

- Draft -

**2013 DEVELOPMENT OF
WATER AND WASTEWATER IMPACT FEES
FOR THE CITY OF SAN MARCOS**

Prepared for:

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- and -

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- Draft -
**2013 DEVELOPMENT OF
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- Draft -

2013 DEVELOPMENT OF WATER AND WASTEWATER IMPACT FEES FOR THE CITY OF SAN MARCOS

1.0 BACKGROUND AND PROCESS

HDR Engineering was retained by the City of San Marcos (City) in February 2013 to assist the City and its appointed Capital Improvements Advisory Committee (CIAC) in the development and consideration of an update of the City's water and wastewater impact fees. The appointed CIAC assists the City Council in overseeing the development of land use and capital improvements information and the resulting calculation of maximum impact fee amounts for Council consideration.

Because this is an update effort, the City is following the one-step Public Hearing process outlined in Chapter 395 of the Texas Local Government Code where the CIAC considers the land use, capital improvements information and maximum impact fee calculation all at once and then reports its findings and recommendations to the City Council for one Public Hearing on the updated information.

Consistent with State law, the methodology that was used determines the maximum fee amounts through consideration of either: (a) a calculated credit for other methods of payments for utility capital by a new customer, such as through utility rates or taxes, or (b) a reduction of maximum fee amount equal to 50 percent of the unit capital cost of providing new service. By maximum amounts, this means that the determined fee amounts were calculated as the highest that can be lawfully levied by the City, given the prospective capital improvements plan, the cost of existing and new utility capacity, and consideration of a credit to new customers for net capital contributions made through rate payments. The City Council can decide to enact fees less than the maximum amounts shown in this report.

As detailed later in this report, the overall maximum calculated water and wastewater fees were developed as a sum of component pieces. For instance, the overall water maximum fee is comprised of separate amounts for water supply, treatment, pumping, storage, and transmission. The overall wastewater maximum fee is similarly comprised of wastewater treatment, pumping, and interceptor components. This will facilitate the consideration of offsets or credits from the applicable fee if a developer builds and dedicates eligible facilities to the City or the City provides wholesale service to a neighboring utility and wishes to charge certain portions of the fee to be collected by the wholesale customer and then passed to the City.

The maximum fee amounts do not include any capital costs for local (neighborhood) water distribution or wastewater collection systems as these facilities are, by City policy, provided by developers at their own expense, or if funded by the City, are typically used to provide service to existing development. In either case, these local facilities would not be applicable for an impact

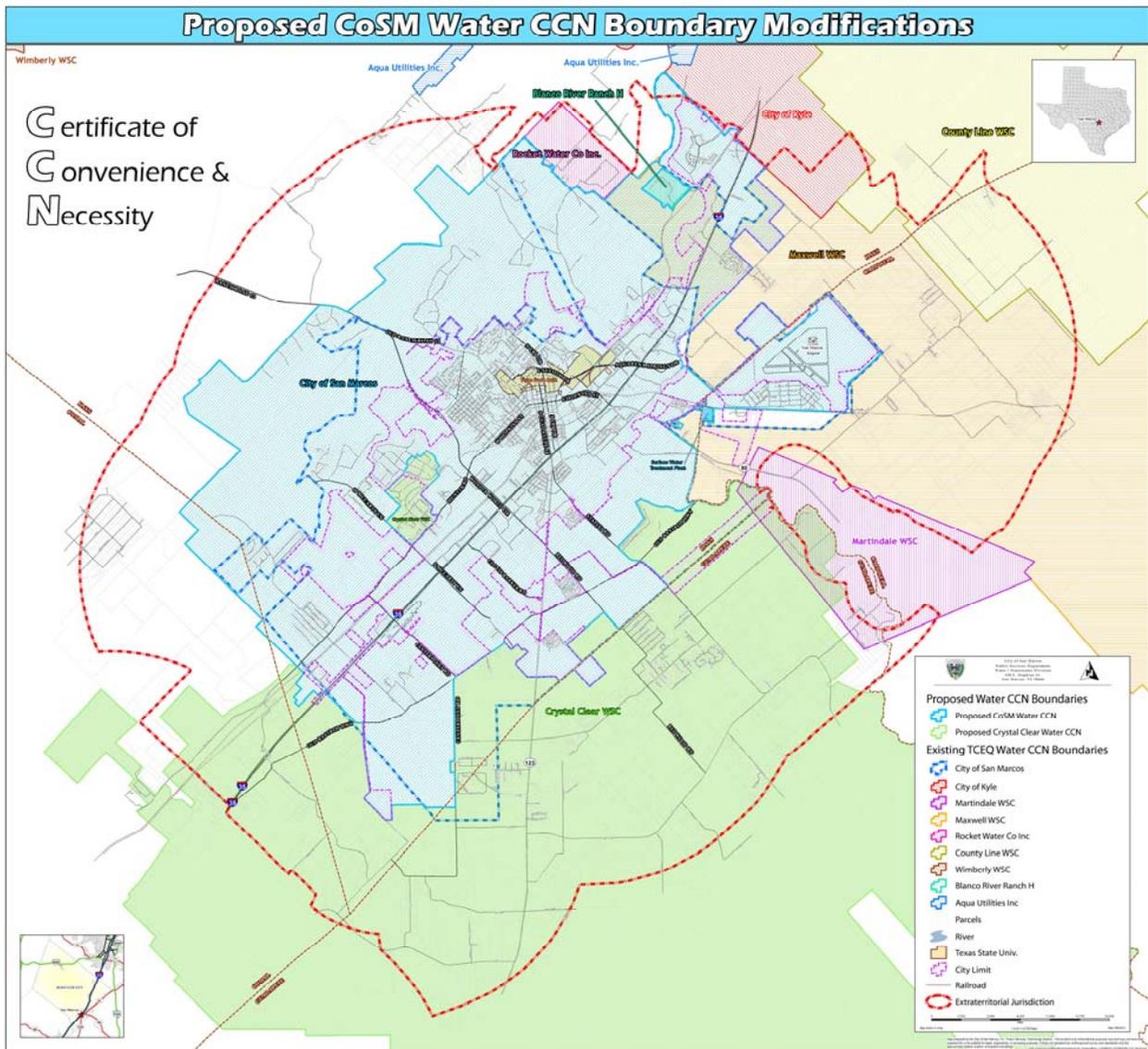
fee charge. Nor does the capital improvements plan include future project costs related to rehabilitation or regulatory improvements that provide for existing customers.

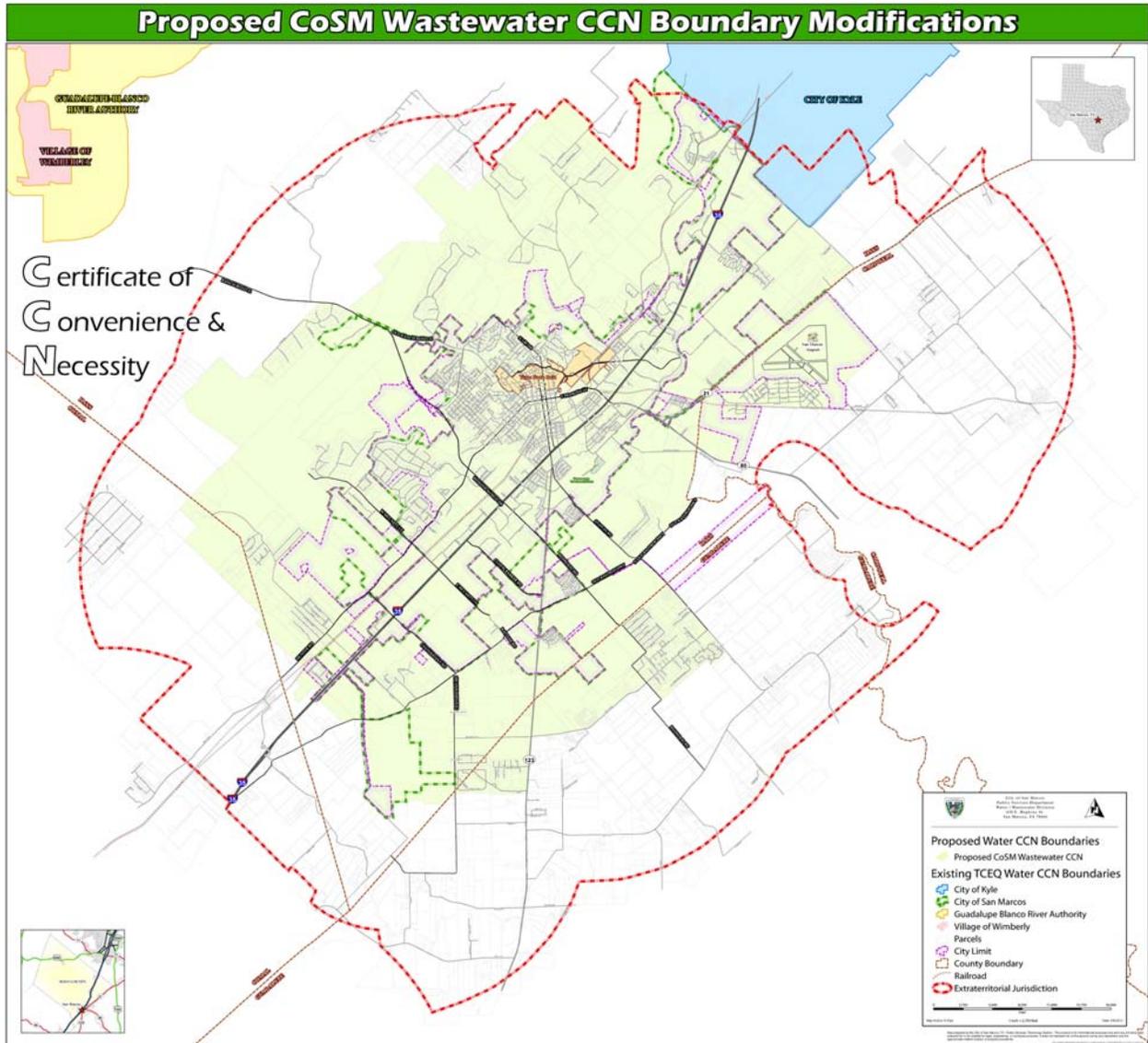
Service area, land uses, service demands, existing facility capacities, design factor assumptions, prospective growth-related CIP, and facility costing were developed by City Staff with assistance by HDR. HDR then combined these elements into the format needed for Committee consideration and for use in the pending maximum impact fee calculations.

DRAFT

2.0 UTILITY SERVICE AND FEE APPLICATION AREA

The City of San Marcos' proposed state-certificated water and wastewater service areas, shown below and on the next page, are the areas in which the impact fees is intended to be charged. These fee application service areas would be the locations in which San Marcos may levy the impact fees, in-part or in-full, *if City service is provided*. If the City does not provide service, in full or in-part, then the impact fees would not apply.





3.0 LAND USE ASSUMPTIONS

Table 1 provides an estimate of the current and future land use patterns of the potential service area. The overall acreage shown in Table 1 is reflective of certificated water and wastewater service areas. Because of other utilities which provide water service in areas adjacent to the City of San Marcos, the City’s certificated water service area is smaller than that for wastewater.

The certificated water service area encompasses about 58,984 acres with about 47% of that currently developed to some level of intensity. The certificated wastewater service area encompasses about 91,225 acres with about 31% of that currently developed to some level of intensity.

Over time as the City grows, developed land areas will increase both in and outside the City and become a higher percentage of overall land uses. By the year 2022, about 58% of the water service area and 39% of the wastewater service area are expected to be developed. Representative water and wastewater service demands per acre are also shown and used in the planning process.

**TABLE 1
CURRENT AND PROJECTED LAND USE
CITY OF SAN MARCOS**

ITEM	Current		2022	
	Acre ^s *	%	Acre ^s *	%
Water Service Area				
Residential	22,422	38.0%	27,803	47.1%
Non-Residential	5,381	9.1%	6,673	11.3%
Undeveloped/Open Space/Unserved	31,181	52.9%	24,508	41.6%
Total Land Use Acreage	58,984	100.0%	58,984	100.0%
Wastewater Service Area				
Residential	22,422	24.6%	29,291	32.1%
Non-Residential	5,381	5.9%	6,673	7.3%
Undeveloped/Open Space/Unserved	63,422	69.5%	55,261	60.6%
Total Land Use Acreage	91,225	100.0%	91,225	100.0%

* Acres reflect type of committed land use. May only be partially developed,

Also assumes

Utility	gallons per acre/day	
Water	360	Residential
	650	Non-Residential
	gallons per acre per day	
Wastewater	165	Residential
	265	Non-Residential

4.0 CURRENT/PROJECTED UTILITY DEMAND VERSUS EXISTING UTILITY CAPACITY

Table 2 indicates the number of water and wastewater utility connections by water meter size and what is termed a standard Living Unit Equivalent (LUE) conversion factor for meters of varying sizes. The standard meter size for a single family residential house in San Marcos is a 5/8" water meter, which is considered to be one LUE.

Based on American Water Works Association standards, the equivalent number of Living Unit Equivalents (LUEs) can be determined for water meters of larger size. In this manner, meters of larger size (i.e. larger potential service demands) can be couched in terms of the equivalent demand of a number of typical single family homes. For this reason, the LUE concept is a useful tool for being able to apply a base fee amount to service requests of varying meter sizes.

TABLE 2
LIVING UNIT EQUIVALENT UNIT CONVERSION FACTORS
CITY OF SAN MARCOS

Meter Size	Living Units Equivalent (LUEs) per Meter (a)	Number of Meters in 2013 (b)	Number of LUEs in 2013
WATER			
5/8"	1.00	9,159	9,159
3/4"	1.5	230	345
1"	2.5	384	960
1.5"	5.0	161	805
2"	8.0	343	2,744
3"	16.0	63	1,008
4"	25.0	38	950
6"	50.0	19	950
8"	80.0	21	1,680
10"	115.0	1	115
30"	5,000.0	1	-
Total Water		10,420	18,716
WASTEWATER			
5/8"	1.00	8,150	8,150
3/4"	1.5	196	294
1"	2.5	297	743
1.5"	5.0	139	695
2"	8.0	298	2,384
3"	16.0	58	928
4"	25.0	35	875
6"	50.0	18	900
8"	80.0	21	1,680
10"	115.0	1	115
Total Wastewater		9,213	16,764

(a) Derived from AWWA C700-C703 standards for continuous rated flow performance scaled to 5/8" meter.

(b) Source: City of San Marcos, June 2013.

As was previously mentioned, the overall maximum fee calculations are the sum of various component pieces. So, the utility demands and capital improvements information, shown in Tables 3 and 4, are developed in a similar component fashion. Forecasts are not made in this fee study for local neighborhood water distribution or wastewater collection lines, as these “subdivision-type” improvements are typically funded by the developer rather than the City.

Tables 3 and 4 summarize the City’s current and projected water and wastewater service demands and existing supply (service) capability by type of facility in both million gallons daily and equivalent LUE terms. The projected growth of the water utility system and service demand reflect an average of 550 new LUEs per year or 5,500 LUEs over the 10-year planning period. The projected growth of the wastewater utility system and service demand reflect an average of 440 new LUEs per year or 4,400 LUEs over the 10-year planning period.

Various “design flow” assumptions for the various types of facilities are shown in the footnotes to the tables and are reflective of what level of service demand each type of facility is intended to meet (i.e. peak day demand, peak hour demand, TCEQ requirements, wet-weather flows, etc.).

Current and 10-year future service demands are compared to the *existing* service capacity of the various utility components. In some cases such as wastewater interceptor lines, the projected 10-year demand exceeds existing utility capacity, clearly indicating that additional capacity is needed within the planning period.

In several other instances, there is excess capacity available system wide, but not necessarily in the areas where the new service demands are occurring. So, new capital improvements are needed to address that growth. In the case of water supply and treatment, groundwater permit requirements are necessitating the construction of facilities needed late in the planning period to implement the Hays/Caldwell Public Utility Authority groundwater supply project.

TABLE 3
EST. WATER SERVICE DEMAND & AVAILABLE CAPACITY
CITY OF SAN MARCOS

Facility Type	2013	2022
Supply		
Existing 2013 Capacity (mgd)	12.2	12.2
Est. Service Demand	7.2	9.3
Excess (Deficiency)	5.0	2.9
Existing 2013 Capacity (LUEs) *	31,713	31,713
Est. Service Demand	18,716	24,216
Excess (Deficiency)	12,997	7,497
Treatment		
Existing 2013 Capacity (mgd)	26.5	26.5
Est. Service Demand	11.5	14.9
Excess (Deficiency)	15.0	11.6
Existing 2013 Capacity (LUEs) *	43,053	43,053
Est. Service Demand	18,716	24,216
Excess (Deficiency)	24,337	18,837
Pumping		
Existing 2013 Capacity (mgd)	20.5	20.5
Est. Service Demand	11.5	14.9
Excess (Deficiency)	9.0	5.6
Existing 2013 Capacity (LUEs) *	33,268	33,268
Est. Service Demand	18,716	24,216
Excess (Deficiency)	14,552	9,052
Ground Storage		
Existing 2013 Capacity (mg)	5.4	5.4
Est. Service Demand	3.7	4.8
Excess (Deficiency)	1.7	0.6
Existing 2013 Capacity (LUEs) *	27,013	27,013
Est. Service Demand	18,716	24,216
Excess (Deficiency)	8,297	2,797
Elevated Storage		
Existing 2013 Capacity (mg)	3.0	3.0
Est. Service Demand	1.9	2.4
Excess (Deficiency)	1.1	0.6
Existing 2013 Capacity (LUEs) *	30,000	30,000
Est. Service Demand	18,716	24,216
Excess (Deficiency)	11,284	5,784
Transmission		
Existing 2013 Capacity (mgd)	69.0	69.0
Est. Service Demand	17.3	22.4
Excess (Deficiency)	51.7	46.6
Existing 2013 Capacity (LUEs) *	74,734	74,734
Est. Service Demand	18,716	24,216
Excess (Deficiency)	56,018	50,518

* Assumes LUE conversion factors of :

- 385 gpd/LUE for water supply
- 616 gpd/LUE for treatment
- 616 gpm/LUE for pumping
- 200 gals/LUE for ground storage
- 100 gals/LUE for elevated storage
- 923 gpd/LUE for transmission

**TABLE 4
EST. WASTEWATER SERVICE DEMAND & AVAILABLE CAPACITY
CITY OF SAN MARCOS**

Facility Type	2013	2022
Treatment		
Existing 2013 Capacity (mgd)	9.0	9.0
Est. Service Demand	5.0	6.3
Excess (Deficiency)	4.0	2.7
Existing 2013 Capacity (LUEs) *	30,174	30,174
Est. Service Demand	16,764	21,164
Excess (Deficiency)	13,411	9,011
Pumping		
Existing 2013 Capacity (mgd)	29.6	29.6
Est. Service Demand**	22.5	28.4
Excess (Deficiency)	7.1	1.2
Existing 2013 Capacity (LUEs) *	22,065	22,065
Est. Service Demand	16,764	21,164
Excess (Deficiency)	5,301	901
Interceptors		
Existing 2013 Capacity (mgd)	23.8	23.8
Est. Service Demand	22.5	28.4
Excess (Deficiency)	1.3	(4.6)
Existing 2013 Capacity (LUEs) *	17,732	17,732
Est. Service Demand	16,764	21,164
Excess (Deficiency)	969	(3,431)

* Assumes LUE conversion factors of :
 298 gpd/LUE for wastewater treatment
 1,342 gpd/LUE for wastewater pumping
 1,342 gpd/LUE for interceptors
 **Assumes 100% of existing ww service demand pumped

5.0 IDENTIFIED MAJOR CAPITAL IMPROVEMENT PLAN AND COSTS

Due to very limited excess capacity or additional capacity needed in certain locations by the end of the 10-year planning horizon, the City has identified a series of needed capital improvements for almost every facility type, except wastewater treatment. Incremental capacity improvements to water supply, treatment, pumping, storage and transmission in the next ten years are expected to total almost \$62.2 million. Capacity additions for wastewater pumping and interceptors are expected to total almost \$20 million.

Specific projects that accomplish these service capacity goals are identified in Table 5 and 6 for water and wastewater, respectively, along with their cost, capacity, unit cost, and allocation of existing and projected demand to these facilities. The projects listed as future facilities comprise the 10-year growth-related CIP that will underlie the ultimate impact fee calculation.

Chapter 395 recognizes that a new unit of growth will likely connect to *existing* excess capacity, but at the same time, also induce the need for new *future* facilities that add capacity. To acknowledge, this weighted cost of capital is calculated using the relative number of LUEs assigned to existing versus new capacity to calculate a weighted capital cost of service for a new (LUE) unit of growth.

As indicated at the bottom of Tables 5 & 6, the total unit capital cost is estimated at \$2,674 per LUE for water and \$3,734 per LUE for wastewater, totaling \$6,408 per LUE for combined water and wastewater service.

It should be emphasized that the amounts shown in Tables 5 and 6 reflect the weighted unit cost of capital, but these are not the calculated maximum impact fees. In the next report Section 6.0, this weighted unit cost of capital is then adjusted to maximum impact fee amounts based on consideration of the different ways (rates versus fees) that a new customer will pay for these capital costs.

TABLE 5
 WATER CAPITAL IMPROVEMENTS PLAN INVENTORY AND COSTING
 CITY OF SAN MARCOS

Facility Name	Construction Cost	Capacity		Construction Cost per LUE	Facility Capacity Allocations (LUEs)			Total Capacity
		Total	LUEs		Existing Customers	Growth Use in Next 10 Years	Excess Capacity after 10 Years	
WATER SUPPLY								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing Supply	\$ 17,529,402	12.2	31,713		18,716	4,800	8,197	31,713
Subtotal Existing Facilities	\$ 17,529,402	12.2	31,713	\$ 553	18,716	4,800	8,197	31,713
<i>FUTURE FACILITIES</i>								
HCPUA	\$ 33,219,820	5.4	14,037			700	13,337	14,037
Subtotal Future Facilities	\$ 33,219,820	5.4	14,037	\$ 2,367	-	700	13,337	14,037
TOTAL WATER SUPPLY	\$ 50,749,222	17.6	45,750		18,716	5,500	21,534	45,750
AVERAGE CAPITAL COST PER NEW LUE = \$				784				
WATER TREATMENT								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing WTPs	\$ 21,368,541	26.5	43,053		18,716	4,800	19,537	43,053
Subtotal Existing Facilities	\$ 21,368,541	26.5	43,053	\$ 496	18,716	4,800	19,537	43,053
<i>FUTURE FACILITIES</i>								
HCPUA	\$ 2,833,281	1.8	2,924			700	2,224	2,924
Subtotal Future Facilities	\$ 2,833,281	1.8	2,924	\$ 969	-	700	2,224	2,924
TOTAL WATER TREATMENT	\$ 24,201,822	28.3	45,978		18,716	5,500	21,762	45,978
AVERAGE CAPITAL COST PER NEW LUE = \$				556				
WATER PUMPING								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing Booster Pump Stations	\$ 3,351,399	20.5	33,268		18,716	550		19,266
Subtotal Existing Facilities	\$ 3,351,399	20.5	33,268	\$ 101	18,716	550	14,002	33,268
<i>FUTURE FACILITIES</i>								
McCarty PS Improvements	\$ 1,000,000	2.9	4,679			2,475		
Soyars PS	\$ 2,000,000	1.6	2,573			2,475	98	2,573
Subtotal Future Facilities	\$ 3,000,000	4.5	7,252	\$ 414	-	4,950	98	2,573
TOTAL WATER PUMPING	\$ 6,351,399	24.9	40,520		18,716	5,500	16,304	40,520
AVERAGE CAPITAL COST PER NEW LUE = \$				382				
GROUND STORAGE								
<i>EXISTING FACILITIES</i>								
		mg						
Existing GS Tanks	\$ 9,240,000	5.4	27,013		18,716	3,297	5,000	27,013
Subtotal Existing Facilities	\$ 9,240,000	5.4	27,013	\$ 342	18,716	3,297	5,000	27,013
<i>FUTURE FACILITIES</i>								
New Tank	\$ 3,125,000	1.0	5,000			2,203		
Subtotal Future Facilities	\$ 3,125,000	1.0	5,000	\$ 625	-	2,203	2,797	5,000
TOTAL GROUND STORAGE	\$ 12,365,000	6.4	32,013		18,716	5,500	7,797	32,013
AVERAGE CAPITAL COST PER NEW LUE = \$				455				
ELEVATED STORAGE								
<i>EXISTING FACILITIES</i>								
		mg						
Existing ES Tanks	\$ 4,852,000	3.0	30,000		18,716	4,400	6,884	30,000
Subtotal Existing Facilities	\$ 4,852,000	3.0	30,000	\$ 162	18,716	4,400	6,884	30,000
<i>FUTURE FACILITIES</i>								
Trunk Hill Tank	\$ 1,790,000	0.5	5,000			550		
Northside Elevated Tank	\$ 1,500,000	0.5	5,000			550		
Subtotal Future Facilities	\$ 1,500,000	1.000	10,000	\$ 150	-	1,100	8,900	10,000
TOTAL ELEVATED STORAGE	\$ 6,352,000	4.000	40,000		18,716	5,500	15,784	40,000
AVERAGE CAPITAL COST PER NEW LUE = \$				159				
TRANSMISSION								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing Transmission	\$ 24,893,977	69.0	74,734		18,716	4,400	51,618	74,734
Subtotal Existing Facilities	\$ 24,893,977	69.0	74,734	\$ 333	18,716	4,400	51,618	74,734
<i>FUTURE FACILITIES</i>								
Southeast Waterline Improvements	\$ 6,530,000							
Northeast Waterline Improvements	\$ 2,300,000							
West Waterline Improvements	\$ 5,735,000							
Water Main Oversizing	\$ 3,000,000							
Water Master Plan	\$ 1,000,000							
Subtotal Future Facilities	\$ 18,565,000	48.5	52,530	\$ 353	-	1,100	51,430	52,530
TOTAL TRANSMISSION	\$ 43,458,977	117.5	127,264		18,716	5,500	103,048	127,264
AVERAGE CAPITAL COST PER NEW LUE = \$				337				
WATER TOTAL	\$ 143,478,420							
AVERAGE CAPITAL COST PER NEW LUE = \$				2,674				

TABLE 6
WASTEWATER CIP INVENTORY AND COSTING
CITY OF SAN MARCOS

Facility Name	Construction Cost	Capacity		Construction Cost per LUE	Facility Capacity Allocations (LUEs)			Total Capacity
		Total	LUEs		Existing Customers	Growth Use in Next 10 Years	Excess Capacity after 10 Years	
TREATMENT								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing WWTPs	\$ 31,964,891	9.0	30,174		16,764	4,400	9,011	30,174
Subtotal Existing Facilities	\$ 31,964,891	9.0	30,174	\$ 1,059	16,764	4,400	9,011	30,174
<i>FUTURE FACILITIES</i>								
n.a.								
Subtotal Future Facilities	\$ -	-	-	\$ -	-	-	-	-
TOTAL WASTEWATER TREATMENT	\$ 31,964,891	9.0	30,174		16,764	4,400	9,011	30,174
		AVERAGE CAPITAL COST PER NEW LUE = \$			1,059			
PUMPING								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing Lift Stations	\$ 13,038,933	29.6	22,065		16,764	3,520	1,781	
Subtotal Existing Facilities	\$ 13,038,933	29.6	22,065	\$ 591	16,764	3,520	1,781	22,065
<i>FUTURE FACILITIES</i>								
Hwy 21 Lift Station	\$ 1,000,000	0.5	373					
Wonderworld Craddock LS	\$ 180,000	0.2	139					
River Road Lift Station - LS 14	\$ 2,000,000	2.4	1,776					
Subtotal Future Facilities	\$ 3,180,000	3.1	2,288	\$ 1,390		880	1,408	2,288
TOTAL PUMPING	\$ 16,218,933	32.7	24,353		16,764	4,400	3,189	24,353
		AVERAGE CAPITAL COST PER NEW LUE = \$			751			
INTERCEPTORS								
<i>EXISTING FACILITIES</i>								
		mgd						
Existing Interceptors	\$ 20,403,844	23.8	17,732		16,764	969	-	17,732
Subtotal Existing Facilities	\$ 20,403,844	23.8	17,732	\$ 1,151	16,764	969	-	17,732
<i>FUTURE FACILITIES</i>								
Southeast Interceptor Improvements	1,600,000							
Northeast Interceptor Improvements	7,700,000							
West Interceptor Improvements	6,700,000							
Wastewater Master Plan	\$ 600,000							
Subtotal Future Facilities	\$ 16,600,000	10.4	7,748	\$ 2,142	-	3,431	4,317	7,748
TOTAL INTERCEPTORS	\$ 37,003,844	34.2	25,481		16,764	4,400	4,317	25,481
		AVERAGE CAPITAL COST PER NEW LUE = \$			1,924			
WASTEWATER TOTAL	\$ 85,187,668							
		AVERAGE CAPITAL COST PER NEW LUE = \$			3,734			

6.0 CONSIDERATION OF OTHER METHODS OF CAPITAL PAYMENT

For Utilities that charge an impact fee for new or expended service, the new customer generally pays for capital in two ways:

1. the up-front impact fee that gains the new customer an “equity buy-in” to the system, and
2. monthly utility rate payments, where a portion of rate payments are for debt service.

The 77th Texas Legislature amended Chapter 395 of the Local Government Code to require that either: (1) consideration of a calculated credit for rate payments be reflected in the fee amount, or (2) a credit equal to 50 percent of the total projected cost of the capital improvements plan be given in calculating the maximum fee amount.

Table 7 characterizes the present value of existing and prospective utility capital costs per LUE that is projected to be supported by the utility rates and attributable to the new customers. This analysis considers the full term of existing or future bonds and is calculated using the total number of LUEs (existing and new) that would be present and paying rates in the year 2017, mid-way through the 10-year planning period.

For water and wastewater combined, the “rate credit” that is an offset to the full capital cost of service, shown in Tables 5 and 6, is calculated at \$663 per LUE.

TABLE 7
EXISTING OR ANTICIPATED DEBT TO BE PAID THROUGH UTILITY RATES
CITY OF SAN MARCOS

Facility Type	Net Present Value of Debt Payments In Rates	Mid-point 2017 LUEs	Debt Payments per LUE
WATER UTILITY			
Supply			
Existing Debt	\$ 235,509	21,466	\$ 11
Series 2013-2022	\$ 2,524,079	21,466	\$ 118
Subtotal Water Supply	\$ 2,759,588	21,466	\$ 129
Treatment			
Existing Debt	\$ 483,900	21,466	\$ 23
Series 2013-2022	\$ 215,276	21,466	\$ 10
Subtotal Water Treatment	\$ 699,176	21,466	\$ 33
Pumping			
Existing Debt	\$ 228,299	21,466	\$ 11
Series 2013-2022	\$ 227,943	21,466	\$ 11
Subtotal Pumping	\$ 456,243	21,466	\$ 21
Ground Storage			
Existing Debt	\$ 132,682	21,466	\$ 6
Series 2013-2022	\$ 237,441	21,466	\$ 11
Subtotal Water Storage	\$ 370,123	21,466	\$ 17
Elevated Storage			
Existing Debt	\$ 350,772	21,466	\$ 16
Series 2013-2022	\$ 113,972	21,466	\$ 5
Subtotal Water Storage	\$ 464,744	21,466	\$ 22
Transmission			
Existing Debt	\$ 3,000,521	21,466	\$ 140
Series 2013-2022	\$ 1,410,589	21,466	\$ 66
Subtotal Transmission Lines	\$ 4,411,110	21,466	\$ 205
Total Water	*		\$ 427
WASTEWATER UTILITY			
Treatment			
Existing Debt	\$ 1,489,404	18,964	\$ 79
Series 2013-2022	\$ -	18,964	\$ -
Subtotal WWTP	\$ 1,489,404	18,964	\$ 79
Pumping			
Existing Debt	\$ 168,449	18,964	\$ 9
Series 2013-2022	\$ 82,727	18,964	\$ 4
Subtotal WWTP	\$ 251,177	18,964	\$ 13
Interceptors			
Existing Debt	\$ 2,312,908	18,964	\$ 122
Series 2013-2022	\$ 431,846	18,964	\$ 23
Subtotal Interceptors	\$ 2,744,753	18,964	\$ 145
Total Wastewater			\$ 237
Total Water and Wastewater			\$ 663

7.0 ALTERNATIVE MAXIMUM IMPACT FEE CALCULATIONS

Table 8 summarizes the full unit capital costs of providing new service, the two alternative credit calculations for new customers, and the maximum fee calculation for each of the rate credit options.

In this update, the maximum water impact fee is calculated at \$2,256 per LUE and the maximum wastewater impact fee is calculated at \$3,506 per LUE for a maximum combined water and wastewater impact fee of \$5,762.

Compared to current fee amounts, the updated maximum water fee is \$210 less per LUE, but the maximum wastewater fee is \$1,321 per LUE higher, resulting in the newly updated maximum fee being \$1,111 per LUE higher than current fee levels.

**TABLE 8
DERIVATION OF ALTERNATIVE MAXIMUM WATER AND WASTEWATER IMPACT FEE AMOUNTS
CITY OF SAN MARCOS**

ITEM	Weighted Capital Cost of New Service per LUE	Optional Adjustments			Optional Max. Fee Amounts		Highest of Option A or B
		- Option A - Rate Credit	- Option B - Less 50% Capital Cost Adjustment	- Option A -	- Option B -		
WATER							
Supply	\$ 784	\$ 129	\$ 392	\$ 655	\$ 392		
Treatment	\$ 556	\$ 33	\$ 278	\$ 524	\$ 278		
Pumping	\$ 382	\$ 21	\$ 191	\$ 361	\$ 191		
Ground Storage	\$ 455	\$ 17	\$ 228	\$ 438	\$ 228		
Elevated Storage	\$ 159	\$ 22	\$ 80	\$ 138	\$ 80		
Transmission	\$ 337	\$ 205	\$ 169	\$ 132	\$ 169		
Allocated Impact Fee Study Cost	\$ 8	\$ -	\$ -	\$ 8	\$ 8		
Total Water	\$ 2,683	\$ 427	\$ 1,337	\$ 2,256	\$ 1,345		\$ 2,256
WASTEWATER							
Treatment	\$ 1,059	\$ 79	\$ 530	\$ 981	\$ 530		
Pumping	\$ 751	\$ 13	\$ 375	\$ 737	\$ 375		
Interceptors	\$ 1,924	\$ 145	\$ 962	\$ 1,779	\$ 962		
Allocated Impact Fee Study Cost	\$ 8	\$ -	\$ -	\$ 8	\$ 8		
Total Wastewater	\$ 3,742	\$ 237	\$ 1,867	\$ 3,506	\$ 1,875		\$ 3,506
TOTAL WATER/WASTEWATER	\$ 6,425	\$ 663	\$ 3,204	\$ 5,762	\$ 3,221		\$ 5,762

8.0 COMPARABLES

For comparison purposes, the current impact fees for a new standard residential connection (1 LUE) in other nearby cities and utilities are as follows:

City/Utility	Last Updated	Water	Wastewater	Total
Burnet	2004	\$1,085	\$1,173	\$2,258
New Braunfels Utilities	2011	\$2,311	\$1,571	\$3,882
Seguin	2007	\$1,875	\$2,374	\$4,249
Cedar Park	2007	\$2,250	\$2,000	\$4,250
Kyle	2008	\$2,115	\$2,216	\$4,331
San Marcos - Current	2002	\$2,466	\$2,185	\$4,651
Buda	2010	\$2,187	\$2,531	\$4,718
Pflugerville	2007	\$2,403	\$2,414	\$4,817
Austin (maximum fee calculation)	2007	\$3,307	\$1,852	\$5,159
San Marcos – Maximum Calculation	2013	\$2,256	\$3,506	\$5,762
Leander	2012	\$3,880	\$1,615	\$5,495
Hutto	2013	\$3,625	\$2,128	\$5,753
San Antonio Water System (high pressure plane and upper ww collection zones)	2011	\$3,510	\$2,347	\$5,847
Round Rock	2012	\$3,889	\$2,073	\$5,962
Boerne	2009	\$2,563	\$3,629	\$6,192
Georgetown	2010	\$4,714	\$1,694	\$6,408
Schertz	2012	\$4,240	\$3,468	\$7,708
West Travis County PUA – Hwy 71 Area	2012	\$5,992	n/a	n/a
Dripping Springs (DSWSC and WTCPUA water and City wastewater)	2008-2012	\$10,809	\$9,752	\$20,561

9.0 ADVISORY COMMITTEE ACTIONS AND RECOMMENDATIONS

The following summarizes the Advisory Committee activities during the impact fee updating process:

- On 6/25/13, the Committee met to:
 - Review Chapter 395 Impact Fee process and requirements.
- On 9/24/13, the Committee met to:
 - Review land use and CIP information
 - Review the draft impact fee calculations
 - Review the draft report to Council
- On 10/8/13, the Committee met to:
 - Make findings and recommendations to Council

The Advisory Committee makes the following findings and recommendations:

- The land use assumptions and Capital Improvements Plans underlying the maximum fee calculations are consistent with State law and good engineering practices.
- The Advisory Committee finds that the data and methodology underlying the maximum impact fee calculation are reasonable and useful for City purposes.
- By a ___-___ vote, the Advisory Committee concurs with the methodology used in the calculation of the following maximum fee amounts:

MAXIMUM FEE CALCULATIONS

Water Impact Fee per LUE	\$ 2,256
<u>Wastewater Impact Fee per LUE</u>	<u>\$ 3,506</u>
Total Combined Fee per LUE	\$ 5,762

- By ___-___ vote, the Committee recommends that the Council consider the other water and wastewater impact fees be set at ___% of the maximum calculated fees.