

**APPENDIX E**  
**CREDIT CALCULATION ANALYSIS**

## **CREDIT CALCULATION**

### **CODE GOVERNING IMPACT FEE DEVELOPMENT**

Local Government Code Title 12, Subtitle C, Chapter 395 contains the rules governing Impact Fee development. As defined in those rules, the maximum impact fee per service unit shall be calculated by dividing the costs of the portion of capital improvements attributed to new growth by the number of new growth units over the time period covered in the impact fee analysis (Section 395.015 MAXIMUM FEE PER SERVICE UNIT, (b)). In addition, the capital improvements plan must contain a plan for awarding either:

- A credit for the portion of utility service revenues (rates) generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or
- In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan (Section 395.014 CAPITAL IMPROVEMENTS PLAN, (A)(7)).

The code further states that the impact fee is not allowed to exceed the amount determined by subtracting the credit from the costs of the impact fee eligible capital improvements (maximum impact fee). (Section 395.015 MAXIMUM FEE PER SERVICE UNIT, (a)).

As described by the definitions in the code, the following formulas result:

$$\text{Maximum Impact Fee} = (\text{Total Costs attributed to new growth over 10 years including Interest} - \text{Credit}) / \text{Number of New Service Units over next 10 years}$$

The purpose of this credit is to ensure that new growth is not charged twice for the portion of capital improvements attributed to them, once through the impact fee and then again through rates.

The code does not specifically address the way in which this credit is to be calculated. Each utility should calculate the credit in a way that is consistent with the operation of their fund, the way they finance their capital improvements, and the way these capital improvements costs are represented in their utility rates. The next section describes how Fort Worth's credit was calculated.

### **FORT WORTH FINANCING OF CAPITAL IMPROVEMENTS AND CREDIT ANALYSIS**

The City of Fort Worth finances all (100%) of its capital improvements through the issuance of bonds. As such, debt service payments include a portion of impact fee eligible costs. Fort Worth then uses impact fee funds collected to pay the portion of their debt service that is attributed to impact fee eligible costs.

This would result in none of their impact fee eligible costs being included in the calculation of their rates (no credit) unless the city chose to transfer impact fees in an amount less than the eligible costs.

As part of its decision making process, the City of Fort Worth considered several options of impact fee and credit analysis. The three scenarios considered are below.

- Scenario 1 – The city would choose the option laid out in Chapter 395 guidelines of collecting only 50% of the maximum impact fee (a 50% credit, no credit analysis needed).
- Scenario 2 – The city would choose to collect an impact fee higher than 50% of the maximum (75%), thereby needing a credit analysis; in years 2017-2018 it is assumed impact fees would cover only a portion of the impact fee eligible debt service; in years 2019-2026 it is assumed impact fees would cover all of the impact fee eligible debt service.
- Scenario 3 – The city would choose to collect an impact fee higher than 50% of the maximum (100%), thereby needing a credit analysis; in years 2017-2018 it is assumed impact fees would cover only a portion of the impact fee eligible debt service; in years 2019-2026 it is assumed impact fees would cover all of the impact fee eligible debt service.

As mentioned above, for Scenarios 2 and 3 the city is choosing not to cover all impact fee eligible debt with money from the Impact Fee Fund for the first two years. The reason for this is that those transfers have already been determined (the 2017 budget was already approved prior to this impact fee study, and the 2018 budget is nearing final approval). In both of those years, the budgeted transfer had been determined based on the anticipated Impact Fee Funds available using the prior Impact Fee collection rate of \$921 per service unit. These budgeted transfers are not sufficient to cover all of the impact fee eligible debt service as calculated in this Impact Fee Study. This results in a credit for those years.

In remaining years (2019-2026), it is Fort Worth's intent to transfer sufficient funds from the Impact Fees Fund to cover all impact fee eligible debt service. Fort Worth has a very detailed method of calculating the portion of each year's debt service payments for each bond series that is impact fee eligible, based on the projects that were funded in each bond series and what portion of those projects is impact fee eligible. Further, if there should be a year in which less impact fee funds have been collected than was projected and sufficient impact fee funds are not available to cover the portion of debt service that is impact fee eligible, then the city has committed to use other funds as necessary to pay that portion of the debt service. When additional impact fees have been collected, the city will reimburse those other funds.

A summary of the impact fee credit analysis for all three scenarios are shown in **Tables E-1** through **E-3**. Graphs of these results and their proposed phasing over the next three years are shown in **Figures E-1** through **E-3**.

**Table E-1 Scenario 1 - Impact Fee and Credit Analysis (50%)**

	<b>Water</b>	<b>Wastewater</b>
Preliminary Maximum Calculated Infrastructure Cost	\$625,041,757	\$332,339,827
Minus the CREDIT	\$0	\$0
Max Allowable Calculated Infrastructure Cost	\$625,041,757	\$332,339,827
Service Units	142,209	127,381
Max Allowable Impact Fee per Service Unit	\$4,395	\$2,609
<b>Collect 50% of Max Allowable Impact Fee per Service Unit</b>	<b>\$2,197</b>	<b>\$1,304</b>

**Table E-2 Scenario 2 - Impact Fee and Credit Analysis (75%)**

Credit Calculation	Water	
	2017	2018
Portion of debt service attributed to impact fee eligible costs	\$14,236,513	\$18,970,578
Budgeted Transfer from Impact Fee Fund to Cover Debt Service	\$6,206,967	\$6,206,967
Yearly Credit	\$8,029,546	\$12,763,611
<b>TOTAL Credit</b>	<b>\$20,793,157</b>	
	Wastewater	
	2017	2018
Portion of debt service attributed to impact fee eligible costs	\$3,303,775	\$4,377,409
Budgeted Transfer from Impact Fee Fund to Cover Debt Service	\$2,838,453	\$2,838,453
Yearly Credit	\$465,322	\$1,538,956
<b>TOTAL Credit</b>	<b>\$2,004,278</b>	

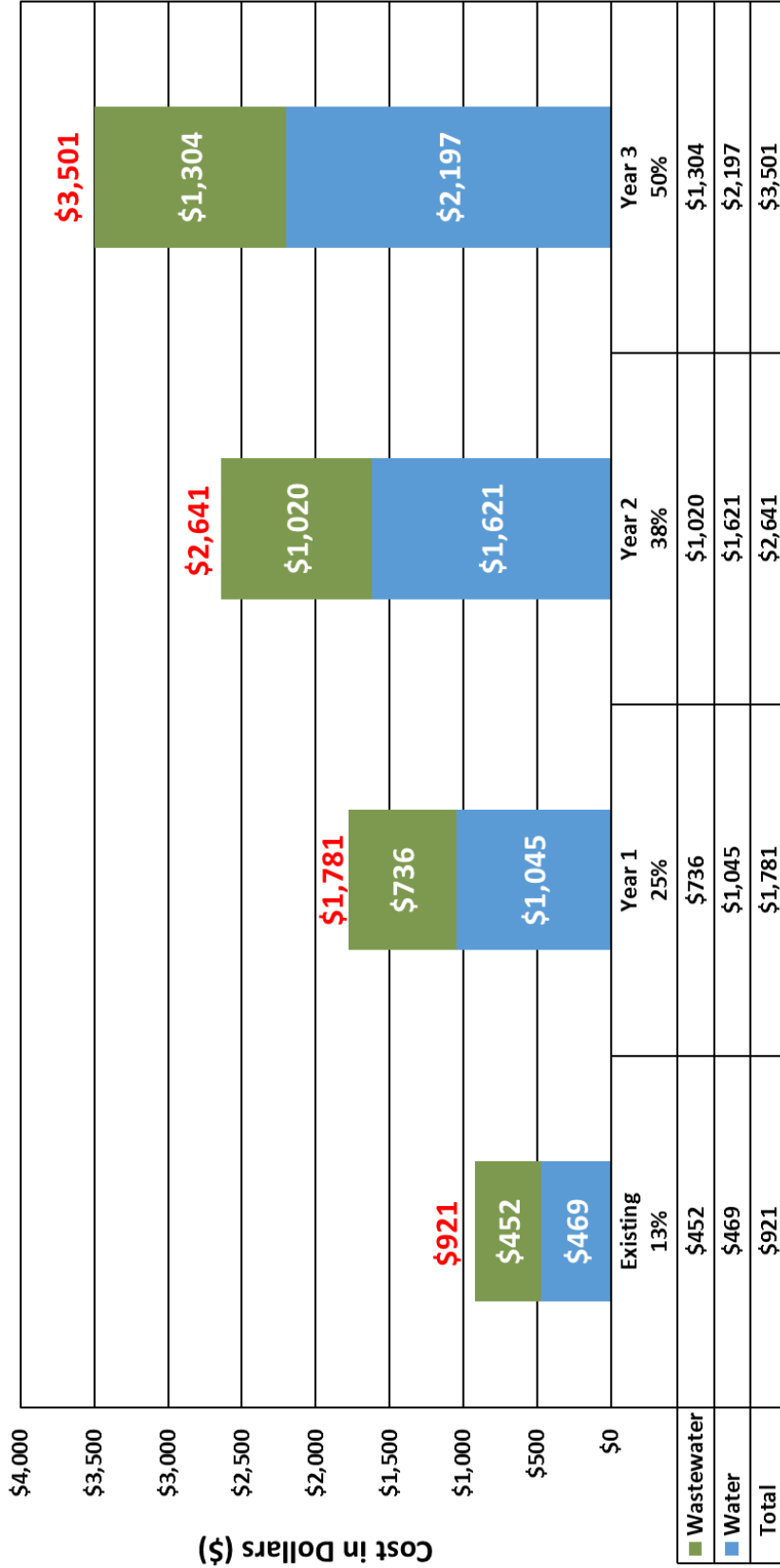
	Water	Wastewater
Preliminary Maximum Calculated Infrastructure Cost	\$625,041,757	\$332,339,827
Minus the CREDIT	<b>(\$20,793,157)</b>	<b>(\$2,004,278)</b>
Max Allowable Calculated Infrastructure Cost	\$604,248,600	\$330,335,549
Service Units	142,209	127,381
Max Allowable Impact Fee per Service Unit	\$4,249	\$2,593
<b>Collect 75% of Max Allowable Impact Fee per Service Unit</b>	<b>\$3,187</b>	<b>\$1,945</b>

**Table E-3 Scenario 3 - Impact Fee and Credit Analysis (100%)**

Credit Calculation	Water	
	2017	2018
Portion of debt service attributed to impact fee eligible costs	\$14,236,513	\$18,970,578
Budgeted Transfer from Impact Fee Fund to Cover Debt Service	\$6,206,967	\$6,206,967
Yearly Credit	\$8,029,546	\$12,763,611
<b>TOTAL Credit</b>	<b>\$20,793,157</b>	
	Wastewater	
	2017	2018
Portion of debt service attributed to impact fee eligible costs	\$3,303,775	\$4,377,409
Budgeted Transfer from Impact Fee Fund to Cover Debt Service	\$2,838,453	\$2,838,453
Yearly Credit	\$465,322	\$1,538,956
<b>TOTAL Credit</b>	<b>\$2,004,278</b>	

	Water	Wastewater
Preliminary Maximum Calculated Infrastructure Cost	\$625,041,757	\$332,339,827
Minus the CREDIT	(\$20,793,157)	(\$2,004,278)
Max Allowable Calculated Infrastructure Cost	\$604,248,600	\$330,335,549
Service Units	142,209	127,381
Max Allowable Impact Fee per Service Unit	\$4,249	\$2,593
<b>Collect 100% of Max Allowable Impact Fee per Service Unit</b>	<b>\$4,249</b>	<b>\$2,593</b>

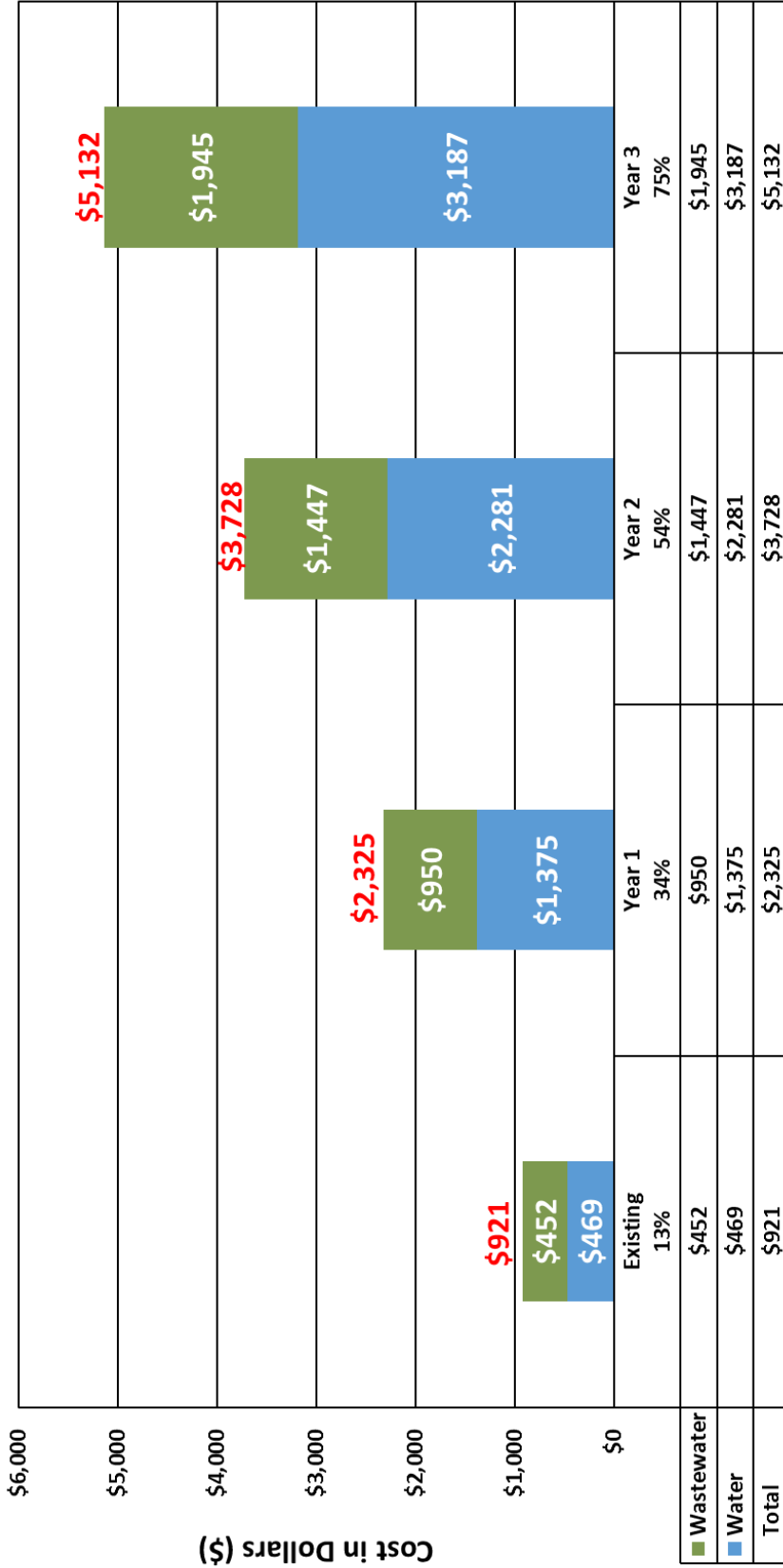
**Figure E-1**  
**Scenario 1: Existing Impact Fee to 50% of Maximum Allowable Impact Fee**  
**(No Credit Included)**



Percentage of Impact Fee Collected VS. Maximum Allowable

■ Water ■ Wastewater

**Figure E-2**  
**Scenario 2: Existing Impact Fee to 75% of Maximum Allowable Impact Fee**  
**(Including Credit Calculation)**

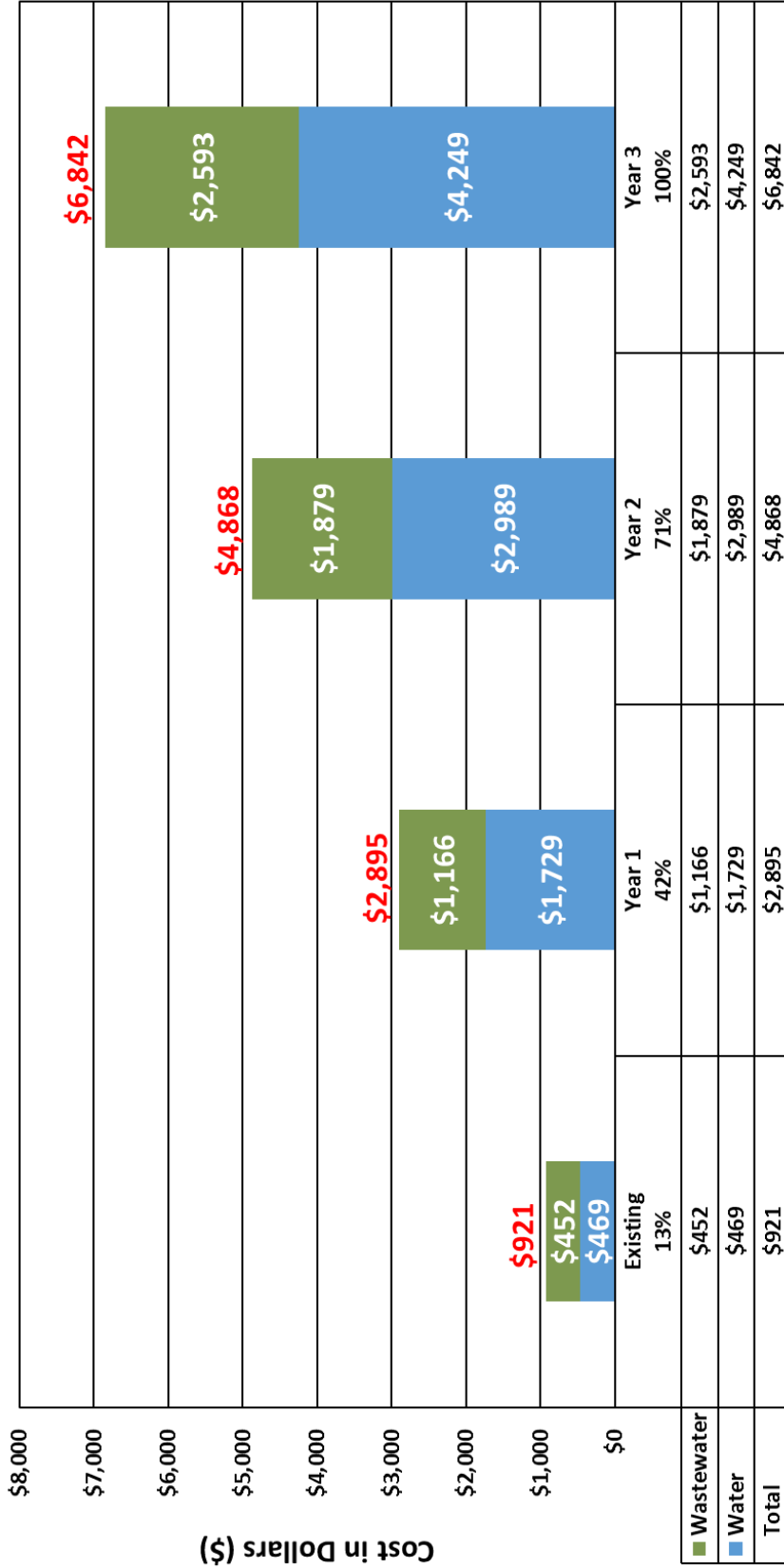


**Percentage of Impact Fee Collected VS. Maximum Allowable**

■ Water ■ Wastewater



**Figure E-3**  
**Scenario 3: Existing Impact Fee to 100% of Maximum Allowable Impact Fee**  
**(Including Credit Calculation)**



**Percentage of Impact Fee Collected VS. Maximum Allowable**

■ Water ■ Wastewater