



Approved FY 2020 Budgets

Section VI: CAPITAL FINANCING, CASH AND DEBT



Clean Rivers Tunnel Dewatering
Pump Station

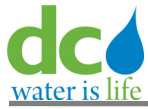
\$ in thousands

DC Water relies on several funding sources to finance its capital projects and cash flow needs. The process of identifying, obtaining, and managing these funds is a combined effort throughout the Authority. This includes future revenues, collections, grant applications, planning, and debt service management. Approximately 64% of DC Water’s Capital Program is funded from debt and Pay-Go, 19% of the funds is contributed by the wholesale capital payments, and the remaining estimated 18% funds comes from other available funds.

Below is the list of funding sources and percentage contribution, to support DC Water’s overall CIP needs.

Ten-year Sources of Funds	Amount	Percentage
Debt Financing (1)	\$1,787,082	36.1%
Use of Available Funds	155,425	3.1%
Wholesale Capital Payment	924,719	18.7%
EPA Grants & CSO Appropriation	166,495	3.4%
Interest Income on Bond Proceeds	21,031	0.4%
Pay-Go Financing (2)	1,394,402	28.1%
Clean Rivers Impervious Area Charge (CRIAC)	436,401	8.8%
System Availability Fee (SAF)	71,225	1.4%
Total	\$4,956,780	100.0%

- 1) Debt financing refers to the borrowing of funds through long-term revenue bonds, commercial paper, and other short-term notes
- 2) Pay-Go financing is any funds available after meeting the reserves and rate stabilization fund deposits



Funds Summary

\$ in thousands

Sources and Uses of Funds

	FY 2018 Actual	FY 2019 Approved	FY 2019 Revised	FY 2020 Approved
Sources				
Beginning Balance	\$ 172,706	\$ 249,878	\$ 282,107	\$ 143,688
New Debt Proceeds / Commercial Paper / EMCP ⁽¹⁾	\$ 346,672	\$ 110,000	\$ 110,000	\$ 180,716
System Availability Fee (SAF)	-	3,850	3,850	5,775
Clean Rivers Impervious Area Charge (CRIAC)	-	30,824	31,270	34,769
Pay-Go Financing	113,021	65,948	67,270	69,083
EPA Grants	25,332	44,339	18,215	38,990
CSO Appropriation	14,054	-	-	-
Wholesale Customer Capital Contributions	98,522	65,851	67,112	67,321
Interest Income	1,730	2,981	2,981	3,658
Total Sources	\$ 599,330	\$ 323,793	\$ 300,698	\$ 400,311
Uses				
Water Projects	\$ 69,006	\$ 45,747	\$ 61,885	\$ 71,721
Wastewater Treatment	106,104	74,617	69,979	66,620
Sanitary Sewer Treatment	46,888	32,947	44,927	43,646
Combined Sewer & LTCP Projects	188,294	200,343	195,349	151,427
Stormwater Projects	1,988	4,909	4,220	8,571
Non-Process Facilities	35,526	33,107	15,309	36,002
Washington Aqueduct	13,194	12,930	12,930	15,532
Capital Equipment	14,430	27,400	27,400	17,105
Meter Replacement / AMR/ CIS	14,499	7,118	7,118	9,718
Total Uses	\$ 489,929	\$ 439,118	\$ 439,117	\$ 420,342
Ending Balance	\$ 282,107	\$ 134,553	\$ 143,688	\$ 123,657

(1) Commercial Paper and Extendable Municipal Commercial Paper are used for interim financing and capital equipment

Cash Reserve Summary

	FY 2018 Actual	FY 2019 Approved	FY 2019 Revised	FY 2020 Approved
Beg. O&M Reserve Balance (Net of Rate Stabilization Fund)	\$ 147,212	\$ 140,000	\$ 166,796	\$ 165,000
Operating Surplus	\$ 97,149	\$ 84,520	\$ 100,974	\$ 101,633
Wholesale Customer Prior Year Billing Reconciliation	8,987	(1,500)	(10,982)	(3,448)
Project Billing Refund	-	(4,000)	(11,000)	(4,000)
Transfer to Rate Stabilization Fund	-	-	-	-
Federal Customer Prior Year Billing Reconciliation	(9,019)	(5,821)	(5,821)	1,317
Interest Earned from Bond Proceeds	227	424	424	570
Pay-Go Capital Financing	(77,761)	(73,624)	(75,391)	(81,071)
Ending O&M Reserve Balance (Net of Rate Stabilization Fund)	\$ 166,796	\$ 140,000	\$ 165,000	\$ 180,000
Rate Stabilization Fund	\$ 61,450	\$ 61,450	\$ 55,450	\$ 55,450

\$ in thousands

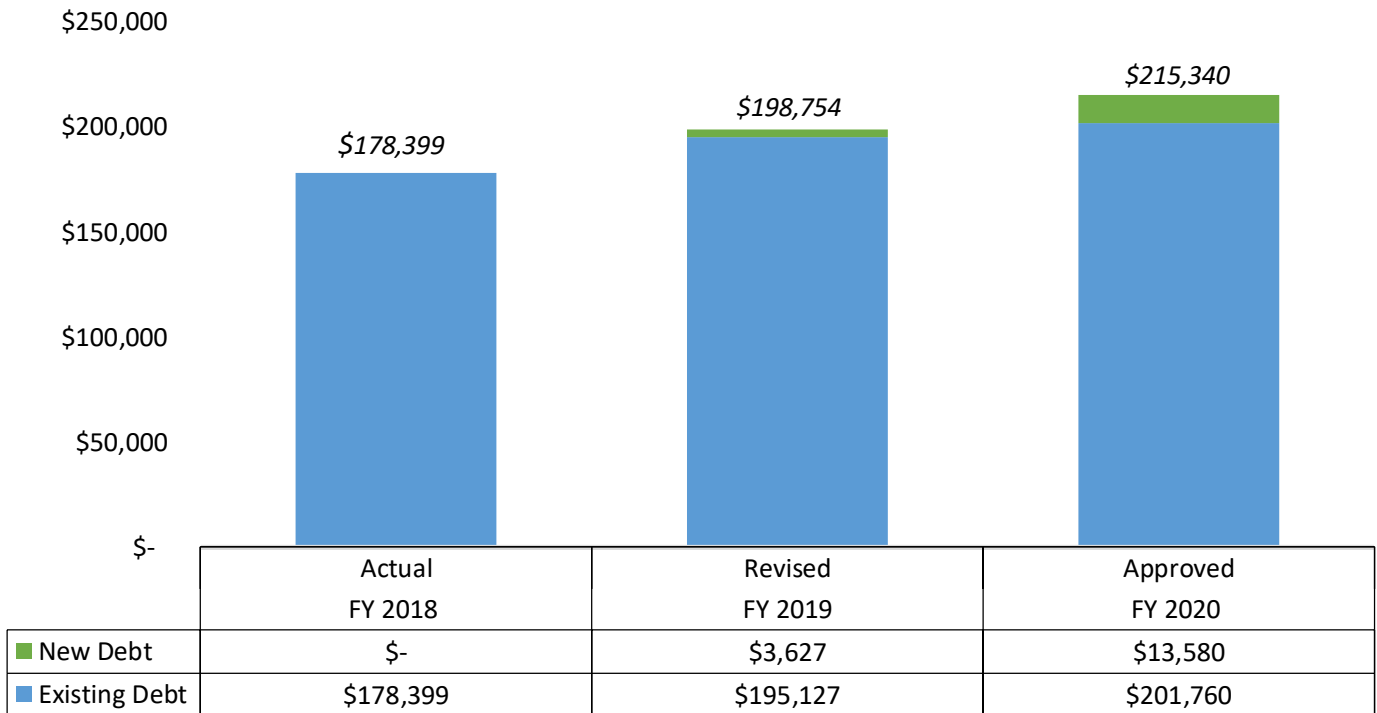
Interest Rate Assumptions

- Budget Appropriation and Financial Plan
 - 1) Variable rate
 - 2.50% in FY 2019 and FY 2020
 - 2) Fixed rate
 - 5.50% in FY 2019 and 6.00% in FY 2020
 - Plus cost of issuance and insurance

Capital Financing Plan

- DC Water’s comprehensive capital financing plan includes three key goals:
 - 1) minimize cost of capital
 - 2) increase operational flexibility
 - 3) optimize asset/liability matching through: Interim Financing, Pay-Go Financing, Permanent Bond financing, and Federal Grants

Debt Management FY 2018 - FY 2020





Debt Service Management

\$ in thousands

The chart below shows debt service payment of principal and interest for a three-year outlook.

Bond Series	FY 2018 Actual	FY 2019 Revised	FY 2020 Approved
Senior Lien			
Series 1998	\$ 22,647	\$ 23,366	\$ 23,368
Series 2009	4,436	-	-
2014A	16,849	16,849	16,849
2017A / B	17,072	17,069	17,845
2018A / B	6,292	18,325	18,324
Total Senior Lien	\$ 67,296	\$ 75,609	\$ 76,385
Subordinate Lien			
Series 2008A Subordinate Bond	\$ 7,208	\$ -	\$ -
Series 2010A Subordinate Bond	10,999	11,094	15,609
Series 2012A,B-1,B-2,C Subordinate Bond	21,058	21,061	20,091
Series 2013A Subordinate Bond	14,994	14,994	14,994
Series 2014B Subordinate Bond	1,250	3,250	3,253
Series 2014C Subordinate Bond	17,467	17,998	30,302
Series 2015A,B Subordinate Bond	18,101	19,503	19,423
Series 2016 Subordinate Bond	17,420	28,955	17,039
Series 2016B Subordinate Bond	858	858	858
EMCP	674	500	1,500
Commercial Paper	271	500	1,500
Jennings Randolph Bond	805	805	805
Total Subordinate Lien	\$ 111,104	\$ 119,518	\$ 125,375
Proposed Debt Service	\$ -	\$ 3,627	\$ 13,580
Total Debt Service	\$ 178,399	198,754	215,339

As of September 2018, DC Water has reaffirmed its credit rating; this allows for a lower borrowing cost which in turn reduces ratepayer cost in the long run.

Senior Bond Ratings		
Moody's Investor Service	Aa1	Stable Outlook
Standard & Poor's Corporation	AAA	Stable Outlook
Fitch's Rating	AA	Positive Outlook

\$ in thousands

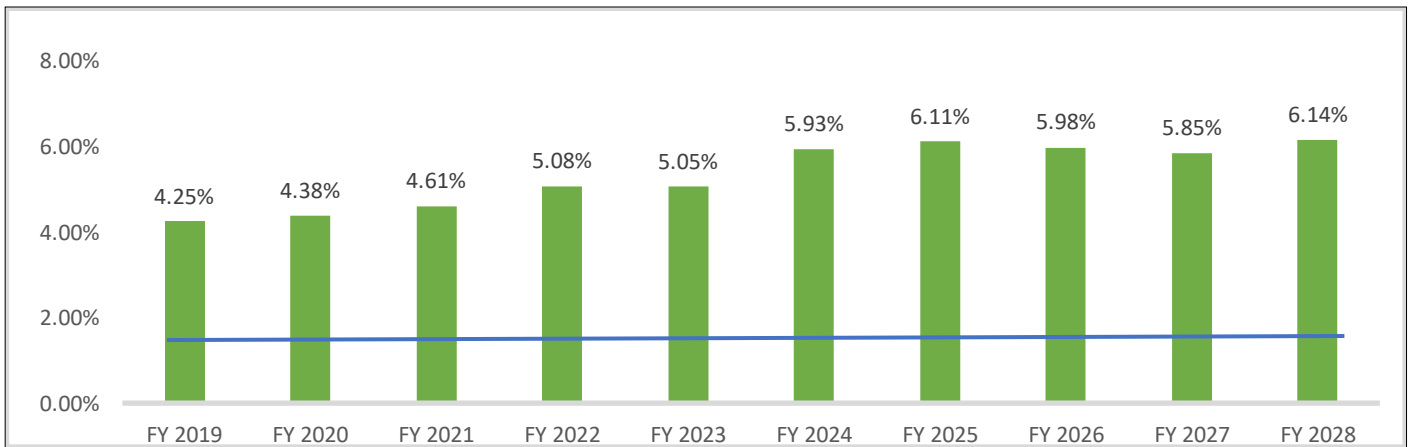
Debt Service Coverage (FY 2019 - FY 2028)

DC Water is authorized to issue additional debt only to the extent that it can satisfy the Debt Service Coverage (annual net revenues as a percent of annual debt service) requirements established in the Indenture and certain Board policies.

Debt level	Master Indenture	Board Resolution	Management Practice
Senior	120x	140x	140x
Subordinate	100x	100x	100x

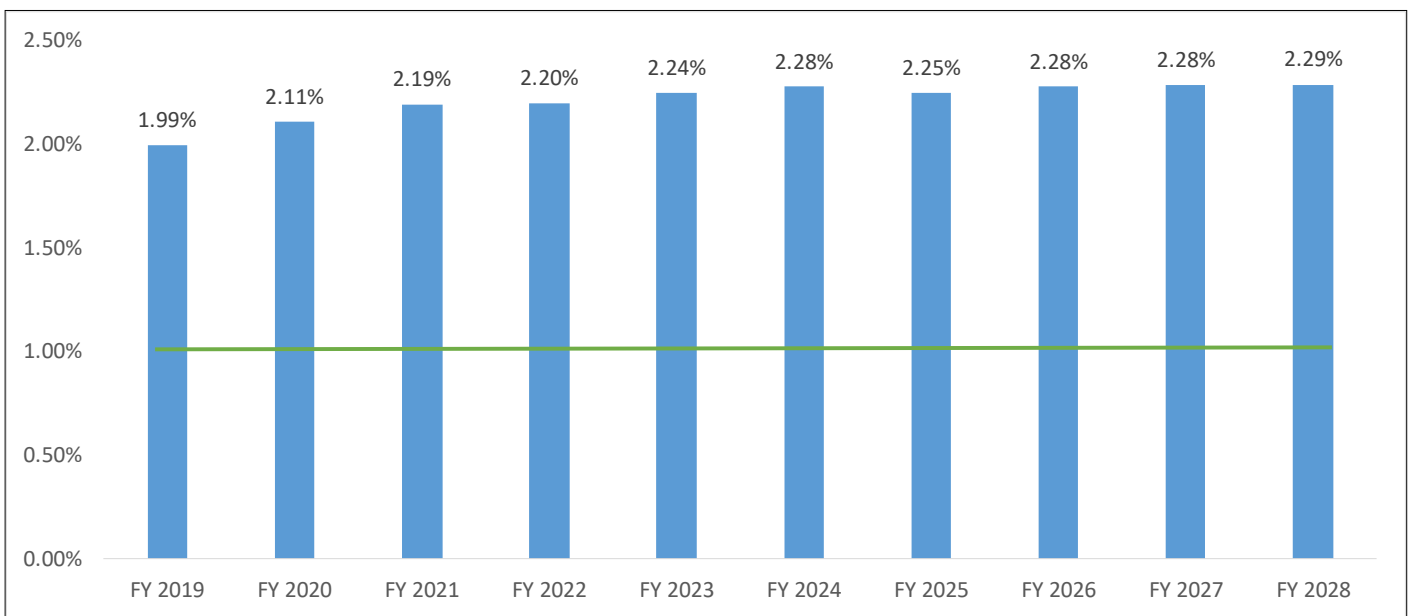
Senior Debt Service Coverage

Senior Debt Service Coverage (Board/Management target = 140x)



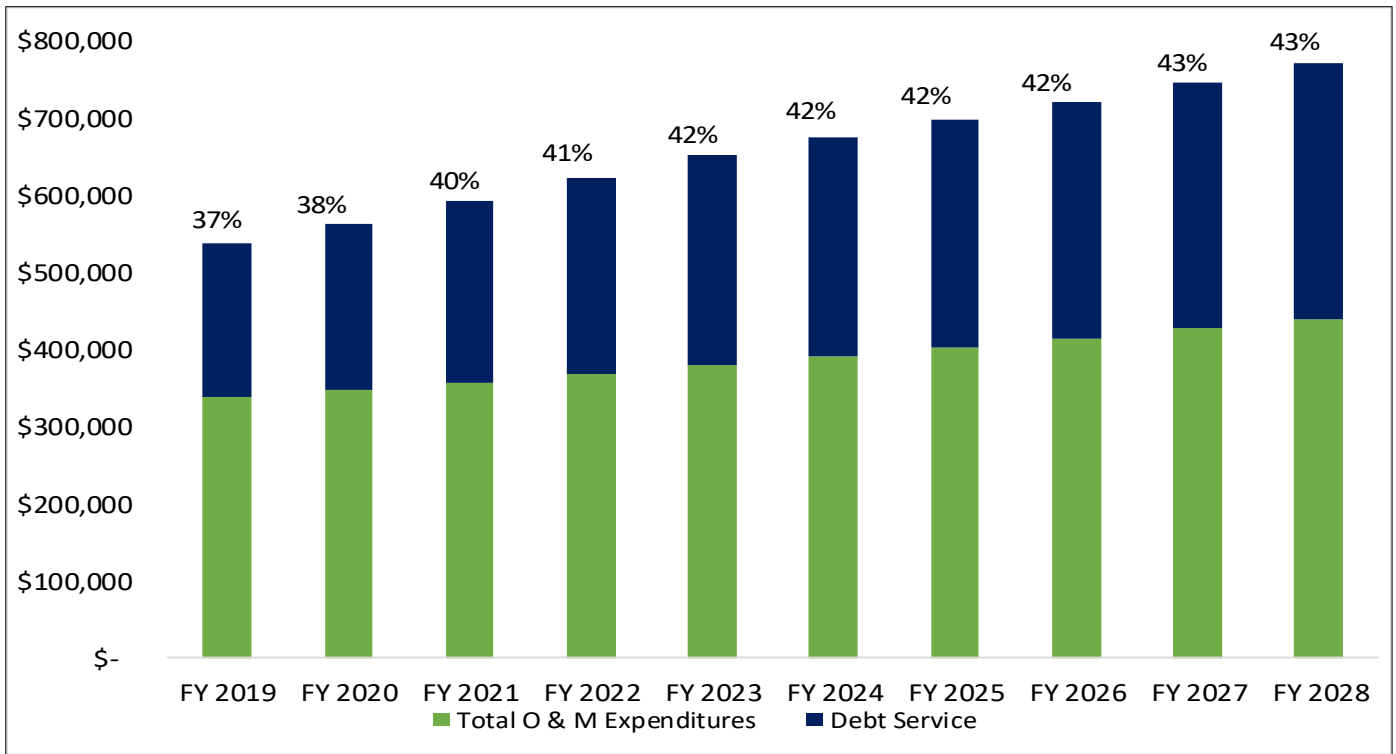
Subordinate Debt Service Coverage

Subordinate Debt Service (Board/Management target = 100x)

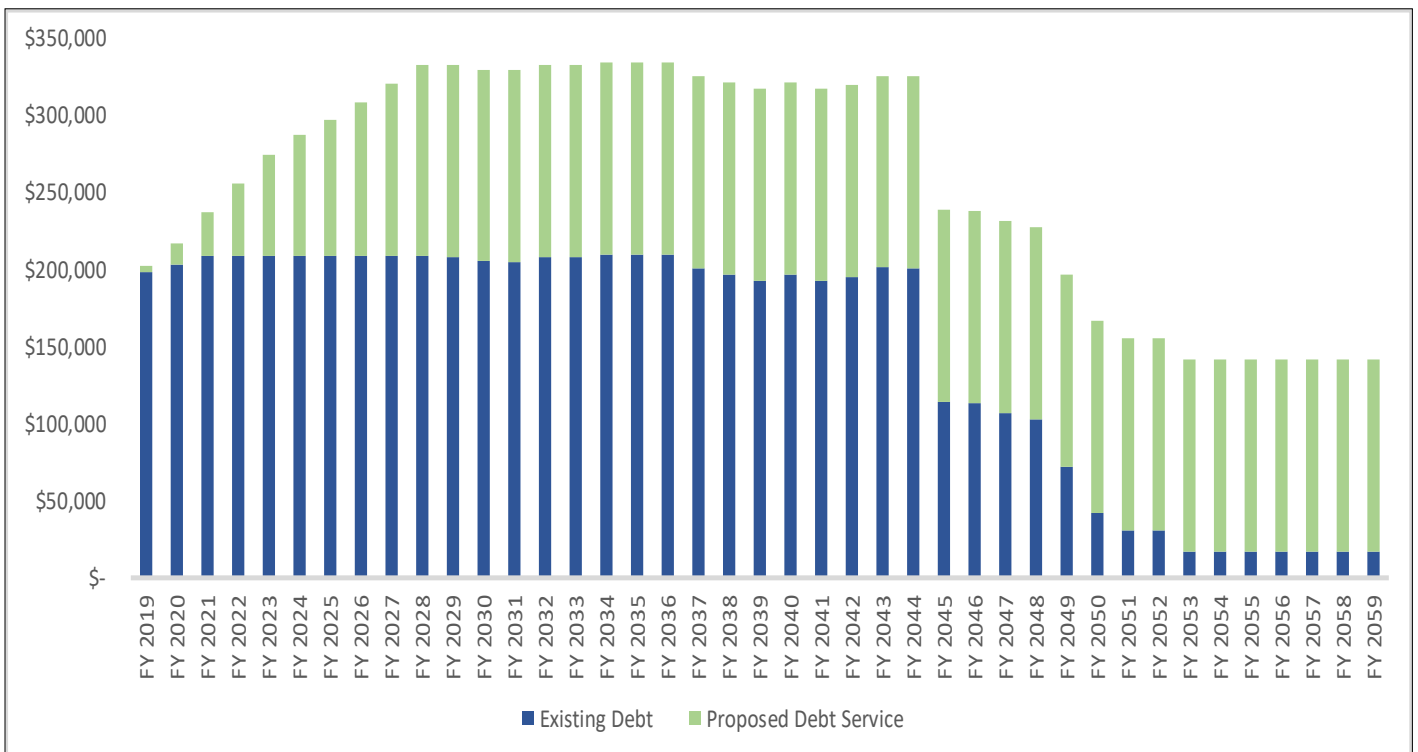


\$ in thousands

Debt Service as Percentage of O&M Expenditures

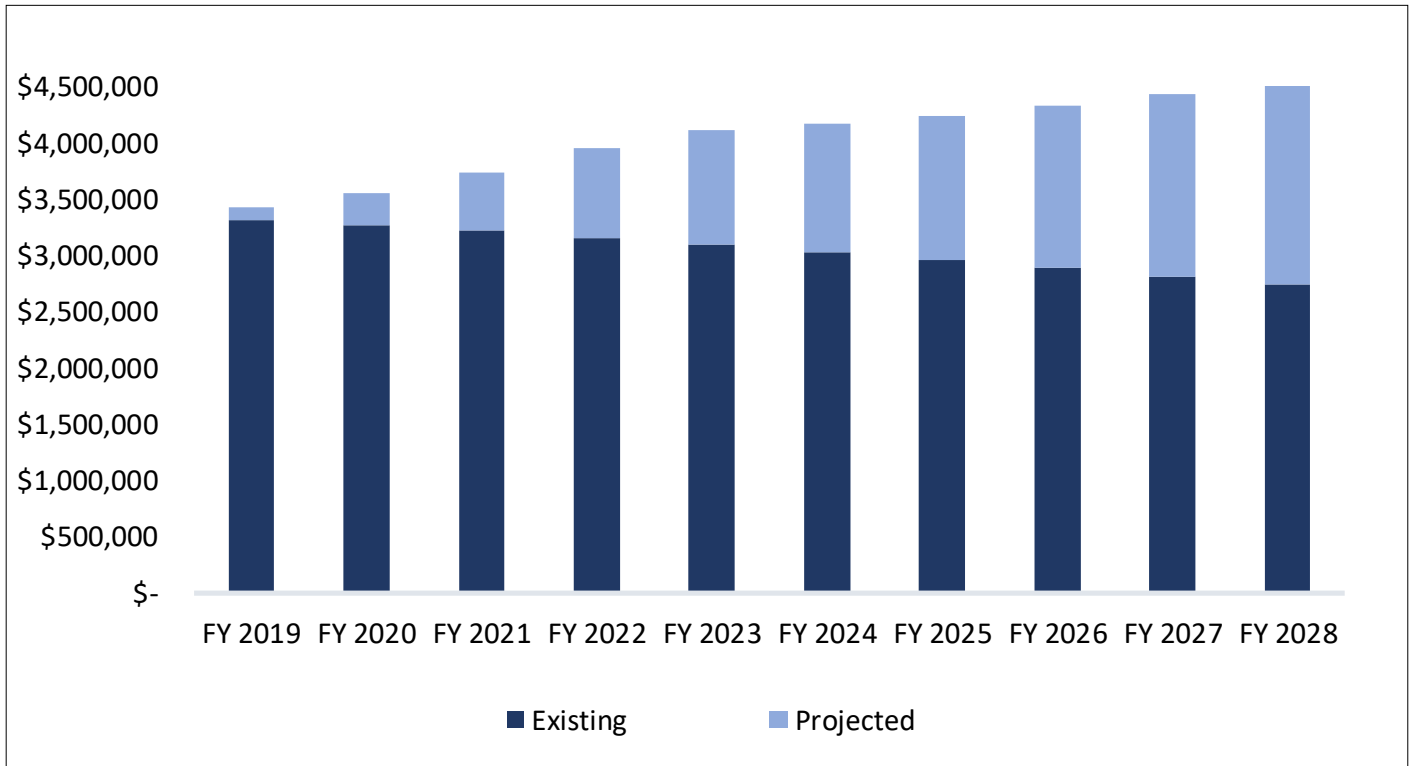


Total Long Term Outstanding & Proposed Debt Service

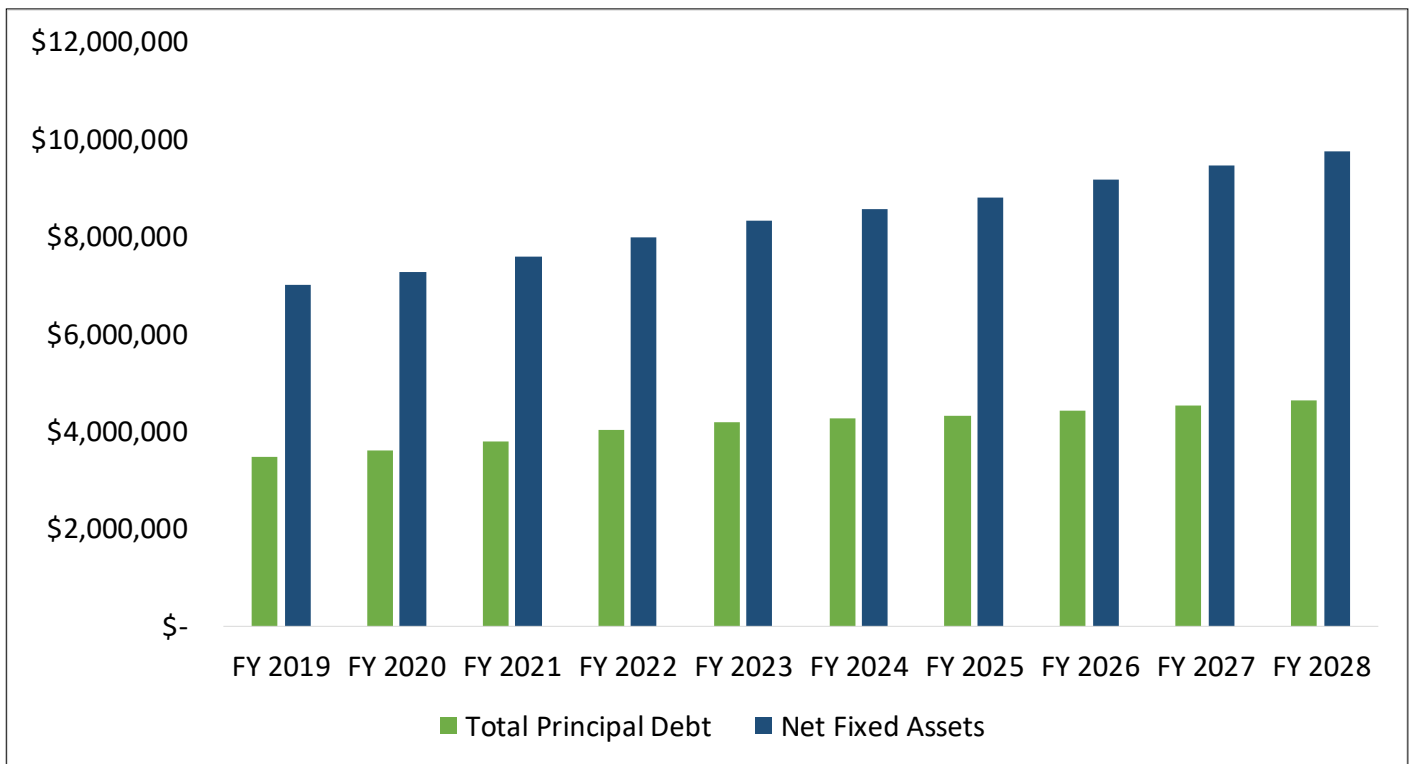


\$ in thousands

Principal Outstanding Debt

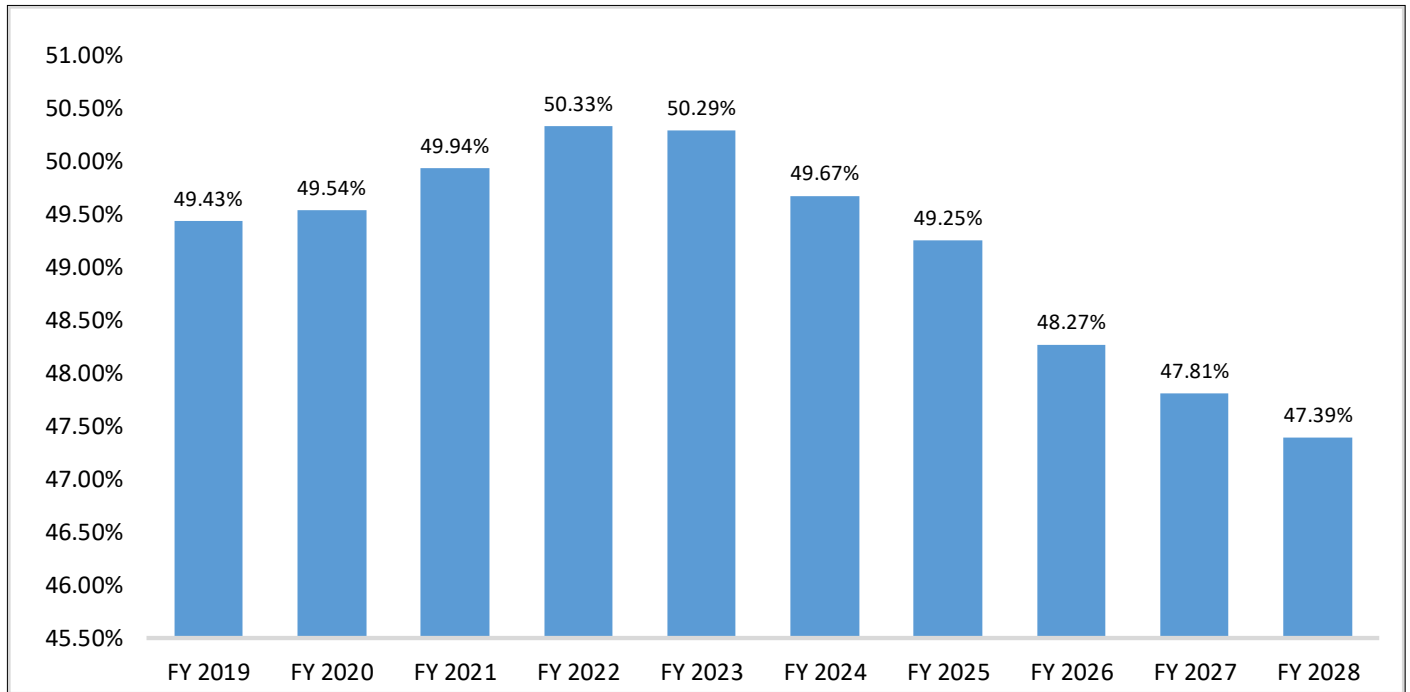


Principal vs Net Fixed Assets



\$ in thousands

Debt to Net Fixed Assets Ratio



DEBT LIMIT: DC Water is not subject to any legal debt limitations. However, prior to any new debt issuance, DC Water must meet an additional bonds test and certify revenue sufficiency

PUBLIC UTILITY SENIOR LIEN REVENUE BONDS: 1) Series 1998 (March 1998); 2) Series 2014A (July 2014); 3) Series 2017A (January 2017); 4) Series 2017B (January 2017); 5) Series 2018A (April 2018); and 6) Series 2018B (April 2018)

PUBLIC UTILITY SUBORDINATE LIEN REVENUE BONDS: 1) Series 2012A (March 2012); 2) Series 2013A (July 2013); 3) Series 2014B (July 2014); 4) Series 2013A (July 2013); 5) Series 2014B (July 2014); 6) Series 2015A (October 2015); 7) Series 2015B (October 2015); and 8) Series 2016B Environmental Impact Bond (September 2016)

PUBLIC UTILITY SUBORDINATE LIEN REVENUE BONDS (FEDERALLY TAXABLE ISSUER SUBSIDY BUILD AMERICA BONDS): 1) Series 2010A (October 2010)

PUBLIC UTILITY SUBORDINATE LIEN REVENUE REFUNDING BONDS: 1) Series 2008A: (refunded Series 2004, Assured Guaranty insured, April 2008); 2) Series C taxable commercial paper: (refunded Series 2007B, April 2008); 3) Series 2012C: (advance refunded Series 2003, March 2012); 4) Series 2014C: (advanced refunded all or a portion of Series 2007A, 2008A, 2009A, and 2012B, October 2014); and 5) Series 2016A: (advanced refunded all or a portion of Series 2007A, 2008A, and 2009A, January 2016)

NOTES FOR JENNINGS RANDOLPH RESERVOIR: The note payable to the Federal government for improvements to the Jennings Randolph Reservoir is considered subordinate debt under the Master Indenture of Trust. The notes were issued to provide a backup water supply facility for the Authority. DC Water's share of operating and capital cost is 30 percent

NOTES FOR LITTLE SENECA RESERVOIR: The note payable to Washington Suburban Sanitary Commission (WSSC) is considered subordinate debt under the Master Indenture of Trust. The notes were issued by WSSC for construction of the Little Seneca Dam and Lake for backup and peak-day water supply for the Authority. DC Water's share of operating and capital costs is 40 percent. DC Water prepaid the note in full in August 2013

COMMERCIAL PAPER (CP): These notes issued are considered subordinate debt under the Master Indenture of Trust. DC Water's commercial paper program is issued in increments with maturities less than 270 days. As described in Section III, the Board approved the commercial paper program in early FY 2002; proceeds from the sale of the notes are used for interim bond financing, short-term financing for capital equipment and certain taxable costs for the Washington Aqueduct. Each new bond issuance is evaluated to determine the most cost effective way of reducing the amount of taxable commercial paper. Normal market conditions for commercial paper carries significantly lower interest rates than long-term debt. In May 2015, DC Water successfully extended JP Morgan Chase Bank as the dealer and US Bank as the paying

agent and entered a Letter of Credit (LOC) with Landesbank Hessen - Thuringen Girozentrale, New York Branch (Helaba). The \$150 million commercial paper program includes: (1) Series B (tax-exempt) aggregate principal amount not to exceed \$100 million; and (2) Series C (taxable) aggregate principal amount not to exceed \$50 million

EXTENDABLE MUNICIPAL COMMERCIAL PAPER (EMCP): This program will provide interim financing for a portion of the Authority's Capital Improvement Program. Under this program, the notes are issued backed by the liquidity and credit rating of the Authority. Each Series A EMCP Note will mature on its respective "Original Maturity Date", which may range from one to 90 days from the date of issuance, unless its maturity is extended on the "Original Maturity Date" to the "Extended Maturity Date", which will be the date that is 270 days after the date of issuance of the Series A EMCP Note. The notes are payable from and secured by a subordinate lien on the Authority's net revenues, as further described in the Authority's Master Indenture of Trust as supplemented. In November 2015, DC Water authorized the deal for the EMCP program with Goldman, Sachs & Co. The \$100 million extendable municipal commercial paper program includes: (1) Series A (tax-exempt) aggregate principal amount not to exceed \$100 million

DEBT POLICY: DC Water's comprehensive debt policy can be found on our website at www.dcwater.com

INVESTOR RELATIONS: DC Water's investor relations can be found via BondLink at www.dcwaterbonds.com