study

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water is life

District of Columbia Water and Sewer Authority
George S. Hawkins, General Manager

Briefing on:

***DC Clean Rivers Project Interface with
Non-motorized Boathouse Zone
Along Georgetown Waterfront***

Briefing for:

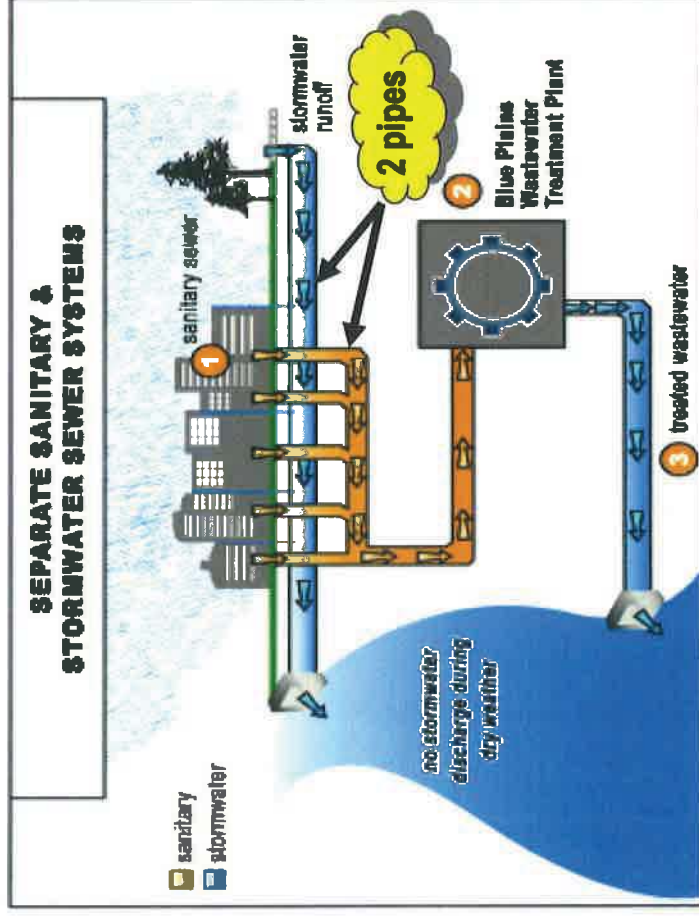
National Park Service

January 26, 2012

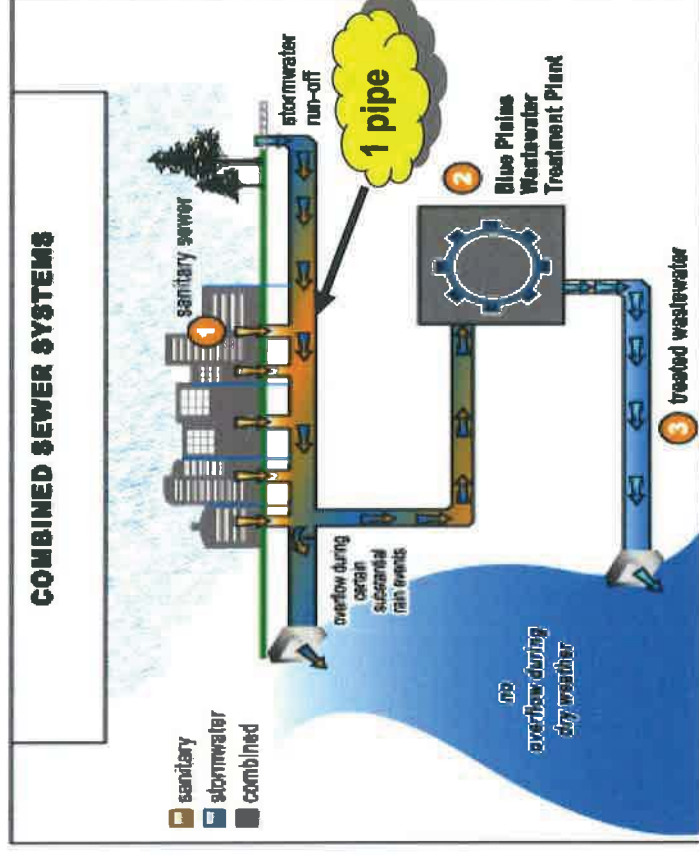


DCWATER.COM

Separate and Combined Sewer Systems



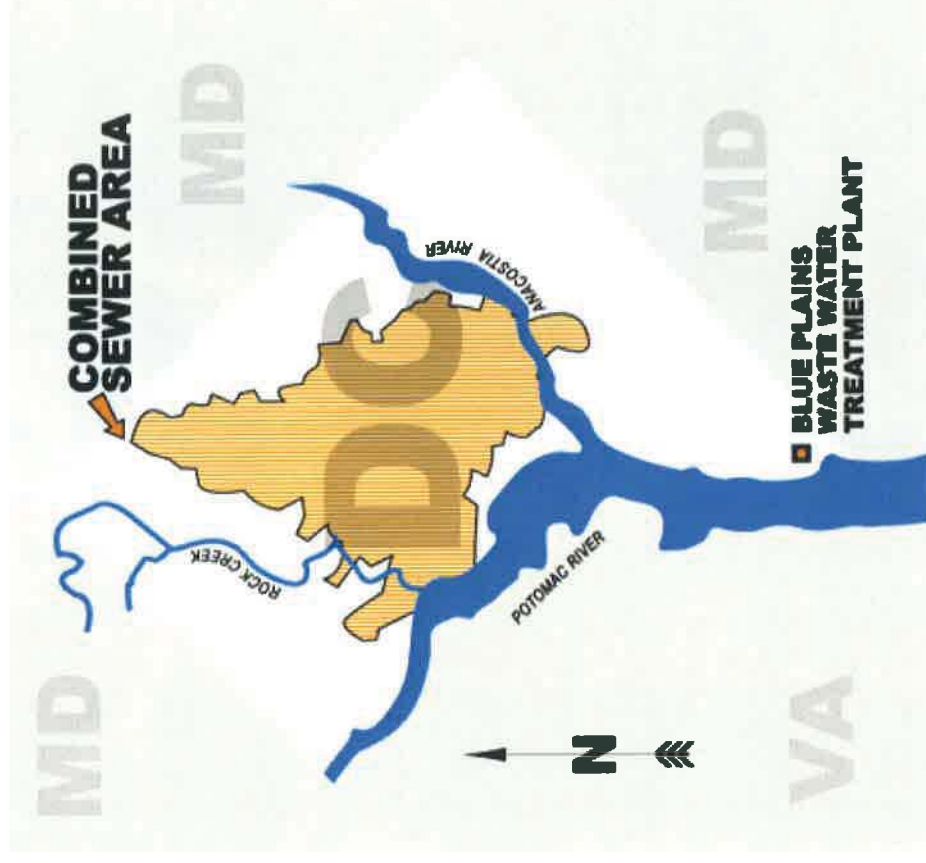
100% of suburbs
67% of D.C.



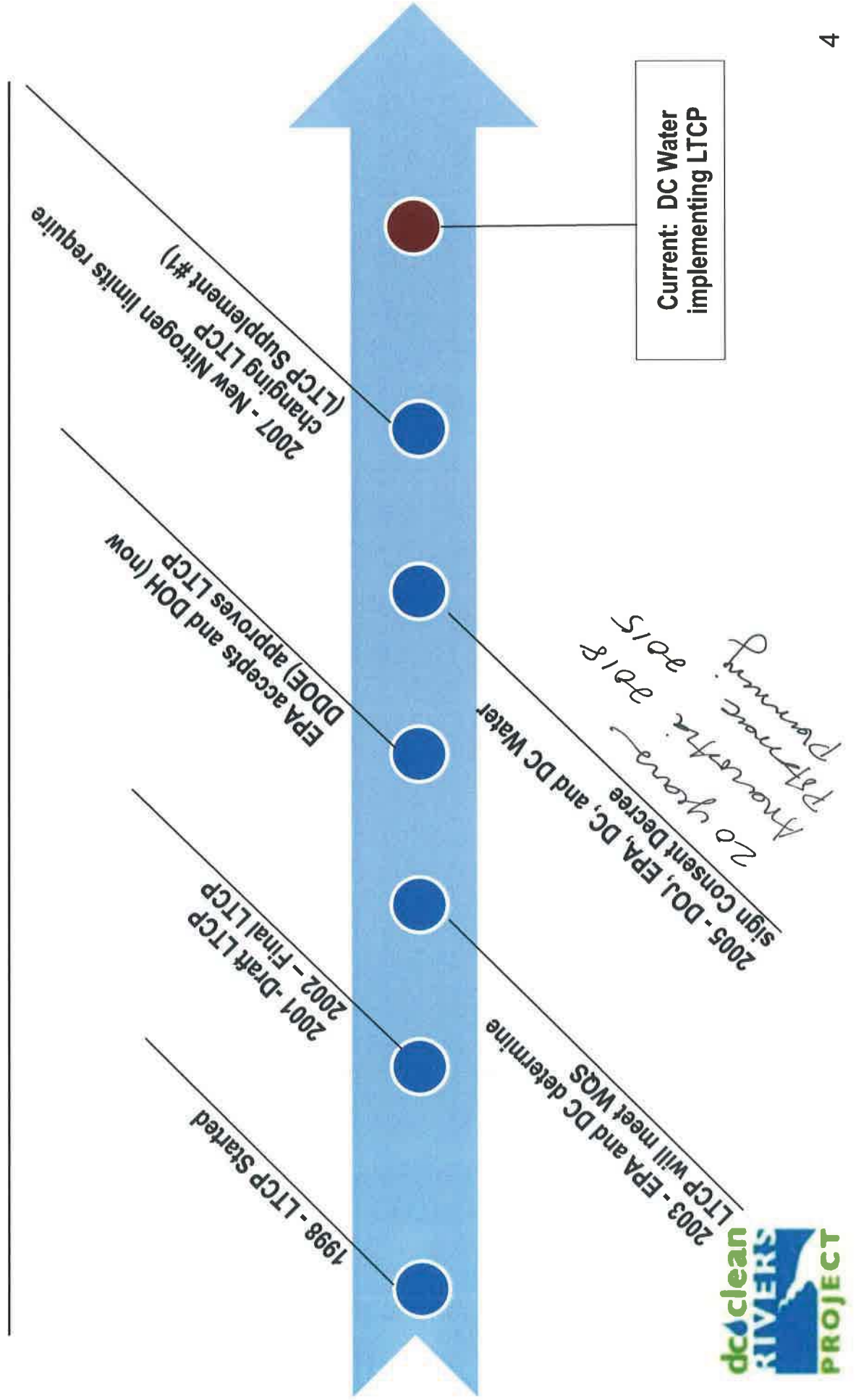
0% of suburbs
33% of D.C.

Combined Sewer Area

- 1/3 area is combined (12,478 acres)
- 53 CSO outfalls
 - 15 to Anacostia
 - 10 to Potomac
 - 28 to Rock Creek
- Three receiving waters
 - Anacostia River
 - Potomac River
 - Rock Creek

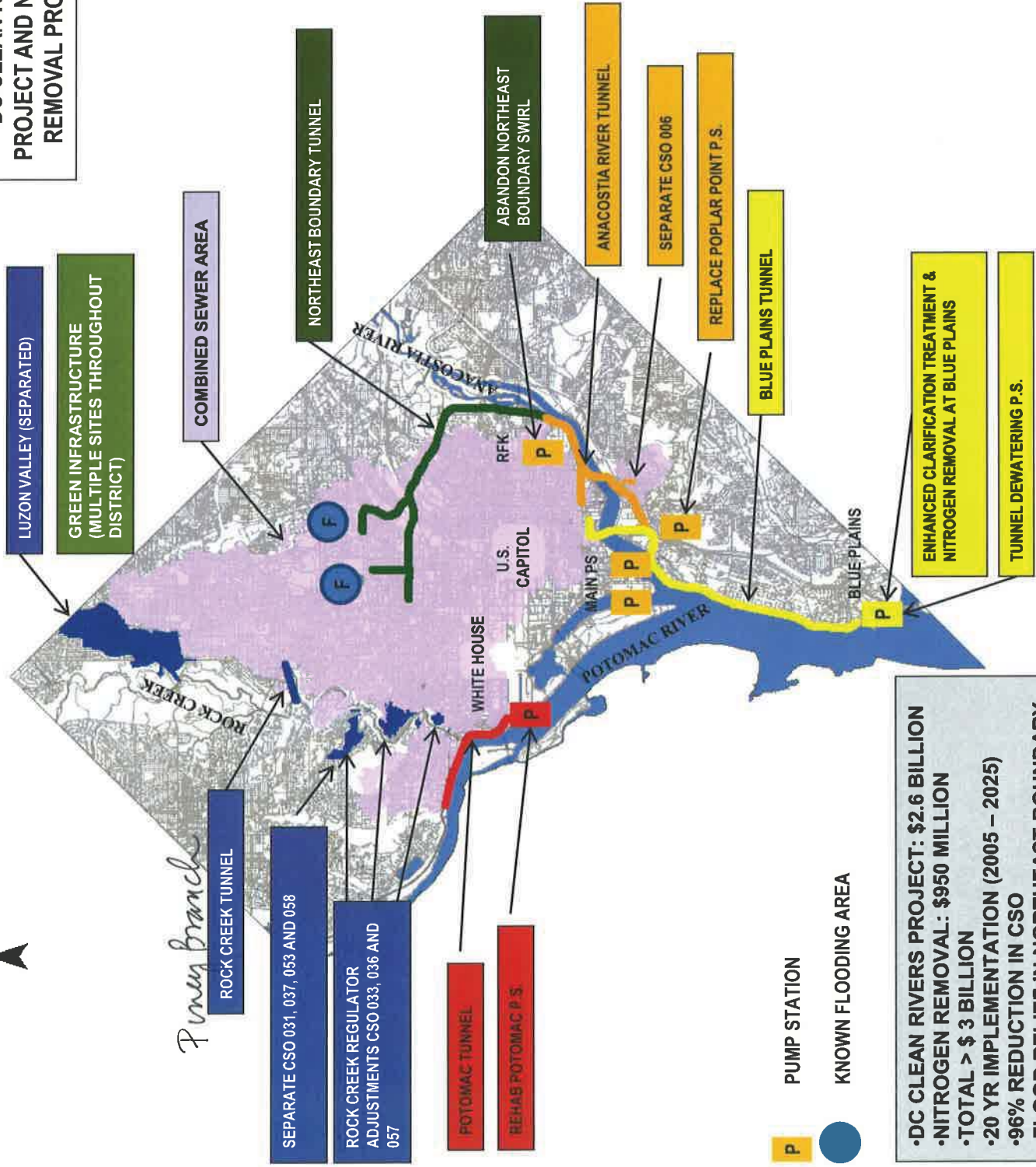


LTCP Development Timeline





DC CLEAN RIVERS PROJECT AND NITROGEN REMOVAL PROGRAMS



- DC CLEAN RIVERS PROJECT: \$2.6 BILLION
- NITROGEN REMOVAL: \$950 MILLION
- TOTAL > \$ 3 BILLION
- 20 YR IMPLEMENTATION (2005 – 2025)
- 96% REDUCTION IN CSO
- FLOOD RELIEF IN NORTHEAST BOUNDARY



Benefits of DC Clean Rivers Project

1

CSO Reduction

Item	Anacostia River	Potomac River	Rock Creek	Total
CSO Overflow Volume (mg/avg yr)				
1996 – DC Water Formed	2,142	1,063	49	3,254
2025 – DCCR in Place	54	79	5	138
% Reduction	98%	93%	90%	96%

2

Water Quality Improvement

- Bacteria levels will be lower, dissolved oxygen will be higher

3

Trash Reduction

- Trash from CSOs will be practically eliminated

4

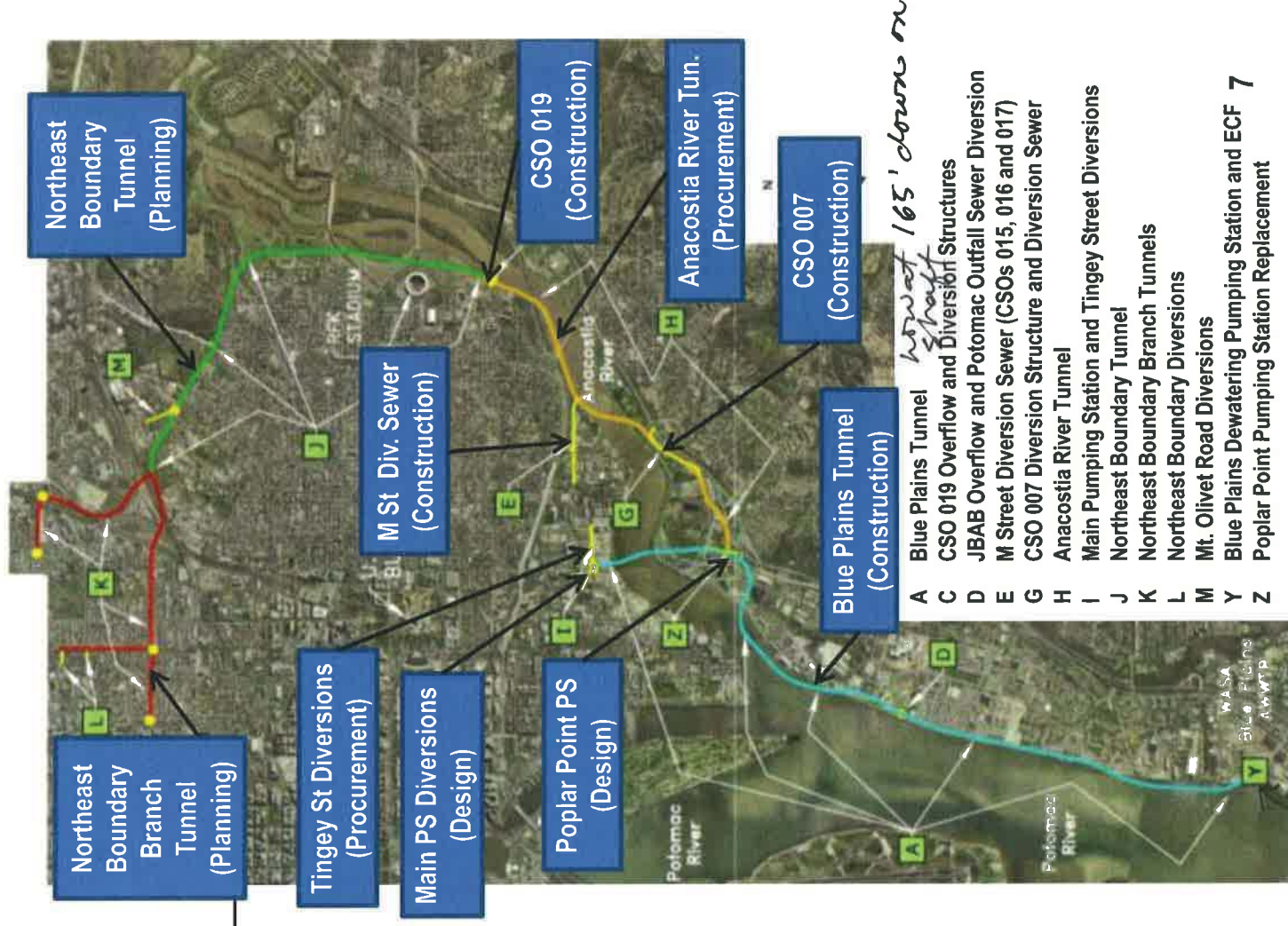
Flooding Relief in Northeast Boundary Area

- Improves property values
- Supports economic development
- Protects private and public property
- Less impact of DDOT roads during rain events
- Less need for emergency response/rescues during rain events

*Won't necessarily render waters fishable & swimmable
Other parts of The watershed, much larger watershed*

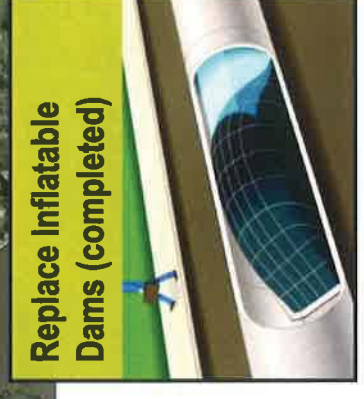
Implementation Status Anacostia River Projects

- Construct storage/conveyance Tunnel
 - 23' inside diameter
 - 157 million gallons of storage
- Program on schedule, within budget
- Place facilities south of RFK stadium in operation by 2018, remainder by 2025
- Project required by Federal Consent Decree
 - Stipulated penalties for failure to meet specified schedules



Implementation Status Potomac River CSO Controls

- 38.5% CSO reduction achieved since 1996
- 58 million Gallon Storage Tunnel
- Approx. 9,500' long 32.5' ± diameter *Reopened to Key Bridge*
- Tunnel Dewatering Pump Station
- Facility planning to start 3/23/15 per Consent Decree



done @ Kennedy Center

Implementation Status Rock Creek CSO Controls

- 9.5 million gallon Storage Tunnel
- Approx. 3,000' long 23' ± diameter
- Gravity dewatering
- Facility Planning to start 3/23/2016



DC Clean Rivers Project Schedule (Showing Major Milestones Only)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Consent Decree Deadlines														
Anacostia River Tunnel							Place in Operation Facilities below RFK 3/23/18	★					Place in Operation all Facilities 3/23/25	★
Potomac Tunnel													Place in Operation 3/23/25	★
Rock Creek (Piney Branch Tunnel)													Place in Operation 3/23/25	★

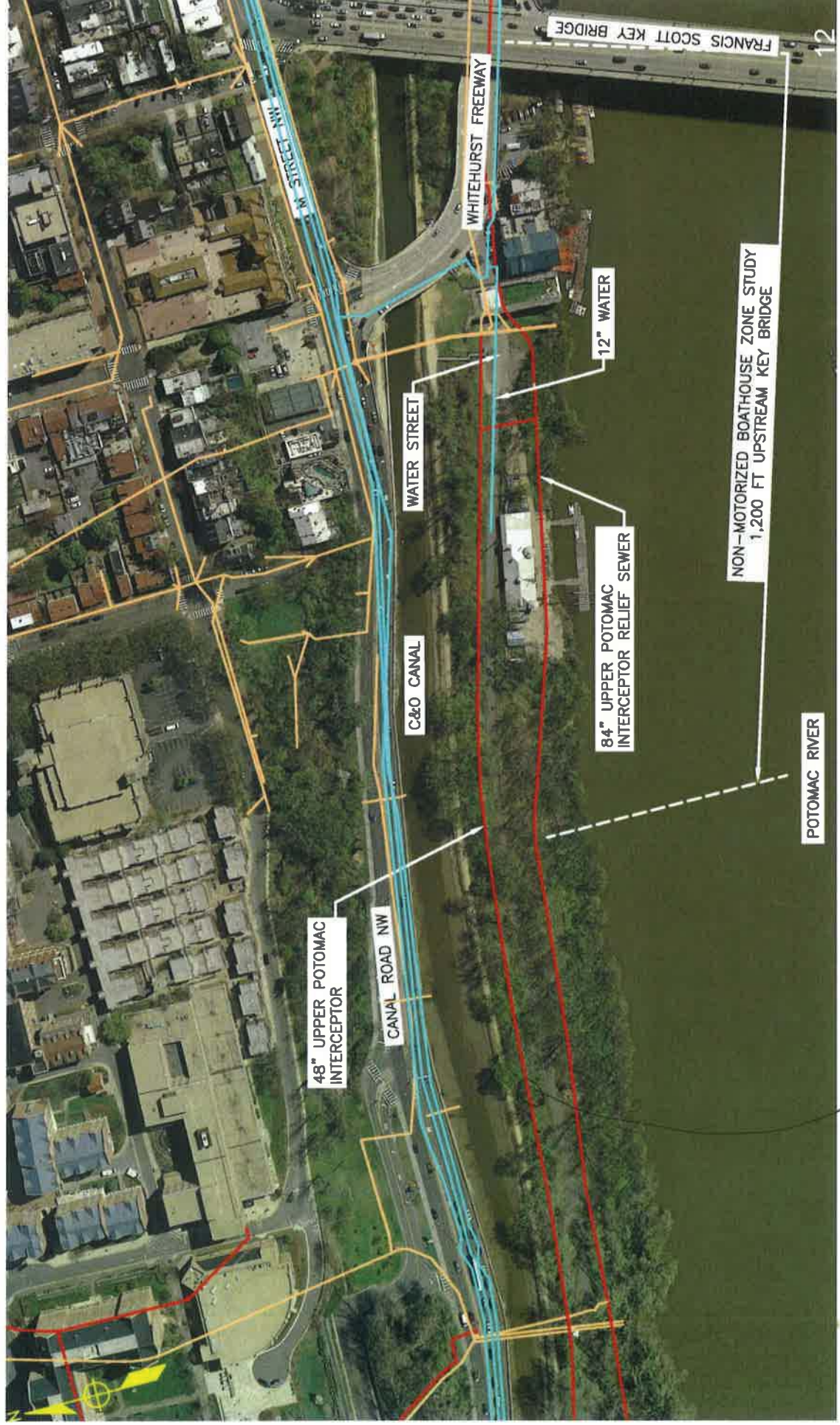
aha NE Boundary?

millions of dollars in penalties if deadlines missed.

DC Water Facilities to Consider in Boathouse Study

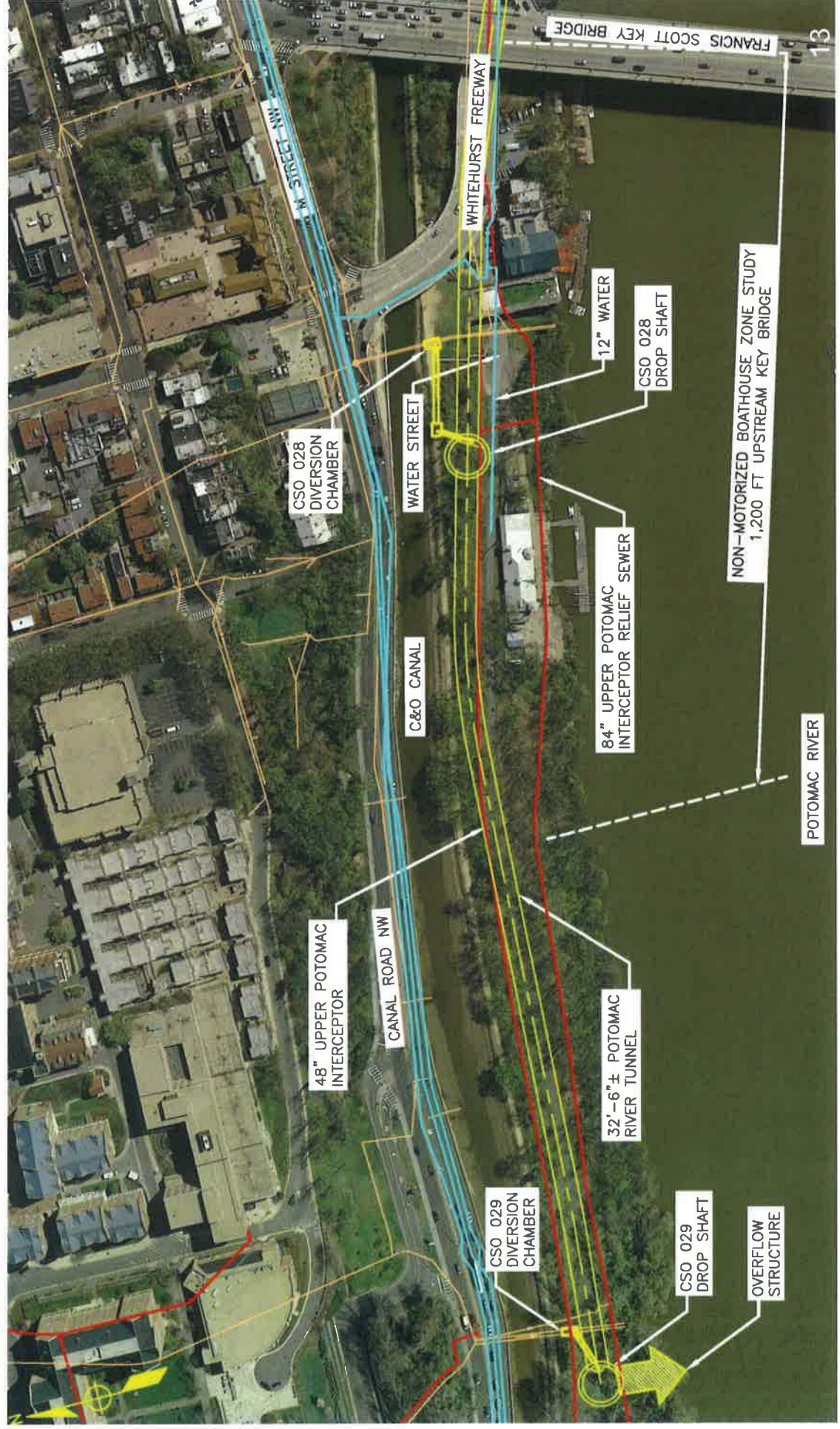
- Existing Sewer Lines
 - 48" Upper Potomac Interceptor
 - 84" Upper Potomac Interceptor Relief Sewer
 - Existing CSOs 028 and 029
- Existing Water Lines
- Future DC Clean Rivers Project Facilities
 - Facility planning for Potomac Tunnel not scheduled to start until 2015
 - Tunnel alignment is conceptual – other alternatives are possible

Existing DC Water Facilities



not currently in service,

Future DC Clean Rivers Project Facilities



Next Steps

- Schedule next coordination Meeting with NPS
- Ascertain schedule for study and major milestones