

POTOMAC RIVER



Briefing on the Potomac Interceptor

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY





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



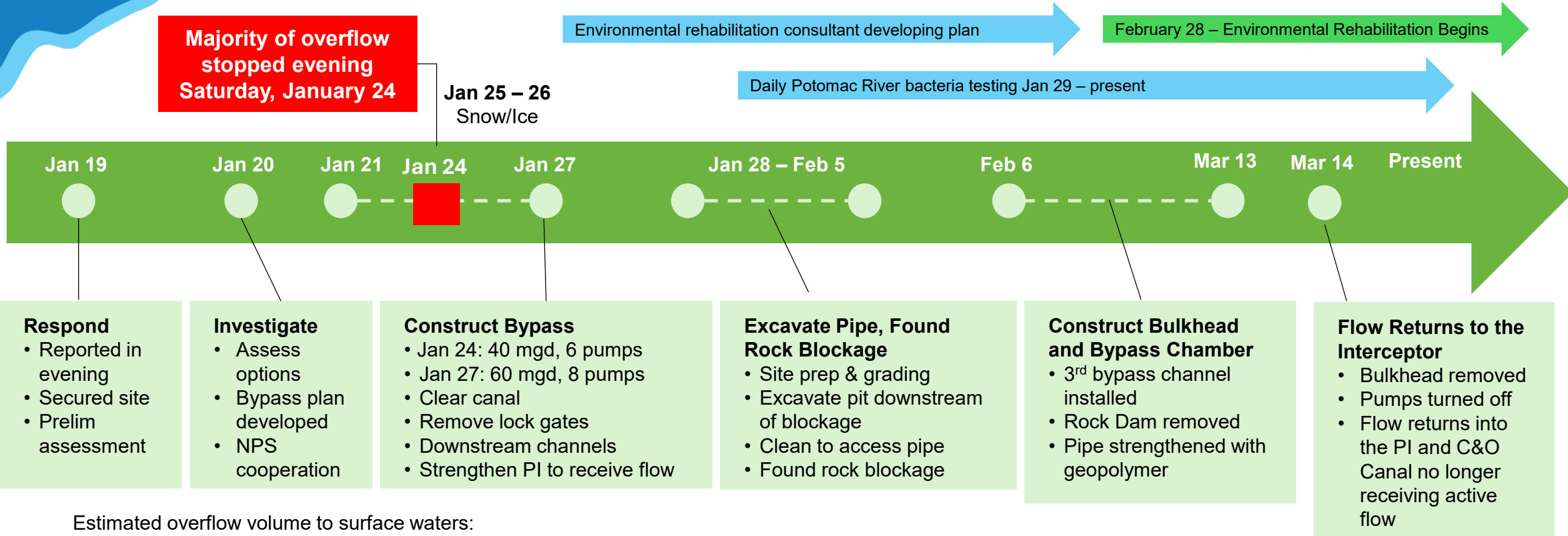
Pipe Break

Pipe break: 72"
diameter reinforced
concrete pipe

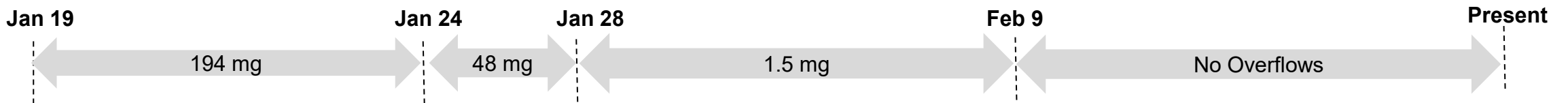


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Timeline



Estimated overflow volume to surface waters:



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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



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

Sample Date	E. Coli (MPN/100 ml)									
	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
3/1/26	7	2,420	46	12	Not sampled	Not sampled	4	30	16	9
3/2/26	9	2,300	43	6	Not sampled	Not sampled	10	89	17	12
3/3/26	4	2,420	16	12	Not sampled	Not sampled	11	61	13	8
3/4/26	22	2,100	62	18	76	49	13	124	15	39
3/5/26	36	2,420	15	17	44	39	13	58	26	31
3/6/26	13	1,120	26	13	71	59	39	816	16	29
3/7/26	44	1,410	55	23	36	25	20	24	20	13
3/8/26	291	1,050	345	365	291	308	260	291	14	11
3/9/26	31	179	44	36	32	60	46	153	18	12
3/10/26	16	228	24	15	32	23	21	435	41	18
3/11/26	5	20	17	20	32	20	10	411	22	28
3/12/26	64	1,410	16	20	15	23	77	7400	55	44
3/13/26	48	77	49	39	73	34	435	299	291	26
3/14/26	46	32	34	28	44	46	79	110	56	56
3/15/26	20	36	23	23	34	40	39	249	46	17

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.

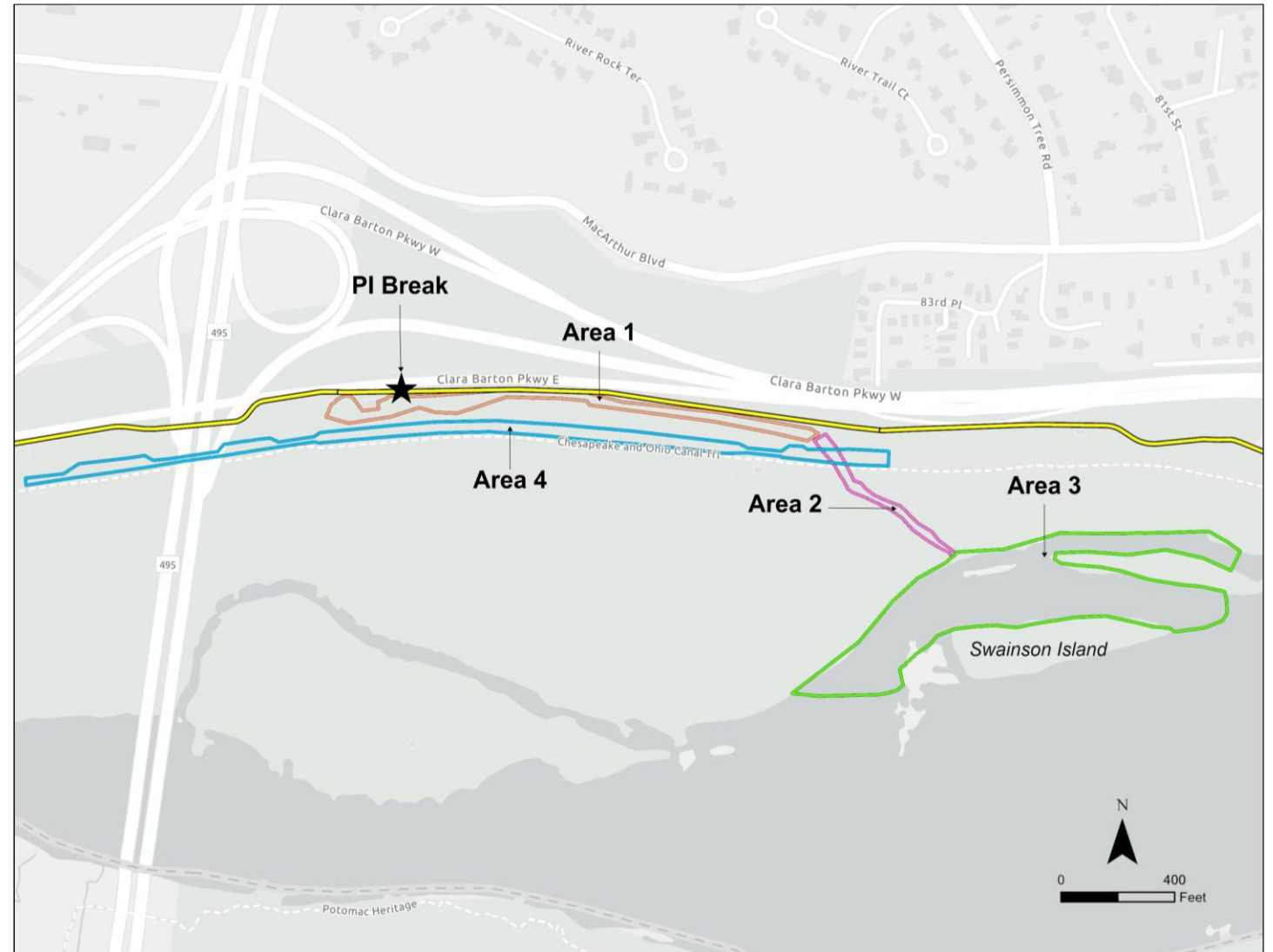
Clean-Up Areas

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





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.

Rehabilitation Photos

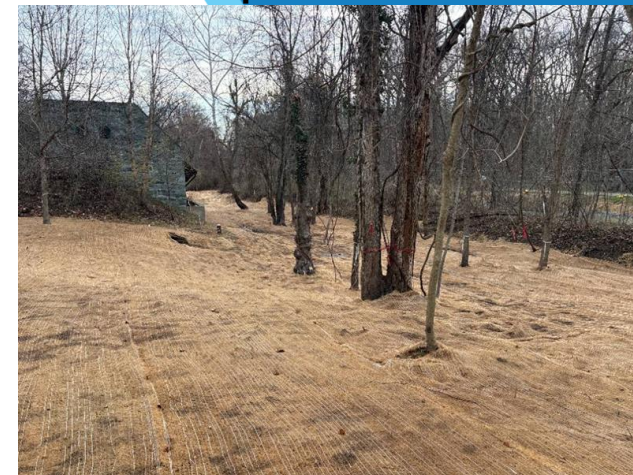
After Overflow



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

