

Fiscal Year 2020 Approved Revenue & General Fund Operating Budgets

Board Meeting
September 17, 2019

Tarrant Regional Water District Fiscal Year 2020 Budget

Enriching Communities, Improving Quality of Life

DESCRIPTION OF THE DISTRICT

The Tarrant Regional Water District is a water control and improvement district and political subdivision of the State of Texas created in October 1924 pursuant to Article 16, Section 59 of the Texas Constitution. The District is presently functioning under the general laws of the State of Texas, including Chapters 49 and 51, Texas Water Code, and pursuant to the provisions of Chapter 268, Acts of 1957, 55th Legislature of Texas as amended, Regular Session (the "District Act"), and is authorized by the District Act to issue bonds and finance public works projects.

The District was created for the purpose of developing and providing a sufficient supply of raw water as well as providing flood protection for the City of Fort Worth. The District's functions have expanded and now encompass the development of a raw water supply system to meet the needs of major municipal and industrial users within and outside its boundaries, to provide flood protection for surrounding communities, and to support recreation in a joint effort with other local governments within Tarrant County.

As the District's functions have expanded, it has become more crucial than ever to ensure that all systems maintained and operated by the District are done so at the most optimal level, that resources are used as efficiently as possible, and that the public is informed on the direction the District is taking in all areas of responsibility.

In this Fiscal Year 2020 Annual Budget, resources have been efficiently allocated based on the District's core missions. For the Revenue Fund, the core mission is to deliver a reliable, resilient supply of water to the public at the lowest cost and highest quality possible. For the General Fund, the two core missions are to reduce the risk of flooding in our communities with dependable flood damage reduction infrastructure and operations, and enhance the quality of life in North Texas communities by creating recreation opportunities around TRWD infrastructure to enable active lifestyles.

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Revenue Fund



Spillway at Richland Chambers

TRWD Revenue Fund FY20 Budget Summary

TRWD Water Supply Mission

Deliver a reliable, resilient supply of water to the public at the lowest cost and highest quality possible.

Water Supply Overview

TRWD provides water to more than two million people in an 11-county service area, making it one of the largest water suppliers in the state. The District provides raw water to more than 50 wholesale customers in North Central Texas, the largest of which include the cities of Fort Worth, Arlington, Mansfield as well as the Trinity River Authority.

Approved FY20 Revenue Fund Budget

			FY	/19 Approved	FY	20 Approved
Revenues	F'	Y18 Actuals		Budget		Budget
Sale of Water	\$:	123,684,944	\$	145,550,606	\$:	144,972,496
Interest Income	\$	5,342,796	\$	3,500,000	\$	3,500,000
Contributions	\$	438,126	\$	477,900	\$	1,496,068
Other Income	\$	9,327,575	\$	2,275,112	\$	4,803,730
Total Revenues	\$:	138,793,441	\$	151,803,618	\$ 1	154,772,294

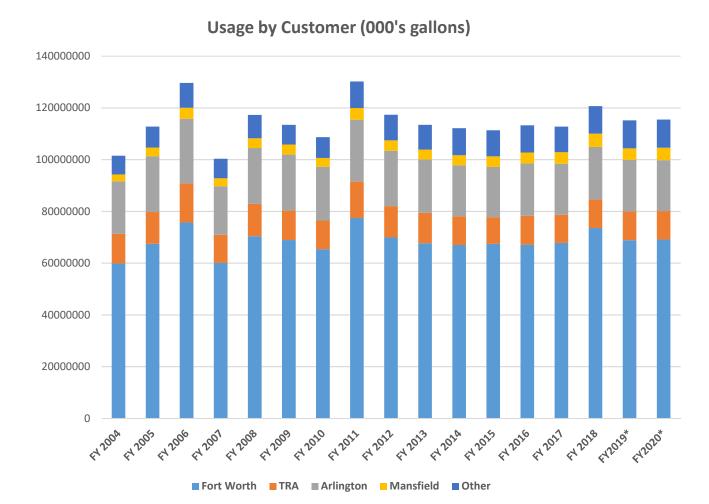
Expenditures	F	Y18 Actuals	FY	19 Approved Budget	FY	20 Approved Budget
Operating	\$	51,176,212	\$	70,513,374	\$	73,249,246
Capital	\$	622,299	\$	807,451	\$	912,717
Debt Service	\$	87,386,536	\$	80,482,793	\$	80,610,331
Total Expenditures	\$:	139,185,047	\$	151,803,618	\$:	154,772,294

			FY:	L9 Approved	FY	20 Approved	
System Rate	FY18 Actuals			Budget	Budget		
In District Rate	\$	1.06856	\$	1.26220	\$	1.25539	
Out of District Rate	\$	1.07456	\$	1.26520	\$	1.25539	
Arlington Rate	\$	1.07181	\$	1.26370	\$	1.25539	

Water Supply Demands

Demand for water supply is based on many factors including population growth, water conservation, weather patterns, and changing population lifestyles. All these factors play into the current water supply and future demand requirements. The District manages both the current demand needs and prepares for the future demand requirements while working to keep the water rate stable for its customers.

The graph below shows water usage for the past 15 years and budgeted usage for FY19 & FY20. Overall customer usage has increased steadily over the years, with some large peaks due to significant droughts. The District is currently preparing for future demands by expanding transmission system infrastructure and developing new sources of supply.



^{*}Budgeted Usage

System Rate Calculation

The Sale of Water revenues are estimated using the budgeted raw water rate multiplied by the budgeted water sales for FY20. This budgeted rate, expressed in dollars per 1000 gallons, is calculated by taking the budgeted expenditures for FY20, subtracting other income sources and dividing that number by the estimated usage in gallons. Each fiscal year, the primary wholesale customers provide their estimated usage for the year. The remaining customers' estimated usage is determined using historical data of actual reported usage. FY20 will be the first year the "In-District Rate", "Out-of-District Rate" and the City of Arlington's rate will be the same.

	F١	/19 Approved	F١	20 Approved	
Net System Revenue Requirements		Budget		Budget	% Change
Total Expenditures	\$	151,803,619	\$	154,772,294	2.0%
Less: Other Revenues Not Through Sale of Water	\$	(6,253,012)	\$	(9,799,798)	56.7%
Net System Revenue Requirement	\$	145,550,607	\$	144,972,496	-0.4%

		FY19 Budgeted	FY20 Budgeted	
Gallonage (000'S)		Water Sales	Water Sales	% Change
Fort Worth In-District		47,041,000	47,187,000	0.3%
Fort Worth Out-of-District		21,833,000	21,901,000	0.3%
Trinity River Authority		11,034,931	11,001,724	-0.3%
Mansfield		4,454,989	4,880,518	9.6%
Arlington		19,965,040	19,659,385	-1.5%
Other In-District		850,000	850,000	0.0%
Other Out-of-District		10,000,000	10,000,000	0.0%
	Total Gallonage (000's)	115,178,960	115,479,627	0.3%

	FY19 Budgeted	FY20 Budgeted	
Calculated System Rate	Rate	Rate	% Change
Fort Worth In-District	\$1.26220	\$1.25539	-0.5%
Fort Worth Out-of-District	\$1.26520	\$1.25539	-0.8%
Trinity River Authority	\$1.26520	\$1.25539	-0.8%
Mansfield	\$1.26520	\$1.25539	-0.8%
Arlington	\$1.26370	\$1.25539	-0.7%
Other In-District	\$1.26220	\$1.25539	-0.5%
Other Out-of-District	\$1.26520	\$1.25539	-0.8%

System Rate Model

To accurately project water rates, the District utilizes a rate model. The customers' estimates for raw water usage are combined with the District's estimated expenses to calculate an estimated rate. A sample of the District's rate model for the years 2019 - 2025 is shown below.

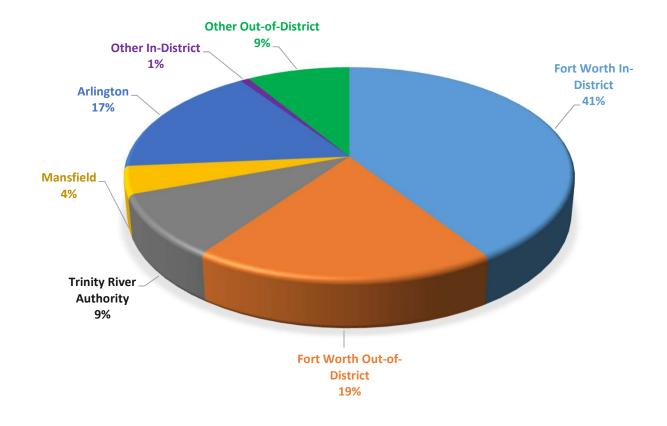
	Approved 2019	Approved 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
SYSTEM OPERATIONS							
Operations and Maintenance	50,513,374	53,249,246	56,367,998	59,750,078	63,335,083	67,135,188	71,163,299
Pumping Power	20,000,000	20,000,000	18,000,000	18,000,000	18,000,000	18,000,000	18,000,000
Capital Expenditures	807,451	912,717	1,003,989	1,104,388	1,214,826	1,336,309	1,469,940
TOTAL EXPENSES	71,320,825	74,161,963	75,371,987	78,854,465	82,549,909	86,471,496	90,633,239
OUTSTANDING BOND DEBT SERVICE							
Outstanding Principal & Interest	79,475,393	78,103,631	77,854,833	77,849,828	75,607,515	75,010,251	73,449,208
Outstanding Extendible Commercial Paper Bonds	1,000,000						
Bond Paying Agent Fees	7,400	6,700	7,050	7,050	7,050	7,050	7,050
TOTAL OUTSTANDING BOND DEBT SERVICE	80,482,793	78,110,331	77,861,883	77,856,878	75,614,565	75,017,301	73,456,258
PROPOSED BOND DEBT SERVICE							
Extendible Commercial Paper Bonds		2,500,000	1,000,000				
2021 Issue - \$50M			1,345,000	3,460,000	3,465,000	3,465,000	3,465,000
2022 Issue - \$50M				1,291,000	3,323,000	3,324,000	3,323,000
2023 Issue - \$50M					1,330,000	3,424,000	3,424,000
2024 Issue - \$50M						1,440,000	3,566,000
2025 Issue - \$50M							1,486,000
TOTAL PROPOSED BOND DEBT SERVICE	0	2,500,000	2,345,000	4,751,000	8,118,000	11,653,000	15,264,000
TOTAL EXPENDITURES	151,803,618	154,772,294	155,578,870	161,462,343	166,282,474	173,141,797	179,353,497
OTHER REVENUE (not through the sale of water)							
Water Sales not under system rate	1,330,000	500,000	505,000	510,050	515,151	520,302	525,505
Dallas Water Utilities Reimbursement of O&M	501,361	2,422,529	2,500,000	2,625,000	2,756,250	2,894,063	3,038,766
Interest Earned	3,500,000	3,500,000	2,275,000	2,275,000	2,275,000	2,275,000	2,275,000
Excess Reserve Funds		1,390,000					
Other Revenues	921,651	1,987,269	2,007,142	2,027,213	2,047,485	2,067,960	2,088,640
TOTAL OTHER REVENUE (not through the sale of water)	6,253,012	9,799,798	7,287,142	7,437,263	7,593,886	7,757,325	7,927,911
NET SYSTEM REQUIREMENTS	145,550,606	144.073.406	440 204 720	454 035 000	450 600 500	465 204 472	474 435 506
NET STSTEM REQUIREMENTS	143,330,000	144,972,496	148,291,728	154,025,080	158,688,588	165,384,472	171,425,586
SYSTEM WATER RATES	2019	2020	2021	2022	2023	2024	2025
	2019						
SYSTEM WATER RATES	2019						
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer deman	2019 ds projections	2020	2021	2022	2023	2024	2025
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer deman Fort Worth (In-District) Fort Worth (Out-District) Arlington	2019 ds projections 47,041,000	2020 47,187,000 21,901,000 19,659,385	2021 47,333,000 21,969,000 20,247,106	2022 47,480,000 22,037,000 20,247,106	2023 47,627,000 22,105,000 20,247,106	2024 47,775,000	2025 47,923,103 22,242,739 20,247,106
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer deman Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931	47,187,000 21,901,000 19,659,385 11,001,724	47,333,000 21,969,000 20,247,106 11,083,336	47,480,000 22,037,000 20,247,106 11,189,102	47,627,000 22,105,000 20,247,106 11,300,993	47,775,000 22,174,000 20,247,106 11,440,106	2025 47,923,103 22,242,739 20,247,106 11,554,507
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244	47,775,000 22,174,000 20,247,106 11,440,106 5,282,829	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814	47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751	47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814	47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751	47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820	2022 47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406
PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demands fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26220 1.26520	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631
PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demands fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26220 1.26520 1.26370	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26220 1.26520 1.26370 1.26520	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26220 1.26520 1.26370 1.26520 1.26520 1.26520	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26220 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273	2022 47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26220 1.26520 1.26370 1.26520 1.26520 1.26520	47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539	47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657	47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demander fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) Other (Out-District) Other (Out-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 59,375,072	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 60,242,056	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 69,311,525
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District) Fort Worth (In-District) Fort Worth (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 60,242,056 27,960,572	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 64,337,059 29,860,598	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 66,966,683 31,081,512	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 69,311,525 32,169,833
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District) Fort Worth (In-District) Fort Worth (In-District) Fort Worth (Out-District) Fort Worth (Out-District) Fort Worth (Out-District) Fort Worth (Out-District) Arlington	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 2.2539 2.494,396 24,680,285	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 60,242,056 27,960,572 25,769,068	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 2.35085 1.35085 2.360,598 27,350,857	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 2.8380,566	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 1.44633 1.44633 2,283,534
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 2.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 1.27273 60,242,056 27,960,572 25,769,068 14,106,077	2022 47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 2.8380,566 16,035,708	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 69,311,525 32,169,833 29,283,534 16,711,366
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District) Fort Worth (In-District) Fort Worth (Out-District) Fort Worth (Out-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 59,375,072 27,623,075 25,229,788 13,961,376 5,636,445	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 2.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 29,860,598 27,350,857 15,265,976 6,996,395	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 69,311,525 32,169,833 29,283,534 16,711,366 7,860,642
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Arlington Trinity River Authority Mansfield Other (In-District)	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 59,375,072 27,623,075 25,229,788 13,961,376 5,636,445 1,072,869	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 2.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273 1.27223	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 1.40171 2.40171 1	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631 1.44631 1.44631 1.44631 1.44631 1.44631 69,311,525 32,169,833 29,283,534 16,711,366 7,860,642 1,260,404
SYSTEM WATER RATES PROJECTED WATER USE (1000 GAL.) - 5 yr. customer demand fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) TOTAL PROJECTED SYSTEM WATER RATES (\$/1000 GAL.) Fort Worth (In-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield Other (In-District) Other (Out-District) PROJECTED SYSTEM REVENUE: (\$) Fort Worth (In-District) Fort Worth (In-District) Fort Worth (Out-District) Fort Worth (Out-District) Fort Worth (Out-District) Arlington Trinity River Authority Mansfield	2019 ds projections 47,041,000 21,833,000 19,965,040 11,034,931 4,454,989 850,000 10,000,000 115,178,960 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 1.26520 59,375,072 27,623,075 25,229,788 13,961,376 5,636,445	2020 47,187,000 21,901,000 19,659,385 11,001,724 4,880,518 850,000 10,000,000 115,479,627 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 2.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539 1.25539	2021 47,333,000 21,969,000 20,247,106 11,083,336 4,978,128 854,250 10,050,000 116,514,820 1.27273	47,480,000 22,037,000 20,247,106 11,189,102 5,077,690 858,521 10,100,250 116,989,669 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657 1.31657	2023 47,627,000 22,105,000 20,247,106 11,300,993 5,179,244 862,814 10,150,751 117,472,908 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 1.35085 29,860,598 27,350,857 15,265,976 6,996,395	2024 47,775,000 22,174,000 20,247,106 11,440,106 5,282,829 867,128 10,201,505 117,987,674 1.40171	2025 47,923,103 22,242,739 20,247,106 11,554,507 5,434,974 871,464 10,252,513 118,526,406 1.44631

Water Usage Projections

Each fiscal year, the primary wholesale customers provide their estimated usage for the year. The remaining customers' estimated usage is determined using historical data of actual reported usage. The customers' projected usage for FY20 increased 300,667,000 gallons, 0.3% higher than FY19. The District's primary wholesale customers account for 90% of budgeted water sales for FY20.

	FY19 Budgeted	FY20 Budgeted		
Gallonage (000'S)	Water Sales	Water Sales	Variance	% Change
Fort Worth In-District	47,041,000	47,187,000	146,000	0.3%
Fort Worth Out-of-District	21,833,000	21,901,000	68,000	0.3%
Trinity River Authority	11,034,931	11,001,724	(33,207)	-0.3%
Mansfield	4,454,989	4,880,518	425,529	9.6%
Arlington	19,965,040	19,659,385	(305,655)	-1.5%
Other In-District	850,000	850,000	-	0.0%
Other Out-of-District	10,000,000	10,000,000	-	0.0%
Total Gallonage (000's)	115,178,960	115,479,627	300,667	0.3%

FY20 Budgeted Water Usage by Customer



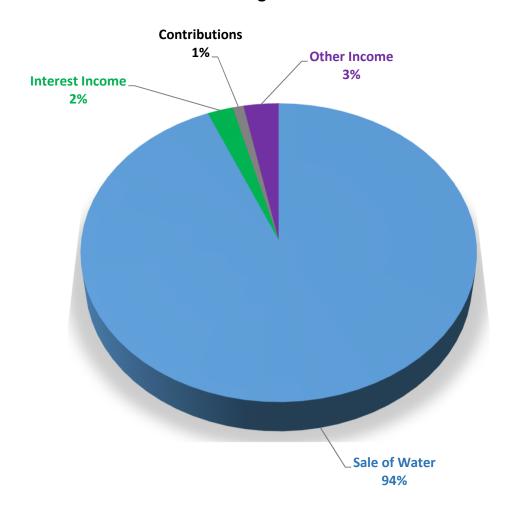
Sources of Revenue

The Sale of Water provides the primary source and largest single component of income to the Revenue Fund. Interest Earnings on investments, program contributions and other income sources provide the remaining 6% of the budgeted revenues for FY20. These individual components will be discussed in more detail on the following pages.

FY19 Approved FY20 Approved

Sources	ا	FY18 Actuals	Budget	Budget	Variance	% Change
Sale of Water	\$	123,684,944	\$ 145,550,606	\$ 144,972,496	\$ (578,110)	-0.4%
Interest Income	\$	5,342,796	\$ 3,500,000	\$ 3,500,000	\$ -	0.0%
Contributions	\$	438,126	\$ 477,900	\$ 1,496,068	\$ 1,018,168	213.1%
Other Income	\$	9,327,575	\$ 2,275,112	\$ 4,803,730	\$ 2,528,618	111.1%
Total	\$	138,793,441	\$ 151,803,618	\$ 154,772,294	\$ 2,968,676	2.0%

FY20 Budgeted Revenues

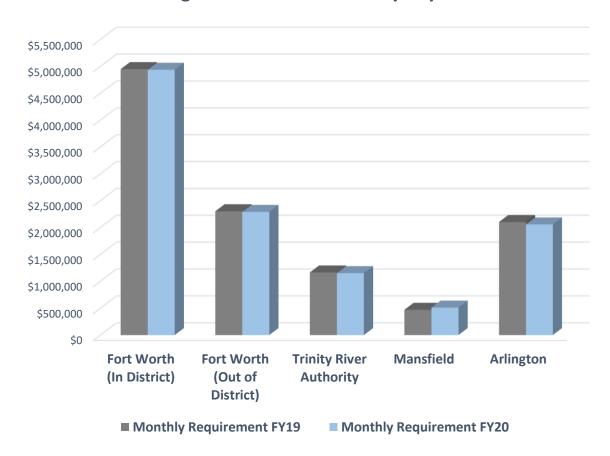


Sale of Water

Customer Monthly Payments

	Fort Worth (In District)	Fort Worth (Out of District)	Trinity River Authority	Mansfield	Arlington
FY20 Estimated Usage (000's)	47,187,000	21,901,000	11,001,724	4,880,518	19,659,385
FY20 Budgeted Rate per 1,000 Gallons	\$1.25539	\$1.25539	\$1.25539	\$1.25539	\$1.25539
FY20 Budgeted Revenue Requirement	\$59,238,088	\$27,494,296	\$13,811,454	\$6,126,953	\$24,680,195
FY19 Budgeted Revenue Requirement	\$59,375,071	\$27,623,075	\$13,961,376	\$5,636,445	\$25,229,787
Monthly Requirement FY20 Monthly Requirement FY19	\$4,936,507 \$4,947,923	\$2,291,191 \$2,301,923	\$1,150,955 \$1,163,448	\$510,579 \$469,704	\$2,056,683 \$2,102,482

Budgeted Customer Monthly Payments



Interest Income

The Revenue Fund budgeted interest income includes interest income generated from the operating Revenue Fund as well as the Bond Reserve Fund and the unspent bond proceeds. The majority of the income comes from the Reserve Fund which holds a balance equal to the largest annual debt service payment per bond covenant requirements and is able to invest in longer term investments. In addition to the Reserve Fund, in the past the District issued long-term debt for multi-year projects which allowed available proceeds to be invested and increased Interest Income in those years. As the District changes to issuing Extendible Commercial Paper Bonds, those excess proceeds will not be available as the District will only issue for short term cash flow needs and then roll those issuances to long-term bonds after they are spent. The offset is that Interest Expense will also be lower than it would have been as the District did not have to pay interest on proceeds that weren't needed at the beginning of a project. Therefore, starting in FY19, the District has decreased the budgeted Interest Income to account for that change in debt issuance practices.

The graph below illustrates the actual interest earned on investments for the past 10 years and budgeted interest income for FY19 and FY20.



^{*}Budgeted Interest Income

Contributions

Contribution revenues help off-set the District's expenses for the Water Efficiency and Pollution Campaign. In FY20 these revenues will account for \$1.5M in income for the Revenue Fund. A closer look at these program's expense budgets will be shown in the expenditures section on page 17.

In FY20,the Water Efficiency program will add North Texas Municipal Water District (NTMWD) as a contributor to the program. Both the City of Dallas and NTMWD have agreed to contribute \$583,334 each to the public outreach and education campaign, also known as "Water is Awesome." This will be approximately a \$400K increase for the City of Dallas from their FY19 contribution. Additionally, Upper Trinity Water District, the City of Dallas and NTMWD are projected to give \$5K each to the Regional Water Symposiums. The City of Dallas has also agreed to contribute \$20K to the Weekly Watering program in FY20.

For FY20, the contributors to the Pollution Campaign will be the City of Dallas and the City of Fort Worth with \$200K each, and the City of Denton with \$13K. As the Pollution Campaign supports both the Water Supply and Flood Protection missions, the contributions and expenses are split between the Revenue Fund and General Fund budgets. See below for Revenue Fund's portion of revenues and page 17 for details on the expenses.

Water is awesome. Learn to save it at: WaterIsAwesome.com

EV10 Approved EV20 Approved

			LII	19 Approved	F Y 4	zo Approved	
Program		L8 Actuals		Budget		Budget	Variance
Water Efficiency Program Revenues	\$	178,126	\$	187,500	\$	1,205,668	\$ 1,018,168
Pollution Campaign (Reverse Litter)	\$	260,000	\$	290,400	\$	290,400	\$ -
Tota	al \$	438,126	\$	477,900	\$	1,496,068	\$ 1,018,168



Other Income

In FY20, revenue from Dallas Water Utilities is expected to significantly increase as the joint sections of the Integrated Pipeline project come online.

The Reserve Fund requirement is expected to decrease in FY20 due to a decrease in debt service payments, therefore \$1.39M will become available from excess reserve funds.

Other Water Sales are from customers whose payments are not based on the District's system rate. The \$830K decrease is due to a budget adjustment for the City of Weatherford as they have not needed to pull District water from Benbrook Lake and are not projecting to do so this year.

The increase in permits, leases and sales is due in part to a projected increase in the number of septic and improvement permits issued at Cedar Creek and Richland Chambers, and the sale of hydroelectric power at Lake Arlington's terminal storage facility is anticipated to increase by \$20K in FY20.

			F١	19 Approved	FY	20 Approved		
Sources	FY18 Actuals			Budget	Budget		Variance	
Dallas Water Utilities	\$	237,663	\$	501,361	\$	2,422,529	\$	1,921,168
Excess Reserve Funds	\$	7,884,999	\$	-	\$	1,390,000	\$	1,390,000
Other Water Sales - not based on rate	\$	695,405	\$	1,330,000	\$	500,000	\$	(830,000)
Permits, Sales, Leases	\$	448,991	\$	418,451	\$	471,201	\$	52,750
Miscellaneous Revenues	\$	60,517	\$	25,300	\$	20,000	\$	(5,300)
Total	\$	9,327,575	\$	2,275,112	\$	4,803,730	\$	2,528,618



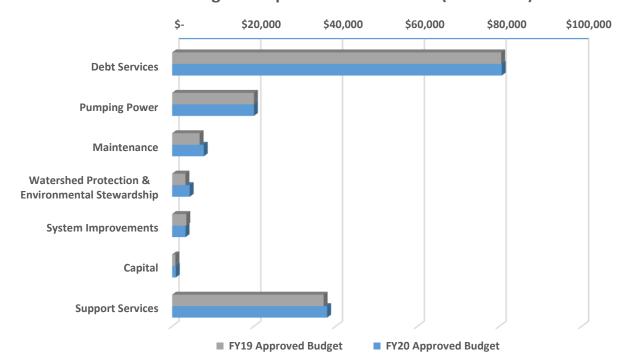
The Hydroelectric Turbine, pictured above, is located at Arlington Outlet and produces electricity which the District sells back to the grid. FY20 income from the sale of power is estimated at \$20K.

Revenue Fund Expenditure Budget Overview

The FY20 Water Supply Operating Budget is presented in budget categories. The Revenue Fund capital, system improvements and maintenance budgets are directly related to the District's commitment to delivering a reliable, resilient supply of water to the public at the lowest cost and highest quality possible. Through incorporation of the Water Efficiency program, the Pollution Campaign, and the Watershed Protection programs, the District continues to show its commitment to Watershed Protection and Environmental Stewardship. The Water Supply operations are supported through administrative and professional services, information technology and a staff committed to the Water Supply mission. The table below shows the FY18 actual costs in each area, along with the FY19 approved budget and the proposed FY20 budget.

				FY	19 Approved	FΥ	20 Approved		
Budget Categories	FY18 Actuals			Budget		Budget	Variance	% Change	
Debt Services		\$	87,386,536	\$	80,482,793	\$	80,610,331	\$ 127,538	0.2%
Pumping Power		\$	12,846,896	\$	20,000,000	\$	20,000,000	\$ -	0.0%
Maintenance		\$	5,721,118	\$	6,722,177	\$	7,748,979	\$ 1,026,802	15.3%
Watershed Protection &		\$	2,935,066	\$	3,258,640	\$	4,308,134	\$ 1,049,494	32.2%
Environmental Stewardsh	nip								
System Improvements		\$	1,939,613	\$	3,463,424	\$	3,281,700	\$ (181,724)	-5.2%
Capital		\$	622,299	\$	807,451	\$	912,717	\$ 105,266	13.0%
Support Services		\$	27,733,519	\$	37,069,134	\$	37,910,433	\$ 841,299	2.3%
	Total	\$	139.185.047	Ś	151.803.619	Ś	154.772.294	\$ 2.968.675	2.0%

Budget Comparison FY19 to FY20 (thousands)



FY20 Operating Expenditures

Strategic Goals

Tarrant Regional Water District has five water supply strategic goals, and operating costs are budgeted with these goals in mind.

Goal 1: Efficiently meet 100% of customer water supply needs during normal operations with the most treatable water possible.

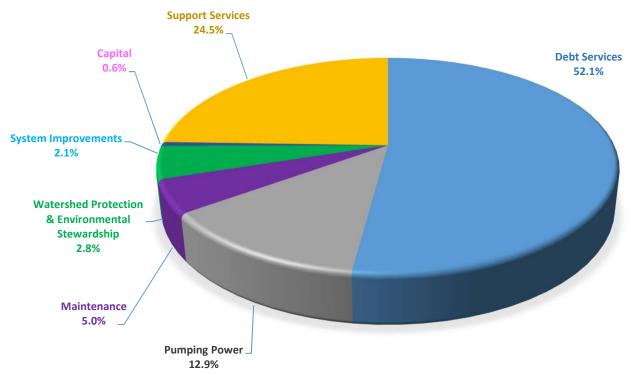
Goal 2: Ensure the public is well informed about the TRWD mission and activities.

Goal 3: Provide the best public service by coordination with other government agencies and stakeholders that together provide quality drinking water to the public.

Goal 4: Maintain cost effective business practices that maximize system operating capability, reliability, and security.

Goal 5: Incorporate environmental stewardship, conservation, and sustainability into all district practices.

FY20 Approved Budget



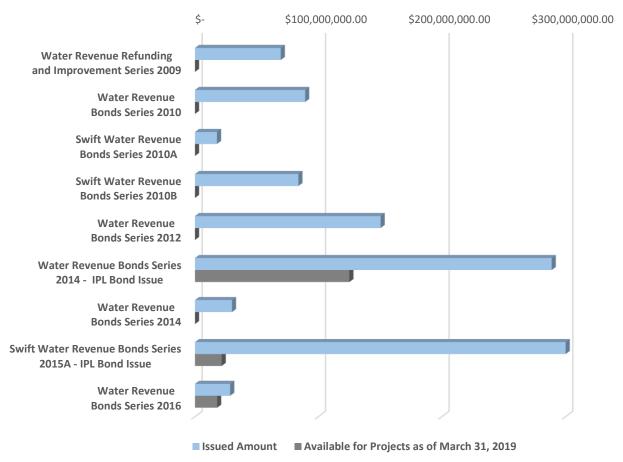
Debt

The District is sensitive to the escalating costs related to water supply and the impact to our customers. We continue to explore financing options that reduce the cost of capital investments and we prioritize our expenditures through our asset management and capital improvement program. Attached as Appendix A is a description of the capital improvement projects the District plans to undertake in 2020.

			FY	19 Approved	FY	20 Approved		
	F	FY18 Actuals		Budget		Budget	Variance	%Change
Bonds Payable	\$	41,459,999	\$	34,340,000	\$	34,030,000	\$ (310,000)	-0.9%
Interest Expense	\$	45,896,789	\$	46,135,393	\$	46,553,631	\$ 418,238	0.9%
Bond Issuance Expense	\$	22,939	\$	-	\$	20,000	\$ 20,000	100.0%
Paying Agent Fees	\$	6,809	\$	7,400	\$	6,700	\$ (700)	-9.5%
Total Debt Service	ce \$	87,386,536	\$	80,482,793	\$	80,610,331	\$ 127,538	0.2%

The graph below illustrates how much debt the District has issued since 2009 and the amount of available funds we have as of March 31, 2019.

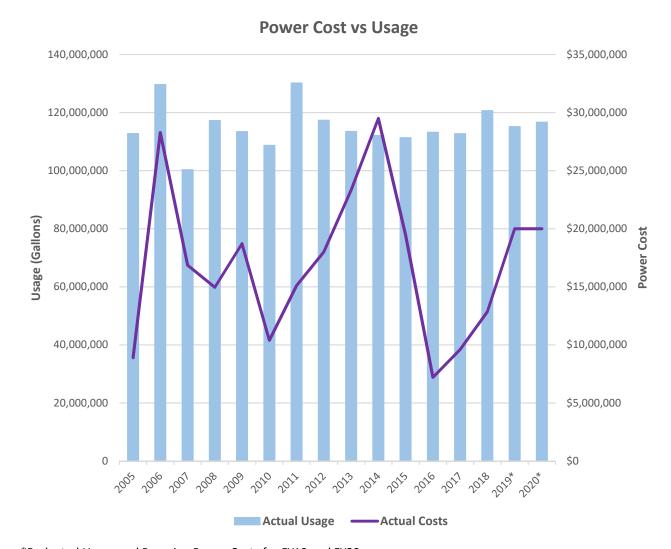
Bonds Issued vs Available as of March 31, 2019



Pumping Power Budget

For the FY20 Revenue Fund Operating Budget, pumping power was broken out as a budget category in an effort to further explain the factors that influence pumping power costs. The amount of rainfall leading into the fiscal year and power unit costs have the greatest impact on actual costs. The graph below illustrates how changes in usage do not always have a direct correlation to pumping power costs. In FY16 the Customer Advisory Committee agreed that because the uncertainties of predicting pumping costs 18 months in advance are so great, the annual pumping power budget would be set at \$23M annually. In FY19 the budget was reduced to \$20M annually due to significantly low power cost years as well as additional model information. As the impact of the Integrated Pipeline on pumping power costs becomes more clear, this number will again be revisited.

	FY18 Actuals	Budget	Budget	Variance
Pumping Power	\$ 12,846,896	\$ 20,000,000	\$ 20,000,000	\$ -



^{*}Budgeted Usage and Pumping Power Costs for FY19 and FY20

Maintenance Budget

The Water Supply Maintenance budget is costs to maintain the water supply system. The largest increases from FY19 is in Pipeline and Pump Station and Facilities Maintenance. This is largely due to additional Integrated Pipeline locations coming online in FY20. Additional increases are proposed in structure maintenance at Richland Chambers for wetlands vegetation enhancements including sprigging and putting down a mulch blanket as well as needed levee repairs at Richland Chambers due to winter flooding. The Maintenance Support budget includes equipment rental, contract labor and fuel used on various projects.

FY19	Approved	FY20	Approved
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	F۱	Y18 Actuals	Budget	Budget	Variance		% Change
Pipeline & Pump Station	\$	2,988,437	\$ 3,601,000	\$ 4,170,500	\$	569,500	15.8%
Facilities Maintenance	\$	968,439	\$ 1,146,976	\$ 1,573,375	\$	426,399	37.2%
Equipment & Fleet	\$	405,836	\$ 668,641	\$ 681,741	\$	13,100	2.0%
Maintenance Support	\$	961,443	\$ 603,560	\$ 607,763	\$	4,203	0.7%
Benbrook Reservoir O&M	\$	212,207	\$ 487,000	\$ 465,600	\$	(21,400)	-4.4%
Stream Gauging Stations	\$	184,756	\$ 215,000	\$ 250,000	\$	35,000	16.3%
Total	\$	5,721,118	\$ 6,722,177	\$ 7,748,979	\$	1,026,802	15.3%



TRWD has a pipe replacement program that utilizes sophisticated technology to identify areas on each pipe segment with the highest potential of failure. Sections of pipe are replaced by the District's crew while demands are low, saving time and valuable dollars. The FY20 Pipeline and Pump station budget includes a \$768K budget to replace 14 pipe segments totaling 336 feet.

Watershed Protection and Environmental Stewardship Budget

From ensuring the best water quality in our reservoirs through the Reverse Litter campaign and Reservoir Cleanups to our Water Efficiency program, TRWD is committed to protecting our watersheds and being strong environmental stewards. The District's development of wetlands not only provides an additional source for water supply, but also provides a wide array of ancillary benefits, which include optimal habitat for wildlife, as well as educational and research opportunities. Details of the District's two largest environmental and watershed protection programs are discussed on the next page.

The District collects water samples every quarter from each reservoir. The costs to test these samples are included in the environmental cost budget and are projected to decrease in FY20 due to the restructuring of the District's contract with the testing laboratory.

				FY:	L9 Approved	FY2	20 Approved				
		FY18 Actuals			Budget		Budget	Variance		% Change	
Water Efficiency Program		\$	1,626,191	\$	1,541,910	\$	2,858,502	\$	1,316,592	85.4%	
Environmental		\$	438,331	\$	842,900	\$	549,050	\$	(293,850)	-34.9%	
Pollution Campaign		\$	552,363	\$	490,400	\$	490,400	\$	-	0.0%	
Watershed Protection		\$	278,053	\$	347,630	\$	369,182	\$	21,552	6.2%	
Reservoir Cleanups		\$	40,128	\$	35,800	\$	41,000	\$	5,200	14.5%	
	Total	¢	2 025 066	¢	2 250 640	Ċ	/ 200 12/	Ċ	1 0/0 /0/	22.20/	



TRWD actively participates in an average of 60 events per year with the TRWD Stream Trailer.

Watershed Protection and Environmental Stewardship Budget (continued)

Water Efficiency Program

The Water Efficiency program has enabled TRWD to defer new supplies and capital costs. This year the North Texas Municipal Water District (NTMWD) has joined the TRWD-Dallas partnership, unifying the awareness campaign messaging and media buys. The Water Efficiency program budget has increased accordingly, but this increase is offset by contributions from NTMWD and the City of Dallas.

A School Education program has been added to the FY20 budget to increase awareness in the upcoming generation of water users.

FY20 Water Efficiency Program

Program Area	E	(penditures	C	ontributions	TRWD Portion		
"Water is Awesome" Campaign	\$	2,050,002	\$	1,166,668	\$	883,334	
School Education Program	\$	263,000	\$	-	\$	263,000	
Regional Symposiums	\$	24,000	\$	19,000	\$	5,000	
Program Exhibits	\$	6,000	\$	-	\$	6,000	
Video and Promotional Items	\$	45,000	\$	-	\$	45,000	
Campaign Programs (waterwise,	\$	439,000	\$	20,000	\$	419,000	
weekly watering, etc.)							
Gardening & Landscape	\$	31,500	\$	_	\$	31,500	
Workshops	·	,	•		·	,	
Total	\$	2,858,502	\$	1,205,668	\$	1,652,834	



Learn ways to save it at:

WaterlsAwesome.com

Pollution Campaign

The Reverse Litter Campaign is entering its eighth year of a successful coordinated effort with the City of Dallas, the City of Denton and the City of Fort Worth to promote environmental stewardship and mindfulness of the water quality of our lakes and rivers.

FY20 Pollution Campaign

	Ex	penditures	Co	ntributions	TR	WD Portion
Reverse Litter Campaign	\$	490,400	\$	290,400	\$	200,000

System Improvement Budget

The Water Supply System Improvement budget consists of projects that enhance, strengthen, or support the current system infrastructure. Listed below are the System Improvement projects budgeted for FY20.

The Asset Management program touches every aspect of the Water Supply System, from equipment purchases, to staff retention, to the planning and execution of projects to best serve our communities. The program is an integral part of assuring the District continues to use best practices in all facets of maintenance and operations.

The Water Delivery Master Plan project is an analysis that will evaluate existing and future system capacity and operational needs in the TRWD water delivery system. This master plan will serve as a platform to evaluate and prioritize water delivery system capital projects needed to meet projected demands and to evaluate needs for resiliency and operational flexibility in the system.

EV20 Approved

	FY2U Approved						
Project		Budget					
Refurbish Richland Chambers Spillway Gate Controllers	\$	720,000					
Asset Management Project - Phase 4	\$	500,000					
Additional Variable Frequency Drives at RC3L - Design	\$	400,000					
Cedar Creek Reservoir Office Refurbish	\$	325,000					
Water Delivery Master Plan	\$	300,000					
Eagle Mountain C Valve Rehabilitation	\$	250,000					
Probable Maximum Flood & Breach Analyses for Eastern Reservoirs	\$	200,000					
Other Miscellaneous System Improvement Projects	\$	586,700					
	Total \$	3,281,700					



Capital Budget

The District considers purchases of \$10K or greater for a piece of machinery or equipment to be a capital purchase. Purchases of property and construction costs of more than \$20K will also fall in the category of a capital asset. Construction or remodeling projects that are changing the function of a current TRWD asset are considered to be capital expenditures. The FY20 budget includes a renovation to convert a metal building previously used as a mechanic shop into an office for the Eagle Mountain Reservoir staff and a budget to upgrade two pump station vibration units. The FY20 capital expenditure budget is detailed below.

	FY	20 Approved
Capital Projects		Budget
Two 6500 Vibration Units	\$	140,000
Eagle Mountain Lake Office/Shop Conversion	\$	120,000
Admin Building Note	\$	82,217
Land Purchases	\$	25,000
Total Capital Proj		367,217
Capital Equipment		
Replacement:		
4 - 1/2 Ton 4WD Crew Cab Pickup	\$	136,000
1 - Backhoe Loader 4WD	\$	115,000
2 - 1 Ton 4WD Ext Cab & Chassis	\$	95,000
1 - 3/4 Ton 2WD Pickup	\$	42,000
2 - 20KW Stand-by-Generator	\$	39,000
1 - Full Size SUV 2WD	\$ \$	36,500
1 - Heavy Duty Welder	\$	11,500
1 - Heavy Duty Tandem Axle Trailer	\$	8,500
	\$	483,500
Additions:		
1 - 3/4 Ton 2WD Pickup	\$	42,500
1 - 20KW Stand-by-Generator	\$	19,500
	\$	62,000
Total Capital Equipn	nent \$	545,500
Total Capital Expendit	ures \$	912,717

Vibration units help identify pump inefficiencies and potential damage following failure events. The data collected from the vibration units also help identify necessary preventative maintenance in order to avoid costly failures from occurring.



6500 Vibration Unit

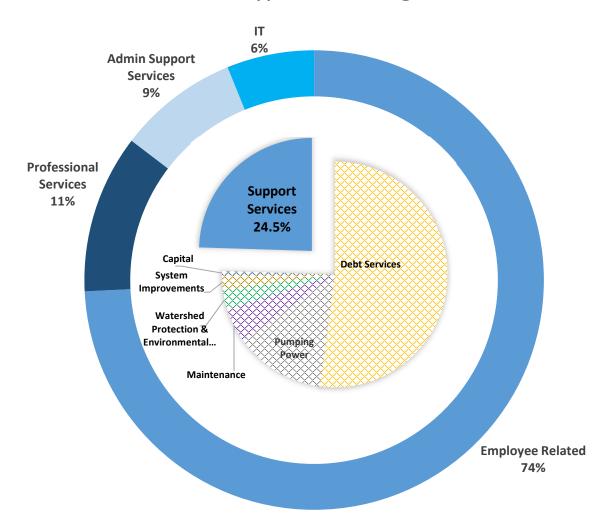
Support Services Budget Overview

The support services budget consists of expenditures for services that support the District overall, including personnel and administrative costs. Employee related budgets make up 74% of the overall support services budget for FY20. Additional details of each of these areas will be discussed on the following pages.

FY19 Approved FY20 Approved

	F	Y18 Actuals	Budget	Budget	1	Variance	% Change
Employee Related	\$	20,739,179	\$ 27,386,391	\$ 28,136,544	\$	750,153	2.7%
Professional Services	\$	3,234,047	\$ 4,390,631	\$ 4,231,154	\$	(159,477)	-3.6%
Admin Support Services	\$	2,382,213	\$ 3,078,194	\$ 3,211,326	\$	133,132	4.3%
<u>IT</u>	\$	1,378,080	\$ 2,213,918	\$ 2,331,409	\$	117,491	5.3%
Total Support Services	\$	27,733,519	\$ 37,069,134	\$ 37,910,433	\$	841,299	2.3%

FY20 Support Services Budget

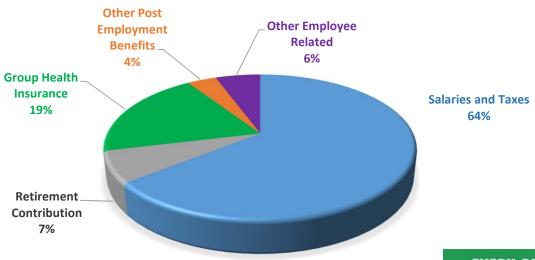


Support Services Employee Related Budget

The total Employee Related budget for FY20 is \$28.1M, representing an increase of 2.7% from the prior year's budget. The drivers for the slight increase in personnel costs were salary and retirement increases due to raises and promotions as well as one full-time position added for FY20. A 10% increase in the Other Post Employment Benefits (OPEB) budget will be seen each year until 75% of the OPEB liability is funded. Other employee related budgets include business and travel, education, and the employee wellness program.

		FY19	FY20		
		Approved	Approved		
	FY18 Actuals	Budget	Budget	Variance	% Change
Salaries and Taxes	\$ 14,709,105	\$ 17,422,147	\$ 18,081,157	\$ 659,010	3.8%
Retirement Contribution	\$ 1,652,591	\$ 1,880,762	\$ 1,953,428	\$ 72,666	3.9%
Group Health Insurance	\$ 2,493,726	\$ 5,655,929	\$ 5,512,199	\$ (143,730)	-2.5%
Other Post Employment Benefits	\$ 838,530	\$ 922,383	\$ 1,014,621	\$ 92,238	10.0%
Other Employee Related	\$ 1,045,227	\$ 1,505,171	\$ 1,575,139	\$ 69,968	4.6%
Total	\$ 20,739,179	\$ 27,386,392	\$ 28,136,544	\$ 750,152	2.7%

FY20 Employee Related Budgets



Recruiting and retaining forward thinking and committed employees is a top priority for the District.

Support Services Professional Services Budget

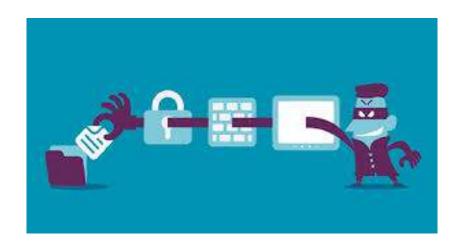
Legal and consulting services make up the majority of the FY20 professional services budget. Additional detail of the FY20 consulting service areas is shown in the chart below. The miscellaneous professional fees consists of the budgets for the annual audit, arbitrage, and surveying and appraisal fees.

FY19 Approved FY20 Approved

	F	Y18 Actuals	Budget	Budget	'	Variance	% Change	
Consulting Fees	\$	2,560,931	\$ 3,501,346	\$	3,334,976	\$	(166,370)	-4.8%
Legal Fees	\$	457,693	\$ 627,600	\$	627,600	\$	-	0.0%
Misc. Professional Fees	\$	215,423	\$ 261,685	\$	268,578	\$	6,893	2.6%
	Total \$	3,234,047	\$ 4,390,631	\$	4,231,154	\$	(159,477)	-3.6%

FY20 Large Consulting Projects

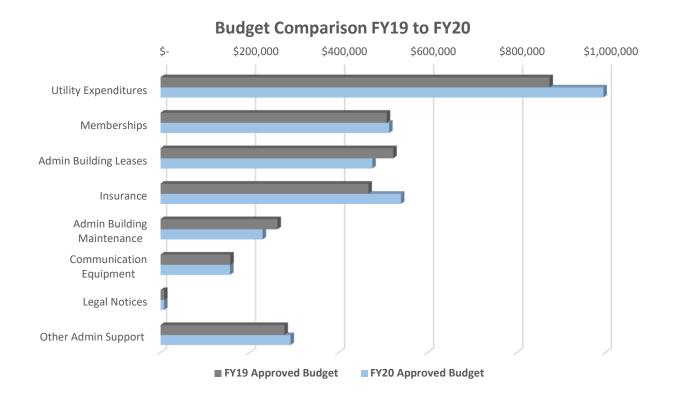
Cyber Security and Information Technology Consulting	\$ 582,750
Pipeline Infrastructure Testing and Studies	\$ 400,000
Riverware Software Support	\$ 100,000
Physical Security Vulnerability Assessment	\$ 94,500



Support Services Administrative Support Services Budget

The Administrative Support Services budget consists of overhead type expenditures. Utility costs are budgeted to increase in FY20 due to IPL locations coming online. The administration building lease budget, which consists of the administration buildings held by the General fund and leased to the Revenue Fund, decreased in FY20 due to one of the leases ending in FY19. The table and chart below show the budget changes from FY19 to FY20 for all administrative support areas.

			FY	19 Approved	FY	20 Approved			
	FY	FY18 Actuals		Budget		Budget	١	/ariance	% Change
Utility Expenditures	\$	636,471	\$	874,002	\$	995,679	\$	121,677	13.9%
Memberships	\$	410,690	\$	508,113	\$	513,705	\$	5,592	1.1%
Admin Building Leases	\$	522,893	\$	522,893	\$	475,890	\$	(47,003)	-9.0%
Insurance	\$	363,692	\$	467,034	\$	540,120	\$	73,086	15.6%
Admin Building Maintenance	\$	139,148	\$	262,679	\$	229,399	\$	(33,280)	-12.7%
Communication Equipment	\$	48,793	\$	156,900	\$	156,270	\$	(630)	-0.4%
Legal Notices	\$	4,018	\$	8,060	\$	8,060	\$	-	0.0%
Other Admin Support	\$	256,508	\$	278,513	\$	292,203	\$	13,690	4.9%
Total	\$	2,382,213	\$	3,078,194	\$	3,211,326	\$	133,132	4.3%

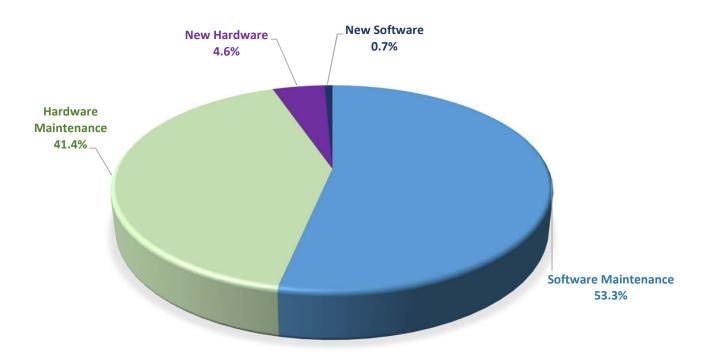


Support Services Information Technology Budget

The Information Technology budget is projected to increase in FY20 to keep up with the escalating threat of cyber attacks and data breaches. The cost to add needed additional modules and elements to existing software is increasing the software maintenance budget for FY20. In addition, the New Software budget includes a purchase of a SharePoint APM software, which will audit access and monitor the health of the SharePoint platform. Computer hardware maintenance costs are increasing and new hardware is decreasing as the hardware that was budgeted as new in FY19 will now be included in the hardware maintenance budget.

			FY19 Approved		FY	20 Approved			
	FY18 Actuals		Budget			Budget	,	Variance	% Change
Software Maintenance	\$	861,737	\$	1,166,228	\$	1,243,210	\$	76,982	6.6%
Hardware Maintenance	\$	398,603	\$	435,330	\$	965,349	\$	530,019	121.8%
New Hardware	\$	107,533	\$	580,860	\$	107,100	\$	(473,760)	-81.6%
New Software	\$	10,207	\$	31,500	\$	15,750	\$	(15,750)	-50.0%
Total	\$	1.378.080	\$	2,213,918	\$	2,331,409	\$	117.491	5.3%

FY20 Approved IT Budget



Revenue Fund FY20 Budget

				•								
	F۱	19 Approved	F۱	/20 Approved								
Revenues		Budget		Budget		Variance	% Change					
Sale of Water	\$	145,550,606	\$	144,972,496	\$	(578,110)	-0.4%					
Interest Income	\$	3,500,000	\$	3,500,000	\$	-	0.0%					
Dallas Water Utility	\$	501,361	\$	2,422,529	\$	1,921,168	383.2%					
Contributions	\$	477,900	\$	1,496,068	\$	1,018,168	213.1%					
Excess Reserve Funds	\$	-	\$	1,390,000	\$	1,390,000	100.0%					
Other Water Sales	\$	1,330,000	\$	500,000	\$	(830,000)	-62.4%					
Leases/Concessions & Contributions	\$	418,451	\$	471,201	\$	52,750	12.6%					
Miscellaneous	\$	25,300	\$	20,000	\$	(5,300)	-20.9%					
Total Revenues	\$	151,803,618	\$	154,772,294	\$	2,968,676	2.0%					
FY19 Approved FY20 Approved												
Expenditures	•	Budget	•	Budget		Variance	% Change	Notes*				
Debt Service	\$	80,482,793	\$	80,610,331	\$	127,538	0.2%					
Pumping Power	\$	20,000,000	\$	20,000,000	\$	-	0.0%					
<u>Maintenance</u>												
Pipeline & Pump Station	\$	3,601,000	\$	4,170,500	\$	569,500	15.8%	1				
Facilities Maintenance	\$	1,141,976	\$	1,573,375	\$	431,399	37.8%	2				
Equipment & Fleet	\$	617,800	\$	622,300	\$	4,500	0.7%					
Maintenance Support	\$	607,250	\$	611,000	\$	3,750	0.6%					
Benbrook Reservoir O&M	\$	322,000	\$	300,600	\$	(21,400)	-6.6%					
Stream Gauging Stations	\$	215,000	\$	250,000	\$	35,000	16.3%	3				
Total Maintenance	\$	6,505,026	\$	7,527,775	\$	1,022,749	15.7%					
Watershed Protection and Environmental	Ste	wardship										
Water Efficiency Program	\$	1,541,910	\$	2,858,502	\$	1,316,592	85.4%	4				
Environmental	\$	828,500	\$	534,000	\$	(294,500)	-35.5%					
Pollution Campaign	\$	490,400	\$	490,400	\$	-	0.0%					
Watershed Protection	\$	347,630	\$	369,182	\$	21,552	6.2%					
Reservoir Cleanups	\$	35,800	\$	41,000	\$	5,200	14.5%					
Total Watershed Protection & Environmental Stewardship		3,244,240	\$	4,293,084	\$	1,048,844	32.3%					
Water System Improvements	\$	3,468,424	\$	3,281,700	\$	(186,724)	-5.4%					
Capital	\$	807,451	\$	912,717	\$	105,266	13.0%	5				
Support Services												
Employee Related	\$	27,386,391	\$	28,136,544	\$	750,153	2.7%					
Professional Services	\$	4,390,631	\$	4,231,154	\$	(159,477)	-3.6%					
Admin Support Services	\$	3,304,744	\$	3,447,580	\$	142,836	4.3%					
IT	\$	2,213,918	\$	2,331,409	\$	117,491	5.3%					
Total Support Services		37,295,684	\$	38,146,687	\$		2.3%					
Total Expenditures	\$	151,803,618	\$	154,772,294	\$	2,968,676	2.0%					

^{*}See explanations for significant variances on next page

Variance Explanations

1 Pipeline and Pumpstation Maintenance

The increase is due to pipeline and pumpstation maintenance budgets that were added for the additional IPL locations anticipated to come online in FY20

2 Facilities Maintenance

The increase is due to facility maintenance costs that are projected to increase largely due to anticipation of additional IPL locations coming online.

3 Stream Gauging Stations

The increase in the stream gauging station budget is due to an increase in the cost of maintenance and the addition of a new gauge for FY20.

4 Water Efficiency Program

The Water Efficiency Program increased the public outreach and education budget in order to purchase additional regional media buys and add new educational programs. Of this increase \$1M was off set by an increase in contributions for the program.

5 Capital

The increase in Capital is due to adding a backhoe loader. This piece of equipment will replace two older units that will be sold at auction.

Appendix



Wetlands at Richland Chambers Reservoir

Memo

To: TRWD Board of Directors and Customer Advisory Committee

From: Dan Buhman
Date: April 12, 2019

Re: 2020 Capital Improvement Projects

The purpose of this memorandum is to provide a brief description of the capital improvement projects TRWD plans to undertake in 2020. Many of these projects span multiple years. Funding for these projects is provided through revenue bonds, extendable commercial paper bonds, and through the TRWD Revenue Fund budget.

2000 Horsepower Variable Frequency Drive Addition at the Richland Chambers Low Capacity Booster Pump Station (RC3L) - \$1.5M

Summary: Two of the existing three pump motors at the RC3L Booster Pump Station in Waxahachie (that boosts water delivered from Cedar Creek and Richland-Chambers Reservoirs) are driven by variable frequency drives. The third pump needs the same capability added in order to optimize pumping operation of this critical booster pump station to match flows from the lake pump stations. The new 2000 Hp VFD and associated cooling enhancements in the electrical room will be under design in later 2019 and installed in 2020. Capital Cost Projection: \$1.5M.

Cedar Creek (CC) Section II Pipeline Replacement – 7 miles in the Mansfield to Midlothian Area - \$72M

Summary: In this area of the Cedar Creek pipeline, approximately one third of all pipe segments have pre-stressing wire breaks due to hydrogen embrittlement. Potential pipeline ruptures in this area of highly distressed pipeline would result in significant negative consequences. Moreover, loss of this section of the CC Pipeline due to a pipe failure would negatively impact TRWD's ability to deliver water to several primary

customer cities fed directly from the pipeline. The recommended course of action is to remove and replace approximately seven miles of 72" pre-stressed concrete cylinder pipe (PCCP) with 90" welded steel pipe in the Mansfield to Midlothian area. Design/permitting is expected to begin in mid-

2019, with construction starting in 2021/2022 following completion of the new lake pump station at Cedar Creek Lake that feeds the Integrated Pipeline and connecting IPL pipeline Section 17 in 2020. Approximate Project Cost: \$72M

Richland Chambers Lake Pump Station (RC1) Conversion from Bulk Chlorine Gas to Alternative Biofilm and Zebra Mussel Control System - \$12.5M

Summary: The primary alternative to replacing chlorine gas at the Richland Chambers Lake Pump Station to prevent zebra mussel infestation of TRWD's transmission pipeline system and to avoid conveyance of zebra mussel veligers to terminal storage involves a two-phased sodium hypochlorite feed approach. The same system, coupled with ammonia feed to form chloramines, is also effective for pipeline biofilm control, which left unchecked during high flow conditions in the warmer months of the year can lead to significant decreases in flow capacity. The first step would be installation of a series of sodium hypochlorite storage tanks for bulk delivered 12% sodium hypochlorite. Should TRWD determine that on-site sodium hypochlorite (0.8%) generation is warranted, an expanded facility building upon the first phase infrastructure would be constructed. Current capital cost projection for both phases is approximately \$12.5M.

Alternative means for zebra mussel control are also being explored through pilot testing, including the potential use of copper ion. Final results of piloting will be available in late 2019, at which time a decision will be made by TRWD as to which alternative zebra mussel/biofilm control methodology will be employed at RC1 in lieu of the current chlorine gas system.

Water Delivery Master Plan - \$500,000

Summary: This analysis will evaluate existing and future system capacity and operational needs in the TRWD water delivery system. This master plan will serve as a platform to evaluate and prioritize water delivery system capital projects needed to meet projected demands and to evaluate needs for resiliency and operational flexibility in the system. The results will inform the TRWD CIP, ensuring funds are expended efficiently.

Integrated Water Supply Plan Update - \$725,000

Summary: The previous Integrated Water Supply Plan was completed in 2014. It is scheduled to be updated during FY 2021 following completion in 2019 of the Water Supply Service Area Demand Update and completion in 2020 of the Water Delivery Master Plan. The IWSP 2021 Update will integrate the discrete planning accomplished during the two previous years with the Service Area Demand Update and Delivery Master Plan into a series of alternative development plans/scenarios with the greatest potential for continued water supply reliability and resiliency. The objective is to develop an implementation plan for the next 50 years that is adaptive and maximizes reliability while minimizing the effect on customer water rates. The 2021 Region C Regional Water Supply Plan will include TRWD's preferred water supply development strategies through the year 2070. The Integrated Water Supply Plan will perform discrete evaluations of those strategies and establish priorities for financing and sequencing their development.

Continuation - Aquifer Storage and Recovery Demonstration Wells - \$8M

Summary: Aquifer Storage and Recovery (ASR) is a proven technology to store water underground for later use. Benefits of ASR systems include improved resiliency in times of drought, avoidance of evaporation, storage for emergency situations, and an intermittent source of supply to be used during peak demand periods. Based on the results of studies completed for the District in 2000, 2002, and 2015, ASR appears to be a technically feasible water supply strategy for the District. A more detailed business case evaluation was completed in 2016, and based on those results and discussions with other agencies that have implemented ASR, the District decided to implement an ASR demonstration project to verify aquifer performance. The primary purposes of the project are to verify that ASR is feasible in the Trinity aquifer in this region, verify geochemistry reactions, verify recharge rates, verify feasible storage volumes, verify recovery rates, and to verify construction and operating costs. We are progressing with negotiations on an agreement with TRA to site the ASR Pilot Project at their Tarrant County Water Treatment Plant and the design team is progressing pilot well design and supporting TRWD staff with preparations for permitting the project with the TCEQ.

Continuation – Kennedale Balancing Reservoir Expansion, Phase 3 (Modifications to Existing Cells) - \$23M

Summary: Construction activity continues at the Kennedale Balancing Reservoir (KBR). The first two phases – 108" Bypass Piping and the 3rd Cell Foundation have been completed. This third phase of construction to be awarded in the Fall of 2019 and implemented over a two-year period involves the installation of flow-through inlet and outlet piping for the existing two cells, with valves connections to the Cedar Creek, Richland Chambers and IPL pipelines that supply (KBR). Two large concrete splitter box weirs will be removed and current leakage attributed to existing cell inlets plugged. Enhanced operational flexibility and improved water quality will also result. The final phase after this construction, currently scheduled for the mid 2020's, is to complete the new third 165 million gallon third cell at KBR providing additional emergency storage and optimized time of day capability. Capital cost projection for phase 3 cell modifications is approximately \$23M.

General Fund



Trinity River Trails

TRWD General Fund Fiscal Year 2020 Budget Summary

The General Fund includes budgets for both Flood Protection and Recreation missions. See discussion of each individual mission's budgets on the following pages. This budget assumes a tax rate of .0287 cents per \$100 valuation (an increase from 2019), which will generate approximately \$21M in revenues.

Approved Fiscal Year 2020 General Fund Budget

FLOOD CONTROL

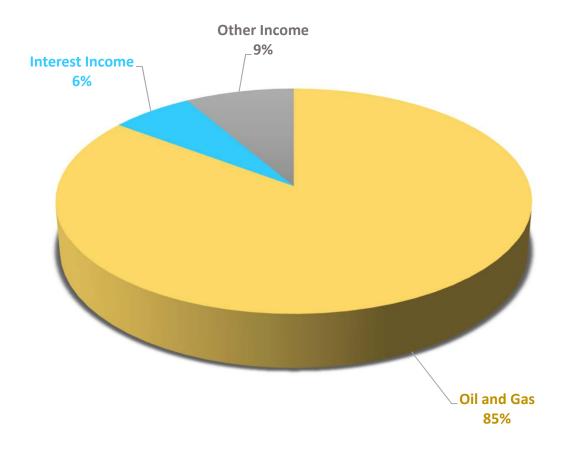
	FY19 Approved		FY20 Approved				
Revenues		Budget		Budget		Variance	% Change
Taxes	\$	12,000,000	\$	21,000,000	\$	9,000,000	75.0%
Reimbursable Project Revenues	\$	972,600	\$	1,622,600	\$	650,000	66.8%
Oil and Gas Revenues	\$	10,000,000	\$	-	\$	(10,000,000)	-100.0%
Interest Income Revenues	\$	200,000	\$	-	\$	(200,000)	-100.0%
Other Income Revenues	\$	1,099,870	\$	-	\$	(1,099,870)	-100.0%
Sub Total Revenues	\$	24,272,470	\$	22,622,600	\$	(1,649,870)	-6.8%
Expenditures							
Flood Protection	\$	19,153,988	\$	20,933,139	\$	1,779,151	9.3%
Reimbursable Project Expenses	\$	972,600	\$	1,622,600	\$	650,000	66.8%
Sub Total Expenditures	\$	20,126,588	\$	22,555,739	\$	2,429,151	12.1%
Budgeted Net Increase to Equity	\$	4,145,882	\$	66,861	\$	(4,079,021)	-98.4%
RECREATION Operating Revenues	\$	1,356,780	\$	2,031,250	\$	674,470	49.7%
Operating Expenses	\$	2,013,140	\$	2,660,148	\$	647,008	32.1%
Use of Contingency Fund Revenues	\$	(656,360)	\$	(628,898)	\$	27,462	-4.2%
CONTINGENCY							
Oil and Gas Revenues	\$	-	\$	10,000,000	\$	10,000,000	100.0%
Interest Income Revenues	\$	-	\$	750,000	\$	750,000	100.0%
Other Income Revenues	\$	-	\$	990,338	\$	990,338	100.0%
Recreation Fund Expenses	\$	-	\$	628,898	\$	628,898	100.0%
Budgeted Net Increase to Equity	\$	-	\$	11,111,440	\$	11,111,440	100.0%
DEBT SERVICE							
TIF Revenues	\$	4,100,820	\$	5,103,557	\$	1,002,737	24.5%
Debt Service Expenses	\$	4,100,820	\$	5,103,557	\$	1,002,737	24.5%
Budgeted Net Increase to Equity	\$	-	\$	-	\$	-	0.0%

Contingency Fund Revenues

Beginning October 1, 2019, the District desires to set aside future Oil and Gas revenues, interest income, and other revenues in a Contingency Fund.

		FY19 Approved			20 Approved			
	FY18 Actuals		Budget		Budget	Var	iance	% Change
Oil and Gas	\$ 9,900,279	\$	10,000,000	\$	10,000,000	\$	-	0.0%
Interest Income	\$ 731,769	\$	200,000	\$	750,000	\$ 55	50,000	275.0%
Other Income	\$ 1,150,337	\$	1,099,870	\$	990,338	\$ (10	09,532)	-10.0%
Total Contingency Fund Revenues	\$ 11,782,385	\$	11,299,870	\$	11,740,338	\$ 44	10,468	3.9%

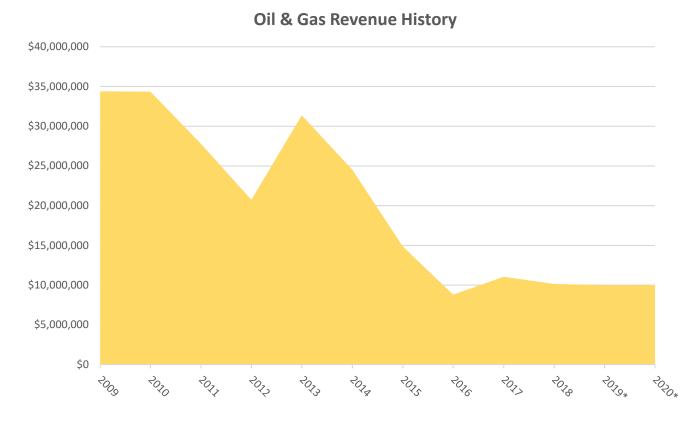
FY20 Approved Budget



Contingency Fund Revenues Oil and Gas Royalties

The majority of revenue from oil and gas royalties is generated from mineral interests located in Wise, Jack and Tarrant Counties under and surrounding Lake Bridgeport and Lake Eagle Mountain. Due to uncertainty of oil and gas production, revenues received during the year will be set aside as a contingency for future needs.

The chart below illustrates the actual revenues received from oil and gas royalties for the past 10 years with the budgeted revenues for FY19 and FY20.



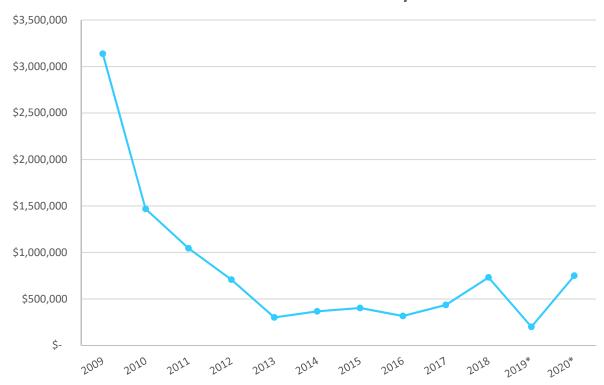
^{*}Budgeted Oil & Gas Revenues

Contingency Fund Revenues Interest Income

Interest income is generated from the District's General Fund investment portfolio. The portfolio consists of U.S. government and agency fixed income securities as well as investments in Local Government Investment Pools and has an average maturity of two years. Interest rates have increased over the past two years, and the budget for interest income has been increased for FY20 to reflect the change in the market, as seen below.

			FY	19 Approved	FY	20 Approved		
	FY1	L8 Actuals		Budget		Budget	Variance	% Change
Interest Income	\$	731,769	\$	200,000	\$	750,000	\$ 550,000	275.0%

Investment Income History



^{*}Budgeted investment income

Contingency Fund Revenues Other Income

Other Income is budgeted less in FY20 compared to FY19 due to a decrease in miscellaneous revenues and administration building leases. The General Fund built and holds the administration building assets and leases them to the Revenue Fund. In FY19 one of the administration building leases was fully paid and therefore the revenues will decrease in FY20. Miscellaneous Revenues budget decreased due to park dedication fees being eliminated from the budget for FY20, as this program is not expected to start until a later date. Other Income also consists of leases and permits along the Floodway, which is expecting an increase in FY20 due to new lease agreements.

Sources	Budget	Budget		Variance	% Change	
Annex East, West and Garage Lease	\$ 661,890	\$	602,391	\$	(59,499)	-9.0%
Miscellaneous Revenues	\$ 266,446	\$	196,589	\$	(69,857)	-26.2%
Floodway Leases & Permits	\$ 147,034	\$	159,608	\$	12,574	8.6%
Equipment & Sand Sales	\$ 24,500	\$	31,750	\$	7,250	29.6%
Total	\$ 1,099,870	\$	990,338	\$	(109,532)	-10.0%

TRWD General Fund Flood Protection FY20 Budget Summary

TRWD Flood Protection Mission

Reduce the risk of flooding in our communities with dependable flood damage reduction infrastructure and operations.

Flood Protection Overview

TRWD was created during the 1920's in part to help protect Fort Worth from devastating floods that wreaked havoc on parts of the city. Since that time, the District has played an active role in protecting people and properties along the Trinity River. The District has and continues to work closely with the U.S. Army Corps of Engineers to maintain a 27-mile levee system built in the 1950's. Additionally, the District maintains both Marine Creek and Cement Creek to provide additional protection to the city during flooding events.

Each year the District works to efficiently and effectively manage the current flood protection infrastructure while at the same time looking ahead to prepare for potential future flood events.

The annual budget includes both short term maintenance as well as long term strategies and structure implementation while working every year to increase practices for cost effective management of the system. The District believes in preparing now for the future in order to protect its citizens in the best possible manner.

Approved FY20 Flood Protection Budget

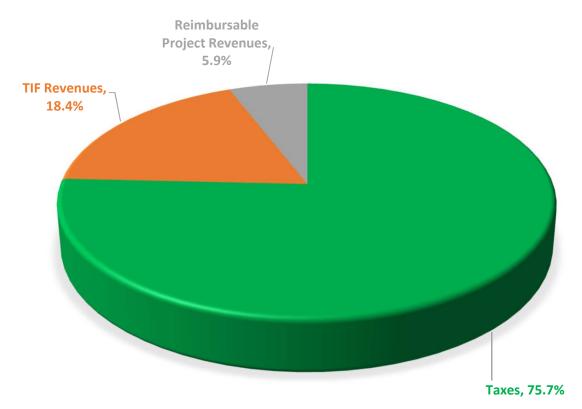
	F	Y18 Actuals	FY	19 Approved Budget	FΥ	'20 Approved Budget		
Flood Pr	Flood Protection System Revenues							
Taxes	\$	12,010,248	\$	12,000,000	\$	21,000,000		
Total Revenues	\$	12,010,248	\$	12,000,000	\$	21,000,000		
Flood Protection System Expenditures								
Operating	\$	15,100,195	\$	18,401,988	\$	18,998,639		
Capital	\$	(226,513)	\$	752,000	\$	1,934,500		
Total Expenditures	\$	14,873,682	\$	19,153,988	\$	20,933,139		
Budgeted Net Increase to Equity	\$	(2,863,434)	\$	(7,153,988)	\$	66,861		
Re		oursable Projec						
Reimbursable Project Revenues	\$	144,219	\$	972,600	\$	1,622,600		
Reimbursable Project Expenses	\$	142,310	\$	-	\$	-		
Total	\$	1,909	\$	972,600	\$	1,622,600		
Trinity Rive	er V	ision/Central C	ity I	Project				
TIF Revenues	\$	3,836,461	\$	4,100,820	\$	5,103,557		
Debt Service Expense	\$	15,000	\$	4,100,820	\$	5,103,557		
Total	\$	3,821,461	\$	-	\$	-		
Budgeted Net Increase to Equity	\$	959,936	\$	(6,181,388)	\$	1,689,461		

Sources of Revenue

The following table and chart illustrate the sources of General Fund income and provide a comparison between FY19 and FY20 budgeted revenues. These revenue components provide the needed financial resources for the District to continue its Flood Protection mission each year. Each of the revenue sources will be discussed further in the upcoming sections.

		FY	19 Approved	FY	20 Approved		
	FY18 Actuals		Budget		Budget	Variance	% Change
Taxes	\$ 12,010,248	\$	12,000,000	\$	21,000,000	\$ 9,000,000	75.0%
TIF Revenues	\$ 3,836,461	\$	4,100,820	\$	5,103,557	\$ 1,002,737	24.5%
Reimbursable Project Revenues	\$ 144,219	\$	972,600	\$	1,622,600	\$ 650,000	66.8%
Total Revenues	\$ 15,990,928	\$	17,073,420	\$	27,726,157	\$ 10,652,737	62.4%

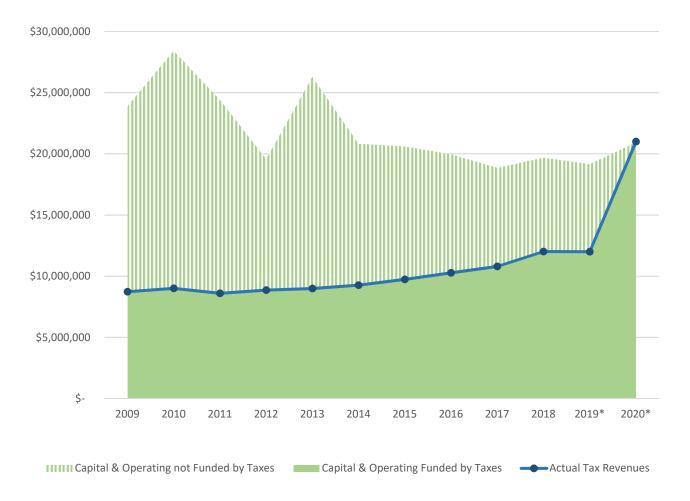
FY20 Approved Budget



Tax Revenues

As a governmental entity, the District is empowered to levy and collect ad valorem taxes to meet the maintenance and operations expenses of its flood control and administrative functions. The District's ad valorem property tax is currently set at 0.0287 per \$100 valuation and is projected to generate \$21 million in revenues for the District. This is based on a net taxable value of approximately \$73 billion and represents a projected tax burden of approximately \$55 for an estimated average home valued at \$193 thousand. There was new legislation passed in June that changes when and how we can change our tax rate. We discussed the ramification of these changes and related options at the budget workshop on July 23.

The chart below shows the Property Tax Revenues for the past 10 years compared to the Operating and Capital Budget. The difference between the Tax Revenues and the Operating and Capital Budget comes from Interest Income, Program Contributions, Oil & Gas Royalties, and Other Miscellaneous Income.



^{*}Budgeted tax revenues

TIF Revenues and Debt for the Trinity River Vision/Central City Project

In May 2018 a special bond election was held and approved by the voters to issue \$250M in bonds to finance the remaining outstanding local share of the Trinity River Vision/Central City Project. This \$250M will be repaid by The City of Fort Worth Tax Increment Reimbursement Zone Number Nine (TIF9) in accordance with the project costs funding agreement. Fiscal year 2019 was the first year General Obligation debt service was a component of the General Fund Operating Budget. The table below illustrates how the TIF Revenues collected will directly offset the budgeted debt expenditures for FY20. To date, no debt has been issued.

			FΥ	/19 Approved	FY	20 Approved		
	F١	18 Actuals		Budget		Budget	Variance	% Change
TIF Revenues	\$	3,836,461	\$	4,100,820	\$	5,103,557	\$ 1,002,737	-24.5%
Debt Service	\$	15,000	\$	(4,100,820)	\$	(5,103,557)	\$ (1,002,737)	24.5%
Total	\$	3,851,461	\$	-	\$	-	\$ -	0.0%



To date, over 384 thousand cubic yards of contaminated soil has been removed from the project area. In addition, the remediation efforts have also treated and pumped over 44 million gallons of water. This cleanup is vital to get the area ready for digging of the bypass channel.

Revenues from Reimbursable Projects

The District is proposing a \$1.5M budget for trail enhancement and extension projects in FY20. These projects will provide significantly enhanced access to the Trinity River Trails and all costs associated with these projects are 100% reimbursable from Chisholm Trail Mitigation money through an interlocal agreement with the City of Fort Worth.

The City of Dallas, the City of Fort Worth, and the City of Denton contribute to Pollution Campaign, also known as Reverse Litter. The contributions are projected to cover 100% of the General Fund campaign costs.

	FY	19 Approved	FY	20 Approved			
Reimbursable Project		Budget		Budget	١	/ariance	% Change
Chisholm Trail Mitigation Projects	\$	850,000	\$	1,500,000	\$	650,000	176.5%
Pollution Campaign Contributions	\$	122,600	\$	122,600	\$	-	0.0%
	Total \$	972,600	\$	1,622,600	\$	650,000	66.8%



Completed construction of a trail extension on the East Bank at Parkview Ave. This project cost was fully reimbursed from Chisholm Trail Mitigation funds.

FY20 Operating Expenditures

Strategic Goals

Tarrant Regional Water District has six Flood Protection strategic goals. The General Fund operating budget centers around accomplishing these goals.

Goal 1: Protect the communities behind the Fort Worth Floodway from the level of flooding for which the levees were originally designed to protect.

Goal 2: Protect the dams and levees owned and operated by TRWD and communities they serve.

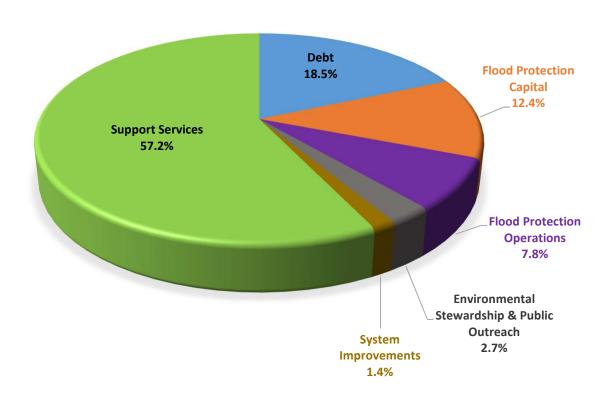
Goal 3: Reduce the public's risk of flooding by how we operate our infrastructure.

Goal 4: Create opportunities to further reduce flood risks in the communities we serve.

Goal 5: Inform the public and our partners about flood risks and operations.

Goal 6: Connect the community to the recreation system we have built on the flood protection infrastructure.

FY20 Approved Budget

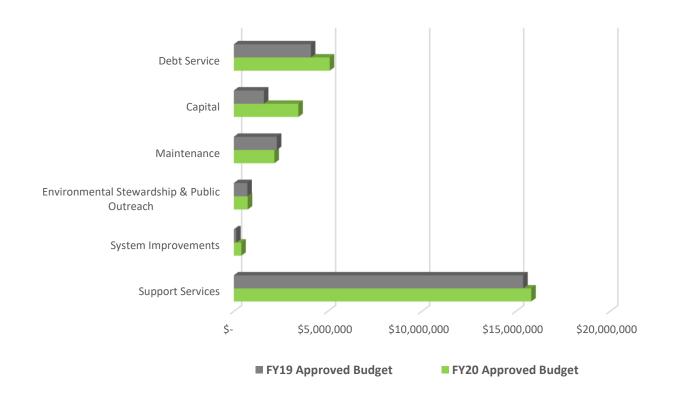


Expenditure Budget Overview

The FY20 Flood Protection Operating Budget is presented below in budget categories. Flood protection capital, system improvement projects and operation maintenance budgets are directly related to costs associated with the District's commitment to reducing the public's risk of flooding. Through continued efforts with programs like Stormwater management and the Reverse Litter Campaign, environmental stewardship and public outreach have become a vital element of the District's overall operating budget. The Flood Protection operations are supported through administrative and professional services, information technology and a staff committed to the Flood Protection mission. Additional details of the budget categories will be provided on the following pages.

			FY	19 Approved	FY	20 Approved		
Budget Categories	F	Y18 Actuals		Budget		Budget	Variance	% Change
Debt Service	\$	15,000	\$	4,100,820	\$	5,103,557	\$ 1,002,737	24.5%
Capital	\$	(222,294)	\$	1,602,000	\$	3,434,500	\$ 1,832,500	114.4%
Maintenance	\$	2,087,783	\$	2,288,713	\$	2,161,040	\$ (127,673)	-5.6%
Environmental Stewardship &	\$	279,064	\$	718,604	\$	740,811	\$ 22,207	3.1%
Public Outreach								
System Improvements	\$	530,299	\$	127,500	\$	400,000	\$ 272,500	213.7%
Support Services	\$	12,341,141	\$	15,389,771	\$	15,819,388	\$ 429,617	2.8%
Tota	\$	15,030,992	\$	24,227,408	\$	27,659,296	\$ 3,431,888	14.2%

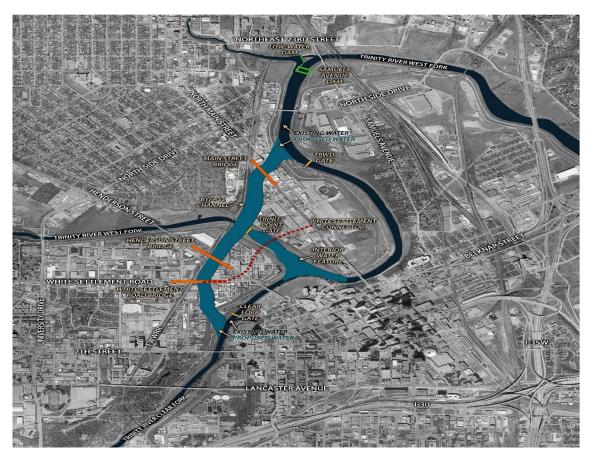
Budget Comparison FY19 to FY20



Debt for Trinity River Vision/Central City Project

In May 2018 a special bond election was held and approved by the voters to issue \$250 million in bonds to finance the remaining outstanding local share of the Trinity River Vision/Central City Project. This \$250 million will be repaid by The City of Fort Worth Tax Increment Reimbursement Zone Number Nine (TIF9) in accordance with the project costs funding agreement. Fiscal year 2019 was the first year General Obligation debt service was a component of the General Fund Operating Budget. The table below illustrates how the TIF Revenues collected will directly off-set the budgeted debt expenditures for FY20. To date, no bonds have been issued.

			FY	19 Approved	FY	20 Approved	
	FY	'18 Actuals		Budget		Budget	Variance
Debt Service	\$	15,000	\$	4,100,820	\$	5,103,557	\$ (1,002,737)
TIF Revenue	\$	3,836,461	\$	(4,100,820)	\$	(5,103,557)	\$ 1,002,737
	Total \$	3,851,461	\$	-	\$	-	\$ -



Picture above is a map of the Central City Project, which is the publicly funded portion of the Trinity River Vision plan. The Central City Project is limited to infrastructure improvements, environmental cleanup and flood protection. A new bypass channel will replace an outdated levee system that is unable to accommodate the city's population growth. This project will provide necessary flood protection, ecosystem improvements, new bridges and new or improved roads or trails.

Capital Budget

The District considers purchases of \$10K or greater for machinery and equipment to be a capital purchase. Purchases of property and construction costing \$20K or more will also fall in the category of a capital asset. The FY20 budget includes a \$1.5M budget for trail construction, which as previously noted is 100% reimbursable through an interlocal agreement with the City of Fort Worth. In addition, the Panther Island Canal construction project which was scheduled to be completed in FY19 was delayed and is therefore projected to carry over a \$1.5M budget into FY20. The budgets for all of the approved capital purchases are listed below.

	F	Y20 Approved	
Capital Projects		Budget	
Chisholm Trail Mitigation Projects	\$	1,500,000	*
Panther Island Canal Construction	\$	1,500,000	
Land Easements along the Floodway	\$	25,000	
Total Capital Projects	\$	3,025,000	

	FY20 Approved			
Capital Equipment		Budget		
Replacement				
2 - 1 Ton Crew Cab w/ Utility Bed	\$	124,000		
1 - 3/4 Ton 4WD Crew Cab Pickup	\$	48,500		
1 - 1/2 Ton 4WD Crew Cab Pickup	\$	34,000		
All Terrain Crew Cab Utility Vehicle	\$	17,500		
Heavy Duty Welder Replacement	\$	11,500		
	\$	235,500		
Additions				
Heavy Duty Vibratory Roller Packer	\$	124,000		
Survey and Data Collection Equipment	\$	50,000		
	\$	174,000		
Total Capital Equipment	\$	409,500		
Total Capital Expenditures	\$	3,434,500		

^{*}Reimbursable Project - see revenue section

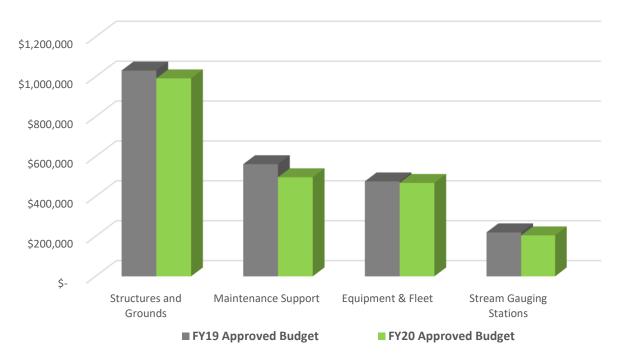
Maintenance Budget

The Flood Protection Operations Budget consists of maintenance budgets that are directly related to the Flood Protection strategic goals. In FY20, the overall maintenance costs are budgeted to decrease by 5.6%. The majority of the decrease is in maintenance support costs, which is due to a \$65K decrease projected for contract labor. The need for contract labor has steadily decreased over the past few years due to more services being performed in house.

FY19 Approved	FY20 Approved
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		F۱	18 Actuals	Budget	Budget Varia			% Change
Structures and Grounds		\$	1,012,317	\$ 1,031,250	\$ 992,100	\$	(39,150)	-3.8%
Maintenance Support		\$	463,997	\$ 561,730	\$ 496,313	\$	(65,417)	-11.6%
Equipment & Fleet		\$	449,716	\$ 475,733	\$ 467,627	\$	(8,106)	-1.7%
Stream Gauging Stations		\$	161,753	\$ 220,000	\$ 205,000	\$	(15,000)	-6.8%
	Total	\$	2,087,783	\$ 2,288,713	\$ 2,161,040	\$	(127,673)	-5.6%

Budget Comparison FY19 to FY20



Environmental Stewardship and Public Outreach Budget

Environmental Stewardship is one of the District's primary strategic goals. As owners and operators of the Fort Worth Floodway, protecting the quality of the water in the Trinity River is a priority. The Stormwater Program identifies and implements strategies to improve stormwater quality before it enters the river. The Environmental budget also consists of routine water testing costs, which are projected to decrease in FY20 due to the restructuring of the District's contract with the water sample testing laboratory.

Bringing awareness of the impact litter has on the Trinity River and involving the community in our efforts are defined strategic goals for the District. The Reverse Litter campaign is a successful pollution awareness program and is entering into its eighth year. In the General Fund this program is funded 100% by contributions from the campaign partners. The District's social responsibility plan guides the Public Outreach budget.

FY19 Approved FY20 Approved

<u>. </u>		FY:	18 Actuals	Budget	Budget	Variance	% Change
Stormwater Program		\$	70,980	\$ 150,000	\$ 250,000	\$ 100,000	66.7%
Environmental Costs		\$	29,986	\$ 317,350	\$ 248,100	\$ (69,250)	-21.8%
Pollution Campaign*		\$	138,091	\$ 122,600	\$ 122,600	\$ -	0.0%
Public Outreach		\$	40,007	\$ 128,654	\$ 120,111	\$ (8,543)	-6.6%
	Total	\$	279,064	\$ 718,604	\$ 740,811	\$ 22,207	3.1%

^{*}Reimbursable Project - see revenue section



Sampling of the Trinity River is performed monthly from five different locations along the Floodway.

System Improvement Budget

A component of the Flood Protection budget is system improvement projects. The following table provides a list of the approved projects for FY20.

		FY2	20 Approved		
Projects		Budget			
Replace Valves in 4th Street Dam		\$	180,000		
Evaluations of Flood Levels for FW Floodway		\$	100,000		
Trail Resurfacing		\$	70,000		
Crusher/Screen Rental for Asphalt Stockpile		\$	40,000		
Replace HVAC Unit for Fort Worth Operations Building		\$	10,000		
	Total	\$	400,000		



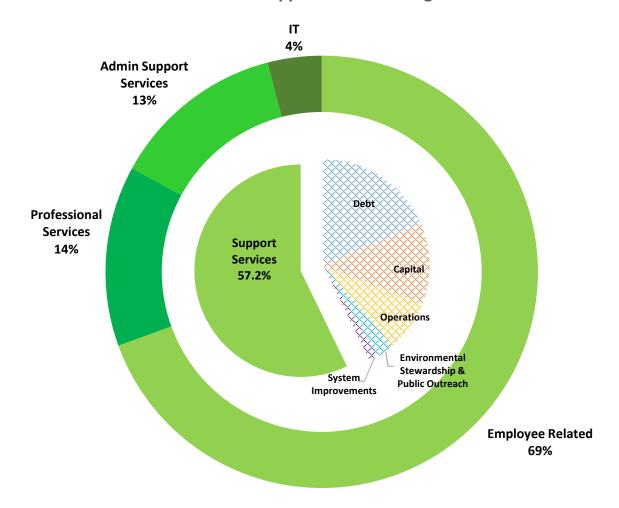
Trail resurfacing enhances the trails for safety and sustainability. Shown here is a resurfacing project that will replace the weathered asphalt.

Support Services Budget Overview

The Support Services budget consists of expenditures for services that support the District overall including personnel and administrative costs. Employee related budgets make up almost 70% of the overall support services budget for FY20. As shown in the table below, support budgets are approved to increase by 2.5% for FY20 as compared to FY19. Additional details of each of these areas will be discussed on the following pages.

			FY	19 Approved	FY	20 Approved			
	Y18 Actuals Budget				Budget	,	Variance	% Change	
Employee Related	\$	8,223,631	\$	10,512,307	\$	10,988,916	\$	476,609	4.5%
Professional Services	\$	2,004,907	\$	2,223,079	\$	2,133,712	\$	(89,367)	-4.0%
Admin Support Services	\$	1,734,168	\$	1,909,951	\$	2,059,643	\$	149,692	7.8%
<u>IT</u>	\$	378,435	\$	744,434	\$	637,117	\$	(107,317)	-14.4%
Total	\$	12,341,141	\$	15,389,771	\$	15,819,388	\$	429,617	2.8%

FY20 Support Services Budget

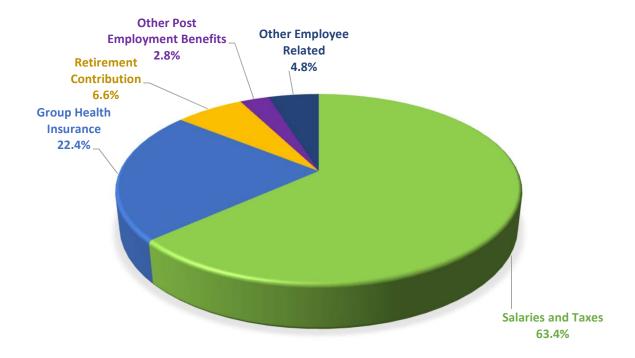


Support Services Employee Related Budget

Total Employee Related expenditures budgeted for FY20 are \$11M, representing an increase of 4.5% from prior year's budget. The drivers for the slight increase in personnel costs was due to raises, bonuses, promotions and addition of two part time employees for the FY20 budget. A 10% increase in the Other Post Employment Benefits (OPEB) budget will be seen each year until 75% of the OPEB Trust is funded. Other employee related costs include business and travel, education, and the employee wellness program.

			FY	19 Approved	FY	20 Approved			
	F۱	/18 Actuals		Budget		Budget	١	/ariance	% Change
Salaries and Taxes	\$	5,621,796	\$	6,675,086	\$	6,966,000	\$	290,914	4.4%
Group Health Insurance	\$	1,371,509	\$	2,330,665	\$	2,460,765	\$	130,100	5.6%
Retirement Contribution	\$	613,158	\$	697,788	\$	725,719	\$	27,931	4.0%
Other Post Employment Benefits	\$	252,890	\$	278,179	\$	305,997	\$	27,818	10.0%
Other Employee Related	\$	364,278	\$	530,589	\$	530,435	\$	(154)	0.0%
Total	\$	8,223,631	\$	10,512,307	\$	10,988,916	\$	476,609	4.5%

FY20 Employee Related Budget



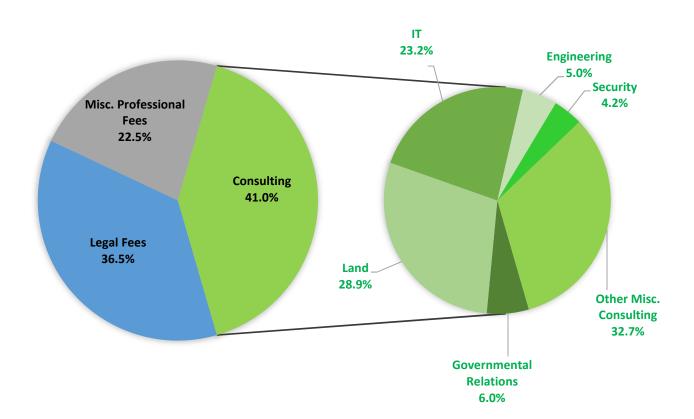
Support Services Professional Services Budget

Legal and consulting services make up the majority of the FY20 Professional Services budget. Additional detail of the consulting service areas is shown in the chart below. The miscellaneous professional fee's budget is the annual budget for the financial audit, surveying and other professional fees.

FY19 Approved FY20 Approved

	FY	18 Actuals	Budget	Budget	•	Variance	% Change
Consulting Fees	\$	650,587	\$ 966,898	\$ 875,452	\$	(91,446)	-9.5%
Legal Fees	\$	964,006	\$ 778,800	\$ 778,800	\$	-	0.0%
Misc. Professional Fees	\$	390,314	\$ 477,381	\$ 479,460	\$	2,079	0.4%
	Total \$	2.004.907	\$ 2.223.079	\$ 2.133.712	Ś	(89.367)	-4.0%

FY20 Professional Services with Consulting Budget Breakout



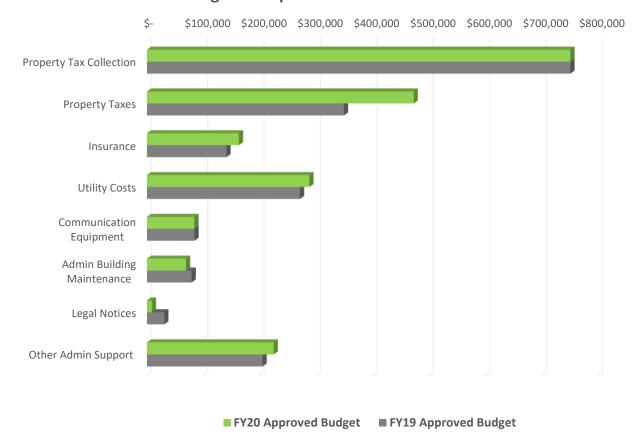
Support Services Administrative Support Services Budget

The Administrative Support Services budget consists of overhead type expenditures. The largest increase for the FY20 budget can be seen in Property Taxes, at 35%. Property tax expenses are for the District's participation in Tax Increment Funding Zones (TIFs); as tax collections increase, so do the TIF contributions. The table and chart below shows the budget changes from FY19 to FY20 for all administrative support budget areas.

FY19 Approved FY20 Approved

	F۱	Y18 Actuals	Budget	Budget	Variance	% Change
Property Tax Collection	\$	698,322	\$ 750,000	\$ 750,000	\$ -	0.0%
Property Taxes	\$	464,262	\$ 349,000	\$ 472,507	\$ 123,507	35.4%
Insurance	\$	109,685	\$ 140,851	\$ 162,893	\$ 22,042	15.6%
Utility Costs	\$	188,815	\$ 271,110	\$ 287,711	\$ 16,601	6.1%
Communication Equipment	\$	14,715	\$ 84,200	\$ 84,010	\$ (190)	-0.2%
Admin Building Maintenance	\$	41,965	\$ 79,221	\$ 69,184	\$ (10,037)	-12.7%
Legal Notices	\$	6,819	\$ 30,780	\$ 8,780	\$ (22,000)	-71.5%
Other Admin Support	\$	209,585	\$ 204,789	\$ 224,558	\$ 19,769	9.7%
Total	\$	1,734,168	\$ 1,909,951	\$ 2,059,643	\$ 149,692	7.8%

Budget Comparison FY19 to FY20

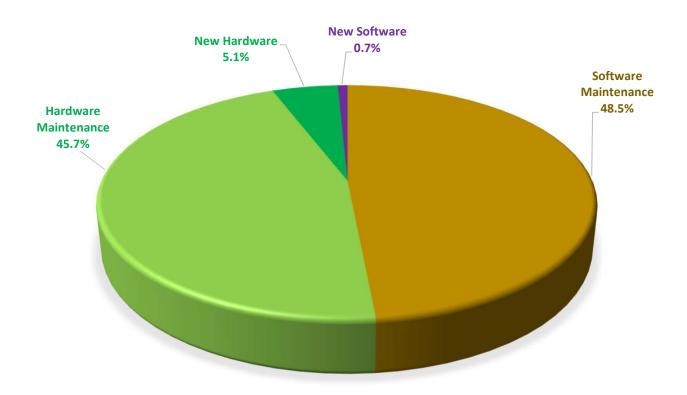


Support Services Information Technology Budget

The Software Maintenance budget is proposed to decrease in FY20 due to software updates for the Aviso software being completed in FY19. The New Software budget includes a purchase of a Flood Management software and SharePoint APM software, which will audit access and monitor the health of the SharePoint platform. Computer hardware maintenance costs are increasing and new hardware is decreasing as the hardware that was budgeted as new in FY19 will now be included in the hardware maintenance budget.

			FY	19 Approved	FY	20 Approved			
	FY18 Actuals				Budget			Variance	% Change
Software Maintenance	\$	222,714	\$	428,464	\$	308,930	\$	(119,534)	-27.9%
Hardware Maintenance	\$	120,213	\$	131,290	\$	291,137	\$	159,847	121.8%
New Hardware	\$	32,430	\$	175,180	\$	32,300	\$	(142,880)	-81.6%
New Software	\$	3,078	\$	9,500	\$	4,750	\$	(4,750)	-50.0%
Total	al Ś	378.435	\$	744,434	\$	637.117	Ś	(107.317)	-14.4%

FY20 Approved IT Budget



Flood Protection Operations FY20 Budget

	FY	19 Approved	• •					
Revenues		Budget		Budget		Variance	% Change	
Taxes	\$	12,000,000	\$	21,000,000	\$	9,000,000	75.0%	
TIF Revenues	\$	4,100,820	\$	5,103,557	\$	1,002,737	24.5%	
Reimbursable Project Revenues	\$	972,600	\$	1,622,600	\$	650,000	66.8%	
Total Revenues	\$	17,073,420	\$	27,726,157	Ś	10,652,737	62.4%	
Total Neverlacs	<u> </u>	17,073,420		27,720,237	<u> </u>	10,032,737	021470	
	FY	19 Approved	FY	20 Approved				
Expenditures		Budget		Budget		Variance		Notes*
Debt Service	\$	4,100,820	\$	5,103,557	\$	1,002,737	24.5%	1
	·	, ,	•	, ,	·	, ,		
Capital	\$	1,602,000	\$	3,434,500	\$	1,832,500	114.4%	2
<u>Maintenance</u>								
Structures and Grounds	\$	1,031,250	\$	992,100	\$	(39,150)	-3.8%	
Maintenance Support	\$	561,730	\$	496,313	\$	(65,417)	-11.6%	
Equipment & Fleet	\$	475,733	\$	467,627	\$	(8,106)	-1.7%	
Stream Gauging Stations	\$	220,000	\$	205,000	\$	(15,000)	-6.8%	
Total Maintenance	\$	2,288,713	\$	2,161,040	\$	(127,673)	-5.6%	
Environmental Stewardship and Public	Outi	reach						
Stormwater Program	\$	150,000	\$	250,000	\$	100,000	66.7%	3
Environmental	\$	317,350	\$	248,100	\$	(69,250)	-21.8%	
Pollution Campaign	\$	122,600	\$	122,600	\$	-	0.0%	
Public Outreach	\$	128,654	\$	120,111	\$	(8,543)	-6.6%	
Total Environmental Stewardship and		718,604	\$	740,811	\$	22,207	3.1%	
Public Outreach	•	•	·	,	•	,		
System Improvements	\$	127,500	\$	400,000	\$	272,500	213.7%	4
System improvements	7	127,300	Υ	100,000	Υ	272,300	213.770	•
Support Services								
Employee Related	\$	10,512,307	\$	10,988,916	\$	476,609	4.5%	
Professional Services	\$	2,223,079	\$	2,133,712	\$	(89,367)	-4.0%	
Admin Support Services	\$	1,909,951	\$	2,059,643	\$	149,692	7.8%	5
IT	\$	744,434	\$	637,117	\$	(107,317)	-14.4%	
Total Support Services	\$	15,389,771	\$	15,819,388	\$	429,617	2.8%	
Total Expenditures	Ś	24,227,408	\$	27,659,296	\$	3,431,888	14.2%	
		,,		, , , , , , , , , , , , , , , , , , , ,	<u> </u>			
Budgeted Net Increase to Equity	\$	(7,153,988)	\$	66,861	\$	7,220,849	-100.9%	

^{*}See explanations for significant variances on next page

Variance Explanations

1 Debt

General Fund debt service costs are for the TRV project and are off-set by revenues received from the TIF 9

2 Capital

The capital budget increase is due to additional trail construction budgets added to the FY20 budget as part of the Interlocal Agreement with the City of Fort Worth and will be 100% reimbursable. In addition, the construction of the canal was scheduled to be completed in FY19, but the project was delayed and will carry over a \$1.5M budget into FY20.

3 Stormwater Program

The Stormwater program increase is due to adding a model that will help the District operate the new gates (added as part of the Central City project) in a way that benefits the river's water quality.

4 Flood Protection System Improvements

The budget increase in FY20 is due to additional system improvement projects being added to the FY20 budget. Please see page 44 for a full list of the system improvement projects for FY20.

5 Administrative Support Services

The increase in the Administrative Support Services budget for FY20 is largely due to an increase in the property tax budget. Property tax expenses are for the District's participation in Tax Increment Funding Zones (TIFs); as tax collections increase, so do the TIF contributions.

Recreation Fund



TRWD General Fund Recreation FY20 Budget Summary

TRWD Recreation Mission

Enhance the quality of life in North Texas communities by creating recreational opportunities around TRWD infrastructure to enable active lifestyles.

Recreation Overview

Much of the infrastructure TRWD has built provides for excellent recreational opportunities for the public. For example, maintenance roads can double as trails for public use, and the recreation fund then provides additional recreation opportunities through trailheads that allow easier access to the trail system. The Recreation Fund budget provides the needed resources to maintain the recreation side of the infrastructure and produce events that drive communities to the river. Overall, the District has a \$2.6M recreation program for a net investment of \$630K.

Approved FY20 Recreation Budget

			FY:	19 Approved	FY	20 Approved			
Operating Revenues	F۱	/18 Actuals		Budget		Budget	١	/ariance	% Change
Events & Programming	\$	252,738	\$	289,500	\$	1,021,250	\$	731,750	252.8%
Infrastructure	\$	1,115,038	\$	1,067,280	\$	1,010,000	\$	(57,280)	-5.4%
Total Revenues	\$	1,367,776	\$	1,356,780	\$	2,031,250	\$	674,470	49.7%
Operating Expenditures									
Events & Programming	\$	602,559	\$	675,500	\$	1,446,000	\$	770,500	114.1%
Infrastructure	\$	621,124	\$	848,725	\$	724,175	\$	(124,550)	-14.7%
Admin Support	\$	391,955	\$	488,915	\$	489,973	\$	1,058	0.2%
Total Expenditures	\$	1,615,638	\$	2,013,140	\$	2,660,148	\$	647,008	32.1%
Use of Contingency Fund Revenues	\$	(247,862)	\$	(656,360)	\$	(628,898)	\$	27,462	-4.2%

Recreation Event and Programming Budget Summary

Recreation events and programs are designed to bring awareness to the river and to improve the quality of life for the public. In 2018, a study conducted by the University of North Texas found the permitted and TRWD hosted events bring an average of 270,000 people each year to the Trinity Trails in Fort Worth. For FY20, recreation events and programs are budgeted to cost \$1.4M, while projecting to bring in \$1M in revenues, for a net expenditure budget of \$425K.

			FY	19 Approved	FY	20 Approved			
Revenues	FY	'18 Actuals		Budget		Budget	V	ariance	% Change
Oktoberfest Fort Worth	\$	-	\$	-	\$	303,000	\$	303,000	0.0%
Fort Worth Fourth	\$	225,152	\$	235,000	\$	235,000	\$	-	0.0%
Panther Island Ice Rink	\$	-	\$	-	\$	226,000	\$	226,000	0.0%
Rockin' the River	\$	-	\$	-	\$	155,000	\$	155,000	0.0%
Fort Wurst	\$	-	\$	-	\$	52,500	\$	52,500	0.0%
Flyfest	\$	13,461	\$	12,000	\$	14,000	\$	2,000	16.7%
Sunday Funday	\$	-	\$	-	\$	13,000	\$	13,000	0.0%
Fall Trash Bash	\$	12,375	\$	20,000	\$	10,000	\$	(10,000)	-50.0%
Spring Trash Bash	\$	1,500	\$	20,000	\$	7,500	\$	(12,500)	-62.5%
Adopt a Drain	\$	210	\$	2,500	\$	750	\$	(1,750)	-70.0%
Miscellaneous Events	\$	40	\$	-	\$	4,500	\$	4,500	0.0%
Total Revenues	\$	252,738	\$	289,500	\$	1,021,250	\$	731,750	252.8%
Expenditures									
Oktoberfest Fort Worth	\$	-	\$	-	\$	286,000	\$	286,000	0.0%
Fort Worth Fourth	\$	369,745	\$	370,000	\$	370,000	\$	-	0.0%
Panther Island Ice Rink	\$	-	\$	-	\$	218,150	\$	218,150	0.0%
Rockin' the River	\$	-	\$	-	\$	196,000	\$	196,000	0.0%
Fort Wurst	\$	-	\$	-	\$	26,000	\$	26,000	0.0%
Flyfest	\$	50,406	\$	45,500	\$	55,000	\$	9,500	20.9%
Sunday Funday	\$	-	\$	-	\$	8,800	\$	8,800	0.0%
Fall Trash Bash	\$	53,407	\$	91,500	\$	91,000	\$	(500)	-0.5%
Spring Trash Bash	\$	31,839	\$	40,000	\$	40,000	\$	-	0.0%
Adopt a Drain	\$	3,760	\$	3,100	\$	4,000	\$	900	29.0%
Trout Stockings	\$	16,500	\$	25,000	\$	25,000	\$	-	0.0%
Mayfest	\$	23,444	\$	20,000	\$	20,500	\$	500	2.5%
Adopt a River	\$	-	\$	-	\$	20,000	\$	20,000	0.0%
Marine Creek Health Fair	\$	10,119	\$	12,000	\$	12,000	\$	-	0.0%
Miscellaneous Events	\$	18,933	\$	11,500	\$	12,100	\$	600	5.2%
Program Support	\$	24,406	\$	56,900	\$	61,450	\$	4,550	8.0%
Total Expenditures	\$	602,559	\$	675,500	\$	1,446,000	\$	770,500	114.1%
Net Investment	\$	(349,821)	\$	(386,000)	\$	(424,750)	\$	(38,750)	10.0%

Recreation Infrastructure Budget Summary

The Recreation Fund Infrastructure expenditure budget is projected to be \$724K for FY20 with revenues generated from lease agreements, permits, and fees budgeted at just over \$1M. The \$286K net income from the District's recreation infrastructure for FY20 is a 31% increase from FY19.

			FY:	19 Approved	FY	20 Approved		
Revenues	F١	18 Actuals		Budget		Budget	Variance	% Change
Woodshed Restaurant	\$	225,240	\$	211,000	\$	211,000	\$ -	0.0%
Coyote Drive-In Theatre	\$	210,419	\$	175,000	\$	175,000	\$ -	0.0%
Twin Points Park	\$	338,556	\$	275,000	\$	340,000	\$ 65,000	23.6%
Panther Island Facilities	\$	82,554	\$	95,000	\$	120,000	\$ 25,000	26.3%
Miscellaneous Permits	\$	7,650	\$	1,000	\$	7,000	\$ 6,000	600.0%
Bridgeport & EM Leases	\$	164,092	\$	160,280	\$	157,000	\$ (3,280)	-2.0%
Trailhead Construction	\$	86,527	\$	150,000	\$	-	\$ (150,000)	-100.0%
Total Revenues	\$	1,115,038	\$	1,067,280	\$	1,010,000	\$ (57,280)	-5.4%
Expenditures								
Cowtown Water Complex	\$	4,420	\$	4,500	\$	5,500	\$ 1,000	22.2%
Woodshed Restaurant	\$	10,780	\$	3,000	\$	3,000	\$ -	0.0%
Coyote Drive-In Theatre	\$	61,632	\$	60,350	\$	63,800	\$ 3,450	5.7%
Twin Points Park	\$	146,806	\$	136,000	\$	188,700	\$ 52,700	38.8%
Eagle Mountain Park	\$	36,111	\$	42,425	\$	64,325	\$ 21,900	51.6%
Panther Island Facilities	\$	149,514	\$	176,050	\$	178,650	\$ 2,600	1.5%
Trailhead Construction	\$	67,535	\$	200,000	\$	-	\$ (200,000)	-100.0%
Public Art & Signs	\$	21,700	\$	50,000	\$	50,000	\$ -	0.0%
Trailhead maintenance	\$	122,626	\$	176,400	\$	170,200	\$ (6,200)	-3.5%
Total Expenditures	\$	621,124	\$	848,725	\$	724,175	\$ (124,550)	-14.7%
Net Revenues	\$	493,914	\$	218,555	\$	285,825	\$ 67,270	30.8%



Twin Points Park is located at Eagle Mountain Lake and attracts an average of 60,000 visitors each year.

Recreation Support Services Overview

The Administrative Support Services budget consists of costs that support the District overall, including personnel and administrative costs.

Expenditure	FY	18 Actuals	Budget	Budget	٧	ariance	% Change
Personnel Services	\$	306,079	\$ 396,205	\$ 416,947	\$	20,742	5.2%
Administrative Support Services	\$	85,876	\$ 92,710	\$ 73,026	\$	(19,684)	-21.2%
Total Expenditures	\$	391,955	\$ 488,915	\$ 489,973	\$	1,058	0.2%
Net Investment	\$	(391,955)	\$ (488,915)	\$ (489,973)	\$	(1,058)	0.2%



TRWD manages the 400-acre Eagle Mountain Park that features 6 miles of hiking trails

Recreation Operations FY20 Budget

FY19 Approved FY20 Approved

Operating Revenues		Budget	Budget	Variance	% Change
Events and Programming	\$	289,500	\$ 1,021,250	\$ 731,750	252.8%
Infrastructure Related Revenue	\$	1,067,280	\$ 1,010,000	\$ (57,280)	-5.4%
	Total Revenues \$	1,356,780	\$ 2,031,250	\$ 674,470	49.7%

FY19 Approved FY20 Approved

Operating Expenditures		Budget		Budget	Variance	% Change
Events and Programming	\$	675,500) \$	1,446,000	\$ 770,500	114.1%
Infrastructure	\$	848,72	\$	724,175	\$ (124,550)	-14.7%
Administrative Support	\$	488,91	\$	489,973	\$ 1,058	0.2%
	Total Expenditures \$	2,013,140	\$	2,660,148	\$ 647,008	32.1%

Use of Contingency Fund Revenues \$ (6	(656,360) \$	(628,898) \$	27,462	-4.2%
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The annual Flyfest event held on the Trinity River creates an optimal urban angling