

# **WORKING DOCUMENT FOR PUBLIC REVIEW JULY 2013**

**IMPACT FEE REPORTS:  
ASSESSED AND COLLECTED FEES  
AND  
IMPACT FEE LAND USE ASSUMPTIONS  
AND  
IMPACT FEE CAPITAL IMPROVEMENTS PLAN**

**City of Austin, Texas  
Austin Water Utility**

**DRAFT SUBJECT TO CHANGE**

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ASSESSED AND COLLECTED IMPACT FEES *PLACEHOLDER*

City of Austin, Texas  
Austin Water Utility

Working Document for Public Review July 2013

I. ASSESSED AND COLLECTED IMPACT FEES *PLACEHOLDER*

## IMPACT FEE LAND USE ASSUMPTIONS

City of Austin, Texas  
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**DRAFT SUBJECT TO CHANGE**

IMPACT FEE LAND USE ASSUMPTIONS  
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## IMPACT FEE LAND USE ASSUMPTIONS

City of Austin, Texas  
Austin Water Utility

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### I. INTRODUCTION

Texas law, specifically Texas Local Government Code, Chapter 395, enacted by the State Legislature in 1987 (Senate Bill 336) and amended as recently as 2011, empowers cities to impose and collect "impact fees" and establishes the guidelines cities must follow to do so. The term "impact fee" includes the "capital recovery fees" that the City of Austin charges for facility expansion of its water and wastewater systems. The City of Austin water and wastewater impact fees are further governed by the Austin City Code, Title 25 Land Development, Chapter 25-9 Water and Wastewater, Article 3 Water and Wastewater Capital Recovery Fees, Sections 25-9-311 through 25-9-353, other sections of the Land Development Code referred to by these sections, and ordinances approved amending these sections.

Among the several requirements imposed on cities by Chapter 395 is the development and approval of a report called "land use assumptions." Section 395.001 (5) of the Local Government Code defines the term succinctly: "Land use assumptions" includes a description of the service area and projections of changes in land uses, densities, intensities, and population over at least a 10-year period." In a definitive article written by three people who helped develop Chapter 395, entitled "Impact Fees: The Intent Behind the New Law" (St. B. Tex. Env'tl. L. J., vol. 19; 1989; pp. 68-73) by Ray Farabee, et.al., the term is so described:

"Land use assumptions" are the basic projections of population growth and future land uses on which plans for new or expanded facilities must be based. The land use assumptions may be general and do not require detailed projections for specific parcels of land. They should, however, be thorough enough to permit reasonably accurate long range planning. The time period on which these projections are based must be at least ten years.

This report has been prepared for the purpose of complying with the requirements of Chapter 395 of the Local Government Code with respect to "land use assumptions." It is an amendment to the City's impact fee land use assumptions approved by the City Council on February 13, 1997, and subsequently amended and updated, most recently in August 2007, and adopted by City Council September 17, 2007. State law requires that the land use assumptions be updated at least every five years.

### II. SERVICE AREA

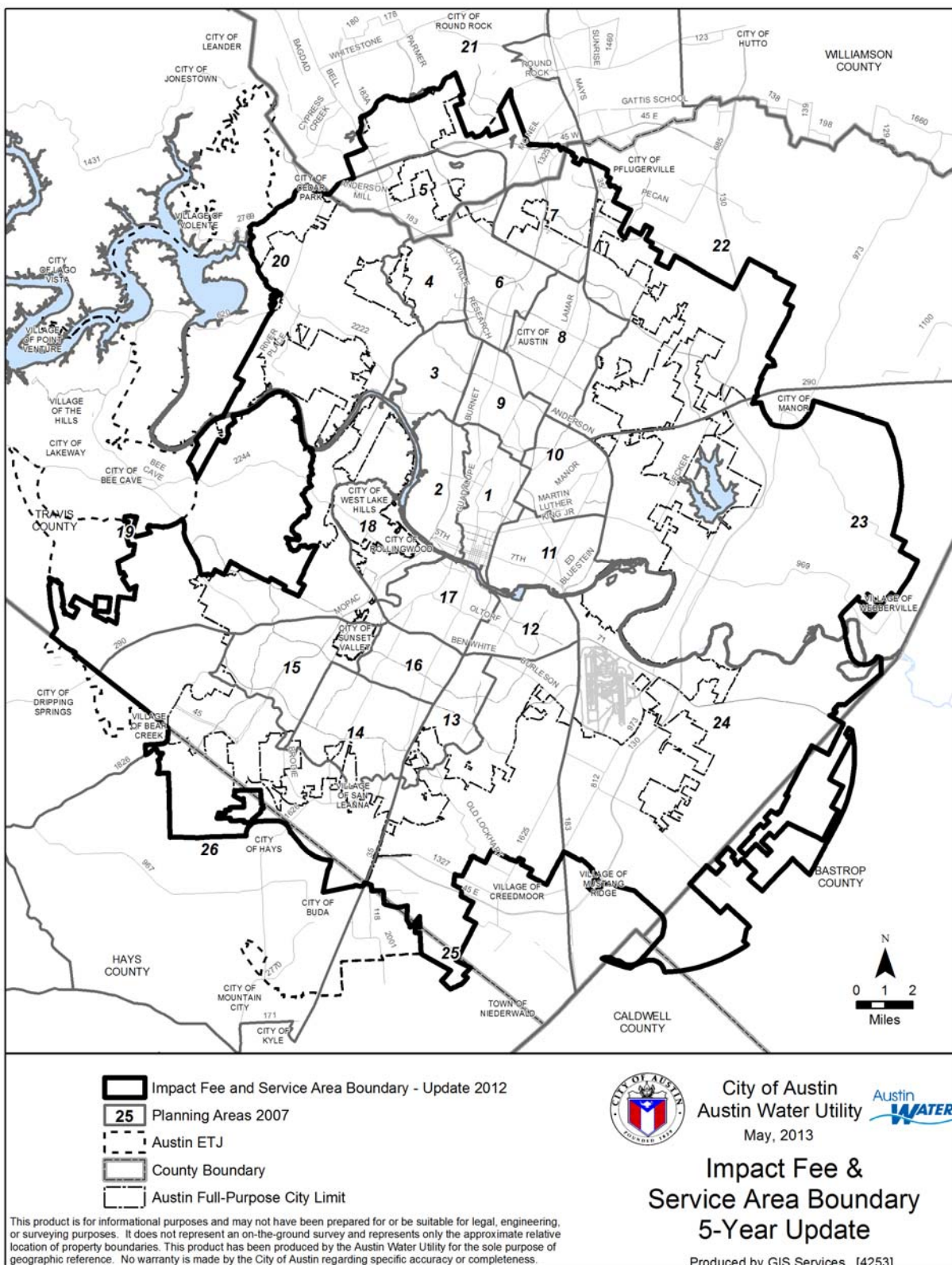
The "service area", for the purposes of these land use assumptions, is the area within the corporate boundaries of the City of Austin and its existing extraterritorial jurisdiction (ETJ) to be served by the existing city water and wastewater systems and the facilities listed in the revised Impact Fee Capital Improvements Plan. The boundary encompassing this area is illustrated by Map 1. For general reference the areas are:

- 2007 outer boundary = 537 sq. mi. (343,861 acres)
- 2012 outer boundary = 544 sq. mi. (347,965 acres)

For reference, within the outer boundary, the 2010 served area covers approximately 192,000 acres, not including conservation land and other cities' jurisdictions, in general. Appendix A of this land use assumptions report provides the written description of the updated impact fee service area boundary for ordinance purposes. The written description, not the map, is the official service area description.

The Impact Fee "service area" defines the area to be used to calculate projected "service units" and the impact fee.





These land use assumptions anticipate that the impact fees to be calculated will be imposed uniformly over the entire service area and will be calculated in a manner consistent with that premise. This is explicitly provided for by 1989 amendments to Chapter 395 of the Local Government Code, which added Section 395.0455. This section reads in part:

System-Wide 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 system-wide 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.

Another paragraph in this section further clarifies the requirements of state law:

- (c) After adoption of system-wide 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 system-wide land use assumptions.

### III. GROWTH PROJECTIONS

For the 5-year update, 2010 U.S. Census population data was used to estimate the 2010 served population. This data was also used to adjust and improve the 2010 employment figures and the 2020 population and employment forecasts developed in years past by the Planning and Development Review Department. The 10-year period from 2010 to 2020 is used as the basis for determining the amount of growth in a 10-year planning horizon as required in the Impact Fee Act. The GIS-based review and adjustment procedure for updating the growth projection was done in coordination with the City Demographer from the Planning and Development Review Department. The resulting projection takes the form of population and employment distributed by traffic serial zones, which are then aggregated into the water pressure zones and wastewater drainage areas necessary for analysis of facility demand versus capacity relationships.

Results for the Planning Areas illustrated on Map 1 are:

Table 1 - Population Growth. Shows estimated 2010 and projected 2020 population aggregated to Planning Areas and to total service area. As noted above, these figures are consistent with U.S. census data for 2010 and projections for 2020. These 10-year growth population figures correspond to estimates and projections of residents actually receiving City of Austin water and/or wastewater service. This table includes the calculated average annual growth rate and the gross population density. The gross densities are calculated by dividing the estimated or projected population by the total acres in each Planning Area.

Table 2 - Employment Growth. Shows estimated 2010 and projected 2020 employment aggregated to Planning Area and to total service area. As noted above, these 10-year growth figures are consistent with Planning and Development Review Department data for 2010 and projections for 2020. This table includes the calculated average annual growth rate, and the gross employment density. The gross densities are calculated by dividing the estimated or projected employees by the total acres in each Planning Area. As with population, these figures correspond to work sites that will actually receive City of Austin water and/or wastewater service.

Table 1: Population Growth

Planning Area Summary	2010 Population	2020 Population	Population Annual Growth Rate	Acres for 2010 Served	2010 Residential Gross Density Pop/Ac	2020 Residential Gross Density Pop/Ac *	Change in Residential Gross Density
1	60,282	68,750	1.32%	5,139	11.73	13.38	14.05%
2	25,815	27,727	0.72%	5,315	4.86	5.22	7.41%
3	27,171	28,242	0.39%	5,328	5.10	5.30	3.94%
4	20,455	21,782	0.63%	4,244	4.82	5.13	6.49%
5	37,491	44,846	1.81%	5,353	7.00	8.38	19.62%
6	32,643	36,390	1.09%	6,410	5.09	5.68	11.48%
7	31,217	36,150	1.48%	5,178	6.03	6.98	15.80%
8	74,144	77,052	0.39%	8,318	8.91	9.26	3.92%
9	31,967	35,210	0.97%	4,689	6.82	7.51	10.14%
10	41,351	50,543	2.03%	5,735	7.21	8.81	22.23%
11	35,787	42,209	1.66%	6,317	5.66	6.68	17.95%
12	43,359	45,269	0.43%	4,596	9.43	9.85	4.41%
13	35,255	38,000	0.75%	4,463	7.90	8.51	7.79%
14	47,441	51,549	0.83%	7,965	5.96	6.47	8.66%
15	39,986	45,632	1.33%	7,996	5.00	5.71	14.12%
16	31,163	34,604	1.05%	4,245	7.34	8.15	11.04%
17	43,605	48,858	1.14%	5,627	7.75	8.68	12.05%
18	12,629	13,032	0.31%	5,520	2.29	2.36	3.19%
19	29,897	33,678	1.20%	13,355	2.24	2.52	12.65%
20	30,345	39,781	2.74%	8,240	3.68	4.83	31.09%
21	16,616	35,702	7.95%	4,185	3.97	8.53	114.87%
22	39,468	62,383	4.68%	16,389	2.41	3.81	58.06%
23	20,433	31,871	4.55%	9,799	2.09	3.25	55.98%
24	16,527	27,781	5.33%	22,191	0.74	1.25	68.10%
25	20,225	35,416	5.76%	7,634	2.65	4.64	75.11%
26	30,663	38,534	2.31%	7,340	4.18	5.25	25.67%
<b>Total within Boundary</b>	<b>875,936</b>	<b>1,050,991</b>	<b>1.84%</b>	<b>191,570</b>	<b>4.57</b>	<b>5.49</b>	<b>19.98%</b>

\* Based on 2010 served area acreage

Table 2: Employment Growth

Planning Area Summary	2010 Employment	2020 Employment	Employment Annual Growth Rate	Acres for 2010 Served Area	2010 Employment Gross Density Emp/Ac	2020 Employment Gross Density Emp/Ac *	Change in Employment Gross Density
1	133,511	142,441	0.65%	5,139	25.98	27.72	6.69%
2	15,607	17,462	1.13%	5,315	2.94	3.29	11.89%
3	11,162	12,479	1.12%	5,328	2.09	2.34	11.80%
4	6,290	7,072	1.18%	4,244	1.48	1.67	12.43%
5	15,618	19,372	2.18%	5,353	2.92	3.62	24.04%
6	46,916	49,371	0.51%	6,410	7.32	7.70	5.23%
7	9,712	14,694	4.23%	5,178	1.88	2.84	51.30%
8	28,275	31,905	1.22%	8,318	3.40	3.84	12.84%
9	28,872	31,381	0.84%	4,689	6.16	6.69	8.69%
10	27,546	46,321	5.33%	5,735	4.80	8.08	68.16%
11	24,264	29,214	1.87%	6,317	3.84	4.62	20.40%
12	26,337	28,627	0.84%	4,596	5.73	6.23	8.69%
13	9,615	11,910	2.16%	4,463	2.15	2.67	23.87%
14	6,285	8,245	2.75%	7,965	0.79	1.04	31.19%
15	8,202	10,175	2.18%	7,996	1.03	1.27	24.06%
16	13,265	15,706	1.70%	4,245	3.12	3.70	18.40%
17	22,107	27,013	2.02%	5,627	3.93	4.80	22.19%
18	11,616	11,806	0.16%	5,520	2.10	2.14	1.64%
19	13,804	16,954	2.08%	13,355	1.03	1.27	22.82%
20	13,961	17,786	2.45%	8,240	1.69	2.16	27.40%
21	7,271	14,309	7.00%	4,185	1.74	3.42	96.80%
22	34,228	50,830	4.03%	16,389	2.09	3.10	48.50%
23	22,952	30,829	2.99%	9,799	2.34	3.15	34.32%
24	22,820	42,682	6.46%	22,191	1.03	1.92	87.04%
25	14,668	25,216	5.57%	7,634	1.92	3.30	71.91%
26	4,936	8,865	6.03%	7,340	0.67	1.21	79.60%
<b>Total within Boundary</b>	<b>579,840</b>	<b>722,665</b>	<b>2.23%</b>	<b>191,570</b>	<b>3.03</b>	<b>3.77</b>	<b>24.63%</b>

\* Based on 2010 served area acreage

#### IV. SERVICE UNITS

##### Water and Wastewater Service Unit Assumptions

Calculation of the impact fee in accordance with Chapter 395 of the Local Government Code requires the use of a "service unit." Within the definitions section of Chapter 395.001(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."

To use a simplified explanation, the number of projected new service units are divided into the costs of capital projects allocated to this new growth in order to calculate the allowable impact fee (per service unit). The journal article by Ray Farabee, et.al, mentioned previously, states that the "'Service unit' is one of the most important, but conceptually difficult, elements of the (new) law." This article also observes that "Cities may select their own standards for measuring service units, but any measure chosen must attempt to accurately reflect differences in service consumption between users." The service unit is based on the size of water meter sold, exactly as the fee unit was calculated. Table 3 illustrates the relationship between service units and meter sizes. The service unit calculation depends on the relative differences between the various sizes and types of meters as determined by their rated maximum flows and rated continuous flows.

Table 3: CALCULATION OF SERVICE UNITS

The size and type of water meter purchased determines number of service units in accordance with the following schedule:

METER SIZE	TYPE	SERVICE UNITS
5/8"	positive displacement	1
3/4"	positive displacement	1.5
1"	positive displacement	2.5
1 1/2"	positive displacement	5
1 1/2"	turbine	8
2"	positive displacement	8
2"	turbine	10
3"	compound	16
3"	turbine	24
4"	compound	25
4"	turbine	42
6"	compound	50
6"	turbine	92
8"	turbine	160
10"	turbine	250
12"	turbine	330
6" x 2"	fire service	based on domestic demand
8" x 2"	fire service	based on domestic demand
10" x 2"	fire service	based on domestic demand

The service unit is determined on the basis of the American Water Works Association (AWWA) standards C700-09, C701-12 and C702-10 recommended maximum rate for continuous duty (flow) of the meter purchased at sale of tap. The service unit, as described here, has for years been in Austin's capital recovery fee ordinances; it is well accepted, and it is extraordinarily easy to calculate at time of collection. In addition, it is based on Uniform Plumbing Code meter size and type criteria counting plumbing fixtures that directly reflect the differences in service consumption between different users. Table 4 shows the latest count of all meters in the system in September 2011 by size. From that list is calculated the number of hypothetical service units installed in the system. That figure is 352,521 service units as shown on Table 4.

Table 4 - Estimate of Service Units in the Austin Water Distribution System

Meter Size	Meters September 2011 *	Service Unit Multiplier **	September 2011 Service Units
5/8"	185,342	1	185,342
3/4"	10,509	1.5	15,764
1"	9,087	2.5	22,718
1 1/4"	10	5	50
1 1/2"	4,063	6.58	26,719
2"	3,693	8.94	33,020
3"	1,221	18.98	23,170
4"	587	27.11	15,916
6"	300	56.07	16,822
8"	29	100.74	2,921
10"	39	250	9,750
12"	1	330	330
16"	0		0
<b>Total</b>	<b>214,881</b>		<b>352,521</b>

\* Meter count September 2011 without individual customers in wholesale utilities.

#### Existing Water System Service Units

To determine the flow equivalent of a water system service unit the weather normalized pumpage is divided by the total number of service units. The weather-normalized water pumpage for FY10 (October 2009-September 2010) is estimated to be 49,967 million gallons (actual FY10 usage was 43,827 million gallons). Therefore the current system-wide flow average is 388 gallons per day per service unit (or 0.27 gpm). Weather normalized pumpage estimates are used to minimize the impact of weather related variation. Water use and pumpage are significantly impacted by weather.

$$\frac{\text{Weather Normalized Total Water System Pumpage}}{\text{Total Number of Water System Service Units}} = \text{Water Flow per Day per Service Unit}$$

$$\frac{49,967 \text{ Million Gallons per Year}}{352,521 \text{ Service Units}} = 388 \text{ Gallons per Day per Service Unit}$$

#### Existing Wastewater System Service Units

The wastewater collection system does not have individual meters for a majority of the customers. In most cases wastewater is billed based on water meter data. Therefore wastewater collection system service units are calculated as a percentage of the water distribution system service units. Based on 2010 census data 96.4% of the AWU water customers are also wastewater customers. It is assumed that there is a direct relationship between the number of



customers and the number of service units so the number of wastewater service units is estimated to be 96.4% of the water distribution system service units or 339,878 service units.

The wastewater collection system service unit flow equivalent is calculated using the weather normalized total system influent treated at the wastewater treatment plants. The FY10 weather normalized total wastewater collection system influent is estimated to be 35,604 Million gallons. Therefore the flow equivalent per wastewater service unit is estimated to be 287 gallons per day per service unit.

$$\frac{\text{Weather Normalized Total Wastewater System Influent}}{\text{Total Number of Wastewater System Service Units}} = \text{Wastewater Flow per Day per Service Unit}$$

$$\frac{35,604 \text{ Million Gallons per Year}}{339,878 \text{ Service Units}} = 287 \text{ Gallons per Day per Service Unit}$$

#### Future Water and Wastewater Service Units

The projection of new service units presents a challenge in that it depends on size, type and number of meters sold, while the basis for the forecasts are population and employment converted to water and wastewater flows. The projection estimates of future service units are based on relationships between population, employment, total flow, and per capita flow projections.

Future service unit forecasts are derived from projections of population and employment combined with planned water pumpage forecasts. 2020 water pumpage forecasts are calculated in accordance with The 140 Plan, Austin Water Utility's Conservation Plan, referring to a goal of reducing the per capita pumpage from 156 gpcd in 2010 (weather normalized) to 140 gpcd by 2020. Reducing the per capita pumpage, while increasing the population and employment, results in a reduced number of gallons per service unit. The 2020 water flow per service unit is expected to be reduced proportionally with the per capita flow so the 2020 water flow per service unit is estimated to be 348 gallons per day per service unit.

$$\frac{156 \text{ gpcd (2010)}}{140 \text{ gpcd (2020)}} = \frac{388 \text{ gallons per day per service unit (2010)}}{348 \text{ gallons per day per service unit (2020)}}$$

The 2020 total system water pumpage, calculated based on the 140 Plan and the projected population of 1,050,991, is 53,853 Million gallons (leap year). Dividing the total annual pumpage by 348 gallons per day per service unit gives a 2020 estimate of 422,813 service units. For water the 2010 service units are 352,521 and for 2020 they are 422,813, therefore, the 10-year growth increment is 70,292.

Future wastewater service units were calculated in a similar fashion. For wastewater projections the 140 Plan Water Conservation plans have been taken into account through a relatively small reduction in total annual influent flow projections. Many of the water conservation measures in the 140 Plan are aimed at outdoor use so it is not expected to influence the wastewater flows as much as the water pumpage. For these reasons, the wastewater flow per service unit estimate, 287 gallons per service unit per day is assumed to remain constant from 2010 to 2020. Total annual wastewater influent flows for 2020 are projected to be 42,967 Million gallons. 42,967 million gallons generated at an average of 287 gallons per day per service unit yields an estimate of 410,166 wastewater service units in 2020. For wastewater the 2010 service units are 339,878 and for 2020 they are 410,166, therefore, the 10-year growth increment is 70,288.

The spatial summary of the results of this exercise is presented in Table 5. Since the location of growth and the service unit growth increments for water and wastewater essentially track the same, a wastewater version of Table 5 is not included in the report. The population and employment projections of Section III Tables 1 and 2 were converted to average daily water pumpage and then to forecasts of new service units for the entire service area.

Table 5: Projection of Water Service Units

Planning Area Summary	2010		2010		2010 Total		2010 Service		2020		2020		2020 Total		2020 Service		10 Year	
	Residential	MGD	Employment	MGD	MGD	Units	Residential	MGD	Employment	MGD	MGD	Units	MGD	Units	Service Unit	Growth		
1	5.6	5.6	10.2	15.9	40,854	5.7	9.7	15.3	44,009	3,155								
2	2.4	2.4	1.2	3.6	9,389	2.3	1.2	3.5	10,073	685								
3	3.1	3.1	0.9	4.0	10,335	2.9	0.9	3.7	10,763	428								
4	2.5	2.5	0.5	3.0	7,604	2.3	0.5	2.8	8,054	450								
5	4.6	4.6	1.2	5.8	14,939	4.8	1.4	6.2	17,713	2,773								
6	3.8	3.8	3.7	7.4	19,177	3.7	3.4	7.1	20,491	1,314								
7	3.7	3.7	0.8	4.4	11,378	3.7	1.0	4.8	13,680	2,302								
8	7.0	7.0	2.3	9.2	23,767	6.4	2.3	8.6	24,847	1,081								
9	3.1	3.1	2.3	5.4	13,977	3.0	2.2	5.2	15,076	1,099								
10	3.8	3.8	2.2	6.0	15,446	4.1	3.2	7.4	21,178	5,732								
11	3.4	3.4	1.9	5.2	13,433	3.5	2.0	5.5	15,728	2,295								
12	4.1	4.1	2.0	6.1	15,712	3.8	1.9	5.7	16,383	671								
13	3.4	3.4	0.7	4.2	10,711	3.3	0.8	4.1	11,672	961								
14	5.0	5.0	0.5	5.6	14,351	4.8	0.6	5.5	15,748	1,398								
15	4.6	4.6	1.1	5.6	14,486	4.6	1.2	5.8	16,555	2,069								
16	3.1	3.1	1.0	4.1	10,594	3.1	1.0	4.1	11,783	1,190								
17	4.2	4.2	1.7	5.9	15,180	4.2	1.8	6.0	17,183	2,002								
18	1.2	1.2	0.9	2.1	5,401	1.1	0.8	1.9	5,458	58								
19	3.5	3.5	1.5	4.9	12,718	3.5	1.6	5.1	14,578	1,860								
20	3.8	3.8	1.1	4.9	12,569	4.4	1.2	5.6	16,078	3,510								
21	2.0	2.0	0.6	2.6	6,712	3.8	1.0	4.8	13,936	7,224								
22	4.1	4.1	2.7	6.8	17,485	5.5	3.6	9.1	26,185	8,700								
23	1.9	1.9	1.8	3.7	9,492	2.6	2.1	4.7	13,617	4,125								
24	1.6	1.6	1.7	3.3	8,484	2.3	2.9	5.2	14,890	6,406								
25	1.9	1.9	1.1	3.1	7,873	3.0	1.7	4.7	13,556	5,683								
26	3.6	3.6	0.5	4.1	10,453	4.0	0.7	4.7	13,576	3,122								
Total within Boundary	91.0	91.0	45.9	136.9	352,521	96.5	50.7	147.1	422,813	70,292								



**IMPACT FEE LAND USE ASSUMPTIONS – APPENDIX A**

Description of Impact Fee Boundary for 5-Year Update Adopted TBD  
(Ord -00)

All jurisdiction boundaries such as county lines, utility companies, municipalities, etc., used in this description are those boundaries as they exist on the date this boundary is adopted and are to be recognized as the most accurate location of the impact fee boundary if another landmark or distance reference creates an ambiguity.

All street and landmark names reflect one of the names shown in commonly available maps of the Austin area. The City of Austin GIS was used for street names in this description. Distances have been scaled from Austin GIS and are intended to approximately place the boundary when landmarks are not available or may be ambiguous. The referenced landmark is to be taken as the accurate location.

When a road, street, etc. is referenced, the boundary is assumed to follow the centerline, and only one side of the road, street, etc. is within the impact fee service area boundary.

Boundaries of any city's jurisdiction (ETJ or city limits), counties, and the service area of another utility, can be found by referring to maps available from those individual entities. The accuracy of those maps is not warranted by the City of Austin or the Austin Water Utility. Taxing authority records also indicate inclusion in the individual entities.

The impact fee service area described below shall not include the certificated service area of another utility providing water and/or wastewater service to its customers under a certificate of convenience and necessity from the Texas Commission on Environmental Quality or its predecessor and successor agency and with whom the City has no wholesale contract to provide water and/or sewer service providing for the payment of impact fees.

The impact fee service area described below shall not include land within the jurisdiction of cities other than Austin; provided, however, that within the jurisdiction of cities other than Austin, land is included within the impact fee service area where it is included in the service area of those utilities with whom the City has wholesale contracts to provide water and/or sewer service providing for the payment of impact fees or where that other city has executed an agreement with Austin for the City to supply retail water and/or wastewater service providing for the payment of impact fees.

Where the impact fee service area is described by the Austin jurisdiction passing through a tract, the entire tract which is partially in the Austin jurisdiction and not in the jurisdiction of another city will be considered to be in the service area.

In addition to land within the impact fee service area described below, the impact fee service area includes land in the service areas of those utilities with whom the City has wholesale contracts to provide water and/or wastewater service providing for the payment of impact fees, to the extent such land has been approved by the City to receive water and/or wastewater service from the City.

Any tract of land which is not entirely within the impact fee service area, as described below or according to the conditions described above, is not considered to be in the impact fee service area.

Accordingly, the City of Austin Impact Fee Service Area Boundary is described as follows:

1. Beginning at the junction of the east frontage road of IH-35 South and the common city limits of Austin and Buda, the boundary proceeds along the jurisdiction boundary of Austin in a generally east and south direction (to include the Sunfield #2 MUD) for about 3.0 miles until it turns generally NE.
2. Then proceeding in a general NE direction along the common jurisdiction boundary of Austin and Buda for about 0.5 mile to the jurisdiction boundary west of S. Turnersville Road.
3. Then proceeding in a general south direction along the common jurisdiction boundary of Austin and Buda west of S. Turnersville Rd., including the electric substation property, for about 1.7 miles to Satterwhite Road.
4. Then proceeding in a general east and SE direction along Satterwhite Rd. for about 2.1 miles to the common jurisdiction boundary of Austin and Niederwald near Williamson Road.

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5. Then proceeding in a general NE direction along the common jurisdiction boundary of Austin and Niederwald for about 0.4 mile to the intersection of the common jurisdiction boundaries of Niederwald and Austin at Williamson Road.
6. Then proceeding in a general NE direction along the common jurisdiction boundary of Austin and Creedmoor for about 5.7 miles including sections along Williamson Road, Graef Road, Wright Rd., Palmer Road and near FM 1327 and Carl Road.
7. Then proceeding in a general NNE direction along the common jurisdiction boundary of Austin and Creedmoor near Carl Road for about 0.9 mile to its intersection with Old Lockhart Hwy.
8. Then proceeding in a general SE direction along the common jurisdiction boundary of Austin and Creedmoor for about 3.9 miles until it intersects with the common jurisdiction boundary of Austin, Creedmoor, and Mustang Ridge and turns generally northeast.
9. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Mustang Ridge for about 3.8 miles to the vicinity of SH130 until it turns generally ESE.
10. Then proceeding in a general ESE direction along the jurisdiction boundary of Austin for about 3.8 miles across the common Travis/Bastrop County line to the common jurisdiction boundary of Bastrop and Austin and turns generally NE.
11. Then proceeding in a general NNE direction along the jurisdiction boundary of Austin for about 22.2 miles to the centerline of the Colorado River and turns generally NNW.
12. Then proceeding in a general NNW direction from the centerline of the Colorado River along the common jurisdiction boundary of Austin and Webberville for about 9.5 to the end of the Webberville jurisdiction on Blake Manor Rd. where it turns NE.
13. Then proceeding in a general NE and NW direction along the jurisdiction boundary of Austin following Blake Manor Road for about 1.3 miles and turns generally north.
14. Then proceeding in a general north direction along the jurisdiction boundary of Austin for about 5.0 miles to its intersection with Littig Road, which is also the common jurisdiction boundary of Austin and Manor, and continues east along the jurisdiction boundary.
15. Then proceeding in a general WNW direction along the jurisdiction boundary of Austin, which is also Littig Road, for about 2.2 miles along the common jurisdiction boundary of Austin and Manor and continues along the Austin jurisdiction boundary.
16. Then proceeding in a clockwise direction WNW, SW, NW and NE along the common jurisdiction boundary of Austin and Manor for about 5.6 miles until it intersects with Gregg Manor Road.
17. Then proceeding in a general NNW direction along Gregg Manor Rd., which is the jurisdiction boundary of Austin for about 0.4 mile until it intersects Fuchs Grove Road and the Austin jurisdiction.
18. Then proceeding in a general NE direction along the jurisdiction boundary of Austin near Fuchs Grove Road for about 3.0 miles until it intersects with Cameron Road.
19. Then proceeding in a general NW direction along the jurisdiction boundary of Austin for about 1.9 mile (Cameron Road) until it and the common jurisdiction boundary of Austin and Pflugerville turns generally SW.
20. Then proceeding in general SW direction along the common jurisdiction boundary of Austin and Pflugerville (Cameron Road) for about 1.2 mile until it and the common jurisdiction boundary of Austin and Pflugerville turns generally NW.

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21. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 2.4 miles until the jurisdiction boundary turns generally SW just east of the intersection of Immanuel Road and Killingsworth Lane.
22. Then proceeding in a general SW direction along the common jurisdiction boundary of Pflugerville and Austin (east of Immanuel Road) for about 0.5 mile until the jurisdiction boundary turns generally NW.
23. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (south of Serenity Drive) for about 0.5 mile until the jurisdiction boundary turns generally NE.
24. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until the jurisdiction boundary turns generally NW.
25. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (south of St. Croix Ln.) for about 0.4 mile until the jurisdiction boundary turns generally NE.
26. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.1 mile until the jurisdiction boundary turns generally NW.
27. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.3 mile until the jurisdiction boundary turns generally NE.
28. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.5 mile until it turns generally NW.
29. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (north of Olympic Drive) for about 0.2 mile until it turns generally SW.
30. Then proceeding in a general SW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until it turns generally NW.
31. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until it turns generally SW.
32. Then proceeding in a general SW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until the jurisdiction boundary turns generally NW at Wells Branch Parkway.
33. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.3 mile until it turns generally NE.
34. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.9 mile until it turns generally NW at or near Old Austin-Pflugerville Road.
35. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (Old Austin-Pflugerville Road, Pecan St. and FM 1825) for about 0.7 mile until the jurisdiction boundary turns generally NE.
36. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Central Commerce Dr. and West Pflugerville Loop) for about 0.5 mile until the jurisdiction boundary turns generally WNW.
37. Then proceeding in a general WNW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.2 mile until the jurisdiction boundary turns generally west at or near White River Blvd.

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38. Then proceeding in a general west direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Grand Avenue Parkway) for about 0.2 mile until the jurisdiction boundary turns generally NNW.
39. Then proceeding in general NNW and NNE directions along the common jurisdiction boundary of Pflugerville and Austin for about 0.3 mile until the jurisdiction boundary turns generally NW at or near Royston Lane.
40. Then proceeding in a general WNW direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Royston Lane) for about 0.1 mile until the jurisdiction boundary turns generally NW.
41. Then proceeding in a general north direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Central Commerce Dr.) for about 0.2 mile until the jurisdiction boundary turns generally NW.
42. Then proceeding in a general WNW direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Picadilly Dr.) for about 0.7 mile until the jurisdiction boundary turns generally NW.
43. Then proceeding in general NW and west directions along the common jurisdiction boundary of Round Rock and Austin for about 0.4 mile until the jurisdiction boundary turns generally SSW at or near Bratton Lane.
44. Then proceeding in a general SSW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.2 mile (along or near Bratton Lane) until the jurisdiction boundary turns generally WNW.
45. Then proceeding in a general WNW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.3 mile until it turns generally NNE.
46. Then proceeding in a general NNE direction along the common jurisdiction boundary of Round Rock and Austin for about 0.2 mile until it turns generally WNW.
47. Then proceeding in a general WNW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.7 mile until it turns generally NW at or near FM 1325.
48. Then proceeding in a general NW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.2 mile until it turns generally west in the vicinity of SH 45.
49. Then proceeding in a general west direction along the common jurisdiction boundary of Round Rock and Austin for about 1.0 mile until it turns generally SW at or near McNeil Road.
50. Then proceeding in a general SW direction along the common jurisdiction boundary of Round Rock and Austin (and also along or near McNeil Road) for less than 0.1 mile until it turns generally WNW.
51. Then proceeding in a general WNW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.1 mile until it turns generally NNW.
52. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin for about 2.1 miles until it turns generally SW at or near RM 620.
53. Then proceeding in a general SW direction along the common jurisdiction boundary of Round Rock and Austin (and also along or near RM 620) for about 0.8 mile until it turns generally SSE.
54. Then proceeding in a general SSE direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of the Brushy Creek MUD) for about 0.8 mile until it turns generally WSW.
55. Then proceeding in a general WSW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of the Brushy Creek MUD) for about 0.6 mile until it turns generally NNW.

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56. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of the Brushy Creek MUD) for about 0.3 mile until it turns generally SW at or near RM 620.
57. Then proceeding in a general SW direction along the common jurisdiction boundary of Round Rock and Austin (and also along or near RM 620 and the boundary of Brushy Creek MUD) for about 0.6 mile until it turns generally NNW.
58. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 0.2 mile until it turns generally WSW.
59. Then proceeding in a general WSW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 0.2 mile until it turns generally NNW.
60. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 1.1 mile until it turns generally ENE.
61. Then proceeding in a general ENE direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 0.3 mile until it turns generally NNW.
62. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD and Fern Bluff MUD) for about 1.3 mile until it turns generally WSW at or near Brushy Creek Road.
63. Then proceeding in a general WSW direction along the northern jurisdiction boundary of Austin that also generally meanders alongside South Brushy Creek, for about 5.0 miles until it turns generally SW at or near US 183.
64. Then proceeding along US 183 North, also called South Bell Blvd., which marks the common jurisdiction boundary of Cedar Park and Austin for about 0.7 mile until it turns generally WSW.
65. Then proceeding in a general WSW direction along the common jurisdiction boundary of Cedar Park and Austin for about 0.8 mile until it turns generally SSE.
66. Then proceeding in a general SSE direction along the common jurisdiction boundary of Cedar Park and Austin for about 0.8 mile until it intersects FM 620 North.
67. Then proceeding in a general WSW direction along FM 620 North, which marks the common jurisdiction boundary of Cedar Park and Austin for about 1.1 mile until it intersects with FM 2769.
68. Then proceeding in general WNW direction along FM 2769, which marks the common jurisdiction boundary of Cedar Park and Austin for about 0.9 mile until it turns generally SW along FM 2769.
69. Then proceeding in a general WSW direction along FM 2769 (part of which marks the common jurisdiction boundary of Cedar Park and Austin) for about 2.7 miles until it intersects with Bullick Hollow Rd.
70. Then proceeding in a general SSE direction along Bullick Hollow Rd. for about 2.2 miles until it intersects with the Austin Water Utility property and turns SW along the Austin Water Utility property.
71. Then proceeding in a general SSE along the Austin Water Utility property for about 0.6 until it intersects with Bullick Hollow Road and continues SW.
72. Then proceeding in a general SSE direction along Bullick Hollow Road for about 0.2 mile until it intersects with the Austin Water Utility property and turns south along the Austin Water Utility property.
73. Then proceeding in a generally south direction along the Austin Water Utility property for about 1.5 miles until it intersects with FM 620 at the Cortana habitat property.

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74. Then proceeding in a general SSW direction along the west boundary of Cortana for about 2.7 miles until it turns generally SE.
75. Then proceeding in a general SE direction along the west boundary of Cortana for about 0.3 mile until it turns generally SSW.
76. Then proceeding in a general SSW direction along the west boundary of Cortana for about 1.5 mile until it intersects the Colorado River.
77. Then proceeding in a general WSW direction upstream along the Colorado River, along the border of Commons Ford Park, for about 0.3 mile.
78. Then proceeding in a general SW direction upstream along the Colorado River, along the border of the Balfour Tract, for about 1.0 mile.
79. Then proceeding in a general SSE and SSW direction along the common jurisdiction boundary of Austin and Bee Caves (which is the border of the Balfour Tract), for about 0.9 mile, until it turns generally SSE.
80. Then proceeding in a general SSE direction along the common jurisdiction boundary of Austin and Bee Caves (which is the border of the Balfour Tract), for about 0.7 mile, until it intersects FM 2244.
81. Then proceeding in a general east direction along FM 2244 for about 0.1 mile until it intersects the eastern boundary of the Balfour Tract.
82. Then proceeding in a general NNE direction along the border of the Balfour Tract for about 1.6 mile until it turns generally SE.
83. Then proceeding in a general SE direction along the border of the Balfour Tract and Commons Ford Ranch Park for about 0.2 mile to the south corner of Commons Ford Ranch Park.
84. Then proceeding in a general NNE direction along the border of Commons Ford Ranch Park for about 0.3 mile until it turns generally north in an arc.
85. Then proceeding in an approximate arc, following the boundary of Commons Ford Ranch Park for about 0.6 mile as it turns from north to NE.
86. Then proceeding in a general NNW direction along the border of Commons Ford Ranch Park for about 0.3 mile until it intersects the Colorado River.
87. Then proceeding in a general NE direction downstream along the Colorado River for about 1.9 mile.
88. Then proceeding in an approximate arc, following the course of the river for about 3.1 miles as it turns from east to south, and then from south to east.
89. Then proceeding in a general south direction along the WCID #10 boundary for about 1.7 mile until it intersects FM 2244 in the vicinity of Barton Creek Blvd.
90. Then proceeding in a general SW direction along the common WCID #20 and WCID #10 boundary (and along Barton Creek Blvd.) for about 0.4 mile until the district boundary turns generally SE.
91. Then proceeding in a general SE direction along the common WCID #20, Camelot WSC and WCID #10 boundary for about 0.5 mile until it turns generally SSW.
92. Then proceeding in a general SSW direction along the WCID #10 boundary for about 0.4 mile until its junction with the boundary of Lost Creek MUD and Country Club at or near Barton Creek.



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93. Then proceeding in a varying direction from southwest to southeast along the western boundary of Lost Creek Country Club for about 2.4 mile until it turns generally NE.
94. Then proceeding in a general east direction along the boundary of Lost Creek Country Club, Lost Creek MUD and Barton Creek for about 1.0 mile until it intersects with the west property line of the Gaines Ranch.
95. Then proceeding in a general SSW direction along the west property lines of the Barton Creek Wilderness Preserve and Gaines Ranch subdivision to Foster Ranch Road for about 1.5 mile until it turns generally ESE.
96. Then proceeding in a general ESE direction along Foster Ranch Road for about 0.2 mile to Travis Country Circle until it turns generally SSW.
97. Then proceeding in a general SSW direction along Foster Ranch Rd. for about 0.4 mile to the full purpose Austin city limits at Southwest Parkway until it turns generally WNW.
98. Then proceeding in a general WNW direction for about 2.5 miles, along the Austin full purpose city limit at Amara Cove where it turns generally WNW.
99. Then proceeding in a general WNW direction for about 0.5 mile across the Austin jurisdiction to the corner of the Barton Creek Habitat Preserve just west of Barton Creek Blvd. until it turns SSW.
100. Then proceeding in a general SSW direction along the back lot lines on Barton Creek Blvd., and continues for about 0.5 mile until the boundary intersects the full purpose Austin city limits and turns generally west.
101. Then proceeding in a general west and SSW along the full purpose Austin city limits and along the boundary of the Uplands tract for about 0.6 mile until the boundary intersects with Old Bee Caves Road and turns generally west.
102. Then proceeding in a general west direction along Old Bee Caves Road for about 0.4 mile to the eastern right of way of Hwy. 71 and turns generally NE.
103. Then proceeding in a general NW direction along Hwy. 71, for about 2.1 miles until the boundary intersects with the common jurisdiction boundary of the Village of Bee Cave and City of Austin.
104. Then proceeding in a general arc from east to west along the common jurisdiction boundary of the Village of Bee Cave and City of Austin for about 3.5 miles until the jurisdiction intersects with the boundary of the Wong Tract which is also the LCRA CCN #11670 boundary.
105. Then proceeding in a general south direction along various portions of the east boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 5.7 miles until it turns generally WNW.
106. Then proceeding in a general WNW direction along the southern boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.9 mile until it turns generally NNE.
107. Then proceeding in a general NNE direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.1 mile until it turns generally east.
108. Then proceeding in a general east direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.5 mile until it turns generally north.
109. Then proceeding in a general north direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.5 mile until it turns generally west.
110. Then proceeding in a general east direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.5 mile until it intersects the Shield-Ayres City of Austin Conservation property and turns generally south.

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111. Then proceeding in a general south direction about 0.4 mile along the boundary of the Shield-Ayres City of Austin Conservation Easement property until it turns generally WNW.
112. Then proceeding in a general WNW direction about 0.8 mile along the boundary of the Shield-Ayres City of Austin Conservation Easement property until it turns generally SSW.
113. Then proceeding in a general SSW and NW direction about 3.4 miles along the southern boundary of the Shield-Ayres Private Conservation Easement property until it intersects the Austin jurisdiction boundary and turns generally SSE.
114. Then proceeding in a general SSE and SSW direction 1.9 miles along the Austin jurisdiction until it intersects the county line boundary between Travis and Hays and it turns generally SE.
115. Then proceeding in a general SE direction 5.3 miles along the county line boundary between Travis and Hays until it turns generally south at the village limits of Bear Creek.
116. Then proceeding in a general south direction along the common city limits of Austin and Bear Creek and the common jurisdiction boundary of Austin and Dripping Springs for about 6.0 miles until it turns generally east.
117. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Dripping Springs for about 1.0 mile until it intersects with the common Austin jurisdiction and Hays jurisdiction.
118. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Hays for about 1.7 mile until it turns generally north.
119. Then proceeding in a general north direction along the common jurisdiction boundary of Austin and Hays which follows various subdivision boundaries for about 4.2 miles until it turns generally east.
120. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Hays for about 0.9 mile until it turns generally south.
121. The proceeding in a general south direction along the common jurisdiction boundary of Austin and Hays for about 1.4 mile until it turns generally east.
122. Then proceeding in a general east and south direction along the common jurisdiction boundary of Austin and Hays for about 1.5 mile until it intersects the common jurisdiction boundary of Austin and Buda and turns generally SE.
123. Then proceeding in a general SE direction along the common jurisdiction boundary of Austin and Buda for about 1.8 mile until it turns generally south.
124. Then proceeding in a general south direction along the common jurisdiction boundary of Austin and Buda for about 1.2 mile until it turns generally east.
125. Then proceeding in a general east direction along the common jurisdiction boundary and city limits of Austin and Buda for about 1.7 miles to the east frontage road of IH-35 South which marks both the end and beginning points of the Impact Fee Service Area Boundary.



## IMPACT FEE CAPITAL IMPROVEMENTS PLAN

City of Austin, Texas  
Austin Water Utility

Working Document for Public Review July 2013

**DRAFT SUBJECT TO CHANGE (WTP VERSION)**

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## I. INTRODUCTION

The Texas Impact Fee Act (Chapter 395 of the Texas Local Government Code) provides methods and procedures that Austin must follow to continue to impose its water and wastewater impact fees. This act requires the determination of the costs of capital improvements attributable to new growth for a specified period of time. These costs are the principal building blocks on which the calculation of impact fees is based. The plan that identifies the capital improvements or facility expansions for which impact fees may be assessed is termed the "capital improvements plan". In 1990, the City of Austin achieved compliance with the Texas Impact Fee Act by approving land use assumptions on April 5, 1990 and then approving the impact fee CIP and amendments to the ordinance on June 7, 1990. In subsequent years, the City has maintained compliance with periodic updates. From 1990 to 2001, the Texas Impact Fee Act stipulated that the City is to update its land use assumptions and impact fee CIP at least every three years. Beginning September 1, 2001, the Texas Impact Fee Act stipulates that these updates are to be done at least every five years. The five-year period begins on the day the impact fee CIP is adopted. This document represents the update to the 2007 CIP. Both it and the land use assumptions can be adopted at the same time.

The law outlines a methodology for calculating the cost of particular facilities attributable to new growth based on a defined planning period (not to exceed 10 years). The planning period establishes a time frame in which to evaluate capacity made available for new growth as compared to the demand for that capacity represented by the land use assumptions. One of the keys to the methodology is the expression of both demand and capacity for a particular project in terms of service units. By knowing the number of service units associated with the impact fee projects that are expected to be used during the planning period, the capacity and cost attributable to new growth can readily be determined. Using this cost and the projected total number of new service units within the utility service boundary during the planning period, the "maximum fee per service unit" may be calculated as prescribed by the law. The methodology of the Capital Improvements Plan provides the framework for calculating the maximum allowable impact fee, which is simply the upper limit on the fee pursuant to the law.

The methodologies employed in this Impact Fee CIP comply with the provisions of the Texas Impact Fee Act. This update is as comprehensive as previous updates, extensively reworking the list of qualified CIP projects. It continues to exclude projects that are predominately dedicated to existing users, or that may not be constructed within the ten-year planning period. And in cases where other participants contributed funds, only the City of Austin's shares of the costs were included. In addition, capacity, costs, and service areas were studied on a project by project basis.

The Impact Fee CIP process calculates the maximum allowable fees. This calculation conforms to the state requirement for the Impact Fee CIP to include a plan for awarding a credit for the portion of water and wastewater utility service revenues generated by new service units connected during the program period that is used for the payment of improvements, including the payment of debt, that are included in the Impact Fee CIP. Note that, beginning September 1, 2001 Texas State Law required this type of revenue credit method. In previous City of Austin Impact Fee updates, the alternate credit method equal to 50 percent of the total projected cost of implementing the capital improvements plan was used. Discussion of a new rate revenue credit method applied in this Impact Fee 5-year update can be found in Section VII.

## II. FACILITY PLANNING -- DEFINING THE LEVEL OF CAPACITY USAGE AND RESERVE CAPACITY NEEDS

To provide an overall comparison of the capacity and costs associated with new growth projects versus those associated with existing needs, the recent Capital Improvements Program projects of the Austin Water Utility have been divided into the three groups. Appendices C and D include those projects from the FY 2012/2016 CIP built in prior years or scheduled to be built in the next few years that are targeted to benefit existing users and to meet stricter safety, efficiency, environmental or regulatory standards. Tables 1 and 2 list those water and wastewater impact fees projects that have been built or plan to be built in the future and that will largely benefit new Utility customers during the next ten years. Table 3 is composed of projects that are anticipated to be built late in the ten-year planning period or beyond, and thus are not included in the group of projects on which impact fee calculations are based. Projects removed from the project listing adopted in the 2007 Impact Fee CIP are shown on Table 4. The Impact Fee CIP

projects along with major utility facilities are shown on Water Map 1, 1A, 1B, 1C, 1D, 1E, following Table 1 and Wastewater Map 2, 2A, 2B, 2C, 2D and 2E following Table 2.

A comparison of the dollar value of projects in the Appendices and Tables 1, 2, and 3 gives an indication of the relative investment in capacity to serve existing and future needs (as defined by the law) as a function of the Capital Improvements Programs of 1980s. Some of the projects in Appendices C and D will certainly benefit future users; however, in order to take a conservative approach to ensuring full compliance with the law, they will not be considered impact fee projects when they are made necessary by environmental and regulatory requirements. Other projects in Appendices C and D will also benefit future users as well as existing users (annexation areas, highway utility relocations, and certain trunk lines internal to the system), but when their benefit to existing users outweighs the benefit to future users, they are not included in Tables 1 and 2.

Analysis of the level of existing usage of capacity in the case of water and wastewater treatment plants is a straightforward examination of flow data. Flow data for pipes in the water distribution system and wastewater collection system is generally not available, so system calculations and hydraulic models are used to help estimate utilization levels of pipes under selected demand conditions (existing or future). The summary tables at the end of this document, Tables 8 and 9, include an estimate of the existing users and the total capacity of impact fee projects expressed in service units for water pressure zones and wastewater collection areas. Inspection of these figures gives an indication of the level of existing capacity usage and the reserve capacity associated with the facilities.

In sizing and timing new facilities, both population projections (the Land Use Assumptions) and historical flow data are used in predicting demands (flows) associated with future growth. The Utility's CIP planning employs cost-effectiveness analysis to identify the best infrastructure timing and sizing investment alternatives. The principle factors weighed in this analysis are:

- brainstorming of alternatives
- capital costs
- operation and maintenance costs
- time value of money
- economy of scale
- environmental and other key non-pecuniary impacts

The Utility seeks to maintain a prudent, cost-effective amount of reserve capacity in the water and wastewater system in order to carry out its mission of providing safe, reliable service. In this way, the commitments that the City makes to its customers in the form of tap sales, service extension requests, developer contracts, and MUD and other district contracts, can be fulfilled in a manner that allows all parties in the development process to plan efficiently. The impact fee methodology prescribed by state statute serves the function of quantifying the cost of the reserve capacity that constitutes the Utility's plan for serving new customers for a ten-year planning horizon.

This Impact Fee update is consistent with a number of core principles of the City's recently approved Imagine Austin comprehensive plan, including:

- Grow as a compact and connected city
- Develop as an affordable and healthy community
- Sustainably manage water and other environmental resources

Imagine Austin's planning framework and guidelines are part of Austin Water Utility's planning processes and are integrated into the development of the Utility's CIP. Additionally, this Impact Fee update incorporates the City's water conservation goal of reducing per capita water pumpage to 140 gpcd by 2020.

**Table 1 Water Impact Fee Projects**  
(Costs in 1000's)

Subproject / Map ID	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost
<b>City Construction</b>						
3889.001	CANYON CREEK 30	30"	Northwest C	1987	1,231	1,311
5038.001	part NWC Pump Station (and tank)	11.2 MGD, 1.5 MG	Northwest C	2013	10,860	11,566
5038.001	part NWC Pump Station (and tank)	11.2 MGD, 1.5 MG	Northwest C	2013	1,331	0
5038.001	group NWC Pump Station (and tank) group	11.2 MGD, 1.5 MG	Northwest C	2013	12,191	11,566
5038.002	Anderson Mill/RR 620 Transmission Main	24"/36"	Northwest C	2012	4,581	4,879
2032.001	Four Points Reservoir	8mg	Northwest C	1988	5,194	5,532
2006.003	WEST BULL CREEK P.S. UPGRADES	5.8-B 10.4-C	Northwest C	2007	896	954
793.001	Anderson Mill Transmission Main III	16"	Northwest B	2000	4,736	5,044
793.002	Anderson Mill Transmission Main II-A & IV	24"	Northwest B	2000	2,085	2,221
1086.001	part Jollyville Transmission Main Ph. IIA & III	48"	Northwest B	2001	8,138	8,667
1086.002	part Jollyville Transmission Main Phase IIB	48"	Northwest B	2001	1,135	1,209
3897.001	group JOLLYVILLE TM group	48"	Northwest B	2001	9,273	9,876
3616.001	JOLLYVILLE PUMP STATION	45mgd	Northwest B	1989	6,160	6,560
	ANDERSON MILL RESERVOIR	3 mg	Northwest B	1989	4,148	4,418
2014.001	NORTHWEST A PRES ZONE RES Martin total	34 mg	Northwest A	1988	8,361	8,904
4758.002	16 in FM 1825 Interconnect	16"	Northwest A	2006	803	0
4814.002	HOWARD LANE EAST TM	36"	Northwest A	1998	4,765	5,075
4814.003	part HOWARD LN PUMP STATION & TM sizing >	54/42/36/24	Northwest A/B/C	2001	5,193	5,531
4814.003	part HOWARD LANE PRESSURE ZONE IMP (PS)	43/65 mgd	Northwest A/B/C	2001	10,000	10,650
4814.004	part HOWARD LANE PRESSURE ZONE IMPR (PS)	43/65 mgd	Northwest A/B/C	2001	1,922	0
	group HOWARD LANE PUMP STATION & TM group	43/65 mgd	Northwest A/B/C	2001	17,115	16,181
6935.016	Jollyville NWA Transmission Main (Plant 4)	84"	Northwest A/B/C	2014	110,542	117,727
2028.001	Martin Hill Transmission Main	54"	Northwest A/B/C	2016	19,752	21,036
2939.001	DESSAU RD TRANSMISSION MAIN	16"	North	1990	934	995
2090.005	DECKER LAKE TM/JOHNNY MORRIS	16/24"	North	1999	462	492
6935.021	Austin Film Society	16"	North	2011	1,021	1,087
6935.035	Howard Lane Extension	16"	North	2017	2,200	2,343
6935.003	Boyce Lane Transmission Main	24"	North	2015	7,130	7,593
3779.001	NORTHTOWN TRANS MAIN	48"	North	1988	610	650
2088.001	HOWARD LN/NORTHTOWN TRANS MAIN	48"	North	1989	3,593	3,827
4814.001	NORTH/EAST AREA WATER IMP. Samsung	48"	North	1999	1,718	1,830
3783.001	NE AUSTIN PUMPING STATION	55 mgd	North	1989	1,974	2,102
844.001	NE AUSTIN TRANS MAIN	54/48"	North	1997	6,657	7,090

**Table 1 Water Impact Fee Projects**  
(Costs in 1000s)

Subproject / Map ID	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost
<b>City Construction</b>						
3620.001	US 290 EAST RESERVOIR	12MG	Central	1987	2,144	2,283
6935.018	FM969 Decker to SH 130	24"	Central	2016	3,700	3,941
3618.001	East Austin TRANS MAIN	66"	Central	1989	8,203	8,736
2937.001	SPRINGDALE ROAD 48" TM	48"	Central	1998	6,118	6,516
1168.004	part ULLRICH TO GREEN TM	72"	Central	2001	25,987	27,676
1168.003	part CENTRAL AREA WATER IMP. Engineering group ULLRICH TO GREEN TM group	72/48"	Central	2001	4,461	4,751
		72"	Central	2001	30,448	32,427
3761.001	part GREEN WTP TRANS. MAIN SOUTH	60"	Central South	1989	1,572	1,674
3612.001	part GREEN WTP TRANSMISSION MAIN south funding group GREEN WTP TRANS MAIN SOUTH group	60"	Central South	1989	4,049	4,312
	BLUFF SPRINGS TRANS MAIN II	60"	Central South	1989	5,621	5,986
3769.001	BLUFF SPRINGS RESERVOIR PILOT KNOB	36"	Central South	1988	1,913	2,037
3626.001	part BLUFF SPRINGS TRANS MAIN PILOT KNOB	10 mg	Central South	1989	2,139	2,278
3617.001	part PILOT KNOB TRANS MAIN SECIII	48"	Central South	1992	7,466	7,951
3898.001	part BURLESON RD TRANSMISSION MAIN	48"	Central South	1992	1,805	1,922
3901.001	group PILOT KNOB TRANS MAIN group	48"	Central South	1992	478	509
3628.001	SOUTH CENTRAL TRANS MAIN	48"	Central South	1992	9,749	10,383
3871.001	E BEN WHITE BLVD TRANS MAIN	48"	Central South	1987	4,578	4,876
2097.001	ELROY TRANSMISSION MAIN	24"	Central South	1993	3,506	3,734
2963.001	MOORE'S CRSG RESERVOIR & TRANS	36"	Central South	2010	4,996	5,321
		36"	Central South	1990	2,402	2,558
3766.001	SOUTH IH 35 TRANSMISSION MAIN	36"	South	1988	2,812	2,995
3876.001	SLAUGHTER LN TRANSMISSION MAIN	36/30/24"	South	1992	2,673	2,847
6937.005	part S I-35, Pilot Knob Pump Station	24 MGD	South	2012	10,324	10,995
6937.003	part So. IH35 W/WW Infrastructure Improvs PMC	PMC	South	2012	8,576	9,133
6937.001	part IH 35 South Transmission Main	36"	South	2010	17	18
6937.006	part S I-35, Segment 21 - Pilot Knob Reservoir 48-inch Water Main	48"	South	2011	680	724
6937.008	part S I-35, Segment 6 - I 35 South of Onion Creek, 36-inch Water Main	36"	South	2011	1,496	1,593
6937.009	part S I-35, Seg. 13/14 - Pleasant Valley Ext., Rinard Crk to E Slaughter Lr 42"	48"	South	2012	1,905	2,029
6937.010	part S I-35, Segment 17/18/19 - Slaughter Ln Ext to Thaxton, 48-inch Water 48"	48"	South	2011	3,212	3,421
6937.011	part S I-35, Segment 4 - I 35, N of FM 1626 to Onion Creek, 36-inch Water 36"	36"	South	2010	1,361	1,449
6937.012	part S I-35, Segment 7 - I 35, north of FM 1327, 42-inch Water Main 42"	42"	South	2011	2,058	2,192
6937.013	part S I-35, Segment 9.0 - FM 1327, I 35 to Bradshaw Rd, 42-inch Water M 42"	42"	South	2011	2,242	2,388

**Table 1 Water Impact Fee Projects**  
(Costs in 1000's)

Subproject / Map ID	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost
<b>City Construction</b>						
6937.014	part S I-35, Segment 9.1 - FM 1327 to Bradshaw Road north of FM 1327	42"	South	2012	2,810	2,993
6937.015	part S I-35, Seg. 18/19 - Slaughter Ln Ext., Marble Crk to Thaxton Rd, 48-lr 48"		South	2010	317	338
6937.016	part S I-35, Seg. 20.1/21 - Wm Cannon from McKinney Falls to Pilot Knob 48"		South	2011	3,247	3,458
6937.017	part S I-35, Seg. 2/5 - I 35 Slaughter and Onion Crk Crossings, 36-In Water 36"		South	2012	7,950	8,467
6937.018	part S I-35, Segment 8 - I 35 Crossing North of FM 1327, 42-In Water Main 42"		South	2011	1,614	1,719
6937.019	part S I-35, Segment 20.0 - McKinney Falls Pkwy, Thaxton to Wm Cannon 48"		South	2011	3,247	3,458
6937.020	part S I-35, Segment 15 - Goodnight Ranch Ph I, 48-Inch Water Main 48"		South	2010	1,011	1,077
6937.021	part S I-35, Segment 1 - I 35 Slaughter Ln to Slaughter Crk, 36-In Water M 36"		South	2011	2,863	3,049
6937.022	part S I-35, Seg. 11/12 - S. Pleasant Val. Ext. at Legends Way, 42-In Water 42"		South	2011	1,953	2,080
6937.023	part S I-35, Segment 10 - Bradshaw Rd, S of River Plantation Dr, 42-In Water 42"		South	2011	1,770	1,885
6937.024	part S I-35, Segment 16 - Goodnight Ranch Phase II, 48-Inch Water Main 48"		South	2010	1,366	1,455
6937.030	part S. IH 35, E. Slaughter ROW acquisition	site Seg. 17/18/19	South	2010	496	528
	group S I-35 TM and PS Group	36"/42"/48", 24 mgd PS	South	2012	60,515	64,448
3825.001	SWB CAMP BEN MC CULLOUGH REALL	16"	Southwest B	1992	504	537
3859.001	WINDMILL RUN SW B TRANS MAIN	36"	Southwest B	1990	1,962	2,090
4800.010	SWC Pressure Zone Pump Station	8.2 mgd	Southwest C	2006	5,862	6,318
4800.005	Cirleville Reservoir	1.25 mg	Southwest C	2001	2,347	0
4800.022	SWC Pressure Zone TM Phase 1	30"	Southwest C	2007	5,546	5,906
4800.021	SWC PRESSURE ZONE TM PHASE 2	30"	Southwest C	2007	2,104	2,241
5335.001	part Ullrich WTP 160 MGD Expansion	67 mgd exp	Ullrich Service	2007	109,136	116,230
5335.002	part Ullrich WTP 160 MGD Expansion Contract 1 - LSPS	67 mgd exp	Ullrich Service	2006	2,567	2,734
	group ULLRICH WTP 100 to 167 mgd group	67 mgd exp	Ullrich Service	2007	111,703	118,964
6683.019	part WTP4 CMAR	50 mgd	Plant 4 Service	2014	247,255	263,327
6683.019	part WTP4 CMAR	50 mgd	Plant 4 Service	2014	26,451	0
6683.002	part Water Treatment Plant No. 4	50 mgd	Plant 4 Service	2014	98,386	104,781
6683.002	part Water Treatment Plant No. 4	50 mgd	Plant 4 Service	2014	2,073	0
6683.014	part WTP4 RW Pump Station Facility	50 mgd	Plant 4 Service	2014	7,243	7,714
6683.013	part WTP4 Raw Water Pump Station Excavation and Stormwater Facilities	50 mgd	Plant 4 Service	2014	3,438	3,661
6683.010	part WTP 4-Plant Site Storm Water Facilities	50 mgd	Plant 4 Service	2014	3,327	3,543
6683.009	part WTP #4-Environmental Commissioning	50 mgd	Plant 4 Service	2014	2,839	3,024
6683.020	part WTP4 Bullick Hollow Roadway Improvements	50 mgd	Plant 4 Service	2011	1,081	1,151
6683.018	part Value Engineering	50 mgd	Plant 4 Service	2014	574	611
6683.007	part Water Treatment Plant 4 - Property Fencing	50 mgd	Plant 4 Service	2009	359	382
	WTP #4 plant total cost (see also SPID 6935.016)	50 mgd	Plant 4 Service	2014	393,026	388,195
	part Adjustment to upsized components for 50 mgd unit cost	50 mgd	Plant 4 Service	2014	-14,130	-15,048
	group WTP 4 Adjusted cost for fee calculation	50 mgd	Plant 4 Service	2014	378,896	373,147
8702.003	Shaw Lane Sludge Facility Improvements	60 acre, 34 years	Entire System	2013	4,043	4,306

CIP-5

DRAFT SUBJECT TO CHANGE

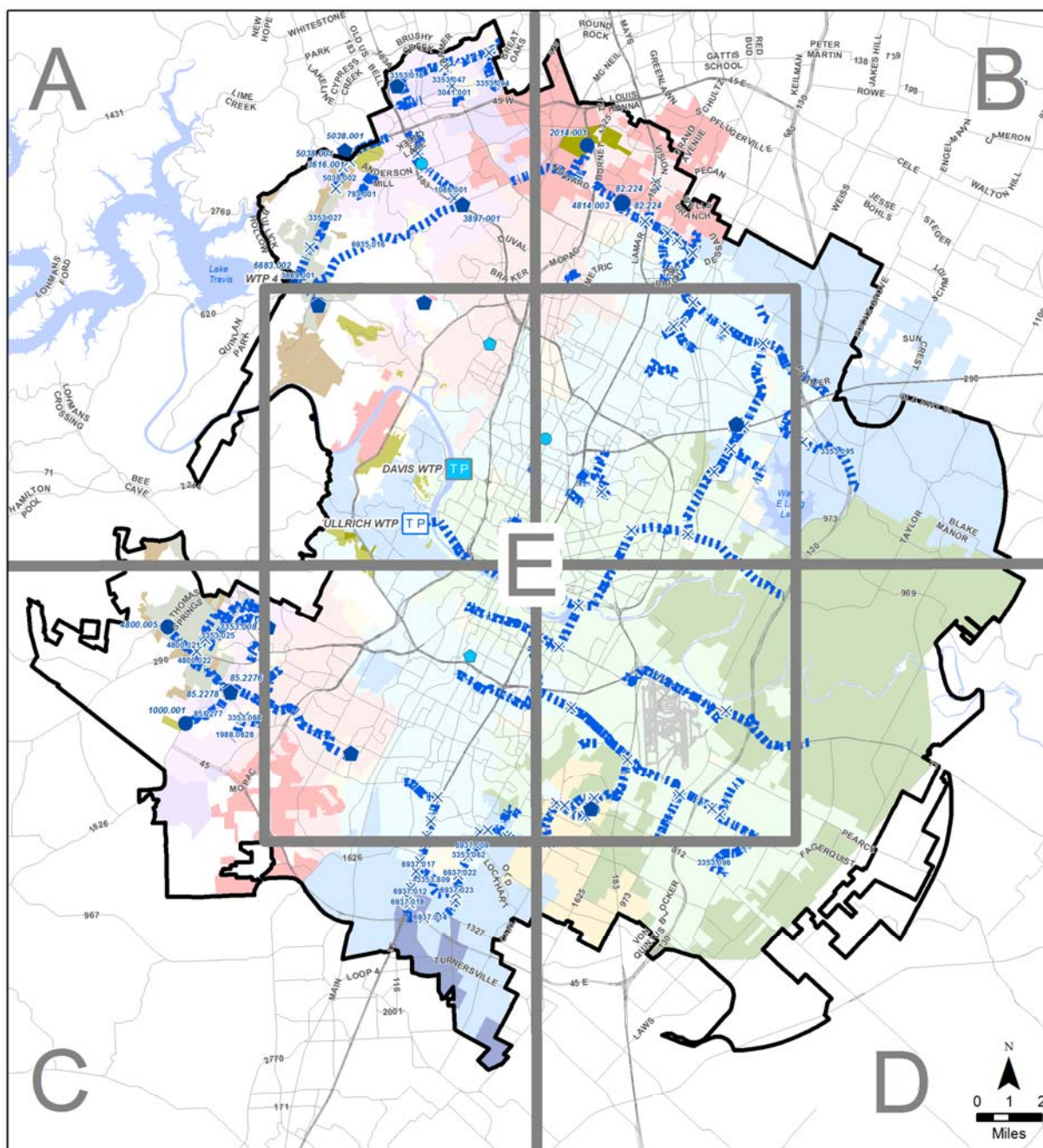


**Table 1 Water Impact Fee Projects**  
(Costs in 1000s)

Subproject / Map ID	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost
<b>Developer Reimbursements</b>						
3353.027	CANYON CREEK Subdivision Reimbursement	24"	Northwest C	2002	1,100	1,172
3353.022	AMAX Self-Storage Reimbursement	24"	Northwest C	2007	169	210
	group Developer Reimbursements Northwest C = 2	24"	Northwest C	2007	1,269	1,382
3041.001	DAVIS SPRINGS SERVICE EXTENSION	24"	Northwest B	1997	941	0
3353.018	AVERY RANCH SERVICE EXTENSION	24/36/48" 3MG tank	Northwest B	2012	9,769	10,404
3353.018	AVERY RANCH SERVICE EXTENSION	24/36/48" 3MG tank	Northwest B	2012	3,756	0
3353.038	STONE HEDGE Subdivision	24"	Northwest B	2011	8,931	9,512
3353.094	Pearson Ranch-RRISD SER 2869 and 2870	24"	Northwest B	2013	2,670	0
	group Developer Reimbursements Northwest B = 4	36"	Northwest B	2012	26,067	19,916
3353.019	IBM TIVOLI	16"	Northwest A	2002	341	0
3353.032	HOWARD LANE SERVICE EXTENSION	24/16"	Northwest A	2000	220	0
3353.065	Schultz 45 Acre Tract Water--Wells Branch Commerce Park	24"	Northwest A	2012	332	354
	group Developer Reimbursements Northwest A = 3	24"	Northwest A	2012	893	354
3353.009	DELL WATER	24"	North	1998	1,769	0
3353.042	PARMER PARK TM REIMBURSEMENT	24"	North	2002	871	928
3353.033	PIONEER CROSSING, ph2, ser1825	24"	North	2004	1,243	1,324
3353.007	Jourdan's Crossing Service Extension	24"	North	2001	282	0
2090.003	DECKER LAKE 24" TM (W/SER 1745)	24"	North	1996	1,148	1,223
5028.002	RMMA Reimbursement	16/24"	North	2007	1,119	1,192
5028.004	RMMA Reimbursement	16"	North	2008	6,106	6,503
5028.006	RMMA Reimbursement	30"	North	2011	5,692	6,062
5815.002	Triangle - Infrastructure Incentives	16/24"	North	2005	413	440
3353.099	Pioneer Hill	16"	North	2012	430	458
3353.028	Wild Horse Ranch	24/36"	North	2010	2,414	2,571
	group Developer Reimbursements North = 11	16/24/30/36 "	North	2012	21,487	20,699
3353.095	Whisper Valley-Indian Hills CRA -- north line	24"	North	2015-2018	0	3,060
3353.049	Robertson Hill Development	16"	Central	2008	643	685
3353.069	University Neighborhood Overlay District	24"	Central	2007	1,828	1,947
	group Developer Reimbursements North Central =2	24"	Central	2008	2,471	2,632
3353.095	Whisper Valley-Indian Hills CRA -- central line	48"	Central	2015-2018	2,000	20,477
3353.052	Del Valle Junior High Number 2	24"	Central South	2005	349	372
3353.059	PEARCE LANE TRACT	36"	Central South	2004	2,598	2,767
3353.073	Watersedge PUD	24"	Central South	2013	5,150	5,485
3353.096	Formula One United States	24/36"	Central South	2012	5,380	5,730
3353.100	71 Commercial	24"	Central South	2012	1,098	1,169
	group Developer Reimbursements South Central = 5	36"	Central South	2013	14,575	15,522

**Table 1 Water Impact Fee Projects**  
(Costs in 1000's)

Subproject / Map ID	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost
<b>Developer Reimbursements</b>						
3353.062	Zachary Scott Tract SER	24"	South	2009	1,240	1,321
3353.074	Alexan Onion Creek	24"/36"	South	2010	884	941
3353.072	Goodnight Ranch	24"	South	2011	1,817	1,935
3353.089	Fox Hill	16/24"	South	2015	3,776	4,021
	group Developer Reimbursements South = 4	36"	South	2015	7,717	8,219
3353.068	Circle C CCR 103 Water Line Improvements	16"	Southwest B	2018	2,094	2,230
3353.068	Circle C CCR 103 Water Line Improvements	16"	Southwest B	2018	852	0
	group Circle C CCR 103 Developer Reimbursements Southwest B	16"	Southwest B	2018	2,946	2,230
3353.008	Lantana Service Extension Developer Reimbursement SW B&C	14 mgd PS	Southwest B&C	2002	3,254	0
3353.025	TRAVIS COUNTRY WEST Reimbursement	2.1 mgd PS, 16"	Southwest C	2003	1,680	1,789
<b>Contract Revenue Bond Projects</b>						
Circle C MUD #3 Southwest A&B Facilities						
	Southwest A Site Development CC#3-MUD	na	Southwest A/B/C	1988	266	283
85.2278	85/22-78 Southwest B Pump Station CC#3 MUD	22 mgd	Southwest B	1988	2,290	2,439
85.2277	85/22-77 Southwest B 36" Transmission Main CC#3-MUD	36-inch	Southwest B	1988	1,130	1,203
1988.0628	Southwest B 16" Trans Main CC#3-MUD	16-inch	SWB	1988	197	210
1000.001	Southwest B Reservoir #1 CC#3-MUD total	2 mg	SWB	1988	1,903	2,027
Southland Oaks MUD Facilities						
1001.001	Davis Lane Reservoir SO-MUD add 10 to 20 mg	10 mg	South	1988	1,819	1,937
1987.0508	Davis Lane TM (PS discharge) SO-MUD	48"	Southwest A/B/C	1987	220	234
	Village at Western Oaks MUD Southwest A Zone Facilities					
85.2265	85/22-65 Davis Lane Pump Station VWO-MUD	56 mgd	Southwest A/B/C	1988	5,758	6,132
Maple Run at Austin MUD Southwest A Zone Facilities						
1987.0627	SWA 48" Interconnector MR-MUD	48-inch	Southwest A/B/C	1987	1,016	1,082
85.2279	85/22-79 SWA TM Phases 1,1A,2,3,4A,4B MR-MUD	48-inch	Southwest A/B/C	1987	4,501	4,794
85.2276	85/22-76 SWA Storage Tank (Slaughter Lane) MR-MUD	6 mg	Southwest A/B/C	1988	1,256	1,338
	North Central Austin Growth Corridor MUD #1					
82.224	82/22-40 Howard Lane Reservoirs NCAGC-MUD total	20 mg	North	1987	3,824	4,073
<b>Totals</b>					1,011,155	1,046,195
<b>Total Build Cost w/ Interest</b>						2,057,350



- |                                 |                                |
|---------------------------------|--------------------------------|
| 2012 Impact Fee Boundary Update | Existing Treatment Plant       |
| CIP Pump Station                | Existing Reservoir             |
| CIP Reservoir                   | Existing Pump Station          |
| CIP WTP                         | Existing Water Pipes 24" - 30" |
| CIP Water Pipes                 | Existing Water Pipes 36" - 72" |
| Project Separator               |                                |

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May, 2013

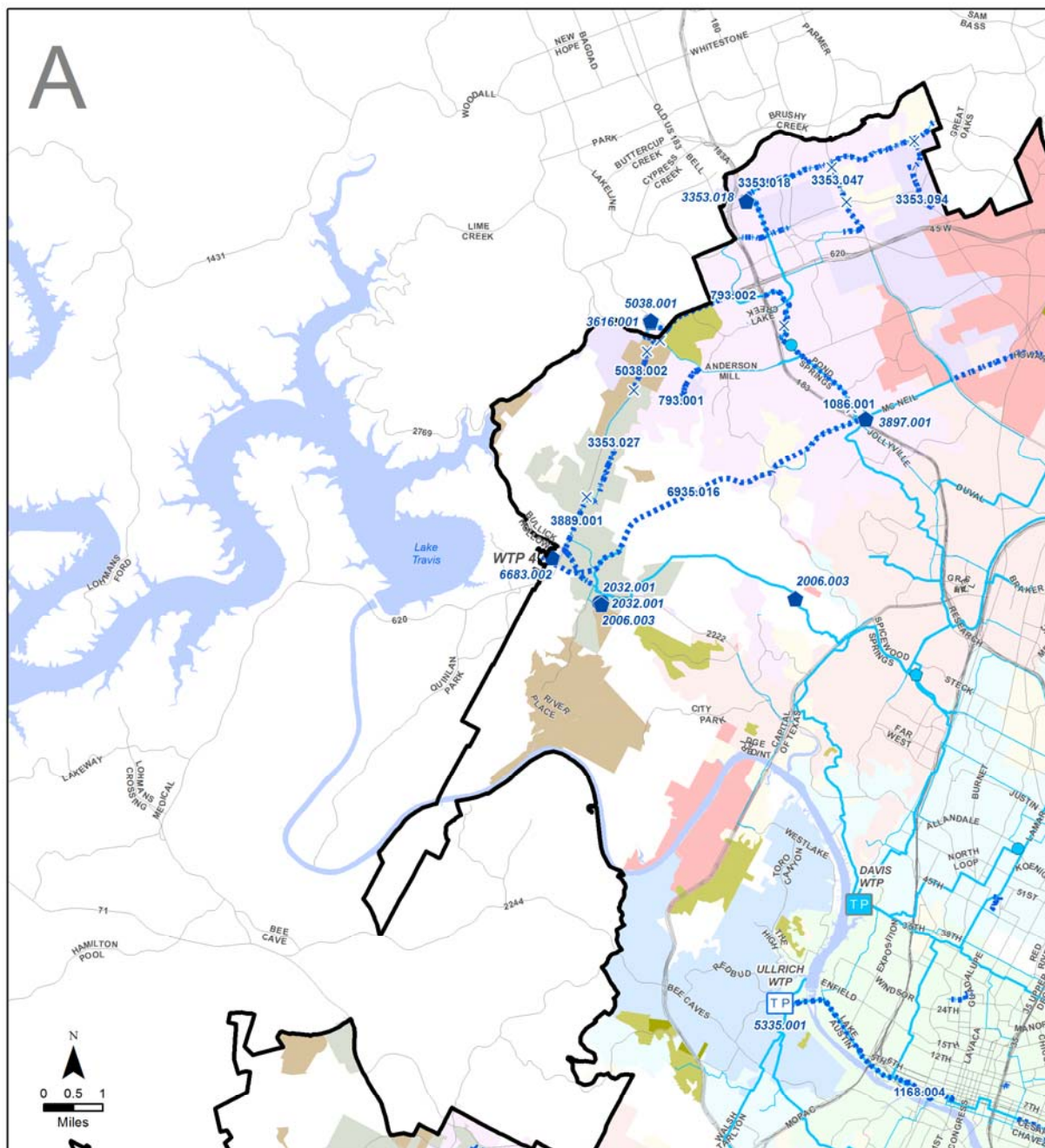
## Impact Fee CIP Major Water Facilities

Produced by GIS Services [4241]

MAP 1

CIP-8  
DRAFT SUBJECT TO CHANGE





- |                                 |                                |
|---------------------------------|--------------------------------|
| 2012 Impact Fee Boundary Update | Existing Treatment Plant       |
| CIP Pump Station                | Existing Reservoir             |
| CIP Reservoir                   | Existing Pump Station          |
| CIP WTP                         | Existing Water Pipes 24" - 30" |
| CIP Water Pipes                 | Existing Water Pipes 36" - 72" |
| Project Separator               |                                |

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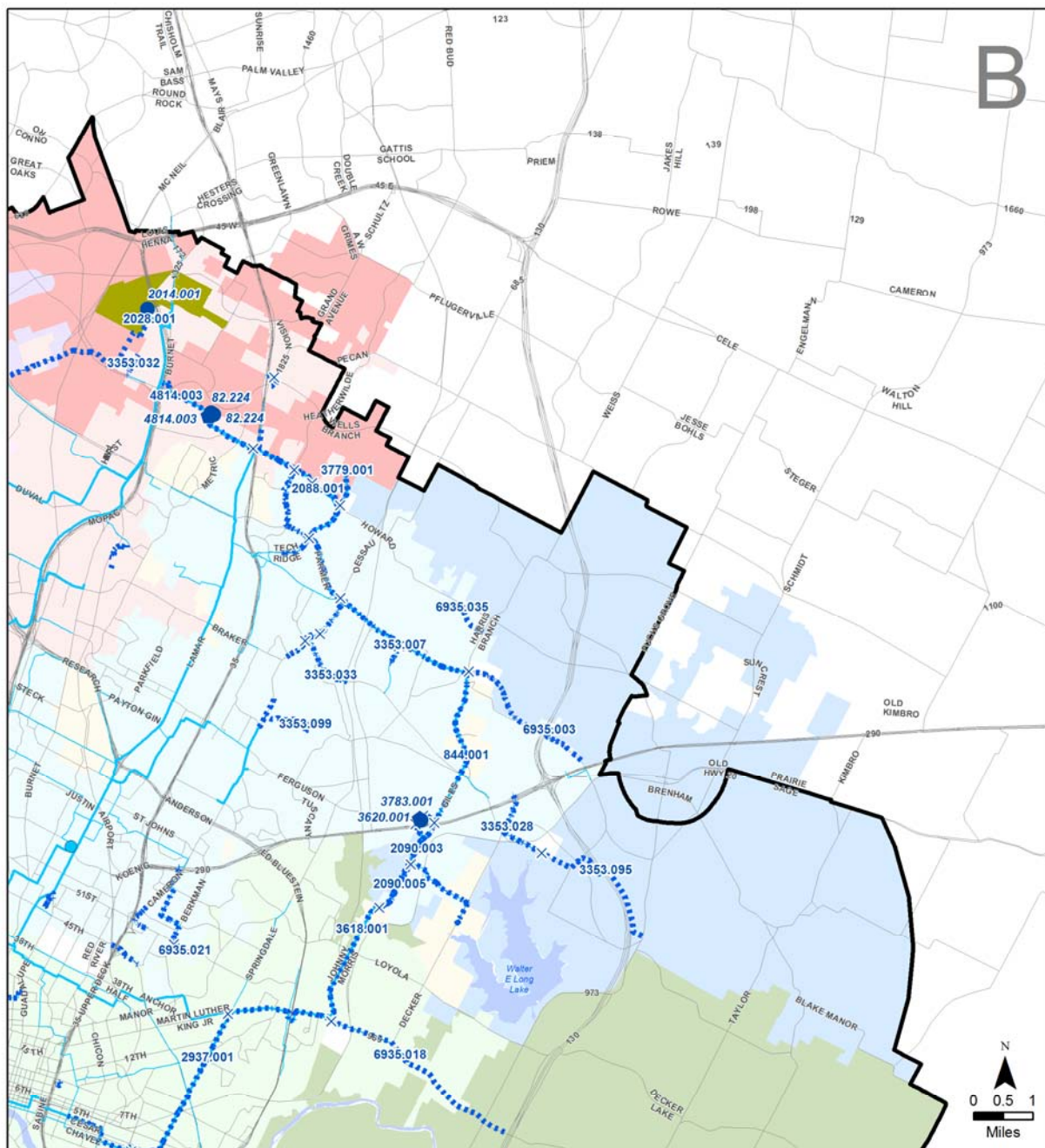


## Impact Fee CIP Major Water Facilities (A)

Produced by GIS Services [4241]

MAP 1A

CIP-9  
DRAFT SUBJECT TO CHANGE



- |                                 |                                |
|---------------------------------|--------------------------------|
| 2012 Impact Fee Boundary Update | Existing Treatment Plant       |
| CIP Pump Station                | Existing Reservoir             |
| CIP Reservoir                   | Existing Pump Station          |
| CIP WTP                         | Existing Water Pipes 24" - 30" |
| CIP Water Pipes                 | Existing Water Pipes 36" - 72" |
| Project Separator               |                                |

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City of Austin  
Austin Water Utility  
May, 2013



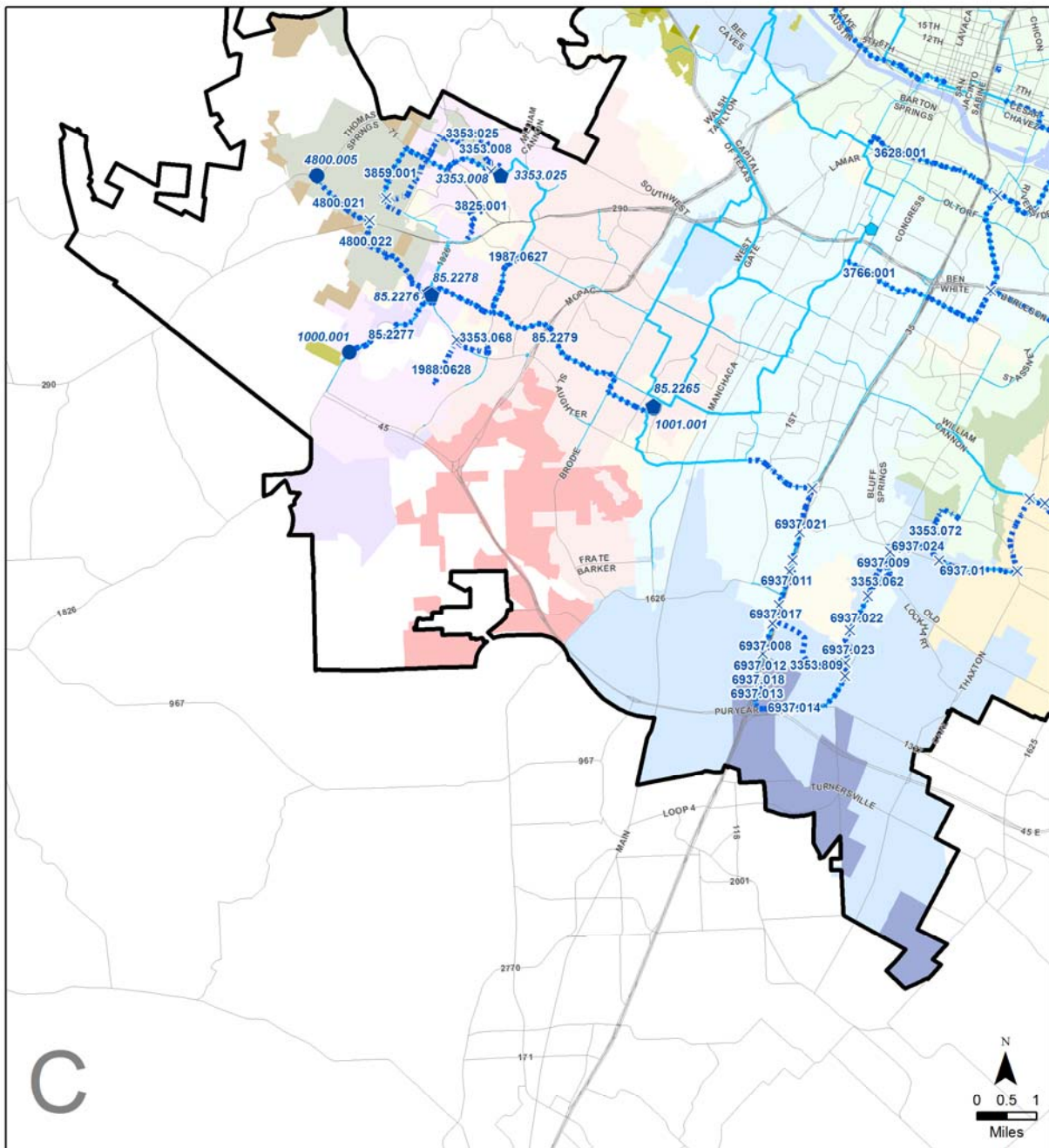
## Impact Fee CIP Major Water Facilities (B)

Produced by GIS Services [4241]

MAP 1B

CIP-10  
DRAFT SUBJECT TO CHANGE





- |                                 |                                |
|---------------------------------|--------------------------------|
| 2012 Impact Fee Boundary Update | Existing Treatment Plant       |
| CIP Pump Station                | Existing Reservoir             |
| CIP Reservoir                   | Existing Pump Station          |
| CIP WTP                         | Existing Water Pipes 24" - 30" |
| CIP Water Pipes                 | Existing Water Pipes 36" - 72" |
| Project Separator               |                                |

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. This product has been produced by the Austin Water Utility for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.



City of Austin  
Austin Water Utility  
May, 2013

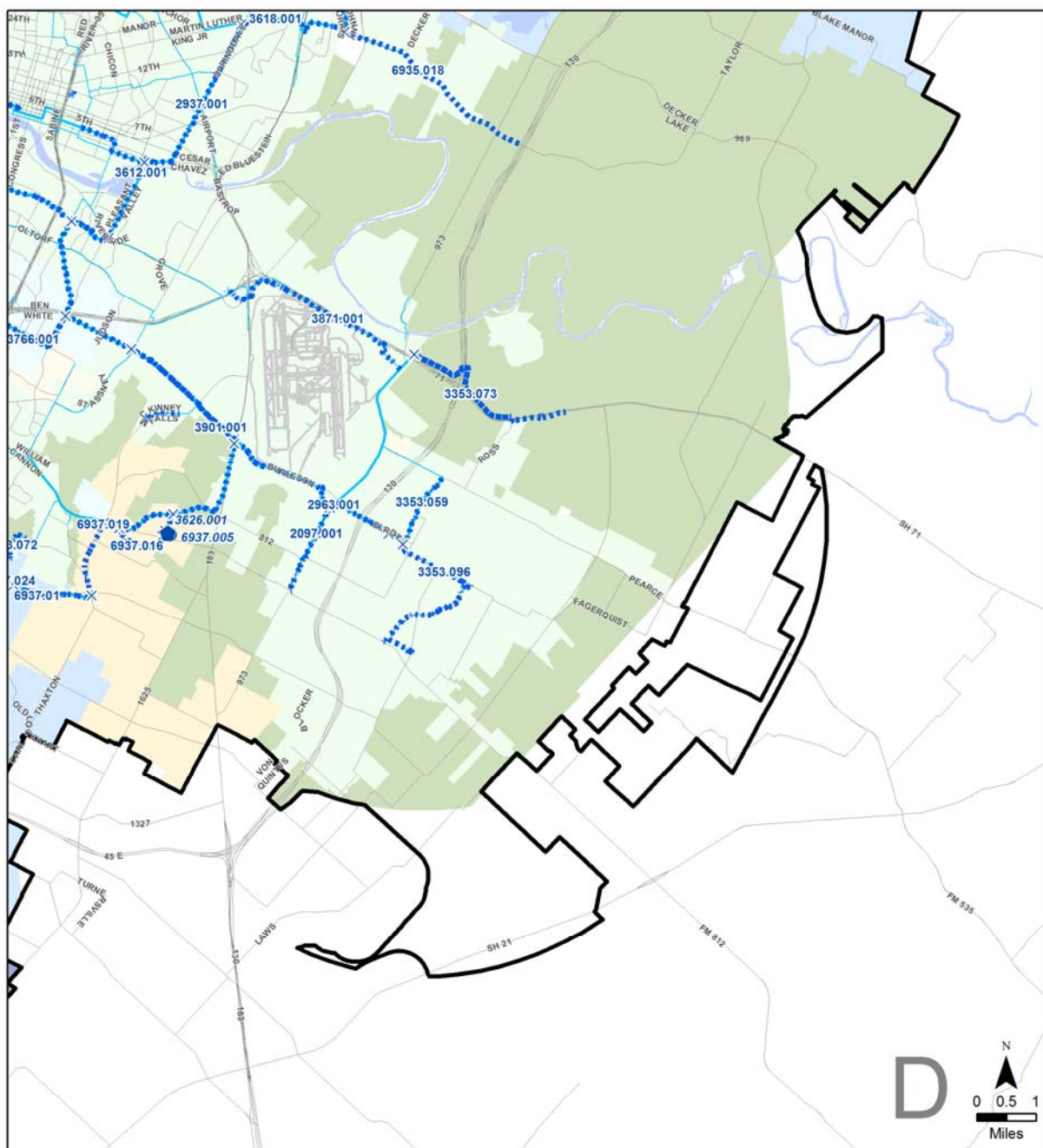


## Impact Fee CIP Major Water Facilities (C)

Produced by GIS Services [4241]

MAP 1C

CIP-11  
DRAFT SUBJECT TO CHANGE



- |                                 |                                |
|---------------------------------|--------------------------------|
| 2012 Impact Fee Boundary Update | Existing Treatment Plant       |
| CIP Pump Station                | Existing Reservoir             |
| CIP Reservoir                   | Existing Pump Station          |
| CIP WTP                         | Existing Water Pipes 24" - 30" |
| CIP Water Pipes                 | Existing Water Pipes 36" - 72" |
| Project Separator               |                                |

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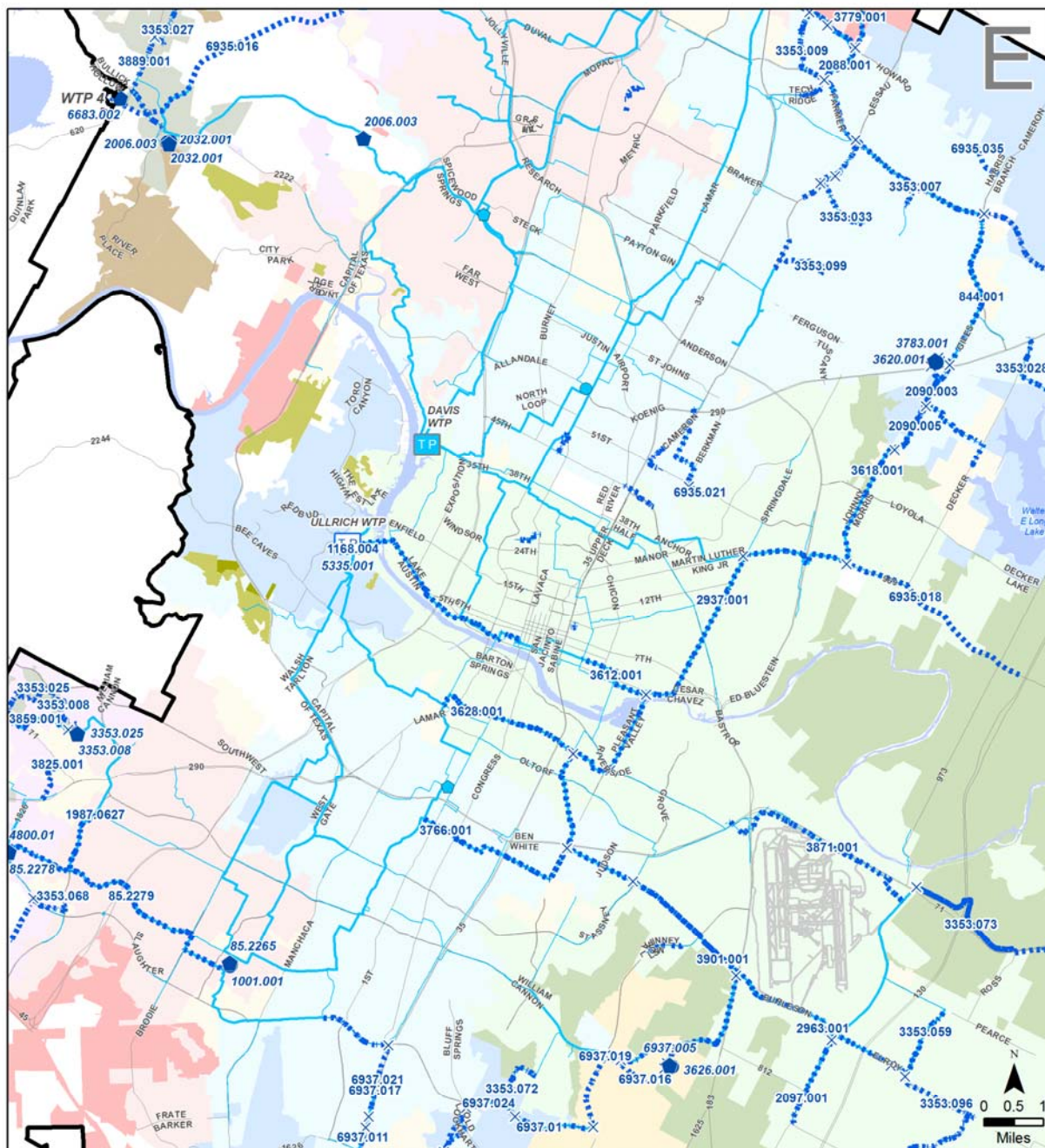
## Impact Fee CIP Major Water Facilities (D)

Produced by GIS Services [4241]

MAP 1D

CIP-12  
DRAFT SUBJECT TO CHANGE





- |                                 |                                |
|---------------------------------|--------------------------------|
| 2012 Impact Fee Boundary Update | Existing Treatment Plant       |
| CIP Pump Station                | Existing Reservoir             |
| CIP Reservoir                   | Existing Pump Station          |
| CIP WTP                         | Existing Water Pipes 24" - 30" |
| CIP Water Pipes                 | Existing Water Pipes 36" - 72" |
| Project Separator               |                                |

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City of Austin  
Austin Water Utility  
May, 2013



## Impact Fee CIP Major Water Facilities (E)

Produced by GIS Services [4241]

MAP 1E

CIP-13  
DRAFT SUBJECT TO CHANGE



**Table 2 Wastewater Impact Fee Projects**  
(Costs in 1000s)

SubProject / Map ID	Project Description	Size	Drainage Basin	Completion Date	Cost to Build	Interest Cost
<b>City Construction</b>						
3168.037	Pearce Lane Lift Station Upgrade (900 to 1800 gpm)	900 gpm exp	Upper Dry Creek	2012	550	0
6937.003	part So. IH35 W/WW Infrastructure Improvs PMC	PMC	Upper Onion	2012	3,992	4,251
6937.003	part So. IH35 W/WW Infrastructure Improvs PMC	PMC	Upper Onion	2012	644	0
6937.025	part S I-35, Onion Creek Wastewater Interceptor - Rinard to Slaughter (N Tunnel)	54"	Upper Onion	2012	13,355	14,223
6937.026	part S I-35, Onion Creek Golf Course WW Int - I 35 to Rinard (South Tunnel)	42"	Upper Onion	2012	11,473	12,219
6937.027	part S I-35, Onion Creek Wastewater Tie-in Line - Phase 1	24"	Upper Onion	2012	2,508	2,671
	group S I-35, Onion Creek Wastewater Interceptor - group	54"	Upper Onion	2012	31,972	33,364
3353.062	part Zachary Scott Tract (both city const. and dev design)	36"	Rinard	2010	5,997	6,387
3353.062	part Zachary Scott Tract (both city const. and dev design)	36"	Rinard	2010	2,310	0
	group Zachary Scott Tract (both city const. and dev design) group				8,307	6,387
4197.001	part ONION CRK INTRCPTR	54"	Onion, Middle	1986	1,965	2,093
4292.001	part ONION CK INTER EXST to BOGGY CK	54"	Onion, Middle	1989	2,351	2,504
4577.001	part ONION CREEK INTERCEPTOR	54"	Onion, Middle	1986	627	668
	group ONION CREEK INTERCEPTOR above tunnel group	54"	Onion, Middle	1986	4,943	5,264
4299.001	part ONION CK INTERCEPTOR PH 4 tunnel	84"	Onion Tunnel	1986	11,568	12,320
4577.001	part ONION CREEK INT REALLO tunnel	84"	Onion Tunnel	1986	10,576	11,263
	group ONION CREEK INTERCEPTOR TUNNEL group	84"	Onion Tunnel	1986	22,144	23,583
4221.001	WILLIAMSON CREEK INT PH II	42"	Up. Williamson	1989	820	873
4534.001	OAK HILL BR-OF WMSON CK INTER	30"	Up. Williamson	1989	1,533	1,633
6943.004	part Parmer Lane Interceptor	42"	Lake, Rattan	2017	483	514
6943.004	part Parmer Lane Interceptor	42"	Lake, Rattan	2017	26,598	0
	group Parmer Lane Interceptor group	42"	Lake, Rattan	2017	27,081	514
810.001	part Upper Walnut Creek Interceptor	36"	Up. Walnut	2002	8,362	8,906
810.001	part Upper Walnut Creek Interceptor	36"	Up. Walnut	2002	614	0
	group Upper Walnut Creek Interceptor group	36"	Up. Walnut	2002	8,976	8,906
3168.039	Waters Park Relief Main	36"	Up. Walnut	2015	4,087	4,353

**Table 2 Wastewater Impact Fee Projects**  
(Costs in 1000s)

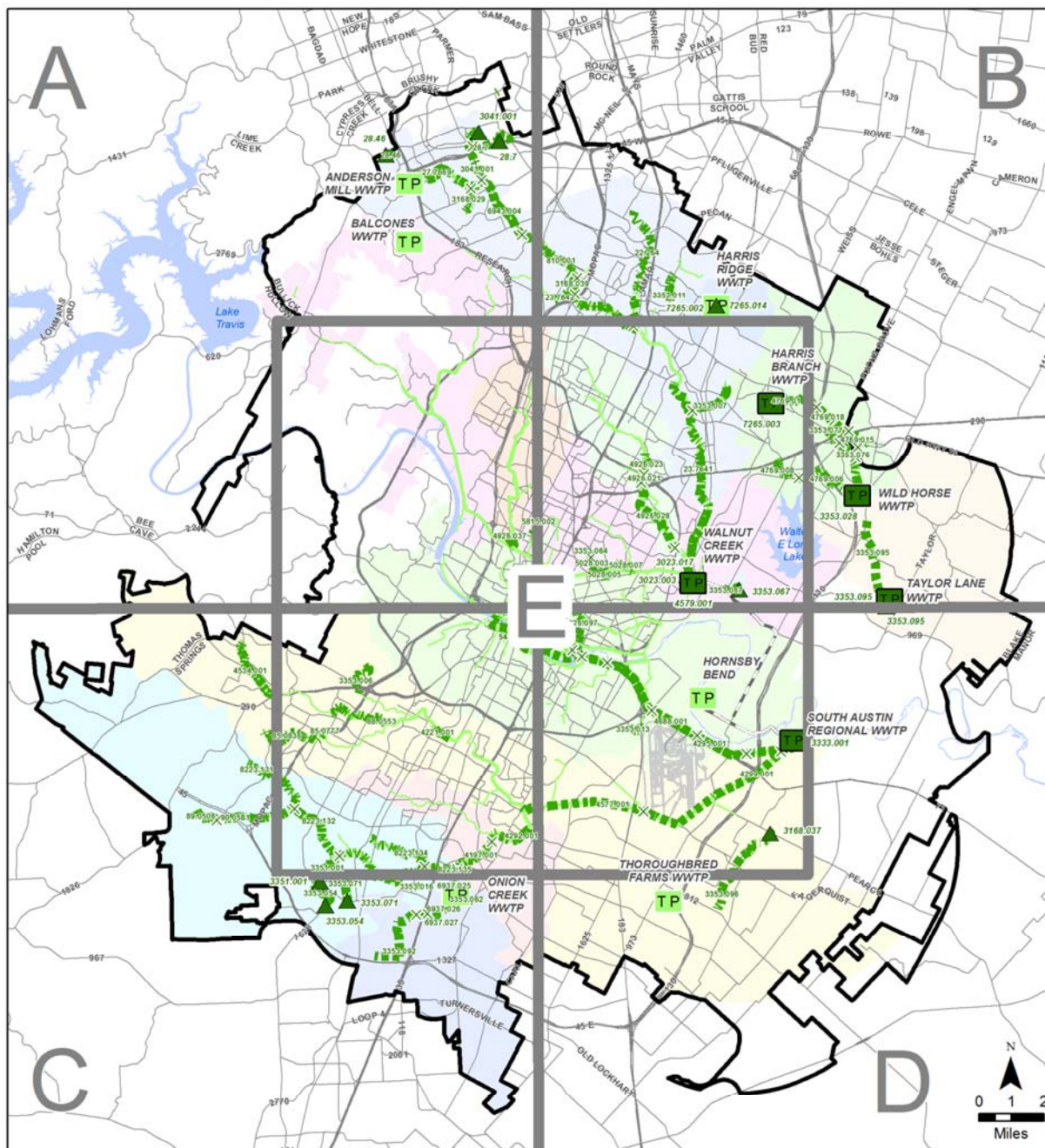
SubProject / Map ID	Project Description	Size	Drainage Basin	Completion Date	Cost to Build	Interest Cost
<b>City Construction</b>						
4926.026	part ACWP - Little Walnut/Buttermilk - South	60"	Little Walnut	2006	11,069	11,766
4926.026	part ACWP - Little Walnut/Buttermilk - South	60"	Little Walnut	2006	5,753	0
4926.021	part ACWP- Little Walnut/ Buttermilk at 290 and 193	42"	Little Walnut	2009	1,931	2,057
4926.023	part ACWP- Little Walnut/ Buttermilk at Centre Creek	42"	Little Walnut	2006	4,732	5,040
	group ACWP- Little Walnut/ Buttermilk group			2006	23,465	19,865
4926.037	ACWP - Shoal Creek WW Improvements / 29th to 34th St.	66"	Shoal Creek	2006	12,270	13,066
4926.097	ACWP Pedemales (Line Y only)	36"	Boggy Central	2010	4,859	5,175
4769.009	Wildhorse Northwest Interceptor Phase 2	21"/24"	Decker-Gileland	2013	2,597	0
4769.006	Northeast Service Area North Interceptor (Wildhorse North Interceptor)	36"	Decker-Gileland	2005	2,329	2,460
4769.010	Harris Branch Interceptor Lower A	30"	Harris-Gileland	2016	6,826	7,057
4769.016	Harris Branch Interceptor Lower B	36"	Harris-Gileland	2015	1,050	1,116
4769.018	Harris Branch Interceptor Lower B	36"	Harris-Gileland	2015	5,772	0
4769.015	Wildhorse North Interceptor Ext. No. of 290	42"	Harris-Gileland	2012	3,640	3,977
7265.002	Purchase of Deesau Utilities	.5 mgd plant, 4100 gpm LS, 16" FM	Deesau/Harris	2006	2,061	0
7265.014	Deesau WWTP Expansion to 1.0 MGD GROUP	.5 mgd EXP	Deesau/Harris	2016	4,500	4,793
					6,561	4,793
4966.001	part GOVALLE I & D SYSTEM	96"	Govalle/SAR part	1990	5,913	6,297
4966.001	part GOVALLE INTER AND DIVERSION	96"	Govalle/SAR part	1990	36,065	40,661
	group GOVALLE INTERCEPT AND DIVERSION group	96"	Govalle/SAR part	1990	43,996	46,958
5461.001	part Downtown Wastewater Tunnel	96"	Upper Gov/SAR part	2012	53,262	56,745
5461.001	part Downtown Wastewater Tunnel	96"	Upper Gov/SAR part	2012	6,309	0
	group Downtown Wastewater Tunnel group	96"	Upper Gov/SAR part	2012	61,591	56,745
3333.001	part SAR Expansion & Improvements Project (50 to 75 mgd)	25 mgd exp	SAR service	2006	19,067	20,306
3333.005	part SAR Lift Station Interconnect Tunnel	25 mgd exp	SAR service	2006	3,941	4,197
3333.006	part SAR Train C South	25 mgd exp	SAR service	2006	26,367	31,297
3333.007	part SAR Train C North	25 mgd exp	SAR service	2006	25,605	27,269
3333.007	part SAR Train C North	25 mgd exp	SAR service	2006	2,826	0
3333.008	part SAR New Electrical Substation and Miscellaneous Areas	25 mgd exp	SAR service	2006	13,239	14,066
	group SAR WWTP 50 to 75 MGD EXPANSION group	25 mgd exp	SAR service	2007	94,064	97,166
3023.017	part Walnut Creek WWTP 75 MGD Upgrade	15 mgd exp	Walnut service	2004	9,656	9,434
3023.017	part Walnut Creek WWTP 75 MGD Upgrade	15 mgd exp	Walnut service	2004	16,753	0
4579.001	part WALNUT CREEK WWTP, PH III	15 mgd exp	Walnut service	2004	16,469	16,469
3023.003	part Walnut Creek WWTP	15 mgd exp	Walnut service	2004	20,474	21,805
	group WALNUT CREEK WWTP60 TO 75 MGD group	15 mgd exp	Walnut service	2005	63,569	47,726

**Table 2 Wastewater Impact Fee Projects**  
(Costs in 1000s)

SubProject / Map ID	Project Description	Size	Drainage Basin	Completion Date	Cost to Build	Interest Cost
<b>Developer Reimbursements</b>						
3353.095	Whisper Valley-Indian Hills CRA	30/36"/LS/TP	Lower Gilleland	2015	11,500	14,804
3353.092	Stratford Tracts 1,2,3-SER Developer Reimbursement Upper Onion Basin = 1	15/18/24	Upper Onion	2014	2,222	2,366
3353.054	MARBRIDGE FARMS WASTEWATER	350 gpm LS	Lower Bear	2007	217	231
3353.071	Rancho Alto Ventures group Developer Reimbursements Bear Creek = 2	500 gpm LS, FM 850 gpm	Lower Bear Lower Bear	2008 2006	442 659	471 702
3351.001	Cullen/Southland Acquisition	12"FM/18"	Slaughter	1997	761	0
3353.016	Akin High School Reimbursement group Developer Reimbursements Slaughter Basin = 2	18" 18"	Slaughter Slaughter	2000 2000	459 1,220	0
3353.006	TRAVIS COUNTRY Developer Reimbursement Williamson Basin = 1	21"	Williamson	1997	41	44
3353.013	Metro Center Services Extension ( #1537) group Developer Reimbursements Carson Creek Basin = 1	24" 24"	Carson Carson	2000 2000	151 151	0
3353.096	Formula One United States group Developer Reimbursements Mid Dry Creek Basin = 1	30" 30"	Upper Dry Creek Upper Dry Creek	2012 2012	8,127 8,127	0
3353.007	JOURDAN CROSSING WW LLINE (Samsung) Dell 18	48" 18"	Walnut Creek Walnut Creek	1998 2000	2,406 652	0
3353.011	group Developer Reimbursements Walnut Creek Basin = 2	24"	Walnut Creek	2007	3,058	0
5815.002	Triangle - Infrastructure Incentives	18"	Waller Creek	2005	1,193	1,271
3353.049	Robertson Hill Development group Developer Reimbursements Waller Creek = 2	15" 15/18"	Waller Creek Waller Creek	2008 2008	693 1,886	738 2,009
3353.028	Wild Horse Ranch	.75 mgd	Decker	2009	4,075	4,340
3353.076	Wild Horse Addition	18"	Decker	2009	793	845
3353.077	Scots Glen group Developer Reimbursements Decker Creek = 3	18" .75 mgd, 18/24"	Decker Decker	2009 2009	845 5,713	0 4,340
3041.001	DAVIS SPRINGS SERVICE EXT. 3600 gpm LS #1, and >	16"FM/21" gravity	Lake Creek	1996	1,476	0
28.46	3353.093 Lakeline Condos-Gencap Partners SER 2846	15"FM/1100gpmLS	Lake Creek	2013	1,065	1,065
28.7	3353.094 Pearson Ranch-RRISD SER 2869 and 2870	12/24/FM/1100gpmLS	Lake Creek	2016	2,060	2,194
3168.029	Balcones Lift Station Relief (STANZEL BROTHERS) group Developer Reimbursements Lake Creek Basin = 4	24" 12/24/FM/1100gpmLS	Lake Creek Lake Creek	2002 2016	1,576 6,112	1,678 4,937
3353.067	Austin Blue Sky In Inc SER 2271	1000 gpm LS, FM	Elm Creek	2006	680	724
5028.005	RMMA Redevelopment South SER 2281 (plans 2007-0016)	15"	Tannehill To SAR	2009	1,301	1,386
5028.007	RMMA SER 2282 Southeast WW Improvements	15-inch	Fannehill to WALNU	2010	2,539	0
5028.007	RMMA SER 2282 Southeast WW Improvements	15-inch	Fannehill to WALNU	2010	3,150	3,355
5028.003	RMMA Airport Rd WW Improvs Phase Two SER 2279	18-inch	Fannehill to WALNU	2008	2,011	2,142
5028.007	RMMA Redevelopment Catellus SER 2263 group RMMA developer reimbursements Tannehill to WALNUT group	15-inch 15/18"	Fannehill to WALNU Fannehill to WALNU	2010 2010	447 8,147	476 5,973

**Table 2 Wastewater Impact Fee Projects**  
(Costs in 1000s)

SubProject / Map ID	Project Description	Size	Drainage Basin	Completion Date	Cost to Build	Interest Cost
<b>Capital Investment in Brushy Creek Regional Wastewater System</b>						
NA	Purchase of Brushy System Capacity from LCRA, to 0.84mgd	0.5 mgd increase	Brushy Creek	2010	12,063	12,847
<b>Contract Revenue Bond Projects</b>						
Circle C MUD #4 Slaughter Creek Facility 89.0506	South Branch Interceptor and Extension CC#4 MUD	21-30-inch	Slaughter	1988	1,295	1,379
Circle C MUD #3 Slaughter Creek Facilities 8223.131	82/23-13 North Bank Upper Slaughter Cr.Int. A&B CC#3 MUD	36-inch	Slaughter	1988	1,650	1,757
8223.132	82/23-13 Slaughter Creek Interceptor Phases 1, 2A & 2B CC#3 MUD	48-54-inch	Slaughter	1988-1992	9,280	9,883
Southland Oaks MUD Slaughter Creek Facilities 8223.132	82/23-13 Slaughter Creek Interceptor 1 & 2 SO-MUD	48-inch	Slaughter	1990	701	747
8223.134	82/23-13 Slaughter North Branch Interceptor SO-MUD	30-inch	Slaughter	1990	1,595	1,699
8223.135	82/23-13 Slaughter Tunnel SO-MUD	54-inch	Slaughter	1988	3,442	3,666
Southland Oaks MUD Onion Creek Facility 4197.001	Onion Creek Int Phase 3 (Slaught. To Boggy) SO-MUD	54-inch	Onion, Middle	1988	2,935	3,126
Village at Western Oaks MUD 88.055	North Williamson Creek Int & Easements VWO MUD	42-inch	Williamson	1989	3,097	3,298
88.084	South Williamson Trunk Phases 1 and 2 VWO-MUD	15-24-inch	Williamson	1989	919	979
Maple Run at Austin MUD Williamson Creek Facility 85.0777	Williamson Creek 30" WW Interceptor MR-MUD	30-inch	Williamson	1989	500	533
North Central Austin Growth Corridor MUD #1 Walnut Creek Facilities 23.7641	72/23-05 Lower Walnut Creek WW Imp Phases A,B&C NCAGC-MUD	72-inch	Walnut	1987	12,221	13,015
23.7642	Upper Walnut Creek Int Phases 3A,3B,4&5 NCAGC-MUD	60-inch	Walnut	1987	6,253	6,659
North Austin GC MUD #1 Wells Branch Upper Walnut Facilities 22.264	Wells Branch WW Trunk Line Phases, 1,1A, 2&3 NCAGC-MUD	18-24-inch	Walnut	1985	1,468	1,563
na	Upper Walnut Creek WW Trunk Line Phase 2 NCAGC-MUD	24"	Walnut	1985	1,325	1,411
North Austin MUD #1 27.7669	Lake Creek Collection, Lake Creek Wastewater System Improvements Contracts 1&2 (LS at capacity)	48"	Lake Creek	1989	3,627	3,863
Totals					556,011	494,382
Total Cost to Build w/ Interest						1,050,393



- 2012 Impact Fee Boundary Update
- ▲ CIP Lift Station or Pump
- CIP Tunnel Shaft
- CIP WW Treatment Plant
- CIP Wastewater Pipes
- TP Existing City WWTP
- Existing Wastewater Pipes 24" - 36"
- Existing Wastewater Pipes 42" - 60"
- Existing Wastewater Sludge Line
- X Project Separator

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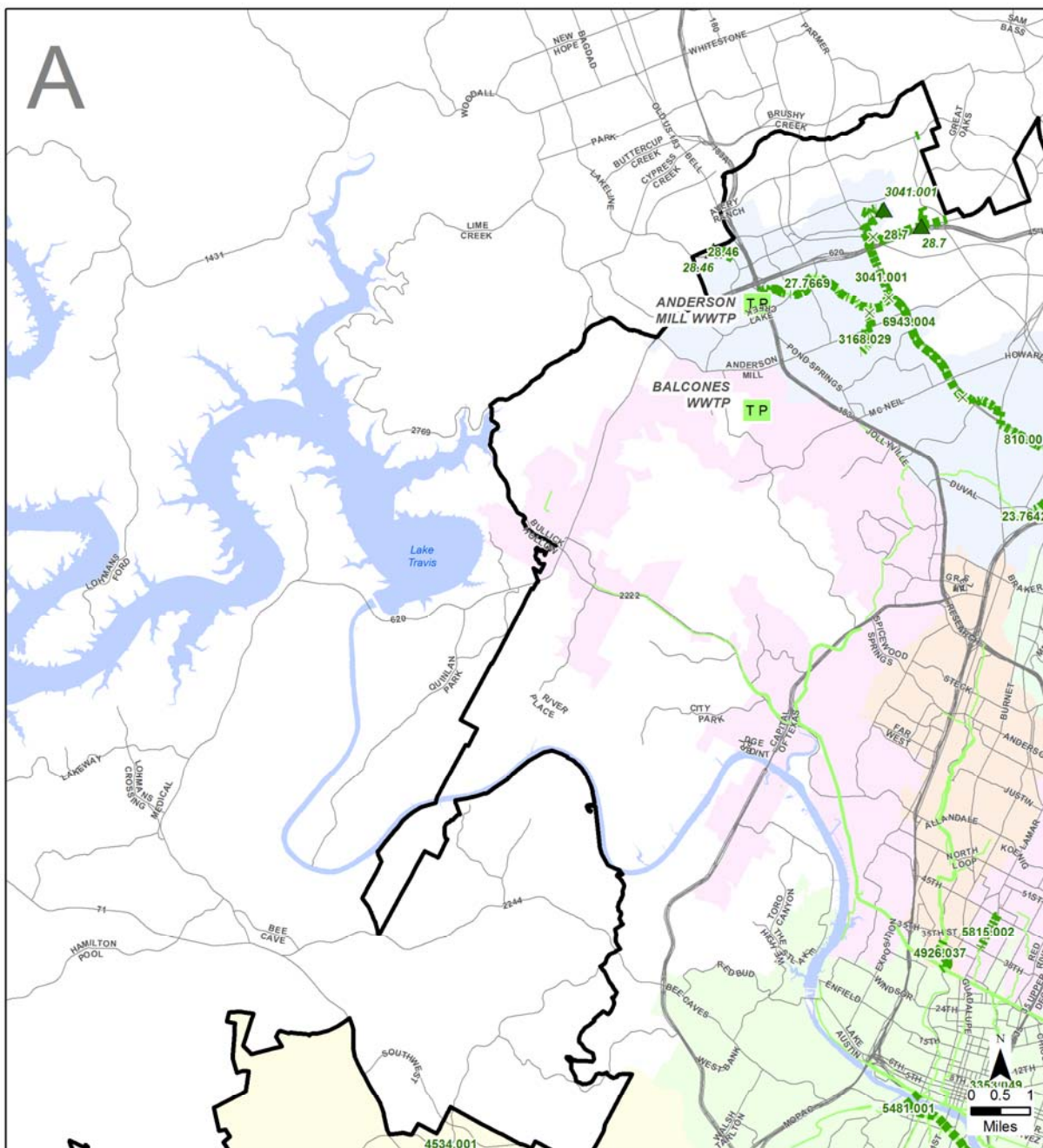
## Impact Fee CIP Major Wastewater Facilities

Produced by GIS Services [4241]

MAP 2


CIP-18  
DRAFT SUBJECT TO CHANGE





- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 2012 Impact Fee Boundary Update | Existing City WWTP                  |
| CIP Lift Station or Pump        | Existing Wastewater Pipes 24" - 36" |
| CIP Tunnel Shaft                | Existing Wastewater Pipes 42" - 60" |
| CIP WW Treatment Plant          | Existing Wastewater Sludge Line     |
| CIP Wastewater Pipes            | Project Separator                   |

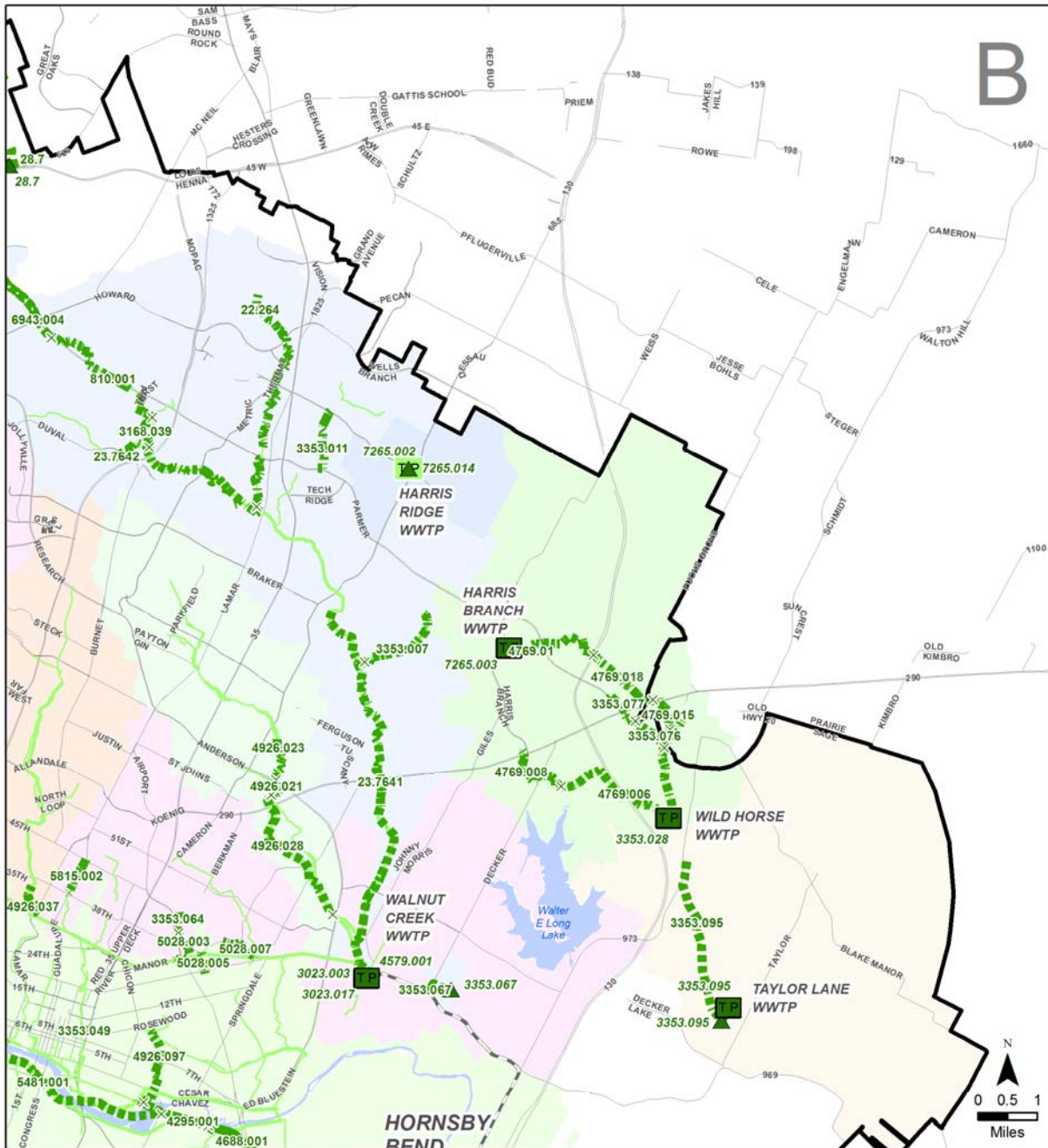
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**City of Austin**  
 Austin Water Utility  
 May, 2013  
**Impact Fee CIP**  
**Major Wastewater Facilities**  
**(A)**

Produced by GIS Services [4241]

MAP 2A

CIP-19  
 DRAFT SUBJECT TO CHANGE



-  2012 Impact Fee Boundary Update    
  Existing City WWTP  
 CIP Lift Station or Pump    
 Existing Wastewater Pipes 24" - 36"  
 CIP Tunnel Shaft    
 Existing Wastewater Pipes 42" - 60"  
 CIP WW Treatment Plant    
 Existing Wastewater Sludge Line  
 CIP Wastewater Pipes    
 Project Separator

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Austin Water Utility  
May, 2013



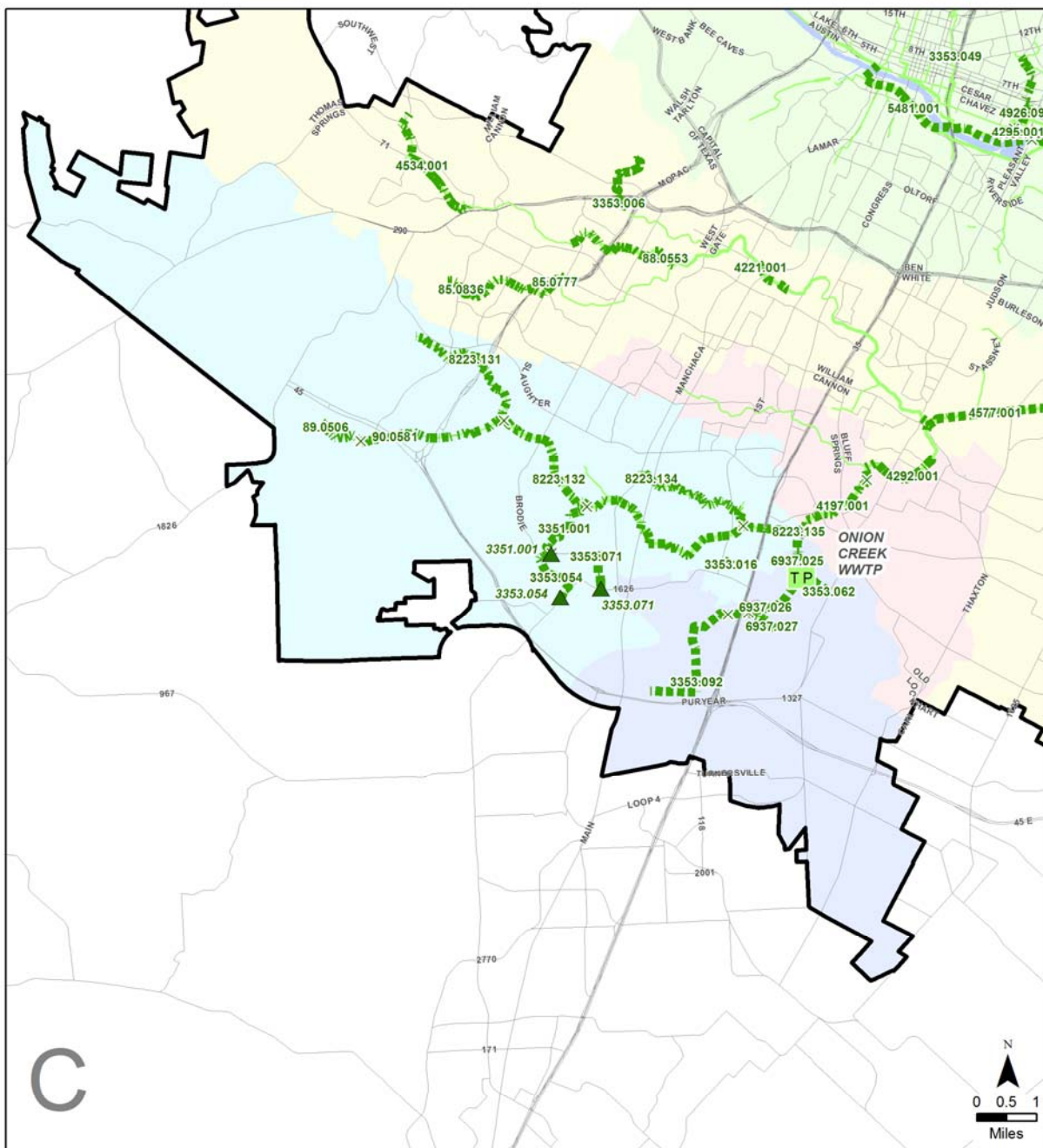
Impact Fee CIP  
Major Wastewater Facilities  
(B)

Produced by GIS Services [4241]

MAP 2B


CIP-20  
DRAFT SUBJECT TO CHANGE





- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 2012 Impact Fee Boundary Update | Existing City WWTP                  |
| CIP Lift Station or Pump        | Existing Wastewater Pipes 24" - 36" |
| CIP Tunnel Shaft                | Existing Wastewater Pipes 42" - 60" |
| CIP WW Treatment Plant          | Existing Wastewater Sludge Line     |
| CIP Wastewater Pipes            | Project Separator                   |

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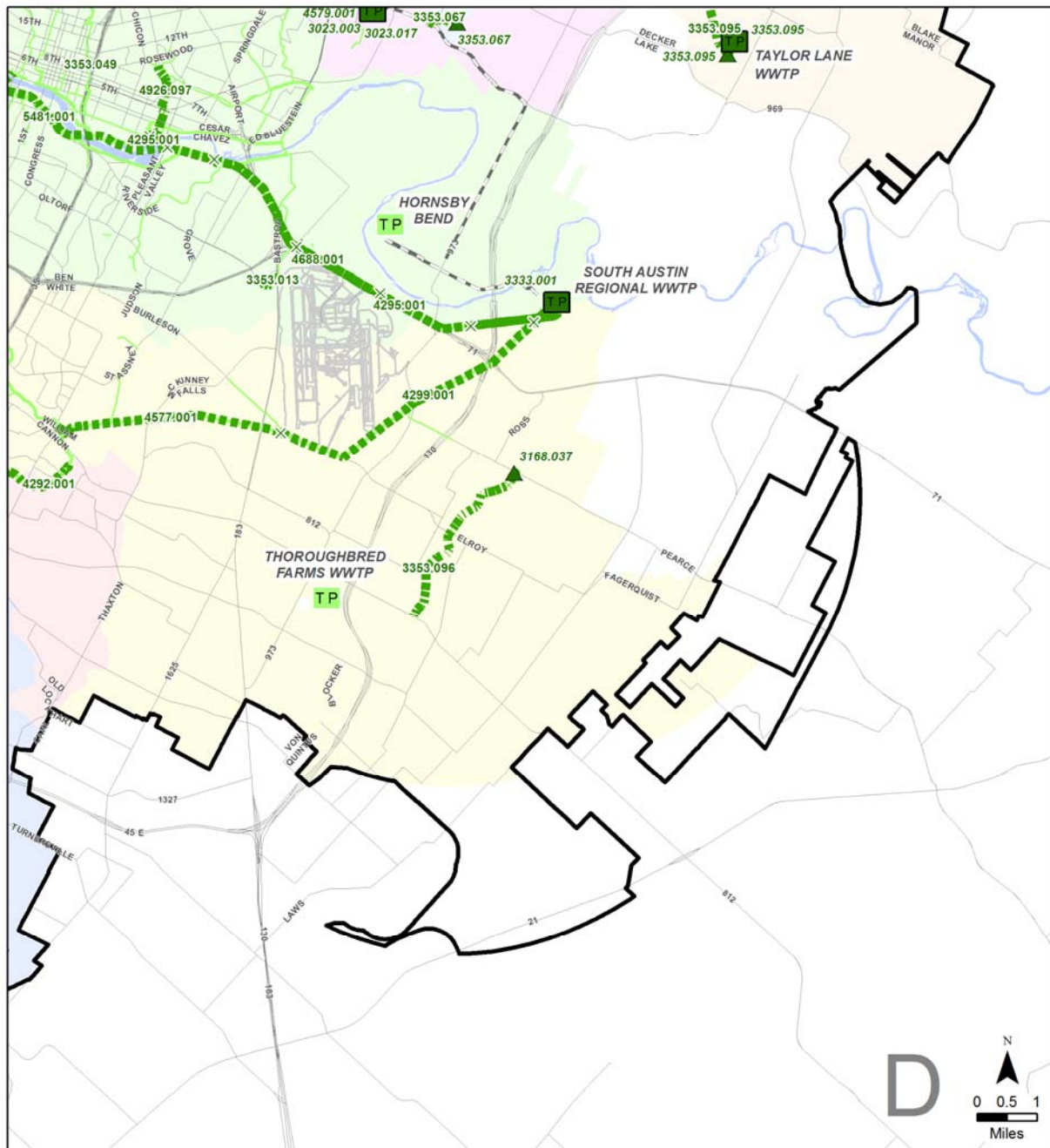

**City of Austin**  
**Austin Water Utility**  
 May, 2013  
**Impact Fee CIP**  
**Major Wastewater Facilities**  
**(C)**

Produced by GIS Services [4241]

MAP 2C

CIP-21  
 DRAFT SUBJECT TO CHANGE



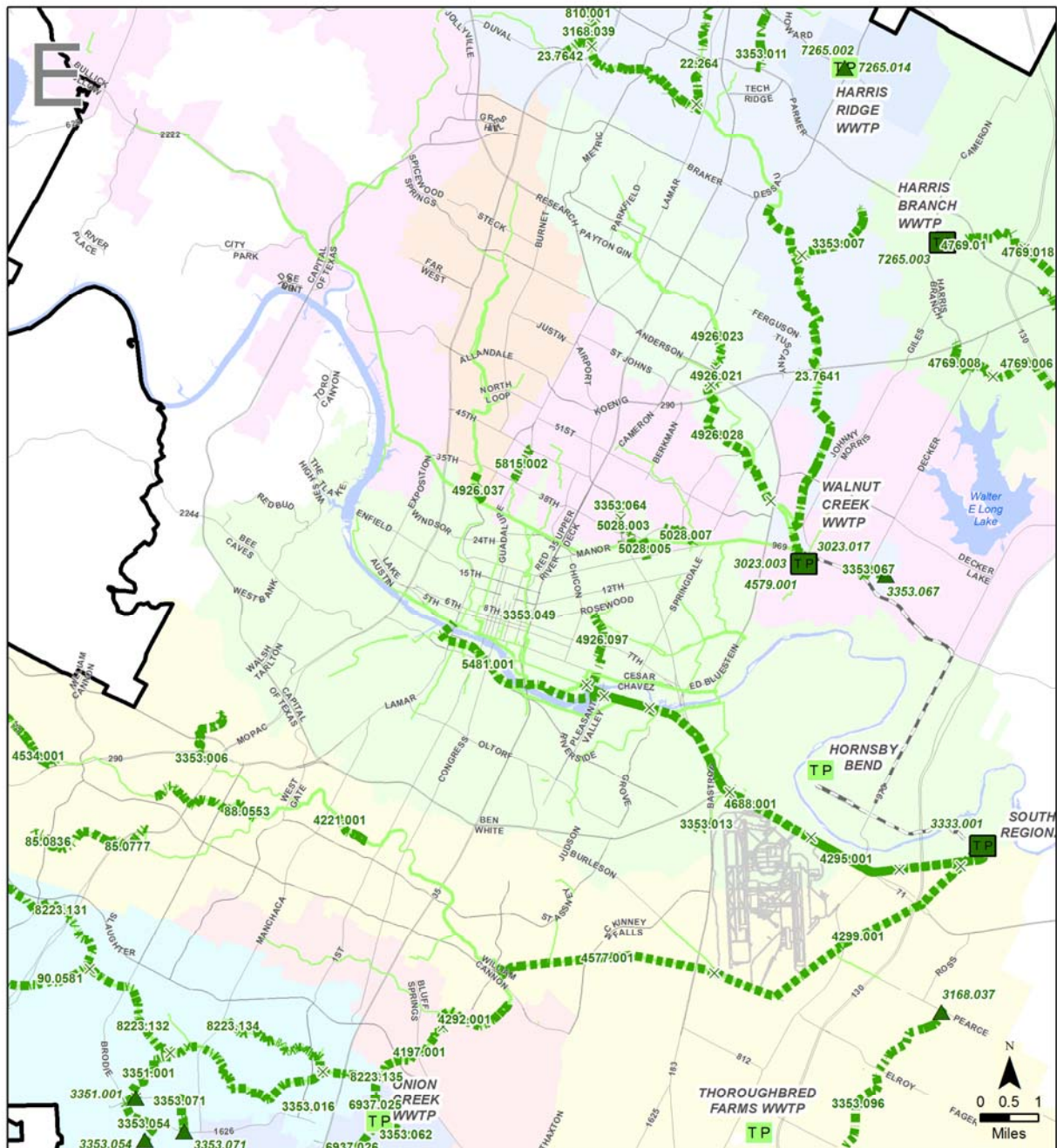


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**City of Austin**  
**Austin Water Utility**  
 May, 2013  
**Impact Fee CIP**  
**Major Wastewater Facilities**  
**(D)**  
 Produced by GIS Services [4241]


MAP 2D

CIP-22  
 DRAFT SUBJECT TO CHANGE




- 2012 Impact Fee Boundary Update
- ▲ CIP Lift Station or Pump
- CIP Tunnel Shaft
- CIP WW Treatment Plant
- CIP Wastewater Pipes
- Existing City WWTP
- Existing Wastewater Pipes 24" - 36"
- Existing Wastewater Pipes 42" - 60"
- Existing Wastewater Sludge Line
- X Project Separator

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City of Austin  
Austin Water Utility  
May, 2013



## Impact Fee CIP Major Wastewater Facilities (E)

Produced by GIS Services [4241]

MAP 2E

CIP-23  
DRAFT SUBJECT TO CHANGE

**Table 3 Long-Range Future Growth Projects in the Capital Improvements Program**

Capital Improvement Projects Targeted to Meet Long-Range Future Needs  
Timing uncertain, or beyond 2020, or not serving new users in 10-year planning horizon

<b>WATER</b>			(Costs in 1000s)
<b>DEPT</b>	<b>SUBPROJECT ID</b>	<b>SUBPROJECT NAME</b>	<b>COST</b>
2207	2006.013	Far South Zone Pump Station	\$6,000
2207	2127.016	Southwest Parkway SWB Elevated Reservoir	\$5,000
2207	2127.022	Far South Zone Reservoir	\$6,000
2207	3353.060	Pioneer Crossing Amended PUD (North)	\$1,170
2207	3353.079	Ridgeview Subdivison	\$165
2207	6935.001	Davis Medium Service TM	\$56,000
2207	6935.005	Springdale Road/US 183/Hwy 71 TM	\$9,400
2207	6935.007	East Highway 183 TM	\$4,720
2207	6935.013	Forest Ridge/NWA Transmission Main	\$1,123
2207	6935.019	Parmer & 620 Interconnect	\$2,220
2207	6935.022	Springdale/290 Improvements	\$3,250
2207	6935.024	EAPS to Cameron TM	\$22,000
2207	6935.025	Southwest Parkway TM (SWB)	\$3,600
2207	6935.026	Moore Rd TM	\$3,500
2207	6935.029	FM 812 TM	\$8,000
2207	6935.031	McNeil Rd TM	\$23,000
2207	6935.033	Johnny Morris/Hwy 290 Area Grid Extension	\$2,200
2207	6935.039	Cameron Rd Distribution Waterline(s)	\$3,627
2207	6936.002	Martin Hill Elevated Reservoir	\$6,000
2207	6937.002	South I-35 Elevated Tank	\$10,117

<b>WASTEWATER</b>			(Costs in 1000s)
<b>DEPT</b>	<b>SUBPROJECT ID</b>	<b>SUBPROJECT NAME</b>	<b>COST</b>
2307	448.002	Williamson Creek Tunnel And Gravity Interceptor	\$37,000
2307	3023.033	Walnut Creek WWTP Sludge Transfer Line	\$6,850
2307	3023.046	Walnut Creek WWTP 100 MGD Expansion	\$287,505
2307	3168.040	Boggy Creek Tunnel	\$8,400
2307	3168.059	Pearce Lane Lift Station Phase 2 Upgrade and New Forcemain	\$3,500
2307	3353.060	Pioneer Crossing Amended PUD (SER, North)	\$2,000
2307	3353.073	Watersedge PUD (SER)	\$8,163
2307	3353.083	The Vistas (SER)	\$4,239
2307	3353.098	Block 18 Alley WW Relocation	\$5,791
2307	3353.091	Pearson Avery Ranch (Future Wastewater SER)	\$2,132
2307	3353.101	Bellingham Meadows/Wm Wallace Way LS SER	\$2,280
2307	4769.011	Upper Harris Branch Wastewater Improvements	\$14,585
2307	4769.017	Upper Gilleland Interceptors-18 inch	\$15,949
2307	4769.019	Upper Gilleland Interceptor -24 inch	\$3,441
2307	6943.003	Lower Tannehill Interceptor (above Crosstown Tunnel)	\$5,000
2307	6943.020	WWTP Flow Transfer (Walnut growth capacity management)	\$2,100
2307	6943.023	Onion Interceptor Upgrade - Segment 2-Etj To Bear	\$2,500
2307	6943.024	Robinson Ranch Walnut Interceptor	\$6,000
2307	7265.004	Wildhorse WWTP Expansion to 1.5 MGD	\$8,000



Table 4 Projects Removed from Previous Impact Fee Listing

Removed Water Impact Fee Projects (All costs in 1000s of dollars)						
Subproject #	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Reason
2919.001	Millwood NWB Transmission Main	16"	Northwest B	1993	164	minimal capacity remaining
6683.005	Four Points/NWB TM	36"	Northwest B	2014	499	plan changed by new site location
6683.003	Forest Ridge/NWA TM	48"	Northwest A	2014	8,362	moved to future, Table 3
3353.060	Pioneer Crossing Amended PUD (North)	24"	North	2007	1,170	no developer activity, to Table 3
3353.043	Morse Tract/TND	24"	North	2007	1,545	no developer activity, to Table 3
6935.010	SH130 Crossings	misc.	Central	2006	300	minor cost to track in multi-zones
6935.001	Davis Medium Service TM	72"	North Central	2024	56,000	moved to future, Table 3
3353.063	Johnson Ridge Tract Water SER #2257	36"	South Central	2008	6,218	no developer activity, to Table 3
6935.004	U S 183 South/McKinney Falls Pkwy TM	24"	South Central	2013	1,960	moved to future, Table 3
3353.053	Colton Bluff Subdivision Water	24"	South	2006	688	reconfigured in S l35 project
3353.066	Riddell/Adams Extract Tracts Water	36"	South	2006	3,978	reconfigured in S l35 project
3368.002	Pilot Knob/Thaxton Road TM	48"	South	2013	11,443	reconfigured in S l35 project
6937.002	South I-35 Elevated Tank and Site	3 mg	South	2020	10,117	moved to future, Table 3
3353.030	Pickard Tract (old Barker Pickard) Developer Reimburse	16/24"	Southwest A	2004	971	minimal capacity remaining
3798.001	Approach Main Oversize	16/24"	Entire System	1995	1,111	minimal capacity remaining
Removed Wastewater Impact Fee Projects (All costs in 1000s of dollars)						
Subproject #	Project Description	Size	Drainage Basin	Completion Date	Cost to Build	Reason
NA	Brushy 10-year payments on WWTP and Int. Capital Imps from proforma	0.3 mgd exp.	Brushy Creek	2010	10,247	replaced by later capacity purchase
4769.011	Lake Creek LS Capacity Increase	4200 gpm exp.	Lake Creek	2007	500	replaced by Palmer Ln Int 6943.004
3353.060	Upper Harris Branch Interceptor	24"/30"	Harris Branch	2020	15,200	moved to future, Table 3
7265.003	Pioneer Crossing Amended PUD N	24/30"	Harris-Gilleland	2007	4,068	no developer activity, to Table 3
7265.006	Harris Branch Pkg WWTP expansion to 0.6 mgd	0.6 mgd	Harris Branch	2007	1,200	replaced by Harris Branch 4769.18
3353.073	Northeast Subregional WWTP Site	site for 15 mgd	Gilleland	2009	5,000	area plan is changing
3353.041	Watersedge PUD	2500 gpm LS	Colorado River	2007	2,690	no developer activity, to Table 3
7025.001	Berdoll Farms LS & FM Reimburse. (Pearce Ln LS)	900 gpm LS	Dry Creek	2000	988	replace by Pearce LS upgrade 3168.037
448.002	Garfield Tract 0.3 mgd WWTP	0.3 mgd	Dry Creek South	2013	2,450	changed to MUD funding
3353.053	Williamson Creek Tunnel and Gravity Interceptor	66"	Williamson	2015	40,020	moved to future, Table 3
3164.016	Colton Bluff Subdivision	24"	Onion-Marble	2006	785	plan change to developer only facility
3164.034	Hornsby Bend Inlet Screens (55 to 70 dry ton/day)	15dt/day exp	Entire System	2014	1,657	master plan reevaluation underway
3164.033	Hornsby Bend Sidestream Trmt Plant Rebuild	15dt/day exp	Entire System	2014	2,050	master plan reevaluation underway
3164.023	Hornsby Bend SAR Digester House Rebuild	15dt/day exp	Entire System	2012	1,000	master plan reevaluation underway
3164.024	Hornsby Bend 2 Add'l GBTs	15dt/day exp	Entire System	2012	1,450	master plan reevaluation underway
3164.024	Hornsby Bend Additional Inlet Screens	15dt/day exp	Entire System	2012	950	master plan reevaluation underway

### III. IMPACT FEE FACILITIES AND FEE CALCULATION METHODOLOGY

The facilities that provide the bulk of water and wastewater capacity for new growth in Austin's service area are listed in Table 1 and Table 2 (and again in Tables 8 and 9 in Section VI). They were selected from the complete list of planned projects, including the major facilities built with contract bonds and developer contract reimbursements, according to the following criteria:

- Has the predominant function of serving new growth rather than existing growth;
- Does not provide repair, operation, or maintenance of existing facilities;
- Does not upgrade, expand or replace existing facilities serving existing development in order to meet stricter safety, environmental or regulatory standards.

These impact fee projects represent the individual projects that provide capacity necessitated by new development projected to occur within the next ten years. As shown in Table 1 and Table 2, most are already built as part of the City's CIP program, with only a portion not yet constructed. Impact fee facilities are shown graphically in Map 1 and Map 2.

To determine the costs of projects attributable to new growth, the Texas Impact Fee Act outlines a conceptually simple 4-step process based on quantifying the demand versus capacity relationship for projects in service areas. The process can be stated as follows:

1. Determine capacity of project in service units, and cost per service unit;
2. Determine future demand (capacity used up) for project in service units for the ten-year planning period;
3. Determine the impact project cost attributable to new growth, which is the cost per service unit (step 1) multiplied by the planning period demand (step 2).
4. Determine the cost per service unit by dividing the summation of the costs of the capital improvements (step 3) by the total number of projected service units for the ten-year planning period from the Land Use Assumptions.

The complex part of this methodology is step 2, determining the capacity that will be used in an individual project during the planning period. One might be tempted to simply add up the cost per service unit of each project to come up with a fee. This would be invalid because each new user does not use a service unit of capacity in every new project, and would result in double counting. Instead, the spatial allocation of new users from the Land Use Assumptions must be used to estimate the actual usage of a given project. To carry out this approach in a manageable manner, the water and wastewater service areas were divided up into subareas, pressure zones for water and drainage areas for wastewater. Sets of projects are assigned to each subarea, and the capacity addition to the subarea system is then defined. The assumption is made that each new user in a subarea uses a service unit of the available capacity associated with the selected set of impact fee projects in that subarea. The structure of Tables 8 and 9 illustrates this "subarea" methodology.

Calculation of the impact fee is not sensitive to the length of the planning period or the number of new growth users as long as all projects have more than enough capacity for growth (in excess of capacity serving existing users) in the planning period, as is the case with the great majority of Austin's impact fee improvements, because the number of new service units occurs in both the numerator and the denominator of the fee calculation. The calculation is more sensitive to the location of new users. If a large proportion of new users are projected to locate in areas with high cost per service unit for impact fee facilities, the calculated impact fee is correspondingly higher. If instead, more are projected to locate in areas with few or inexpensive impact fee facilities, the calculated fee will be lower.

#### IV. SERVICE UNIT DEMAND AND CAPACITY RELATIONSHIPS

See Land Use Assumptions Section IV, SERVICE UNITS, page LUA-6 and LUA-7 for service unit calculation discussion.

##### Water Service Unit Equivalency:

For 2010 residential use, 388 gallons per day per service unit divided by an average flow per capita of 103.9 gallons per capita per day (2010 residential pumpage divided by 2010 population) yields 3.74 residents per service unit. 2010 non-residential service unit equivalency is estimated at 4.90 employees per service unit by dividing 388 gallons per day per service unit by an average flow per employee of 79.2 gpcd (2010 non-residential pumpage divided by the 2010 number of employees). The number of residential customers per average service unit in Austin appears to be very high because this calculation is skewed by the large percentage of customers living in multi-family housing and by municipal utility districts with master meters. These types of customers typically have large master meters with more efficient ratios between number of users and maximum capacity (on which the number of service units is determined) than do small residential meters. A summary of this information is provided in Table 5 below.

Table 5. LAND USE - SERVICE UNIT EQUIVALENCY MATRIX FOR THE  
WATER SYSTEM: CONVERSIONS FOR A TEN-YEAR PERIOD

Year	Service Units	Average Number of Residents / Service Unit	Average Number of Employees / Service Unit	Average Number of Gallons / Day Water Use
2010	1	3.74	4.90	388
2020	1	3.78	4.95	348

Meter size selection usually involves a count of water-using fixtures and an analysis of the number of fixtures that may be used at one time, calculated by a builder, engineer or architect. The result is a determination of the flow characteristics of a structure, or other facility relating the land use, to continuous and maximum flow requirements, which in turn are compared against meter flow ratings to select a meter size. Thus, a given meter size reflects a user-defined level of use or consumption in terms of flow. The average daily flow of one service unit, defined above, was chosen as the basis of consumption in this analysis so that every customer charged an impact fee will be placed on a uniform, flow-based footing. This indicates that on an average, each meter purchaser would be expected to use about 388 gallons per day per service unit (gpd/su) (in year 2010) and 348 gpd/su (in year 2020) of meter capacity purchased. The corresponding maximum day and peak hour consumption (needed to determine the required capacity in facilities) are readily determined from the known relationships between these flows derived from flow measurements in the water pressure zones.

##### Service Unit Conversion Factors:

The foregoing basic service unit definitions are specific to particular terms for relating magnitude and duration of flow, average daily pumpage in the case of water service units and average daily flow for wastewater. Utility facilities are sized using varied design flow criteria. To calculate the capacity of a given facility in service units the basic service unit value must be converted to the necessary design flow basis for that type of facility using the appropriate peaking factor relationship. These relationships are shown on Tables 6 and 7 along with the capacity sizing basis for each type of facility. Note for example, that for wastewater lift stations and force mains, a peaking factor of 4 is used to convert the basic wastewater service unit (287 gpd/su) to a wet weather peak basis, so that an infiltration and inflow flow component is factored into the calculation of service unit capacity.

**Table 6 Water Service Unit Conversion Factors for Facility Capacity****Water Facilities**

Service Unit Flow Definition: Q/SU -- annual average flow basis

2012 analysis: 388 gpd/SU for 2010 and 348 gpd/SU for 2020. Average used for capacity calculation = **368 gpd/SU**

2006 analysis: 445 gpd/SU all years

2001 analysis: 484 gpd/SU all years

Facility	Capacity Sizing Basis	2006 Peaking Factor	2006 Service Unit Flow gpd per SU	2012 Peaking Factor	2012 Service Unit Flow gpd per SU
Water Treatment Plant	max day flow = plant rated capacity	1.70	445x1.7 = 756	1.75 (Note 1)	368x1.75 = 644
Pump Station	1.25 x zone max day flow = pump station rated capacity				
NWC	"	2.488	445x2.488x1.25= 1384	2.04	368x2.04x1.25= 938
NWB	"	2.149	445x2.149x1.25= 1195	2.1	368x2.10x1.25= 966
NWA	"	2.149	445x2.149x1.25= 1195	1.95	368x1.95x1.25= 897
North	"	1.877	445x1.877x1.25= 1044	1.69	368x1.69x1.25= 777
Central	"	1.776	445x1.776x1.25= 988	1.4	368x1.40x1.25= 644
South	"	1.923	445x1.923x1.25= 1070	1.65	368x1.65x1.25= 759
SWA	"	2.126	445x2.126x1.25= 1183	2.29	368x2.29x1.25= 1053
SWB	"	2.262	445x2.262x1.25= 1258	2.45	368x2.45x1.25= 1127
SWC	"	2.488	445x2.488x1.25= 1384	2.61	368x2.61x1.25= 1201
Transmission Main	zone peak hour flow = pipe capacity at 5 fps				
NWC	"	4.647	445x4.647= 2068	4.09	368x4.09= 1505
NWB	"	3.595	445x3.595= 1600	3.82	368x3.82= 1406
NWA	"	2.806	445x2.806= 1249	3.15	368x3.15= 1159
North	"	3.018	445x3.018= 1343	2.59	368x2.59= 953
Central	"	2.46	445x2.46= 1095	1.93	368x1.93= 710
South	"	3.025	445x3.025= 1346	2.48	368x2.48= 913
SWA	"	3.727	445x3.727= 1659	4.01	368x4.01= 1476
SWB	"	3.576	445x3.576= 1591	5.47	368x5.47= 2013
SWC	"	4.115	445x4.115= 1831	4.99	368x4.99= 1836
Storage Tank	city volumetric criteria 200 gal/capita	na	200gal/capita x 799,965 capita / 316,147 SU = 506 gal/SU	na	200gal/capita x 875,936 capita / 352,521 SU = 497 gal/SU

Note 1. The water plant peaking factor of 1.75 is the trended max day flow with 10% variation factor.

Table 7 Wastewater Service Unit Conversion Factors for Facility Capacity

**Wastewater Facilities**

Wastewater Service Unit Flow Definition: Q/SU -- annual average flow basis

2012 -- weather normalized flow based -- **287 gpd/SU**

2006 -- at 61.73% return flow = 275 gpd/SU

2001 -- at 65% return flow = 318 gpd/SU

Facility	Capacity Sizing Basis	2006 Peaking Factor	2006 Service Unit Flow gpd per SU	2012 Peaking Factor	2012 Service Unit Flow gpd per SU
Wastewater Treatment Plant	annual average flow = plant rated capacity	1	275x1 = 275	1	287x1 = 287
Interceptor	peak hour flow (5yr storm I/I) = 80% pipe full capacity	4	275x4 = 1100	4	287x4 = 1148
Lift Station	peak hour flow (5yr storm I/I) = rated firm capacity	4	275x4 = 1100	4	287x4 = 1148



## V. SERVICE UNIT DEMAND PROJECTIONS

The Land Use Assumptions provide the foundation for estimating the cost of capital improvements attributable to new growth by making it possible to quantify the demand for service from those improvements. The source data obtained from the Planning and Development Review Department gives population and employment data distributed by traffic serial zone within the City's extraterritorial jurisdiction. The serial zone distribution not only allows the Utility to allocate growth to the selected impact fee service area, but it also can be translated into demands at specific points in the water and wastewater pipe networks using the computer.

The translation of population and employment demand data to flow based service units was described in the previous section. Land use data expressed in service units by Planning Area was included in Table 5 of the Land Use Assumptions. The traffic serial zone information was allocated to water pressure zones and wastewater drainage areas to quantify demand by subarea. Demand sets for 2010 and 2020 were developed for the ten-year growth period.

Demand projections describing the impact fee project subareas are presented in Tables 8 and 9. All water pressure zones include impact projects; and since they do not overlap, the ten-year growth summed by zones equals the system-wide growth total. Accounting for the growth service units in wastewater project drainage areas is more complex, since the drainage area of one interceptor project may be a subset of a downstream interceptor project drainage area. For example, the Slaughter Creek project drainage area is a subset of the Onion Creek project drainage area. Service unit totals by wastewater treatment plant drainage areas are also presented to indicate a system-wide total.

## VI. CAPACITY AND COST ATTRIBUTABLE TO NEW GROWTH

### Water and Wastewater Capacity and Costs

Tables 8 and 9 present the capacity and cost attributable to new growth according to the impact fee methodology outlined in Section III. The cost used in the impact fee calculation is simply the cost per service unit multiplied by the ten-year growth in service units derived from the land use assumptions for the subarea served by each set of facilities.

The following outline illustrates the methodology used to calculate the maximum impact fees allowed by law. The letters of each item correspond to the lettered columns in Tables 8 and 9.

- A. The reference table to the Impact Fee project listing tables.
- B. Project description. Columns A and B are used to identify the Impact CIP projects.
- C. Unused (part of project description)
- D. Project size. This is the design size of the facility.
- E. Pressure zone or drainage area.
- F. Completion date
- G. Cost to build. The cost to build a given facility includes the cost to the City for land acquisition, engineering, and construction, along with related cost components. The cost is listed in thousands of dollars, and excludes interest.
- H. Interest cost. The law allows interest cost to be added into the cost of a project if the impact fee will be used to repay both principal and interest. The amount of debt service assigned to each project was calculated by the Utility using the following assumptions: all bonds for the selected impact fee capital improvements projects were sold at the same time, an interest rate of 5.5% was assumed and the term of the bonds was thirty years. The amount of interest cost is indicated in thousands of dollars.
- I. Total cost to build (G plus H). Tables 8 and 9 provide cost figures with and without interest to provide a cost comparison.

- J. Design capacity of impact fee new facility or expansion. Capacity of the impact fee projects are expressed in service units for the subarea as a whole. All of the projects in a subarea are evaluated as a group to determine the best estimate of capacity added to the subarea by the facilities acting together. Typically one project “size” best represents the capacity addition for the subarea as a whole. See Tables 6 and 7 for capacity equations.
- K. Cost to build per service unit without interest (G divided by J).
- L. Cost to build per service unit with interest (I divided by J).
- M. Year 2010 land use assumptions. The population and land use level in a particular pressure zone or drainage area in the year 2010, expressed in service units.
- N. Year 2020 land use assumptions. The population and land use level in a particular pressure zone or drainage area in the year 2020, expressed in service units.
- O. Growth users (N minus M). The number of service units of new growth entering a particular pressure zone or drainage area in the ten year growth period. Each service unit of new growth uses a service unit of capacity in the set of facilities making up the subarea.
- P. Impact costs without interest (K times O). The cost per service unit of the facilities multiplied by the number of growth users in the specific pressure zone or drainage area, excluding interest.
- Q. Impact costs with interest (L times O). The cost per service unit of the facilities multiplied by the number of growth users in the specific pressure zone or drainage area, including interest.
- R. Existing users. The number of existing users (expressed in service units) whose service is enhanced by the addition of the facilities in the subarea; therefore, capacity attributable to existing needs.
- S. Excess service units in the subarea (J minus R minus O). The number of service units remaining unused in the subarea impact fee facilities after the 10-year planning period.

Steps A through S define the costs of the impact fee projects attributable to new growth. The procedure for summing these costs to calculate the maximum allowable impact fee is presented in the next section.

#### Water Plant Flow Distribution and Available Capacity

For the planning horizons of both recent 5-year updates, three major changes to the city’s water plants take place, with corresponding changes in how water is distributed throughout the system now and how it will be distributed when Water Treatment Plant 4 (WTP 4) comes on line in 2014. In terms of the maximum allowable impact fee calculation, the fee is based on the units of capacity required by new growth served by the Ullrich plant expansion and the new WTP 4 as a function of which plant generally serves the location of projected growth. The amount of growth associated with each plant is shown on Table 8 on the line item for each facility and on the summary table at the end.

The first plant change came in 2007 with completion of the 67 mgd expansion at Ullrich WTP. The plant expansion together with the Ullrich to Green TM and other recent transmission mains made it possible to move more Ullrich water into the system including through an eastern pathway north to the East Austin Reservoir and Pump Station facility and beyond.

In late 2008 Austin’s oldest plant, Green WTP, originally completed in 1925, was retired. In general, areas previously served by Green are now served by Ullrich. Using the 2010 weather normalized flow from existing users served by Ullrich (and previously Green) of 125.1 mgd, the Ullrich capacity available for growth is 41.9 mgd (167 - 125.1) at the start of the planning period.

In 2014 the new 50 mgd WTP 4 is scheduled to come on line, increasing system capacity to 335 mgd. WTP 4 is expected to be operated at full capacity to take advantage of the lower operating cost of the new plant as compared to

the older plants, which are at a lower elevation. It is projected that when WTP 4 is completed, Davis WTP will generally be operated at lower flow rates than currently. In terms of the impact fee calculation, it is noted that growth in the north and northwest pressure zones in what has traditionally been Davis Desired Development Zone service area is made possible by available WTP 4 capacity taking on some of the existing Davis users. Therefore the growth in the traditional Davis service area is attributed to WTP 4 for fee calculation purposes, as shown on Table 8.

**Table 8 Water Impact Fee Calculation by Pressure Zone Areas**  
(All costs in 1000s of dollars unless preceded by "\$")

A Ref. Table	B Project Description Orgn Name	C	D Size	E Pressure Zone	F Completion Date	G Cost to Build	H Interest Cost	I Total Build	J Facility Design Capacity SU	K Cost to Build per SU G/J	L Cost to Build per SU w/ interest I/J	M 2010 Land Use Assumptions SU	N 2020 Land Use Assumptions SU	O 10-Year Growth Users SU	P Impact Cost without interest K x O	Q Impact Cost with interest L x O	R 2010 Benefitting Existing Users SU	S 2020 Excess SU Alter 10 years J-R-O
1	CANYON CREEK 30	30"		Northwest C	1987	1,231	1,311											
1	NVIC PUMP STATION AND TANK group	11.2 MGD, 1.5 M	Northwest C	2013	12,191	11,566												
1	ANDERSON MILL/RR 620 TM	24"/36"	Northwest C	2012	4,581	4,879												
1	FOUR POINTS RESERVOIR	8mg	Northwest C	1988	5,194	5,532												
1	WEST BULL CREEK P.S. UPGRADES	5.8-B 10.4-C	Northwest C	2007	896	954												
1	Developer Reimbursements Northwest C = 2	24"	Northwest C	2007	1,269	1,382												
	Facility Size That Determines Capacity Addition	11.2 mgd PS			25,362	25,623	50,985	11,940	2.12	4.27	4.27	4,226	5,161	935	1,986	3,983	3,170	7,836
1	JOLLYVILLE TM group	48"		Northwest B	2001	9,273	9,876											
1	JOLLYVILLE PUMP STATION	45mgd	Northwest B	1989	6,160	6,560												
1	ANDERSON MILL TRANSMISSION MN 24"	24"	Northwest B	2000	2,085	2,221												
1	ANDERSON MILL TRANSMISSION MAIN 16"	16"	Northwest B	2000	4,736	5,044												
1	ANDERSON MILL RESERVOIR	total 3 mg	Northwest B	1989	4,148	4,418												
1	Developer Reimbursements Northwest B = 4	36"	Northwest B	2012	26,067	19,916												
	Facility Size That Determines Capacity Addition	45 mgd PS			52,469	48,034	100,503	46,584	1.13	2.16	2.16	20,242	37,278	8,036	9,051	17,337	29,242	9,306
1	NORTHWEST A PRES ZONE RES Martin total	34 mg		Northwest A	1988	8,361	8,904											
1	16 in FM 1825 INTERCONNECT	16"	Northwest A	2006	803	0												
1	HOWARD LANE EAST TM	36"	Northwest A	1998	4,765	5,075												
1	Developer Reimbursements Northwest A = 3	24"	Northwest A	2012	893	354												
	Facility Size That Determines Capacity Addition	34 mg tank			14,822	14,333	29,155	68,410	0.22	0.43	0.43	60,496	71,395	10,899	2,361	4,645	36,298	21,214
1	HOWARD LANE PUMP STATION & TM group	43/65 mgd	Northwest A/B/C	2001	17,115	16,181												
1	MARTIN HILL TRANSMISSION MAIN	54"	Northwest A/B/C	2016	19,752	21,036												
1	JOLLYVILLE NWA TM (see also Plant 4)	84"	Northwest A/B/C	2014	110,542	117,727		note 3										
	Facility Size That Determines Capacity Addition	84" TM			147,409	154,944	302,353	193,021	0.76	1.57	1.57	93,963	113,834	19,871	15,175	31,126	50,511	122,639
1	DESSAU RD TRANSMISSION MAIN	16"	North	1990	934	995												
1	DECKER LAKE TM/JOHNNY MORRIS	16/24"	North	1999	462	492												
1	AUSTIN FILM SOCIETY	16"	North	2011	1,021	1,087												
1	HOWARD LANE EXTENSION	16"	North	2017	2,200	2,343												
1	BOYCE LANE TM	24"	North	2015	7,130	7,593												
1	HOWARD LANE RESERVOIRS NCAGC-MUD	20 mg	North	1987	3,824	4,073												
1	NORTH TOWN TRANS MAIN	48"	North	1988	610	650												
1	HOWARD LN/NORTH TOWN TRANS MAIN	48"	North	1989	3,593	3,827												
1	NORTH/EAST AREA WATER IMP. Samsung	48"	North	1999	1,718	1,830												
1	NE AUSTIN PUMPING STATION	55 mgd	North	1989	1,974	2,102												
1	NE AUSTIN TRANS MAIN	54/48"	North	1997	6,657	7,090												
1	WHISPER VALLEY - INDIAN HILLS CRA -- north 124"	124"	North	2018	0	3,060												
1	Developer Reimbursements North = 11	16/24/30/36"	North	2012	21,487	20,699												
	Facility Size That Determines Capacity Addition	54" TM			51,610	55,842	107,452	53,878	0.96	1.99	1.99	68,016	86,674	18,658	17,873	37,211	13,603	21,617

**Table 8 Water Impact Fee Calculation by Pressure Zone Areas**  
(All costs in 1000s of dollars unless preceded by "\$")

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Ref. Table	Project Description Orign Name		Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost	Total Cost to Build	Facility Design Capacity SU	Cost to Build per SU G/J	Cost to Build w/ Interest I/J	2010 Land Use Assumptions SU	2020 Land Use Assumptions SU	10-Year Growth SU	Impact Cost without interest K x O	Impact Cost with interest L x O	2010 Benefiting Existing Users SU	2020 Excess SU After 10 years J-R O
1	US 290 EAST RESERVOIR	12 mg		Central	1987	2,144	2,283											
1	FM969 DECKER TO SH 130	24"		Central	2016	3700	3,941											
1	EAST AUSTIN TRANS MAIN	66"		Central	1989	8,203	8,736											
1	SPRINGDALE ROAD 48" TM	48"		Central	1998	6,118	6,516											
1	ULLRICH TO GREEN TM group	72"		Central	2001	30,448	32,427											
1	WHISPER VALLEY - INDIAN HILLS CRA -- centra 48"			Central	2018	2,000	20,477											
1	Developer Reimbursements North Central =2	16/24"		Central	2008	2,471	2,632											
	Facility Size That Determines Capacity Addition	72" TM				55,084	77,011	132,095	128,629	0.43	1.03	107,320	123,518	16,198	6,937	16,634	42,928	69,503
1	GREEN WTP TRANS MAIN SOUTH group	60"		Central South	1989	5,621	5,986											
1	BLUFF SPRINGS TRANS MAIN II	36"		Central South	1988	1,913	2,037											
1	BLUFF SPRINGS RESERVOIR PILOT KNOB	10 mg		Central South	1989	2,139	2,278											
1	PILOT KNOB TRANS MAIN group	48"		Central South	1992	9,749	10,383											
1	SOUTH CENTRAL TRANS MAIN	48"		Central South	1987	4,578	4,876											
1	E BEN WHITE BLVD TRANS MAIN	24"		Central South	1993	3,506	3,734											
1	ELROY TRANSMISSION MAIN	36"		Central South	2013	4,996	5,321											
1	MOORE'S CRSG RESERVOIR & TRANS	36"		Central South	1990	2,402	2,558											
1	Developer Reimbursements South Central =5	36"		Central South	2013	14,575	15,522											
	Facility Size That Determines Capacity Addition	60" TM				49,479	52,695	102,174	89,325	0.55	1.14	42,928	49,407	6,479	3,589	7,411	10,732	72,114
1	SOUTH IH 35 TRANSMISSION MAIN	36"		South	1988	2,812	2,995											
1	SLAUGHTER LN TRANSMISSION MAIN	36/30/24"		South	1992	2,673	2,847											
1	DAVIS LANE RESERVOIR SO-MUD add	10 to 10 mg		South	1988	1,819	1,937											
1	S I-35 TM and PS Group	36"/42"/48", 24 m		South	2012	60,515	64,448											
1	Developer Reimbursements South = 4	24/36"		South	2015	7,717	8,219											
	Facility Size That Determines Capacity Addition	48" TM				75,536	80,446	155,982	44,457	1.70	3.51	45,280	54,107	8,827	14,998	30,970	6,792	28,838
1	SOUTHWEST A SITE DEVELOPMENT CO#3-MU na	48"		Southwest A/B/C	1988	266	283											
1	DAVIS LANE TM (PS discharge) SO-MUD	48"		Southwest A/B/C	1987	220	234											
1	DAVIS LANE PUMP STATION VWO-MUD	60 mgd		Southwest A/B/C	1988	5,758	6,132											
1	SWA 48" INTERCONNECTOR MR-MUD	48-inch		Southwest A/B/C	1987	1,016	1,082											
1	SWA TM PHASES 1,1A,2,3,4A,4B MR-MUD	48-inch		Southwest A/B/C	1987	4,501	4,794											
1	SWA STORAGE TANK (Slaughter Lane) MR-MUI 6 mg	48" TM		Southwest A/B/C	1988	1,256	1,338											
	Facility Size That Determines Capacity Addition	48" TM				13,017	13,863	26,880	22,867	0.57	1.18	37,941	44,680	6,739	3,836	7,922	11,382	4,746
1	Lantana Ser. Ext. Developer Reimbursement SWE 14 mgd PS	14 mgd PS		Southwest B&C	2002	3,254	0	3,254	12,027	0.27	0.27	10,495	13,334	2,839	768	768	5,248	3,941
	Facility Size That Determines Capacity Addition	14 mgd PS				3,254	0	3,254	12,027	0.27	0.27	10,495	13,334	2,839	768	768	5,248	3,941

**Table 8 Water Impact Fee Calculation by Pressure Zone Areas**  
(All costs in 1000s of dollars unless preceded by "\$")

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Ref. Table	Project Description Orign Name	Size	Pressure Zone	Completion Date	Total Cost to Build	Cost to Build per SU	Interest Cost	Cost to Build per SU	Facility Capacity SU	Cost to Build per SU	Cost to Build w/ interest	2010 Land Use Assumptions SU	2020 Land Use Assumptions SU	10-Year Growth Users N-M	Impact Cost without interest K x O	Impact Cost with interest L x O	2010 Benefiting Existing Users SU	2020 Excess SU After 10 years J-R-O
1	Circle C CCR 103 Developer Reimbursements SW16'		Southwest B	2018	2,946		2,230											
1	SWB CAMP BEN MCCULLOUGH REALL 16'		Southwest B	1992	504		537											
1	WINDMILL RUN SW B TRANS MAIN 36"		Southwest B	1990	1,962		2,090											
1	SOUTHWEST B PUMP STATION CC#3 MUD 22 mgd		Southwest B	1988	2,290		2,439											
1	SOUTHWEST B 36" TRANSMISSION MAIN CC#3 36-inch		Southwest B	1988	1,130		1,203											
1	SOUTHWEST B 16" TRANS MAIN CC#3-MUD 16-inch		Southwest B	1988	197		210											
1	SOUTHWEST B RESERVOIR #1 CC#3-MUD 2 mg		Southwest B	1988	1,903		2,027											
	Facility Size That Determines Capacity Addition 36" TM				10,932		10,736		11,342	0.96	1.91	8,037	10,124	2,087	2,012	3,987	6,831	2,424
1	SWC PRESSURE ZONE PUMP STATION	8.2 mgd	Southwest C	2006	5,862		6,318											
1	CIRCLEVILLE RESERVOIR totals>	1.25 mg	Southwest C	2001	2,347		0											
1	SWC PRESSURE ZONE TM PHASE 1 30"		Southwest C	2007	5,546		5,906											
1	SWC PRESSURE ZONE TM PHASE 2 30"		Southwest C	2007	2,104		2,241											
1	TRAVIS COUNTRY WEST Reimbursement 2.1 mgd PS, Facility Size That Determines Capacity Addition 30" TM		Southwest C	2015	1,680		1,789											
					17,539		16,254		33,793	2.03	3.92	2,458	3,211	753	1,532	2,951	1,475	6,394
1	ULLRICH WTP 100 to 167 mgd group 67 mgd exp		Ullrich Service	2007	111,703		118,964											
					111,703		118,964		230,667	1.07	2.22	see notes 1 and 2	34,434	36,971	76,346	see notes 1 and 2		
1	WTP #4 group (see also Jollyville NWA TM) 50 mgd		Plant 4 Service	2014	378,896		373,147											
					378,896		373,147		752,043	4.88	9.69	see notes 1 and 2	35,858	174,993	347,331	see notes 1 and 2		
1	Shaw Lane Sludge Facility Improvements Facility Size That Determines Capacity Addition 60 acre, 34 years		Entire System	2013	4,043		4,306											
					4,043		4,306		8,349	0.02	0.03	352,521	422,813	70,292	1,189	2,456	0	168,701
					TOTAL		2,057,353											
<p><b>Service Unit and System-wide Impact Cost Totals</b>      <b>70,292</b>      <b>293,271</b></p> <p>Calculated rate revenue credit per state law (See Appendix A)</p> <p>Resultant amount to be used for calculating maximum allowable impact fee      <b>-210,461</b></p> <p><b>Maximum Allowable Impact Fee (\$380,627,000 / 70,292 service units)</b>      <b>\$5,415</b></p>																		

**Table 8 Water Impact Fee Calculation by Pressure Zone Areas**  
Notes and Plant Flow Distribution Table

Plant	Plant Flow Distribution (Maximum Day )									
	2010		2020		2020		2010-2020		2010-2020	
	current	future	existing	user	flow	area	growth	area	growth	10-year
	regime	regime	regime	regime	regime	regime	regime	regime	regime	regime
	mgd	mgd	mgd	mgd	mgd	mgd	mgd	mgd	mgd	mgd
Plant 4	50	0	50	36.1	13.9	19,871	35,858	0	0	0
Davis	118	114.5	72.9	61.9	11.0	18,658	0	0	0	0
Ullrich	167	125.1	134.6	116.1	18.5	31,763	34,434	34,434	34,434	34,434
All Plants	335	239.6	257.5	214.1	43.4	70,292	70,292	70,292	70,292	70,292

Note 1 Plant service to growth in the traditional Davis service area is made possible by Plant 4 taking on some Davis existing users. Thus, 86% of Davis area north zone growth is attributable to Plant 4 for fee calculation above. 14% of north zone growth is attributed to Ullrich. This is reflected in the plant flow distribution table to the right.

Note 2 Beyond 2020 Plant 4 capacity will continue to provide service units for growth along with the Ullrich expansion, at whatever distribution between existing and growth users for all 3 plants that fits the system hydraulic demand situation that occurs. Recognizing that the flow per service unit may continue to change over time, the 2020 system excess capacity is 77.5 mgd and 127,270 SU in the present analysis. See flow distribution table at right.

Note 3 Capacity of the new Jollyville and Martin Hill TMs is calculated based on the maximum day peaking factor in the same manner as for plants, since these major TMs operate in the same flow regime as the plant that

Note 4 WTP 4 cost is adjusted for upsized components. See Table 1 for WTP total cost and upsized component adjustment.

**Table 9 Wastewater Impact Fee Calculation by Collection Drainage Areas**  
(All costs in 1000's of dollars unless preceded by "\$")

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Ref. Table	Project Description Orig Name		Size	Drainage Basin Facility Area	Completion Date	Cost to Build	Cost to Interest	Total Cost to Build	Facility Design Capacity SU	Cost to Build per SU	Cost to Build w/ Interest I/J	2010 Land Use Assumptions SU	2020 Land Use Assumptions SU	10-Year Growth Users SU	Impact Cost w/o interest KxO	Impact Cost with Interest LxO	2010 Existing Users SU	2020 Excess SU After 10 years J-R-O
2	Developer Reimbursements Bear Creek to Slaughter = 2850 gpm -2LS			Lower Bear	2006	659	702											
2	Developer Reimbursements Slaughter Basin = 2		18"	Slaughter	2000	1220	0											
2	South Branch Interceptor and Extension CQ#4 MUD		21-30-inch	Slaughter	1988	1,295	1379											
2	North Bank Upper Slaughter Cr.Int. A&B CC#3		36-inch	Slaughter	1988	1,650	1757											
2	Slaughter Creek Interceptor Phases 1, 2A & 2B CC#3 MUD		48-54-inch	Slaughter	1988-1992	9,280	9883											
2	Slaughter Creek Interceptor 1 & 2 SO-MUD		48-inch	Slaughter	1990	701	747											
2	Slaughter North Branch Interceptor SO-MUD		30-inch	Slaughter	1990	1,595	1699											
2	Slaughter Tunnel SO-MUD		54-inch	Slaughter	1988	3,442	3666											
2	Facility Size That Defines Capacity Addition		54" at 0.17%	Bear/Slaughter		19,842	19,832	39,674	36,516	0.54	1.09	15,811	19,222	3,411	1,853	3,706	15,811	17,294
2	Zachery Scott Tract WW SER #2260		36"	Rinard	2010	8307	6387											
2	city const. and developer design reimbursement																	
2	S I35, Onion Creek Wastewater Interceptor - group		54"	Upper Onion	2012	31972	33364											
2	Developer Reimbursement Upper Onion Basin = 1		15/18/24"	Upper Onion	2014	2222	2366											
2	Facility Size That Defines Capacity Addition		54" at 0.15%	Rinard-Upper Onion		42501	42118	84619	34,286	1.24	2.47	0	2,611	2,611	3,237	6,444	0	31,675
2	ONION CREEK INTERCEPTOR above tunnel group		54"	Onion, Middle	1986	4,943	5264											
2	Onion Creek Int Phase 3 (Slaughter To Boggy) SO-		54-inch	Onion, Middle	1988	2,935	3126											
2	Facility Size That Defines Capacity Addition		54" at 0.12%	Onion above tunnel		7,878	8390	16,268	38,328	0.21	0.42	23,300	30,681	7,381	1,517	3,133	23,300	Note 1
2	WILLIAMSON CREEK INT PH II		42"	Williamson	1989	820	873											
2	OAK HILL BR-OF WMSON CK INTER		30"	Williamson	1989	1,533	1633											
2	TRAVIS COUNTRY developer reimbursement		21"	Williamson	1997	41	44											
2	North Williamson Creek Int & Easements VWO		42-inch	Williamson	1989	3,097	3298											
2	South Williamson Trunk Phases 1 and 2 VWO-		15-24-inch	Williamson	1989	919	979											
2	Williamson Creek 30" WW Interceptor MR-MUD		30-inch	Williamson	1989	500	533											
2	Facility Size That Defines Capacity Addition		42" at 0.189%	Williamson Facility Area		6,910	7,389	14,269	24,652	0.28	0.58	21,076	23,913	2,837	795	1,642	21,076	Note 1
2	Pearce Lane Lift Station Upgrade (900 to 1800 gpm)		900 gpm exp	Upper Dry Creek	2012	550	0											
2	Formula One developer reimbursement		30"	Upper Dry Creek	2012	8,127	0											
2	Facility Size That Defines Capacity Addition		30" at 0.06%	Upper Dry Creek Above Pearce LS		8,677	0	8,677	4,530	1.92	1.92	3,219	5,425	2,206	4,226	4,226	0	2,324
2	ONION CREEK INTERCEPTOR TUNNEL group		84"	Onion Tunnel Area	1986	22,144	23883											
2	Facility Size That Defines Capacity Addition		84" at 0.1%	Onion Tunnel Area		22,144	23883	45,727	91,010	0.24	0.50	65,563	84,632	19,070	4,640	9,582	65,563	6,377



**Table 9 Wastewater Impact Fee Calculation by Collection Drainage Areas**  
(All costs in 1000's of dollars unless preceded by "\$")

A Ref. Table	B Project Description Orig Name	C	D	E Drainage Basin	F Completion Date	G Cost to Build	H Interest Cost	I Total Cost to Build	J Facility Design Capacity	K Cost to Build per SU	L Cost to Build per SU	M 2010 Land Use Assumptions	N 2020 Land Use Assumptions	O 10-Year Growth Users	P Impact Cost w/o	Q Impact Cost with	R 2010 Existing Users	S 2020 Excess SU After Users
2	ACWP Pedernales (Line Y only)	36"		Boggy Central	2010	4,859	5,175	10,034	16,446	0.30	0.61	12,344	13,570	1,227	363	749	12344	2,875
	Facility Size That Defines Capacity Addition	36" at 0.30%		Facility Area														
2	Metro Center Developer Reimbursement	24"		Carson	2000	151	0	0	151	7,038	0.02	1,383	1,489	106	2	2	1,383	5,549
	Facility Size That Defines Capacity Addition	24" at 0.48%		Facility Area														
2	Robertson Hill Development	12"		Waller Creek to SAR	2008	693	738	1,431	962	0.72	1.49	287	373	87	63	129	287	2,344
	Facility Size That Defines Capacity Addition	12" at 0.36%		Facility Area														
2	GOVALLIE INTERCEPT AND DIVERSION group	96"		Govalle Tunnel to SAR	1990	43,988	46,858											
2	Downtown Wastewater Tunnel group	96"		Govalle Tunnel to SAR	2011	61,591	56,745											
	Facility Size That Defines Capacity Addition	96" at 0.05%		Govalle Tunnel to SAR		105,589	103,603	209,192	91,847	1.15	2.28	79,260	89,059	9,800	11,266	22,321	79,260	2,787
2	RMMA developer reimburse to WALNUT group	15/18/24"		Tannehill to WALNUT	2010	8,147	5,973											
	Facility Size That Defines Capacity Addition	18" at 2.83%		Facility Area		8,147	5,973	14,120	7,951	1.02	1.78	2,328	5,534	3,207	3,286	5,695	2,328	2,416
2	Triangle - Infrastructure Incentives	18"		Waller Creek to WALNUT	2005	1,193	1,271											
	Facility Size That Defines Capacity Addition	18" at 0.33%		Facility Area		1,193	1,271	2,464	2,718	0.44	0.91	1,523	1,836	312	137	283	1523	883
2	ACWP- Shoal Creek 29th to 34th	66"		Shoal Creek - upper	2006	12,270	13,068											
	Facility Size That Defines Capacity Addition	66" at 0.36%		Shoal Creek above Crosstown Tunnel		12,270	13,068	25,338	90,732	0.14	0.28	22,116	24,121	2,005	271	560	22,116	66,611

**Table 9 Wastewater Impact Fee Calculation by Collection Drainage Areas**  
(All costs in 1000's of dollars unless preceded by "\$")

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Project Description Ordn Name		Size	Drainage Basin Facility Area	Completion Date	Cost to Build	Interest Cost	Total Build	Facility Capacity SU	Cost to Build per SU	Cost to Build per SU w/o interest	Land Use Assumptions SU	2020 Land Use Assumptions SU	10-Year Growth Users SU	Impact Cost w/o interest	Impact Cost with interest	2010 Existing Users SU	2020 Excess SU After 10 years JRO
UPPER WALNUT CREEK INTERCEPTOR group	36"		Upper Walnut	2002	8976	8906											
Waters Park Relief Main	36"		Upper Walnut	2015	4087	4353											
Developer Reimbursements Walnut Creek = 2	18" & 48"		Walnut Creek	2007	3,058	0											
Austin Blue Sky developer reimbursement	1000 gpm LS,		Elm to Walnut	2006	680	724											
Lower Walnut Creek WW Imp Phases A,B&C	72-inch		Walnut	1987	12,221	13015											
NCAGC-MUD																	
Upper Walnut Creek Int Phases 3A, 3B, 4&5	60-inch		Walnut	1987	6,253	6659											
NCAGC-MUD																	
Wells Branch WW Trunk Line Phases, 1,1A, 2&3	18-24-inch		Walnut	1985	1,468	1563											
NCAGC-MUD																	
Upper Walnut Creek WW Trunk Line Phase 2	24"		Walnut	1985	1,325	1411											
NCAGC-MUD																	
Facility Size That Defines Capacity Addition	72" at 0.10%		Walnut Creek, part Elm		38,068	36,632	74,700	75,436	0.50	0.99	63,995	79,273	15,278	7,710	15,129	63,995	Note 1
ACWP-Little Walnut/Buttermilk group	60"		Little Walnut	2009	23,485	18,885											
Facility Size That Defines Capacity Addition	60" at 0.35%		Little Walnut		23,485	18,885	42,370	69,408	0.34	0.61	36,773	38,446	1,673	566	1,021	36,773	30,962
Developer Reimbursements Lake Creek = 4	12/24/FM/		Lake Creek	2016	6,112	4,937											
Lake Creek Collection and Interceptor Contract	3600 gpm LS and 2-1100gpmLS		Lake Creek	1989	3,627	3863											
Palmer Lane Interceptor group	48"		Lake, Ratan	2017	27,081	514											
Facility Size That Defines Capacity Addition	42" at 0.2%		Lake, Ratan		36,820	9,314	46,134	20,906	1.76	2.21	14,510	19,261	4,752	8,369	10,487	14,510	1,644
Purchase of Dessau Utilities	.5 mgd plant, 4100 gpm		Dessau/Harris	2006	2,061	0											
Dessau WWTP Expansion to 1.0 MGD	.5 mgd Exp		Dessau/Harris	2018	4500	4,793											
Facility Size That Defines Capacity Addition	1 mgd		Facility Area	2018	6,561	4,793	11,354	3,484	1.88	3.26	1,004	1,988	983	1,851	3,203	1,004	1,497
Wildhorse Northwest Interceptor Phase 2	21"/24"		Decker-Gilleland	2013	2,597	0											
Northeast Service Area North Int. (Wildhorse NW Int.)	36"		Decker-Gilleland	2005	2,329	2,480											
Harris Branch Interceptor Lower A	30"		Harris-Gilleland	2016	6,626	7,057											
Harris Branch Interceptor Lower B	36"		Harris-Gilleland	2015	1,050	1,118											
Wildhorse North Interceptor Lower B	36"		Harris-Gilleland	2015	5,772	0											
Wildhorse North Interceptor Ext. No. of 290	42"		Harris-Gilleland	2012	3,640	3,877											
Wild Horse Ranch developer reimbursement	.75 mgd		Decker	2009	4,075	4,340											
Wild Horse Addition developer reimbursement	18"		Decker	2009	793	845											
Scots Glen developer reimbursement	24"		Decker	2009	845	0											
Facility Size That Defines Capacity Addition	36" at 0.09% & 30" at 0.39%		Facility Area		27,727	19,716	47,443	20,139	1.38	2.36	2,359	7,516	5,156	7,099	12,146	2,359	12,624

**Table 9 Wastewater Impact Fee Calculation by Collection Drainage Area**  
(All costs in 1000's of dollars unless preceded by '\$')

A Ref. Table	B Project Description Orig Name	C	D Size	E Drainage Basin Facility Area	F Completion Date	G Cost to Build	H Cost to Interst	I Total Cost to Build	J Facility Capacity SU	K Cost to Build per SU w/o Interst	L Cost to Build per SU w/ Interst	M 2010 Land Use Assumptions SU	N 2020 Land Use Assumptions SU	O 10-Year Growth Users SU	P Impact Cost w/o Interst KxO	Q Impact Cost with Interst LxO	R 2010 Existing Users SU	S 2020 Excess SU After 10 year J-R-O
2	Whisper Valley Indian Hills CRA Facility Size That Defines Capacity Addition	30/38/45/STP 30 at 0.25%		Gilliland Facility Area	2015	11500	14804	11500	14804	1.24	2.55	0	1,707	1,707	2,125	4,889	0	7,553
2	Purchase of Bruhly system capacity from LCRA, new 0.94 mgd Facility Size That Defines Capacity Addition	0.5 mgd Increase		Bruhly Creek Facility Area	2010	12069	12847	12069	12847	1,742	14.30	850	1,857	967	6,656	13,828	0	775
2	SAR WWTP 50 to 75 MGD EXPANSION group	25 mgd exp		SAR service	2006	94,064	97,169	191,232	87,108	1.08	2.20	144,822	173,692	28,569	31,174	63,378	17,321	40,918
2	WALNUT CREEK WWTP60 TO 75 MGD group	15 mgd exp		WALNUT service	2005	63,569	47,728	111,296	52,265	1.22	2.13	166,395	216,679	30,284	36,833	64,488	21,159	792
					Total Cost to Build w/ Interst			1,050,393										

Note 1 The main interceptor in this group will reach capacity in the 10-year planning period according to the standard criteria. By allowing the pipe to go beyond 50% full, it will provide capacity for growth during the remaining few years of the financing period, after which time it will move off the impact fee

Service Unit and System-wide Impact Cost Totals  
 Calculated rate revenue credit per state law (See Appendix B)  
 Resultant amount to be used for calculating maximum allowable impact fee  
 Maximum Allowable Impact Fee (\$160,522,000 / 70,288 service units) \$ 2,284

## VII. MAXIMUM ALLOWABLE FEE CALCULATION AND RATE REVENUE CREDIT

Once the portion of facilities cost associated with the 10-year growth users is calculated for water pressure zone and wastewater drainage basin analysis areas, the next step is summing these area costs to produce the total system growth cost -- the impact cost total. Then, in compliance with Section 395.014 (a) (7) of the law, a credit must be applied to take into account the amount of money the new growth users will pay in rate payments that go towards financing the growth CIP projects listed on the tables.

Previously, an amount equal to 50% of the impact cost total of the growth projects was credited as provided in the law for the case where a city-specific rate revenue credit has not been calculated. In this update, the Austin-specific rate revenue credits are calculated for water and wastewater, based on the idea that in any future year the study period growth users make rate payments in proportion to their number as a percent of total rate payers. And by extension, the growth user contribution to any particular component of the rate requirements (in this case the set of growth projects) can be estimated using this percentage. Applying this percentage to the amortized cost of the growth projects each year, and summing over all of the years costs are incurred, gives the rate revenue credit for the new users' share of the growth project rate payments. Note that the rate revenue credit calculation uses the same interest cost basis (30-year financing and 5.5% interest rate) that yields the individual project interest costs presented in Tables 1 and 2. The rate revenue credit spreadsheets are shown in Appendix A for water and in Appendix B for wastewater.

Using this method the rate revenue credit for water is \$210,461,000 and for wastewater it is \$87,843,000. To complete the maximum allowable fee calculation, the rate revenue credits are subtracted from the impact cost totals and the result is divided by the total number of 10-year growth service units to arrive at system wide maximum allowable fees.

As shown on Table 8 the water maximum allowable fee is \$5,415 per service unit.

As shown on Table 9 the wastewater maximum allowable fee is \$2,284 per service unit.

The Texas Impact Fee State Law provides for the timing of assessing fees for a given tract of land. Additionally, the local political subdivision is allowed to set the collected fees up to the maximum allowable amount. Refer to the ASSESSED AND COLLECTED FEES report for these aspects of the Impact Fee.

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## Appendix A

### Water Rate Revenue Credit Calculation

#### Method

Section 395.014 (a)(7) of the Impact Fee law requires that calculation of the maximum allowable fee include a rate revenue credit to account for the money new growth users will pay in rate payments that go towards financing the CIP growth projects. Previously, an amount equal to 50% of the impact cost of the growth projects was credited as provided in the law for the case where a CIP plan-specific rate revenue credit has not been calculated. The 5-year update is the first to calculate the rate revenue credit for Austin's impact fee CIP and the conditions of the 10-year planning period being analyzed.

The calculation method is based on the idea that in any future year the study period growth users make rate payments in proportion to their number as a percent of total rate payers. And by extension, the growth user contribution to any particular component of the rate requirements (the set of impact fee projects in this case) can be estimated using this percentage. Applying the year by year percentage of new growth users to the total amortized cost of the growth projects each year, and then summing all years gives the rate revenue credit for the new users' share of the growth project rate payments. This method is employed in developing the accompanying table. It has 3 basic steps:

1. Estimate the total cost of growth projects being financed each year during the financing life of the projects.

This is done in the top part of the table. Yearly totals are arrived at by adding together the amortized cost of the individual projects, beginning from the completion date of the earliest-built water project (1987) and carrying out to the end of the financing period for last-built project (2047). The amortization uses the same financing basis for project interest costs presented in CIP Tables 1 and 2 (30-year financing period and 5.5% interest rate). The resulting cost totals are shown in the row labeled Amortized Cost by Year. These totals estimate the rate revenue requirements for the impact fee growth projects for each year. Only the amortized cost totals for year 2013 and beyond are shown for clarity since these are the only years during which the study period new growth users will make rate payments.

2. Determine the percentage that the new growth users are of the total rate payers for each year in the future.

As shown in the lower part of the table, the study period new growth users (expressed in service units from the Land Use Assumptions) begin arriving in 2013, and are tallied by year as they come on line. At the end of the 10-year planning period, year 2022, the results row labeled Study Period Total Service Units shows the same 70,292 cumulative total of 10-year new growth water service units used in calculating the project impact costs in Table 8. Beyond 2022 the number of new growth service units that are the subject of the rate revenue credit for the 10-year planning period remains constant, but their percentage of total service units continues to change.

The total system service units are tallied by year starting with the existing 2012 water service unit total (365,576) adding in the subject 10-year new growth users for the planning period of 2012 – 2022 as they come on line, and then continuing to the end of the financing period in 2047 with the addition of future growth projected to occur in the period beyond 2022. The resulting year by year number of total system service units is shown in the table in the row labeled Total Service Units. The percentage that the study period new growth users are of the total service units for each particular year in the future is readily calculated by dividing the Study Period Total Service Units by the Total Service Units. The resulting percentages are shown in the row labeled Growth Percent of Total Service Units. The study period growth users as a percent of total users rises to a maximum of 16.1% in 2022 and then declines to 10.6% at the end of the financing period of the last project in 2047.

3. Calculate the amount the new growth users will pay towards the growth projects for each particular year. The sum of all years is the rate revenue credit.

Applying the Growth Percent of Total Service Units to the growth project Amortized Cost by Year gives the results labeled New Service Units Amount of Amortized Cost for each year (bottom row of table). Summing across for all years gives the Rate Revenue Credit Amount shown at the lower right hand corner of the table.

Using this method the water rate revenue credit is \$210,461,000. It is subtracted from the water impact project cost of \$591,088,000 developed in Table 8 in calculating the water maximum allowable fee. Note that the calculated rate



revenue credit equates to 36% of the water impact project cost which compares to 50% used previously. It may be said that of the \$591 M in impact project costs (including interest), that are associated with serving new growth users in the 10-year planning period, \$210 M of that amount will come from new growth user rate payments, so only the remainder, \$381 M, goes into calculating the maximum allowable fee.

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Annual Projected		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Cost	Total Cost																		
1987 Total	\$36,166																		
1988 Total	\$69,196																		
1989 Total	\$85,745																		
1990 Total	\$10,940																		
1991 Total	\$0																		
1992 Total	\$26,692																		
1993 Total	\$7,240																		
1994 Total	\$0																		
1995 Total	\$0																		
1996 Total	\$2,371																		
1997 Total	\$14,688																		
1998 Total	\$24,242																		
1999 Total	\$4,502																		
2000 Total	\$14,305																		
2001 Total	\$117,948																		
2002 Total	\$7,665	\$256																	
2003 Total	\$3,469	\$116	\$116																
2004 Total	\$7,932	\$264	\$264	\$264															
2005 Total	\$1,574	\$52	\$52	\$52	\$52														
2006 Total	\$18,284	\$609	\$609	\$609	\$609	\$609													
2007 Total	\$249,478	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316	\$8,316
2008 Total	\$13,937	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465	\$465
2009 Total	\$3,302	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110	\$110
2010 Total	\$26,560	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885	\$885
2011 Total	\$88,638	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955	\$2,955
2012 Total	\$113,521	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784	\$3,784
2013 Total	\$45,410	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514	\$1,514
2014 Total	\$977,338	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578	\$32,578
2015 Total	\$22,521	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751	\$751
2016 Total	\$48,428	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614	\$1,614
2017 Total	\$4,543	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151	\$151
2018 Total	\$30,713	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024	\$1,024
Amortized Cost by Year	\$2,057,349	\$55,444	\$55,188	\$55,073	\$54,808	\$54,756	\$54,146	\$45,830	\$45,366	\$45,256	\$44,370	\$41,416	\$37,632	\$36,118	\$33,540	\$2,789	\$1,175	\$1,024	\$0
2013 Forward Cumulative Total		\$1,152,541	\$1,207,730	\$1,262,802	\$1,317,611	\$1,372,366	\$1,426,513	\$1,472,343	\$1,517,709	\$1,562,965	\$1,607,335	\$1,648,751	\$1,686,383	\$1,722,501	\$1,726,041	\$1,728,831	\$1,730,006	\$1,731,029	\$1,731,029
1987 Forward Cumulative Total		\$1,478,862	\$1,534,050	\$1,589,122	\$1,643,931	\$1,698,686	\$1,752,833	\$1,798,663	\$1,844,029	\$1,889,285	\$1,933,655	\$1,975,071	\$2,012,703	\$2,048,821	\$2,052,361	\$2,055,151	\$2,056,326	\$2,057,349	\$2,057,349
2012 Existing Service Units		365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576
2013 New Service Units		6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468	6,468
2014 New Service Units		6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587
2015 New Service Units		6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707
2016 New Service Units		6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831	6,831
2017 New Service Units		6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956
2018 New Service Units		7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084	7,084
2019 New Service Units		7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214
2020 New Service Units		7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346
2021 New Service Units		7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480	7,480
2022 New Service Units		7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619
Study Period Total Service Units		70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292
Total Service Units		506,281	514,775	523,412	532,195	541,124	550,203	559,435	568,821	578,365	588,069	597,936	607,968	618,169	628,541	639,087	649,810	660,713	671,798
Growth Percent of Total Service Units		13.9%	13.7%	13.4%	13.2%	13.0%	12.8%	12.6%	12.4%	12.2%	12.0%	11.8%	11.6%	11.4%	11.2%	11.0%	10.8%	10.6%	10.5%
New Service Units Amount of Amortized Cost		\$7,698	\$7,536	\$7,396	\$7,239	\$7,113	\$6,918	\$6,759	\$6,606	\$6,500	\$6,304	\$6,069	\$4,351	\$4,107	\$3,96	\$307	\$127	\$109	\$210,461
Rate Revenue Credit Amount																		\$210,461	

## Appendix B

### Wastewater Rate Revenue Credit Calculation

#### Method

Section 395.014 (a)(7) of the Impact Fee law requires that calculation of the maximum allowable fee include a rate revenue credit to account for the money new growth users will pay in rate payments that go towards financing the CIP growth projects. Previously, an amount equal to 50% of the impact cost of the growth projects was credited as provided in the law for the case where a CIP plan-specific rate revenue credit has not been calculated. The 5-year update is the first to calculate the rate revenue credit for Austin's impact fee CIP and the conditions of the 10-year planning period being analyzed.

The calculation method is based on the idea that in any future year the study period growth users make rate payments in proportion to their number as a percent of total rate payers. And by extension, the growth user contribution to any particular component of the rate requirements (the set of impact fee projects in this case) can be estimated using this percentage. Applying the year by year percentage of new growth users to the total amortized cost of the growth projects each year, and then summing all years gives the rate revenue credit for the new users' share of the growth project rate payments. This method is employed in developing the accompanying table. It has 3 basic steps:

1. Estimate the total cost of growth projects being financed each year during the financing life of the projects.

This is done in the top part of the table. Yearly totals are arrived at by adding together the amortized cost of the individual projects, beginning from the completion date of the earliest-built wastewater project (1985) and carrying out to the end of the financing period for last-built project (2047). The amortization uses the same financing basis for project interest costs presented in CIP Tables 1 and 2 (30-year financing period and 5.5% interest rate). The resulting cost totals are shown in the row labeled Amortized Cost by Year. These totals estimate the rate revenue requirements for the impact fee growth projects for each year. Only the amortized cost totals for year 2013 and beyond are shown for clarity since these are the only years during which the study period new growth users will make rate payments.

2. Determine the percentage that the new growth users are of the total rate payers for each year in the future.

As shown in the lower part of the table, the study period new growth users (expressed in service units from the Land Use Assumptions) begin arriving in 2013, and are tallied by year as they come on line. At the end of the 10-year planning period, year 2022, the results row labeled Study Period Total Service Units shows the same 70,288 cumulative total of 10-year new growth wastewater service units used in calculating the project impact costs in Table 9. Beyond 2022 the number of new growth service units that are the subject of the rate revenue credit for the 10-year planning period remains constant, but their percentage of total service units continues to change.

The total system service units are tallied by year starting with the existing 2012 wastewater service unit total (352,899) adding in the subject 10-year new growth users for the planning period of 2012 – 2022 as they come on line, and then continuing to the end of the financing period in 2047 with the addition of future growth projected to occur in the period beyond 2022. The resulting year by year number of total system service units is shown in the table in the row labeled Total Service Units. The percentage that the study period new growth users are of the total service units for each particular year in the future is readily calculated by dividing the Study Period Total Service Units by the Total Service Units. The resulting percentages are shown in the row labeled Growth Percent of Total Service Units. The study period growth users as a percent of total users rises to a maximum of 16.6% in 2022 and then declines to 11.0% at the end of the financing period of the last project in 2047.

3. Calculate the amount the new growth users will pay towards the growth projects for each particular year. The sum of all years is the rate revenue credit.

Applying the Growth Percent of Total Service Units to the growth project Amortized Cost by Year gives the results labeled New Service Units Amount of Amortized Cost for each year (bottom row of table). Summing across for all years gives the Rate Revenue Credit Amount shown at the lower right hand corner of the table.

Using this method the wastewater rate revenue credit is \$87,843,000. It is subtracted from the wastewater impact project cost of \$248,365,000 developed in Table 9 in calculating the wastewater maximum allowable fee. Note that the

calculated rate revenue credit equates to 35% of the wastewater impact project cost which compares to 50% used previously. It may be said that of the \$248 M in impact project costs (including interest), that are associated with serving new growth users in the 10-year planning period, \$88 M of that amount will come from new growth user rate payments, so only the remainder, \$160 M, goes into calculating the maximum allowable fee.

Annual Projected Cost		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total Cost	1985 Total	\$5,768	\$192	\$1,703	\$1,703														
	1986 Total	\$51,080	\$1,703	\$1,703	\$1,703														
Total Cost	1987 Total	\$38,149	\$1,272	\$1,272	\$1,272														
	1988 Total	\$642	\$642	\$642	\$642	\$642													
Total Cost	1989 Total	\$26,529	\$884	\$884	\$884	\$884	\$884												
	1990 Total	\$95,597	\$3,187	\$3,187	\$3,187	\$3,187	\$3,187	\$3,187											
Total Cost	1991 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0										
	1992 Total	\$19,163	\$639	\$639	\$639	\$639	\$639	\$639	\$639	\$639									
Total Cost	1993 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0								
	1994 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0							
Total Cost	1995 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0						
	1996 Total	\$1,476	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49					
Total Cost	1997 Total	\$846	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28				
	1998 Total	\$2,406	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80	\$80			
Total Cost	1999 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
	2000 Total	\$1,262	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	\$42	
Total Cost	2001 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2002 Total	\$21,136	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705	\$705
Total Cost	2003 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2004 Total	\$111,296	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710	\$3,710
Total Cost	2005 Total	\$7,273	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242
	2006 Total	\$192,699	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423	\$6,423
Total Cost	2007 Total	\$27,785	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926	\$926
	2008 Total	\$44,879	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496
Total Cost	2009 Total	\$17,572	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586	\$586
	2010 Total	\$59,605	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987	\$1,987
Total Cost	2011 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	2012 Total	\$199,866	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662	\$6,662
Total Cost	2013 Total	\$4,662	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155
	2014 Total	\$42,683	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153
Total Cost	2015 Total	\$17,937	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423
	2016 Total	\$27,595	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598	\$598
Total Cost	2017 Total	\$0	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920
	2018 Total	\$9,293	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310
Amortized Cost by Year		\$31,610	\$31,763	\$32,993	\$31,889	\$31,537	\$31,205	\$30,321	\$27,134	\$27,134	\$26,495	\$26,495	\$26,495	\$26,495	\$26,446	\$26,418	\$26,338	\$26,338	\$26,296
2012 Forward Cumulative Total		\$63,064	\$94,827	\$127,821	\$159,709	\$191,246	\$222,451	\$252,771	\$279,905	\$307,039	\$333,535	\$360,030	\$386,525	\$413,020	\$439,466	\$465,884	\$492,222	\$518,559	\$544,855
1985 Forward Cumulative Total		\$359,078	\$390,841	\$423,834	\$455,723	\$487,259	\$518,464	\$548,785	\$575,919	\$603,053	\$629,548	\$656,043	\$682,539	\$709,034	\$735,480	\$761,898	\$788,235	\$814,573	\$840,869
2012 Existing Service Units	2013 New Service Units	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899
	2014 New Service Units	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449
2015 New Service Units	2016 New Service Units	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696
	2017 New Service Units	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823
2018 New Service Units	2019 New Service Units	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085
	2020 New Service Units	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219
2021 New Service Units	2022 New Service Units	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496
	Study Period Total Service Units	6,449	13,021	19,717	26,541	33,494	40,579	47,798	55,154	62,650	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288
Total Service Units		359,348	365,920	372,616	379,440	386,393	393,477	400,697	408,053	415,549	423,187	430,287	437,507	444,848	452,311	459,901	467,617	475,463	483,440
Growth Percent of Total Service Units		1.8%	3.6%	5.3%	7.0%	8.7%	10.3%	11.9%	13.5%	15.1%	16.6%	16.3%	16.1%	15.8%	15.5%	15.3%	15.0%	14.8%	14.5%
New Service Units Amount of Amortized Cost		\$567	\$1,130	\$1,746	\$2,231	\$2,734	\$3,218	\$3,617	\$3,668	\$4,091	\$4,401	\$4,328	\$4,257	\$4,186	\$4,110	\$4,038	\$3,959	\$3,884	\$3,823



Annual Projected Cost	Total Cost	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1985 Total	\$5768																		
1986 Total	\$51080																		
1987 Total	\$38149																		
1988 Total	\$19250																		
1989 Total	\$26529																		
1990 Total	\$95597																		
1991 Total	\$0																		
1992 Total	\$19163																		
1993 Total	\$0																		
1994 Total	\$0																		
1995 Total	\$1476																		
1996 Total	\$846																		
1997 Total	\$2406																		
1998 Total	\$0																		
1999 Total	\$1262																		
2000 Total	\$0																		
2001 Total	\$705																		
2002 Total	\$0																		
2003 Total	\$0																		
2004 Total	\$11296																		
2005 Total	\$7273																		
2006 Total	\$192699																		
2007 Total	\$27785																		
2008 Total	\$44879																		
2009 Total	\$17572																		
2010 Total	\$59605																		
2011 Total	\$0																		
2012 Total	\$199866																		
2013 Total	\$4662																		
2014 Total	\$4588																		
2015 Total	\$42683																		
2016 Total	\$17937																		
2017 Total	\$27595																		
2018 Total	\$9293																		
Amortized Cost by Year	\$1,050,393	\$26,296	\$25,591	\$25,591	\$21,881	\$21,639	\$15,215	\$14,288	\$12,793	\$12,208	\$10,221	\$10,221	\$3,559	\$3,403	\$3,250	\$1,827	\$1,220	\$310	\$0
2012 Forward Cumulative Total		\$571,151	\$596,742	\$622,333	\$644,214	\$665,853	\$681,068	\$695,357	\$708,151	\$720,358	\$730,579	\$740,800	\$744,359	\$747,762	\$751,012	\$752,840	\$754,069	\$754,379	\$754,379
1985 Forward Cumulative Total		\$867,164	\$892,755	\$918,346	\$940,227	\$961,866	\$977,082	\$991,371	\$1,004,164	\$1,016,372	\$1,026,593	\$1,036,814	\$1,040,372	\$1,043,775	\$1,047,026	\$1,048,853	\$1,050,083	\$1,050,393	\$1,050,393
2012 Existing Service Units		352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899	352,899
2013 New Service Units		6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449
2014 New Service Units		6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572
2015 New Service Units		6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696	6,696
2016 New Service Units		6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823	6,823
2017 New Service Units		6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953	6,953
2018 New Service Units		7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085
2019 New Service Units		7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219
2020 New Service Units		7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356
2021 New Service Units		7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496
2022 New Service Units		7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638	7,638
Study Period Total Service Units		70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288	70,288
Total Service Units		491,552	499,799	508,185	516,712	525,381	534,196	543,159	552,273	561,539	570,961	580,540	590,281	600,185	610,255	620,494	630,905	641,491	652,254
Growth Percent of Total Service Units		14.3%	14.1%	13.8%	13.6%	13.4%	13.2%	12.9%	12.7%	12.5%	12.3%	12.1%	11.9%	11.7%	11.5%	11.3%	11.1%	11.0%	10.8%
New Service Units Amount of Amortized Cost		\$3,760	\$3,999	\$3,540	\$2,976	\$2,895	\$2,002	\$1,849	\$1,628	\$1,528	\$1,258	\$1,237	\$424	\$399	\$374	\$207	\$137	\$34	\$87,843
Rate Revenue Credit Amount																			\$87,843

**Appendix C**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Wastewater**

(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2307	757.007	Waller Creek Center Improvement	\$485,175	\$382,522
2307	757.008	Webberville Improvements	\$559,335	\$482,720
2307	757.009	GLEN BELL SERVICE CTR IMPROVEMENTS	\$0	\$0
2307	757.010	East Service Center	\$160,000	\$0
2307	757.012	Old North Service Center (ONSC) Improvements	\$0	\$0
2307	757.014	Glen Bell Solar	\$50,500	\$49,797
2307	757.016	Waller Creek Roof Replacement	\$287,283	\$284,690
2307	757.019	Disaster Recovery System	\$318,000	\$310,445
2307	757.021	Webberville Svc Ctr Reroof	\$208,000	\$72,700
2307	2231.065	Misc. WW Rehabilitation	\$16,000	\$11,252
2307	2231.092	Onion Creek Tunnel Corrosion Protection Installation	\$0	\$0
2307	2231.104	WW Relay and Spot Rehabilitation	\$14,956,331	\$12,712,385
2307	2231.122	Airport at Chesterfield WW Improvs	\$8,428,675	\$5,875,598
2307	2231.125	Odor Control Assessment and Construction	\$70,000	\$68,817
2307	2231.128	Willowbrook at 40th St. Water and WW Improvements	\$341,183	\$176,417
2307	2231.131	Fletcher Euclid Reroute	\$701,562	\$671,657
2307	2231.134	Palma Plaza Reroute	\$0	\$0
2307	2231.135	Fort Branch Creek Stabilization	\$0	\$0
2307	2231.138	Private Lateral Loan and Grant Program	\$250,000	\$0
2307	2231.143	CBD Alleys W & WW Rehab	\$900,000	\$526,886
2307	2231.146	Pemberton Heights Water Rehab Ph 3	\$128,000	\$0
2307	2231.149	South Congress 12	\$1,665,167	\$1,528,911
2307	2231.179	Misc Water/WW Rehab FY09-10 Ph 3	\$5,000	\$5,000
2307	2231.181	East Austin SSO-Ongoing Rehab	\$358,448	\$290,018
2307	2231.182	North Austin Wastewater Overflow Abatement Project	\$1,358,600	\$1,296,004
2307	2231.183	South Austin SSO-Ongoing Rehab	\$235,634	\$141,978
2307	2231.184	West Austin SSO-Ongoing Rehab	\$1,690,450	\$1,639,803
2307	2231.188	CBD Alley Water Lines 2010-Ph 1-4th to 10th & San Antonio	\$40,000	\$33,042
2307	2231.197	Nueces Water Rehab for W 8th to MLK	\$114,880	\$27,134
2307	2231.199	Buttermilk Creek WW Reroute	\$203,000	\$185,873
2307	2231.211	Real Estate Svcs-Existing WW Pipelines	\$28,200	\$17,439
2307	2231.212	WW Manhole Rehabilitation	\$3,164,500	\$2,952,238
2307	2231.213	WW Cured-in-Place Pipe (CIPP)	\$8,827,690	\$6,163,705
2307	2231.215	Robert Dedman St. Reconstruction Utility Improvs	\$325,000	\$0
2307	2231.216	Nelray and Evans Utility Improvements	\$0	\$0
2307	2231.217	UT Campus Area Utility Improvements	\$0	\$0
2307	2231.221	Future Wastewater Pipeline Replace/Rehab	\$0	\$0
2307	2231.222	Future Wastewater Pipeline Replace/Rehab-Service Contracts	\$0	\$0
2307	2231.223	Future Wastewater Pipeline Replace/Rehab-AWU Crews	\$0	\$0
2307	2231.224	Little Walnut Creek Tunnel Odor Control Unit	\$66,690	\$18,836
2307	2981.001	Subdivision Engineering & Inspection	\$11,577,093	\$10,138,259
2307	3007.005	Govalle WWTP roofing	\$240,000	\$229,278
2307	3023.006	Walnut Creek WWTP Electrical Distribution Imp.- Phase II	\$28,675,384	\$21,968,252
2307	3023.019	Walnut Creek WWTP Headworks Improvements	\$0	\$0
2307	3023.021	Walnut Creek WWTP Plant Control System Upgrade	\$0	\$0
2307	3023.022	Walnut Creek Pumping System Improvements	\$0	\$0
2307	3023.025	Walnut Creek WWTP Tertiary Filter Rehabilitation	\$482,000	\$404,807
2307	3023.026	Walnut Creek Outfall Bank Erosion Ph II	\$1,923,663	\$378,913
2307	3023.027	Walnut Creek Influent Flow Improvement and Equipment Replacement/Rehab	\$4,947,691	\$647,879
2307	3023.029	Walnut Creek WWTP Buildings Reroof	\$754,220	\$719,108
2307	3023.033	Walnut Creek WWTP Sludge Transfer Line	\$0	\$0
2307	3023.034	ADP-Walnut Crk WWTP-Parent	\$0	\$0
2307	3023.036	Walnut Creek Prim & Second Clarifier Rehab	\$0	\$0
2307	3023.038	ADP-Walnut Creek WWTP WAS Pump Replacement	\$45,000	\$0
2307	3023.039	Walnut Creek WWTP Secondary Process Improvements	\$0	\$0
2307	3023.040	Walnut Creek Influent Bank Erosion	\$5,000	\$0
2307	3023.041	Walnut Creek WWTP Lab and Admin Bldg HVAC Rehab - Phase I	\$0	\$0
2307	3023.043	Walnut Creek Alkalinity Delivery	\$0	\$0
2307	3023.044	ADP-Walnut Crk WWTP Effluent Flow Meter Replacement	\$26,000	\$0
2307	3023.045	ADP-Walnut Creek WWTP Bar Rack Replacement	\$55,000	\$0
2307	3023.046	Walnut Creek WWTP 100 MGD Expansion	\$0	\$0
2307	3159.003	Laboratory Information Management System	\$591,000	\$232,621
2307	3159.010	CMMS Hansen	\$500,000	\$0

CIP-C-1  
**DRAFT SUBJECT TO CHANGE**

**Appendix C**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Wastewater**  
(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2307	3159.011	CMMS MP5	\$176,000	\$0
2307	3159.012	GIS	\$367,000	\$14,826
2307	3159.013	Data Management / Integration Tools	\$992,795	\$855,945
2307	3159.014	SCADA-Data Integration	\$479,000	\$165,740
2307	3159.016	SAN & Server Replacement	\$487,262	\$465,550
2307	3159.017	Router, Switch Replacement & Disaster Recovery	\$469,473	\$384,775
2307	3159.019	AWU Phone Switch replacement-GAATN/Vol	\$341,119	\$233,427
2307	3159.021	Mobile Workforce	\$100,000	\$0
2307	3163.001	WW House Connections	\$150,000	\$100,000
2307	3164.010	Hornsby Bend Master Plan	\$1,267,000	\$707,587
2307	3164.021	HB Biosolids Storage Facility	\$0	\$0
2307	3164.030	ARRA Loan Hornsby Bend Compost Pad Expansion	\$1,204,974	\$1,086,767
2307	3164.036	HB Hazardous Gas Detection & Ventilation	\$404,718	\$392,286
2307	3164.038	ARRA Loan HB Digester Domes Rehab	\$33,697,102	\$25,655,837
2307	3164.040	ADP-HB Digester Feed Pump Replacement	\$90,000	\$0
2307	3164.041	Hornsby Bend Biogas Energy Project	\$5,812,000	\$919,493
2307	3164.047	Hornsby Bend Plantwide Electrical Replacent	\$0	\$0
2307	3164.048	Hornsby Bend SSTP Relief	\$0	\$0
2307	3164.052	Hornsby Bend Odor Control	\$0	\$0
2307	3164.053	Hornsby Bend SCADA Improvements	\$1,117,000	\$265,296
2307	3164.054	Hornsby Bend SCADA Control Room	\$0	\$0
2307	3164.059	Hornsby Bend Plant Road repairs	\$0	\$0
2307	3164.060	ADP-Hornsby Bend-Parent	\$0	\$0
2307	3164.061	Hornsby Bend Admin Building Repair	\$650,000	\$514,507
2307	3164.062	Hornsby Bend/SAR digester Complex	\$0	\$0
2307	3164.063	HB SAR Complex Pumps & Heat Exchangers Replacement	\$0	\$0
2307	3164.065	Hornsby Bend WWTP Lab and Admin Bldg HVAC Rehab - Phase I	\$0	\$0
2307	3164.067	ADP-HB Dewatering Building Enclosure	\$100,000	\$0
2307	3164.068	ADP-HB Thickener Lift Station Rehab	\$95,000	\$0
2307	3168.014	LS & FM Rehab & Relief	\$1,259,913	\$449,218
2307	3168.032	Four Points Force Main	\$172,185	\$171,234
2307	3168.038	Lift Station Telemetry System Improvements	\$1,558,000	\$972,295
2307	3168.043	Boggy Creek LS Upgrade	\$3,567,270	\$2,023,502
2307	3168.046	Lake Creek LS Capacity Increase	\$500,000	\$486,835
2307	3168.048	Lift Station Abandonment	\$0	\$0
2307	3168.052	West Bank LS Rehab	\$282,150	\$95,504
2307	3168.054	Linger Lane Lift Station	\$1,250,000	\$4,285
2307	3168.055	Lake Creek LS Force Main Rehabilitation	\$89,000	\$0
2307	3168.057	Rock Harbour LS Improvements	\$0	\$0
2307	3168.058	Northwest Lift Station LRP Engineering Study	\$0	\$0
2307	3168.062	Lindshire LS Relief	\$18,375	\$1,251
2307	3168.063	Lockheed LS Relief	\$18,625	\$1,094
2307	3170.001	Bee Cave Woods LS Improvements	\$0	\$0
2307	3185.002	Capital Equipment - Vehicles	\$3,855,779	\$1,131,215
2307	3212.006	MISCELLANEOUS PAVING IMPROVEMENTS	\$65,000	\$35,682
2307	3212.025	Manhole and Valve Casting Adjustments	\$349,107	\$349,106
2307	3212.055	US 183 Water Relocations from Sprindale to MLK	\$128,426	\$122,078
2307	3212.056	W US 290-71 from Joe Tanner to Scenic Brook	\$433,691	\$392,822
2307	3212.065	US 183 - MLK Blvd. to Boggy Crk.	\$121,033	\$115,970
2307	3212.075	TXDOT-FM2222@Lakewood(Bull Creek)	\$160,386	\$160,089
2307	3212.079	SH 71 at Thornberry	\$135,000	\$76,192
2307	3212.116	Hwy 290 & Airport Blvd WWL Relocation	\$423,000	\$162,538
2307	3212.125	Future WW Pipeline Relocation-External	\$0	\$0
2307	3212.127	Future WW Pipeline Relocations-Internal	\$0	\$0
2307	3333.010	SAR WWTP Plant Control System Upgrade	\$0	\$0
2307	3333.013	SAR Roof Replacement	\$432,065	\$424,170
2307	3333.014	SAR Scum Facilities	\$0	\$0
2307	3333.015	SAR Tertiary Filter Improvements	\$417,571	\$316,314
2307	3333.016	SAR Thickener Improvements	\$300,000	\$0
2307	3333.017	SAR Replace Drives on A & B Clarifiers	\$0	\$0
2307	3333.022	SAR Plant A Pri/Sec Clarifier Repair	\$0	\$0
2307	3333.025	SAR Admin Bldg Improvements	\$341,578	\$341,573
2307	3333.028	SAR Replace Plant A&B Blowers	\$0	\$0

CIP-C-2  
**DRAFT SUBJECT TO CHANGE**

**Appendix C**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Wastewater**

(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2307	3333.032	SAR Future Elect Sub-station (Sub 1 replacement)	\$0	\$0
2307	3333.033	SAR Train A Preliminary Treatment Building HVAC Rehabilitation	\$345,667	\$339,018
2307	3333.034	SAR Lift Station 2 Debris Removal	\$500,000	\$95,406
2307	3333.037	SAR WWTP Sludge Transfer Line	\$0	\$0
2307	3333.038	SAR WWTP-Valve and Gate Replacement	\$0	\$0
2307	3333.039	ADP-SAR WWTP	\$0	\$0
2307	3333.040	ADP-SAR Train B RAS/Inlet Channel Restoration	\$250,000	\$0
2307	3333.041	SAR Chlorine Release Recovery Project	\$1,556,000	\$1,235,429
2307	3333.042	ADP-SAR Final Clarifier 4A Replacement	\$100,000	\$2,563
2307	3333.043	SAR Train A/B Secondary Treatment and Disinfection Improvs-Assessment	\$250,000	\$0
2307	3333.044	SAR Train A/B Secondary Treatment and Disinfection Imps-Design/Bid/Build	\$0	\$0
2307	3333.045	ADP-SAR Train A/B Aeration Basin Crack Repair	\$150,000	\$3,830
2307	3353.095	Whisper Valley-Indian Hills CRA	\$7,900,000	\$0
2307	3353.096	Formula One United States	\$8,126,619	\$4,431
2307	3353.098	Marriott Hotel Downtown	\$500,000	\$0
2307	4769.001	Northeast Area Regional Service Plan	\$186,000	\$177,140
2307	4769.011	Upper Harris Branch Wastewater Improvements	\$270,355	\$162,709
2307	4769.017	Upper Gilleland Interceptors-18 inch	\$99,410	\$99,409
2307	4769.019	Upper Gilleland Interceptor -24 inch	\$65,001	\$65,001
2307	4769.021	Northeast Regional WWTP	\$250,000	\$0
2307	4800.028	West Campus System Improvements	\$150,000	\$87,157
2307	4800.033	West Campus Water & WW Improvements Area 5	\$856,192	\$469,502
2307	4857.010	Anderson Mill Estates STAA-Phase I	\$3,886,836	\$2,925,253
2307	4857.016	Anderson Mill Water / us 183 Wastewater Improvements	\$416,000	\$332,354
2307	4857.017	North Acres	\$690,000	\$345,742
2307	4857.019	STAA - Springwoods non-MUD and Kruger (wastewater)	\$250,000	\$0
2307	4857.021	STAA - Ferguson Cut-off (wastewater)	\$432,963	\$259,594
2307	4857.022	STAA - Pond Springs Road (wastewater)	\$422,963	\$381,597
2307	4857.023	STAA - 2222 Frontage (W&WW)	\$266,722	\$248,078
2307	4857.024	North Acres - Water and Wastewater Improvements-North	\$2,950,988	\$1,347,242
2307	4857.025	North Acres - Final Conveyance	\$971,992	\$507,800
2307	4857.026	North Acres - Wastewater Tunnel	\$1,254,600	\$493,052
2307	4857.027	North Acres - Water and Wastewater Improvements - South	\$1,668,653	\$4,764
2307	4857.028	Anderson Mill Estates STAA Phase II	\$858,787	\$131,336
2307	4857.029	Annexation Telemetry-River Place MUD & Lost Creek MUD	\$0	\$0
2307	4926.081	ACWP - Barton Creek Lift Station Relief Tunnel	\$3,894,024	\$3,860,497
2307	4926.090	ACWP-Govalle 1-So. 2nd St. WW Improvements	\$18,391,519	\$18,353,109
2307	4926.115	ACWP-Tree Replacement Svc Agreement	\$999,000	\$720,285
2307	4926.129	ACWP-Joint Proj with PARD	\$720,618	\$697,709
2307	4927.007	Canterbury, Hwy, and Bergstrom Shafts and Lateral Rehab	\$5,482,179	\$4,964,390
2307	4927.008	Canterbury LS Demolition	\$1,531,932	\$1,484,724
2307	4927.011	Govalle Tunnel Centralized Odor Control	\$5,135,000	\$714,195
2307	4954.007	Bluffington L.S. Upgrades	\$780,851	\$649,704
2307	5261.002	Southern Walnut Creek Hike and Bike Trail	\$162,000	\$0
2307	5403.001	Rio Grande: from MLK to 24th St. Street Reconstruction & Utility Adjustment	\$175,001	\$133,981
2307	5408.002	West 34th Street from Shoal Creek Bridge to West Avenue Street Reconstruction	\$478,068	\$228,195
2307	5754.026	Bull Creek-Lakewood Dr. Low Water Crossing Improvements	\$178,178	\$177,435
2307	5771.060	Bike Blvd. Rio Grande and Nueces from 3rd to MLK	\$25,000	\$25,000
2307	5789.019	Blunn Creek - Long Bow Storm Drain Improvements	\$130,000	\$124,088
2307	5789.020	Shoal Creek - Allandale Storm Drain Improvements	\$66,591	\$53,385
2307	5789.022	Shoal Creek - Ridgelea Storm Drain Improvements	\$451,864	\$139,323
2307	5789.086	Shoal Creek - Rosedale Storm Drain Improvements Phase 2	\$374,000	\$232,157
2307	5789.096	Little Shoal Creek Tunnel Realignment and Utility Relocations - Phase I	\$153,242	\$127,619
2307	5873.010	Wm Cannon Railroad Overpass	\$12,000	\$641
2307	5873.012	Red Bud Trail Bridges at Lake Austin	\$114,803	\$57,437
2307	5980.010	Congress Alley and Sixth Street Alley Reconstruction	\$71,000	\$13,852
2307	6055.004	E. 7th Street Improvments - Northwestern to Pleasant Valley	\$786,301	\$676,404
2307	6055.012	E. 7th Street Improvements - Navasota to Northwestern	\$994,802	\$978,777
2307	6621.007	Walnut Creek Security Access System Upgrade	\$0	\$0
2307	6621.008	Hornsby Bend Security Access System Upgrade	\$0	\$0
2307	6621.009	SAR Security Access System Upgrade	\$0	\$0
2307	6621.010	SCADA Cyber Security Remediation	\$0	\$0
2307	6621.011	Admin Buildings Security Access System Upgrade	\$837,000	\$491,814

CIP-C-3  
**DRAFT SUBJECT TO CHANGE**

**Appendix C**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Wastewater**

(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2307	6621.014	Govalle WWTP Security Access System Upgrade	\$0	\$0
2307	6659.002	Cost of Service Rate Study 2007	\$221,508	\$221,507
2307	6659.004	Facility Condition Assessment	\$1,026,000	\$904,757
2307	6659.006	WWTP Nutrient Removal Desktop Evaluation	\$0	\$0
2307	6686.001	Group 32-32nd St. Reconstruct.& utility adjustment from Duval to Red River	\$264,216	\$237,334
2307	6710.002	Thoroughbred Farms WWTP Rehab	\$50,000	\$0
2307	6755.002	Todd (Pleasant Valley) from Ben White to St. Elmo	\$0	\$0
2307	6943.016	Wastewater System Flow Monitoring and Analysis	\$0	\$0
2307	6943.020	WWTP Flow Transfer	\$0	\$0
2307	6960.001	Brazos St/Cesar Chavez-11th St E	\$367,796	\$366,105
2307	6961.001	Colorado Street Reconstruction and Utility Adjustment from 3rd to 7th St W	\$362,001	\$72,626
2307	6961.003	Colorado from 10th to 11th (Governor's Mansion)	\$95,782	\$3,848
2307	7265.001	Dessau WWTP Rehab - Lift Station	\$680,715	\$671,930
2307	7265.005	Pkg WWTP Rehab	\$300,000	\$174,641
2307	7265.007	Onion Creek WWTP Rehab	\$0	\$0
2307	7265.009	Lost Creek Package Plant Rehab	\$0	\$0
2307	7265.011	Package Plant Hypochlorite Systems	\$350,000	\$201,153
2307	7265.012	Harris Branch WWTP Decommissioning	\$0	\$0
2307	7267.001	Lab Casework Cabinets Rehab(3 sites)	\$355,000	\$167,574
2307	7467.001	Walnut Creek Basin Odor and Corrosion Improvements	\$1,569,200	\$1,084,807
2307	7531.003	Gp 22 - Oakland & Highland frm 6th to 9th, Tremont & W6.5 frm Oak to High	\$31,431	\$22,763
2307	7531.006	Gp 8-A - Forest Trail & Stamford Way St Reconstruction/Utility Adjustment	\$40,068	\$32,117
2307	7531.007	Gp 8-B - Elton Lane & Griswold Lane Street Recon/Utility Adjustment	\$371,001	\$339,572
2307	7531.008	Gp 8-C Vista Ln & Stamford Ln Street Reconstructon & Utility Adjustment	\$0	\$0
2307	7532.001	Group 3 - Northeast Residential/Collector Streets	\$70,000	\$16,868
2307	7532.005	Group 19 Ph1 Recon & Utility Adj - Residential/Collector Streets Northeast	\$343,900	\$80,755
2307	7532.006	Group 19 Ph2 Recon & Utility Adj - Residential/Collector Streets Northeast	\$1,258,859	\$1,084,644
2307	7533.003	Group 12 - Justin Lane and Foster Lane Area - Street Reconstruction	\$345	\$344
2307	7534.001	5th Street from I35 to Onion Street Reconstruction and Utility Ad (Group 7)	\$231,657	\$23,612
2307	7534.002	Group 7 University Hills East	\$203,653	\$72,720
2307	7534.004	Pedernales ST Recon and Util Adjust from 6th to Webberville (Group 7)	\$115,000	\$10,344
2307	7534.006	Group 21 - Residential and Collector Streets Central East (North)	\$0	\$0
2307	7535.005	Group 11 Phase 2 - Southeast Residential/Collector streets	\$350,001	\$344,559
2307	7535.006	Group 4A - Montana St and Felix Ave	\$29,350	\$25,206
2307	7536.003	Group 10 - Collector/Residential Streets SW	\$1,021,460	\$297,707
2307	8098.001	Group 17 - 8th Street from Congress to West Ave.	\$231,250	\$79,899
2307	9084.001	Facilities IDIQ	\$18,000	\$0
2307	9324.001	6th Street, Congress to IH35, Streetscape Improvements	\$0	\$0

**Appendix D**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Water**

(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	757.007	Waller Creek Center Improvement	\$587,548	\$473,077
2207	757.008	Webberville Improvements	\$676,098	\$602,936
2207	757.009	GLEN BELL SERVICE CTR IMPROVEMENTS	\$0	\$0
2207	757.010	East Service Center	\$160,000	\$0
2207	757.012	Old North Service Center (ONSC) Improvements	\$0	\$0
2207	757.014	Glen Bell Solar	\$46,000	\$44,739
2207	757.016	Waller Creek Roof Replacement	\$273,616	\$270,993
2207	757.019	Disaster Recovery System	\$318,000	\$305,295
2207	757.020	South Svc Center	\$0	\$0
2207	757.021	Webberville Svc Ctr Reroof	\$222,000	\$102,507
2207	2006.001	Pump Station Improvements	\$0	\$0
2207	2006.005	Spicewood Springs Pump Station Improvements	\$5,696,334	\$4,821,170
2207	2006.006	Water Distribution Control System Improvements	\$1,175,000	\$486,440
2207	2006.007	Retired Facility Decommissioning - PS	\$650,000	\$556,884
2207	2006.010	Guildford Cove PS back-up power generator	\$100,000	\$0
2207	2006.011	JOLLYVILLE PUMP STATION	\$457,000	\$456,119
2207	2006.012	North Austin Pump Station Improvements	\$100,000	\$0
2207	2006.014	Spicewood Springs PS Util Improvements-TM	\$1,814,095	\$14,336
2207	2006.016	Guildford Cove Property Purchase	\$50,000	\$1,100
2207	2009.010	Green Decommission Plant	\$11,199,856	\$10,985,563
2207	2009.011	Green WTP Decommissioning TM Relocation	\$1,620,473	\$1,551,855
2207	2015.006	Davis WTP Power Distribution Upgrade	\$20,350,000	\$1,468,201
2207	2015.010	Davis WTP Treated Water Discharge System - Prelim Eng.+ First Priority Imp.	\$4,042,191	\$2,678,994
2207	2015.011	Davis WTP Flocculator Imp.	\$4,959,000	\$4,899,992
2207	2015.013	Davis WTP Process Improvements & Equipment Replacements/Rehab	\$20,979,400	\$20,623,074
2207	2015.015	Davis Basin Hand Rail Replacements	\$0	\$0
2207	2015.016	Davis Bldg Roof Replacement	\$1,135,000	\$1,131,089
2207	2015.017	Davis and Ullrich Hydraulic Efficiency Improvements	\$515,000	\$60,590
2207	2015.019	Davis SCADA System	\$0	\$0
2207	2015.026	Davis WTP Main Power Feed Replacement	\$0	\$0
2207	2015.027	Davis WTP On-Site Generation Chlorine	\$0	\$0
2207	2015.028	Davis Sludge Processing Improvements	\$449,060	\$441,319
2207	2015.029	Davis WTP Filter Improvs Phase 2	\$0	\$0
2207	2015.030	Davis Chemical Feed System Improvements	\$650,000	\$317,371
2207	2015.031	Davis Freight Elevator	\$224,950	\$222,285
2207	2015.034	Davis WTP Maintenance Building	\$0	\$0
2207	2015.035	Air Handler Replacement-Davis	\$0	\$0
2207	2015.037	Dehumidifier (SS) Ducting Replacement-Davis	\$0	\$0
2207	2015.039	Davis WTP Site Improvements	\$21,369	\$21,369
2207	2015.040	ADP-Davis WTP	\$0	\$0
2207	2015.041	Davis WTP TWDS-Medium Service PS	\$2,228,631	\$429,443
2207	2015.042	ADP-Davis WTP Chlorine System Improvements	\$250,000	\$23,009
2207	2015.043	Davis WTP Liquid Ammonia Sulfate Impvs	\$0	\$0
2207	2015.044	ADP-Davis Facility Improvements 2012	\$150,000	\$0
2207	2056.004	WDCS/SCADA Ph 2 (Priority 1)	\$369,680	\$235,056
2207	2127.001	Reservoir Improvements - Parent	\$2,006,639	\$1,321,466
2207	2127.003	Forest Ridge Reservoir Access Road	\$0	\$0
2207	2127.012	North Austin Reservoir Replacement	\$100,000	\$0
2207	2127.015	East Austin Reservoir Recoating	\$2,878,283	\$2,875,988
2207	2127.018	Capital of Texas Reservoir Recoating	\$703,963	\$687,398
2207	2127.019	Pilot Knob Reservoir Improvements	\$2,093,970	\$2,050,067
2207	2127.020	Highland Park Reservoir Improvements	\$28,949	\$28,380
2207	2127.021	Spicewood Springs Reservoir Improvements	\$30,000	\$22,418
2207	2127.023	Reservoir Evaluations	\$400,000	\$241,027
2207	2127.024	Forest Ridge Reservoir Improvements	\$115,000	\$49,975
2207	2231.091	Small Diameter Main Replacement	\$1,202,144	\$904,009
2207	2231.113	Pemberton Heights Phase II Water Rehab	\$919,636	\$919,632
2207	2231.122	Airport at Chesterfield WW Improvs	\$110,000	\$0
2207	2231.128	Willowbrook at 40th St. Water and WW Improvements	\$50,000	\$2,860
2207	2231.134	Palma Plaza Reroute	\$0	\$0
2207	2231.140	WRI-Duncan Ave Ext	\$245,062	\$234,336
2207	2231.141	Misc. Water Rehab. 08/09	\$1,070,005	\$975,593
2207	2231.142	North Shields Water Rehab	\$1,180,425	\$1,172,163

CIP-D-1  
**DRAFT SUBJECT TO CHANGE**



**Appendix D**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Water**  
(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	2231.143	CBD Alleys W & WW Rehab	\$2,512,722	\$1,057,613
2207	2231.146	Pemberton Heights Water Rehab Ph 3	\$897,667	\$776,254
2207	2231.150	Line and Fire Hydrant Replacement	\$5,677,268	\$4,476,750
2207	2231.155	Elroy Rd Water Rehabilitation Ph 2	\$300,000	\$247,750
2207	2231.157	Elroy Rd Water Rehabilitation Ph 3	\$0	\$0
2207	2231.158	Condition Assessment of Transmission Lines	\$0	\$0
2207	2231.159	Plaza Saltillo Water Rehab Ph 1	\$500,000	\$392,652
2207	2231.164	Polygon 337 Water Rehab Except 32nd Red River to Duval	\$500,000	\$180,119
2207	2231.171	Meadowview Ln WL Improvements	\$75,450	\$11,099
2207	2231.172	Northwood Rd WL Improvements	\$73,800	\$11,290
2207	2231.173	Barton Hills Trenchless Water Improvements	\$60,676	\$60,676
2207	2231.175	Carsonhill Water Rehabilitation	\$533,000	\$520,110
2207	2231.176	Large Diameter Waterline On-Call Services ID/IQ	\$4,647,335	\$1,729,169
2207	2231.178	Misc Water Rehab Project 2009-10 Ph 2	\$2,612,000	\$899,115
2207	2231.179	Misc Water/WW Rehab FY09-10 Ph 3	\$190,000	\$140,497
2207	2231.181	East Austin SSO-Ongoing Rehab	\$41,836	\$41,835
2207	2231.185	Plaza Saltillo Water Rehab Phase 2	\$510,393	\$431,041
2207	2231.186	Misc Water Rehab 2009-10 Phase 1 WL Improvs	\$268,800	\$55,756
2207	2231.187	Mildred and Willow Street Rehab	\$210,000	\$84,430
2207	2231.188	CBD Alley Water Lines 2010-Ph 1-4th to 10th & San Antonio	\$321,000	\$255,841
2207	2231.190	ID/IQ contract for Small Diameter Water Lines	\$1,278,511	\$11,340
2207	2231.197	Nueces Water Rehab for W 8th to MLK	\$235,869	\$138,138
2207	2231.198	Misc Water Rehab 2009-10 Phase A WL Improvs	\$275,400	\$39,714
2207	2231.201	Misc Water Rehab 09-10 Phase B WL Improvements	\$410,600	\$52,358
2207	2231.204	3101 Shoreline Dr. Meter Improvs	\$75,000	\$0
2207	2231.207	Misc Water Rehab 2010-11 Phase A	\$60,300	\$38,758
2207	2231.208	Misc Water Rehab 2010-11 Phase B	\$44,267	\$27,222
2207	2231.209	Misc Water Rehab Phase C	\$66,385	\$42,966
2207	2231.210	Misc Water Rehab 2010-11 Phase D	\$81,207	\$52,589
2207	2231.214	Boggy Creek Water Line Replacement	\$650,000	\$41,709
2207	2231.215	Robert Dedman St. Reconstruction Utility Improvs	\$75,000	\$0
2207	2231.216	Nelray and Evans Utility Improvements	\$0	\$0
2207	2231.218	Future Water Pipeline Replace/Rehab	\$0	\$0
2207	2231.220	Future Water Pipeline Replace/Rehab-AWU Crews	\$0	\$0
2207	2981.001	Subdivision Engineering & Inspection	\$13,185,021	\$10,445,803
2207	2982.001	Water Services & Meters	\$1,435,925	\$1,225,460
2207	3156.003	Water Resource Planning Study	\$716,034	\$688,669
2207	3159.003	Laboratory Information Management System	\$591,000	\$232,621
2207	3159.010	CMMS Hansen	\$401,000	\$0
2207	3159.011	CMMS MP5	\$176,000	\$0
2207	3159.012	GIS	\$444,000	\$14,826
2207	3159.013	Data Management / Integration Tools	\$1,138,977	\$995,127
2207	3159.014	SCADA-Data Integration	\$404,000	\$234,681
2207	3159.016	SAN & Server Replacement	\$498,240	\$473,656
2207	3159.017	Router, Switch Replacement & Disaster Recovery	\$472,839	\$388,141
2207	3159.019	AWU Phone Switch replacement-GAATN/Vol	\$369,974	\$232,537
2207	3159.021	Mobile Workforce	\$100,049	\$0
2207	3185.002	Capital Equipment - Vehicles	\$1,502,046	\$581,034
2207	3212.006	MISCELLANEOUS PAVING IMPROVEMENTS	\$60,000	\$18,916
2207	3212.055	US 183 Water Relocations from Sprindale to MLK	\$809,120	\$778,824
2207	3212.056	W US 290-71 from Joe Tanner to Scenic Brook	\$235,330	\$231,774
2207	3212.065	US 183 - MLK Blvd. to Boggy Crk.	\$669,901	\$653,830
2207	3212.075	TXDOT-FM2222@Lakewood(Bull Creek)	\$1,870,028	\$1,859,828
2207	3212.079	SH 71 at Thornberry	\$720,000	\$315,186
2207	3212.081	FM 973 Projects	\$498,304	\$210,456
2207	3212.085	US290 E. projects	\$14,535	\$13,992
2207	3212.092	Westgate from Cameron Lp to Cohaba	\$333,066	\$328,065
2207	3212.093	Howard Lane Projects	\$1,026,840	\$1,026,840
2207	3212.104	Manchaca Rd-Ravenscroft to FM 1626	\$2,297,500	\$2,277,048
2207	3212.109	Howard Ln/Metric Blvd Pressure Reducing Valve	\$92,483	\$78,630
2207	3212.113	SH 71 (W) WL Relocation: Upland ridge Dr to No. of SW Pkwy	\$822,764	\$818,852
2207	3212.114	RM 2769 (Volente Rd) WL Relocation: RM 620 to Wet	\$662,607	\$643,766
2207	3212.117	FM 734 Parmer Ln & Amherst Drive	\$179,599	\$174,396

CIP-D-2  
**DRAFT SUBJECT TO CHANGE**

**Appendix D**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Water**

(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	3212.118	US 290(W Ben White) @SB Loop 1	\$78,031	\$66,626
2207	3212.120	SH71 (W) WL Reloc-Arroyo Canyon to S. of SW Pkwy	\$701,314	\$572,676
2207	3212.121	Old Manor Bridge at Tannehill Branch	\$373,200	\$355,453
2207	3212.122	SH71 @ Riverside	\$3,000,000	\$1,793,212
2207	3212.123	US290E Manor Expressway	\$790,000	\$64,841
2207	3212.124	Future Water Pipeline Relocations-External	\$0	\$0
2207	3212.126	Future Water Pipeline Relocations-Internal	\$0	\$0
2207	3212.128	Cameron Rd Waterline Relocations	\$0	\$0
2207	3257.001	Water Laboratory	\$59,423	\$0
2207	3353.079	Ridgeview Subdivision	\$165,082	\$0
2207	3353.081	Bellingham Meadows	\$2,060,700	\$0
2207	3353.096	Formula One United States	\$5,373,734	\$1,389,058
2207	3353.097	Glenlake Water System	\$2,000,000	\$1,996,142
2207	4798.013	Valve Replacement Program - Combined	\$1,286,000	\$251,372
2207	4800.001	Westlake/West Rim Water System Improvements	\$0	\$0
2207	4800.023	McAllen Pass PRV	\$0	\$0
2207	4800.025	Northwest A & B Zone Boundary Projects	\$0	\$0
2207	4800.028	West Campus System Improvements	\$3,222,500	\$3,165,792
2207	4800.029	HWY 290 / 183 Low Pressure Project	\$0	\$0
2207	4800.030	IH 35 / Oltorf Low Pressure Project	\$0	\$0
2207	4800.033	West Campus Water & WW Improvements Area 5	\$4,917,001	\$4,453,018
2207	4857.010	Anderson Mill Estates STAA-Phase I	\$2,235,471	\$1,994,340
2207	4857.017	North Acres	\$537,363	\$449,218
2207	4857.023	STAA - 2222 Frontage (W&WW)	\$378,247	\$354,714
2207	4857.024	North Acres - Water and Wastewater Improvements-North	\$564,347	\$255,849
2207	4857.025	North Acres - Final Conveyance	\$125,568	\$24,596
2207	4857.027	North Acres - Water and Wastewater Improvements - South	\$160,085	\$5,102
2207	4953.002	Real Estate Admin Costs	\$3,298,898	\$3,228,386
2207	4953.003	Property Improvements	\$148,554	\$63,258
2207	4953.011	Tabor Dam Repair	\$0	\$0
2207	4953.013	Hays County Ranch Boundary Fencing Section w and Spike Strip	\$66,100	\$53,739
2207	4953.015	Various Fencing	\$125,000	\$0
2207	4953.020	Rutherford Ranch Road	\$0	\$0
2207	4953.021	WFAD - Walk for a Day	\$250,000	\$95,352
2207	4953.022	Reicher Ranch Road Repair	\$287,000	\$261,617
2207	4953.023	Reicher Ranch-Emmaus House repairs	\$90,000	\$0
2207	4953.025	BCP Shop & Barn	\$225,000	\$0
2207	5028.006	RMMA Redevelopment North WPZ Imp Phase 3 (SER 2278)	\$5,692,284	\$5,610,157
2207	5071.001	Loop 360 Water System Improvements	\$1,188,091	\$1,183,647
2207	5071.002	Loop 360 Water Imp - Allen Road Pump Station	\$5,834,000	\$5,270,708
2207	5071.003	Loop 360 Water Impr - Barclay Drive Pump Station and Ground Storage	\$5,049,000	\$4,721,573
2207	5071.004	Allen-Barclay Transmission Main	\$1,490,000	\$1,469,728
2207	5071.005	Loop 360 Water Impr - Misc Distribution Improvements	\$2,068,382	\$1,820,551
2207	5267.027	Walnut WRI Tank and Pump Station Rehab	\$1,040,000	\$345,604
2207	5267.039	Hancock GC Irrigation System and Reimbursement	\$510,000	\$0
2207	5309.005	South Central Area PB Service Replacements	\$2,215,864	\$84,970
2207	5335.003	Ullrich WTP Contract II Raw Water Pipeline Construction	\$0	\$0
2207	5335.005	Ullrich DACS obsolescence	\$70,000	\$2,265
2207	5335.008	Ullrich WTP On-Site Generation of Chlorine	\$0	\$0
2207	5335.009	Ullrich Roof Replacement	\$800,000	\$792,701
2207	5335.010	ADP-Ullrich Repl Obsolete & Failed Equipment	\$140,000	\$84,530
2207	5335.011	Ullrich WTP Basin Coatings	\$500,000	\$390,553
2207	5335.012	Ullrich Basin Structural Repairs	\$320,000	\$268,138
2207	5335.013	Ullrich Grit Removal	\$500,000	\$362,233
2207	5335.014	Ullrich Chlorine Scrubber Caustic Replacement	\$0	\$0
2207	5335.015	Ullrich Lime Residual Process Valve Replacement	\$100,000	\$0
2207	5335.016	Ullrich 15kv SWGR Replacement	\$0	\$0
2207	5335.017	Air Handler Replacement-Ullrich	\$0	\$0
2207	5335.019	Maintenance Shop a/c Replacement-Ullrich	\$0	\$0
2207	5335.020	ADP-Ullrich RWPS Raw Water Header Corrosion Rehab	\$650,000	\$434,141
2207	5335.021	ADP-Ullrich-parent	\$0	\$0
2207	5335.022	Ullrich WTP Insulation Repair	\$100,000	\$44,518
2207	5335.023	Ullrich WTP Liquid Ammonia Sulfate Impvs	\$0	\$0

CIP-D-3  
**DRAFT SUBJECT TO CHANGE**

**Appendix D**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Water**  
(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	5385.002	Davis Lane from Leo Street to West Gate Blvd.	\$154,000	\$33,245
2207	5385.003	Davis/Deer from Brodie to Corran Ferry	\$36,000	\$0
2207	5403.001	Rio Grande: from MLK to 24th St. Street Reconstruction & Utility Adjustment	\$1,092,000	\$1,004,848
2207	5403.003	Rio Grande Street Reconstruction and Utility Adjustment from 24th to 29th	\$80,000	\$12,362
2207	5408.002	West 34th Street from Shoal Creek Bridge to West Avenue Street Reconstructi	\$1,196,451	\$544,400
2207	5645.003	Davis & Ullrich O&M Manual Digital Archiving	\$0	\$0
2207	5754.048	Hoeke-Posten Lane Roadway and Drainage Improvements	\$10,032	\$3,600
2207	5771.060	Bike Blvd. Rio Grande and Nueces from 3rd to MLK	\$85,000	\$63,585
2207	5789.020	Shoal Creek - Allandale Storm Drain Improvements	\$758,504	\$616,285
2207	5789.022	Shoal Creek - Ridgelea Storm Drain Improvements	\$85,000	\$45,371
2207	5789.028	Lady Bird Lake -East 4th Street Storm Drain Improvements	\$353,000	\$343,134
2207	5789.033	Fort Branch - Oak Lawn Subdivision Storm Drain Improvements	\$275,666	\$269,222
2207	5789.086	Shoal Creek - Rosedale Storm Drain Improvements Phase 2	\$50,000	\$29,690
2207	5789.096	Little Shoal Creek Tunnel Realignment and Utility Relocations - Phase I	\$825,091	\$342,969
2207	5873.009	Riverside Dr Bridges over Country Club Creek	\$261,301	\$244,242
2207	5873.012	Red Bud Trail Bridges at Lake Austin	\$253,000	\$57,440
2207	5980.008	Downtown Alleys Si and 5g	\$347,714	\$344,436
2207	6055.004	E. 7th Street Improvments - Northwestern to Pleasant Valley	\$807,001	\$723,969
2207	6055.012	E. 7th Street Improvements - Navasota to Northwestern	\$1,148,256	\$1,120,236
2207	6055.015	Second Street Phase 2, Colorado to Congress	\$56,055	\$56,054
2207	6055.024	Second Street District Streetscape Street Recon. & Utility Adj. Phase 3	\$679,142	\$62,000
2207	6062.005	Onion Creek 24-inch South Zone WTM 36-inch Central Zone WTM Relocation	\$2,575,213	\$2,512,881
2207	6598.037	US 290 at FM 1826 and Convict Hill Road	\$496,745	\$38,975
2207	6621.005	SCADA Cyber Security Enhancements	\$660,000	\$640,704
2207	6621.006	Davis WTP Security Access System Upgrade	\$750,000	\$0
2207	6621.010	SCADA Cyber Security Remediation	\$0	\$0
2207	6621.011	Admin Buildings Security Access System Upgrade	\$877,000	\$532,149
2207	6621.012	Pump Stations/Reservoirs Security Access System Upgrade	\$413,594	\$12,103
2207	6621.014	Govalle WWTP Security Access System Upgrade	\$0	\$0
2207	6659.002	Cost of Service Rate Study 2007	\$271,433	\$271,432
2207	6659.004	Facility Condition Assessment	\$1,026,000	\$904,904
2207	6686.001	Group 32-32nd St. Reconstruct.& utility adjustment from Duval to Red River	\$653,014	\$625,639
2207	6755.001	Pleasant Valley from St. Elmo to Button Bend	\$329,351	\$100,940
2207	6755.002	Todd (Pleasant Valley) from Ben White to St. Elmo	\$171,550	\$117,517
2207	6934.001	Motorola Oak Hill - Conversion	\$0	\$0
2207	6935.013	Forest Ridge/NWA Transmission Main	\$1,122,586	\$1,041,442
2207	6935.022	Springdale/290 Improvements	\$0	\$0
2207	6935.032	Tanglebriar System Improvements	\$0	\$0
2207	6935.033	Johnny Morris/Hwy 290 Area Grid Extension	\$0	\$0
2207	6935.034	Riverside & Pleasant Valley Transmission Main Interconnect	\$0	\$0
2207	6935.036	Riverplace Glenlake Interconnect	\$0	\$0
2207	6935.038	Parmer at US 290E TM	\$0	\$0
2207	6935.039	Cameron Rd Distribution Waterline(s)	\$0	\$0
2207	6939.003	Loop 360 Westlake to Waymaker	\$0	\$0
2207	6959.001	Group 30: Oltorf St E/Congress Ave-IH35	\$1,017,001	\$508,876
2207	6960.001	Brazos St/Cesar Chavez-11th St E	\$1,645,320	\$1,445,402
2207	6961.001	Colorado Street Reconstruction and Utility Adjustment from 3rd to 7th St W	\$698,769	\$55,696
2207	6961.002	Colorado Street Reconstruction and Utility Adjustments from 7th to 10th St	\$0	\$0
2207	6961.003	Colorado from 10th to 11th (Governor's Mansion)	\$112,276	\$4,481
2207	6998.001	Rundberg Ln. Extension from Metric to Burnet	\$0	\$0
2207	7485.001	Wells Branch Parkway from Heatherwilde to near I35	\$213,037	\$196,944
2207	7531.003	Gp 22 - Oakland & Highland frm 6th to 9th, Tremont & W6.5 frm Oak to High	\$50,289	\$46,162
2207	7531.006	Gp 8-A - Forest Trail & Stamford Way St Reconstruction/Utility Adjustment	\$35,374	\$32,246
2207	7531.007	Gp 8-B - Elton Lane & Griswold Lane Street Recon/Utility Adjustment	\$375,045	\$342,541
2207	7532.001	Group 3 - Northeast Residential/Collector Streets	\$663,600	\$610,707
2207	7532.002	Group 9 Reconstruction & Utility Adj - NE Collector/Residential Streets	\$634,000	\$409,361
2207	7532.005	Group 19 Ph1 Recon & Utility Adj - Residential/Collector Streets Northeast	\$964,160	\$315,138
2207	7532.006	Group 19 Ph2 Recon & Utility Adj - Residential/Collector Streets Northeast	\$676,184	\$604,576
2207	7533.003	Group 12 - Justin Lane and Foster Lane Area - Street Reconstruction	\$57,711	\$57,711
2207	7534.001	5th Street from I35 to Onion Street Reconstruction and Utility Ad (Group 7)	\$300,000	\$83,424
2207	7534.002	Group 7 University Hills East	\$462,000	\$128,619
2207	7534.004	Pedernales ST Recon and Util Adjust from 6th to Webberville (Group 7)	\$52,000	\$40,497
2207	7534.006	Group 21 - Residential and Collector Streets Central East (North)	\$60,000	\$55,628

CIP-D-4  
**DRAFT SUBJECT TO CHANGE**

**Appendix D**  
**CIP Projects Targeted to Meet Existing Needs 2012-2016--Water**  
(in 1000's of dollars)

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	7535.003	Group 11 Phase 1 - Southeast Residential/Collector streets	\$726,682	\$704,509
2207	7535.005	Group 11 Phase 2 - Southeast Residential/Collector streets	\$629,622	\$613,378
2207	7535.006	Group 4A - Montana St and Felix Ave	\$362,230	\$344,680
2207	7535.007	Group 45 - Residential/Collector Streets SE	\$10,000	\$0
2207	7536.003	Group 10 - Collector/Residential Streets SW	\$1,623,307	\$519,093
2207	8098.001	Group 17 - 8th Street from Congress to West Ave.	\$135,850	\$95,418
2207	8158.001	3rd St from Nueces to Congress	\$23,913	\$9,456
2207	8158.002	3rd Street Reconstruction from Congress to Brazos & San Jacinto to Trinity	\$63,324	\$17,744
2207	8158.003	3rd Street Reconstruction from Brazos to San Jacinto (CFA Brazos LP)	\$134,000	\$0
2207	8702.002	Lime Creek Quarry	\$103,094	\$93,094
2207	9084.001	Facilities IDIQ	\$18,000	\$848
2307	757.007	Waller Creek Center Improvement	\$485,175	\$382,522

## **Appendix E**

### **Descriptions of the Zones for the Current Fees**

Descriptions of the zones for the current fees are found in the Land Development Code Chapter 25-1-21(26) and (30), Chapter 25-8-2(D), Chapter 25-2-311, and Ordinance 990805-31 excerpted below. The boundaries are subject to change based on field work and plan review by Watershed Management Department.

Land Development Code Chapter 25-1-21 (30) DRINKING WATER PROTECTION ZONE means the areas within the Barton Springs Zone, the Barton Creek watershed, all water supply rural watersheds, and all water supply suburban watersheds, as described in Section 25-8-2 (*Descriptions Of Regulated Areas*), that are in the planning jurisdiction.

LDC 25-8-2(D): BARTON SPRINGS ZONE means all watersheds that contribute recharge to Barton Springs, including those portions of the Barton, Williamson, Slaughter, Onion, Bear and Little Bear Creek watershed located in the Edwards Aquifer recharge or contributing zones.

BARTON CREEK WATERSHED means the land area that drains to Barton Creek.

EDWARDS AQUIFER is the water-bearing substrata also known as the Edwards and Associated Limestones Aquifer and includes the stratigraphic rock units known as the Edwards Formation and Georgetown Formation.

EDWARDS AQUIFER CONTRIBUTING ZONE means all land generally to the west and upstream of the Edwards Aquifer recharge zone that provides drainage into the Edwards Aquifer recharge zone.

EDWARDS AQUIFER RECHARGE ZONE means all land over the Edwards Aquifer that recharges the aquifer, as determined by the surface exposure of the geologic units comprising the Edwards Aquifer, including the areas overlain with quaternary terrace deposits.

SOUTH EDWARDS AQUIFER RECHARGE ZONE means the portion of the Edwards Aquifer recharge zone that is located south of the Colorado River and north of the Blanco River.

WATER SUPPLY RURAL WATERSHEDS include the Lake Travis watershed and Lake Austin watershed, excluding the Bull Creek watershed and the area to the south of Bull Creek and the east of Lake Austin.

WATER SUPPLY SUBURBAN WATERSHEDS include:  
the Bull, Eanes, Dry Creek North, Taylor Slough North, Taylor Slough South, and West Bull creek watersheds; the Town Lake watershed on the south side of Town Lake from Barton Creek to Tom Miller Dam; the Town Lake watershed on the north side of Town Lake from Johnson Creek to Tom Miller Dam; and the Town Lake watershed on the east side of Lake Austin from Tom Miller Dam to Bull Creek.

Land Development Code Chapter 25-1-21 (26) DESIRED DEVELOPMENT ZONE means the area not within the drinking water protection zone.

LDC 25-8-2(D): SUBURBAN WATERSHEDS include all watersheds not otherwise classified as urban, water supply suburban, or water supply rural watersheds, and include:  
the Brushy, Carson, Cedar, Cottonmouth, Country Club East, Country Club West, Decker, Dry Creek NE, Dry Creek East, Elm Creek, Elm Creek South, Gilleland, Harris Branch, Lake, Maha, Marble, North Fork, Plum Creek, Rattan, Rinard, South Boggy, Walnut, and Wilbarger creek watersheds; the Colorado River watershed downstream of U.S. 183; and; those portions of the Onion, Bear, Little Bear, Slaughter, and Williamson creek watersheds not located in the Edwards Aquifer recharge or contributing zones.

LDC 25-8-2(D): **URBAN WATERSHEDS** include:  
the Blunn, Buttermilk, East Boggy, East Bouldin, Fort, Harper Branch, Johnson, Little Walnut, Shoal, Tannehill, Waller, and West Bouldin creek watersheds; the north side of the Colorado River watershed from Johnson Creek to U.S. 183; and; the south side of the Colorado River watershed from Barton Creek to U.S. 183.

LDC 25-2-311(A): **CURE** means central urban redevelopment (CURE) combining district which is property located in the central urban area shown on the map adopted by Ordinance No. 001130-110, which is on file with the Planning and Development Review Department. This definition is used in the impact fee ordinance 990805-31 with an addition phrase expanding the fee zone to include the area bounded by Town Lake, Lamar Boulevard, 15<sup>th</sup> Street, and IH-35. (For the Impact Fee, Ordinance 9908-05-31 added “and area bounded by Town Lake, Lamar Blvd., 15<sup>th</sup> Street and IH-35”)