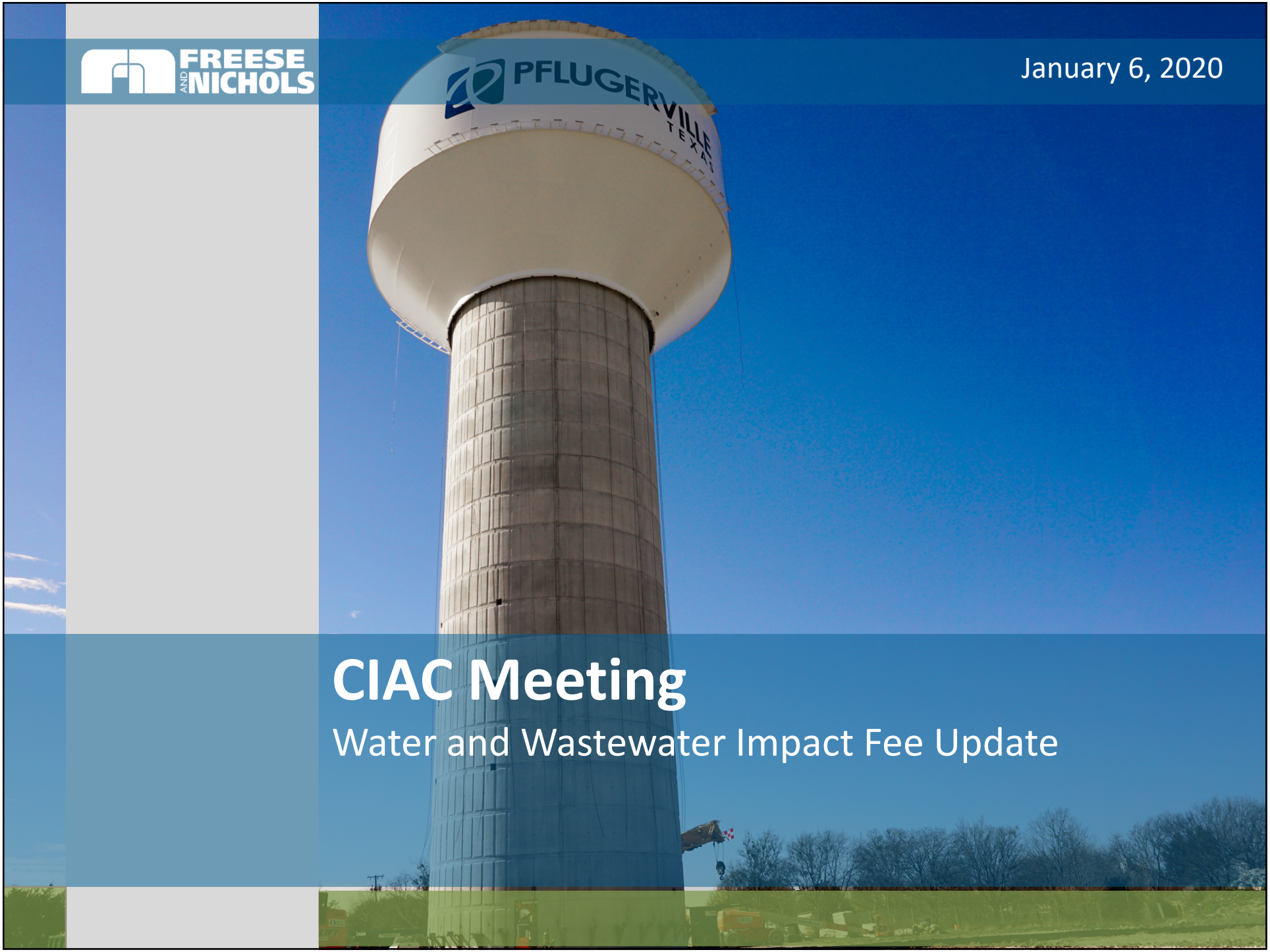


FREESE AND NICHOLS

January 6, 2020

CIAC Meeting

Water and Wastewater Impact Fee Update

Program Development Process

CIAC COORDINATION

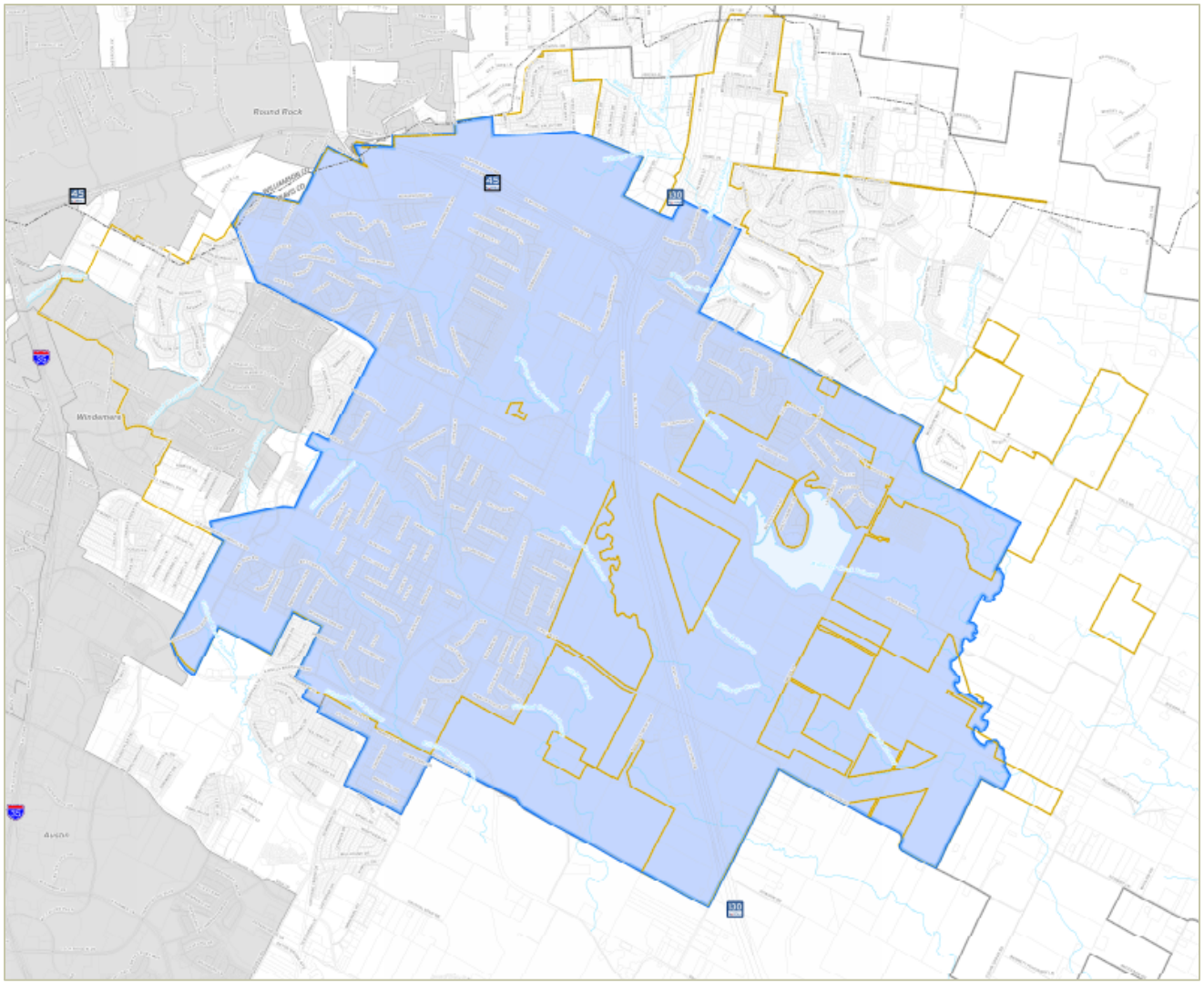
1. Develop Land Use Assumptions
2. Develop Capital Improvement Plan
3. Conduct Impact Fee Calculations/ Prepare Technical Report
4. Public Hearing and Council Consideration
5. Adopt Updated Impact Fee Ordinance

Impact Fee Calculation

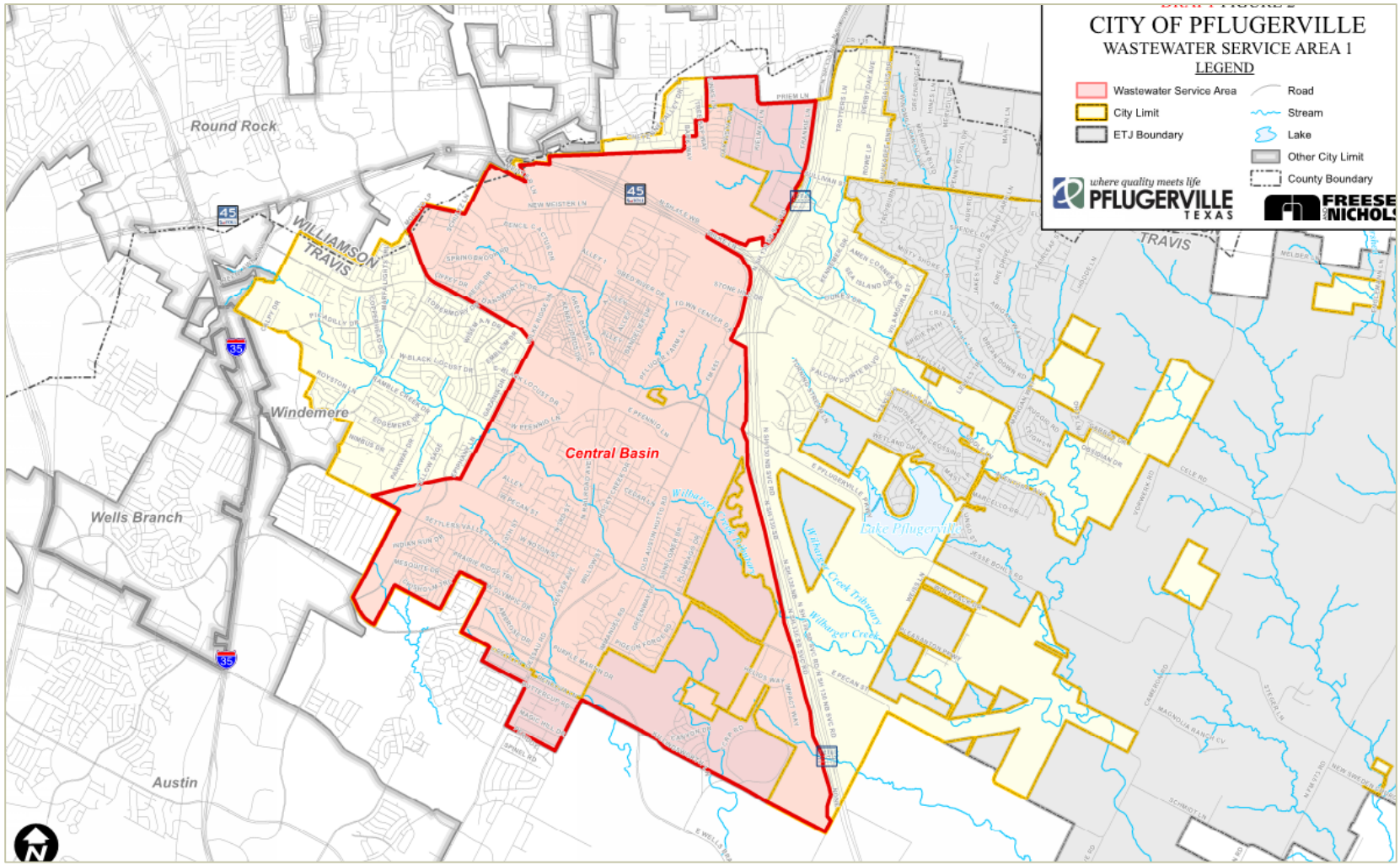
- Impact Fees Calculated by Dividing Eligible CIP/Growth in Service Units
- Credit of 50% for the portion of ad-valorem taxes generated by CIP improvements
- Fee collected can be less than maximum

$$\textbf{Impact Fee Per Service Unit} = \frac{\textbf{Eligible CIP Cost}}{\textbf{New Service Units}}$$

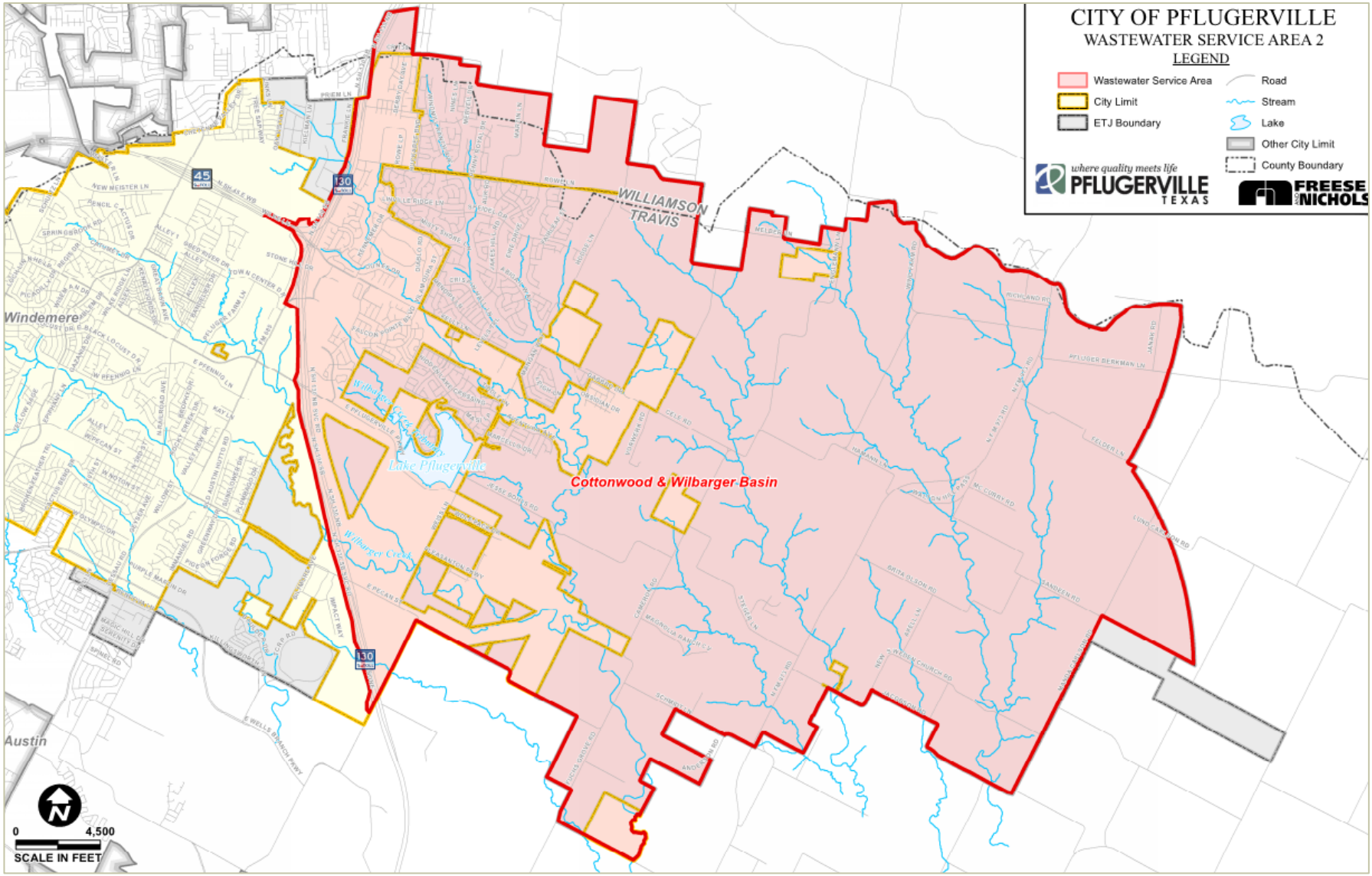
Water Service Area



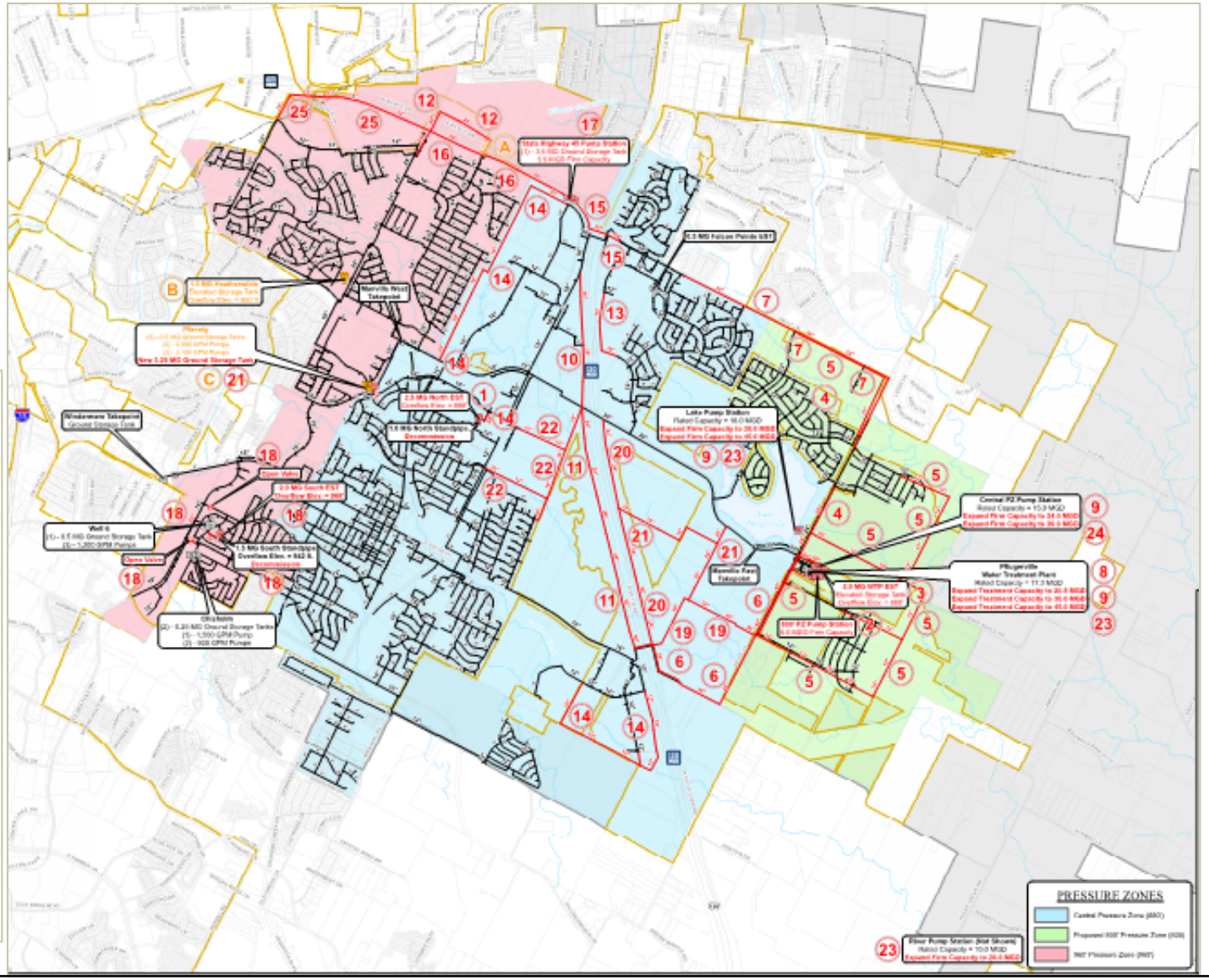
Wastewater Service Area 1



Wastewater Service Area 2



Water Impact Fee CIP



Existing Impact Fee Eligible

- Elevated Storage Tank
- Storage Tank
- PS — Pump Station
- Water Line

Proposed Impact Fee Eligible

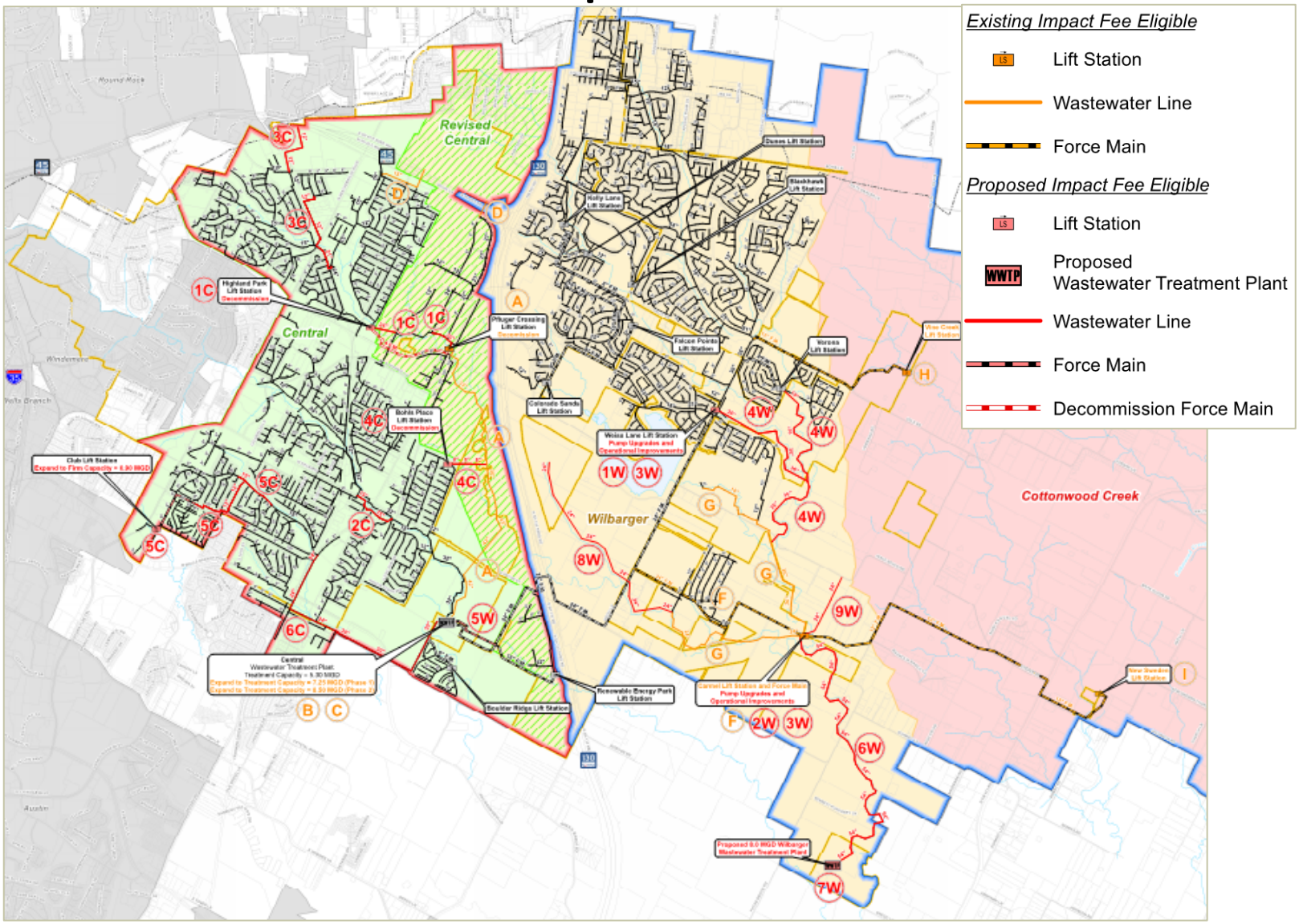
- PS — Pump Station
- WTP — Water Treatment Plant
- Elevated Storage Tank
- Water Line

Water Impact Fee CIP

Proj. No.	Description of Project	Percent Utilization			Costs Based on 2019 Dollars	
		2019[1]	2029	2019-2029	Capital Cost	Eligible Cost
EXISTING ELIGIBLE						
A	16-inch SH 45 Water Line Extension	0%	45%	45%	$854,395	$384,478
B	1.5-MG Heatherwilde Elevated Storage Tank	60%	100%	40%	$6,390,257	$2,556,103
C	9.2-MGD Pfennig Pump Station	70%	100%	30%	$3,200,000	$960,000
D	Impact Fee Study	0%	100%	100%	$54,943	$54,943
PROPOSED ELIGIBLE						
1	2.5-MG North Elevated Storage Tank	40%	100%	60%	$9,170,700	$5,502,420
2	6.0-MGD 800' PZ Pump Station	10%	80%	70%	$7,897,100	$5,527,970
3	2.0-MG 800' PZ Elevated Storage Tank	10%	45%	35%	$7,993,500	$2,797,725
4	30/24/20/16-inch Water Lines to Convert East PZ to 800' PZ	10%	65%	55%	$2,931,900	$1,612,545
5	16/12-inch Water Lines in New 800' PZ	5%	50%	45%	$8,444,700	$3,800,115
6	42/36-inch Weiss Lane/Pecan Street Water Lines	20%	80%	60%	$10,531,300	$6,318,780
7	36/30-inch Weiss Lane/Kelly Lane Water Lines	20%	70%	50%	$9,377,400	$4,688,700
8	Water Treatment Plant Expansion to 20.5 MGD	0%	100%	100%	$23,000,000	$23,000,000
9	WTP, HSPS, and Lake PS Expansion to 30.0 MGD	0%	100%	100%	$38,810,200	$38,810,200
10	20-inch State Highway 130 Water Line	10%	100%	90%	$2,196,700	$1,977,030
11	30/24-inch State Highway 130 Water Lines	10%	90%	80%	$5,846,500	$4,677,200
12	24/20-inch State Highway 45 Water Lines	0%	50%	50%	$2,453,900	$1,226,950
13	16-inch Colorado Sand Drive Looping	10%	95%	85%	$1,001,500	$851,275
14	16/12-inch Looping Improvements in Central PZ	20%	60%	40%	$7,012,700	$2,805,080
15	30/24-inch State Highway 45 Pump Station Suction Line	0%	65%	65%	$2,172,100	$1,411,865
16	30/24-inch State Highway 45 Pump Station Discharge Line	0%	65%	65%	$3,432,900	$2,231,385
17	5.0-MGD State Highway 45 Pump Station & 3.5-MG GST	0%	65%	65%	$12,005,100	$7,803,315
18	2.0-MG South EST, West/960' PZ Connection, and 3.5-MG Pfennig GST	0%	30%	30%	$11,474,100	$3,442,230
19	36-inch Weiss Lane/State Highway 130 Water Line	0%	70%	70%	$4,801,900	$3,361,330
20	24-inch East State Highway 130 Water Line	10%	100%	90%	$4,987,300	$4,488,570
21	20/16-inch Water Lines East of State Highway 130	0%	100%	100%	$2,870,200	$2,870,200
22	16/12-inch Water Lines West of State Highway 130	10%	100%	90%	$3,270,900	$2,943,810
23	WTP and Lake PS Exp. to 45.0 MGD, River PS Exp. to 20.0 MGD	0%	20%	20%	$56,943,300	$11,388,660
24	Central PZ Pump Station Expansion to 39.0 MGD	0%	80%	80%	$10,879,200	$8,703,360
25	12-inch Water Line South of State Highway 45	10%	90%	80%	$1,720,000	$1,376,000
				TOTAL	**$261,724,695**	**$157,572,239**

[1] Utilization in 2019 on proposed projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

Wastewater Impact Fee CIP



Wastewater Impact Fee CIP-SA1

Proj. No.	Description of Project	Percent Utilization			Costs Based on 2019 Dollars	
		2019[1]	2029	2019-2029	Capital Cost	Impact Fee Eligible Cost
EXISTING ELIGIBLE						
A	42/36/33-inch SH 130 Interceptor	30%	60%	30%	$16,306,800	$4,892,040
B	Central Wastewater Treatment Plant Phase 1 Expansion	80%	100%	20%	$44,000,000	$8,800,000
C	Central Wastewater Treatment Plant Phase 2 Expansion	0%	60%	60%	$18,560,000	$11,136,000
D	24/15-inch SH 45 Interceptors	0%	60%	60%	$2,229,300	$1,337,580
E	Impact Fee Study	0%	100%	100%	$32,496	$32,496
PROPOSED ELIGIBLE						
1C	30/24-inch Highland Park Interceptor	50%	75%	25%	$2,101,600	$525,400
2C	15-inch Gilleland Creek Interceptor	75%	95%	20%	$1,036,300	$207,260
3C	21/12-inch North Central Basin Interceptors	40%	70%	30%	$2,839,500	$851,850
4C	8-inch Bohls Place Interceptor	70%	100%	30%	$958,800	$287,640
5C	Club Lift Station Expansion	45%	55%	10%	$4,059,000	$405,900
6C	30/24-inch South Central Basin Interceptor	60%	80%	20%	$11,070,900	$2,214,180
				TOTAL	**$103,194,696**	**$30,690,346**

[1] Utilization in 2019 on proposed projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

Wastewater Impact Fee CIP-SA2

Proj. No.	Description of Project	Percent Utilization			Costs Based on 2019 Dollars	
		2019[1]	2029	2019-2029	Capital Cost	Impact Fee Eligible Cost
EXISTING ELIGIBLE						
F	Carmel Lift Station and Force Main	5%	100%	95%	$3,853,330	$3,660,664
G	36/24/21/18-inch Wilbarger Interceptors	10%	75%	65%	$4,188,786	$2,722,711
H	Vine Creek Lift Station and Force Main	0%	90%	90%	$1,812,459	$1,631,213
I	Impact Fee Study	0%	100%	100%	$32,496	$32,496
PROPOSED ELIGIBLE						
1W	Weiss Lane Lift Station Pump Upgrades	90%	100%	10%	$400,000	$40,000
2W	Carmel Lift Station Pump Upgrades	90%	100%	10%	$350,000	$35,000
3W	Weiss Lane LS and Carmel LS Operational Improvements	90%	100%	10%	$1,840,000	$184,000
4W	Sorento Interceptor Phase 2	70%	90%	20%	$4,892,000	$978,400
5W	Renewable Energy Park Force Main Extension	90%	100%	10%	$506,000	$50,600
6W	54-inch Wilbarger Creek Interceptor	30%	70%	40%	$25,007,300	$10,002,920
7W	8.0 MGD Wilbarger Wastewater Treatment Plant	0%	65%	65%	$115,440,000	$75,036,000
8W	24-inch West Wilbarger Creek Interceptor	0%	45%	45%	$7,326,400	$3,296,880
9W	24-inch East Wilbarger Creek Interceptor	0%	45%	45%	$2,353,200	$1,058,940
				TOTAL	**$168,001,971**	**$98,729,824**

[1] Utilization in 2019 on proposed projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

Service Unit Equivalencies (SUE)

Meter Size	Safe Maximum Operating Capacity (1) (gpm)	Service Unit Equivalent
5/8" Displacement	15	1.0
3/4" Displacement	25	1.7
1" Displacement	40	2.7
1 1/2" Displacement	50	3.3
2" Displacement	100	6.7
3" Compound	320	21.3
4" Compound	500	33.3
4" Combination	700	46.7
6" Compound	1,000	66.7
6" Combination	1,600	106.7
8" Combination	2,800	186.7

(1) Safe maximum operating capacity is based on AWWA standards C700 and C710, C702, and C703.

Projected Water Service Units

Meter Size	2019		2029		Growth in Service Units
	Meters [1]	Service Units	Meters [3]	Service Units	
5/8" Displacement	14,492	14,492	25,953	25,953	11,461
3/4" Displacement	72	120	129	215	95
1" Displacement	155	413	278	740	327
1 1/2" Displacement	125	417	224	746	330
2" Displacement	163	1,087	292	1,946	859
3" Compound	14	299	25	535	236
4" Compound	11	367	20	657	290
4" Combination	2	93	4	167	74
6" Compound	4	267	7	478	211
6" Combination	6	640	11	1,146	506
8" Combination	7	1,307	13	2,340	1,033
Total	**15,051**	**19,501**	**26,954**	**34,923**	**15,422**

(1) Meter count provided by City (minus meters in Manville service area).

(2) Based on AWWA C700 and C710, C702, and C703 Maximum Safe Operating Flow.

(3) Based on 6% growth rate.

Water Impact Fee Calculation

Water Impact Fee	
Total Eligible Capital Improvement Costs	$157,572,239
Total Eligible Financing Costs	$87,132,630
Total Eligible Impact Fee Costs	$244,704,869
Growth in Service Units	15,422
Maximum Water Impact Fee per Service Unit (1)	$15,867
Impact Fee Credit per Service Unit (2)	$7,934
Maximum Allowable Water Impact Fee (3)	**$7,934**

(1) Total Eligible Costs divided by the Growth in Service Units.

(2) Credit is 50% of Maximum Water Impact Fee per Service Unit.

(3) Maximum Allowable Wastewater Impact Fee is Maximum Water Impact Fee minus the Impact Fee Credit per Service Unit.

Projected Wastewater Service Units – SA1

Meter Size	2019		2029		Growth in Service Units
	Meters [1]	Service Units	Meters [3]	Service Units	
5/8" Displacement	10,432	10,432	19,334	19,334	8,901
3/4" Displacement	61	102	113	188	87
1" Displacement	146	388	270	719	331
1 1/2" Displacement	111	368	205	683	314
2" Displacement	139	925	257	1,715	789
3" Compound	14	299	26	554	255
4" Compound	5	167	9	309	142
4" Combination	1	42	2	79	36
6" Compound	3	200	6	371	171
6" Combination	5	480	8	890	410
8" Combination	7	1,307	13	2,422	1,115
Total	**10,923**	**14,710**	**20,242**	**27,262**	**12,551**

(1) Meter count provided by City and allocated for each wastewater service area based on billing data.

(2) Based on AWWA C700 and C710, C702, and C703 Maximum Safe Operating Flow.

(3) Based on Service Area 1 growth rate of 6.36%.

Wastewater Impact Fee Calculation – SA1

Wastewater Impact Fee - Service Area 1	
Total Eligible Capital Improvement Costs	$30,690,346
Total Eligible Financing Costs	$16,970,823
Total Eligible Impact Fee Costs	$47,661,169
Growth in Service Units	12,551
Maximum Wastewater Impact Fee per Service Unit (1)	$3,797
Impact Fee Credit per Service Unit (2)	$1,899
Maximum Allowable Wastewater Impact Fee (3)	**$1,899**

(1) Total Eligible Costs divided by the Growth in Service Units.

(2) Credit is 50% of Maximum Wastewater Impact Fee per Service Unit.

(3) Maximum Allowable Wastewater Impact Fee is Maximum Wastewater Impact Fee minus the Impact Fee Credit per Service Unit.

Projected Wastewater Service Units – SA2

Meter Size	2019		2029		Growth in Service Units
	Meters [1]	Service Units	Meters [3]	Service Units	
5/8" Displacement	8,448	8,448	17,255	17,255	8,808
3/4" Displacement	11	18	23	38	19
1" Displacement	17	46	36	95	48
1 1/2" Displacement	17	58	36	119	61
2" Displacement	32	215	66	439	224
3" Compound	0	0	0	0	0
4" Compound	6	200	12	409	209
4" Combination	1	51	2	104	53
6" Compound	1	67	2	136	70
6" Combination	2	160	3	327	167
8" Combination	0	0	0	0	0
Total	**8,535**	**9,263**	**17,434**	**18,921**	**9,659**

(1) Meter count provided by City and allocated for each wastewater service area based on billing data.

(2) Based on AWWA C700 and C710, C702, and C703 Maximum Safe Operating Flow.

(3) Based on Service Area 2 growth rate of 7.40%.

Wastewater Impact Fee Calculation – SA2

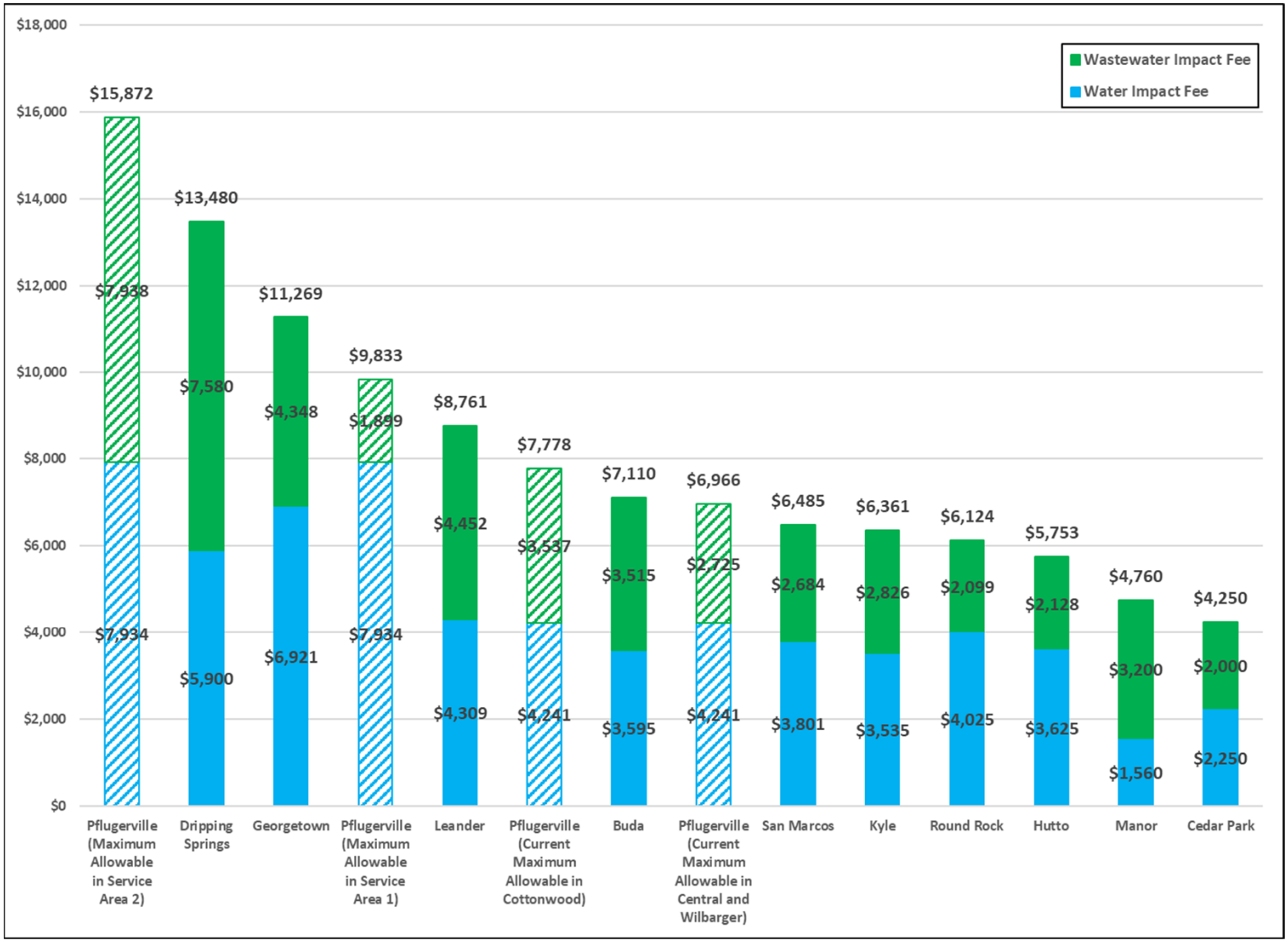
Wastewater Impact Fee - Service Area 2	
Total Eligible Capital Improvement Costs	$98,729,824
Total Eligible Financing Costs	$54,594,574
Total Eligible Impact Fee Costs	$153,324,398
Growth in Service Units	9,658
Maximum Wastewater Impact Fee per Service Unit (1)	$15,876
Impact Fee Credit per Service Unit (2)	$7,938
Maximum Allowable Wastewater Impact Fee (3)	**$7,938**

(1) Total Eligible Costs divided by the Growth in Service Units.

(2) Credit is 50% of Maximum Wastewater Impact Fee per Service Unit.

(3) Maximum Allowable Wastewater Impact Fee is Maximum Wastewater Impact Fee minus the Impact Fee Credit per Service Unit.

Comparison Cities



Schedule

Jan 6	CIAC Meeting #3: Impact fee calculations, benchmarking consideration/recommendation of impact fee Final Master Plan Reports to the City
Jan 28	**Resolution** by City Council establishing Public Hearing date to consider possible adoption of impact fee (PH within 60 days of resolution) and presentation on Water Master Plan and Wastewater Master Plan Report.
Feb 7	**Publish Notice of Public Hearing** on impact fee (at least 30 days before PH; Report made available to public)
Feb 13	Impact fee written recommendation to City Council by CIAC
March 3	CIAC recommendation due to City Secretary/Council (at least 5 business days prior to PH)
Mar 10	**Public Hearing** on Impact Fee; **Resolution/Ordinance** approving impact fee (*adoption within 30 days of PH*)
Mar 24	**Fall back date for adoption of Resolution/Ordinance**

Questions & Discussion