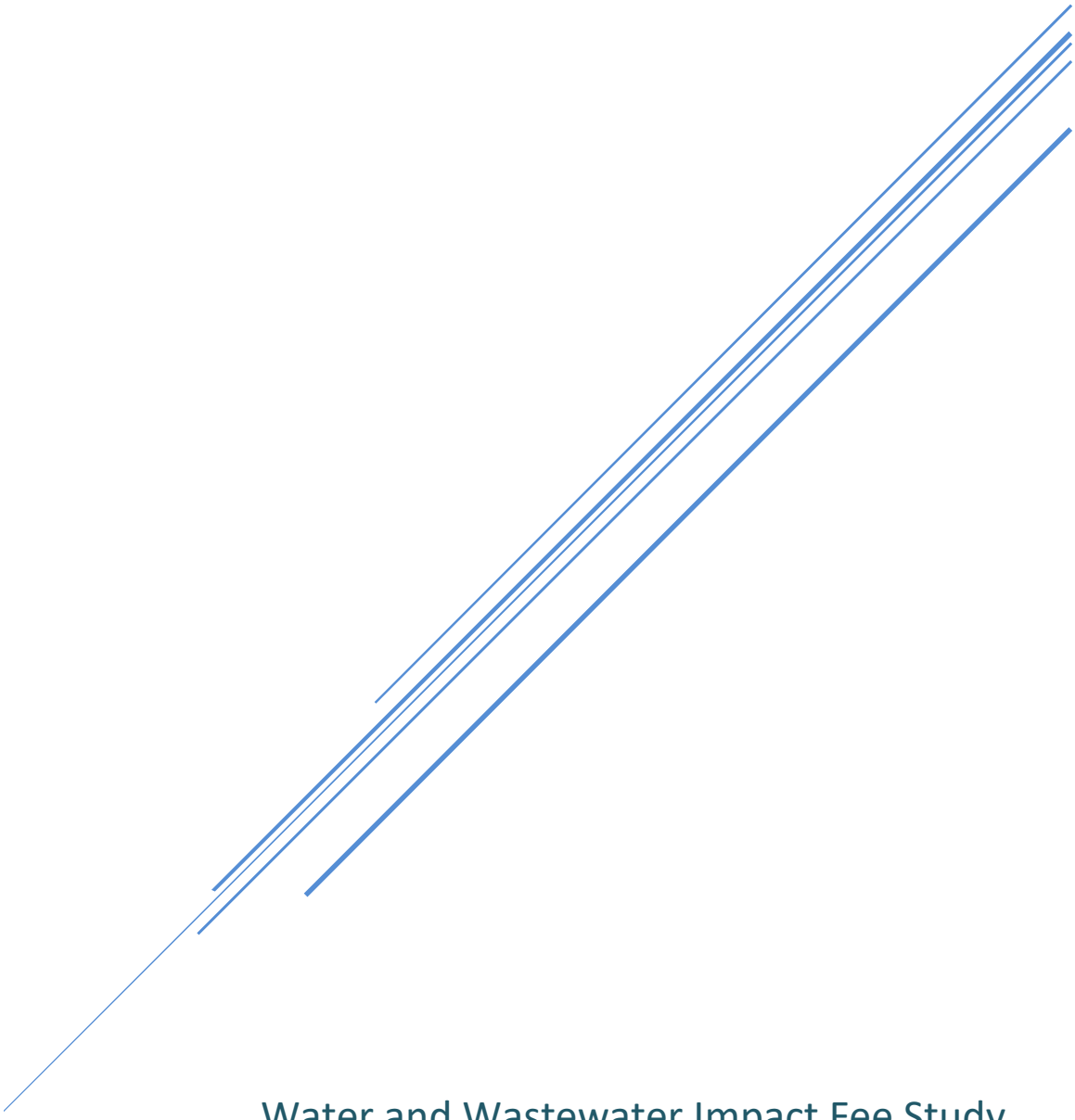
TECHNICAL REPORT

West Travis County PUA



Water and Wastewater Impact Fee Study
July 2021

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Executive Summary

The West Travis County Public Utility Agency (PUA) has retained Murfee Engineering Company, Inc. (MEC) and Nelisa Heddin Consulting (NH Consulting) to perform an update to the PUA's impact fee study. This report details the results of that analysis.

The PUA has updated its impact fees in 2012, 2014 and 2018. In each of the previous updates, the PUA has operated under the assumption of "capping" growth at which point that the PUA reaches peak-day operations of the water treatment plant of 27 million gallons per day (MGD). Since that time, the local area has experienced significant growth demands, particularly in the US 290 System. Given the pressures of this growth, the PUA is contemplating expanding its service area and thereby providing water utility services which are anticipated to exceed 27 MGD. This updated analysis contemplates said service area expansion and thus increases the PUA's projected future capital improvements plan (CIP) by approximately $80M for the water utility and $4M for the wastewater utility (Tables 1 and 2)

Table 1: Summary of Water CIP Projects

Water CIP Projects	System Wide	SH 71	US 290	Total
Existing Improvements	$ 57,352,254	$ 20,898,145	$ 35,938,033	$ 114,188,432
Previously Approved Future CIP	23,632,001	6,400,245	13,462,383	43,494,629
Newly Identified CIP	22,821,527	3,147,520	54,123,486	80,092,534
Total Improvements	$ 103,805,782	$ 30,445,910	$ 103,523,901	$ 237,775,594

Table 2: Summary of Wastewater CIP Projects

Wastewater CIP Projects	
Existing Improvements	$ 41,931,467
Previously Approved Future CIP	14,842,683
Newly Identified CIP	4,222,015
Total Improvements	$ 60,996,165

NH Consulting has provided the PUA with two alternative impact fee calculations.

- Scenario 1 – assumes the issuance of approximately $21M in debt to fund future water projects and approximately $6M to fund future wastewater projects. As such, 10-years of future interest expense on the new debt has been included in the impact fee calculation.

- Scenario 2 – assumes the PUA will use cash-available from other sources to fund future projects, thereby not including any future interest expense for future projects in the impact fee calculation.

Table 3 provides the maximum allowable impact fee, including ad valorem tax credit for each scenario. Table 4 Provides a summary of the fees if assessed at 90%.

Table 3: Summary of Maximum Allowable Impact Fees (Including Ad Valorem Tax Credit)

	Scenario 1 (Includes Future Debt)	Scenario 2 (Excludes Future Debt)
Hwy 71 Water Impact Fee	$ 5,249.44	$ 4,780.28
US 290 Water Impact Fee	$ 8,605.11	$ 8,135.94
Wastewater Impact Fee	$ 12,177.11	$ 11,218.89

Table 4: 90% of Maximum Allowable Impact Fees

	Scenario 1 (Includes Future Debt)	Scenario 2 (Excludes Future Debt)
Hwy 71 Water Impact Fee	$ 4,724.50	$ 4,302.25
US 290 Water Impact Fee	$ 7,744.59	$ 7,322.35
Wastewater Impact Fee	$ 10,959.40	$ 10,097.00

Background

West Travis County Public Utility Agency

The PUA provides water and wastewater services to an estimated population of 60,000 people located in Travis and Hays counties. The PUA acquired the systems from the Lower Colorado River Authority (LCRA) in March 2012. Since that time, the PUA has continued to provide continuous and adequate service to the affected population.

The PUA was created in partnership through concurrent ordinances of the City of Bee Cave, Travis County Municipal Utility District #5 (now Lake Pointe Municipal Utility District), and Hays County as a vehicle to finance, own, and operate the West Travis County water and wastewater utility systems as a publicly owned utility. The PUA Board is currently comprised of five members, each appointed by each of the three sponsoring entities.

Installment Purchase Agreement

In order to purchase the systems by a public entity rather than a divestiture to a private for-profit utility, the PUA was required to retire the debt which LCRA had outstanding against the systems. In March 2012, the principal balance of that debt exceeded $140M, plus interest accrual. However, many of LCRA's bonds were not "callable." As such, immediately retiring the bonds would require the payment of defeasance costs, which would have added significant costs to ratepayers.

In order to avoid payment of additional defeasance costs, the PUA entered into an installment purchase agreement with the LCRA, which outlined specific timing for installment payments through 2019. These installment payments coincided with "call dates" associated with LCRA's bonds. Installment payments consisted of the principal balance on the callable bonds, plus capitalized interest accrued. The PUA made its first installment payment to the LCRA in July 2012. Since that time, the PUA funded subsequent installment payments through the issuance of bonds. The PUA made its final $15M installment payment to the LCRA in the Spring of 2019. Installment payments to the LCRA included both the principal balance on the bonds as well as accrued interest.

System Debt

Since its inception in 2012, the PUA has issued several series of revenue bonds. These issuances not only funded payments to the LCRA but also funded construction of existing and future capital improvement projects necessary to support regional growth.

In order to be rated for bonds, the PUA presented a financial pro forma which illustrated the PUA's ability to support its bonded indebtedness through rates and fees. In 2012, the PUA received an "A-" bond rating by Standard & Poors. In December, 2017 the PUA had its rating upgraded by Standard & Poors to "A positive" and "A1" by Moody's Investor Service. This improved rating is due to increased cash reserves and improved operational and financial management of the utility, including significant cost reductions and revenue enhancements.

System Revenues and Expenses

The PUA is a non-taxing entity. Accordingly, the PUA's only available avenues for revenue recovery are through rates and fees charged to current and future customers of the system. To the extent the PUA does not recover the costs of providing future service to customers through impact fees, those costs must be recovered through rates. The PUA is allowed to set impact fees at an amount at or below the maximum allowable fee as determined by the impact fee calculation. So long as the PUA does not go above the maximum allowable fee, the PUA may use policy initiatives to determine the appropriate level of the impact fee. This balance must be considered when setting an appropriate impact fee, realizing that any portion of the costs not recovered by impact fees will need to be recovered through monthly rates charged to customers.

Impact Fee Fund

Impact fees are only collected from new growth in the system. Existing customers are not subject to pay impact fees[1]. The PUA maintains impact fees collected in a separate fund. The PUA spends impact fee monies only for authorized purposes in compliance with Chapter 395 of the Texas Local Government Code. The PUA has created a plan for spending those funds in accordance with Chapter 395.

[1] Currently existing customers are not subject to impact fees with the exception of a currently existing customer who increases their level of service.

Purpose of Report

One of the most effective growth management tools available to public utilities is the use of new customer impact fees, which facilitates growth paying for itself vs. existing customers paying for this cost burden in rates. The PUA has adopted a ten-year Land Use Assumptions and Capital Improvements Plan (CIP) to service growth in the system, and the cost of the 10-year CIP is the basis for calculating impact fees. Impact fees are calculated by taking the total cost of the CIP divided by the projected growth in living unit equivalents (LUEs) in the system for water and wastewater. The last step in the process to adopt an impact fee is the determination of the maximum allowable impact fees per the guidelines set forth in Chapter 395 of the Texas Local Government Code.

Chapter 395 of the Texas Local Government Code provides specific requirements that cities, water districts and other political subdivisions in Texas must abide by while determining, assessing, and collecting Impact Fees. The process outlined for implementing or amending fees includes:

1. Development of Land Use Assumptions (LUA);
2. Development of Capital Improvement Plan (CIP) based on LUA;
3. Development of maximum impact fees;
4. Public hearing on LUA, CIP and impact fees;
5. Adoption of or amendment to LUA, CIP and impact fees;

NH Consulting has been retained by the PUA to determine the maximum allowable impact fee per requirements set forth in Chapter 395 of the Texas Local Government Code, based upon the Land Use Assumptions and Capital Improvements Plan adopted by the PUA Board of Directors.

This report is intended to outline the methodology utilized by NH Consulting in determining the maximum allowable impact fee that can be charged by the PUA.

Methodology and Findings

In developing amendments to impact fees charged to the PUA's customers, it was first necessary to develop a future assumption of system growth. Next, capital improvements which are necessary to meet the needs of that growth are identified. Finally, a maximum allowable impact fee may be determined. Making this determination involves a systematic progression of steps, which are outlined below.

Step 1: Land Use Assumptions

The PUA relied upon MEC to develop Land Use Assumptions, which have been summarized below. The values shown in Tables 5 and 6 are projected new living unit equivalents (LUEs) for each year in the study.

Table 5: Future Land Use Assumptions – Water (New LUEs per Year)

	US 290	SH71	Total
Oct-22	720	655	1,375
Oct-23	791	640	1,431
Oct-24	863	626	1,489
Oct-25	933	613	1,546
Oct-26	1,004	598	1,602
Oct-27	1,076	583	1,659
Oct-28	1,147	570	1,717
Oct-29	1,218	555	1,773
Oct-30	1,289	541	1,830
Oct-31	1,360	527	1,887

Table 6: Future Land Use Assumptions – Wastewater (New LUEs per Year)

	Total
Oct-22	255
Oct-23	283
Oct-24	219
Oct-25	225
Oct-26	224
Oct-27	229
Oct-28	206
Oct-29	194
Oct-30	183
Oct-31	177

Step 2: Existing Improvements

Chapter 395 of the Texas Local Government Code regulates impact fees that utilities may charge. Chapter 395 requires that impact fees collected by a utility should be utilized to pay for capital improvements necessitated by growth. Capital improvements utilized in the calculation may include existing improvements that have excess capacity as well as future improvements that will meet growth needs. Such projects were isolated by MEC and are included in the impact fee calculation.

Step 3: Planned Improvements

Planned improvements are improvements projected to be necessary in the future, which are driven by growth. Maintenance repair or replacement projects not driven by future growth may not be included in the impact fee calculation. MEC identified future projects that would be necessary to meet the needs of future growth based on projected timing of that growth.

Step 4: Capacity Analysis

Once projects eligible for inclusion in the impact fee have been determined, the next step is to perform a capacity analysis for each of those improvements. State law stipulates that only costs associated with available capacity projected to meet future growth needs in the ten-year planning period can be included in the fee determination.

Step 5: Determination of Costs to be Included in Fee

State law allows the following costs to be included in the impact fee calculation:

- Construction contract price;
- Surveying and engineering fees;
- Land acquisition costs;
- Projected interest and finance costs;
- Fees paid to a qualified engineer or financial consultant, preparing or updating the capital improvements plan.

As MEC estimated construction and engineering costs for each project in the CIP, NH Consulting used those cost estimates and grossed them up for legal and permitting costs as well as bond issuance costs (for bond funded projects) in order to arrive at an estimate of CIP costs in 2018 dollars. Given that many of the projects included in the CIP will be constructed in future years, NH Consulting then grossed up CIP cost estimates in order to account for future inflationary impacts to project costs, as described below.

- Allowable project design and construction costs, as described above, which were then inflated at 3% annually until projected project construction;
- Legal and permitting costs estimated at 1.5% of design and construction costs;
- Bond issuance costs estimated at 2% of design, construction, legal and permitting costs[2];
- Interest Expense (assumed a 30 year bond at 4% interest)[3].

The total costs that may be included in the water impact fees are identified on Schedules 1, 2 and 3; the costs that may be included in the wastewater impact fees are identified on Schedules 4, 5 and 6.

Step 6: Determination of Maximum Allowable Fee

NH Consulting determined a maximum allowable impact fee, which collects all revenues to pay for allowable projects and related fees within the ten-year study period.

Step 7: Determination of Rate Revenue Credit

In addition to describing the costs that can be included in the maximum impact fee calculation, Chapter 395 of the Texas Local Government Code also specifically states that the fee shall:

> *"Provide a plan for awarding:*
>
> (a) A credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt that is included in the capital improvements plan; or
> (b) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan."

Accordingly, the utility may elect to adopt a fee that is equal to 50% of the calculated amount or develop a plan for awarding a credit for utility service revenues that are generated to pay for debt associated with assets in the capital improvements plan.

NH Consulting has performed the requisite credit calculation that determines the credit needed for both the water and the wastewater utility. In so doing, NH Consulting has identified the annual debt service for PUA issued bonds, which are associated with regional assets to be funded through rates. NH Consulting then determined the estimated LUEs in the system based on the current LUE count and projected growth in the system. Finally, NH Consulting divided the total debt service paid for regional projects through rates by the

[2] Bond issuance costs were only included for existing projects.

[3] Interest expense for existing projects included all accrued interest to-date, plus 10 years of future interest. Interest expense for future projects, if included, was for only 10 years of future interest.

total LUEs that would pay those rates over the 10-year study period to determine the total credit which should be applied against the maximum allowable impact fee.

Summary of Maximum Allowable Fees

Maximum Allowable Fees

Table 7 provides the maximum allowable impact fee, including ad valorem tax credit for each scenario. Table 8 Provides a summary of the fees if assessed at 90%.

Table 7: Summary of Maximum Allowable Impact Fees (Including Ad Valorem Tax Credit)

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West Travis County Public Utility Agency
2021 Impact Fee Analysis - Water Utility

Schedule 1
Future CIP Projects, Before Interest Expense - Previously Approved Projects

Final Report

Project	Year Scheduled	Design/ Contruction Costs (2021 Cost)	Legal/ Permitting Costs (1.5%)	Issuance Costs (2%)	Subtotal (2021 Cost)	Future Cost (1)	Capacity Increase	Capacity Used in 2021-2031	Units	Percent Allocation to 2021-2031 Growth	Cost Allocated to 2021-2031 Growth
System Wide											
System Hydraulic Modeling	2022	125,000			125,000	128,750				100%	128,750
Uplands WTP Expansion	2024	17,000,000	255,000		17,255,000	18,855,004	5.000	2.500	MGD	50%	9,427,502
Additional Water Supply Development	2026	1,000,000	15,000		1,015,000	1,176,663				86%	1,011,930
Raw Water Pump Station Expansion (Phase II)	2029	2,700,000	40,500		2,740,500	3,471,583	7.000	1.050	MGD	15%	520,738
		$ 20,825,000	$ 310,500		$ 21,135,500	$ 23,632,001					$ 11,088,920
US 290 System											
1340 Pump Station	2021	1,920,000	28,800		1,948,800	1,948,800	2250	2000	LUE	89%	1,732,267
SW Parkway Upgrade GST2 Phase 2	2022	1,760,000	26,400		1,786,400	1,839,992	9500	5750	LUE	61%	1,113,679
Circle Drive Pump Station	2024	5,600,000	84,000		5,684,000	6,211,060	3000	3000	LUE	100%	6,211,060
1340 TM (Sawyer Ranch Road Ext)	2022	1,200,000	18,000		1,218,000	1,254,540	4500	1500	LUE	33%	418,180
1240 Conversion Water Line	2023	1,400,000	21,000		1,421,000	1,507,539	2700	2250	LUE	83%	1,256,282
RM1826 Phase V 16"	2033		-		-						-
Heritage Oaks Loop Line	2033		-		-					-	-
1420 Pump Station Upgrade	2022	670,000	10,050		680,050	700,452	1500	1100	LUE	73%	513,664
		$ 12,550,000	$ 188,250		$ 12,738,250	$ 13,462,383					$ 11,245,133
State Highway 71 System											
West Bee Cave PS Upgrade (Phase III)	2022	222,000	3,330		225,330	232,090	2500	1100	LUE	44%	102,120
Home Depot Pump Station Expansion & Conversion	2021		-		-						
1080 Bee Cave Transmission Main	2022	5,900,000	88,500		5,988,500	6,168,155	5229	3450	LUE	66%	4,069,638
		$ 6,122,000	$ 91,830		$ 6,213,830	$ 6,400,245					$ 4,171,757
Total Previously Approved Future CIP		**$ 39,497,000**	**$ 590,580**	**$ -**	**$ 40,087,580**	**$ 43,494,629**					**$ 26,505,810**

(1) Assumed 3% annual inflation to scheduled year.

West Travis County Public Utility Agency
2021 Impact Fee Analysis - Water Utility

Schedule 2
Future CIP Projects, Before Interest Expense - Newly Identified Projects

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Project	Year Scheduled	Design/ Contruction Costs (2021 Cost)	Legal/ Permitting Costs (1.5%)	Issuance Costs (2%)	Subtotal (2021 Cost)	Future Cost (1)	Capacity Increase	Capacity Used in 2022-2031	Units	Percent Allocation to 2018-2027 Growth	Cost Allocated to 2018-2027 Growth
Newly Proposed Projects											
System Wide											
Impact Fee Update	2026	92,500			92,500	107,233				100%	107,233
TM No. 2 (Upsize)	2027	1,396,000	20,940		1,416,940	1,691,900	3100	2100	LUEs	68%	1,146,126
Ranch Road 12 16" TM (HPR to Fitzhugh)	2027	5,621,000	84,315		5,705,315	6,812,444	5200	2100	LUEs	40%	2,751,180
1340 PS (HPR)	2027	2,016,000	30,240		2,046,240	2,443,318	5200	2100	LUEs	40%	986,724
Uplands WTP Expansion to 33 MGD	2026	10,000,000	150,000		10,150,000	11,766,632	8	7.44	LUEs	93%	10,942,968
		$ 19,125,500	$ 285,495		$ 19,410,995	$ 22,821,527					$ 15,934,230
US 290 System											
SWP PS Modifications	2025	$ 1,500,000	22,500		1,522,500	1,713,587	12000	8810	LUEs	73%	1,258,059
1240 EST	2027	2,095,000	31,425		2,126,425	2,539,063	2250	2250	LUEs	100%	2,539,063
Hwy 71 Parallel 20" TM (uplands to SWPWPS)	2030	4,150,000	62,250		4,212,250	5,496,031	8150	5700	LUEs	70%	3,843,850
Fitzhugh Road 16" TM (Crumley to RR12)	2030	2,083,000	31,245		2,114,245	2,758,610	5200	2200	LUEs	42%	1,167,104
Darden Hill Rd 16" WL	2028	5,956,400	89,346		6,045,746	7,435,505	5200	1800	LUEs	35%	2,573,829
Nutty Brown 12" TM	2026	3,158,000	47,370		3,205,370	3,715,902	2900	1000	LUEs	34%	1,281,346
Fitzhugh Road 16" TM (CLPS to Crumley)	2029	6,498,000	97,470		6,595,470	8,354,944	5200	3800	LUEs	73%	6,105,536
30" Parallel TM 2 (SWPPS to County Line)	2025	19,354,000	290,310		19,644,310	22,109,844	12000	8810	LUEs	73%	16,232,310
		$ 44,794,400	$ 671,916		$ 45,466,316	$ 54,123,486					$ 35,001,096
SH71 System											
West Bee Cave PS Upgrade (Electrical & Pumping)	2025	$ 336,000	5,040		341,040	383,844	4200	700	LUEs	17%	63,974
TM No. 2 (West Bee Cave to HPR)	2027	$ 825,792	12,387		838,179	1,000,829	3100	700	LUEs	23%	225,994
HPR GST2	2022	1,686,209	25,293		1,711,502	1,762,847	5000	700	LUEs	14%	246,799
		$ 2,848,001	$ 42,720		$ 2,890,721	$ 3,147,520					$ 536,766
Total New Proposed		$ 66,767,901	$ 1,000,131	$ -	$ 67,768,032	$ 80,092,534					$ 51,472,093

(1) Future cost determined by applying 3% annual inflation to scheduled year.

West Travis County Public Utility Agency

2021 Impact Fee Analysis - Water Utility

Schedule 3
Existing Projects, Before Interest Expense

Final Report

Project	Funding Year	Actual Project Cost	Debt Issuance Cost	Total Project Cost	Capacity (MGD or LUEs)	Current Capacity Used (MGD or LUEs)	Capacity Used 2018-2027 (MGD or LUEs)	Capacity Used Beyond 2027 (MGD or LUEs)	Percent Allocation Current	Percent Allocation 2018-2027	Percent Allocation Beyond 2027	Costs Allocated to Current	Costs Allocated to 2018-2027 Growth	Costs Allocated Beyond 2027
Systemwide														
Uplands WTP Chem Building*	2012	$ 2,141,458	$ 42,829	$ 2,184,288	20.00	17.90	2.10	-	90%	11%	0%	$ 1,954,937	$ 229,350	$ -
Uplands WTP Plant*	2012	40,549,183	810,984	41,360,167	20.00	17.90	2.10	-	90%	11%	0%	37,017,349	4,342,817	-
Uplands Raw Water Intake Expansion*	2012	416,305	8,326	424,631	20.00	17.90	2.10	-	90%	11%	0%	380,045	44,586	-
High Service Pump Station 8 MGD to 14 MGD*	2012	4,034,066	80,681	4,114,747	20.00	17.90	2.10	-	90%	11%	0%	3,682,699	432,048	-
Groundwater Feasibility Study	2014	40,000		40,000					84%	16%		33,600	6,400	-
Raw Water Transmission Main No. 2	2015	6,287,320	125,746	6,413,066	16.50	1.40	15.10	-	8%	92%	0%	544,139	5,868,927	-
Raw Water Line & Uplands WTP Expansion PER	2013	173,726		173,726				-	28%	72%	0%	48,643	125,083	-
Raw Water Line & WTP Expansion (Phase 1)	2017	1,592,603	31,852	1,624,455	3.00	0.40	2.60	-	13%	87%	0%	216,594	1,407,861	-
Uplands Clearwell #2*	2012	997,229	19,945	1,017,174	20.00	17.90	2.10	-	90%	11%	0%	910,370	106,803	-
		$ 56,231,890	$ 1,120,363	$ 57,352,254								$ 44,788,377	$ 12,563,877	$ -
SH 71 System														
Lazy 9 SW 71 Transmission Main*	2012	$ 3,090,461	$ 61,809	$ 3,152,270	20	17.90	2.10	-	90%	11%	0%	$ 2,821,282	$ 330,988	$ -
71 System Modeling	2013	49,578		49,578					84%	16%	0%	41,646	7,932	-
SH71 EST (1.0 Mgal)	2012	2,169,142	43,383	2,212,525	3,000	1,350	1,650	-	45%	55%	0%	995,636	1,216,889	-
Misc Improvements for 1280 Pressure Plane	2012	177,037	3,541	180,578	3,000	1,350	1,650		45%	55%	0%	81,260	99,318	-
WEST BEE CAVE PS UPGRADE (PHASE I)	2015	157,711	3,154	160,865	750	650	100	-	87%	13%	0%	139,417	21,449	-
West Bee Cave PS Upgrade Phase II (GST no 2)	2018	1,411,886	28,238	1,440,124	5,000	50	4,950		1%	99%	0%	14,401	1,425,722	-
Transmission Main from Uplands Plant to Bee Cave Pump Station*	2012	1,556,779	31,136	1,587,915	20	17.90	2.10	-	90%	11%	0%	1,421,184	166,731	-
Crystal Mountain EST*	2012	1,917,518	38,350	1,955,868	20	17.90	2.10	-	90%	11%	0%	1,750,502	205,366	-
Senna Hills By-Pass Line*	2012	559,677	11,194	570,871	20	17.90	2.10	-	90%	11%	0%	510,929	59,941	-
Hamilton Pool Road 1280 Pump Station Water Line*	2012	330,552	6,611	337,163	20	17.90	2.10	-	90%	11%	0%	301,761	35,402	-
Hamilton Pool Road Water Line*	2012	6,624,510	132,490	6,757,000	20	17.90	2.10	-	90%	11%	0%	6,047,515	709,485	-
Home Depot Pump Station*	2012	392,792	7,856	400,648	20	17.90	2.10	-	90%	11%	0%	358,580	42,068	-
Home Depot Ground Storage Tank*	2012	147,043	2,941	149,984	20	17.90	2.10	-	90%	11%	0%	134,236	15,748	-
Bee Cave Ground Storage Tank, Pump Station, Piping (off Cuernavaca)*	2012	699,851	13,997	713,848	20	17.90	2.10	-	90%	11%	0%	638,894	74,954	-
HPR Consversion and Upgrade to 1500 gpm	2019	214,321	4,286	218,607	375	20	355	-	5%	95%	0%	11,659	206,948	-
Bee Cave Water Line to Cuernavaca*	2012	990,492	19,810	1,010,302	20	17.90	2.10	-	90%	11%	0%	904,220	106,082	-
		$ 20,489,350	$ 408,795	$ 20,898,145								$ 16,173,121	$ 4,725,025	$ -
US 290 System														
Countyline Pump Station Upgrade 1800 gpm to 3450 gpm*	2012	$ 1,684,429	$ 33,689	$ 1,718,118	20	17.90	2.10	-	90%	11%	0%	$ 1,537,715	$ 180,402	$ -
290 Pipeline														
a) 24" SWPPS to County Line*	2012	12,841,593	256,832	13,098,425	20	17.90	2.10	-	90%	11%	0%	11,723,090	1,375,335	-
b) 20" Countyline to 1420 HGL EST*	2012	3,411,212	68,224	3,479,436	20	17.90	2.10	-	90%	11%	0%	3,114,095	365,341	-
SH71 20" Transmission Main	2013	3,630,945	72,619	3,703,564	20	17.90	2.10	-	90%	11%	0%	3,314,690	388,874	-
20" Main Uplands to SW Parkway (Easements)*	2012	506,714	10,134	516,848	20	17.90	2.10	-	90%	11%	0%	462,579	54,269	-
1420 Elevated Storage*	2012	2,197,353	43,947	2,241,300	20	17.90	2.10	-	90%	11%	0%	2,005,964	235,337	-
Sawyer Ranch Road Ph 1 20"*	2012	1,183,948	23,679	1,207,627	20	17.90	2.10	-	90%	11%	0%	1,080,826	126,801	-
Sawyer RR Ph 1 (Darden Hill)*	2012	1,293,619	25,872	1,319,491	20	17.90	2.10	-	90%	11%	0%	1,180,945	138,547	-
SWPPS Upgrade tp 5,900 gpm*	2012	243,213	4,864	248,077	20	17.90	2.10	-	90%	11%	0%	222,029	26,048	-
SWPPS Upgrade Phase 1 GST	2017	1,960,902	39,218	2,000,120	20	17.90	2.10	-	90%	11%	0%	1,790,107	210,013	-
1826 Phase IV 16" Water Line*	2012	1,055,040	21,101	1,076,141	20	17.90	2.10	-	90%	11%	0%	963,146	112,995	-
US290 System Modeling	2013	79,955		79,955					84%	16%	0%	67,162	12,793	-
1340 EST	2016	2,399,334	47,987	2,447,321	3,000	1,000	2,000	-	33%	67%	0%	815,774	1,631,547	-
1340 Transmission	2017	2,746,676	54,934	2,801,610	3,000	1,000	2,000	-	33%	67%	0%	933,870	1,867,740	-
		$ 35,234,933	$ 703,100	$ 35,938,033								$ 29,211,992	$ 6,726,040	$ -
Total		***$ 111,956,173***	***$ 2,232,258***	***$ 114,188,432***								***$ 90,173,490***	***$ 24,014,942***	***$ -***

TRUE

*LCRA Constructed Projects

West Travis County Public Utility Agency

2021 Impact Fee Study - Wastewater Analysis

Schedule 4
Future CIP Projects, Before Interest Expense - Previously Approved Projects

DRAFT

Project	Year Scheduled	Design/ Contruction Costs (2021 Cost)	Legal/ Permitting Costs (1.5%)	Issuance Costs	Subtotal (2021 Cost)	Future Cost	Capacity Increase	Capacity Used in 2022-2031	Units	Percent Allocation to 2022-2031 Growth	Cost Allocated to 2022-2031 Growth
Future WWTP Expansion	2022	6,325,000	94,875		6,419,875	6,612,471	0.5	0.25	MGD	50%	3,306,236
Effluent Disposal Development	2028	5,900,000	88,500		5,988,500	7,365,100	0.375	0.3	MGD	80%	5,892,080
Bohls Service Area Expansion Lift Station & Force Main	2024	780,000	11,700		791,700	865,112	500	375	LUEs	75%	648,834
Total and Future Projects		$ 13,005,000	$ 195,075	$ -	$ 13,200,075	$ 14,842,683					$ 9,847,149

West Travis County Public Utility Agency

2021 Impact Fee Study - Wastewater Analysis

Schedule 5

Future CIP Projects, Before Interest Expense - Newly Identified Projects

DRAFT

Project	Year Scheduled	Design/ Contruction Costs (2021 Cost)	Legal/ Permitting Costs (1.5%)	Issuance Costs	Subtotal (2021 Cost)	Future Cost	Capacity Increase	Capacity Used in 2015-2024	Units	Percent Allocation to 2018-2027 Growth	Cost Allocated to 2018-2027 Growth
Impact Fee Study	2026	27,500			27,500	31,880				100%	31,880
BWR & Effluent Disposal Injection Well	2022	517,500	7,763	10,350	535,613	551,681	0.375	0.30	MGD	80%	441,345
BWR Phase 1 Supply/Reject FMs	2022	1,460,500	21,908	29,210	1,511,618	1,556,966	0.500	0.30	MGD	60%	934,180
Lime Kiln Interceptor	2026	1,730,000	25,950	39,560	1,795,510	2,081,488	1,800	900	LUEs	50%	1,040,744
Total Future Projects		$ 3,735,500	$ 55,620	$ 79,120	$ 3,870,240	$ 4,222,015					$ 2,448,148

West Travis County Public Utility Agency

2021 Impact Fee Study - Wastewater Analysis

Schedule 6

Existing Projects, Before Interest Expense

DRAFT

Project	Funding Year	Actual Project Cost	Issuance Costs	Total Cost	Capacity	Current Capacity Used	Capacity Used 2022-2031	Capacity Used Beyond 2031	Units	Percent Allocation Current	Percent Allocation 2022-31	Percent Allocation Beyond 2031	Costs Allocated to Current	Costs Allocated to 2022-2031 Growth	Costs Allocated Beyond 2031
Systemwide															
Lakepointe WWTP*	2012	$ 15,317,630	$ 197,590	$ 15,515,220	0.675	0.590	0.085	-	MGD	87%	13%	0%	$ 13,561,452	$ 1,953,768	$ -
Bee Cave Regional System*	2012	8,499,620	109,641	8,609,261	1.000	0.800	0.200	-	MGD	80%	20%	0%	6,887,409	1,721,852	-
Spillman Effluent Irrigation System*	2012	530,458	6,843	537,301	1.000	0.800	0.200	-	MGD	80%	20%	0%	429,841	107,460	-
CCNG Lift Station*	2012	141,970	1,831	143,801	1.000	0.800	0.200	-	MGD	80%	20%	0%	115,041	28,760	-
RM 620 WW Line*	2012	1,262,030	16,280	1,278,309	1.000	0.800	0.200	-	MGD	80%	20%	0%	1,022,647	255,662	-
Hwy 71 WW Line*	2012	998,809	12,884	1,011,693	1.000	0.800	0.200	-	MGD	80%	20%	0%	809,355	202,339	-
Bohl's Effluent Pond and Lift Station	2012	3,816,591	49,232	3,865,823	0.325	0.290	0.035	-	MGD	89%	11%	0%	3,449,504	416,319	-
Bohl's WWTP	2012	5,570,796	71,860	5,642,656	0.325	0.290	0.035	-	MGD	89%	11%	0%	5,034,986	607,671	-
Bohl's Regional Lift Station/FM	2012	2,101,571	27,109	2,128,680	0.325	0.290	0.035	-	MGD	89%	11%	0%	1,899,438	229,242	-
Master Planning and Permitting	2013	310,867		310,867	0.500	-	0.500	-		8%	92%	0%	24,869	285,998	-
Little Barton Creek Interceptor	2013	2,851,077	36,777	2,887,854	0.267	0.038	0.229	-	MGD	14%	86%	0%	411,006	2,476,849	-
		$ 41,401,420	$ 530,048	$ 41,931,467									$ 33,645,546	$ 8,285,921	$ -
															TRUE