Cost of Service Study for Small Potomac Interceptor Users

April 22, 2025

Purpose

- DC Water conveys wastewater through its Potomac Interceptor (PI) for the Town of Vienna, Dulles International Airport, the National Park Service and the Department of Navy, collectively referred to as the "Small PI Users"
- This presentation provides an update on the Small PI Users Cost of Service Study

Independent COS Study

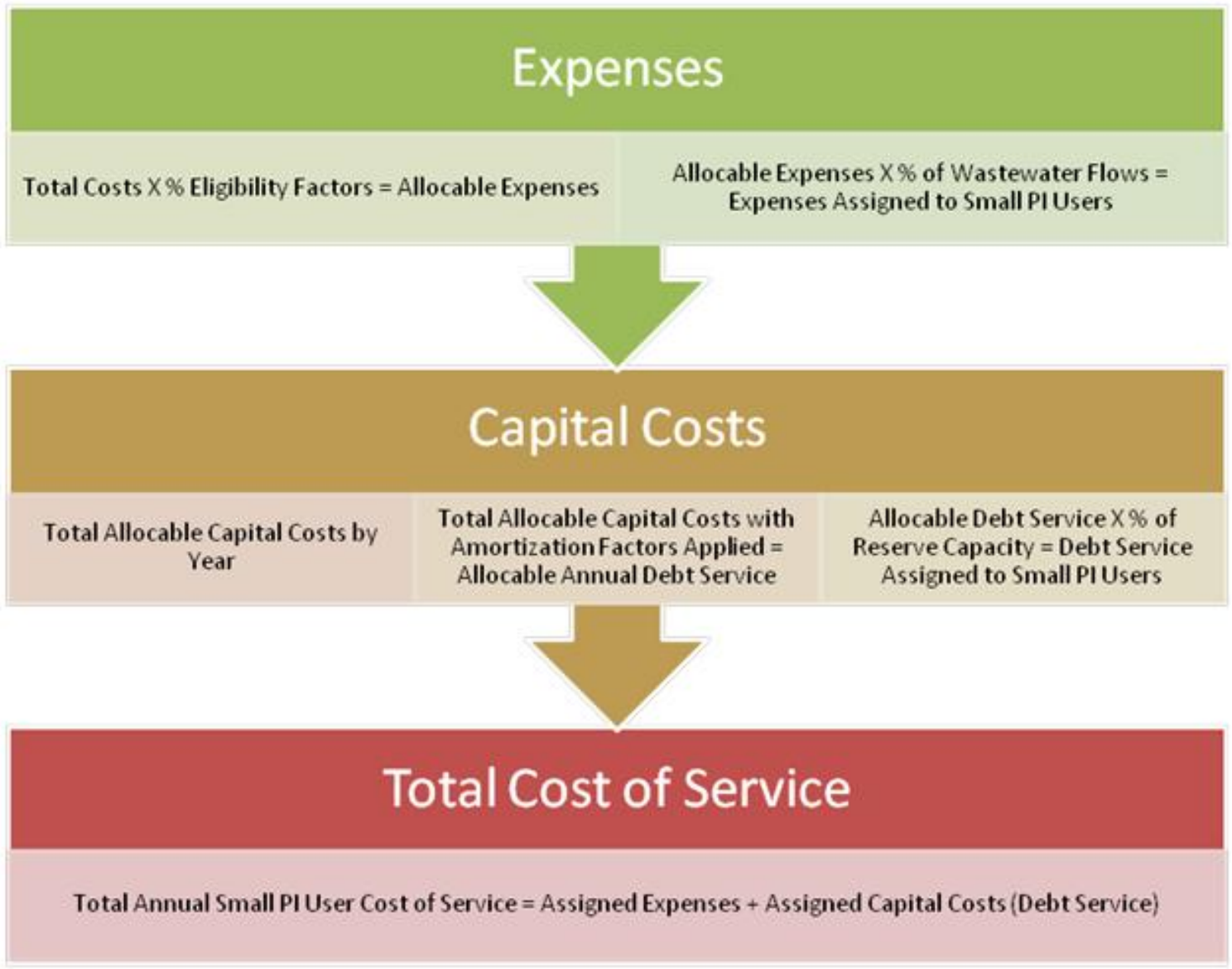
- The PI Cost of Service (COS) study for the Small PI Users is conducted every three years and includes a True-Up Analysis for the Prior Period. The last COS study was performed in FY2022
- The work is performed by independent consultants to bring an unbiased perspective, which ensures that the study is impartial and objective. The consultants have specialized knowledge and experience in conducting COS studies. Their experience can lead to more accurate and thorough analysis
- Amawalk Consulting is experienced in providing consulting services for various COS studies for operating reserves, renewal and replacement reserves, rate stabilization funds, independent review of rates, charges and fee, and affordability benchmarking studies. The company has over nineteen years of experience in the utility industry

Cost of Service Terms & Conditions

- Small PI Users pay a proportionate share of DC Water's operating and capital costs ("Cost of Service" or "COS") on the basis of a rate per MG of wastewater per the service agreements that were executed in the 1960's ("Small PI User Agreements"); costs reflect shares of the following:
  - Operation, maintenance & repair expenses of the Wastewater System including administrative support
  - The original cost of the PI and Blue Plains (considered to be fully repaid)
  - Capital improvements to Blue Plains, the PI, CSO facilities and other common-to-all assets over the last 30 years

- The COS & True-Up Analysis is performed for the "Historical Period" or 2022-2024; rates are proposed for the upcoming 3-year period, the "Forecast Period" or 2026-2028

Cost of Service Methodology



Eligibility factors are applied to total costs to arrive at allocable costs; e.g., Water System costs are 0% eligible. Allocable costs are assigned to Users based on actual flows for expenses and based on reserve capacity for capital costs

Cost of Service & True-Up Findings: 2022-2024

- The actual cost of service for 2022-2024 was $10,728,088; during the prior period of 2019-2021, the cost of service was $9,419,393
- Compared to the assumed wastewater flows in the prior report, actual flows were greater than anticipated for Vienna and both lower and higher (depending on the year) for Dulles; NPS and Navy flows were lower but are relatively small, especially the NPS. Blue Plains actual flows were lower
- Small PI Users paid each of their bills; credits and supplemental charges were applied for previous true-up purposes as recommended in the prior COS Study Report

The COS for 2022-2024 increased by 13.9% compared to the prior 3-year period.
Both periods were impacted by the COVID-19 pandemic

Cost of Service & True-Up Findings: 2022-2024

Year/Description	Vienna	Dulles	NPS	Navy	Total
2022					
Cost of Service	$ 1,798,168	$ 1,541,763	$ 24,142	$ 80,250	$ 3,444,322
Amount Paid	1,986,534	1,276,268	6,361	81,280	3,350,443
Difference	$ 188,366	$ (265,495)	$ (17,781)	$ 1,030	$ (93,879)
2023					
Cost of Service	$ 1,819,811	$ 1,661,488	$ 24,189	$ 84,908	$ 3,590,396
Amount Paid	1,978,418	1,689,543	10,362	86,846	3,765,169
Difference	$ 158,606	$ 28,055	$ (13,827)	$ 1,937	$ 174,772
2024					
Cost of Service	$ 1,824,014	$ 1,756,436	$ 25,328	$ 87,592	$ 3,693,370
Amount Paid	1,823,957	1,823,772	11,072	87,085	3,745,886
Difference	$ (57)	$ 67,336	$ (14,256)	$ (507)	$ 52,516
Total Underpayment/Overpayment	$ 346,916	$ (170,104)	$ (45,864)	$ 2,461	$ 133,409
(Positive is Overpayment, Negative is Underpayment)					

Finding: Vienna and the U.S. Navy are entitled to credits; supplemental charges are appropriate for Dulles and the National Park Service. Net difference is a $133,409 credit to Small PI Users

Forecast Period: Factors Impacting Costs & Rates

The cost of service is expected to increase in 2026-2028, primarily driven by increases in amortized capital costs (debt service):

- It has been many years since investments were made in the PI; major PI Improvements and resulting capital costs begin in 2025. The estimated capital costs in 2025 through 2028 for the Interceptor are $341 million; the effects on DC Water debt service will increase to $25 million in 2028. Small PI Users pay a portion of debt service for the Interceptor, the Pump Station and other Improvements
- Capital improvements to the Potomac Pump Station are expected to require $13 million over the period of 2025 through 2028, with a corresponding impact on debt service
- Capital costs other than PI Improvements (i.e., Blue Plains, CSO-related & Sanitary Sewers) are anticipated to increase significantly compared to prior years
- Expenses are anticipated to increase at the rate of 4.1% in 2026 and 4.0% annually in 2027 and 2028, compared to the prior year, consistent with the DC Water Financial Plan

Forecast Period: Key Assumptions

- Cost-related:
  - DC Water will contractually commit 100% of its planned capital improvements, including those for the PI and Potomac Pump Station
  - Debt financing for all Small PI User-related capital improvements, average interest rate of 6.0% (consistent with the Financial Plan) with a 30-year amortization
- Wastewater flow-related, compared to 2024 flows:
  - Vienna flows will slowly decline
  - Dulles flows will gradually increase, consistent with Master Plan expectations for increased passenger use
  - NPS and Navy flows will remain the same, and relatively small. The NPS in particular is assumed to continue using a small portion of its reserve capacity
  - Blue Plains flows will decline at an average rate of 0.5% per year
  - Reserve capacities remain the same

Forecast Period: Cost of Service

Summary of Projected Operating Expenses Allocated to Small PI Users:

Year	Vienna	Dulles	NPS	Navy	Total
2026	$ 684,509	$ 626,894	$ 1,144	$ 35,077	$ 1,347,624
2027	705,701	656,046	1,185	36,344	1,399,277
2028	733,129	691,819	1,237	37,947	1,464,132
Total	$ 2,123,340	$ 1,974,760	$ 3,566	$ 109,368	$ 4,211,033

Summary of Amortized Capital Costs Allocated to Small PI Users:

Year	Vienna	Dulles	NPS	Navy	Total
2026	$ 1,559,954	$ 1,559,954	$ 31,212	$ 72,719	$ 3,223,840
2027	1,784,722	1,784,722	35,719	83,138	3,688,302
2028	2,163,765	2,163,765	43,326	100,674	4,471,530
Total	$ 5,508,442	$ 5,508,442	$ 110,257	$ 256,531	$ 11,383,672

Projected Cost to Serve Small PI Users:

Year	Vienna	Dulles	NPS	Navy	Total
2026	$ 2,244,463	$ 2,186,849	$ 32,356	$ 107,796	$ 4,571,464
2027	2,490,424	2,440,769	36,904	119,482	5,087,579
2028	2,896,895	2,855,584	44,563	138,620	5,935,663
Total	$ 7,631,782	$ 7,483,202	$ 113,823	$ 365,898	$ 15,594,705
2022-2024 True-Up (credit)	(346,916)	170,104	45,864	(2,461)	(133,409)
Total after True-Up Adjustment	$ 7,284,866	$ 7,653,305	$ 159,687	$ 363,438	$ 15,461,296

Forecast Period: Cost of Service & Proposed Unit Rates

Description	Vienna	Dulles	NPS	Navy
Total before True-Up Adjustment	$ 7,631,782	$ 7,483,202	$ 113,823	$ 365,898
Projected 2026-2028 Flows (MG)	1,062.66	987.91	1.78	54.73
Projected Rate (per MG)	$7,181.77	$7,574.76	$63,789.14	$6,685.80
Current Rate per MG	$5,072.41	$5,706.26	$18,616.15	$4,773.69
Increase (Decrease)	$2,109.36	$1,868.50	$45,172.99	$1,912.11
Increase (Decrease) %	41.6%	32.7%	242.7%	40.1%

The projected total cost of service for 2026-2028 is $15,594,705, which represents an increase of 45% compared to the cost of service in 2022-2024.

True-up credits and charges for the period of 2022-2024 totaling a net credit of $133,409 (Slide 7) are recommended to be applied consistent with recent DC Water practice

Next Steps

- Apply the 2022-2024 true-up credits and supplemental charges, as applicable
- The Proposed Small PI User wastewater rates
  - Effective October 1, 2025, to September 30, 2028
- Continue to monitor billed vs. actual costs and projected vs. actual flows on an annual basis for each Small PI User, with particular emphasis on wastewater flows from the NPS and U.S. Navy as well as the projected versus actual costs of capital improvements