Briefing on the Potomac Interceptor

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

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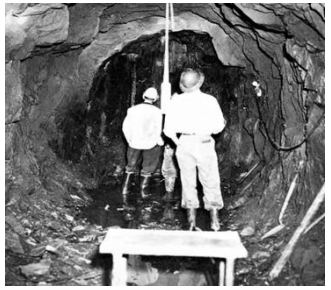
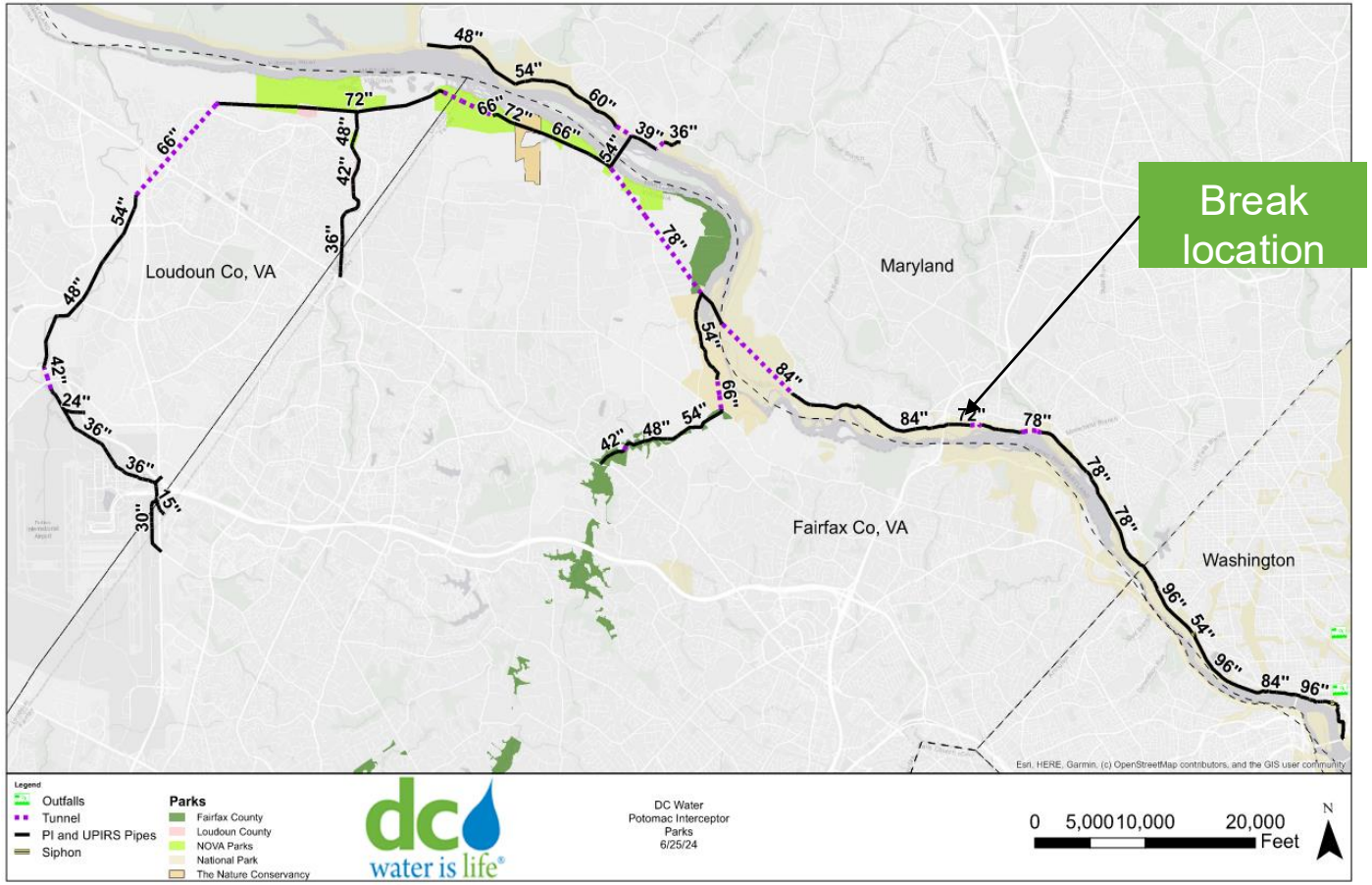
BRIEFING ON THE POTOMAC INTERCEPTOR

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

Potomac Interceptor



- About 54 miles long
- 30” to 96” diameter
- Conveys 60 million gallons per day sanitary sewage (average)
- Constructed in early 1960’s
- 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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Response and Repair

CURRENT

STEP	ACTIVITY	TIMELINE
1	**Bypass Installation** - Install temporary bypass pumping to reroute flow through canal around damaged pipe section	Completed
2	**Investigation and Excavation** - Excavate downstream of pipe, clean and identify scope of blockage	Completed
3	**Repair and Flow Restoration** – Install bulkhead and bypass chamber; remove rock dam and repair collapsed section to restore flow	February to mid-March
4	**Environmental Rehabilitation** – Restore affected areas including drainage channel, C&O Canal and Potomac River shoreline to Swainson Island	Following repair

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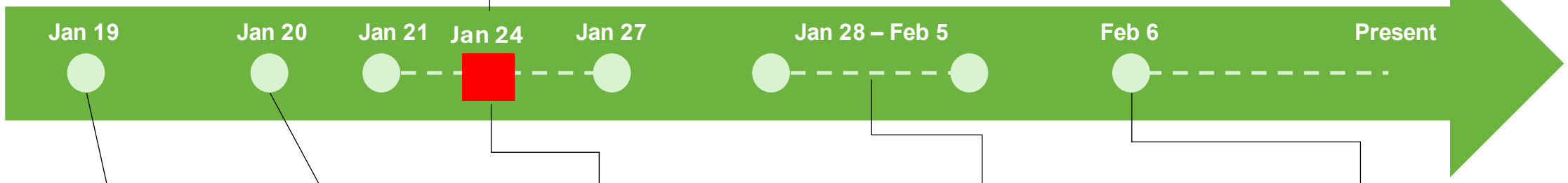
Timeline

Majority of overflow stopped evening Saturday, January 24

Environmental rehabilitation consultant developing plan

Daily Potomac River bacteria testing Jan 29 – present

Jan 25 – 26
Snow/Ice



Respond
- Reported in evening
- Secured site
- Prelim assessment

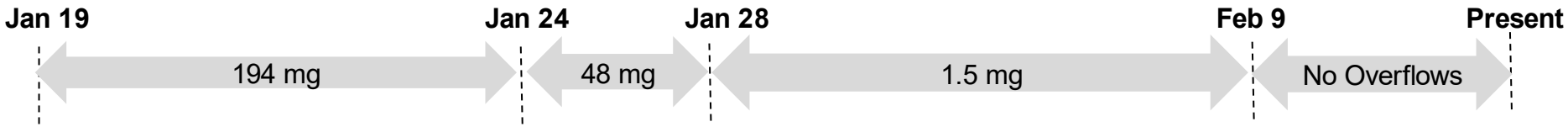
Investigate
- Assess options
- Bypass plan developed
- NPS cooperation

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

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

Construct Bulkhead and Bypass Chamber (ongoing)
- Feb 15: 52 mgd, 4 pumps added
- New chamber for bypass and temp bulkhead
- 3rd bypass channel excavation
- Excavate to pipe to remove rocks

Estimated overflow volume to surface waters:



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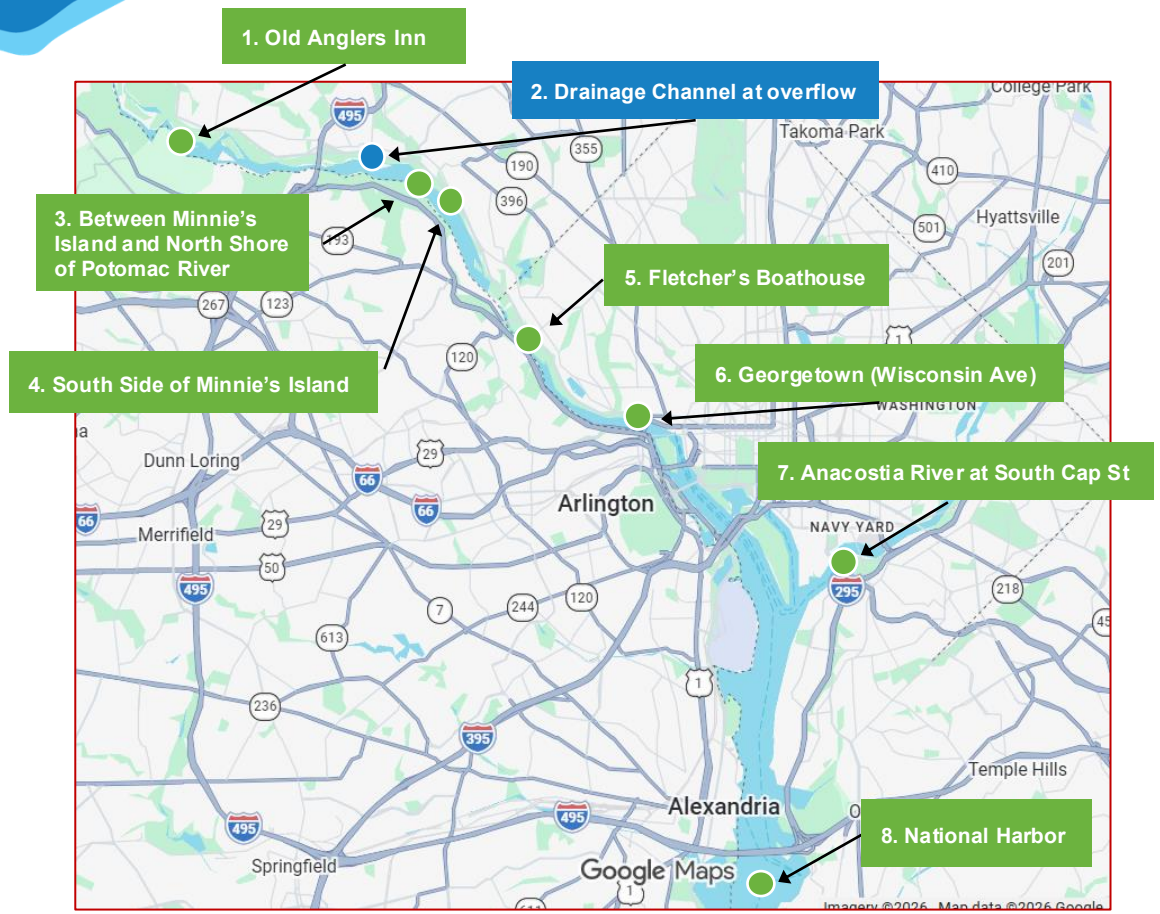
Potomac River Bacteria Sampling



	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	Fletcher's Boathouse	Georgetown @ Wisconsin Ave	Anacostia @ S. Cap St	National Harbor
1/29/2026	11	570,000	Not sampled	Not sampled	14,300	18,600	2	<1
1/30/2026	4	60,000	Not sampled	Not sampled	3,000	2,700	11	3
1/31/2026	3	30,000	Not sampled	Not sampled	1,200	5,100	6	2
2/1/2026	27	80,000	Not sampled	Not sampled	488	300	21	4
2/2/2026	6	242,000	Not sampled	Not sampled	397	173	6	31
2/3/2026	4	460,000	Not sampled	Not sampled	68	53	30	15
2/4/2026	5	210,000	Not sampled	Not sampled	49	48	45	178
2/5/2026	1	77,000	Not sampled	Not sampled	38	84	16	33
2/6/2026	22	242,000	Not sampled	Not sampled	108	238	24	10
2/7/2026	15	86,600	Not sampled	Not sampled	79	114	24	16
2/8/2026	15	130,000	Not sampled	Not sampled	260	43	47	27
2/9/2026	16	730,000	Not sampled	Not sampled	20	20	5	<1
2/10/2026	7	600,000	Not sampled	Not sampled	17	20	2	2
2/11/2026	8	155,000	Not sampled	Not sampled	3	19	<1	6
2/12/2026	5	105,000	Not sampled	Not sampled	7	75	8	14
2/13/2026	7	155,000	Not sampled	Not sampled	33	548	23	8
2/14/2026	3	141,000	Not sampled	Not sampled	<100	153	17	2
2/15/2026	2	199,000	Not sampled	Not sampled	58	84	18	3
2/16/2026	76	173,000	Not sampled	Not sampled	111	238	1,550	138
2/17/2026	59	16,700	Not sampled	Not sampled	3	387	23	88
2/18/2026	43	5,000	3,300	1,600	105	162	40	121
2/19/2026	49	15,200	17,800	14,800	387	435	128	62
2/20/2026	53	7,600	1,550	770	365	4,400	172	326
2/21/2026	135	1,700	727	1,200	107	190	205	345
2/22/2026	285	1,000	261	238	365	517	1,050	238
2/23/2026	204	1,100	299	299	461	613	687	304

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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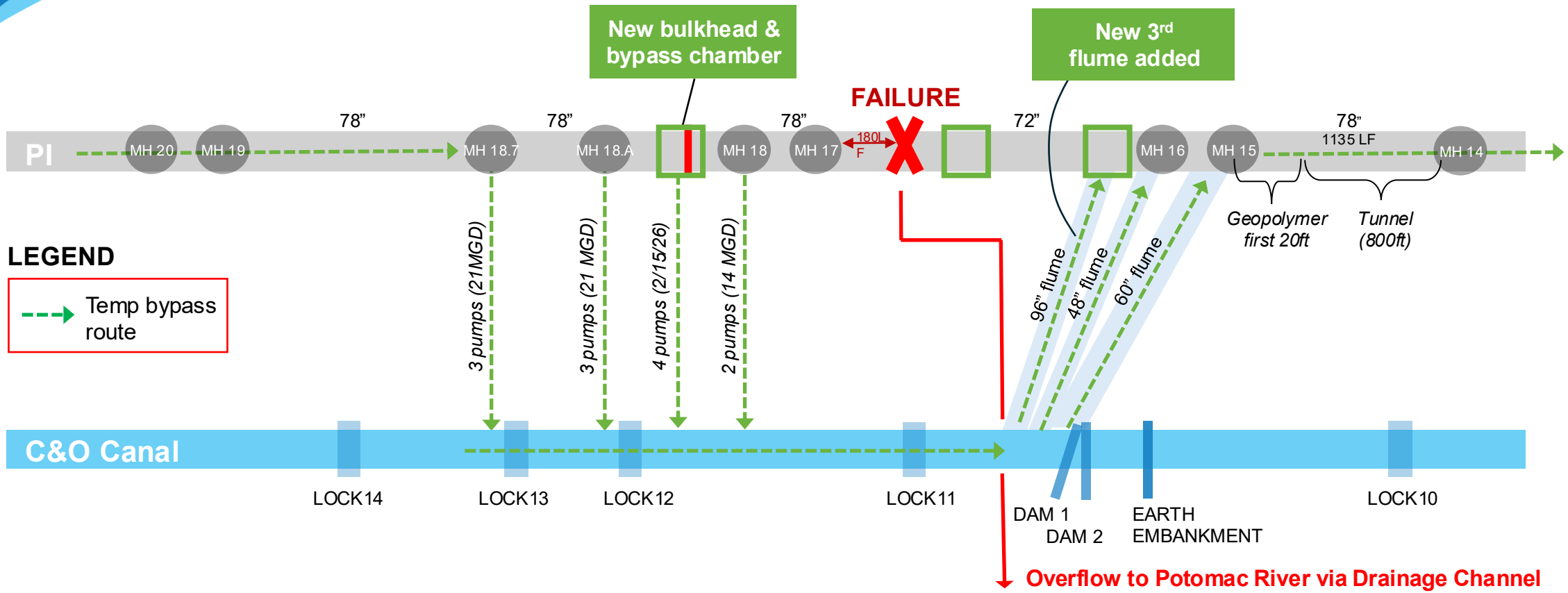
Emergency Response



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Initial Overflow

MH Upstream of Collapse

Overflow in Drainage Channel

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Emergency Response

Setting Up Bypass Pumps

Coffer Dam in Canal

Channel Back to PI

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Bypass in Operation

POTOMAC RIVER

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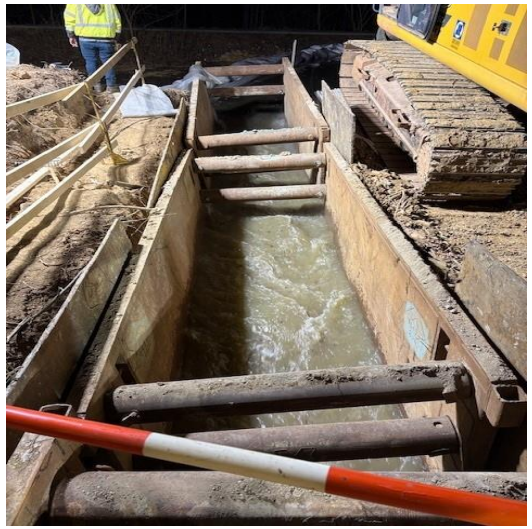
Bypass Pumping



Flow in Discharge Channel

Flow Dropping Back in PI

Fencing Along Canal

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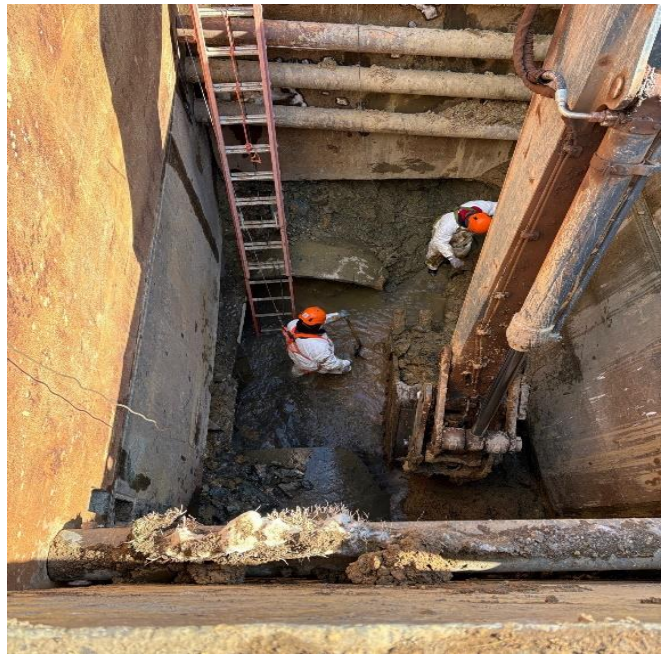
Excavating to Pipe

Failure Site



Excavation to PI

Rock Block in Failed Pipe Section

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New Chamber and Discharge Channel Under Construction




Bypass Pumping Chamber Under Construction and Made Operational

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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Potomac River Break

- Potomac River watershed includes 14,670 square miles through Virginia, Maryland, West Virginia, Pennsylvania, and District
- During the overflow incident, approximately 2% of the total river flow was impacted.
- With time and increasing river flows, bacteria levels are decreasing at and near the overflow site.
- No overflows since February 9
- DC Water committed to cleaning/restoring impacted areas

Environmental Rehabilitation

- DC Water committed to cleaning/restoring impacted areas
- Working with National Park Service, Maryland Department of the Environment (MDE) and other agencies to determine means, methods and scope
- Environmental consultant retained, has performed site walks to assess conditions and drafted an Environmental Rehabilitation Plan
- Impacted areas:
  - C&O Canal
  - Drainage channel along Clara Barton Parkway to Potomac River
  - Potomac River from shore to Swainson Island
- Targeting cleanup as soon as possible after emergency ends to minimize impacts to high-use areas before weather turns warm

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Rehabilitation Plan

Initial Coordination

- Install clear water diversions
- Pump water in Clara Barton channel to PI.
- Coordinate Concept Plan with USACE, NPS, MDE, and DOEE
- NPS Special Use Permit
- Identify Waste Subtitle D landfill
- Conduct pre-construction meetings
- Keep Canal's intake closed (NPS)
- Stake out Limits of Disturbance and access routes
- Identify and locate trees that will be removed

Rehabilitation will be completed in 2 phases

Uncontrolled Overflow Areas

- Phase I = Immediate
- Phase II = After PI flow is restored

C&O Canal Rehabilitation

- Phase I = Removal of materials, initial repairs
- Phase II = Final rehabilitation and repairs

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Next Steps

- Repair and Flow Rehabilitation
- Environmental Rehabilitation
- Continued Rehabilitation