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DRAFT WATER AND WASTEWATER CAPITAL RECOVERY FEE UPDATE

February 2019

Prepared for:

City of League City

FNI Project Number: ADU17474

Prepared by:

FREESE AND NICHOLS, INC.
11200 Broadway St., Suite 2320
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Appendix C Water Project Costs
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Appendix F City Ordinance No. 2013-20

1.0 BACKGROUND AND SCOPE

The City of League City (City) currently assesses water and wastewater capital recovery fees (CRFs) for eligible capital improvement projects and facility expansions. These capital recovery fees are implemented under the procedure outlined in Chapter 395 of the Texas Local Government Code. Capital recovery fees are synonymous with impact fees as defined in Chapter 395 of the Texas Local Government Code as "a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development."

1.1 TEXAS LOCAL GOVERNMENT CODE

In September 2001, Texas Senate Bill 243 amended Chapter 395 establishing the current procedure for implementing capital recovery fees. Chapter 395 requires a capital recovery fee analysis before capital recovery fees can be created and assessed. The following items are identified as capital recovery fee eligible costs in Chapter 395:

- Construction contract price
- Surveying and engineering fees
- Land acquisition costs
- Fees paid to the consultant preparing or updating the capital improvements plan (CIP)
- Projected interest charges and other finance costs for projects identified in the CIP

Chapter 395 also identifies items that capital recovery fees cannot be used to pay for, such as:

- Construction, acquisition, or expansion of public facilities or assets other than those identified on the capital improvements plan
- Repair, operation, or maintenance of existing or new capital improvements
- Upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards
- Upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development
- Administrative and operating costs of the political subdivision
- Principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed above

As a funding mechanism for capital improvements, capital recovery fees allow cities to recover the costs associated with new or facility expansion in order to serve future development. Statutory requirements mandate that capital recovery fees (impact fees) be based on a specific list of improvements identified in a capital improvements program and only the cost attributed (and necessitated) by new growth over a ten-year period may be considered. As projects in the program are completed, planned costs are updated with actual costs to more accurately reflect the capital expenditure of the program. Additionally, new capital improvement projects may be added to the system.

1.2 CAPITAL RECOVERY FEE UPDATE

Texas Local Government Code Chapter 395 requires that capital recovery fees be updated, at a minimum, every five years. The City of League City, through its consultant, Ardurra Group, LLC (Ardurra) is updating the capital recovery fee analysis for the City's water and wastewater systems previously updated in 2013. Ardurra retained Freese and Nichols, Inc. (FNI) to conduct this *2018 Water and Wastewater Capital Recovery Fee Update* (Study). NewGen Strategies and Solutions, LLC was also retained to conduct the utility revenue credit analysis. The City recently completed a *2018 Water Master Plan Update (Volume 1)* and *2018 Wastewater Master Plan Update (Volume 2)*. This report utilizes the capital improvement plans from those water and wastewater master plan updates and follows those reports as *Volume 3*.

This report documents the land use assumptions and water and wastewater capital improvement plans used in the development and calculation of the water and wastewater capital recovery fees for the City. Additionally, this report calculates the maximum allowable water and wastewater capital recovery fees for the City of League City.

The methodology used herein satisfies the requirements of the Texas Local Government Code Chapter 395 for capital recovery fees. A copy of the Texas Local Government Code Chapter 395 is included in **Appendix A**.

1.3 LIST OF ABBREVIATIONS

Table 1-1 provides a glossary for all abbreviations used in this report.

Table 1-1: List of Abbreviations

Abbreviation	Full Nomenclature
Ardurra	Ardurra Group, LLC
BPS	Booster Pump Station
CIP	Capital Improvement Plan
COH	City of Houston
CRF	Capital Recovery Fee
EDU	Equivalent Dwelling Unit
FNI	Freese and Nichols, Inc.
GST	Ground Storage Tank
LS	Lift Station
LUA	2017 Land Use Assumption Report
MGD	Million Gallons per Day
SEWPP	Southeast Water Purification Plant
SH	South Highway
SWWRF	Southwest Water Reclamation Facility
TAZ	Traffic Analysis Zones
WCID	Galveston County Water Control and Improvement District
WL	Water Line
WRF	Water Reclamation Facility
WWTP	Wastewater Treatment Plant

2.0 LAND USE ASSUMPTIONS

Population and land use are important elements in the analysis of water and wastewater systems. In 2017, League City retained FNI to perform a Land Use Assumptions Report (LUA) to develop future land use, population, and employment projections for this *2018 Water and Wastewater Capital Recovery Fee Update*. The *2017 Land Use Assumptions Report* is provided in **Appendix B** for reference.

In the 2017 *Land Use Assumptions Report*, land use, population, and employment for the 10-year and buildout planning periods were projected by Traffic Analysis Zones (TAZs) for League City. The existing and future land use assumptions from the LUA are presented in **Figure 2-1** and **Figure 2-2**, respectively. The projected population and future land use from the LUA were used in the City's *2018 Water Master Plan Update (Volume 1)* and *2018 Wastewater Master Plan Update (Volume 2)*, as well as this study.

Water and Wastewater Capital Recovery Fee Service Areas

Figure 2-3 and **Figure 2-4** present the capital recovery fee eligible water and wastewater service areas, respectively. The Whispering Lakes area is served water but not wastewater by the City. The water CRF service area is largely defined by the existing City limits. The wastewater CRF service area is identical to the water CRF service area with the exception of the Whispering Lakes development.

Equivalent Dwelling Units

Capital recovery fees (CRFs) for League City's water and wastewater systems are calculated per equivalent dwelling units (EDUs). For the City of League City, an EDU is equal to an average single-family connection with a ¾-inch water meter per City Ordinance No. 2013-20 (**Appendix F**). Growth in population and commercial acreage, as well as the size and type of existing water meters were utilized to develop the EDUs for this study. The 10-Year growth in calculated EDUs in the water and wastewater CRF service areas is provided in **Table 2-1**.

Table 2-1: Water and Wastewater Capital Recovery Fee Service Area EDUs

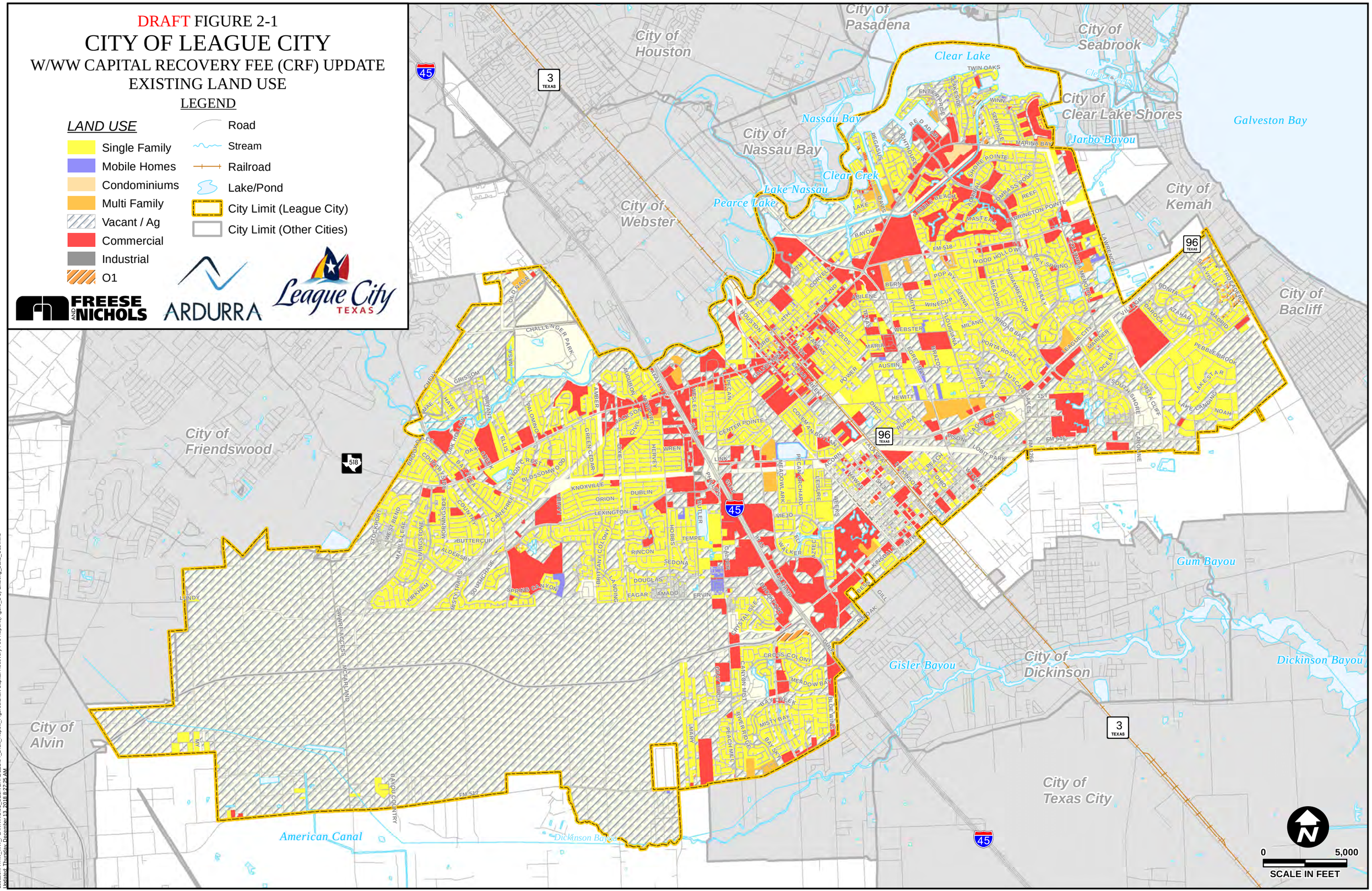
Year	Water EDUs	Wastewater EDUs
2018	52,770	52,259
2028	73,048	72,537
10-Year Growth	**20,278**	**20,278**

DRAFT FIGURE 2-1

CITY OF LEAGUE CITY

W/WW CAPITAL RECOVERY FEE (CRF) UPDATE

EXISTING LAND USE



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DRAFT FIGURE 2-2

CITY OF LEAGUE CITY

W/WW CAPITAL RECOVERY FEE (CRF) UPDATE

FUTURE LAND USE

LEGEND

FUTURE LAND USE

- Rural/Estate Residential
- Park/Open Space/Natural
- Suburban Residential
- Suburban Village
- Suburban Commercial
- Enhanced Auto Dominant Residential
- Enhanced Auto Dominant Commercial
- Urban High
- Urban Low
- Public/Institutional

- Road
- Stream
- Railroad
- Lake/Pond
- City Limit (League City)
- City Limit (Other Cities)

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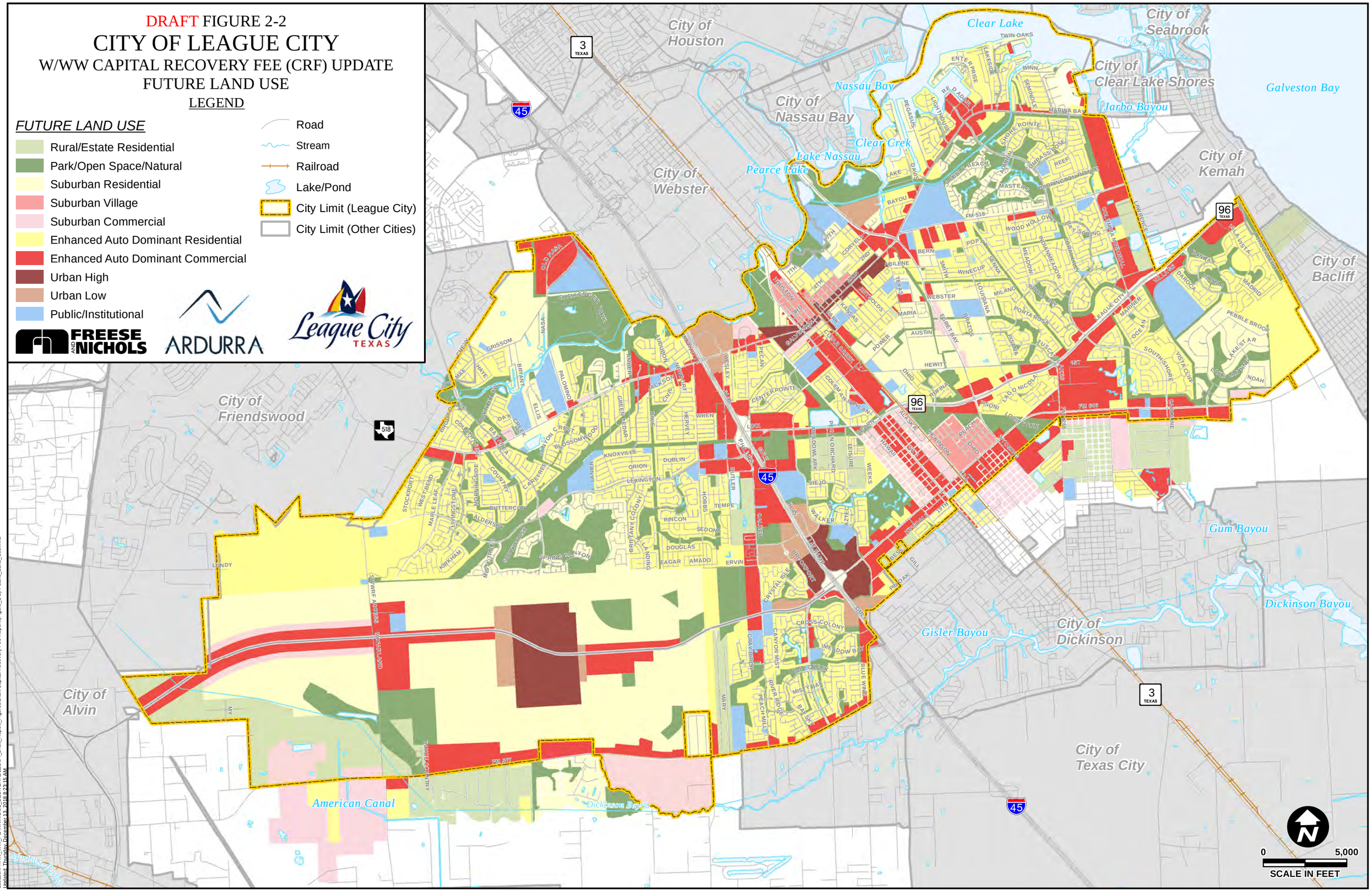
League City TEXAS



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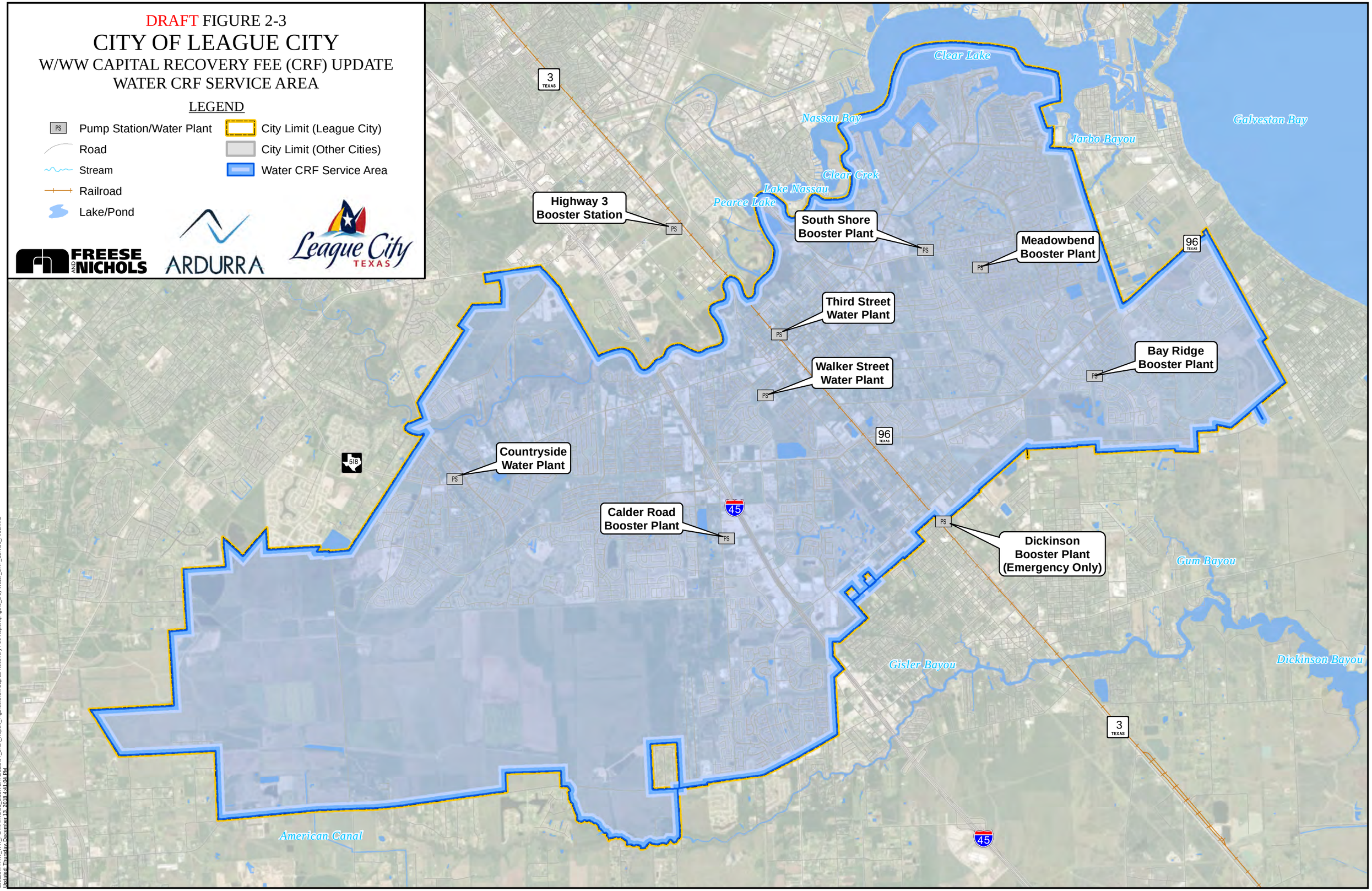
CITY OF LEAGUE CITY

W/WW CAPITAL RECOVERY FEE (CRF) UPDATE

WATER CRF SERVICE AREA



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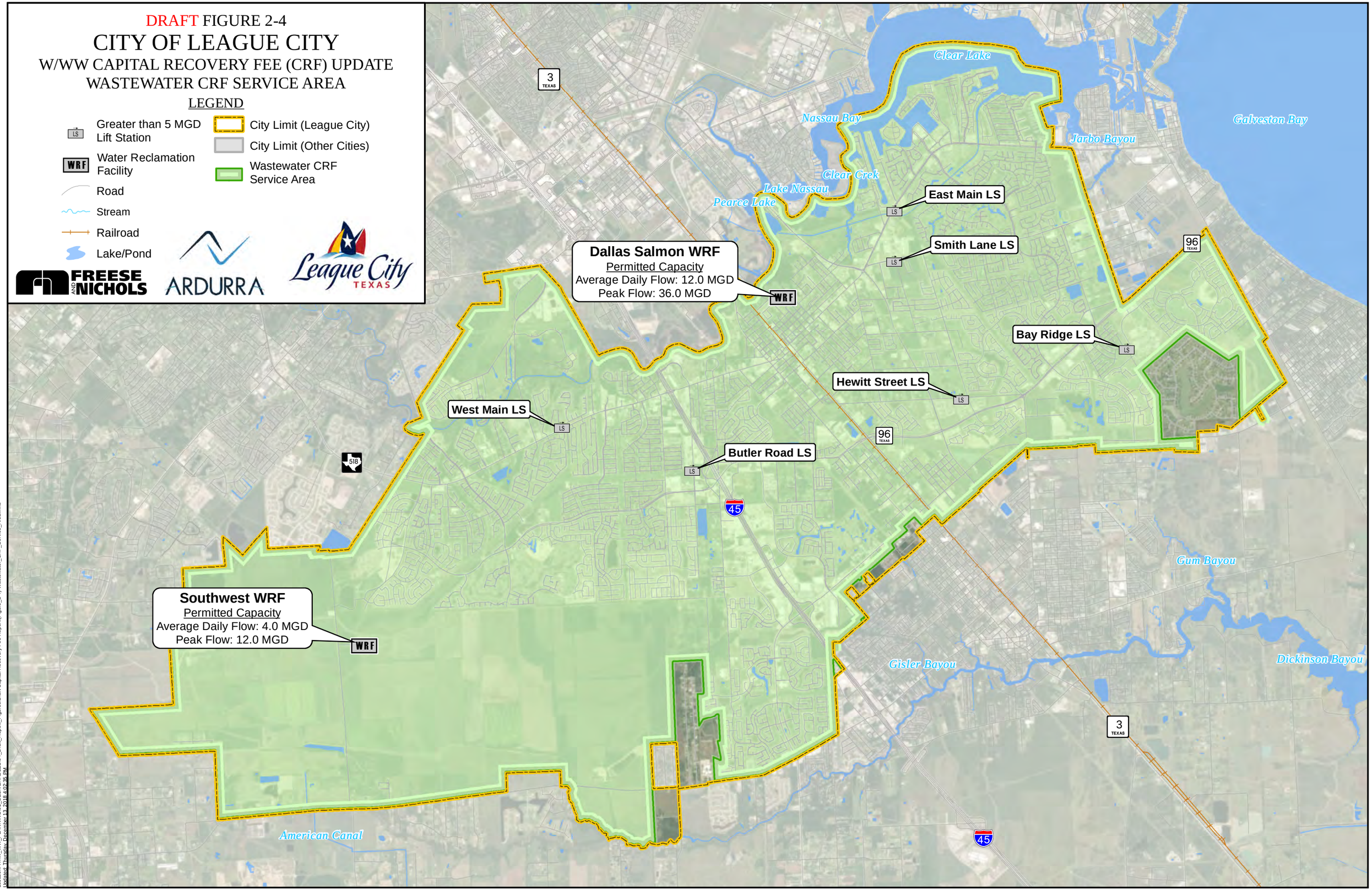
CITY OF LEAGUE CITY

W/WW CAPITAL RECOVERY FEE (CRF) UPDATE

WASTEWATER CRF SERVICE AREA



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3.0 CAPITAL IMPROVEMENT PLANS

Water and wastewater capital improvement plans (CIPs) were developed for the City of League City as part of the City's *2018 Water Master Plan Update (Volume 1)* and *2018 Wastewater Master Plan Update (Volume 2)*. The recommended improvements will provide the required capacity and reliability to meet projected water demands and wastewater flows for the 5-year, 10-year, and 20-year planning periods. The water and wastewater capital improvement projects that are required to serve growth within the next 10 years were identified for inclusion in the capital recovery fee analysis.

3.1 WATER DEMAND AND WASTEWATER LOAD PROJECTIONS

Water demand and wastewater flow projections for 2018 and 2028 were developed in the *2018 Water Master Plan Update (Volume 1)* and *2018 Wastewater Master Plan Update (Volume 2)*. These projections were based on the City's *2017 Land Use Assumptions Report* and water and wastewater planning criteria including average day per capita and per acre usage. **Table 3-1** presents the projected water demands and **Table 3-2** presents the projected wastewater flows for the City of League City in million gallons per day (MGD).

Table 3-1: Projected Water Demands

Year	Average Daily Demand (MGD)	Maximum Daily Demand (MGD)
2018	11.5	19.9
2028	19.6	33.9

Table 3-2: Projected Wastewater Flows

Year	Average Daily Flow (MGD)
2018	9.4
2028	14.6

3.2 WATER AND WASTEWATER SYSTEM IMPROVEMENTS

Proposed water and wastewater system projects and capital costs were developed as part of the CIPs presented in the *2018 Water Master Plan Update (Volume 1)* and *2018 Wastewater Master Plan Update (Volume 2)*. A summary of the costs for each of the existing and proposed projects serving growth in the 10-year period used in the capital recovery fee analysis for both the water and wastewater systems are shown in **Table 3-3** and **Table 3-4**, respectively. The capital costs for the existing water and wastewater

projects are based on actual design and construction costs provided by the City. Detailed project costs for the proposed water and wastewater capital projects were developed in the City's 2018 water and wastewater master plan updates and are included in **Appendix C** and **Appendix D**, respectively.

The existing and proposed 10-year water system projects are shown on **Figure 3-1**. The existing and proposed 10-year wastewater system projects are shown on **Figure 3-2**.

Table 3-3: Water System Capital Recovery Fee Eligible Capital Projects

No.	Description of Project	Capital Cost
	EXISTING	
A	36'' WL SH3 to SSH Booster Station (WT1109)	$13,529,816
B	Replacement of State Hwy 3 Line (WT1502)	$53,615,000
C	Pedregal (West Side Well, Generator & BPS)	$3,676,674
D	State HWY 3 Booster Pump Station Reconstruction (WT1108)	$19,549,372
E	South Shore Harbour Booster Pump Station Reconstruction (WT1102)	$12,235,130
F	Calder Rd Booster Pump Station Expansion (WT1205)	$14,051,049
G	Northside BPS (WT1003)	$8,385,303
H	Capital Recovery Fee Study (WT1704)	$217,824
	Existing Project Sub-total	**$125,260,168**
	PROPOSED	
1	Calder Rd BPS Pump Upgrade	$3,160,000
2	New Waterlines to West Side - Segments 0 & 1	$3,770,000
3	New West Side GST, Well, and BPS	$5,530,000
4	16'' Water line to New West Side GST	$330,000
5	20 MGD SEWPP Expansion	$100,630,000
6	New Waterlines to West Side - Segments 2, 3 & 5	$5,320,000
7	Southeast Service Area Trunks	$4,200,000
8	Northwest Side Well, GST, BPS	$5,390,000
9	North Service Area 12" WL - Grissom	$1,010,000
	Proposed Project Sub-total	**$129,340,000**
	Total Water Capital Improvements Cost	**$254,600,168**

Table 3-4: Wastewater System Capital Recovery Fee Eligible Capital Projects

No.	Description of Project	Capital Cost
	EXISTING	
A	12" Force Main from Bay Colony 14-15 Lift Station (WW1206)	$2,452,925
B	Westover Park Lift Station and Force Main Improvements (WW1801A)	$1,787,610
C	New 24" and 30" Gravity Line along Calder (WW1301)	$4,143,237
D	North Service Area Lift Station, Force Main and Gravity (WW1001)	$2,847,026
E	Southwest Water Reclamation Facility 4.0 MGD (WW0103)	$31,713,862
F	Butler Rd Lift Station and Force Main Improvement (WW1004)	$2,032,695
G	West Main Lift Station and Force Main Improvement (WW1005)	$1,705,719
H	Dallas Salmon WWTP Lift Station Expansion to 12.0 MGD (WW0302)	$5,412,700
I	Dallas Salmon WWTP Expansion to 12.0 MGD (WW0405)	$25,620,464
J	Wastewater Master Plan & CRF Update (WW1704)	$320,994
K	New Hobbs Rd Lift Station and Force Main (WW1207)	$604,498
L	Divert Countryside WWTP, Countryside LF and Westover Park LS to SWWRF (WW1002)	$2,255,916
	Existing Project Sub-total	**$80,897,646**
	PROPOSED	
1	New 48/54/60-inch Southwest Area Trunk Line to Southwest WRF	$17,797,400
2	Expansion of Southwest WRF by 2.0 MGD to a Permitted ADF of 6.0 MGD	$24,960,000
3	Re-Route 18-inch Bay Colony 1 Force Main to Southwest Service Area	$1,575,800
4	Expansion of Harbour Park Lift Station No. 1 to 3.0 MGD Firm Capacity and Replacement 12/21-inch Gravity Lines	$2,173,100
5	Replacement 15-inch Willow Branch and 18-inch FM 518 Gravity Lines	$1,391,300
6	New Southwest WRF 48-inch Gravity Line Extension and Force Main Re-Route	$1,324,000
7	Expansion of Bay Colony 1 14-15 Lift Station to 5.7 MGD Firm Capacity	$2,029,600
8	New 2.5 MGD Firm Capacity FM 646 Lift Station and New 12/15-inch Gravity Lines and New 10-inch Force Main	$5,198,200
9	Expansion of Smith Lane Lift Station to 7.6 MGD Firm Capacity	$4,762,700
	Proposed Project Sub-total	**$61,212,100**
	Total Capital Improvements Cost	**$142,109,746**

DRAFT FIGURE 3-1

CITY OF LEAGUE CITY

W/WW CAPITAL RECOVERY FEE (CRF) UPDATE

WATER CRF CAPITAL IMPROVEMENTS

The utility alignments and wastewater treatment plant locations shown on this figure are for illustration purposes only and do not set the alignments or locations. The locations of utility alignments and wastewater treatment plants will be determined in final design.

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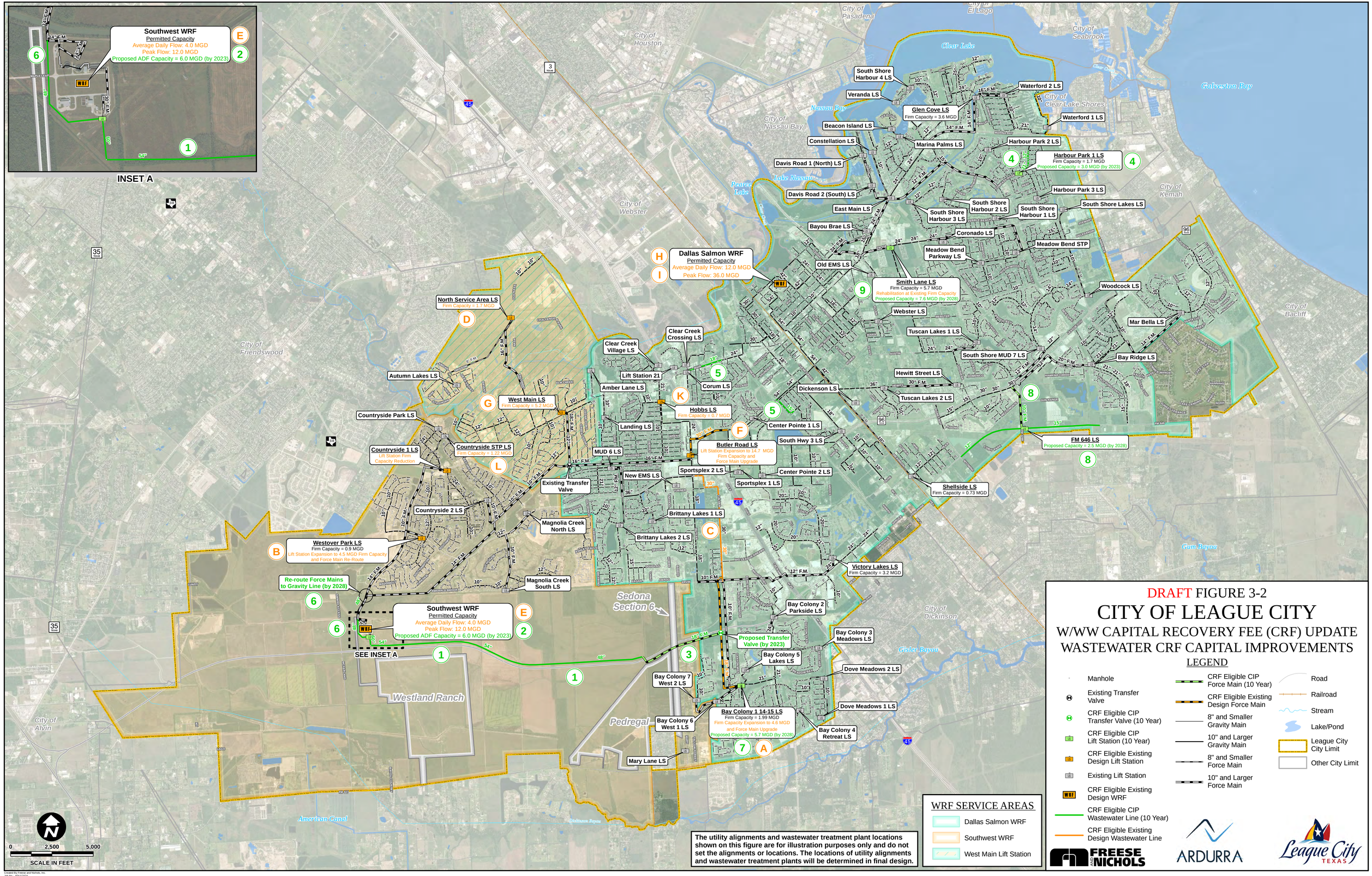

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4.0 WATER AND WASTEWATER CAPITAL RECOVERY FEE ANALYSIS

The water and wastewater capital recovery fee analysis involves determining the utilization of existing and proposed projects required as defined by the capital improvement plan to serve new development over the next 10-year time period. For existing or proposed projects, the capital recovery fee is calculated as a percentage of the project cost, based upon the percentage of the project's capacity required to serve development projected to occur between 2018 and 2028. Capacity serving existing development and development projected to occur beyond the 10-year period is not capital recovery fee eligible.

4.1 SERVICE UNITS

According to Chapter 395 of the Texas Local Government Code, the maximum capital recovery fee may not exceed the amount determined by dividing the cost of capital improvements required by the total number of service units attributed to new development during the capital recovery fee eligibility period (2018 - 2028). For League City, a water and wastewater service unit is an equivalent dwelling unit (EDU), which is equivalent to an average single-family connection with a ¾-inch water meter. The service associated with public, commercial, and industrial connections is converted into EDUs based upon the capacity of the meter used to provide service. **Table 4-1** presents the equivalent dwelling units (EDUs) for residential and commercial connections in the City of League City per City Ordinance No. 2013-20.

The projected 10-Year growth in service units (EDUs) in the City's water and wastewater CRF service areas are provided in **Section 2.0** (**Table 2-1**).

Table 4-1: Equivalent Dwelling Units (EDUs)

Residential		
Type of Structure		**Single-Family Equivalent**
Single Family Residential		1.0
Townhouse		0.8
Condominium/Apartment		0.8
Mobile homes		1.0
Commercial/Industrial		
Meter Size/Type		**Single-Family Equivalent**
3/4"	Displacement	1.0
1"	Displacement	1.667
1-1/2"	Displacement	3.333
2"	Displacement	5.333
2"	Compound	5.333
2"	Turbine	5.333
3"	Compound	10.667
3"	Turbine	11.667
4"	Compound	16.667
4"	Turbine	21.0
6"	Compound	33.333
6"	Turbine	43.333
8"	Compound	53.333
8"	Turbine	93.333
10"	Compound	76.667
10"	Turbine	140.0
12"	Turbine	176.667

4.2 WATER AND WASTEWATER CAPACITY ANALYSES

Existing and proposed water and wastewater capital projects were evaluated to determine the proportion of the project that will be utilized within the next 10 years. The 10-year utilization will define the percentage of the project cost that is capital recovery fee eligible. A summary of the project costs required for the 10-year growth period used in the capital recovery fee analysis for both the water and wastewater systems are shown in **Table 4-2** and **Table 4-3**, respectively. The 2018 percent utilization is the portion of a project's capacity required to serve existing development and is therefore not included in the capital recovery fee eligible cost. The 2028 percent utilization is the portion of the project's capacity that will be utilized by 2028. The 2018 - 2028 percent utilization is the portion of the project's capacity required to

serve growth from 2018 to 2028. The portion of a project's total cost that is used to serve growth projected to occur from 2018 through 2028 is calculated as the total project cost multiplied by the 2018 - 2028 percent utilization. Only this portion of the cost is used in the capital recovery fee analysis.

Table 4-2: Cost Allocation for Water Capital Recovery Fee Calculation

No.		Description of Project	Percent Utilization			Costs Based on 2018 Dollars	
			2018[1]	2028	2018-2028	Capital Cost	10-Year (2018-2028)
Existing/Under Design	A	36" WL SH3 to SSH Booster Station (WT1109)	30%	65%	35%	$13,529,816	$4,735,436
	B	Replacement of State Hwy 3 Line (WT1502)	50%	75%	25%	$53,615,000	$13,403,750
	C	Pedregal (West Side Well, Generator & BPS)	0%	100%	100%	$3,676,674	$3,676,674
	D	State HWY 3 Booster Pump Station Reconstruction (WT1108)	45%	80%	35%	$19,549,372	$6,842,280
	E	South Shore Harbour Booster Pump Station Reconstruction (WT1102)	45%	80%	35%	$12,235,130	$4,282,296
	F	Calder Rd Booster Pump Station Expansion (WT1205)	45%	80%	35%	$14,051,049	$4,917,867
	G	Northside BPS (WT1003)	45%	80%	35%	$8,385,303	$2,934,856
	I	Capital Recovery Fee Study (WT1704)	0%	100%	100%	$217,824	$217,824
					Existing Project Sub-total	**$125,260,168**	**$41,010,983**
Proposed	1	Calder Rd BPS Pump Upgrade	55%	100%	45%	$3,160,000	$1,422,000
	2	New Waterlines to West Side - Segments 0 & 1	0%	35%	35%	$3,770,000	$1,319,500
	3	New West Side GST, Well, and BPS	0%	100%	100%	$5,530,000	$5,530,000
	4	16" Water line to New West Side GST	0%	35%	35%	$330,000	$115,500
	5	20 MGD SEWPP Expansion	0%	50%	50%	$100,630,000	$50,315,000
	6	New Waterlines to West Side - Segments 2, 3 & 5	0%	35%	35%	$5,320,000	$1,862,000
	7	Southeast Service Area Trunks	0%	40%	40%	$4,200,000	$1,680,000
	8	Northwest Side Well, GST, BPS	0%	35%	35%	$5,390,000	$1,886,500
	9	North Service Area 12" WL - Grissom	0%	85%	85%	$1,010,000	$858,500
					Proposed Project Sub-total	**$129,340,000**	**$64,989,000**
					Total Capital Improvements Cost	**$254,600,168**	**$105,999,983**

Table 4-3: Cost Allocation for Wastewater Capital Recovery Fee Calculation

No.		Description of Project	Percent Utilization			Costs Based on 2018 Dollars	
			2018[1]	2028	2018-2028	Capital Cost	10-Year (2018-2028)
Existing/ Under Design	A	12" Force Main from Bay Colony 14-15 Lift Station (WW1206)	85%	100%	15%	$2,452,925	$367,939
	B	Westover Park Lift Station and Force Main Improvements (WW1801A)	65%	95%	30%	$1,787,610	$485,006
	C	New 24" and 30" Gravity Line along Calder (WW1301)	75%	90%	15%	$4,143,237	$621,486
	D	North Service Area Lift Station, Force Main and Gravity (WW1001)	55%	100%	45%	$2,847,026	$1,281,162
	E	Southwest Water Reclamation Facility 4.0 MGD (WW0103)	30%	100%	70%	$31,713,862	$22,199,703
	F	Butler Rd Lift Station and Force Main Improvement (WW1004)	55%	80%	25%	$2,032,695	$508,174
	G	West Main Lift Station and Force Main Improvement (WW1005)	50%	60%	10%	$1,705,719	$170,572
	H	Dallas Salmon WWTP Lift Station Expansion to 12.0 MGD (WW0302)	15%	80%	65%	$5,412,700	$3,518,255
	I	Dallas Salmon WWTP Expansion to 12.0 MGD (WW0405)	15%	80%	65%	$25,620,464	$16,653,302
	J	Wastewater Master Plan & CRF Update (WW1704)	0%	100%	100%	$320,994	$320,994
	K	New Hobbs Rd Lift Station and Force Main (WW1207)	95%	100%	5%	$604,498	$30,225
	L	Divert Countryside WWTP, Countryside LF and Westover Park LS to SWWRF (WW1002)	65%	95%	30%	$2,255,916	$676,775
		Existing/Under Design Project Sub-total				**$80,897,646**	**$46,833,591**
Proposed	1	New 48/54/60-inch Southwest Area Trunk Line to Southwest WRF	0%	30%	30%	$17,797,400	$5,339,220
	2	Expansion of Southwest WRF by 2.0 MGD to a Permitted ADF of 6.0 MGD	0%	35%	35%	$24,960,000	$8,736,000
	3	Re-Route 18-inch Bay Colony 1 Force Main to Southwest Service Area	85%	100%	15%	$1,575,800	$236,370
	4	Expansion of Harbour Park Lift Station No. 1 to 3.0 MGD Firm Capacity and Replacement 12/21-inch Gravity Lines	85%	90%	5%	$2,173,100	$108,655
	5	Replacement 15-inch Willow Branch and 18-inch FM 518 Gravity Lines	40%	50%	10%	$1,391,300	$139,130
	6	New Southwest WRF 48-inch Gravity Line Extension and Force Main Re-Route	25%	35%	10%	$1,324,000	$132,400
	7	Expansion of Bay Colony 1 14-15 Lift Station to 5.7 MGD Firm Capacity	85%	100%	15%	$2,029,600	$304,440
	8	New 2.5 MGD Firm Capacity FM 646 Lift Station and New 12/15-inch Gravity Lines and New 10-inch Force Main	0%	50%	50%	$5,198,200	$2,599,100
	9	Expansion of Smith Lane Lift Station to 7.6 MGD Firm Capacity	0%	85%	85%	$4,762,700	$4,048,295
		Proposed Project Sub-total				**$61,212,100**	**$21,643,610**
		Total Capital Improvements Cost				**$142,109,746**	**$68,477,201**

4.3 MAXIMUM CAPITAL RECOVERY FEE CALCULATION

Chapter 395 of the Texas Local Government Code states that the maximum water and wastewater capital recovery fees may not exceed the amount determined by dividing the cost of capital improvements required by the total number of service units (EDUs) attributed to new development during the 10-year capital recovery fee eligibility period.

The maximum allowable capital recovery fee calculation for League City was developed through a financial based model which fully recognizes the requirements of Texas Local Government Code Chapter 395 including the recognition of cash and/or debt financing, interest earnings, fund balances, and applicable credits associated with the use of utility revenues. In developing the components of the financial model several assumptions must be made, including the following:

- Financing
    - Method of financing (i.e. cash or debt financing)
    - The level of financing (e.g. 50% debt funding)
    - Cost of financing
    - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth
- Portion of Utility Revenue Used to Fund Capital Recovery Fee Water Improvements

The assumptions employed in the maximum allowable capital recovery fee determination provide a reasonable basis for forecasting; however, it must be emphasized that these assumptions may not necessarily reflect actual future conditions. To address this, Chapter 395 requires the monitoring of capital recovery fees through the Capital Recovery Fee Advisory Committee and allows for the option to update or revise capital recovery fees to reflect the actual implementation of the capital recovery fee program.

Once the cost of capacity added that is attributable to growth is determined, it must then be decided how the cost will be financed: cash and/or debt. For any previously funded projects, whether partially funded or in full, actual costs of capital have been included. Based on discussions with City staff, unless specific funding has already been determined, it is assumed that the City will debt finance 50% of the future project costs and cash fund the other 50%. For debt financing, the cost of financing is based on the City's

Financial Advisor's estimates of future debt costs for bonds issued with 20-year terms, as shown in **Appendix E**. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.

Currently, the exact timing and annual level of cash capital expenditures over the forecast period is not determined. The following assumptions were made for water and wastewater capital expenditures:

- It was assumed that water capital expenditures will occur in equal amounts over the 10-year program period.
- For wastewater capital expenditures, the capital projects were divided into two 5-year periods and it was assumed that capital expenditures will occur in equal amounts over each 5-year program period.

It was also assumed that for debt-financed capital projects, the City will expend debt proceeds over a 3-year timeframe. For the calculation of the maximum allowable capital recovery fee, debt is assumed to be issued in equal amounts for each year. In order to recognize the full amount of debt to be issued for the cost of capacity added that is attributable to growth during the 10-year period, a portion of years 8, 9, and 10 are assumed to be spent in the final 3 years (11, 12, and 13).

Because debt is issued over 20-year terms and capital recovery fees developed herein are to be charged over a 10-year period, sufficient fund balance must be generated to meet the future debt service obligations. The existing fund balance of $4,078,917 for water and $9,727,798 for wastewater was assigned as a potential source for the current Capital Recovery Fee CIP. Because of the generation of the fund balance, excess monies will be available for interest earnings.

Chapter 395 states that interest earnings are funds of the capital recovery fee account and are to be held to the same restrictions as capital recovery fee revenues. Therefore, in order to recognize that interest earnings are used to fund water and wastewater improvements, interest earnings are credited against the costs recoverable through capital recovery fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the capital recovery fee determination; however, in an effort to acknowledge the time value of the capital recovery fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 1.69% based on the City's weighted average return on investments as of June 2018.

As with the timing and level of the capital expenditures over the 10-year forecast, the timing and annual level of service unit growth over the 10-year program period is indeterminate at the present time. As such, it is assumed that service unit growth will be consistent over the 10-year forecast.

4.3.1 Utility Revenue Credit Analysis

Chapter 395 requires a plan for awarding a credit for the portion of ad valorem tax and/or utility service revenues generated by new service units during the program period that are used for payment of improvements that are included in the Water Capital Recovery Fee CIP. As an alternative, a credit equal to 50% of the total cost of implementing the Water Capital Recovery Fee CIP may be used. The City has elected to pursue the determination of a credit for the portion of utility revenues generated by new service units during the program period that are used for payment of improvements that are included in the Water and Wastewater Capital Recovery Fee CIPs. It should be noted that the credit is not a determination to recognize the total utility revenue generated by new service units but is only a credit for the portion of utility revenue that is used for payment of improvements that are included in the Water and Wastewater Capital Recovery Fee CIPs. Theoretically, the credit determination could be zero ($0) if the City does not utilize any of the new service unit utility revenue to fund improvements that are included in the Water and Wastewater Capital Recovery Fee CIPs. However, to be conservative and recognize potential cash flow issues that can occur with the funding of major capital improvement projects, it is assumed that the debt-funded projects (50% of the improvement costs included in the Water and Wastewater Capital Recovery Fee CIPs but not otherwise funded) could potentially be funded by utility revenue.

Since payments made through utility revenue will consist of not only the revenue generated by new service units in the defined service area, but also existing property owners throughout the City, the portion attributable to the new service units in the defined service area must be isolated, as illustrated in the credit calculation in **Appendix E**.

The utility revenue credit per EDU for water is **$1,060**. The utility revenue credit per EDU for wastewater is **$493**.

4.3.2 Maximum Allowable Water and Wastewater Capital Recovery Fees

Table 4-4 summarizes the calculation of the maximum allowable water and wastewater capital recovery fees for League City. These calculations include the eligible costs of the water and wastewater capital

projects serving growth in the next 10 years, as well as financing costs and the existing CRF fund balance and interest earnings. **Table 4-5** shows the schedule of maximum allowable water and wastewater capital recovery fees by water meter size, based on the EDUs in City Ordinance 2013-20.

Table 4-4: Water and Wastewater Capital Recovery Fee Calculation

	Calculation Component	2013 CRF(1)	2018 CRF Update
Water Capital Recovery Fee	Total Eligible Capital Improvement Costs	33,255,019	105,999,983
	Total Eligible Financing Cost		29,984,719
	Issuance Costs(2)	664,448	
	Interest(2)	19,395,008	
	Existing Fund Balance(3)		(4,078,917)
	Interest Earnings(3)		(6,959,400)
	Pre Credit Recoverable Cost for CRF	53,314,475	124,946,385
	Growth in Service Units (EDUs)(4)	11,456	20,278
	Maximum Water CRF per Service Unit(5)	4,654	6,162
	Credit for Utility Revenues per Service Unit(6)	(1,439)	(1,060)
	Maximum Allowable Water Capital Recovery Fee(7)	**3,215**	**5,101**

	Calculation Component	2013 CRF(1)	2018 CRF Update
Wastewater Capital Recovery Fee	Total Eligible Capital Improvement Costs	33,009,118	68,477,201
	Total Eligible Financing Cost		6,241,263
	Issuance Costs(2)	664,448	
	Interest(2)	19,246,080	
	Existing Fund Balance(3)		(9,727,798)
	Interest Earnings(3)		(2,925,311)
	Pre Credit Recoverable Cost for CRF	52,919,646	62,065,355
	Growth in Service Units (EDUs)(4)	11,456	20,278
	Maximum Wastewater CRF per Service Unit(5)	4,619	3,061
	Credit for Utility Revenues per Service Unit(6)	(2,200)	(493)
	Maximum Allowable Wastewater Capital Recovery Fee(7)	**2,419**	**2,567**

(1) Information from 2013 CRF Update Report
(2) Applicable to 2013 maximum allowable CRF calculation methodology only
(3) Applicable to 2018 maximum allowable CRF calculation methodology only
(4) 2013 Growth in EDUs calculated as population/2.78 (number of people per household)
2018 Growth in EDUs calculated using existing water meter size/type and projected population & comm. acres
(5) Total Pre Credit Recoverable Cost for CRF divided by the Growth in Service Units (EDUs)
(6) 2013 CRF Credit for utility revenue includes credit for payback from rates and credit for avoided bond costs
(7) Maximum Allowable Water and Wastewater Capital Recovery Fee is Maximum Water/Wastewater Capital Recovery Fee minus the Credit for Utility Revenues per Service Unit (EDU)

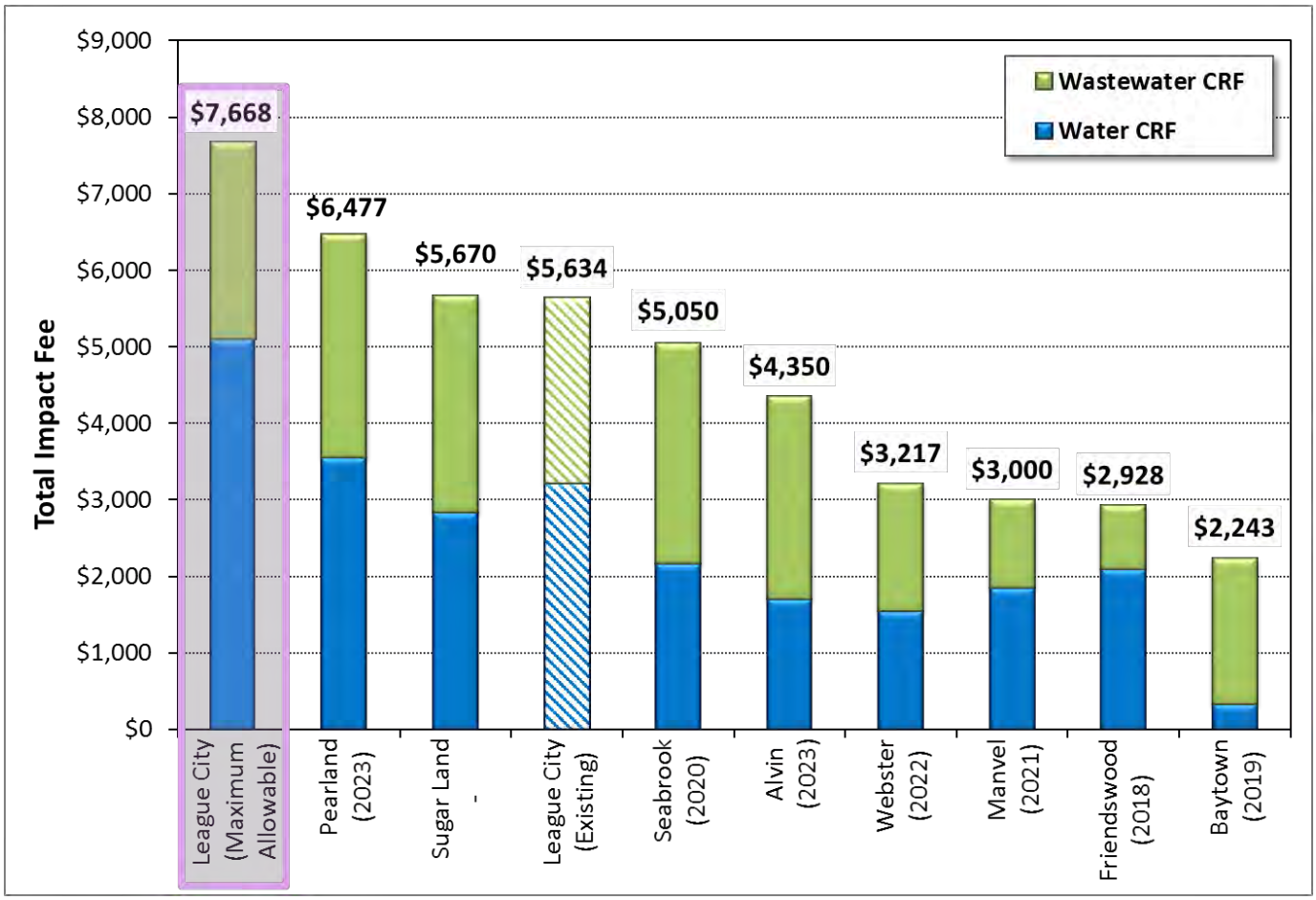
Table 4-5: Schedule of Maximum Allowable Water and Wastewater Capital Recovery Fees

Meter Size	Single Family Equivalent Fee Units (EDUs)	Capital Recovery Fees	
		Water	Wastewater
3/4"	1.0	$5,101	$2,567
1"	1.667	$8,502	$4,279
1-1/2"	3.333	$17,004	$8,557
2"	5.333	$27,207	$13,692
3"	10.667	$54,414	$27,384
4"	16.667	$85,023	$42,788
6"	33.333	$170,046	$85,575
8"	53.333	$272,073	$136,921
10"	76.667	$391,105	$196,823

4.4 BENCHMARK WATER AND WASTEWATER CAPITAL RECOVERY FEES

Water and wastewater capital recovery fees in benchmark cities are presented on **Figure 4-1**. The graph also shows the existing League City CRF, as well as the maximum allowable water and wastewater capital recovery fees calculated as part of this study.

Figure 4-1: Comparison of Water and Wastewater Capital Recovery Fee per Service Unit (EDU)



**Projected year of next CRF update in parenthesis*

5.0 CAPITAL RECOVERY FEE ADOPTION

5.1 PUBLIC HEARING

Chapter 395 of the Texas Local Government Code requires a public hearing to be held to present any update of the capital recovery fees. The presentation shall include a discussion of the new land use assumptions and capital improvement plans.

5.2 ORDINANCE

Once the public hearing is held, the political subdivision shall approve or disapprove the amendments of the land use assumptions and the capital improvement plans and modification of the capital recovery fee within 30 days after the public hearing.

APPENDIX A
Chapter 395, Texas Local Government Code

CHAPTER 395. FINANCING CAPITAL IMPROVEMENTS REQUIRED BY NEW DEVELOPMENT IN MUNICIPALITIES, COUNTIES, AND CERTAIN OTHER LOCAL GOVERNMENTS

SUBCHAPTER A. GENERAL PROVISIONS

§ 395.001. Definitions

In this chapter:

(1) "Capital improvement" means any of the following facilities that have a life expectancy of three or more years and are owned and operated by or on behalf of a political subdivision:

(A) water supply, treatment, and distribution facilities; wastewater collection and treatment facilities; and storm water, drainage, and flood control facilities; whether or not they are located within the service area; and

(B) roadway facilities.

(2) "Capital improvements plan" means a plan required by this chapter that identifies capital improvements or facility expansions for which impact fees may be assessed.

(3) "Facility expansion" means the expansion of the capacity of an existing facility that serves the same function as an otherwise necessary new capital improvement, in order that the existing facility may serve new development. The term does not include the repair, maintenance, modernization, or expansion of an existing facility to better serve existing development.

(4) "Impact fee" means a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development. The term includes amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction, and any other fee that functions as described by this definition. The term does not include:

(A) dedication of land for public parks or payment in lieu of the dedication to serve park needs;

(B) dedication of rights-of-way or easements or construction or dedication of on-site or off-site water distribution, wastewater collection or drainage facilities, or streets, sidewalks, or curbs if the dedication or construction is required by a valid ordinance and is necessitated by and attributable to the new development;

(C) lot or acreage fees to be placed in trust funds for the purpose of reimbursing developers for oversizing or constructing water or sewer mains or lines; or

(D) other pro rata fees for reimbursement of water or sewer mains or lines extended by the political subdivision.

However, an item included in the capital improvements plan may not be required to be constructed except in accordance with Section 395.019(2), and an owner may not be required to construct or dedicate facilities and to pay impact fees for those facilities.

(5) "Land use assumptions" includes a description of the service area and projections of changes in land uses, densities, intensities, and population in the service area over at least a 10-year period.

(6) "New development" means the subdivision of land; the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of the use of land; any of which increases the number of service units.

(7) "Political subdivision" means a municipality, a district or authority created under Article III, Section 52, or Article XVI, Section 59, of the Texas Constitution, or, for the purposes set forth by Section 395.079, certain counties described by that section.

(8) "Roadway facilities" means arterial or collector streets or roads that have been designated on an officially adopted roadway plan of the political subdivision, together with all necessary appurtenances. The term includes the political subdivision's share of costs for roadways and associated improvements designated on the federal or Texas highway system, including local matching funds and costs related to utility line relocation and the establishment of curbs, gutters, sidewalks, drainage appurtenances, and rights-of-way.

(9) "Service area" means the area within the corporate boundaries or extraterritorial jurisdiction, as determined under Chapter 42, of the political subdivision to be served by the capital improvements or facilities expansions specified in the capital improvements plan, except roadway facilities and storm water, drainage, and flood control facilities. The service area, for the purposes of this chapter, may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, except for roadway facilities and storm water, drainage, and flood control facilities. For roadway facilities, the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six miles. For storm water, drainage, and flood control facilities, the service area may include all or part of the land within the political subdivision or its extraterritorial jurisdiction, but shall not exceed the area actually served by the storm water, drainage, and flood control facilities designated in the capital improvements plan and shall not extend across watershed boundaries.

(10) "Service unit" means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989. Amended by Acts 1989, 71st Leg., ch. 566, § 1(e), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 1, eff. Sept. 1, 2001.

SUBCHAPTER B. AUTHORIZATION OF IMPACT FEE

§ 395.011. Authorization of Fee

(a) Unless otherwise specifically authorized by state law or this chapter, a governmental entity or political subdivision may not enact or impose an impact fee.

(b) Political subdivisions may enact or impose impact fees on land within their corporate boundaries or extraterritorial jurisdictions only by complying with this chapter, except that impact fees may not be enacted or imposed in the extraterritorial jurisdiction for roadway facilities.

(c) A municipality may contract to provide capital improvements, except roadway facilities, to an area outside its corporate boundaries and extraterritorial jurisdiction and may charge an impact fee under the contract, but if an impact fee is charged in that area, the municipality must comply with this chapter.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.012. Items Payable by Fee

(a) An impact fee may be imposed only to pay the costs of constructing capital improvements or facility expansions, including and limited to the:

(1) construction contract price;

(2) surveying and engineering fees;

(3) land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and

(4) fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.

(b) Projected interest charges and other finance costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan.

(c) Notwithstanding any other provision of this chapter, the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay a staff engineer who prepares or updates a capital improvements plan under this chapter.

(d) A municipality may pledge an impact fee as security for the payment of debt service on a bond, note, or other obligation issued to finance a capital improvement or public facility expansion if:

(1) the improvement or expansion is identified in a capital improvements plan; and

(2) at the time of the pledge, the governing body of the municipality certifies in a written order, ordinance, or resolution that none of the impact fee will be used or expended for an improvement or expansion not identified in the plan.

(e) A certification under Subsection (d)(2) is sufficient evidence that an impact fee pledged will not be used or expended for an improvement or expansion that is not identified in the capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 90, § 1, eff. May 16, 1995.

§ 395.013. Items Not Payable by Fee

Impact fees may not be adopted or used to pay for:

(1) construction, acquisition, or expansion of public facilities or assets other than capital improvements or facility expansions identified in the capital improvements plan;

(2) repair, operation, or maintenance of existing or new capital improvements or facility expansions;

(3) upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards;

(4) upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development;

(5) administrative and operating costs of the political subdivision, except the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay its administrative and operating costs;

(6) principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed by Section 395.012.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.014. Capital Improvements Plan

(a) The political subdivision shall use qualified professionals to prepare the capital improvements plan and to calculate the impact fee. The capital improvements plan must contain specific enumeration of the following items:

(1) a description of the existing capital improvements within the service area and the costs to upgrade, update, improve, expand, or replace the improvements to meet existing needs and usage and stricter safety, efficiency, environmental, or regulatory standards, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(2) an analysis of the total capacity, the level of current usage, and commitments for usage of capacity of the existing capital improvements, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(3) a description of all or the parts of the capital improvements or facility expansions and their costs necessitated by and attributable to new development in the service area based on the approved land use assumptions, which shall be prepared by a qualified professional engineer licensed to perform the professional engineering services in this state;

(4) a definitive table establishing the specific level or quantity of use, consumption, generation, or discharge of a service unit for each category of capital improvements or facility expansions and an equivalency or conversion table establishing the ratio of a service unit to various types of land uses, including residential, commercial, and industrial;

(5) the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions and calculated in accordance with generally accepted engineering or planning criteria;

(6) the projected demand for capital improvements or facility expansions required by new service units projected over a reasonable period of time, not to exceed 10 years; and

(7) 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 are 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.

(b) The analysis required by Subsection (a)(3) may be prepared on a systemwide basis within the service area for each major category of capital improvement or facility expansion for the designated service area.

(c) The governing body of the political subdivision is responsible for supervising the implementation of the capital improvements plan in a timely manner.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 2, eff. Sept. 1, 2001.

§ 395.015. Maximum Fee Per Service Unit

(a) The impact fee per service unit may not exceed the amount determined by subtracting the amount in Section 395.014(a)(7) from the costs of the capital improvements described by Section 395.014(a)(3) and dividing that amount by the total number of projected service units described by Section 395.014(a)(5).

(b) If the number of new service units projected over a reasonable period of time is less than the total number of new service units shown by the approved land use assumptions at full development of the service area, the maximum impact fee per service unit shall be calculated by dividing the costs of the part of the capital improvements necessitated by and attributable to projected new service units described by Section 395.014(a)(6) by the projected new service units described in that section.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 3, eff. Sept. 1, 2001.

§ 395.016. Time for Assessment and Collection of Fee

(a) This subsection applies only to impact fees adopted and land platted before June 20, 1987. For land that has been platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before June 20, 1987, or land on which new development occurs or is proposed without platting, the political subdivision may assess the impact fees at any time during the development approval and building process. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(b) This subsection applies only to impact fees adopted before June 20, 1987, and land platted after that date. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after June 20, 1987, the political subdivision may assess the impact fees before or at the time of recordation. Except as provided by Section 395.019, the political subdivision may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(c) This subsection applies only to impact fees adopted after June 20, 1987. For new development which is platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision before the adoption of an impact fee, an impact fee may not be collected on any service unit for which a valid building permit is issued within one year after the date of adoption of the impact fee.

(d) This subsection applies only to land platted in accordance with Subchapter A, Chapter 212, or the subdivision or platting procedures of a political subdivision after adoption of an impact fee adopted after June 20, 1987. The political subdivision shall assess the impact fees before or at the time of recordation of a subdivision plat or other plat under Subchapter A, Chapter 212, or the subdivision or platting ordinance or procedures of any political subdivision in the official records of the county clerk of the county in which the tract is located. Except as provided by Section 395.019, if the political subdivision has water and wastewater capacity available:

(1) the political subdivision shall collect the fees at the time the political subdivision issues a building permit;

(2) for land platted outside the corporate boundaries of a municipality, the municipality shall collect the fees at the time an application for an individual meter connection to the municipality's water or wastewater system is filed; or

(3) a political subdivision that lacks authority to issue building permits in the area where the impact fee applies shall collect the fees at the time an application is filed for an individual meter connection to the political subdivision's water or wastewater system.

(e) For land on which new development occurs or is proposed to occur without platting, the political subdivision may assess the impact fees at any time during the development and building process and may collect the fees at either the time of recordation of the subdivision plat or connection to the political subdivision's water or sewer system or at the time the political subdivision issues either the building permit or the certificate of occupancy.

(f) An "assessment" means a determination of the amount of the impact fee in effect on the date or occurrence provided in this section and is the maximum amount that can be charged per service unit of such development. No specific act by the political subdivision is required.

(g) Notwithstanding Subsections (a)-(e) and Section 395.017, the political subdivision may reduce or waive an impact fee for any service unit that would qualify as affordable housing under 42 U.S.C. Section 12745, as amended, once the service unit is constructed. If affordable housing as defined by 42 U.S.C. Section 12745, as amended, is not constructed, the political subdivision may reverse its decision to waive or reduce the impact fee, and the political subdivision may assess an impact fee at any time during the development approval or building process or after the building process if an impact fee was not already assessed.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 980, § 52, eff. Sept. 1, 1997.

Amended by Acts 2001, 77th Leg., ch. 345, § 4, eff. Sept. 1, 2001.

§ 395.017. Additional Fee Prohibited; Exception

After assessment of the impact fees attributable to the new development or execution of an agreement for payment of impact fees, additional impact fees or increases in fees may not be assessed against the tract for any reason unless the number of service units to be developed on the tract increases. In the event of the increase in the number of service units, the impact fees to be imposed are limited to the amount attributable to the additional service units.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.018. Agreement With Owner Regarding Payment

A political subdivision is authorized to enter into an agreement with the owner of a tract of land for which the plat has been recorded providing for the time and method of payment of the impact fees.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.019. Collection of Fees if Services Not Available

Except for roadway facilities, impact fees may be assessed but may not be collected in areas where services are not currently available unless:

(1) the collection is made to pay for a capital improvement or facility expansion that has been identified in the capital improvements plan and the political subdivision commits to commence construction within two years, under duly awarded and executed contracts or commitments of staff time covering substantially all of the work required to provide service, and to have the service available within a reasonable period of time considering the type of capital improvement or facility expansion to be constructed, but in no event longer than five years;

(2) the political subdivision agrees that the owner of a new development may construct or finance the capital improvements or facility expansions and agrees that the costs incurred or funds advanced will be credited against the impact fees otherwise due from the new development or agrees to reimburse the owner for such costs from impact fees paid from other new developments that will use such capital improvements or facility expansions, which fees shall be collected and reimbursed to the owner at the time the other new development records its plat; or

(3) an owner voluntarily requests the political subdivision to reserve capacity to serve future development, and the political subdivision and owner enter into a valid written agreement.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.020. Entitlement to Services

Any new development for which an impact fee has been paid is entitled to the permanent use and benefit of the services for which the fee was exacted and is entitled to receive immediate service from any existing facilities with actual capacity to serve the new service units, subject to compliance with other valid regulations.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.021. Authority of Political Subdivisions to Spend Funds to Reduce Fees

Political subdivisions may spend funds from any lawful source to pay for all or a part of the capital improvements or facility expansions to reduce the amount of impact fees.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.022. Authority of Political Subdivision to Pay Fees

Political subdivisions and other governmental entities may pay impact fees imposed under this chapter.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.023. Credits Against Roadway Facilities Fees

Any construction of, contributions to, or dedications of off-site roadway facilities agreed to or required by a political subdivision as a condition of development approval shall be credited against roadway facilities impact fees otherwise due from the development.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.024. Accounting For Fees and Interest

(a) The order, ordinance, or resolution levying an impact fee must provide that all funds collected through the adoption of an impact fee shall be deposited in interest-bearing accounts clearly identifying the category of capital improvements or facility expansions within the service area for which the fee was adopted.

(b) Interest earned on impact fees is considered funds of the account on which it is earned and is subject to all restrictions placed on use of impact fees under this chapter.

(c) Impact fee funds may be spent only for the purposes for which the impact fee was imposed as shown by the capital improvements plan and as authorized by this chapter.

(d) The records of the accounts into which impact fees are deposited shall be open for public inspection and copying during ordinary business hours.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.025. Refunds

(a) On the request of an owner of the property on which an impact fee has been paid, the political subdivision shall refund the impact fee if existing facilities are available and service is denied or the political subdivision has, after collecting the fee when service was not available, failed to commence construction within two years or service is not available within a reasonable period considering the type of capital improvement or facility expansion to be constructed, but in no event later than five years from the date of payment under Section 395.019(1).

(b) Repealed by Acts 2001, 77th Leg., ch. 345, § 9, eff. Sept. 1, 2001.

(c) The political subdivision shall refund any impact fee or part of it that is not spent as authorized by this chapter within 10 years after the date of payment.

(d) Any refund shall bear interest calculated from the date of collection to the date of refund at the statutory rate as set forth in Section 302.002, Finance Code, or its successor statute.

(e) All refunds shall be made to the record owner of the property at the time the refund is paid. However, if the impact fees were paid by another political subdivision or governmental entity, payment shall be made to the political subdivision or governmental entity.

(f) The owner of the property on which an impact fee has been paid or another political subdivision or governmental entity that paid the impact fee has standing to sue for a refund under this section.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989. Amended by Acts 1997, 75th Leg., ch. 1396, § 37, eff. Sept. 1, 1997.

Amended by Acts 1999, 76th Leg., ch. 62, § 7.82, eff. Sept. 1, 1999; Acts 2001, 77th Leg., ch. 345, § 9, eff. Sept. 1, 2001.

SUBCHAPTER C. PROCEDURES FOR ADOPTION OF IMPACT FEE

§ 395.041. Compliance With Procedures Required

Except as otherwise provided by this chapter, a political subdivision must comply with this subchapter to levy an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.0411. Capital Improvements Plan

The political subdivision shall provide for a capital improvements plan to be developed by qualified professionals using generally accepted engineering and planning practices in accordance with Section 395.014.

Added by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.042. Hearing on Land Use Assumptions and Capital Improvements Plan

To impose an impact fee, a political subdivision must adopt an order, ordinance, or resolution establishing a public hearing date to consider the land use assumptions and capital improvements plan for the designated service area.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.043. Information About Land Use Assumptions and Capital Improvements Plan Available to Public

On or before the date of the first publication of the notice of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall make available to the public its land use assumptions, the time period of the projections, and a description of the capital improvement facilities that may be proposed.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.044. Notice of Hearing on Land Use Assumptions and Capital Improvements Plan

(a) Before the 30th day before the date of the hearing on the land use assumptions and capital improvements plan, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order, ordinance, or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN RELATING TO POSSIBLE ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the land use assumptions and capital improvements plan under which an impact fee may be imposed; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the land use assumptions and capital improvements plan.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.045. Approval of Land Use Assumptions and Capital Improvements Plan Required

(a) After the public hearing on the land use assumptions and capital improvements plan, the political subdivision shall determine whether to adopt or reject an ordinance, order, or resolution approving the land use assumptions and capital improvements plan.

(b) The political subdivision, within 30 days after the date of the public hearing, shall approve or disapprove the land use assumptions and capital improvements plan.

(c) An ordinance, order, or resolution approving the land use assumptions and capital improvements plan may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.0455. Systemwide Land Use Assumptions

(a) In lieu of adopting land use assumptions for each service area, a political subdivision may, except for storm water, drainage, flood control, and roadway facilities, adopt systemwide land use assumptions, which cover all of the area subject to the jurisdiction of the political subdivision for the purpose of imposing impact fees under this chapter.

(b) Prior to adopting systemwide land use assumptions, a political subdivision shall follow the public notice, hearing, and other requirements for adopting land use assumptions.

(c) After adoption of systemwide land use assumptions, a political subdivision is not required to adopt additional land use assumptions for a service area for water supply, treatment, and distribution facilities or wastewater collection and treatment facilities as a prerequisite to the adoption of a capital improvements plan or impact fee, provided the capital improvements plan and impact fee are consistent with the systemwide land use assumptions.

Added by Acts 1989, 71st Leg., ch. 566, § 1(b), eff. Aug. 28, 1989.

§ 395.047. Hearing on Impact Fee

On adoption of the land use assumptions and capital improvements plan, the governing body shall adopt an order or resolution setting a public hearing to discuss the imposition of the impact fee. The public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution imposing an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.049. Notice of Hearing on Impact Fee

(a) Before the 30th day before the date of the hearing on the imposition of an impact fee, the political subdivision shall send a notice of the hearing by certified mail to any person who has given written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of the hearing within two years preceding the date of adoption of the order or resolution setting the public hearing.

(b) The political subdivision shall publish notice of the hearing before the 30th day before the date set for the hearing, in one or more newspapers of general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies.

(c) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON ADOPTION OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the adoption of an impact fee;

(4) the amount of the proposed impact fee per service unit; and

(5) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the plan and proposed fee.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.050. Advisory Committee Comments on Impact Fees

The advisory committee created under Section 395.058 shall file its written comments on the proposed impact fees before the fifth business day before the date of the public hearing on the imposition of the fees.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.051. Approval of Impact Fee Required

(a) The political subdivision, within 30 days after the date of the public hearing on the imposition of an impact fee, shall approve or disapprove the imposition of an impact fee.

(b) An ordinance, order, or resolution approving the imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 5, eff. Sept. 1, 2001.

§ 395.052. Periodic Update of Land Use Assumptions and Capital Improvements Plan Required

(a) A political subdivision imposing an impact fee shall update the land use assumptions and capital improvements plan at least every five years. The initial five-year period begins on the day the capital improvements plan is adopted.

(b) The political subdivision shall review and evaluate its current land use assumptions and shall cause an update of the capital improvements plan to be prepared in accordance with Subchapter B.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 6, eff. Sept. 1, 2001.

§ 395.053. Hearing on Updated Land Use Assumptions and Capital Improvements Plan

The governing body of the political subdivision shall, within 60 days after the date it receives the update of the land use assumptions and the capital improvements plan, adopt an order setting a public hearing to discuss and review the update and shall determine whether to amend the plan.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.054. Hearing on Amendments to Land Use Assumptions, Capital Improvements Plan, or Impact Fee

A public hearing must be held by the governing body of the political subdivision to discuss the proposed ordinance, order, or resolution amending land use assumptions, the capital improvements plan, or the impact fee. On or before the date of the first publication of the notice of the hearing on the amendments, the land use assumptions and the capital improvements plan, including the amount of any proposed amended impact fee per service unit, shall be made available to the public.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.055. Notice of Hearing on Amendments to Land Use Assumptions, Capital Improvements Plan, or Impact Fee

(a) The notice and hearing procedures prescribed by Sections 395.044(a) and (b) apply to a hearing on the amendment of land use assumptions, a capital improvements plan, or an impact fee.

(b) The notice of a hearing under this section must contain the following:

(1) a headline to read as follows:

"NOTICE OF PUBLIC HEARING ON AMENDMENT OF IMPACT FEES"

(2) the time, date, and location of the hearing;

(3) a statement that the purpose of the hearing is to consider the amendment of land use assumptions and a capital improvements plan and the imposition of an impact fee; and

(4) a statement that any member of the public has the right to appear at the hearing and present evidence for or against the update.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 345, § 7, eff. Sept. 1, 2001.

§ 395.056. Advisory Committee Comments on Amendments

The advisory committee created under Section 395.058 shall file its written comments on the proposed amendments to the land use assumptions, capital improvements plan, and impact fee before the fifth business day before the date of the public hearing on the amendments.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.057. Approval of Amendments Required

(a) The political subdivision, within 30 days after the date of the public hearing on the amendments, shall approve or disapprove the amendments of the land use assumptions and the capital improvements plan and modification of an impact fee.

(b) An ordinance, order, or resolution approving the amendments to the land use assumptions, the capital improvements plan, and imposition of an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.0575. Determination That No Update of Land Use Assumptions, Capital Improvements Plan or Impact Fees is Needed

(a) If, at the time an update under Section 395.052 is required, the governing body determines that no change to the land use assumptions, capital improvements plan, or impact fee is needed, it may, as an alternative to the updating requirements of Sections 395.052-395.057, do the following:

(1) The governing body of the political subdivision shall, upon determining that an update is unnecessary and 60 days before publishing the final notice under this section, send notice of its determination not to update the land use assumptions, capital improvements plan, and impact fee by certified mail to any person who has, within two years preceding the date that the final notice of this matter is to be published, give written notice by certified or registered mail to the municipal secretary or other designated official of the political subdivision requesting notice of hearings related to impact fees. The notice must contain the information in Subsections (b)(2)-(5).

(2) The political subdivision shall publish notice of its determination once a week for three consecutive weeks in one or more newspapers with general circulation in each county in which the political subdivision lies. However, a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may publish the required newspaper notice only in each county in which the service area lies. The notice of public hearing may not be in the part of the paper in which legal notices and classified ads appear and may not be smaller than one-quarter page of a standard-size or tabloid-size newspaper, and the headline on the notice must be in 18-point or larger type.

(b) The notice must contain the following:

(1) a headline to read as follows:

"NOTICE OF DETERMINATION NOT TO UPDATE

LAND USE ASSUMPTIONS, CAPITAL IMPROVEMENTS

PLAN, OR IMPACT FEES";

(2) a statement that the governing body of the political subdivision has determined that no change to the land use assumptions, capital improvements plan, or impact fee is necessary;

(3) an easily understandable description and a map of the service area in which the updating has been determined to be unnecessary;

(4) a statement that if, within a specified date, which date shall be at least 60 days after publication of the first notice, a person makes a written request to the designated official of the political subdivision requesting that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body must comply with the request by following the requirements of Sections 395.052-395.057; and

(5) a statement identifying the name and mailing address of the official of the political subdivision to whom a request for an update should be sent.

(c) The advisory committee shall file its written comments on the need for updating the land use assumptions, capital improvements plans, and impact fee before the fifth business day before the earliest notice of the government's decision that no update is necessary is mailed or published.

(d) If, by the date specified in Subsection (b)(4), a person requests in writing that the land use assumptions, capital improvements plan, or impact fee be updated, the governing body shall cause an update of the land use assumptions and capital improvements plan to be prepared in accordance with Sections 395.052-395.057.

(e) An ordinance, order, or resolution determining the need for updating land use assumptions, a capital improvements plan, or an impact fee may not be adopted as an emergency measure.

Added by Acts 1989, 71st Leg., ch. 566, § 1(d), eff. Aug. 28, 1989.

§ 395.058. Advisory Committee

(a) On or before the date on which the order, ordinance, or resolution is adopted under Section 395.042, the political subdivision shall appoint a capital improvements advisory committee.

(b) The advisory committee is composed of not less than five members who shall be appointed by a majority vote of the governing body of the political subdivision. Not less than 40 percent of the membership of the advisory committee must be representatives of the real estate, development, or building industries who are not employees or officials of a political subdivision or governmental entity.

If the political subdivision has a planning and zoning commission, the commission may act as the advisory committee if the commission includes at least one representative of the real estate, development, or building industry who is not an employee or official of a political subdivision or governmental entity. If no such representative is a member of the planning and zoning commission, the commission may still act as the advisory committee if at least one such representative is appointed by the political subdivision as an ad hoc voting member of the planning and zoning commission when it acts as the advisory committee. If the impact fee is to be applied in the extraterritorial jurisdiction of the political subdivision, the membership must include a representative from that area.

(c) The advisory committee serves in an advisory capacity and is established to:

(1) advise and assist the political subdivision in adopting land use assumptions;

(2) review the capital improvements plan and file written comments;

(3) monitor and evaluate implementation of the capital improvements plan;

(4) file semiannual reports with respect to the progress of the capital improvements plan and report to the political subdivision any perceived inequities in implementing the plan or imposing the impact fee; and

(5) advise the political subdivision of the need to update or revise the land use assumptions, capital improvements plan, and impact fee.

(d) The political subdivision shall make available to the advisory committee any professional reports with respect to developing and implementing the capital improvements plan.

(e) The governing body of the political subdivision shall adopt procedural rules for the advisory committee to follow in carrying out its duties.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

SUBCHAPTER D. OTHER PROVISIONS

§ 395.071. Duties to be Performed Within Time Limits

If the governing body of the political subdivision does not perform a duty imposed under this chapter within the prescribed period, a person who has paid an impact fee or an owner of land on which an impact fee has been paid has the right to present a written request to the governing body of the political subdivision stating the nature of the unperformed duty and requesting that it be performed within 60 days after the date of the request. If the governing body of the political subdivision finds that the duty is required under this chapter and is late in being performed, it shall cause the duty to commence within 60 days after the date of the request and continue until completion.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.072. Records of Hearings

A record must be made of any public hearing provided for by this chapter. The record shall be maintained and be made available for public inspection by the political subdivision for at least 10 years after the date of the hearing.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.073. Cumulative Effect of State and Local Restrictions

Any state or local restrictions that apply to the imposition of an impact fee in a political subdivision where an impact fee is proposed are cumulative with the restrictions in this chapter.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.074. Prior Impact Fees Replaced by Fees Under This Chapter

An impact fee that is in place on June 20, 1987, must be replaced by an impact fee made under this chapter on or before June 20, 1990. However, any political subdivision having an impact fee that has not been replaced under this chapter on or before June 20, 1988, is liable to any party who, after June 20, 1988, pays an impact fee that exceeds the maximum permitted under Subchapter B by more than 10 percent for an amount equal to two times the difference between the maximum impact fee allowed and the actual impact fee imposed, plus reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.075. No Effect on Taxes or Other Charges

This chapter does not prohibit, affect, or regulate any tax, fee, charge, or assessment specifically authorized by state law.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.076. Moratorium on Development Prohibited

A moratorium may not be placed on new development for the purpose of awaiting the completion of all or any part of the process necessary to develop, adopt, or update land use assumptions, a capital improvements plan, or an impact fee.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 441, § 2, eff. Sept. 1, 2001.

§ 395.077. Appeals

(a) A person who has exhausted all administrative remedies within the political subdivision and who is aggrieved by a final decision is entitled to trial de novo under this chapter.

(b) A suit to contest an impact fee must be filed within 90 days after the date of adoption of the ordinance, order, or resolution establishing the impact fee.

(c) Except for roadway facilities, a person who has paid an impact fee or an owner of property on which an impact fee has been paid is entitled to specific performance of the services by the political subdivision for which the fee was paid.

(d) This section does not require construction of a specific facility to provide the services.

(e) Any suit must be filed in the county in which the major part of the land area of the political subdivision is located. A successful litigant shall be entitled to recover reasonable attorney's fees and court costs.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.078. Substantial Compliance With Notice Requirements

An impact fee may not be held invalid because the public notice requirements were not complied with if compliance was substantial and in good faith.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

§ 395.079. Impact Fee for Storm Water, Drainage, and Flood Control in Populous County

(a) Any county that has a population of 3.3 million or more or that borders a county with a population of 3.3 million or more, and any district or authority created under Article XVI, Section 59, of the Texas Constitution within any such county that is authorized to provide storm water, drainage, and flood control facilities, is authorized to impose impact fees to provide storm water, drainage, and flood control improvements necessary to accommodate new development.

(b) The imposition of impact fees authorized by Subsection (a) is exempt from the requirements of Sections 395.025, 395.052-395.057, and 395.074 unless the political subdivision proposes to increase the impact fee.

(c) Any political subdivision described by Subsection (a) is authorized to pledge or otherwise contractually obligate all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued or incurred by or on behalf of the political subdivision and to the payment of any other contractual obligations.

(d) An impact fee adopted by a political subdivision under Subsection (a) may not be reduced if:

(1) the political subdivision has pledged or otherwise contractually obligated all or part of the impact fees to the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision; and

(2) the political subdivision agrees in the pledge or contract not to reduce the impact fees during the term of the bonds, notes, or other contractual obligations.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989.

Amended by Acts 2001, 77th Leg., ch. 669, § 107, eff. Sept. 1, 2001.

§ 395.080. Chapter Not Applicable to Certain Water-Related Special Districts

(a) This chapter does not apply to impact fees, charges, fees, assessments, or contributions:

(1) paid by or charged to a district created under Article XVI, Section 59, of the Texas Constitution to another district created under that constitutional provision if both districts are required by law to obtain approval of their bonds by the Texas Natural Resource Conservation Commission; or

(2) charged by an entity if the impact fees, charges, fees, assessments, or contributions are approved by the Texas Natural Resource Conservation Commission.

(b) Any district created under Article XVI, Section 59, or Article III, Section 52, of the Texas Constitution may petition the Texas Natural Resource Conservation Commission for approval of any proposed impact fees, charges, fees, assessments, or contributions. The commission shall adopt rules for reviewing the petition and may charge the petitioner fees adequate to cover the cost of processing and considering the petition. The rules shall require notice substantially the same as that required by this chapter for the adoption of impact fees and shall afford opportunity for all affected parties to participate.

Added by Acts 1989, 71st Leg., ch. 1, § 82(a), eff. Aug. 28, 1989. Amended by Acts 1995, 74th Leg., ch. 76, § 11.257, eff. Sept. 1, 1995.

§ 395.081. Fees for Adjoining Landowners in Certain Municipalities

(a) This section applies only to a municipality with a population of 105,000 or less that constitutes more than three-fourths of the population of the county in which the majority of the area of the municipality is located.

(b) A municipality that has not adopted an impact fee under this chapter that is constructing a capital improvement, including sewer or waterline or drainage or roadway facilities, from the municipality to a development located within or outside the municipality's boundaries, in its discretion, may allow a landowner whose land adjoins the capital improvement or is within a specified distance from the capital improvement, as determined by the governing body of the municipality, to connect to the capital improvement if:

(1) the governing body of the municipality has adopted a finding under Subsection (c); and

(2) the landowner agrees to pay a proportional share of the cost of the capital improvement as determined by the governing body of the municipality and agreed to by the landowner.

(c) Before a municipality may allow a landowner to connect to a capital improvement under Subsection (b), the municipality shall adopt a finding that the municipality will benefit from allowing the landowner to connect to the capital improvement. The finding shall describe the benefit to be received by the municipality.

(d) A determination of the governing body of a municipality, or its officers or employees, under this section is a discretionary function of the municipality and the municipality and its officers or employees are not liable for a determination made under this section.

Added by Acts 1997, 75th Leg., ch. 1150, § 1, eff. June 19, 1997.

§ 395.082. Certification of Compliance Required

(a) A political subdivision that imposes an impact fee shall submit a written certification verifying compliance with this chapter to the attorney general each year not later than the last day of the political subdivision's fiscal year.

(b) The certification must be signed by the presiding officer of the governing body of a political subdivision and include a statement that reads substantially similar to the following: "This statement certifies compliance with Chapter 395, Local Government Code."

(c) A political subdivision that fails to submit a certification as required by this section is liable to the state for a civil penalty in an amount equal to 10 percent of the amount of the impact fees erroneously charged. The attorney general shall collect the civil penalty and deposit the amount collected to the credit of the housing trust fund.

Added by Acts 2001, 77th Leg., ch. 345, § 8, eff. Sept. 1, 2001.

APPENDIX B
2017 Land Use Assumptions Report

Innovative approaches
Practical results
Outstanding service

FINAL

LAND USE ASSUMPTIONS REPORT

FOR CAPITAL RECOVERY FEES

Prepared for:

City of League City

October 2017

Prepared by:

FREESE AND NICHOLS, INC.
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Dallas, Texas 75204
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Demographics by Traffic Analysis Zone

1.0 PURPOSE

Chapter 395 of the Texas Local Government Code prescribes the process by which cities in Texas must formulate capital recovery fees. An initial step in the update process is the establishment of land use assumptions that address growth and development for a ten-year planning period (TLGC Section 395.001(5)) for the years 2017-2027. These land use assumptions, which also include population and employment projections, will become the basis for the preparation of capital recovery fee capital improvement plans for water, wastewater, and roadway facilities.

Statutory requirements mandate that capital recovery fees be updated (at least) every five years. This report, in conjunction with the water and wastewater capital improvements plans, forms the initial key components for the update of League City's capital recovery fee program. This LUA Report would also be considered for a possible roadway capital recovery fee program.

To assist the City of League City in determining the need and timing of capital improvements to serve future development, a reasonable estimation of future growth is required. The purpose of this report is to formulate growth and development projections based upon assumptions pertaining to the type, location, quantity and timing of various future land uses within the community and to establish and document the methodology used for preparing the growth and land use assumptions.

1.1 LAND USE ASSUMPTIONS REPORT ELEMENTS

This report contains the following components:

- **Methodology** - Explanation of the general methodology used to prepare the land use assumptions.
- **Data Collection Zones and Service Areas** - Explanation of data collection zones (traffic analysis zones), and division of the City into capital recovery fee service areas for roadway, water and wastewater facilities.
- **Base Year Data** – Historical population trends for League City and information on population, employment, and land use for League City as of 2017 for each capital service area.
- **Ten-Year Growth Assumptions** - Population and employment growth assumptions for ten years by service areas.
- **Summary** - Brief synopsis of the land use assumptions report.

2.0 METHODOLOGY

Based upon the growth assumptions and the capital improvements needed to support growth, it is possible to develop a capital recovery fee structure that fairly allocates improvement costs to growth areas in relation to their impact upon the entire infrastructure system. The data in this report has been formulated using reasonable and generally accepted planning principles for the preparation of capital recovery fee systems in Texas.

These land use assumptions and future growth projections take into consideration several factors influencing development patterns, including the following:

- The character, type, density, and quantity of existing development,
- Anticipated future land use based on the City's recently approved update to the Future Land Use Plan (FLUP),
- Availability of land for future expansion,
- Current and historical growth trends of population and development within the City,
- Location and configuration of vacant land,
- Growth of employment (per the Houston-Galveston Area Council, H-GAC), and
- Known or anticipated development projects as defined by City Staff. Key development plans include the Duncan Tract, Lakes of Quail Pointe, Westwood, and UTMB to name a few.

A series of work tasks were undertaken in the development of this report and are described below:

1. A kick-off meeting was held to describe the general methodological approach in the study. Service areas were defined for roadway, water, and wastewater capital recovery fee systems.
2. Current and historic data of population, housing, and employment was collected from the City and other acceptable sources to serve as a basis for future growth.
3. A base year (2017) estimate was developed using population and employment data from H-GAC and the City.
4. A growth rate was determined based upon an analysis of data from recent building permit data, past growth trends, and anticipated development to occur over the next ten-year planning period. A compound annual growth rate of **3.4%** was used for the planning period to track the Thoroughfare Plan update growth projections and other concurrent City studies.
5. A ten-year projection (2027) was prepared using the approved growth rate and the FLUP for allocations of population and employment data. Adjustments were then made to consider known or anticipated development activity within the ten-year planning period.

6. Base and ten-year demographics were prepared for the respective service areas for water, wastewater, and roads. Build-out demographics were also prepared for water and wastewater service areas based on the FLUP.

3.0 DATA COLLECTION ZONES & SERVICE AREA MAPS

3.1 DATA COLLECTION ZONES

Data collection zones used for land use assumptions are based upon small geographic areas known as traffic analysis zones (TAZs). These zones, established by the Houston-Galveston Area Council (H-GAC), cover the Metropolitan Planning Organization's (MPO) planning area and serve as the basis for socio-demographic data used in the regional travel forecast model. TAZs were originally formulated based on homogeneity and traffic generation potential using major arterials, creeks, railroad lines and other physical boundaries for delineation.

Population and employment demographics were compiled by these H-GAC TAZs and then aggregated into larger areas to form the service areas for capital recovery fees. Adjustments were made based on City Staff input to account for recent or upcoming known developments affecting these demographics.

3.2 SERVICE AREAS

Chapter 395 requires that service areas be defined for capital recovery fees to ensure that facility improvements are located in close proximity to areas generating needs. Legislative requirements stipulate that roadway service areas be limited to a 6-mile maximum and must be located within the current City limits. Transportation service areas are different from water and wastewater systems, which can include the City limits and its extra-territorial jurisdiction (ETJ) or other defined service area. This is primarily because roadway systems are "open" to both local and regional (non-City) use as opposed to a defined level of utilization from residents within a water and wastewater system. The result is that new development can only be assessed a capital recovery fee based on the cost of necessary capital improvements within that service area.

For roadways, the entirety of the City limits is divided into four service areas. For water and wastewater, a single service area encompasses the City limits as well as Water Control and Improvement District #1 (WCID-1). **Figures 1 and 2** illustrate service areas for Road, Water and Wastewater capital recovery fees. The roadway, water and wastewater service areas with TAZ boundaries can be found in the **Appendix**, respectively.

FIGURE 1: ROADWAY SERVICE AREA

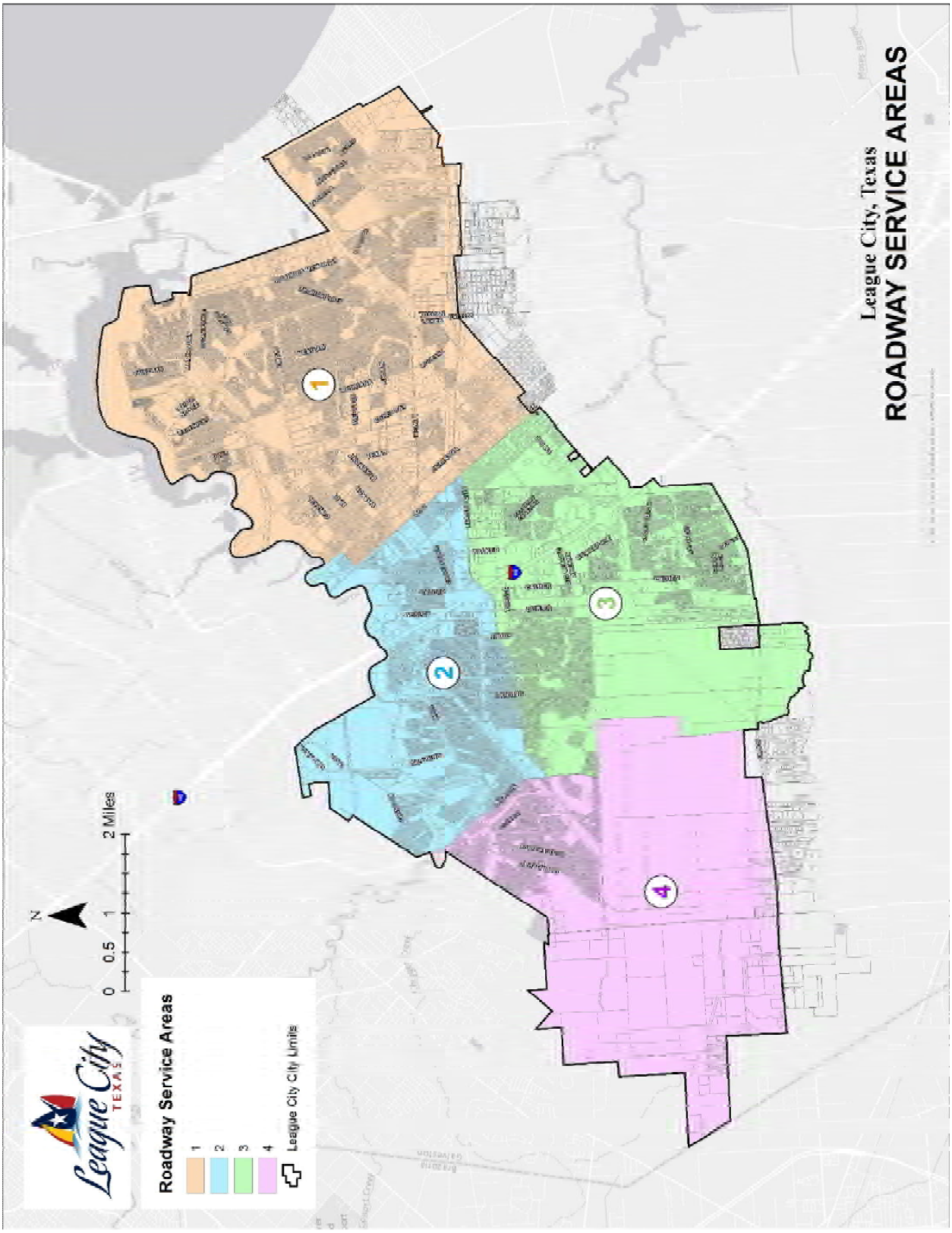
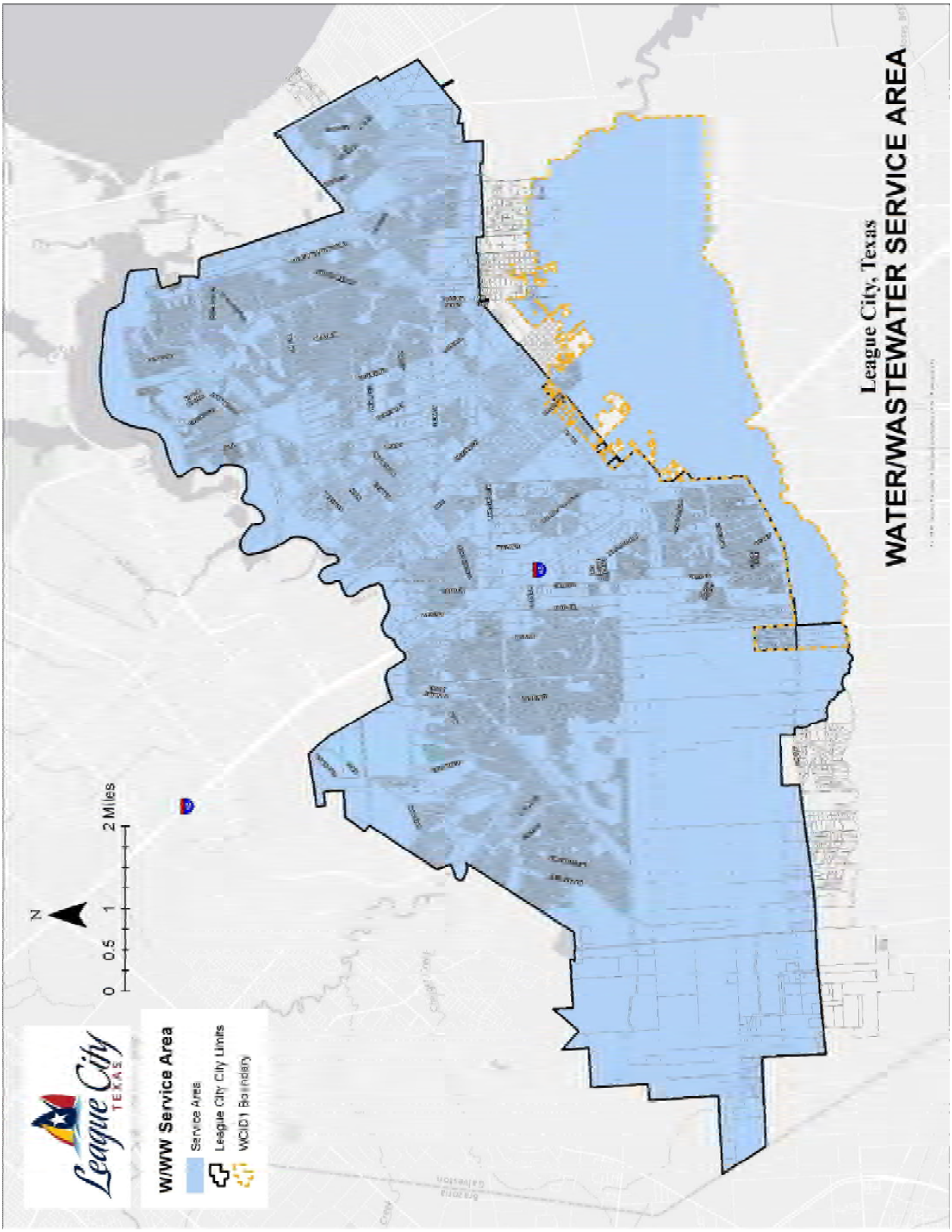


FIGURE 2: WATER AND WASTEWATER SERVICE AREA



3.3 DATA FORMAT

The existing database, as well as the future projections, were formulated according to the following format and categories:

Service Area — Correlates to the proposed roadway, water, and wastewater service areas identified on the attached maps in Section 3.2.

Traffic Analysis Zone (TAZ) — Geographic areas established by the H-GAC Traffic Model which are used for data collection purposes and termed TAZs within this report.

Housing Units (2017) — All living units including single-family, duplex, multi-family and group quarters. The number of existing housing units has been shown for the base year (2017).

Housing Units (2027) — Projected housing units by service zone for 2027 (ten-year growth projections).

Population (2017) — Existing population for the base year (2017).

Population (2027) — Projected population by service zone for the year 2027 (ten-year growth projections).

Employment (2017, 2027) — Employment data is aggregated to three employment sectors and include Retail, Office and Industrial, as provided by the H-GAC. These service sectors serve as the basis for nonresidential trip generation. The following details which types of businesses fall within each of the three sectors.

Basic (Industrial) -- Land use activities that produce goods and services such as those that are exported outside the local economy: manufacturing, construction, transportation, wholesale trade, warehousing and other industrial uses.

Service (Office) -- Land use activities which provide personal and professional services such as financial, insurance, government, and other professional and administrative offices.

Retail -- Land use activities which provide for the retail sale of goods that primarily serve households and whose location choice is oriented toward the household sector such as grocery stores, restaurants, etc.

4.0 BASE YEAR DATA

H-GAC's demographics by TAZ serve as a basis for the base year data analysis of the Land Use Assumption process. This section documents the City's historical growth trends and data used to derive the 2017 base year population estimate for the City of League City. This "benchmark" information provides a starting basis of data for the ten-year growth assumptions that will be presented within the following section.

4.1 HISTORICAL GROWTH

A City's past growth rates are often a good indicator of future growth rates. **Table 1** and **Table 2** show League City's population, numerical change, and compound annual growth rate of recent years and by decade.

From 2010 to 2017, League City has grown consistently, having a peak in the last 2-3 years around 4 percent. Between 2010 and 2017, the compound annual growth rate (CAGR) is 2.9%.

TABLE 1: POPULATION DATA IN RECENT YEARS

Year	Population	Population Change	Percent Change	CAGR
2010	84,088	-	-	
2011	86,278	2,190	2.6%	
2012	88,244	1,966	2.3%	
2013	90,828	2,584	2.9%	2.9%
2014	94,264	3,436	3.8%	
2015	98,149	3,885	4.1%	
2016	100,053	1,904	1.9%	
2017	102,635	2,582	2.6%	

Source: US Census Bureau

Analysis of growth rates since 1970 reveals League City to have had periods of phenomenal growth. Between the years of 2000 and 2010, League City has grown over 80 percent. The 40-year (1970-2010) CAGR is 5.2% and listed in **Table 2**.

TABLE 2: POPULATION DATA BY DECADE

Year	Population	Population Change	Percent Change	CAGR
1970	10,818	-	-	
1980	16,578	5,760	53.2%	
1990	29,903	13,325	80.4%	5.2%
2000	45,327	15,424	51.6%	
2010	83,560	38,233	84.3%	

Source: US Census Bureau

4.2 EXISTING LAND USE

The largest use of developed land within the City limits is single family residential, which alone accounts for approximately 59 percent of all developed land. All residential uses collectively comprise of around 63 percent of the total developed land, which makes League City stand out as a primarily residential community. And are detailed in **Table 3**, **Figure 3**, and **Figure 4**.

TABLE 3: EXISTING LAND USE

Category	Acres	% of Developed	% of Total
Single Family	7,509	59.0%	26.1%
Condominiums	28	0.2%	0.1%
Multi-Family	343	2.7%	1.2%
Mobile Homes	124	1.0%	0.4%
Residential Sub-Total	**8,004**	**62.9%**	**27.8%**
Commercial	3,638	28.6%	12.6%
Industrial	43	0.3%	0.1%
O1	75	0.6%	0.3%
Non-Residential Sub-Total	**3,756**	**29.5%**	**13.0%**
Other or Not Assigned	971	7.6%	3.4%
Total Developed Land	**12,731**	**100.0%**	**44.2%**
Vacant/Ag	**16,085**	**-**	**55.8%**
Total Developable Land	**28,816**	**-**	**100.0%**

FIGURE 3: EXISTING LAND USE

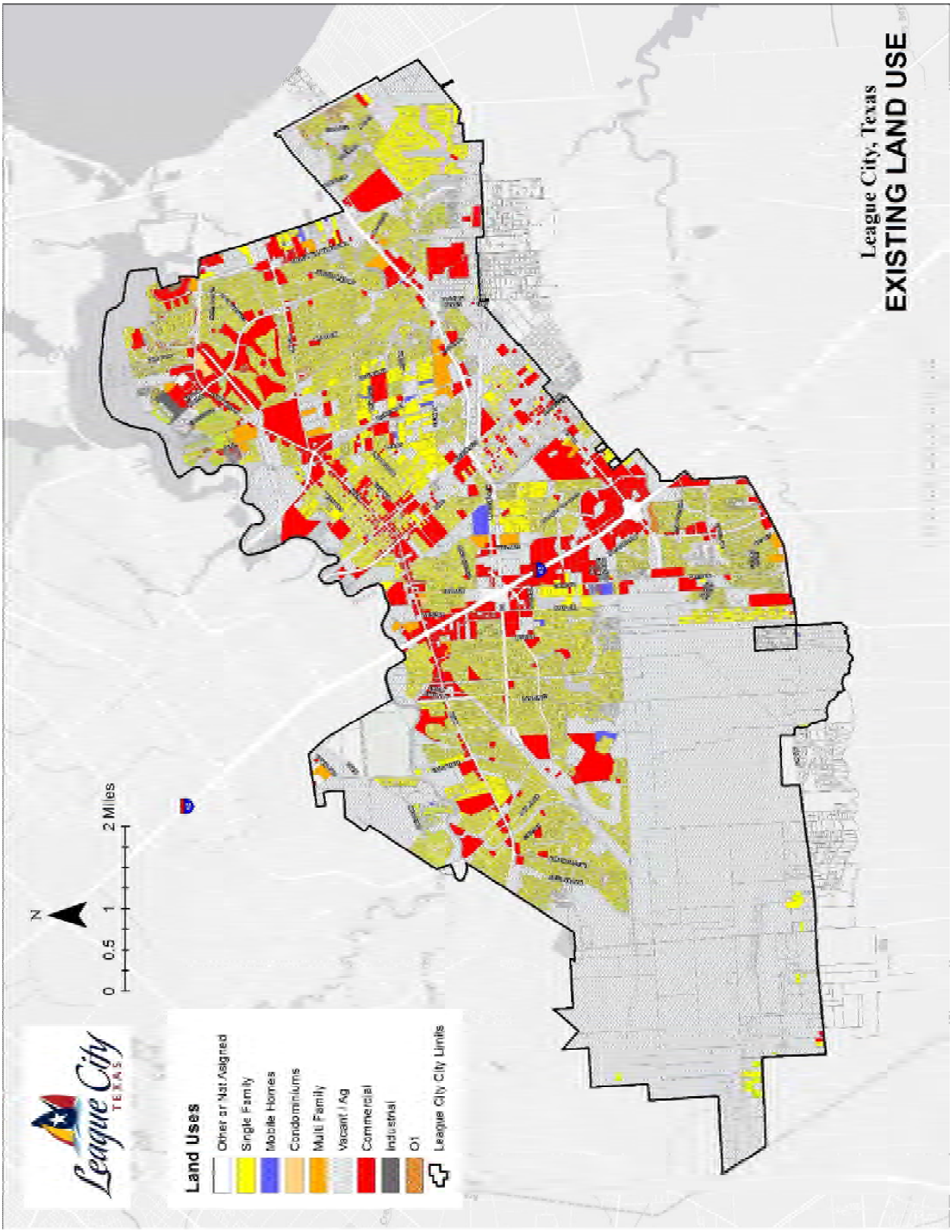
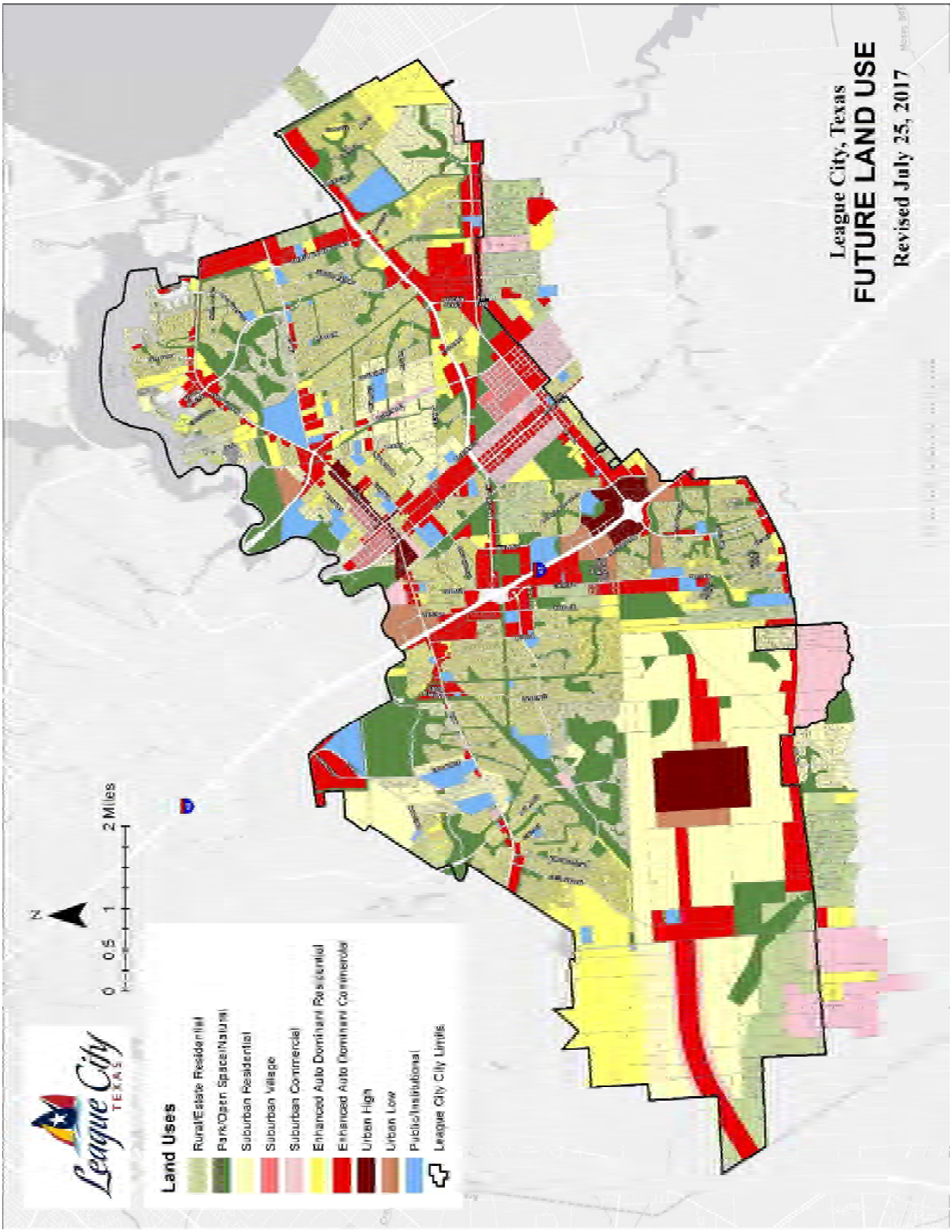


FIGURE 4: FUTURE LAND USE



4.3 2017 POPULATION AND EMPLOYMENT IN LAND USE ASSUMPTIONS PROCESS

For the land use assumptions process, 2017 base population and employment data was calculated using data from the Houston-Galveston Area Council (H-GAC) with verification of this data from City Staff. This information provided a breakdown of employment by traffic analysis zone (TAZ) for 2017, 2030, and 2040. It is important to note that the TSZs do not follow City limits in some locations, so adjustments were made based on the locations of existing land uses and upon the percentage of each TAZ located within City limits. Employment for each TAZ was broken down into basic, retail, and service uses as defined by H-GAC in the modeling demographics. Since Roadway and Water and Wastewater have different service areas, two sets of assumptions has been conducted, each tailored to its own service area.

TABLE 6: SUMMARY OF BASE YEAR (2017) POPULATION AND EMPLOYMENT FOR ROADWAY CAPITAL RECOVERY FEE

Roadway Service Area 2017 Population & Employment	
Population	102,635
Housing Units	36,919
Total Employment	31,133
Basic Employment	*4,219*
Service Employment	*16,125*
Retail Employment	*10,789*
Source: Freese and Nichols, Inc., H-GAC	

TABLE 7: SUMMARY OF BASE YEAR (2017) POPULATION AND EMPLOYMENT FOR WATER AND WASTEWATER CAPITAL RECOVERY FEE

Water and Wastewater Service Area 2017 Population & Employment	
Population	129,234
Housing Units	46,487
Total Employment	36,082
Basic Employment	*5,217*
Service Employment	*18,540*
Retail Employment	*12,325*
Source: Freese and Nichols, Inc., H-GAC	

5.0 TEN-YEAR GROWTH ASSUMPTIONS

Projected growth has been characterized in two forms: population and employment. A series of assumptions were made to arrive at reasonable growth rates for population and employment. The following assumptions have been made as a basis from which ten-year projections could be initiated.

- Future land uses will occur based on similar trends of the past and consistent with the Future Land Use Plan,
- The City will be able to finance the necessary improvements to accommodate continued growth, and
- Densities will be as projected in the Future Land Use Plan.

The ten-year projections are based upon the growth rate that was discussed earlier (**3.4%**) and considers past trends of the City and is in line with concurrent studies.

Both of the assumptions for Roadway Service Area and Water and Wastewater Service Area are presented with 2017 and 2027 population and employment information. However, Water and Wastewater Capital Recovery Fee studies require the build-out population and employment information for that service area, which is why it has been included in the Water and Wastewater Capital Recovery Fee section.

Using the previously mentioned data from H-GAC, linear interpolation was used to develop the interim year 2027 in the data for both population and employment. For population, adjustments were made to account for existing subdivisions with lots remaining and anticipated developments such as the Duncan Tract on the southwest quadrant of the City and the Lakes of Quail Pointe subdivision. For employment, adjustments were made to match growth trends anticipated by the City and modifications in the 2017 Future Land Use Plan with specific areas of growth for The University of Texas Medical Branch (UTMB) campus and Pinnacle Park. **Figure 5** and **Figure 6** depict a distribution map of the 10-year growth for population and employment, respectively.

The build-out demographics were calculated using the H-GAC data by TAZ complemented with an evaluation of existing vacant property in the City to the Future Land Use Plan. The Southwest Side PUD Concept Plan was analyzed to produce a detailed estimate of population and employment at build-out for this large sector of the City.

Tables 8-13 summarize the population and employment demographics for base year (2017), projected year (2027), and build-out for the roadway and water/wastewater service areas.

FIGURE 5: POPULATION GROWTH DISTRIBUTION

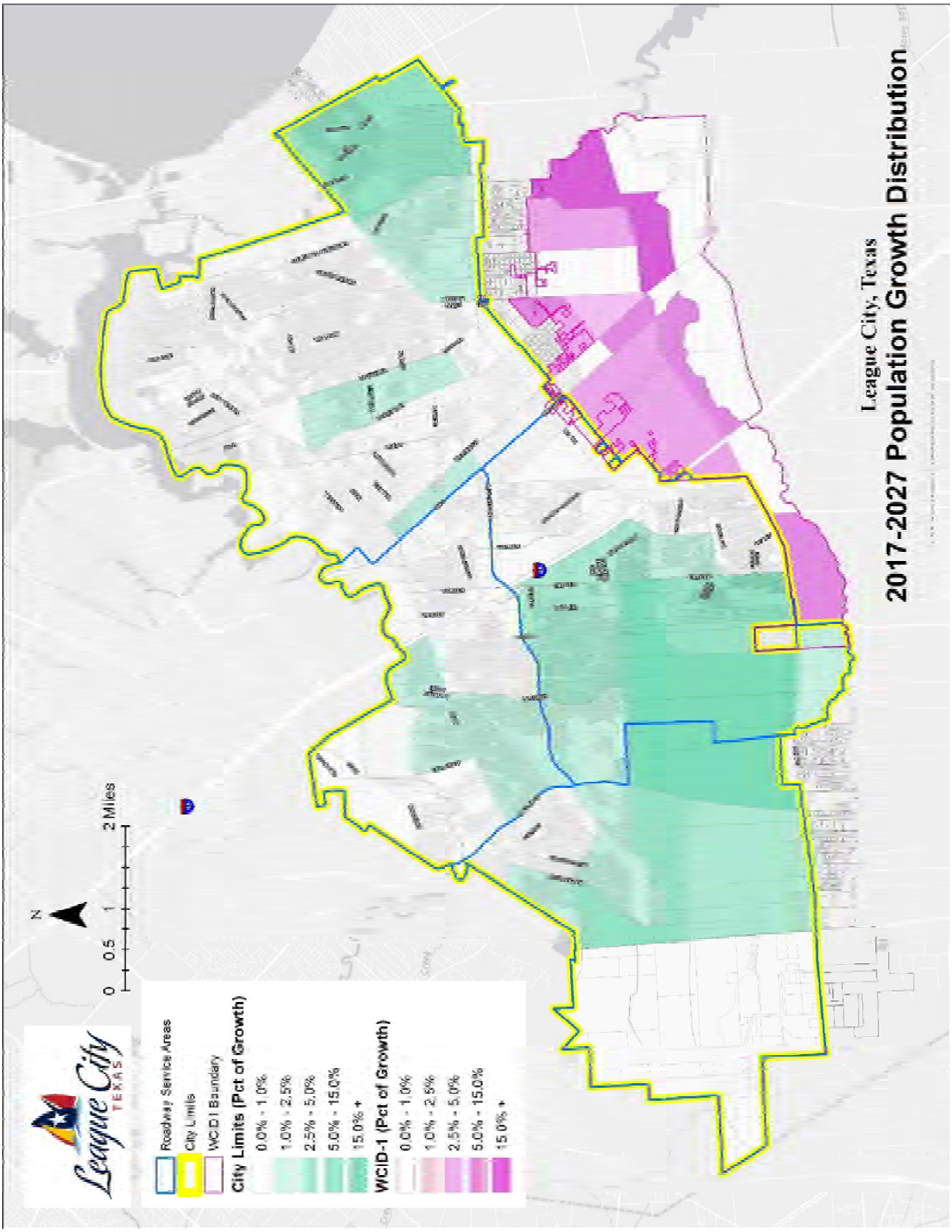
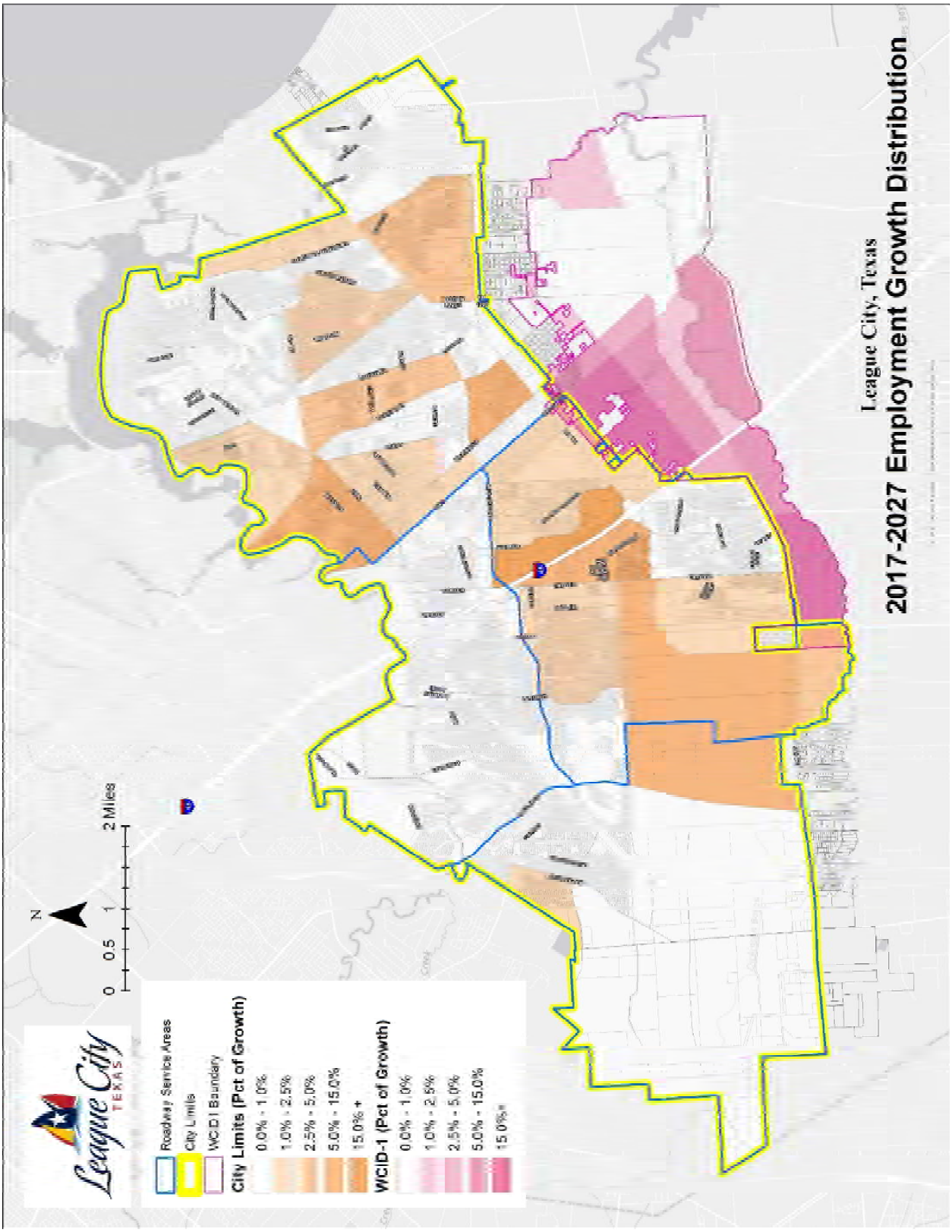


FIGURE 6: EMPLOYMENT GROWTH DISTRIBUTION



Roadway Capital Recovery Fee

TABLE 8: POPULATION AND DWELLING UNIT PROJECTION FOR ROADWAY SERVICE AREA

Ten-Year Population Projection for Roadway Service Area				
Roadway Service Areas	2017		2027	
	Housing Units	Population	Housing Units	Population
Service Area 1	15,951	44,343	18,431	51,238
Service Area 2	9,122	25,358	9,940	27,634
Service Area 3	8,032	22,330	13,804	38,374
Service Area 4	3,814	10,604	9,403	26,140
Total	**36,919**	**102,635**	**51,578**	**143,386**

TABLE 9: POPULATION AND DWELLING UNITS ADDED FOR ROADWAY SERVICE AREA

Added Population and Percentage Growth for Roadway Service Area 2017 to 2027			
Roadway Service Areas	Units Added	Population Added	Pct. Change
Service Area 1	2,480	6,895	16%
Service Area 2	819	2,276	9%
Service Area 3	5,771	16,044	72%
Service Area 4	5,588	15,536	147%
Total	**10,340**	**40,751**	**40%**

TABLE 10: EMPLOYMENT PROJECTIONS FOR ROADWAY SERVICE AREA

Ten-Year Employment Projection for Roadway Service Area								
Roadway Service Areas	Basic		Service		Retail		Total	
	2017	2027	2017	2027	2017	2027	2017	2027
Service Area 1	1,495	1,805	11,135	12,897	6,030	8,625	18,660	23,327
Service Area 2	576	595	2,385	2,462	2,628	2,830	5,589	5,887
Service Area 3	2,036	2,909	1,453	4,044	1,086	2,807	4,575	9,760
Service Area 4	102	159	569	1,028	713	1,541	1,384	2,728
Total	**4,209**	**5,468**	**15,542**	**20,431**	**10,457**	**15,803**	**30,208**	**41,702**

Water and Wastewater Capital Recovery Fee

TABLE 11: POPULATION AND DWELLING UNIT PROJECTION FOR W/WW SERVICE AREA

Ten-Year Population Projection for Water and Wastewater Service Area					
2017		2027		Build-out	
Housing Units	Population	Housing Units	Population	Housing Units	Population
46,487	129,234	62,411	173,503	87,643	243,647

TABLE 12: POPULATION AND DWELLING UNITS ADDED FOR W/WW SERVICE AREA

Added Population and Percentage Growth for Water and Wastewater Service Area 2017 to 2027		
Units Added	Population Added	Pct. Change
15,924	44,269	34%

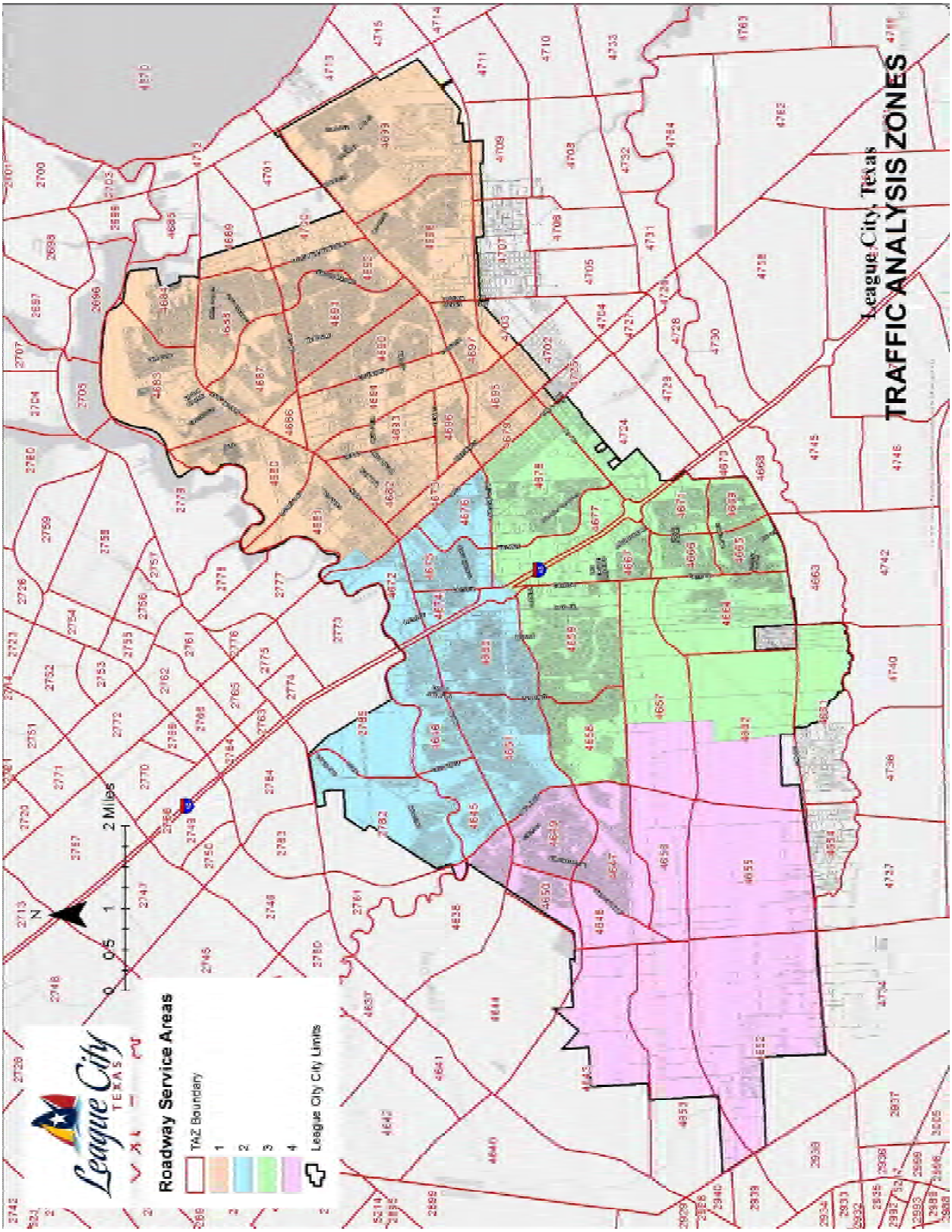
TABLE 13: EMPLOYMENT PROJECTIONS FOR W/WW SERVICE AREA

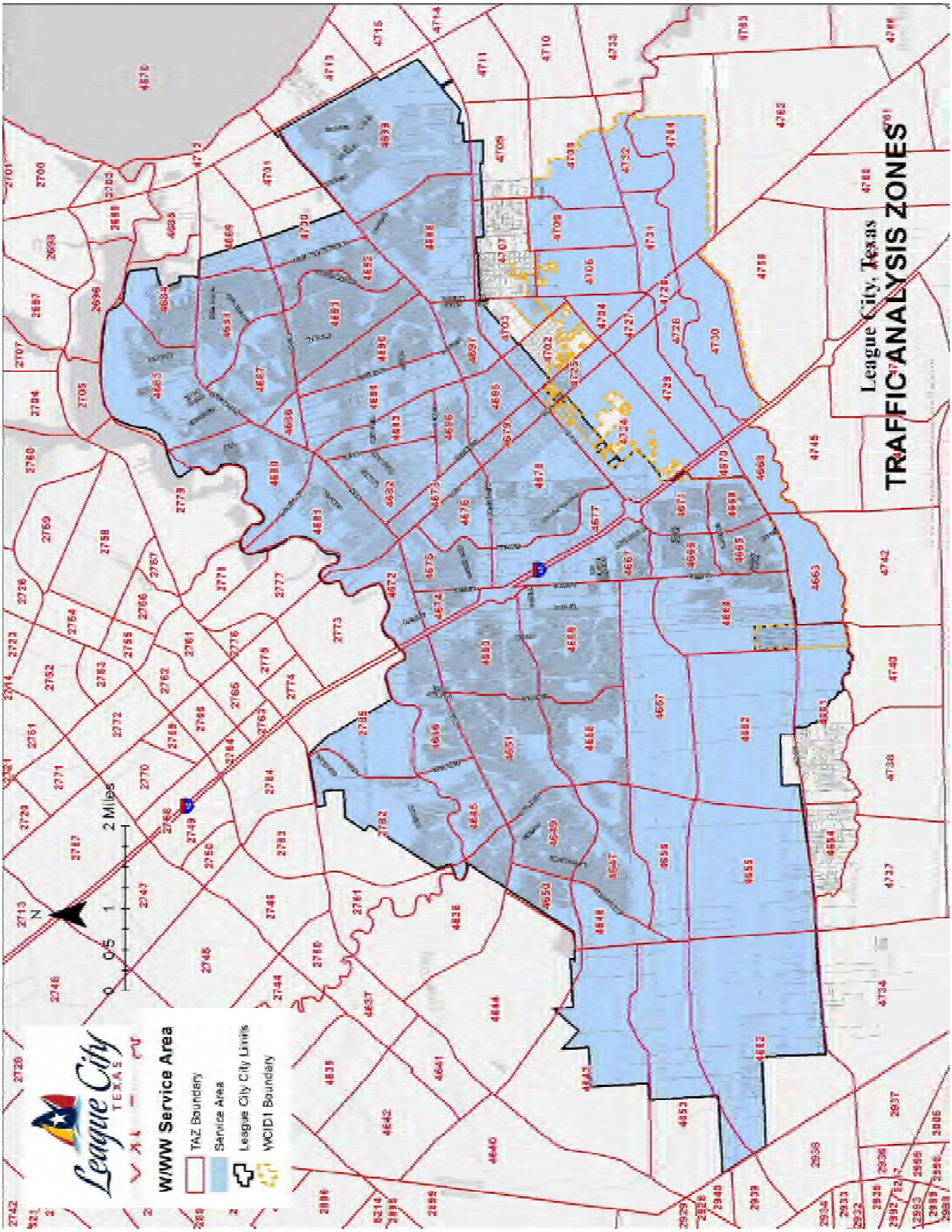
Ten-Year Employment Projection for Water and Wastewater Service Area											
Basic			Service			Retail			Total		
2017	2027	Build-out	2017	2027	Build-out	2017	2027	Build-out	2017	2027	Build-out
5,207	6,873	10,959	17,957	23,498	47,015	11,993	17,703	32,382	35,157	48,074	90,356

6.0 SUMMARY

- From the 2017 Future Land Use Plan, approximately 44 percent of the total developable land within the City limits is developed, with the remaining land available for future development, where infrastructure and topography permit.
- The existing 2017 population for the City limits of League City is approximately 102,635 persons, with an existing estimated employment of around 30,208 jobs.
- An average annual growth rate of 3.4 percent was used to calculate the League City's ten-year growth projections as recommended by the Planning and Zoning Commission in the Future Land Use Plan Update process.
- The ten-year (2027) population growth projection of the Roadway Service Area is 143,386, employment is projected to be a total of 41,702 jobs by 2027 for the Roadway Service Area
- The ten-year (2027) population growth projection of the Water and Wastewater Service Area is 173,503; employment is projected to be a total of 48,074 jobs by 2027 for the Water and Wastewater Service Area. Build-out population is 242,488 and build-out employment is 90,356 for Water and Wastewater Service Area.
- A summary of the 2017 and 2027 demographics broken down by TSZs can be found in the Appendix.

APPENDIX


TRAFFIC ANALYSIS ZONES
League City, Texas
Roadway Service Areas
TAZ Boundary
1
2
3
4
League City City Limits
0 0.5 1 2 Miles
N


TRAFFIC ANALYSIS ZONES
League City, Texas
W/WW Service Area
TAZ Boundary
Service Area
League City Limits
WCID1 Boundary
2 Miles
N

Roadway Population Demographic Summary (persons)

Service Area 1			
TAZ ID	2017	2027	Build-out
4673	502	1,009	1,129
4679	142	142	194
4680	2,492	2,808	3,289
4681	1,654	1,654	2,914
4682	1,943	1,943	3,050
4683	3,307	3,486	3,770
4684	1,082	1,132	1,213
4687	2,171	2,193	2,494
4688	3,913	4,175	4,456
4689	60	96	1,369
4690	3,742	3,852	4,782
4691	6,684	6,926	7,027
4692	3,197	3,400	3,638
4693	738	988	2,222
4694	4,341	4,789	6,279
4695	324	335	560
4696	1,161	1,363	1,626
4697	496	664	1,480
4698	2,312	3,312	6,360
4699	3,343	5,833	8,331
4700	719	1,069	1,469
4702	10	41	427
4703	10	28	410
4725	0	0	88
Total	**44,343**	**51,238**	**68,577**

Service Area 2			
TAZ ID	2017	2027	Build-out
2782	1,368	1,464	3,246
2785	10	65	796
4645	1,276	1,598	1,598
4646	2,477	2,942	3,411
4651	7,147	7,608	7,631
4660	6,587	6,980	7,405
4672	1,393	1,580	1,777
4674	974	974	1,065
4675	1,750	1,750	2,129
4676	2,336	2,633	3,155
4681	40	40	90
Total	**25,358**	**27,634**	**32,303**

Service Area 3			
TAZ ID	2017	2027	Build-out
4657	0	3,382	3,382
4658	2,599	3,547	3,547
4659	5,772	6,866	6,866
4661	10	490	490
4662	0	4,200	4,200
4664	1,775	4,756	4,756
4665	3,978	4,011	4,599
4666	770	1,357	1,357
4667	576	1,881	2,331
4669	2,153	2,247	2,395
4671	1,573	1,648	2,256
4677	32	248	248
4678	2,981	3,310	4,987
4724	111	431	1,423
Total	**22,330**	**38,374**	**42,837**

Service Area 4			
TAZ ID	2017	2027	Build-out
4638	932	1,053	1,169
4643	0	116	7,776
4647	3,482	3,999	4,616
4648	0	2,320	2,830
4649	4,559	4,648	4,729
4650	1,575	2,410	2,410
4652	56	383	8,680
4653	0	402	6,022
4655	0	1,269	6,381
4656	0	2,200	2,727
4657	0	3,800	7,010
4662	0	3,540	8,760
Total	**10,604**	**26,140**	**63,110**

Roadway Employment Demographic Summary (employees)

Service Area 1								
	2017				2027			
TAZ ID	Basic	Service	Retail	Total	Basic	Service	Retail	Total
2779	37	5,093	919	6,049	37	5,093	919	6,049
4673	87	144	442	673	112	186	571	869
4679	0	2	93	95	0	3	157	160
4680	6	102	330	438	9	150	487	646
4681	5	653	407	1,065	12	1,574	981	2,567
4682	10	503	249	762	12	608	301	921
4683	30	1,868	977	2,875	31	1,920	1,004	2,955
4684	17	152	74	243	21	191	93	305
4686	0	580	0	580	0	611	0	611
4687	0	139	348	487	0	140	350	490
4688	19	639	159	817	21	702	175	898
4689	582	266	787	1,635	635	290	859	1,784
4690	88	26	65	179	100	30	74	204
4691	0	29	128	157	0	58	256	314
4692	0	182	338	520	0	182	338	520
4693	135	27	66	228	167	33	82	282
4694	235	221	97	553	368	346	152	866
4695	0	1	14	15	0	57	799	856
4696	0	0	67	67	0	0	73	73
4697	0	0	17	17	0	0	60	60
4698	0	16	172	188	0	45	485	530
4699	0	9	47	56	0	20	105	125
4700	7	289	103	399	11	434	155	600
4702	151	3	27	181	181	4	32	217
4703	86	11	7	104	88	11	7	106
4707	0	84	13	97	0	103	16	119
4709	0	9	56	65	0	10	63	73
4725	0	87	28	115	0	96	31	127
Total	**1,495**	**11,135**	**6,030**	**18,660**	**1,805**	**12,897**	**8,625**	**23,327**

Service Area 2								
	2017				2027			
TAZ ID	Basic	Service	Retail	Total	Basic	Service	Retail	Total
2782	13	31	289	333	13	31	289	333
2785	0	6	24	30	0	19	78	97
4645	0	472	14	486	0	488	14	502
4646	15	104	323	442	15	106	330	451
4651	0	244	141	385	0	259	181	440
4660	46	607	747	1,400	48	617	793	1,458
4672	81	146	520	747	83	150	534	767
4674	0	51	151	202	0	52	153	205
4675	251	703	378	1,332	264	719	417	1,400
4676	170	21	41	232	172	21	41	234
Total	**576**	**2,385**	**2,628**	**5,589**	**595**	**2,462**	**2,830**	**5,887**

Roadway Employment Demographic Summary (employees)

Service Area 3								
	2017				2027			
TAZ ID	Basic	Service	Retail	Total	Basic	Service	Retail	Total
4657	63	1	2	66	179	277	103	559
4658	6	87	3	96	6	87	3	96
4659	162	180	73	415	230	255	104	589
4661	74	0	0	74	373	0	0	373
4662	0	0	0	0	0	298	616	914
4664	0	15	78	93	0	40	208	248
4665	0	34	57	91	0	42	70	112
4666	146	0	35	181	223	0	53	276
4667	674	162	302	1,138	730	345	783	1,858
4669	0	60	59	119	0	69	68	137
4671	71	151	86	308	90	192	109	391
4677	127	468	132	727	153	2,063	359	2,575
4678	293	202	158	653	366	252	197	815
4724	420	93	101	614	559	124	134	817
Total	**2,036**	**1,453**	**1,086**	**4,575**	**2,909**	**4,044**	**2,807**	**9,760**

Service Area 4								
	2017				2027			
TAZ ID	Basic	Service	Retail	Total	Basic	Service	Retail	Total
2781	0	145	48	193	0	145	48	193
4638	0	20	80	100	0	20	80	100
4643	15	82	84	181	15	82	84	181
4644	56	161	428	645	56	161	428	645
4647	0	0	0	0	0	0	0	0
4648	0	0	0	0	0	0	0	0
4649	0	130	47	177	0	131	47	178
4650	0	0	0	0	0	0	209	209
4652	0	30	25	55	0	30	25	55
4653	0	0	0	0	0	0	0	0
4655	0	0	0	0	0	0	0	0
4656	0	0	0	0	0	0	0	0
4657	31	1	1	33	88	2	391	481
4662	0	0	0	0	0	457	229	686
Total	**102**	**569**	**713**	**1,384**	**159**	**1,028**	**1,541**	**2,728**

Water/Wastewater Population Demographic Summary (persons)

TAZ ID	2017	2027	Buildout
2782	1,368	1,464	3,246
2785	10	65	796
4638	932	1,053	1,169
4643	0	116	7,776
4645	1,276	1,598	1,598
4646	2,477	2,942	3,411
4647	3,482	3,999	4,616
4648	0	2,320	2,830
4649	4,559	4,648	4,729
4650	1,575	2,410	2,410
4651	7,147	7,608	7,631
4652	56	383	8,680
4653	0	402	6,022
4655	0	1,269	6,381
4656	0	2,200	2,727
4657	0	7,182	10,392
4658	2,599	3,547	3,547
4659	5,772	6,866	6,866
4660	6,587	6,980	7,405
4661	10	490	490
4662	0	7,740	12,960
4663	1,158	1,438	1,956
4664	2,105	5,086	5,086
4665	3,978	4,011	4,599
4666	770	1,357	1,357
4667	576	1,881	2,331
4668	1,026	1,026	1,049
4669	2,153	2,247	2,395
4670	552	690	1,015
4671	1,573	1,648	2,256
4672	1,393	1,580	1,777
4673	502	1,009	1,129
4674	974	974	1,065
4675	1,750	1,750	2,129
4676	2,336	2,633	3,155
4677	32	248	248
4678	2,981	3,310	4,987

TAZ ID	2017	2027	Buildout
4679	142	142	194
4680	2,492	2,808	3,289
4681	1,694	1,694	3,004
4682	1,943	1,943	3,050
4683	3,307	3,486	3,770
4684	1,082	1,132	1,213
4687	2,171	2,193	2,494
4688	3,913	4,175	4,456
4689	60	96	1,369
4690	3,742	3,852	4,782
4691	6,684	6,926	7,027
4692	3,197	3,400	3,638
4693	738	988	2,222
4694	4,341	4,789	6,279
4695	324	335	560
4696	1,161	1,363	1,626
4697	496	664	1,480
4698	2,312	3,312	6,360
4699	3,343	5,833	8,331
4700	719	1,069	1,469
4702	397	571	1,707
4703	471	769	1,639
4704	1,539	1,624	1,761
4705	3,350	3,367	3,162
4706	2,457	2,588	3,295
4707	49	71	227
4708	3,836	4,817	6,219
4724	2,179	2,644	4,743
4725	791	793	878
4726	197	207	191
4727	842	1,023	1,000
4728	980	1,248	1,451
4729	2,623	2,732	2,695
4730	1,262	1,289	1,667
4731	1,488	2,153	2,597
4732	473	478	468
4764	730	759	1,118
Total	**129,234**	**173,503**	**243,647**

Water/Wastewater Employment Demographic Summary (employees)

	2017				2027				Build-out			
TAZ ID	Basic	Service	Retail	Total	Basic	Service	Retail	Total	Basic	Service	Retail	Total
2779	37	5,093	919	6,049	37	5,093	919	6,049	40	5,363	919	6,322
2781	0	145	48	193	0	145	48	193	0	152	48	200
2782	13	31	289	333	13	31	289	333	13	31	289	333
2785	0	6	24	30	0	19	78	97	0	19	334	353
4638	0	20	80	100	0	20	80	100	0	20	80	100
4643	15	82	84	181	15	82	84	181	15	82	84	181
4644	56	161	428	645	56	161	428	645	56	161	428	645
4645	0	472	14	486	0	488	14	502	0	507	16	523
4646	15	104	323	442	15	106	330	451	39	106	330	475
4647	0	0	0	0	0	0	0	0	0	35	77	112
4648	0	0	0	0	0	0	0	0	361	0	0	361
4649	0	130	47	177	0	131	47	178	0	132	47	179
4650	0	0	0	0	0	0	209	209	0	0	209	209
4651	0	244	141	385	0	259	181	440	102	270	181	553
4652	0	30	25	55	0	30	25	55	7	283	2,790	3,080
4653	0	0	0	0	0	0	0	0	0	0	2,620	2,620
4655	0	0	0	0	0	0	0	0	365	634	479	1,478
4656	0	0	0	0	0	0	0	0	192	247	0	439
4657	94	2	3	99	267	279	494	1,040	273	556	1,172	2,001
4658	6	87	3	96	6	87	3	96	6	87	3	96
4659	162	180	73	415	230	255	104	589	236	276	303	815
4660	46	607	747	1,400	48	617	793	1,458	157	630	793	1,580
4661	148	0	0	148	487	0	0	487	684	1,896	380	2,960
4662	0	0	0	0	0	755	845	1,600	0	2,457	1,924	4,381
4663	9	203	39	251	17	393	76	486	17	494	554	1,065
4664	0	30	156	186	0	57	296	353	0	180	796	976
4665	0	34	57	91	0	42	70	112	47	42	70	159
4666	146	0	35	181	223	0	53	276	223	168	53	444
4667	674	162	302	1,138	730	345	783	1,858	730	781	1,436	2,947
4668	0	148	192	340	0	212	275	487	83	323	443	849
4669	0	60	59	119	0	69	68	137	39	69	68	176
4670	6	59	85	150	9	85	123	217	68	223	123	414
4671	71	151	86	308	90	192	109	391	90	326	109	525
4672	81	146	520	747	83	150	534	767	127	150	534	811
4673	87	144	442	673	112	186	571	869	531	186	571	1,288
4674	0	51	151	202	0	52	153	205	7	52	153	212
4675	251	703	378	1,332	264	719	417	1,400	405	719	417	1,541
4676	170	21	41	232	172	21	41	234	177	21	41	239
4677	127	468	132	727	153	2,063	359	2,575	383	8,363	759	9,505
4678	293	202	158	653	366	252	197	815	535	301	197	1,033
4679	0	2	93	95	0	3	157	160	71	864	1,008	1,943
4680	6	102	330	438	9	150	487	646	19	500	487	1,006
4681	5	653	407	1,065	12	1,574	981	2,567	260	3,778	981	5,019

Water/Wastewater Employment Demographic Summary (employees)

	2017				2027				Build-out			
TAZ ID	Basic	Service	Retail	Total	Basic	Service	Retail	Total	Basic	Service	Retail	Total
4682	10	503	249	762	12	608	301	921	333	608	301	1,242
4683	30	1,868	977	2,875	31	1,920	1,004	2,955	31	2,045	1,004	3,080
4684	17	152	74	243	21	191	93	305	21	191	236	448
4686	0	580	0	580	0	611	0	611	11	635	5	651
4687	0	139	348	487	0	140	350	490	6	140	350	496
4688	19	639	159	817	21	702	175	898	21	702	315	1,038
4689	582	266	787	1,635	635	290	859	1,784	635	290	859	1,784
4690	88	26	65	179	100	30	74	204	100	30	121	251
4691	0	29	128	157	0	58	256	314	6	223	290	519
4692	0	182	338	520	0	182	338	520	0	182	338	520
4693	135	27	66	228	167	33	82	282	246	33	82	361
4694	235	221	97	553	368	346	152	866	581	424	268	1,273
4695	0	1	14	15	0	57	799	856	0	1,880	799	2,679
4696	0	0	67	67	0	0	73	73	14	0	73	87
4697	0	0	17	17	0	0	60	60	49	4	64	117
4698	0	16	172	188	0	45	485	530	11	397	568	976
4699	0	9	47	56	0	20	105	125	3	162	105	270
4700	7	289	103	399	11	434	155	600	15	661	644	1,320
4702	302	6	54	362	352	7	63	422	408	452	160	1,020
4703	172	22	14	208	175	22	14	211	206	22	14	242
4704	48	3	70	121	49	3	72	124	58	3	72	133
4705	0	115	64	179	0	117	65	182	0	128	65	193
4706	0	260	0	260	0	267	0	267	0	283	0	283
4707	0	168	26	194	0	200	31	231	24	868	328	1,220
4708	0	71	69	140	0	85	83	168	5	252	83	340
4709	0	9	56	65	0	10	63	73	0	36	218	254
4724	840	186	202	1,228	1,257	278	302	1,837	1,280	2,276	1,526	5,082
4725	0	174	56	230	0	238	77	315	8	672	110	790
4726	0	78	41	119	0	78	41	119	0	78	41	119
4727	10	210	114	334	12	243	132	387	15	381	132	528
4728	8	143	214	365	9	155	232	396	114	155	232	501
4729	35	534	284	853	38	585	311	934	145	694	311	1,150
4730	101	247	51	399	151	369	76	596	205	573	303	1,081
4731	50	51	59	160	50	51	59	160	50	51	59	160
4732	0	0	0	0	0	0	0	0	0	0	0	0
4764	0	0	0	0	0	0	0	0	0	0	0	0
Total	**5,207**	**17,957**	**11,993**	**35,157**	**6,873**	**23,498**	**17,703**	**48,074**	**10,959**	**47,015**	**32,382**	**90,356**

APPENDIX C
Water Project Costs

PROPOSED CAPITAL IMPROVEMENT PLAN FY2019 - FY2023

PROGRAM: WATER **Program Priority: 2**

PROJECT NAME: 36" WL SH3 to SSH Booster Station
CIP NUMBER: WT1109

CONTACT PERSON: Jody Hooks

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Planning/Design	1,104,746							**$1,104,746**
Land	613,200							**$613,200**
Construction		11,811,870						**$11,811,870**
Equip/Furnishings								**$0**
Total Cost	**$1,717,946**	**$11,811,870**	**$0**	**$0**	**$0**	**$0**	**$0**	**$13,529,816**

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Prior Bonds	1,717,946	6,566,623						**$8,284,569**
Future Bond		4,199,555						**$4,199,555**
Potential Grant(s)								**$0**
Park Dedication Fees								**$0**
4B Funding								**$0**
CRF Funds								**$0**
Other: Fund 1055		1,045,692						**$1,045,692**
Total Funding	**$1,717,946**	**$11,811,870**	**$0**	**$0**	**$0**	**$0**	**$0**	**$13,529,816**

PROJECT DESCRIPTION

This project consist of approximately 17,000 ft of 36" C905 PVC pipe, ROW/easement acquisition, environment assessments, and route determination. The pipeline will connect Hwy 3 booster station with South Shore booster station. Project construction is scheduled in FY2019 because of the number of ROW, permitting, and environmental issues that are required.

PROJECT JUSTIFICATION

The project will provide an alternative connection from the City's major take point at SH 3, to a major booster station, South Shore, providing a secondary route of supply into the City.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?		NO	Personnel/Benefits (50xx)	$0
			Supplies (51xx)	$0
Will this project create future Capital Projects?	YES		Repairs/Maintenance (52xx)	$30,000
Is your request in the current C I P ?	YES		Services (53xx)	$0
If yes, has the cost of the project changed?		NO	**TOTAL**	**$30,000**

PROPOSED CAPITAL IMPROVEMENT PLAN FY2019 - FY2023

PROGRAM: WATER **Program Priority: 1**

PROJECT NAME: 60" Water Line to replace 42" Line on SH3
CIP NUMBER: WT1502

CONTACT PERSON: Jody Hooks

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Planning/Design	1,200,000	5,585,000						**$6,785,000**
Land		4,500,000						**$4,500,000**
Construction				12,400,000	13,480,000	16,450,000		**$42,330,000**
Equip/Furnishings								**$0**
Total Cost	**$1,200,000**	**$10,085,000**	**$0**	**$12,400,000**	**$13,480,000**	**$16,450,000**	**$0**	**$53,615,000**

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Prior Bonds								**$0**
Future Bonds		4,085,000		9,145,075	13,480,000	16,450,000		**$43,160,075**
Potential Grant(s)								**$0**
Park Dedication Fees								**$0**
4B Funding								**$0**
CRF Funds	1,200,000	6,000,000		3,254,925				**$10,454,925**
Other: Fund 084								**$0**
Total Funding	**$1,200,000**	**$10,085,000**	**$0**	**$12,400,000**	**$13,480,000**	**$16,450,000**	**$0**	**$53,615,000**

PROJECT DESCRIPTION

This City of Houston project is for the design and construction of 47,500LF of 60" Water Line along Old Galveston Rd to replace the current 42" line from the Southeast Water Purification Plant (SEWPP) on SH3.

2013 CRF Study reflects 19.5% of project costs are eligible for Water CRF funding.

PROJECT JUSTIFICATION

This project is necessary due to the age of the current 42" line, to increase the capacity of the line with the anticipated additional supply from City of Houston, and TxDOT plans to widen SH3 to meet hurricane evacuation route criteria.

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?	YES		Personnel/Benefits (50xx)	$0
			Supplies (51xx)	$0
Will this project create future Capital Projects?		NO	Repairs/Maintenance (52xx)	$0
Is your request in the current C I P ?	YES		Services (53xx)	$0
If yes, has the cost of the project changed?		NO	**TOTAL**	**$0**

PROPOSED CAPITAL IMPROVEMENT PLAN FY2019 - FY2023

PROGRAM: WATER **Program Priority: 6**

PROJECT NAME: West Side Well, GST, Generator and BPS
CIP NUMBER: WT1707

CONTACT PERSON: Jody Hooks

PROJECT COST BY FISCAL YEAR

Project Cost	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Planning/Design	264,874							**$264,874**
Land	192,500							**$192,500**
Construction		3,119,300						**$3,119,300**
Equip/Furnishings								**$0**
Total Cost	**$457,374**	**$3,119,300**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,576,674**

FUNDING SOURCE BY FISCAL YEAR

Funding Source	Previously Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Future Years	Total
Prior Bonds	190,000	1,300,000						**$1,490,000**
Future Bonds								**$0**
Potential Grant(s)								**$0**
Park Dedication Fees								**$0**
4B Funding								**$0**
CRF Funds		987,162						**$987,162**
Other	267,374	832,138						**$1,099,512**
Total Funding	**$457,374**	**$3,119,300**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,576,674**

PROJECT DESCRIPTION

Project consists of a new west side well and booster pump station at Bay Colony.
-1500 GPM well
-Pump building
-Misc piping, pumps, electrical and controls
-Chemical Feed system
-0.5MG ground storage tank
-SCADA
-Generator

PROJECT JUSTIFICATION

ADDITIONAL CONSIDERATIONS

	YES	NO	Recurring M&O Costs	Amount
Is the project necessary under State/Federal Mandate, contractual obligation, or City Code?		NO	Personnel/Benefits (50xx)	$0
			Supplies (51xx)	$0
Will this project create future Capital Projects?		NO	Repairs/Maintenance (52xx)	$0
Is your request in the current C I P ?	YES		Services (53xx)	$0
If yes, has the cost of the project changed?	YES		**TOTAL**	**$0**

Project Number:	**C**
Project Title:	**Pedregal (West Side Well, Generator, and BPS)**

Project Description: Project consists of a new west side well and booster pump station at Bay Colony. The project will also include a new meter base station for water meter reading.
- 1500 GPM well
- Pump building
- Mics piping, pumps, electrical and controls
- Chemical feed system
- 0.5 MG ground storage tank
- SCADA
- Generator
-Water Meter Base Station

Project Justification: This facility is necessary in order to meet future development needs on the west side of the City and to provide a looped system to the City's existing west side infrastructure, thereby providing back-up capacity, pressure and fire protection to the west side of the City.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	2019 - 2023 CIP Cost	1	EA	$3,576,674	$3,576,674
2	Meter Base Station	1	EA	$100,000	$100,000
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Total Project Cost:	**$3,676,674**

Project Number:	**1**
Project Title:	**Calder Rd BPS Pump Upgrade**

Project Description: This project will constist of upgrading three of the booster pumps to higher design pressure and higher flow to serve new west side developments and the replacenemt of the standby generator. The 2 pumps will be upgraded to 5,000 gpm.

Project Justification: The pump and generator replacements will ensure there is enough pump capacity to meet demands requirements and provide a reliable source of emergency power.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	5,000 gpm Booster Pump	2	EA	$250,000	$500,000
2	Process Mechanical Allowance	1	LS	$600,000	$600,000
3	Electrical/Miscellaneous Allowance	1	LS	$600,000	$600,000
4	Generator	1	LS	$500,000	$500,000
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$2,200,000**
	25% Contingency				$550,000
Subtotal:					**$2,750,000**
	15% Engineering & Professional Services				$410,000
Total Project Cost:					**$3,160,000**

Project Number:	**2**
Project Title:	**New Waterlines to West Side - Segments 0 and 1**

Project Description: This project will consist of obtaining water line easements, design, and construction of approximately 5,900 linear feet of 12-inch water transmission line and 10,200 LF of 16-inch waterline. Segment 0 consists of a 12-inch line that will run along the future Maple Leaf Drive extension, past the future Grand Parkway to the "Future Unnamed Road 1" and a 16-inch waterline that will follow the "Future Unnamed Road 1" and turn north along the "Future Unnamed Road 2" to the future Grand Parkway. Segment 1 consists of a 12-inch line that will run along the future Grand Parkway from the "Future Unnamed Road 2" to the future Bay Area Blvd extension.

Project Justification: This line is necessary in order for the City to be able to provide water supply for future capacity demands and to provide a looped system with the City's existing west side infrastructure to maintain adequate system capacity, pressure, and fire protection to the existing west side development.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	Segment 0 - 12''	5,900	LF	$140	$830,000
2	Segment 0 - 16''	6,600	LF	$175	$1,160,000
3	Segment 1 - 16''	3,600	LF	$175	$630,000
4					
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$2,620,000**
	25% Contingency				$660,000
Subtotal:					**$3,280,000**
	15% Engineering & Professional Services				$490,000
Total Project Cost:					**$3,770,000**

Project Number:	**3**
Project Title:	**New West Side GST, Well, and BPS**

Project Description: This project will consist of the land purchase, engineering, water well, and booster pump station to be located on the west side of the City, west of the future Bay Area Boulevard and north of FM 517 (Westside PUD Drill Site) on a site to be determined.

Project Justification: This facility is necessary in order to meet future development needs on the west side of the City and to provide a looped system to the City's existing west side infrastructure, thereby providing back-up capacity, pressure and fire protection to the west side of the City.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	2 MG Ground Storage Tank	1	EA	$1,200,000	$1,200,000
2	1500 GPM Well Pump	1	EA	$1,000,000	$1,000,000
3	750 GPM Booster Pump	2	EA	$75,000	$150,000
4	1500 GPM Booster Pump	2	EA	$150,000	$300,000
5	Process Mechanical Allowance	1	LS	$600,000	$600,000
6	Electrical/Miscellaneous Allowance	1	LS	$600,000	$600,000
7					
8					
9					
10					
11					
12					
Subtotal:					**$3,850,000**
	25% Contingency				$960,000
Subtotal:					**$4,810,000**
	15% Engineering & Professional Services				$720,000
Total Project Cost:					**$5,530,000**

Project Number:	**4**
Project Title:	**16'' Waterline to New West Side GST**

Project Description: This project includes design and construction of 1,300 LF of 16-inch water line from the future 16-inch water line east from Bay Area Boulevard to the proposed 2 MG ground storage tank site.

Project Justification: This project is identified in the 2012 water master plan and is required for connectivity to the City's existing west distribution system to provide fill capabilities to the future 2 MG ground storage tank. This system provides elevated storage and associated pressure enhancements for future development of the far west service area.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	16" Water Line Connection	1,300	LF	$175	$230,000
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$230,000**
	25% Contingency				$60,000
Subtotal:					**$290,000**
	15% Engineering & Professional Services				$40,000
Total Project Cost:					**$330,000**

Project Number:	**5**
Project Title:	**20 MGD SEWPP Expansion**

Project Description: This project consists of a 20 MGD expansion to SEWPP that will provide the water required to meet the future demands.

Project Justification: This project will provide the capacity required to meet future water demands.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	20 MGD SEWPP Expansion	20	MGD	$3,500,000.00	$70,000,000
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$70,000,000**
	25% Contingency				$17,500,000
Subtotal:					**$87,500,000**
	15% Engineering & Professional Services				$13,130,000
Total Project Cost:					**$100,630,000**

Project Number:	**6**
Project Title:	**New Waterlines to West Side - Segments 2, 3 and 5**

Project Description: This project will consist of obtaining water line easements, design, and construction of approximately 11,000 linear feet of 24-inch water transmission line and 4,700 LF of 16-inch waterline. Segment 2 will consist of a 16-inch water line that will run along the future Bay Area Blvd extension to the future Grand Parkway. Segment 3 will consist of a 24-inch water line runing along the future Grand Parkway from the future Bay Area Blvd extension to the future Hobbs Rd extension. Segment 5 will consist of a 24-inch water line that will connect Hobbs Rd to the Future Hobbs Rd extension.

Project Justification: This line is necessary in order for the City to be able to provide water supply for future capacity demands and to provide a looped system with the City's existing west side infrastructure to maintain adequate system capacity, pressure, and fire protection to the existing west side development.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	Segment 2 - 16''	4,700	LF	$175	$820,000
2	Segment 3 - 24''	10,900	LF	$260	$2,830,000
3	Segment 5 - 24''	200	LF	$260	$50,000
4					
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$3,700,000**
	25% Contingency				$930,000
Subtotal:					**$4,630,000**
	15% Engineering & Professional Services				$690,000
Total Project Cost:					**$5,320,000**

Project Number:	**7**
Project Title:	**Southeast Service Area Trunks**

Project Description: This project provides trunk lines to serve the east side development and redundant supply to the proposed new East Side Elevated. Project includes for a total of approximately 17,100 LF of 16" line, 2,200 LF of 12'' line, and system appurtenances. This will complete the south loop to South Shore Boulevard running north to FM 646. The main East-West section of the 16-inch line will run along FM 646 from FM 270 to South Shore Boulevard, a length of approximately 11,900 LF.

- Section 1: Design & Construction of North-South section of 12” along FM 270 from Strawberry ROW to SH 96
- Section 2: Design of East-West section of 16” along FM646 from FM270 to FM1266 (Tuscan Lakes Blvd)
- Section 3: Design of North-South section of 16” along FM1266 (Tuscan Lakes Blvd) from FM 646 to SH 96, a length of approx. 3,000 LF
- Section 4: Design of East-West section of 16” along FM646 from FM1266 (Tuscan Lakes Blvd) to South Shore Blvd

Project Justification: This project is needed to provide adequate water supply for the projected development on the east side, making the City's system more redundant and eliminating some of the low pressure areas determined during modeling of thedistribution system.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	Section 1: 12” along FM 270 from Strawberry ROW to SH 96	2,200	LF	$140	$310,000
2	Section 2: 16” along FM646 from FM270 to FM1266	5,500	LF	$175	$960,000
3	Section 3: 16” along FM1266 from FM 646 to SH 96	3,000	LF	$175	$530,000
4	Section 4: 16” along FM646 from FM1266 to South Shore Blvd	6,400	LF	$175	$1,120,000
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$2,920,000**
	25% Contingency				$730,000
Subtotal:					**$3,650,000**
	15% Engineering & Professional Services				$550,000
Total Project Cost:					**$4,200,000**

Project Number:	**8**
Project Title:	**Northwest Side Well, GST, and BPS**

Project Description: This project also includes 1 water wells and 1 ground storage tank on 2-acres on the west side. The project generally consists of the construction of 1 water wells, a 3,200 SF pre-engineered control and mechanical building, one 1 MG ground storage tanks, approximately 2,100 LF of yard piping, SCADA system, standby generator, two 125 HP and two 60 HP in-line booster pumps, and miscellaneous items such as site work, concrete drive and parking area, electrical and control wiring. Tentative location is the City's 16-acre tract on the west side.

Project Justification: This facility is necessary in order to meet future development needs on the west side of the City and to provide a looped system to the City's existing west side infrastructure, thereby providing back-up capacity, pressure and fire protection to the west side of the City.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	1500 GPM Well Pump	1	EA	$1,000,000	$1,000,000
2	750 GPM Booster Pump	2	EA	$75,000	$150,000
3	1500 GPM Booster Pump	2	EA	$150,000	$300,000
4	1 MG Ground Storage Tank	1	EA	$1,000,000	$1,000,000
5	Process Mechanical Allowance	1	LS	$600,000	$600,000
6	Electrical/Miscellaneous Allowance	1	LS	$600,000	$600,000
7	Meter Base Station	1	EA	$100,000	$100,000
8					
9					
10					
11					
12					
Subtotal:					**$3,750,000**
	25% Contingency				$940,000
Subtotal:					**$4,690,000**
	15% Engineering & Professional Services				$700,000
Total Project Cost:					**$5,390,000**

Project Number:	**9**
Project Title:	**North Service Area 12" Waterline - Grissom**

Project Description: This project includes the design, construction, and land acquisition for 5,000 LF of 12-inch water line and fire protection features, from the North Service Area Booster Station to West Nasa Rd. This project will be constructed in coordination with Grissom Road. An optional pipeline extension to the neighborhood to the south of the project is shown on the CIP Figure but is not accounted for in the estimated project cost.

Project Justification: This project is required to provide water service and fire protection for current and future development along Grissom Rd. and areas from Grissom Rd. north to FM 528.

Item No.	Item	Quantity	Units	Unit Cost	Total Cost
1	12" Line from North Service Area BPS to West Nasa Rd	5,000	LF	$140	$700,000
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
Subtotal:					**$700,000**
	25% Contingency				$180,000
Subtotal:					**$880,000**
	15% Engineering & Professional Services				$130,000
Total Project Cost:					**$1,010,000**

APPENDIX D
Wastewater Project Costs

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 1 **Phase:** by 2023

Project Name: **New 48/54/60-inch Southwest Area Trunk Line to Southwest WRF**

Project Description:

This project includes the construction of new 48-inch, 54-inch, and 60-inch gravity trunk lines in the Southwest Service Area. This project is anticipated to approximately follow the future Grand Parkway alignment.

Project Drivers:

This line will convey wastewater flows from multiple planned developments east of the Southwest WRF to the treatment facility. This project is sized to convey the projected 20-year peak wastewater flows in the eastern portion of the Southwest WRF Service Area, as well as pumped peak flows from the Bay Colony 1 MUD 14-15 Lift Station (Project 3) and Victory Lakes Lift Station (Project 13).

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	48" Pipe 8- 16 feet deep	6,900	LF	$ 432	$ 2,980,800
2	48" Pipe 16 - 19 feet deep	3,300	LF	$ 480	$ 1,584,000
3	54" Pipe 16 - 19 feet deep	1,000	LF	$ 540	$ 540,000
4	54" Pipe 20 -24 feet deep	4,400	LF	$ 648	$ 2,851,200
5	54" Pipe 25 - 30 feet deep	2,800	LF	$ 702	$ 1,965,600
6	72" Diameter Manhole (8' -16')	9	EA	$ 20,000	$ 180,000
7	72 Diameter Manhole (16' - 24')	9	EA	$ 25,000	$ 225,000
8	72" Diameter Manhole (24' - 30')	8	EA	$ 30,000	$ 240,000
9	60" Pipe 25 - 30 feet deep	1,600	LF	$ 780	$ 1,248,000
10	72" Diameter Manhole (24' - 30')	3	EA	$ 30,000	$ 90,000
				SUBTOTAL:	**$ 11,904,600**
		CONTINGENCY		30%	$ 3,571,400
				SUBTOTAL:	**$ 15,476,000**
		ENG/SURVEY		15%	$ 2,321,400
				SUBTOTAL:	**$ 17,797,400**
				Estimated Project Total:	**$ 17,797,400**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 2 **Phase:** by 2023

Project Name: **Expansion of Southwest WRF by 2.0 MGD to a Permitted ADF of 6.0 MGD**

Project Description:

This project includes the construction of an additional 2.0 MGD of wastewater treatment capacity at the Southwest WRF. The facility is currently permitted for 4.0 MGD average daily flow and was anticipated to be increased to 6.0 MGD as a first-phase expansion.

Project Drivers:

The wastewater flow projections in the Southwest WRF Service Area show the need for additional treatment capacity at this facility within the next 5 years.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2 MGD WWTP Expansion	1	LS	$ 16,000,000	$ 16,000,000
				SUBTOTAL:	**$ 16,000,000**
		CONTINGENCY		30%	$ 4,800,000
				SUBTOTAL:	**$ 20,800,000**
		ENG/SURVEY		20%	$ 4,160,000
				SUBTOTAL:	**$ 24,960,000**
				Estimated Project Total:	**$ 24,960,000**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 3 **Phase:** by 2023

Project Name: **Re-Route 18-inch Bay Colony 1 Force Main to Southwest Service Area**

Project Description:

This project includes the construction of a segment of 18-inch force main to allow for pumped flow from the Bay Colony 1 18-inch Force Main to be conveyed to the Southwest WRF through the 48-inch Southwest Area Trunk Line (Project 1). This project also includes a transfer valve to allow lift station flow to be directed to the Dallas Salmon WRF via the 30-inch Calder Road gravity line or to the Southwest WRF via Project 1.

Project Drivers:

This project allows for wastewater flows to be maintained in the Project 1 trunk line in the near-term while development occurs in the Southwest WRF Service Area. This project is also part of the WRF service area planning to maximize treatment capacities at both treatment facilities.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Force Main < 8 feet deep	5,300	LF	$ 180	$ 954,000
2	Transfer Valve	1	EA	$ 100,000	$ 100,000
				SUBTOTAL:	**$ 1,054,000**
		CONTINGENCY		30%	$ 316,200
				SUBTOTAL:	**$ 1,370,200**
		ENG/SURVEY		15%	$ 205,600
				SUBTOTAL:	**$ 1,575,800**
				Estimated Project Total:	**$ 1,575,800**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 4 **Phase:** by 2023

Project Name: **Expansion of Harbour Park Lift Station No. 1 to 3.0 MGD Firm Capacity and Replacement 12/21-inch Gravity Lines**

Project Description:

This project includes the expansion of the firm pumping capacity to 3.0 MGD. This project also includes replacement 12-inch and 21-inch gravity lines along South Compass Rose Blvd. This project does not include expansion of the lift station wet well.

Project Drivers:

The wastewater flow monitoring and the City's SCADA records indicated surcharging during multiple rain events during the field-testing period. This indicates a lack of firm pumping capacity at the lift station. The flow monitoring data and calibrated hydraulic model indicated surcharging in the gravity lines upstream of the lift station during rain events. The additional firm pumping and conveyance capacity provided by the lift station expansion and replacement lines will help the City maintain regulatory compliance regarding the prevention of surcharging and sanitary sewer overflows in a gravity sewer system (TCEQ §217.53).

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Harbour Park 1 Pumps	1	EA	$ 315,000	$ 315,000
2	Harbour Park 1 Electrical	1	EA	$ 290,000	$ 290,000
3	Harbour Park 1 Generator	1	EA	$ 180,000	$ 180,000
4	Harbour Park 1 Piping and Valves	1	EA	$ 76,000	$ 76,000
5	Habour Park 1 Odor Control	1	EA	$ 120,000	$ 120,000
6	12" Pipe 8- 16 feet deep	1,500	LF	$ 108	$ 162,000
7	21" Pipe 8- 16 feet deep	500	LF	$ 189	$ 94,500
8	48" Diameter Manhole (14' Depth)	9	EA	$ 9,000	$ 81,000
9	60" Diameter Manhole (14' Depth)	4	EA	$ 13,000	$ 52,000
10	Pavement Repair	300	LF	$ 75	$ 22,500
				SUBTOTAL:	**$ 1,393,000**
		CONTINGENCY		30%	$ 417,900
				SUBTOTAL:	**$ 1,810,900**
		ENG/SURVEY		20%	$ 362,200
				SUBTOTAL:	**$ 2,173,100**
				Estimated Project Total:	**$ 2,173,100**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 5 **Phase:** by 2023

Project Name: **Replacement 15-inch Willow Branch and 18-inch FM 518 Gravity Lines**

Project Description:

This project includes the construction of replacement 15-inch and 18-inch gravity lines along Willow Branch and FM 518.

Project Drivers:

The calibrated hydraulic model indicated surcharging in these gravity lines, signifying a lack of capacity to convey peak wastewater flows. The replacement gravity lines are sized to convey existing and projected peak wastewater flows through 2037 and will help the City maintain regulatory compliance regarding the prevention of surcharging and sanitary sewer overflows in a gravity sewer system (TCEQ §217.53).

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe 8- 16 feet deep	2,300	LF	$ 162	$ 372,600
2	15" Pipe > 16 feet deep	1,600	LF	$ 150	$ 240,000
3	48" Diameter Manhole (16' Depth)	7	EA	$ 9,500	$ 66,500
4	60" Diameter Manhole (16' Depth)	11	EA	$ 14,000	$ 154,000
5	Pavement Repair	1,300	LF	$ 75	$ 97,500
				SUBTOTAL:	**$ 930,600**
		CONTINGENCY		30%	$ 279,200
				SUBTOTAL:	**$ 1,209,800**
		ENG/SURVEY		15%	$ 181,500
				SUBTOTAL:	**$ 1,391,300**
				Estimated Project Total:	**$ 1,391,300**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 6 **Phase:** by 2028

Project Name: **New Southwest WRF 48-inch Gravity Line Extension and Force Main Re-Route**

Project Description:

This project includes the construction of approximately 1,800 feet of 48-inch gravity line within the Southwest WRF facility, and the re-routing of two 14-inch force mains.

Project Drivers:

The force mains from the Westover Park and Countryside 2 Lift Stations currently discharge into a manhole adjacent to the Southwest WRF Influent Lift Station near the facility headworks. This creates a turbulent environment where H2S gasses are corroding the manhole. This CIP project includes the re-routing of those force mains into a new manhole and 48-inch gravity line on the northern portion of the Southwest WRF, thereby moving the corrosive gasses away from sensitive equipment. The 48-inch gravity line is sized for the 20-year projected peak flows from the Westover Park and Countryside 2 Lift Stations, including Project 14.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	48" Pipe 8- 16 feet deep	1,800	LF	$ 432	$ 777,600
2	72" Diameter Manhole (8' -16')	4	EA	$ 20,000	$ 80,000
3	14" Force Main < 8 feet deep	200	LF	$ 140	$ 28,000
				SUBTOTAL:	**$ 885,600**
		CONTINGENCY		30%	$ 265,700
				SUBTOTAL:	**$ 1,151,300**
		ENG/SURVEY		15%	$ 172,700
				SUBTOTAL:	**$ 1,324,000**
				Estimated Project Total:	**$ 1,324,000**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 7 **Phase:** by 2028

Project Name: **Expansion of Bay Colony 1 14-15 Lift Station to 5.7 MGD Firm Capacity**

Project Description:

This project includes the construction of a second (parallel) wet well and replacement pumps at the Bay Colony 1 14-15 Lift Station to allow for the lift station firm capacity to be increased from 4.6 MGD to 5.7 MGD.

Project Drivers:

The Bay Colony 1 14-15 Lift Station is currently under design for a capacity expansion to 4.6 MGD. It is understood that this current expansion will include an electrical system and a generator sized for the 5.7 MGD firm capacity. This project is sized to convey the 20-year projected peak wastewater flows in this area and includes costs for the design and construction of a second (parallel) wet well, new pumps, and new piping and valves. Costs for additional electrical and generator are not included in this cost estimate.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Bay Colony 1 14-15 LS Improvements	1	EA	$ 1,301,000	$ 1,301,000
				SUBTOTAL:	**$ 1,301,000**
		CONTINGENCY		30%	$ 390,300
				SUBTOTAL:	**$ 1,691,300**
		ENG/SURVEY		20%	$ 338,300
				SUBTOTAL:	**$ 2,029,600**
				Estimated Project Total:	**$ 2,029,600**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 8 **Phase:** by 2028

Project Name: **New 2.5 MGD Firm Capacity FM 646 Lift Station and New 12/15-inch Gravity Lines and New 10-inch Force Main**

Project Description:

This project includes the construction of a new 2.5 MGD firm capacity lift station along FM 646, and the construction of 12-inch and 15-inch gravity lines and a 10-inch force main.

Project Drivers:

The proposed lift station and gravity mains would serve development along FM 646 east and west of FM 1266. This project is sized to convey the 20-year projected peak wastewater flows in this area.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	FM 646 Wet Well	1	EA	$ 639,000	$ 639,000
2	FM 646 Pumps	1	EA	$ 350,000	$ 350,000
3	FM 646 Electrical	1	EA	$ 250,000	$ 250,000
4	FM 646 Generator	1	EA	$ 150,000	$ 150,000
5	FM 646 Piping and Valves	1	EA	$ 82,000	$ 82,000
6	FM 646 Odor Control	1	EA	$ 96,000	$ 96,000
7	10" Force Main < 8 feet deep	3,100	LF	$ 100	$ 310,000
8	15" Pipe 8- 16 feet deep	5,000	LF	$ 135	$ 675,000
9	48" Diameter Manhole (16' Depth)	11	EA	$ 9,500	$ 104,500
10	12" Pipe 8- 16 feet deep	5,200	LF	$ 108	$ 561,600
11	48" Diameter Manhole (16' Depth)	12	EA	$ 9,500	$ 114,000
				SUBTOTAL:	**$ 3,332,100**
		CONTINGENCY		30%	$ 999,700
				SUBTOTAL:	**$ 4,331,800**
		ENG/SURVEY		20%	$ 866,400
				SUBTOTAL:	**$ 5,198,200**
				Estimated Project Total:	**$ 5,198,200**

City of League City

Wastewater CIP - Opinion of Probable Construction Cost* **November 1, 2018**

Planning Level Costs in 2018 Dollars

CIP Project Number: 9 **Phase:** by 2028

Project Name: **Expansion of Smith Lane Lift Station to 7.6 MGD Firm Capacity**

Project Description:

This project includes the expansion of the Smith Lane Lift Station from 5.7 MGD to a firm pumping capacity of 7.6 MGD. This project assumes the construction of a second wet well for the required additional volume.

Project Drivers:

This project is sized to convey the projected 20-year peak wastewater flows from the Smith Lane service area and includes the reconstruction of the Meadow Bend STP Lift Station at a 4.7 MGD firm pumping capacity (Project 11).

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Smith Lane New Wet Well	1	EA	$ 465,000	$ 465,000
2	Smith Lane Pumps	1	EA	$ 1,064,000	$ 1,064,000
3	Smith Lane Electrical	1	EA	$ 708,000	$ 708,000
4	Smith Lane Generator	1	EA	$ 456,000	$ 456,000
5	Smith Lane Piping and Valves	1	EA	$ 192,000	$ 192,000
6	Smith Lane Odor Control	1	EA	$ 168,000	$ 168,000
				SUBTOTAL:	**$ 3,053,000**
		CONTINGENCY		30%	$ 915,900
				SUBTOTAL:	**$ 3,968,900**
		ENG/SURVEY		20%	$ 793,800
				SUBTOTAL:	**$ 4,762,700**
				Estimated Project Total:	**$ 4,762,700**

APPENDIX E
Capital Recovery Fee Calculations

City of League City - 2018 Water Capital Recovery Fee Study
Capital Improvement Plan for Capital Recovery Fees
Capital Recovery Fee Summary Table
Water Service Area

0	Existing Fund Balance	$ 4,078,917
1	Existing Number of Service Units	52,770
2	Total Number of Services Units for Planning Period	73,048
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	20,278
4	Total Cost of the Water Capital Recovery Fee CIP	$ 254,600,168
5	Recoverable Cost for Capital Recovery Fee Planning Period	$ 105,999,983
6	Percent Recoverable for Water Capital Recovery Fee Planning Period (Line 5 / Line 4)	41.63%
7	Financing Costs (From Financial Analysis)	$ 29,984,719
8	Interest Earnings (From Financial Analysis)	$ (6,959,400)
9	Recoverable Cost of Water Capital Recovery Fee and Financing Costs Less Balance	$ 124,946,385
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	$ 6,162
11	Credit for Utility Revenues (From Financial Analysis)	$ (21,498,510)
12	Recoverable Cost of Water Capital Recovery Fee and Financing (Line 9 + Line 11)	$ 103,447,875
13	Maximum Assessable Fee (Line 12 / Line 3)	$ 5,101

SUMMARY OF WATER CAPITAL RECOVERY FEE DETERMINATION

Water Service Area

Recoverable Capital Recovery Fee CIP Costs	$	105,999,983	Table 4-2
Financing Cost		29,984,719	See Detail Below
Existing Fund Balance		(4,078,917)	Water Appendices - page 1
Interest Earnings		(6,959,400)	Water Appendices - page 3
Pre Credit Recoverable Cost for Capital Recovery Fee	$	124,946,385	Sum of Above
Credit for Utility Revenues		(21,498,510)	Water Appendices - page 6
Maximum Recoverable Cost for Capital Recovery Fee	**$**	**103,447,875**	

Recoverable Capital Recovery Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through capital recovery fees. Reference is Table 4-2 Cost Allocation for Water Capital Recovery Fee Calculation

Financing Costs:

Represents the interest costs associated with debt financing the new capital recovery fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	$	63,385,590	Water Appendices - page 2
Existing Annual Debt Service		25,532,297	Water Appendices - page 2
Principal Component (New and Existing Debt)		(58,933,168)	Water Appendices - page 1
Financing Costs	$	29,984,719	

Existing Fund Balance:

Represents capital recovery fee revenue collected but not yet expended. Some projects that are included in the 2018 Capital Recovery Fee Update were also included in prior Capital Recovery Fee Updates.
To avoid charging twice for the same project, the capital recovery fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Water Appendices.

Interest Earnings

Represents the interest earned on cash flows and assumes a 1.69% annual interest rate.
The Capital Recovery Fee Statute states that interest earnings are funds of the Capital Recovery Fee account and are held to the same restrictions as capital recovery fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs.
Reference is the sum of Accumulated Interest on page 3 of Water Appendices.

Pre Credit Recoverable Cost for Capital Recovery Fee

Represents Recoverable Capital Recovery Fee CIP Costs plus Financing Costs less Existing Fund Balance and Interest Earnings.

Credit for Utility Revenues

In 2001, the local governing Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund capital recovery fee eligible projects for which the new service units were charged an capital recovery fee. The intent of this amendment is to avoid double-charging the new service units for capital recovery fee capital improvements. The credit recognizes utility revenues used to fund the debt service of debt financed capital recovery fee eligible projects. Reference is page 6 of Water Appendices.

Maximum Recoverable Cost for Capital Recovery Fee:

Represents Pre Credit Recoverable Cost for Capital Recovery Fee less Credit for Utility Revenues.
This is the maximum cost that can be recovered through capital recovery fees.

City of League City - 2018 Water Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees
Capital Recovery Fee Calculation Assumptions
Water Service Area

I. General Assumptions

Annual Interest Rate on Deposits(1)	1.69%
Years 1-5 Annual Service Unit Growth(2)	1,622
Years 6-10 Annual Service Unit Growth(2)	2,433
Existing Fund Balance(3)	4,078,917

Portion of Projects Funded by Existing Debt(4)	$ 19,848,574
Non-debt Funded Project Cost(5)	47,066,814
New Project Cost Funded Through New Debt(6)	39,084,594
Total Recoverable Project Cost(7)	$ 105,999,983

II. New Debt Issues Assumptions

Year	Principal(8)	Interest(9)	Term
1	$ 3,908,459	3.84%	20
2	3,908,459	4.09%	20
3	3,908,459	4.59%	20
4	3,908,459	5.09%	20
5	3,908,459	5.59%	20
6	3,908,459	5.59%	20
7	3,908,459	5.59%	20
8	3,908,459	5.59%	20
9	3,908,459	5.59%	20
10	3,908,459	5.59%	20
Total	$ 39,084,594		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures(10)
1	$ 10,000,103
2	6,420,334
3	11,638,334
4	13,477,471
5	8,313,628
6	5,696,924
7	5,696,924
8	5,696,924
9	5,696,924
10	5,696,924
11	3,908,459
12	2,605,640
13	1,302,820
Total	$ 86,151,409

(1) Weighted Average Interest Rate as of June 2018
(2) Derived from Table 2-1 Water and Wastewater Capital Recovery Fee Service Area EDUs
(3) Balance from 09/30/2018 provided by City Staff
(4) Per discussions with City Staff and City files
(5) This assumes 50% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 50% of new project costs funded through new debt issues, unless specified otherwise
(7) Table 4-2 Cost Allocation for Water Capital Recovery Fee Calculation
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest on future debt from City's Financial Advisor October 2018
(10) Assumes new debt proceeds expended over a 3-year timeframe.
Non-debt funded capital expenditures allocated per discussions with City Staff

City of League City - 2018 Water Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees
Debt Service and Expense Summary
Water Service Area

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 283,532	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 283,532
2	283,532	289,888	-	-	-	-	-	-	-	-	573,419
3	283,532	289,888	302,815	-	-	-	-	-	-	-	876,234
4	283,532	289,888	302,815	316,023	-	-	-	-	-	-	1,192,257
5	283,532	289,888	302,815	316,023	329,504	-	-	-	-	-	1,521,761
6	283,532	289,888	302,815	316,023	329,504	329,504	-	-	-	-	1,851,265
7	283,532	289,888	302,815	316,023	329,504	329,504	329,504	-	-	-	2,180,768
8	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	-	-	2,510,272
9	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	-	2,839,776
10	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
11	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
12	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
13	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
14	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
15	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
16	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
17	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
18	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
19	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
20	283,532	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	3,169,279
21	-	289,888	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	2,885,748
22	-	-	302,815	316,023	329,504	329,504	329,504	329,504	329,504	329,504	2,595,860
23	-	-	-	316,023	329,504	329,504	329,504	329,504	329,504	329,504	2,293,045
24	-	-	-	-	329,504	329,504	329,504	329,504	329,504	329,504	1,977,022
25	-	-	-	-	-	329,504	329,504	329,504	329,504	329,504	1,647,519
26	-	-	-	-	-	-	329,504	329,504	329,504	329,504	1,318,015
27	-	-	-	-	-	-	-	329,504	329,504	329,504	988,511
28	-	-	-	-	-	-	-	-	329,504	329,504	659,007
29	-	-	-	-	-	-	-	-	-	329,504	329,504
	$ 5,670,630	$ 5,797,758	$ 6,056,301	$ 6,320,453	$ 6,590,075	$ 6,590,075	$ 6,590,075	$ 6,590,075	$ 6,590,075	$ 6,590,075	$ 63,385,590

II. Summary of Annual Expenses

Year	New Annual Debt Service(1)	Annual Capital Expenditures(2)	Annual Bond Proceeds(2)	Existing Annual Debt Service(3)	Annual Credit(4)	Total Expense
1	$ 283,532	$ 10,000,103	$ (3,908,459)	$ 1,386,199	$ (49,799)	$ 7,711,574
2	573,419	6,420,334	(3,908,459)	1,376,433	(112,940)	4,348,788
3	876,234	11,638,334	(3,908,459)	1,309,400	(184,550)	9,730,959
4	1,192,257	13,477,471	(3,908,459)	1,503,698	(295,212)	11,969,754
5	1,521,761	8,313,628	(3,908,459)	1,585,277	(413,950)	7,098,256
6	1,851,265	5,696,924	(3,908,459)	1,607,190	(575,979)	4,670,940
7	2,180,768	5,696,924	(3,908,459)	1,635,197	(753,230)	4,851,200
8	2,510,272	5,696,924	(3,908,459)	1,717,209	(955,554)	5,060,392
9	2,839,776	5,696,924	(3,908,459)	1,612,410	(1,125,088)	5,115,563
10	3,169,279	5,696,924	(3,908,459)	1,697,942	(1,351,132)	5,304,553
11	3,169,279	3,908,459	-	1,751,379	(1,365,966)	7,463,152
12	3,169,279	2,605,640	-	2,182,575	(1,485,666)	6,471,828
13	3,169,279	1,302,820	-	2,211,150	(1,493,598)	5,189,651
14	3,169,279	-	-	2,069,363	(1,454,238)	3,784,404
15	3,169,279	-	-	575,646	(1,039,585)	2,705,341
16	3,169,279	-	-	389,044	(987,785)	2,570,539
17	3,169,279	-	-	382,879	(986,073)	2,566,085
18	3,169,279	-	-	258,021	(951,413)	2,475,888
19	3,169,279	-	-	177,744	(929,128)	2,417,895
20	3,169,279	-	-	103,544	(908,530)	2,364,294
21	2,885,748	-	-	-	(801,079)	2,084,669
22	2,595,860	-	-	-	(720,606)	1,875,254
23	2,293,045	-	-	-	(636,545)	1,656,500
24	1,977,022	-	-	-	(548,818)	1,428,204
25	1,647,519	-	-	-	(457,348)	1,190,170
26	1,318,015	-	-	-	(365,879)	952,136
27	988,511	-	-	-	(274,409)	714,102
28	659,007	-	-	-	(182,939)	476,068
29	329,504	-	-	-	(91,470)	238,034
	$ 63,385,590	$ 86,151,409	$ (39,084,594)	$ 25,532,297	$ (21,498,510)	$114,486,192

(1) Water Appendices - page 2 Section I
(2) Water Appendices - page 1
(3) Eligible outstanding debt funded projects as a percent of outstanding principal times outstanding annual debt service
(4) Water Appendices - page 6

City of League City - 2018 Water Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Revenue Test

Water Service Area

Year	Capital Recovery Fee	Service Units	Capital Recovery Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ 4,078,917
1	$ 5,101	1,622	$ 8,275,830	$ 7,711,574	$ 564,256	$ 73,702	4,716,875
2	5,101	1,622	8,275,830	4,348,788	3,927,042	112,899	8,756,816
3	5,101	1,622	8,275,830	9,730,959	(1,455,129)	135,694	7,437,381
4	5,101	1,622	8,275,830	11,969,754	(3,693,924)	94,478	3,837,935
5	5,101	1,622	8,275,830	7,098,256	1,177,574	74,812	5,090,321
6	5,101	2,433	12,413,745	4,670,940	7,742,805	151,453	12,984,580
7	5,101	2,433	12,413,745	4,851,200	7,562,545	283,343	20,830,468
8	5,101	2,433	12,413,745	5,060,392	7,353,353	414,171	28,597,991
9	5,101	2,433	12,413,745	5,115,563	7,298,182	544,976	36,441,149
10	5,101	2,433	12,413,745	5,304,553	7,109,192	675,928	44,226,269
11	-	-	-	7,463,152	(7,463,152)	684,360	37,447,477
12	-	-	-	6,471,828	(6,471,828)	578,175	31,553,825
13	-	-	-	5,189,651	(5,189,651)	489,407	26,853,581
14	-	-	-	3,784,404	(3,784,404)	421,847	23,491,024
15	-	-	-	2,705,341	(2,705,341)	374,138	21,159,822
16	-	-	-	2,570,539	(2,570,539)	335,880	18,925,163
17	-	-	-	2,566,085	(2,566,085)	298,152	16,657,229
18	-	-	-	2,475,888	(2,475,888)	260,586	14,441,928
19	-	-	-	2,417,895	(2,417,895)	223,637	12,247,670
20	-	-	-	2,364,294	(2,364,294)	187,007	10,070,384
21	-	-	-	2,084,669	(2,084,669)	152,574	8,138,288
22	-	-	-	1,875,254	(1,875,254)	121,691	6,384,726
23	-	-	-	1,656,500	(1,656,500)	93,904	4,822,131
24	-	-	-	1,428,204	(1,428,204)	69,426	3,463,352
25	-	-	-	1,190,170	(1,190,170)	48,474	2,321,655
26	-	-	-	952,136	(952,136)	31,190	1,400,710
27	-	-	-	714,102	(714,102)	17,638	704,245
28	-	-	-	476,068	(476,068)	7,879	236,056
29	-	-	-	238,034	(238,034)	1,978	-
			$ 103,447,875	$ 114,486,192		$ 6,959,400	

City of League City - 2018 Water Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Capital Recovery Fee Calculation

Water Service Area

Year	Number of Years to End of Period	Future Value Escalation: Interest Rate Factor	Future Value Escalation: Recovery Fee Factor	Annual Service Units: Actual	Annual Service Units: Escalated	Annual Expense: Actual	Annual Expense: Escalated
1	29	1.6123	1.0000	1,622	2,616	$ 7,711,574	$ 12,433,354
2	28	1.5855	1.0000	1,622	2,572	4,348,788	6,895,016
3	27	1.5592	1.0000	1,622	2,529	9,730,959	15,172,056
4	26	1.5332	1.0000	1,622	2,487	11,969,754	18,352,524
5	25	1.5078	1.0000	1,622	2,446	7,098,256	10,702,468
6	24	1.4827	1.0000	2,433	3,608	4,670,940	6,925,614
7	23	1.4581	1.0000	2,433	3,548	4,851,200	7,073,347
8	22	1.4338	1.0000	2,433	3,489	5,060,392	7,255,740
9	21	1.4100	1.0000	2,433	3,431	5,115,563	7,212,947
10	20	1.3866	1.0000	2,433	3,374	5,304,553	7,355,122
11	19	1.3635	1.0000	-	-	7,463,152	10,176,187
12	18	1.3409	1.0000	-	-	6,471,828	8,677,838
13	17	1.3186	1.0000	-	-	5,189,651	6,842,968
14	16	1.2967	1.0000	-	-	3,784,404	4,907,107
15	15	1.2751	1.0000	-	-	2,705,341	3,449,624
16	14	1.2539	1.0000	-	-	2,570,539	3,223,263
17	13	1.2331	1.0000	-	-	2,566,085	3,164,203
18	12	1.2126	1.0000	-	-	2,475,888	3,002,244
19	11	1.1924	1.0000	-	-	2,417,895	2,883,197
20	10	1.1726	1.0000	-	-	2,364,294	2,772,426
21	9	1.1531	1.0000	-	-	2,084,669	2,403,906
22	8	1.1340	1.0000	-	-	1,875,254	2,126,484
23	7	1.1151	1.0000	-	-	1,656,500	1,847,205
24	6	1.0966	1.0000	-	-	1,428,204	1,566,159
25	5	1.0784	1.0000	-	-	1,190,170	1,283,443
26	4	1.0604	1.0000	-	-	952,136	1,009,690
27	3	1.0428	1.0000	-	-	714,102	744,683
28	2	1.0255	1.0000	-	-	476,068	488,204
29	1	1.0085	1.0000	-	-	238,034	240,045
					30,100		$ 160,187,068

Annual Interest Rate:	1.69%
Present Value of Initial Capital Recovery Fee Fund Balance	$ 4,078,917
Total Escalated Expense for Entire Period	$ 160,187,068
Less Future Value of Initial Capital Recovery Fee Fund Balance	6,631,535
Sub-Total	$ 153,555,534
Total Escalated Service Units	30,100
Capital Recovery Fee for Water Service Area	**$ 5,101**

City of League City - 2018 Water Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Capital Recovery Fee Project Funding

Water Service Area

Capital Recovery Fee Project Name(1)	Cost In Service Area (1)	Capital Recovery Fee Recoverable Cost(1)	Debt Funded(2) Existing	Debt Funded(2) Proposed	Non-Debt Funded(2)	Fee Recoverable Cost
New 36" Line - Highway 3 to South Shore (WT1109)	$ 13,529,816	$ 4,735,436	$ 2,737,630	$ 1,631,813	$ 365,992	$ 4,735,436
60" WL Replace 42" on SH3 (WT1502)	53,615,000	13,403,750	-	2,613,731	10,790,019	13,403,750
Pedregal (West Side Well, Generator & BPS) (WT1707)	3,676,674	3,676,674	1,490,000	100,000	2,086,674	3,676,674
Highway 3 Booster Plant Improvements - Phase 1 (WT1108)	19,549,372	6,842,280	6,842,280	-	-	6,842,280
South Shore Booster Plant Improvements - Phase 1 (WT1102)	12,235,130	4,282,296	2,037,746	2,244,550	-	4,282,296
Calder Road Booster Plant Improvements - Phase 1 (WT1205)	14,051,049	4,917,867	3,957,583	-	960,285	4,917,867
Northside (Beamer Rd) Booster Plant Improvements - Phase 1 (WT1003)	8,385,303	2,934,856	2,783,335	-	151,521	2,934,856
Calder Rd BPS Pump Upgrade	3,160,000	1,422,000	-	711,000	711,000	1,422,000
New Waterlines to West Side - Segments 0 & 1	3,770,000	1,319,500	-	659,750	659,750	1,319,500
New West Side GST, Well, and BPS	5,530,000	5,530,000	-	2,765,000	2,765,000	5,530,000
16" Water line to New West Side GST	330,000	115,500	-	57,750	57,750	115,500
20 MGD SEWPP Expansion	100,630,000	50,315,000	-	25,157,500	25,157,500	50,315,000
New Waterlines to West Side - Segments 2, 3 & 5	5,320,000	1,862,000	-	931,000	931,000	1,862,000
Southeast Service Area Trunks	4,200,000	1,680,000	-	840,000	840,000	1,680,000
Northwest Side Well, GST, BPS	5,390,000	1,886,500	-	943,250	943,250	1,886,500
North Service Area 12" WL - Grissom	1,010,000	858,500	-	429,250	429,250	858,500
Capital Recovery Fee Study	217,824	217,824	-	-	217,824	217,824
Total	$ 254,600,168	$ 105,999,983	$ 19,848,574	$ 39,084,594	$ 47,066,814	$ 105,999,983

(1) Table 4-2 Cost Allocation for Water Capital Recovery Fee Calculation

(2) Per discussions with City staff and City files

City of League City - 2018 Water Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Credit Determination

Water Service Area

Year	Eligible Debt Service[2]	Annual Service Units	Eligible Debt Service per Service Unit	Annual Growth in Service Units (Cumulative)	Credit for Annual Water Rate Revenues
1	$ 1,669,730	54,392	$ 30.70	1,622	$ 49,799
2	1,949,852	56,014	34.81	3,244	112,940
3	2,185,634	57,637	37.92	4,867	184,550
4	2,695,955	59,259	45.49	6,489	295,212
5	3,107,037	60,881	51.03	8,111	413,950
6	3,458,454	63,315	54.62	10,545	575,979
7	3,815,965	65,748	58.04	12,978	753,230
8	4,227,482	68,181	62.00	15,411	955,554
9	4,452,186	70,615	63.05	17,845	1,125,088
10	4,867,221	73,048	66.63	20,278	1,351,132
11	4,920,659	73,048	67.36	20,278	1,365,966
12	5,351,854	73,048	73.26	20,278	1,485,666
13	5,380,429	73,048	73.66	20,278	1,493,598
14	5,238,642	73,048	71.72	20,278	1,454,238
15	3,744,925	73,048	51.27	20,278	1,039,585
16	3,558,323	73,048	48.71	20,278	987,785
17	3,552,158	73,048	48.63	20,278	986,073
18	3,427,300	73,048	46.92	20,278	951,413
19	3,347,023	73,048	45.82	20,278	929,128
20	3,272,824	73,048	44.80	20,278	908,530
21	2,885,748	73,048	39.50	20,278	801,079
22	2,595,860	73,048	35.54	20,278	720,606
23	2,293,045	73,048	31.39	20,278	636,545
24	1,977,022	73,048	27.06	20,278	548,818
25	1,647,519	73,048	22.55	20,278	457,348
26	1,318,015	73,048	18.04	20,278	365,879
27	988,511	73,048	13.53	20,278	274,409
28	659,007	73,048	9.02	20,278	182,939
29	329,504	73,048	4.51	20,278	91,470
Total	$ 88,917,887				$ 21,498,510

2018 Service Units[1]	52,770	
Ten Year Growth in Service Units[1]	20,278	
First 5 Year Growth Percentage	40%	years
Second 5 Year Growth Percentage	60%	
Credit Amount	**$ 21,498,510**	

(1) Derived from Table 2-1 Water and Wastewater Capital Recovery Fee Service Area EDUs

(2) Water Appendices - page 2 Section II

City of League City - 2018 Wastewater Capital Recovery Fee Study
Capital Improvement Plan for Capital Recovery Fees
Capital Recovery Fee Summary Table
Wastewater Service Area

0	Existing Fund Balance	$ 9,727,798
1	Existing Number of Service Units	52,259
2	Total Number of Services Units for Planning Period	72,537
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	20,278
4	Total Cost of the Wastewater Capital Recovery Fee CIP	$ 142,109,746
5	Recoverable Cost for Capital Recovery Fee Planning Period	$ 68,477,201
6	Percent Recoverable for Wastewater Capital Recovery Fee Planning Period (Line 5 / Line 4)	48.19%
7	Financing Costs (From Financial Analysis)	$ 6,241,263
8	Interest Earnings (From Financial Analysis)	$ (2,925,311)
9	Recoverable Cost of Wastewater Capital Recovery Fee and Financing Costs Less Balance	$ 62,065,355
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	$ 3,061
11	Credit for Utility Revenues (From Financial Analysis)	$ (10,005,321)
12	Recoverable Cost of Wastewater Capital Recovery Fee and Financing (Line 9 + Line 11)	$ 52,060,034
13	Maximum Assessable Fee (Line 12 / Line 3)	$ 2,567

SUMMARY OF WASTEWATER CAPITAL RECOVERY FEE DETERMINATION

Wastewater Service Area

Recoverable Capital Recovery Fee CIP Costs	$	68,477,201	Table 4-3
Financing Cost		6,241,263	See Detail Below
Existing Fund Balance		(9,727,798)	Wastewater Appendices - page 1
Interest Earnings		(2,925,311)	Wastewater Appendices - page 3
Pre Credit Recoverable Cost for Capital Recovery Fee	$	62,065,355	Sum of Above
Credit for Utility Revenues		(10,005,321)	Wastewater Appendices - page 6
Maximum Recoverable Cost for Capital Recovery Fee	**$**	**52,060,034**	

Recoverable Capital Recovery Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through capital recovery fees. Reference is Table 4-3 Cost Allocation for Wastewater Capital Recovery Fee Calculation

Financing Costs:

Represents the interest costs associated with debt financing the new capital recovery fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	$	19,671,896	Wastewater Appendices - page 2
Existing Annual Debt Service		27,737,912	Wastewater Appendices - page 2
Principal Component (New and Existing Debt)		(41,168,546)	Wastewater Appendices - page 1
Financing Costs	$	6,241,263	

Existing Fund Balance:

Represents capital recovery fee revenue collected but not yet expended. Some projects that are included in the 2018 Capital Recovery Fee Update were also included in prior Capital Recovery Fee Updates. To avoid charging twice for the same project, the capital recovery fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Wastewater Appendices.

Interest Earnings

Represents the interest earned on cash flows and assumes a 1.69% annual interest rate. The Capital Recovery Fee Statute states that interest earnings are funds of the Capital Recovery Fee account and are held to the same restrictions as capital recovery fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 3 of Wastewater Appendices.

Pre Credit Recoverable Cost for Capital Recovery Fee

Represents Recoverable Capital Recovery Fee CIP Costs plus Financing Costs less Existing Fund Balance and Interest Earnings.

Credit for Utility Revenues

In 2001, the local governing Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund capital recovery fee eligible projects for which the new service units were charged an capital recovery fee. The intent of this amendment is to avoid double-charging the new service units for capital recovery fee capital improvements. The credit recognizes utility revenues used to fund the debt service of debt financed capital recovery fee eligible projects. Reference is page 6 of Wastewater Appendices.

Maximum Recoverable Cost for Capital Recovery Fee:

Represents Pre Credit Recoverable Cost for Capital Recovery Fee less Credit for Utility Revenues. This is the maximum cost that can be recovered through capital recovery fees.

City of League City - 2018 Wastewater Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees
Capital Recovery Fee Calculation Assumptions
Wastewater Service Area

I. General Assumptions

Annual Interest Rate on Deposits[1]	1.69%
Years 1-5 Annual Service Unit Growth[2]	1,622
Years 6-10 Annual Service Unit Growth[2]	2,433
Existing Fund Balance[3]	9,727,798

Portion of Projects Funded by Existing Debt[4]	$ 28,945,813
Non-debt Funded New Project Cost[5]	27,308,655
New Project Cost Funded Through New Debt[6]	12,222,733
Total Recoverable Project Cost[7]	$ 68,477,201

II. New Debt Issues Assumptions

Year	Principal[8]	Interest[9]	Term
1	$ 1,455,938	3.84%	20
2	1,455,938	4.09%	20
3	1,455,938	4.59%	20
4	1,455,938	5.09%	20
5	1,455,938	5.59%	20
6	988,609	5.59%	20
7	988,609	5.59%	20
8	988,609	5.59%	20
9	988,609	5.59%	20
10	988,609	5.59%	20
Total	$ 12,222,733		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[10]
1	$ 687,234
2	1,761,502
3	1,336,865
4	4,539,177
5	21,520,490
6	1,822,177
7	1,666,401
8	1,510,625
9	1,354,849
10	1,354,849
11	988,609
12	659,073
13	329,536
Total	$ 39,531,388

(1) Weighted Average Interest Rate as of June 2018
(2) Derived from Table 2-1 Water and Wastewater Capital Recovery Fee Service Area EDUs
(3) Balance from 09/30/2018 provided by City Staff
(4) Per discussions with City Staff and City files
(5) Per discussions with City Staff and City files
(6) Per discussions with City Staff and City files
(7) Table 4-3 Cost Allocation for Wastewater Capital Recovery Fee Calculation
(8) Assumes new debt issued in equal annual amounts based on projected time frame
(9) Estimated interest on future debt from City's Financial Advisor October 2018
(10) Assumes new debt proceeds expended over a 3-year timeframe.
Non-debt funded capital expenditures allocated per discussions with City Staff

City of League City - 2018 Wastewater Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees
Debt Service and Expense Summary
Wastewater Service Area

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 105,618	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 105,618
2	105,618	107,986	-	-	-	-	-	-	-	-	213,604
3	105,618	107,986	112,801	-	-	-	-	-	-	-	326,405
4	105,618	107,986	112,801	117,721	-	-	-	-	-	-	444,127
5	105,618	107,986	112,801	117,721	122,743	-	-	-	-	-	566,870
6	105,618	107,986	112,801	117,721	122,743	83,345	-	-	-	-	650,215
7	105,618	107,986	112,801	117,721	122,743	83,345	83,345	-	-	-	733,560
8	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	-	-	816,905
9	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	-	900,250
10	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
11	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
12	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
13	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
14	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
15	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
16	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
17	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
18	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
19	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
20	105,618	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	983,595
21	-	107,986	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	877,977
22	-	-	112,801	117,721	122,743	83,345	83,345	83,345	83,345	83,345	769,991
23	-	-	-	117,721	122,743	83,345	83,345	83,345	83,345	83,345	657,189
24	-	-	-	-	122,743	83,345	83,345	83,345	83,345	83,345	539,468
25	-	-	-	-	-	83,345	83,345	83,345	83,345	83,345	416,725
26	-	-	-	-	-	-	83,345	83,345	83,345	83,345	333,380
27	-	-	-	-	-	-	-	83,345	83,345	83,345	250,035
28	-	-	-	-	-	-	-	-	83,345	83,345	166,690
29	-	-	-	-	-	-	-	-	-	83,345	83,345
	$ 2,112,363	$ 2,159,719	$ 2,256,029	$ 2,354,428	$ 2,454,864	$ 1,666,899	$ 1,666,899	$ 1,666,899	$ 1,666,899	$ 1,666,899	$ 19,671,896

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 105,618	$ 687,234	$ (1,455,938)	$ 2,464,120	$ (77,369)	$ 1,723,666
2	213,604	1,761,502	(1,455,938)	2,566,290	(162,500)	2,922,959
3	326,405	1,336,865	(1,455,938)	1,977,313	(196,261)	1,988,384
4	444,127	4,539,177	(1,455,938)	2,210,077	(293,168)	5,444,275
5	566,870	21,520,490	(1,455,938)	2,069,931	(354,274)	22,347,080
6	650,215	1,822,177	(988,609)	2,021,537	(448,580)	3,056,740
7	733,560	1,666,401	(988,609)	1,874,573	(518,849)	2,767,075
8	816,905	1,510,625	(988,609)	1,729,379	(579,893)	2,488,407
9	900,250	1,354,849	(988,609)	2,006,461	(739,893)	2,533,057
10	983,595	1,354,849	(988,609)	1,860,048	(794,951)	2,414,931
11	983,595	988,609	-	1,889,664	(803,231)	3,058,637
12	983,595	659,073	-	1,162,437	(599,931)	2,205,173
13	983,595	329,536	-	1,141,809	(594,165)	1,860,775
14	983,595	-	-	722,613	(476,977)	1,229,231
15	983,595	-	-	688,810	(467,527)	1,204,878
16	983,595	-	-	655,596	(458,242)	1,180,949
17	983,595	-	-	642,860	(454,682)	1,171,773
18	983,595	-	-	54,396	(290,174)	747,816
19	983,595	-	-	-	(274,968)	708,627
20	983,595	-	-	-	(274,968)	708,627
21	877,977	-	-	-	(245,442)	632,535
22	769,991	-	-	-	(215,254)	554,737
23	657,189	-	-	-	(183,720)	473,469
24	539,468	-	-	-	(150,810)	388,658
25	416,725	-	-	-	(116,497)	300,228
26	333,380	-	-	-	(93,198)	240,182
27	250,035	-	-	-	(69,898)	180,137
28	166,690	-	-	-	(46,599)	120,091
29	83,345	-	-	-	(23,299)	60,046
	$ 19,671,896	$ 39,531,388	$ (12,222,733)	$ 27,737,912	$ (10,005,321)	$ 64,713,143

(1) Wastewater Appendices - page 2 Section I
(2) Wastewater Appendices - page 1
(3) Eligible outstanding debt funded projects as a percent of outstanding principal times outstanding annual debt service
(4) Wastewater Appendices - page 6

City of League City - 2018 Wastewater Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Revenue Test

Wastewater Service Area

Year	Capital Recovery Fee	Service Units	Capital Recovery Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ 9,727,798
1	$ 2,567	1,622	$ 4,164,803	$ 1,723,666	$ 2,441,137	$ 185,027	12,353,962
2	2,567	1,622	4,164,803	2,922,959	1,241,844	219,276	13,815,081
3	2,567	1,622	4,164,803	1,988,384	2,176,418	251,866	16,243,365
4	2,567	1,622	4,164,803	5,444,275	(1,279,473)	263,701	15,227,594
5	2,567	1,622	4,164,803	22,347,080	(18,182,277)	103,706	(2,850,977)
6	2,567	2,433	6,247,204	3,056,740	3,190,464	(21,222)	318,266
7	2,567	2,433	6,247,204	2,767,075	3,480,129	34,786	3,833,180
8	2,567	2,433	6,247,204	2,488,407	3,758,797	96,543	7,688,520
9	2,567	2,433	6,247,204	2,533,057	3,714,147	161,321	11,563,987
10	2,567	2,433	6,247,204	2,414,931	3,832,273	227,814	15,624,074
11	-	-	-	3,058,637	(3,058,637)	238,201	12,803,638
12	-	-	-	2,205,173	(2,205,173)	197,748	10,796,213
13	-	-	-	1,860,775	(1,860,775)	166,732	9,102,170
14	-	-	-	1,229,231	(1,229,231)	143,440	8,016,379
15	-	-	-	1,204,878	(1,204,878)	125,296	6,936,797
16	-	-	-	1,180,949	(1,180,949)	107,253	5,863,101
17	-	-	-	1,171,773	(1,171,773)	89,185	4,780,513
18	-	-	-	747,816	(747,816)	74,472	4,107,169
19	-	-	-	708,627	(708,627)	63,423	3,461,965
20	-	-	-	708,627	(708,627)	52,519	2,805,857
21	-	-	-	632,535	(632,535)	42,074	2,215,396
22	-	-	-	554,737	(554,737)	32,753	1,693,412
23	-	-	-	473,469	(473,469)	24,618	1,244,560
24	-	-	-	388,658	(388,658)	17,749	873,652
25	-	-	-	300,228	(300,228)	12,228	585,652
26	-	-	-	240,182	(240,182)	7,868	353,338
27	-	-	-	180,137	(180,137)	4,449	177,650
28	-	-	-	120,091	(120,091)	1,988	59,547
29	-	-	-	60,046	(60,046)	499	-
			$ 52,060,034	$ 64,713,143		$ 2,925,311	

City of League City - 2018 Wastewater Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Capital Recovery Fee Calculation

Wastewater Service Area

Year	Number of Years to End of Period	Future Value Escalation: Interest Rate Factor	Future Value Escalation: Recovery Fee Factor	Annual Service Units: Actual	Annual Service Units: Escalated	Annual Expense: Actual	Annual Expense: Escalated
1	29	1.6123	1.0000	1,622	2,616	$ 1,723,666	$ 2,779,063
2	28	1.5855	1.0000	1,622	2,572	2,922,959	4,634,360
3	27	1.5592	1.0000	1,622	2,529	1,988,384	3,100,196
4	26	1.5332	1.0000	1,622	2,487	5,444,275	8,347,389
5	25	1.5078	1.0000	1,622	2,446	22,347,080	33,694,040
6	24	1.4827	1.0000	2,433	3,608	3,056,740	4,532,236
7	23	1.4581	1.0000	2,433	3,548	2,767,075	4,034,566
8	22	1.4338	1.0000	2,433	3,489	2,488,407	3,567,952
9	21	1.4100	1.0000	2,433	3,431	2,533,057	3,571,613
10	20	1.3866	1.0000	2,433	3,374	2,414,931	3,348,466
11	19	1.3635	1.0000	-	-	3,058,637	4,170,525
12	18	1.3409	1.0000	-	-	2,205,173	2,956,836
13	17	1.3186	1.0000	-	-	1,860,775	2,453,580
14	16	1.2967	1.0000	-	-	1,229,231	1,593,902
15	15	1.2751	1.0000	-	-	1,204,878	1,536,359
16	14	1.2539	1.0000	-	-	1,180,949	1,480,821
17	13	1.2331	1.0000	-	-	1,171,773	1,444,897
18	12	1.2126	1.0000	-	-	747,816	906,797
19	11	1.1924	1.0000	-	-	708,627	844,996
20	10	1.1726	1.0000	-	-	708,627	830,953
21	9	1.1531	1.0000	-	-	632,535	729,398
22	8	1.1340	1.0000	-	-	554,737	629,056
23	7	1.1151	1.0000	-	-	473,469	527,978
24	6	1.0966	1.0000	-	-	388,658	426,199
25	5	1.0784	1.0000	-	-	300,228	323,756
26	4	1.0604	1.0000	-	-	240,182	254,701
27	3	1.0428	1.0000	-	-	180,137	187,851
28	2	1.0255	1.0000	-	-	120,091	123,153
29	1	1.0085	1.0000	-	-	60,046	60,553
					30,100		$ 93,092,189

Annual Interest Rate:	1.69%
Present Value of Initial Capital Recovery Fee Fund Balance	$ 9,727,798
Total Escalated Expense for Entire Period	$ 93,092,189
Less Future Value of Initial Capital Recovery Fee Fund Balance	15,815,529
Sub-Total	$ 77,276,660
Total Escalated Service Units	30,100
Capital Recovery Fee for Wastewater Service Area	**$ 2,567**

City of League City - 2018 Wastewater Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Capital Recovery Fee Project Funding

Wastewater Service Area

Capital Recovery Fee Project Name(1)	Cost In Service Area [1]	Capital Recovery Fee Recoverable Cost[1]	Debt Funded[2] Existing	Debt Funded[2] Proposed	Non-Debt Funded[2]	Anticipated Implementation Year	Fee Recoverable Cost
12" Force Main from Bay Colony 14-15 Lift Station (WW1206)	$ 2,452,925	$ 367,939	$ 367,939	$ -	$ -		$ 367,939
Westover Park Lift Station and Force Main Improvements (WW1801A)	1,787,610	485,006	441,752	-	43,253		485,006
New 24" and 30" Gravity Line along Calder (WW1301)	4,143,237	621,486	289,456	-	332,030		621,486
North Service Area Lift Station, Force Main and Gravity (WW1001)	2,847,026	1,281,162	941,792	-	339,369		1,281,162
Southwest Water Reclamation Facility 4.0 MGD (WW0103)	31,713,862	22,199,703	10,595,560	-	11,604,144		22,199,703
Butler Rd Lift Station and Force Main Improvement (WW1004)	2,032,695	508,174	484,424	-	23,750		508,174
West Main Lift Station and Force Main Improvement (WW1005)	1,705,719	170,572	170,572	-	-		170,572
Dallas Salmon WWTP Lift Station Expansion to 12.0 MGD (WW0302)	5,412,700	3,518,255	-	-	3,518,255		3,518,255
Dallas Salmon WWTP Expansion to 12.0 MGD (WW0405)	25,620,464	16,653,302	15,120,165	-	1,533,136		16,653,302
New Hobbs Rd Lift Station and Force Main (WW1207)	604,498	30,225	287	-	29,938		30,225
Divert Countryside WWTP, Countryside LF and Westover Park LS to SWWRF (WW1002)	2,255,916	676,775	533,866	-	142,909		676,775
New 48/54/60-inch Southwest Area Trunk Line to Southwest WRF	17,797,400	5,339,220	-	2,669,610	2,669,610	2018-2023	5,339,220
Expansion of Southwest WRF by 2.0 MGD to a Permitted ADF of 6.0 MGD	24,960,000	8,736,000	-	4,368,000	4,368,000	2018-2023	8,736,000
Re-Route 18-inch Bay Colony 1 Force Main to Southwest Service Area	1,575,800	236,370	-	118,185	118,185	2018-2023	236,370
Expansion of Harbour Park Lift Station No. 1 to 3.0 MGD Firm Capacity and Replacement 12/21-inch Gravity Lines	2,173,100	108,655	-	54,328	54,328	2018-2023	108,655
Replacement 15-inch Willow Branch and 18-inch FM 518 Gravity Lines	1,391,300	139,130	-	69,565	69,565	2018-2023	139,130
New Southwest WRF 48-inch Gravity Line Extension and Force Main Re-Route	1,324,000	132,400	-	66,200	66,200	2024-2028	132,400
Expansion of Bay Colony 1 14-15 Lift Station to 5.7 MGD Firm Capacity	2,029,600	304,440	-	152,220	152,220	2024-2028	304,440
New 2.5 MGD Firm Capacity FM 646 Lift Station and New 12/15-inch Gravity Lines and New 10-inch Force Main	5,198,200	2,599,100	-	1,299,550	1,299,550	2024-2028	2,599,100
Expansion of Smith Lane Lift Station to 7.6 MGD Firm Capacity	4,762,700	4,048,295	-	3,425,075	623,220	2024-2028	4,048,295
Wastewater Master Plan & CRF Update (WW1704)	320,994	320,994	-	-	320,994		320,994
Total	$ 142,109,746	$ 68,477,201	$ 28,945,813	$ 12,222,733	$ 27,308,655		$ 68,477,201

(1) Table 4-3 Cost Allocation for Wastewater Capital Recovery Fee Calculation

(2) Per discussions with City staff and City files

City of League City - 2018 Wastewater Capital Recovery Fee Study

Capital Improvement Plan for Capital Recovery Fees

Credit Determination

Wastewater Service Area

Year	Eligible Debt Service[2]	Annual Service Units	Eligible Debt Service per Service Unit	Annual Growth in Service Units (Cumulative)	Credit for Annual Water Rate Revenues
1	$ 2,569,738	53,881	$ 47.69	1,622	$ 77,369
2	2,779,894	55,503	50.09	3,244	162,500
3	2,303,718	57,126	40.33	4,867	196,261
4	2,654,203	58,748	45.18	6,489	293,168
5	2,636,801	60,370	43.68	8,111	354,274
6	2,671,752	62,804	42.54	10,545	448,580
7	2,608,133	65,237	39.98	12,978	518,849
8	2,546,284	67,670	37.63	15,411	579,893
9	2,906,711	70,104	41.46	17,845	739,893
10	2,843,643	72,537	39.20	20,278	794,951
11	2,873,258	72,537	39.61	20,278	803,231
12	2,146,032	72,537	29.59	20,278	599,931
13	2,125,404	72,537	29.30	20,278	594,165
14	1,706,208	72,537	23.52	20,278	476,977
15	1,672,405	72,537	23.06	20,278	467,527
16	1,639,191	72,537	22.60	20,278	458,242
17	1,626,454	72,537	22.42	20,278	454,682
18	1,037,991	72,537	14.31	20,278	290,174
19	983,595	72,537	13.56	20,278	274,968
20	983,595	72,537	13.56	20,278	274,968
21	877,977	72,537	12.10	20,278	245,442
22	769,991	72,537	10.62	20,278	215,254
23	657,189	72,537	9.06	20,278	183,720
24	539,468	72,537	7.44	20,278	150,810
25	416,725	72,537	5.74	20,278	116,497
26	333,380	72,537	4.60	20,278	93,198
27	250,035	72,537	3.45	20,278	69,898
28	166,690	72,537	2.30	20,278	46,599
29	83,345	72,537	1.15	20,278	23,299
Total	$ 47,409,809			486,672	$ 10,005,321

2018 Service Units[1]	52,259
Ten Year Growth in Service Units[1]	20,278
First 5 Year Growth Percentage	40%
Second 5 Year Growth Percentage	60%
Credit Amount	**$ 10,005,321**

(1) Derived from Table 2-1 Water and Wastewater Capital Recovery Fee Service Area EDUs

(2) Water Appendices - page 2 Section II

APPENDIX F
City Ordinance No. 2013-20

City of League City, TX

300 West Walker
League City TX 77573

Text File

File Number: 13-1051

Agenda Date: 6/11/2013 **Version:** 1 **Status:** Old Business

In Control: Public Works **File Type:** Agenda Item

Agenda Number: 11B.

Title

Consider and take action on Ordinance No. 2013-20 amending Ordinance No. 2006-72 approving updated land use assumptions and capital improvements plan for water and wastewater facilities, and amending impact fees pursuant to the Texas Local Government Code Section 395.052 - **Second Reading** (Assistant City Manager, Public Works)

Council approved first reading 7-1-0 on May 28, 2013.

..Background:

This item provides for Council adoption of new capital recovery fees (CRFs, or impact fees) designed to attach the costs of public infrastructure to developments that generate the need for such infrastructure. The City's current CRFs were set based on a 2006 study; the proposed ordinance is based in more current data and may be used to set CRFs at any level up to the maximums noted in the "Determination of Maximum Capital Recovery Fee" study prepared by CDM-Smith and attached as Exhibit A to the proposed ordinance. The maximum fees set out in the proposed ordinance have been reviewed and approved by the Planning & Zoning Commission in its role as the City's Capital Improvements Advisory Committee. This ordinance, if approved, will bring the City into compliance with state law and also aligns with the Council's general growth-related initiative: proposed fees generally increase from existing levels for residential development, but are lower than current impact fees assessed on commercial development.

State law allows cities to collect water and sewer impact fees (capital recovery fees) based on the premise of "rough proportionality." This establishes the City's assessed capital recovery fee (CRF) as a legitimate exaction if the public benefit from the exaction is roughly proportional to the burden imposed on the public by allowing the proposed land use (i.e., each use or development must pay its fair share or its approximately equivalent). This "rough proportionality" must he shown by individualized determination (see "Determination of Maximum Capital Recovery Fee") with the burden on the government to show its evidence. Section 395.052 of the Texas Local Government Code requires that the land use assumptions and capital improvements plan for which impact fees (CRFs) are imposed shall be reviewed, evaluated, and updated every five years.

This item was initially presented to Council in February 2013. At that time, Council requested a worksession to discuss the specifics involved in development of the new maximum fees. That worksession was held in April, and Council asked that staff and CDM-Smith review and re-analyze CDM-Smith's conclusions. The resulting revised allocation of project costs resulted in an increase in the maximum fee per equivalent dwelling unit (EDU), which would generate higher fees for residential and commercial development. (An EDU is the basic building block of CRF planning and analysis and is intended to represent the water demand for an average single-family house.) Note that while the City's existing CRFs were formulated based on a 5/8" water meter being equivalent to one EDU, the new proposed maximum CRFs use a ¾" meter as the basis for one EDU. This change is important because the ratio of EDUs to a standard commercial meter (for instance, the common two-inch meter) declines as the size of the assumed EDU increases (for example, a two-inch meter is equivalent to eight 5/8" meters, but only 5.3 ¾" meters). As a result, commercial CRFs are expected to trend downward should Council adopt the proposed ordinance.

The revised allocation and proposed ordinance now before Council also contemplate the assessment of fees for residential development based on meter size (at present, residential CRFs are assessed on a per-lot

flat-rate basis regardless of lot size, meter size, home size, etc.). The chart below shows the City's current CRFs compared to those proposed in February and to the maximums recommended for adoption in the proposed ordinance.

Single EDU (3/4" Meter):

Impact Fees	**Existing**	**February 2013 Iteration**	**Updated May 2013 - Proposed**
Water	$1,401.77	$2,327.00	$3,215.00
Wastewater	$2,621.48	$2,398.00	$2,419.00
Total	$4,023.25	$4,725.00	$5,634.00

Because fees are assessed at the time of platting and collected when service is initiated, the amount of additional revenue will change as the inventory of lots are consumed. In the first few years, most of the residential fees collected will be based on the old rates because of vested rights and increasing with time as new property is brought in for development.

Key terms and definitions related to the CRF evaluation process include:

- Land Use Assumptions: The City's current land use assumptions are contained in the League City Comprehensive Plan 2035 ("Comp Plan") adopted under Ordinance No. 2011-27 on May 10, 2011. The land use plan was re-presented to the Planning and Zoning Commission, acting as the City's Capital Improvements Advisory Committee, on February 18, 2013 and May 6, 2013.

- Capital Improvements Plan Update and Determination of Maximum Capital Recovery Fee: The City commissioned CDM-Smith to prepare the City's Water Master Plan update, Wastewater Master Plan update, and Determination of Maximum Capital Recovery Fee Update 2010-2020. The basis of CDM-Smith's updates need for water and sewer improvements was the land use assumptions in the City's Comp Plan.

- Capital Improvements Advisory Committee: At its June 12, 2012 meeting, City Council approved Resolution 2012-22, appointing the Planning and Zoning Commission as the City's Capital Improvements Advisory Committee (CIAC). The CIAC was provided with digital copies of the Comp Plan, Water Master Plan update, Wastewater Master Plan update, and Determination of Maximum Capital Recovery Fee Update 2010-2020 prior to formally meeting on February 18, 2013. Subsequent revisions to the Determination of Maximum Capital Recovery Fee Update 2010-2020 were presented to the CIAC on May 6, 2103. At its February 18 meeting, the CIAC considered the land use assumptions, Water Master Plan update, Wastewater Master Plan update, and Determination of Maximum Capital Recovery Fee Update 2010-2020. Further consideration was given to the Determination of Maximum Capital Recovery Fee Update 2010-2020 on May 6, 2013, with City staff and CDM-Smith representatives presenting the latest information and responding to the CIAC's questions. The CIAC's resultant written comments from their May 6 meeting are attached, as is a copy of the proposed impact fee amending ordinance. The CIAC recommends the continued use of the land use assumptions as set forth in the Comp Plan, approves of the Water Master Plan update, Wastewater Master Plan update, and Determination of Maximum Capital Recovery Fee Update 2010-2020 as presented to the CIAC on May 6, and supports an ordinance amending the City's capital recovery fees up to the maximum allowable set forth in the Determination of Maximum Capital Recovery Fee Update 2010-2020 ~~prepared by~~ CDM-Smith.

APPROVED
JUN 11 2013
CITY COUNCIL

FUNDING
{x } NOT APPLICABLE
{ } Funds are available from Account #_____
{ } Requires Budget Amendment to transfer from Account #_____to Account # _____

Ordinance No. 2013-20

Second Reading

ORDINANCE NO. 2013-20

AN ORDINANCE AMENDING ORDINANCE NO. 2006-72 APPROVING UPDATED LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENTS PLAN FOR WATER AND WASTEWATER FACILITIES, AND AMENDING IMPACT FEES PURSUANT TO THE TEXAS LOCAL GOVERNMENT CODE SECTION 395.052.

WHEREAS, the City of League City, Texas first adopted Impact Fees for new development in 1983 pursuant to Ordinance No. 83-41 in accordance with applicable law; and

WHEREAS, by Ordinance No. 85-51, the City of League City amended Ordinance No. 83-41 in order to modify and amplify the Capital Recovery Fee requirements applicable to persons and entities developing property in the City; and

WHEREAS, by Ordinance No. 89-33, the City of League City amended Ordinances Nos. 83-41 and 85-51, however the capital improvements envisioned by Ordinance No. 89-33 addressed only water supply, treatment and distribution facilities, and wastewater collection and treatment facilities, and only authorized capital recovery fees as (a) water fee per unit of development, and (b) wastewater fee per unit of development; and

WHEREAS, Ordinance No. 94-41 adopted on April 19, 1994 did not amend the capital recovery fee adopted in Ordinance No. 89-33; and

WHEREAS, Ordinance No. 99-81 adopted on January 11, 2000 amended the capital recovery fees adopted in Ordinance No. 89-33;

WHEREAS, Ordinance No. 2006-72 adopted on July 25, 2006 amended the capital recovery fees adopted in Ordinance No. 99-81;

WHEREAS, Section 395.052 of the Texas Local Government Code requires that the land use assumptions and capital improvement plan for which an impact fee is imposed shall be reviewed, evaluated, and updated at least every five years; and

WHEREAS, the City's land use assumptions were reviewed, evaluated, and updated through the adoption of the *League City Comprehensive Plan 2035* adopted May 10, 2011, by Ordinance No. 2011-27; and

WHEREAS, the City has hired the engineering firm of CDM-Smith to update the capital improvement plan and to determine whether the maximum impact fees which may be assessed for the water and wastewater components of the impact fee should be amended; and

WHEREAS, CDM-Smith has filed a report with the City, entitled Determination of Maximum Capital Recovery Fee Update 2010-2020, as revised in April 2013, a true and correct copy of which is attached as Exhibit "A" and make a part of this ordinance; and

WHEREAS, in accordance with the provisions of Chapter 395 of the Texas Local Government Code, Sections 395.052 and 395.058, the City Council of the City of League City determined to appoint the Planning and Zoning Commission to act as the Capital Improvements Advisory Committee, (Committee), for the purpose of updating the land use assumptions, capital improvements, and impact fees and determined that the appointment of such Committee complied in all respects to the provisions of law; and

WHEREAS, the Committee has reviewed the CDM-Smith report and has filed its written comments on the proposed amendments to the land use assumptions, capital improvements plan, and impact fees as required by law, before the fifth business day before the date of the public hearing, for which notice was properly provided by the League City City Council within 60 days after the date it received the update of the land use assumptions and capital improvements plan, in accordance with sections 395.053 and 395.056 of the Texas Local Government Code, a true and correct copy of which comments are attached as Exhibit "B"; and

WHEREAS, on May 28, 2013, the City held a public hearing on the update of the land use assumptions, capital improvements plan, and amendment of impact fees and all required public hearings have been publicized and held in accordance with law; and

WHEREAS, the City of League City has met all of the legal requirements and prerequisites for implementation of impact fees in accordance with Chapter 395 of the Texas Local Government Code; and

WHEREAS, the City Council of the City of League City finds and determines its legislative intent to enable the provisions of Chapter 395 of the Texas Local Government Code and has determined to approve the amendments to the Impact Fees within 30 days after the date of the public hearings on the subject amendments in compliance with section 395.057;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LEAGUE CITY, STATE OF TEXAS:

Section 1. The facts and opinions in the preamble of this Ordinance are true and correct.

Section 2. The Determination of Maximum Capital Recovery Fee Update 2010-2020 is approved and adopted.

Section 3. The combined rate of $5,634.00 per single family equivalent connection shall be adopted with the rate for water being $3,215.00 and $2,419.00 for sewer. Distribution of demands based on water records yields the following:

a. Residential

Type of Structure	Single Family Equivalent Fee Units
Single Family Residential	1
Townhouse	0.8
Condominium/Apartment	0.8
Mobile Homes	1

b. Commercial/Industrial

Commercial/Industrial rates will be determined by the size and type of water meter purchased for the property as follows:

Meter Size and Type		Single Family Equivalent Fee units
¾"	displacement	1
1"	displacement	1.667
1 ½"	displacement	3.333
2"	displacement	5.333
2"	compound	5.333
2"	turbine	5.333
3"	compound	10.667
3"	turbine	11.667
4"	compound	16.667
4"	turbine	21.000
6"	compound	33.333
6"	turbine	43.333
8"	compound	53.333
8"	turbine	93.333
10"	compound	76.667
10"	turbine	140
12"	turbine	176.667

Section 4. Section 114-164(a) and Section 114-164(b) of the Code of Ordinances of the City of League City, Texas are amended to provide as follows:

(a) *Fee Schedule.* Capital Recovery Fees shall be as follows:

(1) *Residential fees.* Residential Fees, rounded to the nearest whole dollar, are as set forth as follows:

For Single Family and Mobile Home Residential Structures:

Meter Size	Single Family Fee units	Water System CRF	Wastewater System CRF
3/4"	1	$3,215	$2,419
1"	1.667	$5,359	$4,032
1-1/2"	3.333	$10,716	$8,063
2"	5.333	$17,146	$12,901

For Townhouse and Condominium/Apartment Residential Structures:

Meter Size	Single Family Fee units	Water System CRF	Wastewater System CRF
3/4"	0.8	$2,572	$1,935
1"	1.334	$4,289	$3,227
1-1/2"	2.666	$8,571	$6,449
2"	4.266	$13,587	$10,319

(2) *Commercial/Industrial fees.* Commercial/Industrial fees will be determined by the size and type of water meter purchased for the property as follows, rounded to the nearest dollar:

Meter Size and Type		Single Family Fee units	Water System CRF	Wastewater System CRF
¾"	displacement	1	$3,215	$2,419
1"	displacement	1.667	$5,359	$4,032
1 ½"	displacement	3.333	$10,716	$8,063
2"	displacement	5.333	$17,146	$12,901
2"	compound	5.333	$17,146	$12,901
2"	turbine	5.333	$17,146	$12,901
3"	compound	10.667	$34,294	$25,803
3"	turbine	11.667	$37,509	$28,222
4"	compound	16.667	$53,584	$40,317
4"	turbine	21.000	$67,515	$50,799
6"	compound	33.333	$107,166	$80,633
6"	turbine	43.333	$139,316	$104,823
8"	compound	53.333	$171,466	$129,013
8"	turbine	93.333	$300,066	$255,773
10"	compound	76.667	$246,484	$185,457
10"	turbine	140	$450,100	$338,660
12"	turbine	176.667	$567,984	$427,357

(b) *Fee Unit Defined.* For the purpose of this division only, the term "fee unit" shall mean a single unit of service as defined by continuous duty maximum flow rate in gallons per minute for a three-fourths-inch (3/4-inch) meter using American Water Works Association C700-C703 standards.

Section 5. All ordinances and agreements and parts of ordinances and agreements in conflict herewith are hereby repealed to the extent of the conflict only.

APPROVED first reading the 28th day of May, 2013.

APPROVED second reading the 11th day of June, 2013.

PASSED AND ADOPTED the 11th day of June, 2013.

TIMOTHY PAULISSEN,
Mayor

ATTEST:

DIANA M. STAPP,
City Secretary