



CITY OF SEGUIN
WATER & WASTEWATER IMPACT FEES

FIVE-YEAR UPDATE

CITY COUNCIL MEETING
JANUARY 5, 2016



IMPACT FEES...

WHAT are they?

- Fees charged to **new customers** for connections to water and wastewater utilities in order to generate funding for capital improvements needed for new growth and development.
 - Existing customers are only charged if a larger water meter is installed, increasing the impact on the system.

HOW are they used?

- Impact fees collected are used to pay for a portion of the costs of providing service to new development.
 - This includes upgrades or new installations of transmission lines, pumps, storage tanks, treatment plants, etc.

WHY do we need them?

- Impact fees help reduce the burden on existing utility customers' rates.
 - As new growth and development occurs system wide improvements and expansions are needed.
 - Without impact fees, existing customers would see significant rate increases to pay for these costs.

What is a Living Unit Equivalent (LUE)?

- An LUE is the typical flow that would be produced by a small single family residence. In this study, it represents 3.29 people per residence. This is the service unit used throughout the study.

What is the 5-Yr Update?

- By State law, updates are required every five years.
- The update must include:
 - Land Use Assumptions (projected population and land use over the next ten years)
 - Capital Improvements Plans (improvements needed to water and wastewater systems to meet the growth projected)
 - Impact Fee Rate Study (the calculation of the maximum impact fees allowed)
- Two firms were hired to assist the City in the update:
 - TRC Engineers- Land Use Assumptions and Capital Improvements Plans (including maps)
 - Willdan Financial- Impact Fee Rate Study

How is the maximum fee calculated?

- By dividing the costs of capital improvements by the number of service units (LUEs) derived from the land use assumptions; and applying the credits mandated by State law.

MAXIMUM FEES VS. EFFECTIVE FEES


- The maximum fees that can be charged are determined by the results of the study.
- Council can adopt maximum fees up to (but no higher than) the fees from the study.
- State law mandates that maximum fees for a development are based on time of platting.
 - *Unplatted properties and properties platted prior to the City's first adoption of Impact Fees (1990) are assessed based on current fees.*
 - *A chart is available for properties platted between 1990 and now.*
- Council can also adopt effective fees lesser than the maximum and change these fees every six months.
- Maximum fees can only be changed with a new study.
- Effective Impact Fees can be changed without a new study as long as they don't exceed the maximum fees.
- Adopting maximum and effective fees allows the Council flexibility in revising the fees over the next five years based on the growth patterns and development of the City.

Agenda Items for Five-Year Update

- **Presentation and Public Hearing of Five Year Updates, Ordinance Changes, & Fees**
- **Resolution adopting the Land Use Assumptions, Capital Improvements Plans, and Impact Fee Study**
 - Study includes the fee calculations for maximum allowable fees
- **Ordinance adopting changes to the City Code of Ordinances**
 - Calculation of Fees for Multi-family Developments
 - Adoption of both Maximum and Effective Fees
- **Ordinance adopting the Maximum and Effective Fees to be Charged**
 - Maximum fees cannot be higher than the allowable fees from the study and cannot be changed without an update or new study.
 - Effective fees can change under the current update as long as they are not higher than the maximum fees adopted by Council.


THREE PHASES OF FEE UPDATES

- **Land Use Assumptions**
- **Capital Improvements Plans**
- **Impact Fee Study**
 - **Calculation of Maximum Allowable Fees**

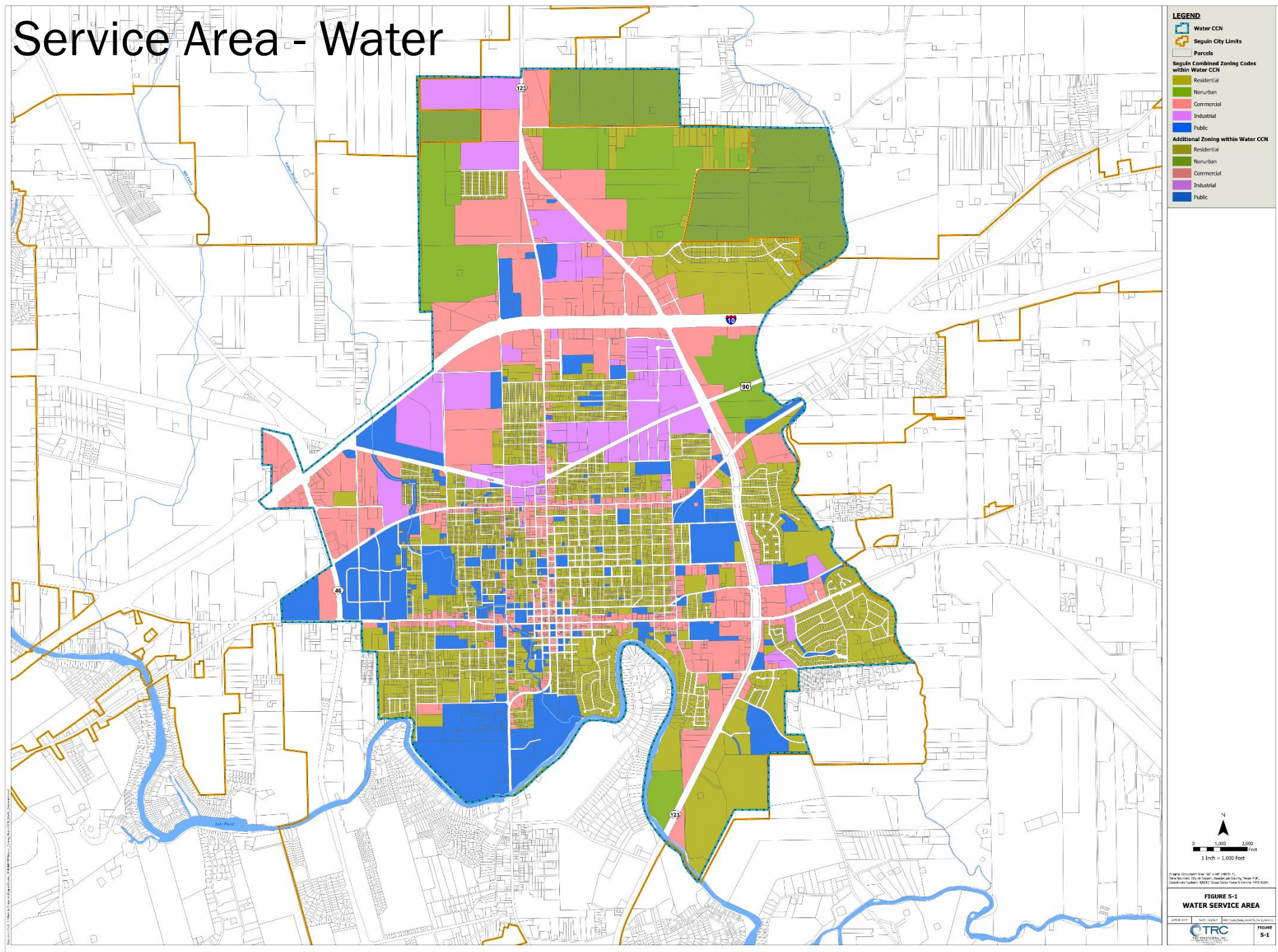


LAND USE ASSUMPTIONS

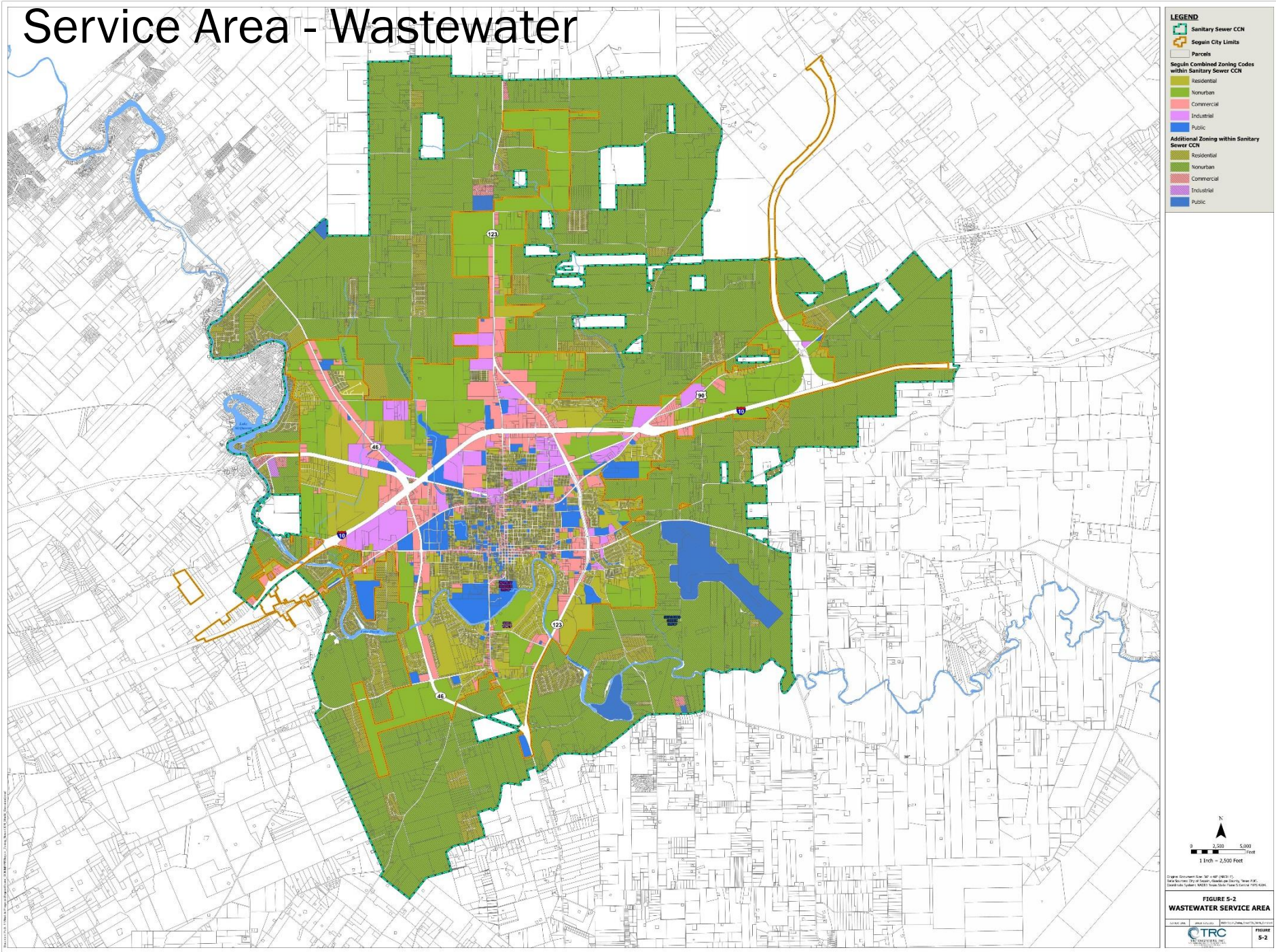
(current, 10-yr, and full buildout)

- **Service Area Definition**
 - **Population Projection Estimates**
 - **Land Use Projections**
- 

Service Area - Water



Service Area - Wastewater



LAND USE ASSUMPTIONS

POPULATION ESTIMATES

Water CCN: Number of Residential Meters x 3.29 (avg family size).
(1.5% Projected Growth Rate)

Wastewater CCN: Number of Residential Accounts on Sewer x 3.29 plus...
Number of Apt Units at 85% occupancy x 2.0* plus...
Number of TLU students living on-campus plus...
Number of Beds in Nursing Homes.
(2% Projected Growth Rate) *More vacant, developable land in sewer CCN*

City Limits: Wastewater CCN population plus...
Approx. Number of Homes on Septic * 3.29
(2% Projected Growth Rate) *More vacant, developable land in sewer CCN*

*National Multifamily Housing Council

LAND USE ASSUMPTIONS

Table 5.1

Population & Land Use Projection for Water Utility

LAND USE	2015		2025		Full Buildout	
	ACRES	%	ACRES	%	ACRES	%
Residential	2,563	27.32%	2,650	28.25%	2,800	29.85%
Right of Way	1,406	14.99%	1,450	15.46%	1,500	15.99%
Commercial	1,856	19.78%	2,000	21.32%	2,200	23.45%
Industrial	817	8.71%	1,000	10.66%	1,200	12.79%
Public	1,154	12.30%	1,175	12.53%	1,200	12.79%
Nonurban	1,585	16.90%	1,106	11.79%	481	5.13%
TOTAL ACREAGE	9,381	100.00%	9,381	100.00%	9,381	100.00%
City Limit Population (a)	30,006		36,577		60,009	
Service Population (b)	25,295		29,356		36,702	
Population per Urban Acre	4.83		5.20		5.92	
Population per Total Acre	2.70		3.13		3.91	

LAND USE ASSUMPTIONS

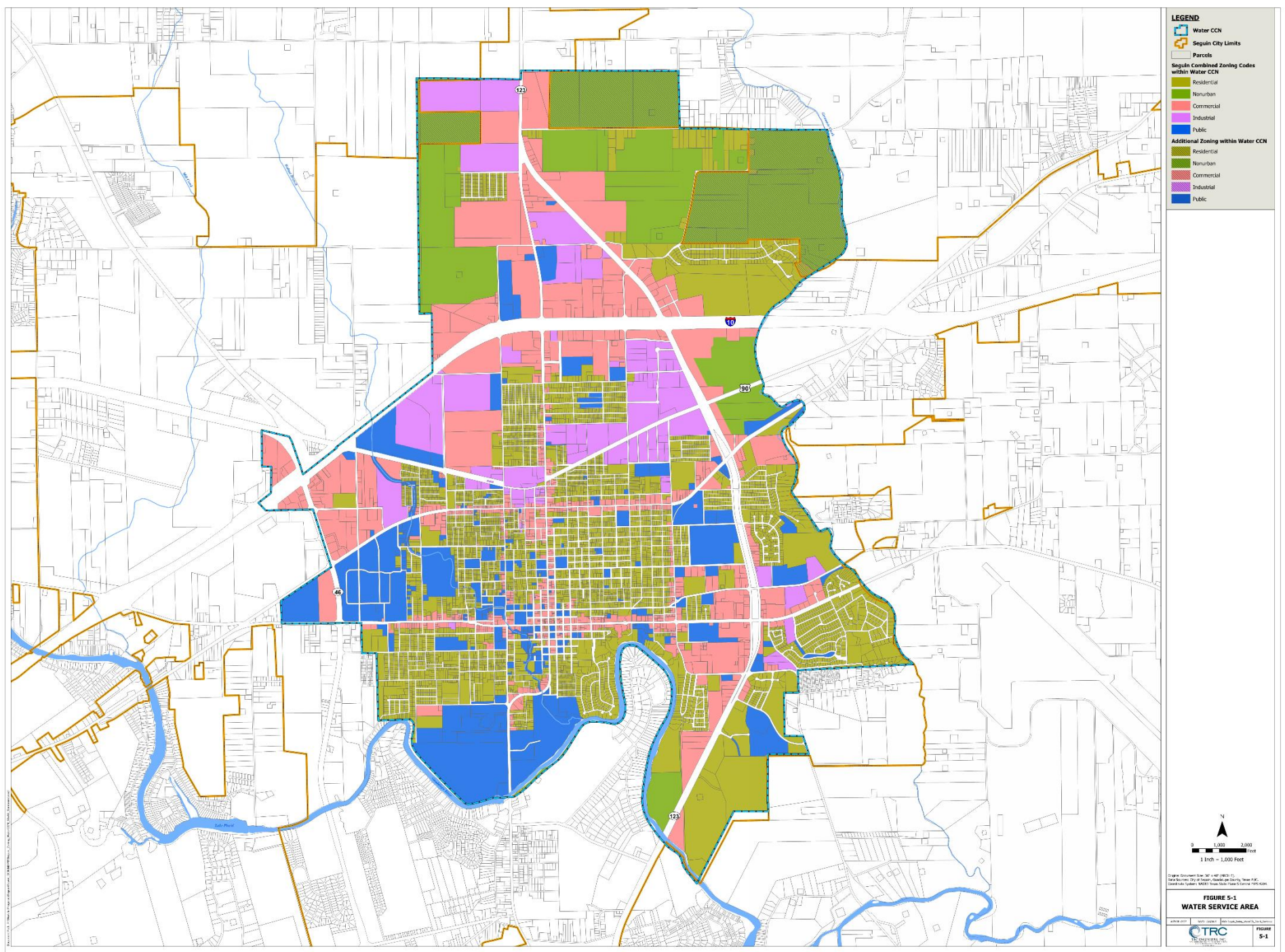
Table 5.2

Population & Land Use Projection for Wastewater Utility

LAND USE	2015		2025		Full Buildout	
	ACRES	%	ACRES	%	ACRES	%
Residential	10,093	15.52%	12,000	18.45%	13,500	20.76%
Right of Way	4,950	7.61%	5,050	7.76%	5,300	8.15%
Commercial	3,275	5.04%	3,725	5.73%	3,500	5.38%
Industrial	1,645	2.53%	1,750	2.69%	2,000	3.08%
Public	2,870	4.41%	2,950	4.54%	3,000	4.61%
Nonurban	42,205	64.89%	39,563	60.83%	37,738	58.02%
TOTAL ACREAGE	65,038	100.00%	65,038	100.00%	65,038	100.00%
City Limit Population (a)	30,006		36,577		60,009	
Service Population (b)	27,373		33,369		54,745	
Population per Urban Acre	1.82		1.91		2.88	
Population per Total Acre	0.42		0.51		0.84	

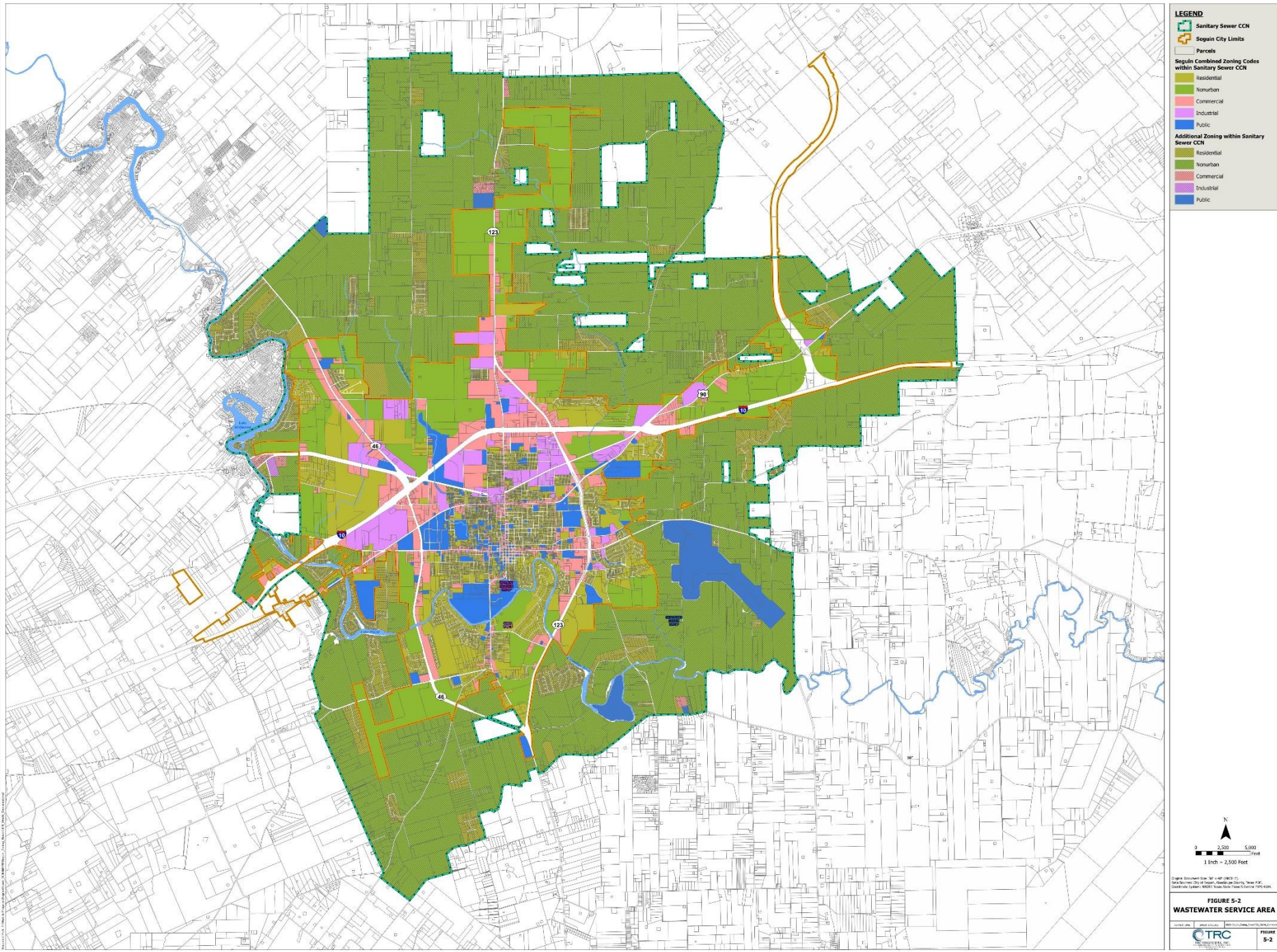
Land Use Projections

- Future Land Use Plan Map
- Existing Zoning Districts
- Development Patterns



Land Use Projections

- Future Land Use Plan Map
- Existing Zoning Districts
- Development Patterns

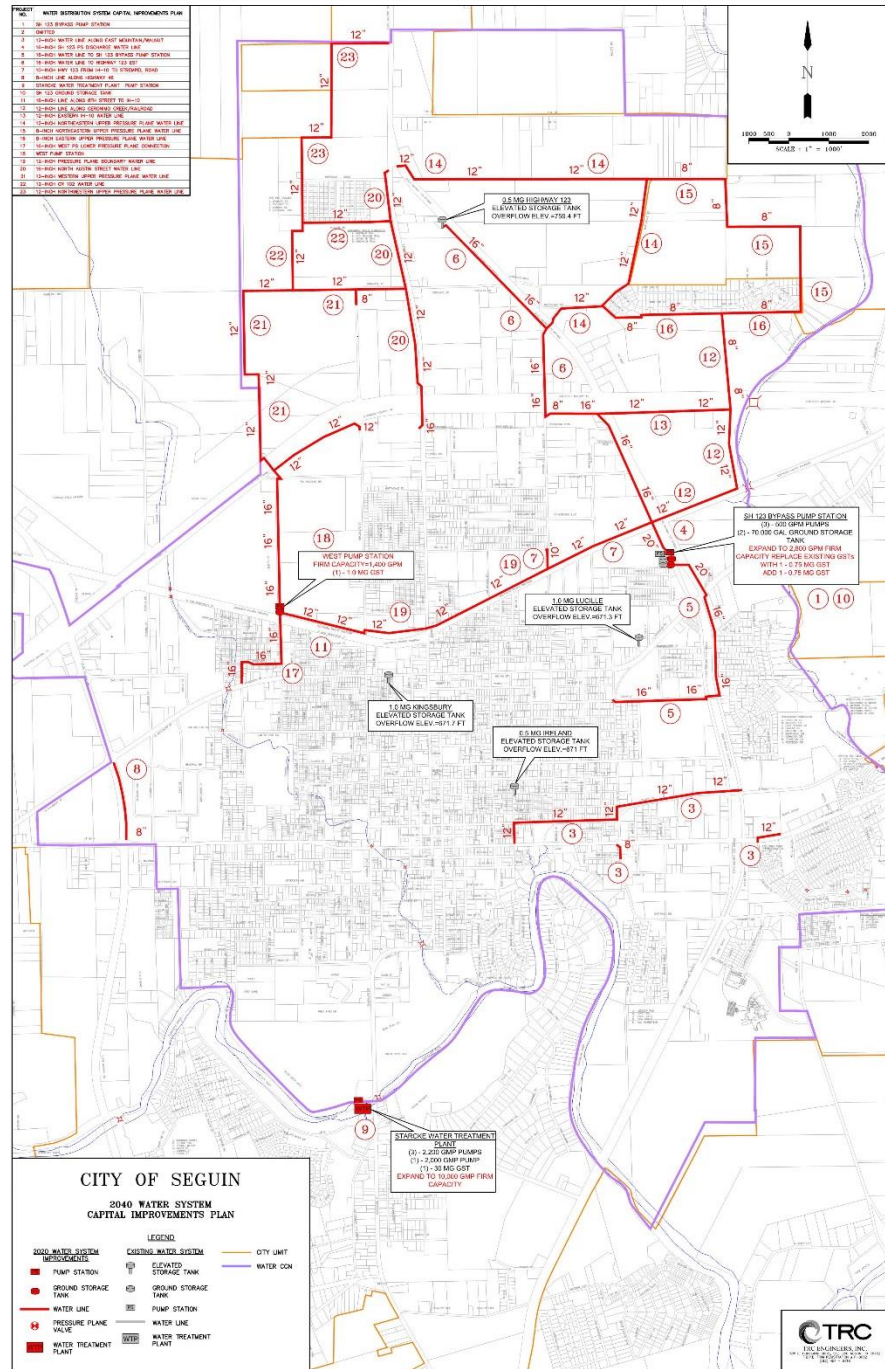
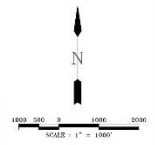


CAPITAL IMPROVEMENTS PLANS

- Inventory of Existing and Planned Capital Facilities
- Performed by Licensed Professional Engineer (TRC)
- Capacity Analysis of Existing and Future Facilities
 - To serve Existing Development, including upgrades
 - To Serve Growth During Next 10 Years
 - Excess Capacity for Growth After 10 Years
- Units of Service for Residential, Commercial, Industrial
- Cost per Unit for Next Ten Years' Growth

PROJECT
WATER MAINS AND OTHER CAPITAL IMPROVEMENTS PLAN

1. 12" 150 BRASS PUMP STATION
2. 12" 150 BRASS PUMP STATION
3. 12" 150 BRASS PUMP STATION
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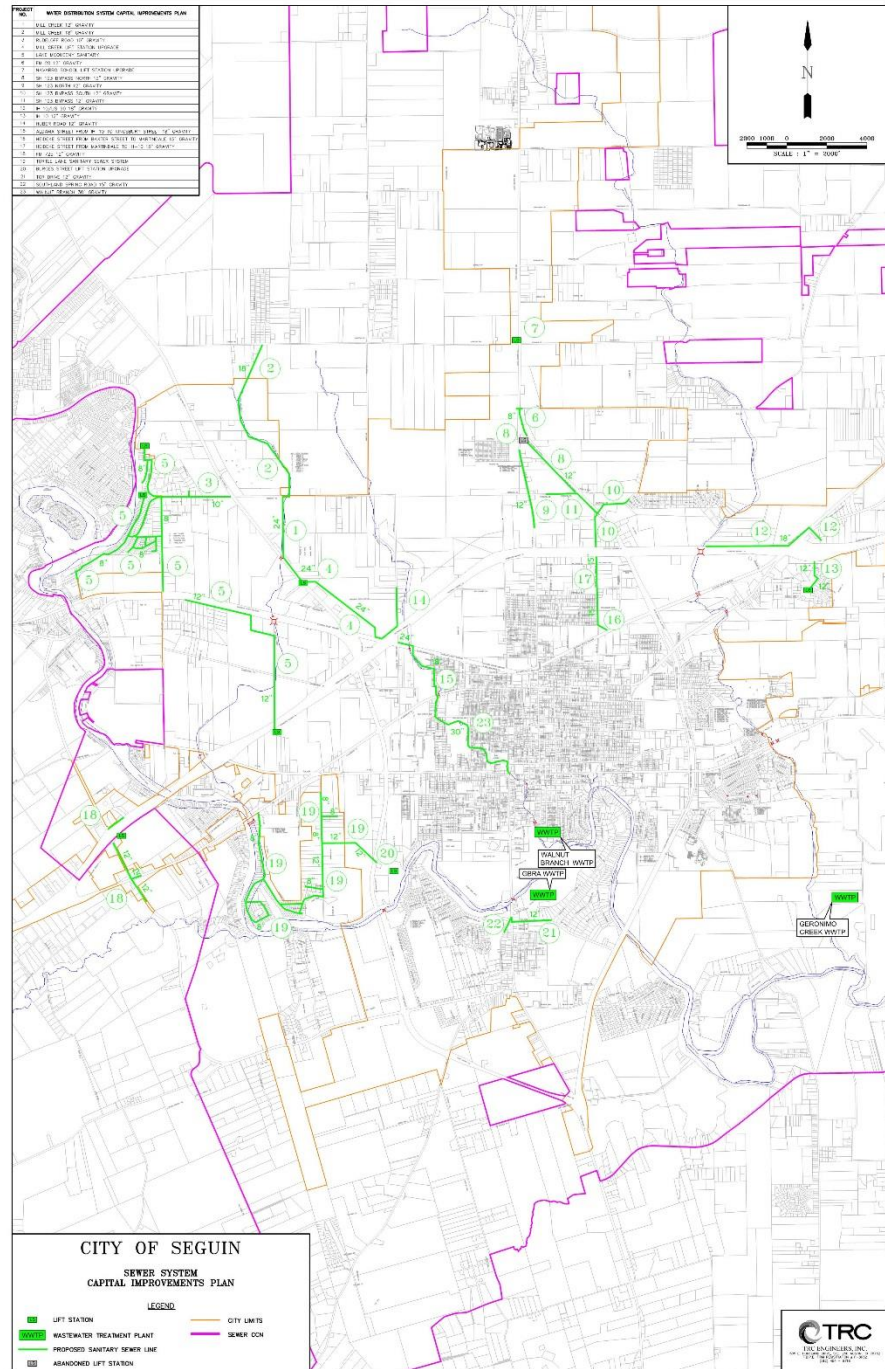
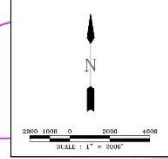
CITY OF SEGUIN
2040 WATER SYSTEM
CAPITAL IMPROVEMENTS PLAN

LEGEND

2040 WATER SYSTEM IMPROVEMENTS	EXISTING WATER SYSTEM	CITY LIMIT
PUMP STATION	ELEVATED STORAGE TANK	CITY LIMIT
GROUND STORAGE TANK	GROUND STORAGE TANK	WATER CON
WATER LINE	PUMP STATION	
PRESSURE PLANE VALVE	WATER LINE	
WATER TREATMENT PLANT	WATER TREATMENT PLANT	



PROJECT NO.	WATER DISTRIBUTION SYSTEM CAPITAL IMPROVEMENTS PLAN
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CITY OF SEGUIN
SEWER SYSTEM
CAPITAL IMPROVEMENTS PLAN

LEGEND

LIFT STATION	CITY LIMITS
WASTEWATER TREATMENT PLANT	SEWER COL
PROPOSED SANITARY SEWER LINE	
ABANDONED LIFT STATION	



CAPITAL IMPROVEMENTS PLANS

**Table 5-6
Estimation of LUEs**

METER SIZE (Excluding Residential and Wholesale Master Meters)	LUEs PER METER (b)	NUMBER OF METERS (a)	NUMBER OF RETAIL LUEs (Excluding Residential Master Meters)
5/8"	1.0	6,716	6,716
3/4"	1.5	0	0
1"	2.5	240	600
1-1/4", 1-1/2"	5.0	125	625
2"	8.0	203	1,624
3"	16.0	30	480
4"	25.0	15	375
6"	50.0	7	350
8"	80.0	1	80
Total		7,337	10,850
Water Service Population			25,295
Sewer Service Population			27,373
Population/LUE			2.33

CAPITAL IMPROVEMENTS PLANS

Table 5-11

Summary of Total Capital Costs

UTILITY	FACILITY TYPE	COST/LUE *
WATER	Supply	\$0.00
	Treatment	\$0.00
	Pumping	\$676.09
	Ground Storage	\$173.34
	Elevated Storage	\$279.69
	Major Transmission	\$772.24
	Study Costs	\$10.91
	TOTAL WATER CAPITAL COSTS	\$1,912.27
	WASTEWATER	Treatment
Pumping **		\$658.58
Major Collection		\$635.31
Study Costs		\$7.39
TOTAL WASTEWATER CAPITAL COSTS		\$6,599.26
TOTAL WATER AND WASTEWATER CAPITAL COSTS		\$8,511.53

FEE CALCULATION

Maximum Allowable Impact Fees

How is the maximum fee calculated?

- By dividing the costs of capital improvements by the number of service units (LUEs) derived from the land use assumptions; and applying the credits mandated by State law.

How are credits applied?

Per Chapter 395 a credit is applied to the total capital costs as follows:

- Detailed Credit- the amount of costs to be recovered for anticipated ad valorem tax and revenues to City from the development.

OR

- A Credit equal to 50% of the cost.

The Equity Residual Model

Both credits are applied to each line item and the higher of the two credit approaches is selected.

Calculations for Water and Wastewater Maximum Impact Fees

UTILITY	FACILITY	COST/ LUE*	ALTERNATIVE		MAXIMUM FEE		HIGHER OF A OR B
			A Rate Credit	B 50% Credit	A Rate Credit	B 50% Credit	
WATER	Pumping	676.09	170.61	338.04	505.48	338.04	505.48
	Ground Storage	173.34	21.47	86.67	151.87	86.67	151.87
	Elevated Storage	279.69	15.18	139.85	264.51	139.85	264.51
	Transmission	772.24	136.78	386.12	635.47	386.12	635.47
	Study Costs	10.91	-	5.45	10.91	5.45	10.91
Total Water		1,912.27	344.04	956.14	1,568.23	956.14	1,568.23
Wastewater	Treatment	5,297.98	1,687.38	2,648.99	3,610.60	2,648.99	3,610.60
	Lift Stations (a)	658.58	1.47	329.29	657.12	329.29	657.12
	Collection	635.31	578.86	317.66	56.45	317.66	317.66
	Study Costs	7.39	-	3.69	7.39	3.69	7.39
Total Wastewater		6,599.26	2,267.71	3,299.63	4,331.55	3,299.63	4,592.76
TOTAL WATER AND WASTEWATER		8,511.53	2,611.75	4,255.77	5,899.79	4,255.77	6,160.99

Water and Wastewater Maximum Impact Fees

METER TYPE	METER SIZE	MULTIPLIER	MAXIMUM IMPACT FEE		
			WATER	WASTEWATER	BOTH
SIMPLE	5/8 X 3/4"	1.0	\$ 1,568.23	\$ 4,592.76	\$ 6,160.99
SIMPLE	3/4"	1.5	\$ 2,352.35	\$ 6,889.13	\$ 9,241.48
SIMPLE	1"	2.5	\$ 3,920.58	\$ 11,481.89	\$ 15,402.47
SIMPLE	1 1/2"	5.0	\$ 7,841.17	\$ 22,963.78	\$ 30,804.95
SIMPLE	2"	8.0	\$ 12,545.87	\$ 36,742.05	\$ 49,287.91
COMPOUND	2"	8.0	\$ 12,545.87	\$ 36,742.05	\$ 49,287.91
TURBINE	2"	10.0	\$ 15,682.33	\$ 45,927.56	\$ 61,609.89
COMPOUND	3'	16.0	\$ 25,091.73	\$ 73,484.09	\$ 98,575.83
TURBINE	3"	24.0	\$ 37,637.60	\$ 110,226.14	\$ 147,863.74
COMPOUND	4"	25.0	\$ 39,205.83	\$ 114,818.89	\$ 154,024.73
TURBINE	4"	42.0	\$ 65,865.80	\$ 192,895.74	\$ 258,761.54
COMPOUND	6"	50.0	\$ 78,411.67	\$ 229,637.78	\$ 308,049.45
TURBINE	6"	92.0	\$ 144,277.47	\$ 422,533.52	\$ 566,810.99
COMPOUND	8"	80.0	\$ 125,458.67	\$ 367,420.46	\$ 492,879.13
TURBINE	8"	160.0	\$ 250,917.34	\$ 734,840.91	\$ 985,758.25
COMPOUND	10"	115.0	\$ 180,346.84	\$ 528,166.91	\$ 708,513.74
TURBINE	10"	250.0	\$ 392,058.34	\$ 1,148,188.92	\$ 1,540,247.27
TURBINE	12"	330.0	\$ 517,517.01	\$ 1,515,609.38	\$ 2,033,126.39

FEE COMPARISON

	Water	Other (SSLGC)	Wastewater	Total
Seguin (current)	613 *1,919	1,306	2,374	4,293
Seguin (2015 Maximum)	1,568 *2,874	1,306	4,592	7,466
Schertz	2,934 *4,240	1,306	3,468	7,708
San Marcos	2,285	-	3,506	5,791
New Braunfels Utilities	2,311	-	1,570	3,881
Kyle	2,115	-	2,216	4,331
Cibolo	3,595	-	1,770	5,365
Springs Hill WSC	2,325	-	-	-

* Total water impact w/ SSLGC fee

IMPACT FEES AS A PERCENTAGE OF AVG HOME SALES PRICE

	Total Impact Fees	Avg Home Price	Percentage of Home Price for total Impact Fees	Percentage of Home Price for Impact Fees w/o SSLGC Fee
Seguin (current)	4,293	175,000	2.5%	1.7%
Seguin (proposed)	5,786	175,000	3.3%	2.6%
Seguin (2015 Maximum)	7,466	175,000	4.3%	3.5%
Schertz	7,708	240,000	3.2%	2.6%
San Marcos	5,791	249,900	2.3%	
New Braunfels	3,881	279,945	1.4%	
Kyle	4,331	214,950	2.0%	
Cibolo	5,365	257,000	2.1%	

FEE COMPARISON

	Water	Other (SSLGC)	Wastewater	Total
Seguin (current fees)	613 *1,919	1,306	2,374	4,293
Seguin (proposed effective)	1,073 (75% increase) *2,379	1,306	3,442 (45% increase)	5,821 (51% increase in City fees + SSLGC fees)
Seguin (2015 Maximum)	1,568 (150% increase) *2,874	1,306	4,592 (90% increase)	7,466
Schertz	2,934 *4,240	1,306	3,468	7,708
San Marcos	2,285	-	3,506	5,791
New Braunfels	2,311	-	1,570	3,881
Kyle	2,115	-	2,216	4,331
Cibolo	3,595	-	1,770	5,365
Springs Hill WSC	2,325	-	-	-

* Total water impact w/ SSLGC fee