Briefing on the Potomac Interceptor

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

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BRIEFING ON THE POTOMAC INTERCEPTOR

Potomac Interceptor

- 86th U.S. Congress authorized Public Law 86-515 for the funding of the construction of the Potomac Interceptor (PI) on June 12, 1960, to serve Dulles Airport and safeguard the Potomac River
- Serves 376 square miles (511,000 people)
- Serves Fairfax & Loudoun Counties, Town of Vienna, Herndon, Dulles Airport in VA, and Montgomery County, MD
- About 54 miles long/ 30" to 96" diameter
- Conveys 60 million gallons per day sanitary sewage (average)
- Flows treated at Blue Plains Advanced Wastewater Treatment Plant

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Pipe Break

Pipe break: 72” diameter reinforced concrete pipe

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Timeline

Majority of overflow stopped evening Saturday, January 24

Jan 25 – 26
Snow/Ice

Environmental rehabilitation consultant developing plan

February 28 – Environmental Rehabilitation Begins

Daily Potomac River bacteria testing Jan 29 – present

Jan 19

Respond
- Reported in evening
- Secured site
- Prelim assessment

Jan 20

Investigate
- Assess options
- Bypass plan developed
- NPS cooperation

Jan 21 – Jan 24

Jan 27

Construct Bypass
- Jan 24: 40 mgd, 6 pumps
- Jan 27: 60 mgd, 8 pumps
- Clear canal
- Remove lock gates
- Downstream channels
- Strengthen PI to receive flow

Jan 28 – Feb 5

Excavate Pipe, Found Rock Blockage
- Site prep & grading
- Excavate pit downstream of blockage
- Clean to access pipe
- Found rock blockage

Feb 6 – Mar 13

Construct Bulkhead and Bypass Chamber
- 3rd bypass channel installed
- Rock Dam removed
- Pipe strengthened with geopolymer

Mar 14 – Present

Flow Returns to the Interceptor
- Bulkhead removed
- Pumps turned off
- Flow returns into the PI and C&O Canal no longer receiving active flow

Estimated overflow volume to surface waters:

Jan 19 – Jan 24	Jan 24 – Jan 28	Jan 28 – Feb 9	Feb 9 – Present
194 mg	48 mg	1.5 mg	No Overflows

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Emergency Response

Bypass Pumps

Coffer Dam in Canal

Channel Back to PI

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Rock Dam Removed and Pipe Strengthened

Rocks and boulders removed from the Interceptor and above the pipe

Pipe Strengthened with Geopolymer

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Flow Returns to the Interceptor

POTOMAC RIVER

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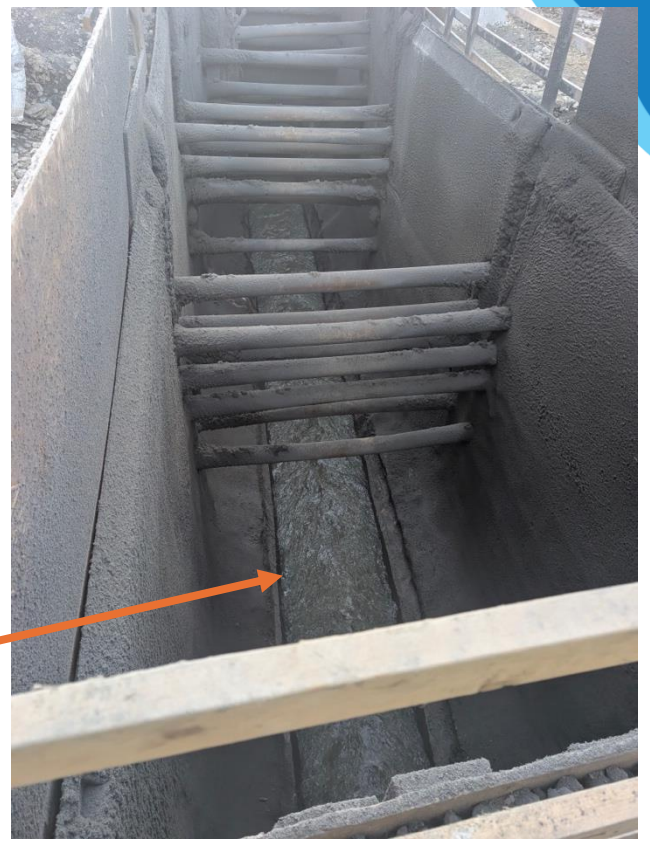
Bulkhead removed



Flow returned to the Interceptor

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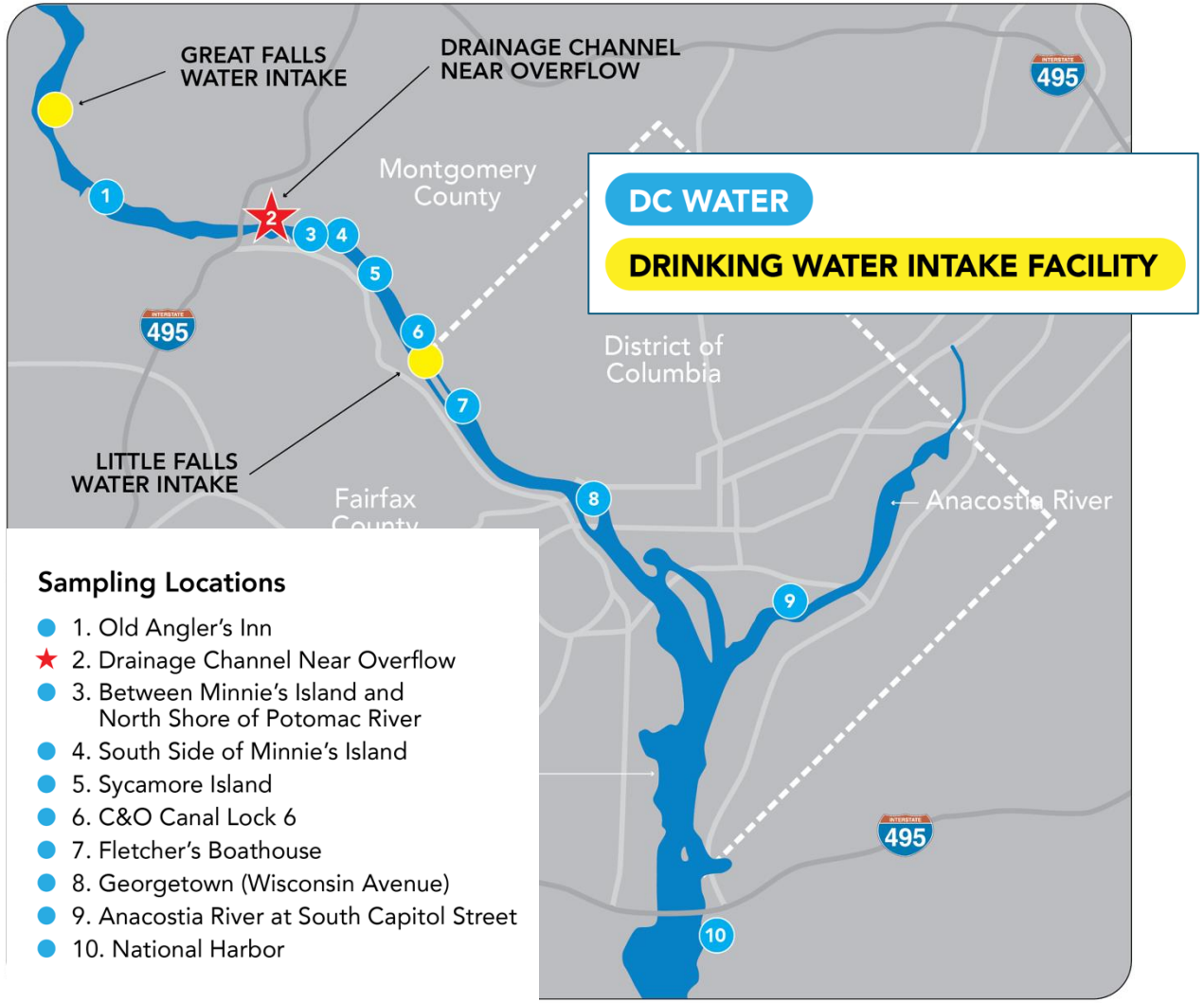
By the Numbers

- Use of the Canal **avoided nearly 2 billion gallons of overflow**
- **2,341 tons of debris** hauled off site so far (equal to 1,300 cars)
- **10,500 gallons of bags filled with rags** cleaned from pumps. Enough to fill a home swimming pool.
- **35 tons of gravel** were hauled in daily to be used at the site. Enough to cover four football fields in a week.
- **3,680 gallons of fuel used daily** for pumps and heavy equipment. Enough to power 11-12 homes for an entire year.

Potomac River Bacteria Sampling



-Daily Sampling at 10 Locations testing water for E. coli

-E. Coli is typically used as a microbial water quality indicator as it indicates fecal contamination

-Sampling start dates

- Locations 1, 2, 7, 8, 9, 10 on January 29
- Minnie Island Locations (3, 4) on February 18
- Sycamore Island (5) and Lock 6 (6) on March 4

-Results posted at DC Water's and DOEE's websites

Potomac River Bacteria Sampling

	E. Coli (MPN/100 ml)									
Sample Date	Old Anglers Inn	Near Drainage Channel @ Overflow (Swainson Island)	Between Minnie's Island and north shore of Potomac River	South Side of Minnie's Island	Sycamore Island	Lock 6	Fletcher's Boathouse	Georgetown @ Wisconsin Ave	Anacostia @ S. Cap St	National Harbor
3/1/2026	7	2,420	46	12	Not sampled	Not sampled	4	30	16	9
3/2/2026	9	2,300	43	6	Not sampled	Not sampled	10	89	17	12
3/3/2026	4	2,420	16	12	Not sampled	Not sampled	11	61	13	8
3/4/2026	22	2,100	62	18	76	49	13	124	15	39
3/5/2026	36	2,420	15	17	44	39	13	58	26	31
3/6/2026	13	1,120	26	13	71	59	39	816	16	29
3/7/2026	44	1,410	55	23	36	25	20	24	20	13
3/8/2026	291	1,050	345	365	291	308	260	291	14	11
3/9/2026	31	179	44	36	32	60	46	153	18	12
3/10/2026	16	228	24	15	32	23	21	435	41	18
3/11/2026	5	20	17	20	32	20	10	411	22	28
3/12/2026	64	1,410	16	20	15	23	77	7400	55	44
3/13/2026	48	77	49	39	73	34	435	299	291	26
3/14/2026	46	32	34	28	44	46	79	110	56	56
3/15/2026	20	36	23	23	34	40	39	249	46	17
3/16/2026	13	21	Not sampled	Not sampled	20	17	3700	2420	34	23

Note: MPN = most probable number

*Consistent with public health and U.S. Environmental Protection Agency standards, swimming is not recommended when *E. coli* levels exceed 410 MPN/100 mL.

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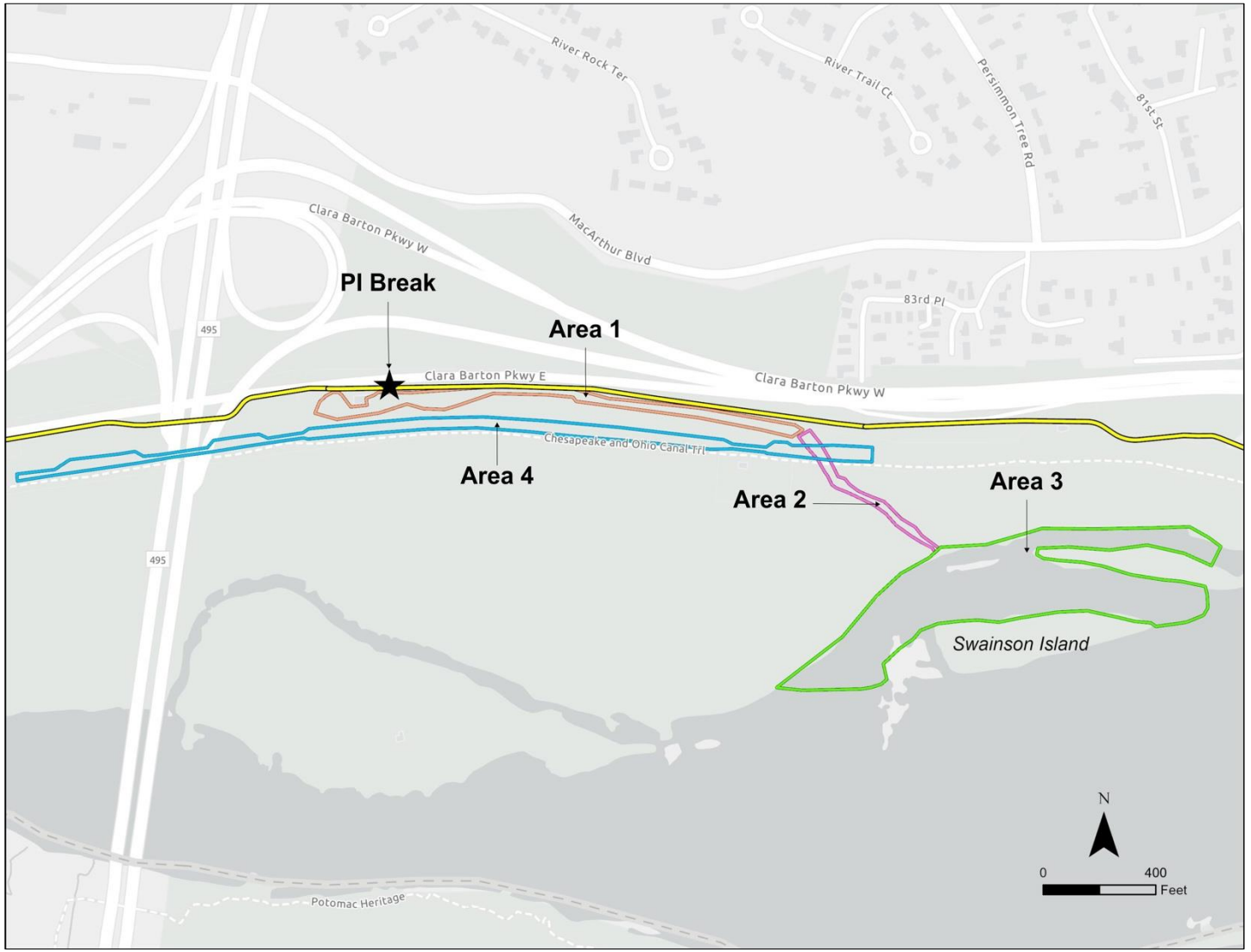
Clean-Up Areas

Uncontrolled Overflow Areas

- Area 1 = Drainage channel along Clara Barton Parkway
- Area 2 = Culvert under C&O Canal and tributary to the Potomac River
- Area 3 = Potomac River from shore to Swainson Island

Controlled Bypass Area

- Area 4 = C&O Canal



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Rehabilitation Update

Area	Description	Responsibility	Completed Activities	Pending Activities
Area 1	Drainage channel along Clara Barton Pkwy	West Side- DC Water East Side- EPA	*Pumping and diversion system installed *Initial removal & temporary stabilization	*EPA confirmation soil sampling results *Stream restoration *Final rehabilitation (topsoil, grading, seeding, etc.) *Planting of trees and shrubs *Restoration of construction access routes (after Area 4 is completed).
Area 2	Culvert under C&O Canal and tributary to the Potomac River	USACE	*Pumping and diversion system installed *Washing of Rock Run Culvert *Initial removal & temporary stabilization	*EPA confirmation soil sampling results *Final rehabilitation (topsoil, grading, seeding, etc.) *Any necessary repairs to Rock Run Culvert
Area 3	Potomac River from shore to Swainson Island	USACE	*Visual inspection of banks and removal of any observed material	*Clean up of any remaining debris in river (pending safe water levels)
Area 4	C&O Canal (Locks 10-14)	Initial Flow and Sludge Removal- DC Water Completion- USACE	*Initial flow & sludge removal in progress	*Removal of impacted vegetation along walls of canal *Removal of material down to clay layer *Inspection and repair of clay layer, canal and lock structures *Final rehabilitation (topsoil, grading, seeding, etc.)

Note: Water quality monitoring to continue. Additional types of sampling to be determined for impact analysis and long-term monitoring.

Coordination with MDE

MDE has requested DC Water to develop a comprehensive plan that will characterize and address impacts of the discharges to Maryland waters

This Plan will include:

- Comprehensive Impact Characterization
- Corrective and Remedial Measures
- Restoration Strategy
- Long-Term Monitoring and Verification
- Prevention of Future PI Overflows
- Public Listening Session

DC Water has hired an environmental expert to assist in developing a plan that:

- Adequately addresses short-term and long-term impacts
- Restores designated uses
- Ensures compliance with Maryland water quality standards
- Provides sufficient long-term monitoring and verification

Once developed, the plan will be shared with MDE and the public

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Rehabilitation Photos

POTOMAC RIVER

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	After Overflow	During Initial Clean Up	Completion to Date
Area 1			
Area 2			

Planned Capital Improvement Program for the Potomac Interceptor

NEAR TERM PROJECTS

PROJECT	REHABILITATION	APPROX. COST	CONSTRUCTION
PI-01A	2,700 LF (Slipline and Geopolymer)	$30M	Spring – Fall 2026
PI-01 Rock Run (Lock 10 / Cabin John)	7,300 LF (Geopolymer)	$95M - $135M	Spring 2027 – Fall 2029
PI-02 Broad Run / FFX	3,300 LF (Geopolymer) 2,700 LF (CIPP)	$6M - $9M	Spring 2027 – Summer 2028
PI-03 Cabin John / MH 4252	16,000 LF (Geopolymer)	$150M - $210M	Summer 2028 – Winter 2030

$350M OVER NEXT 5 YEARS, MORE THAN $600M OVER 10 YEARS

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Next Steps

- Continue Environmental Rehabilitation including the C&O canal
- Begin next phase of Interceptor Rehabilitation
  - Install 2500 feet of new pipe via slip lining from enhanced pumping operation and bulkhead to the downstream flume reentry point

Questions?