

**Joe W. Morrow**

Managing Director  
Public Finance

September 27, 2019

City of League City, Texas  
300 West Walker St.  
League City, Texas 77573

Re: ***Cash Defeasance related to the Waterworks & Sewer System Revenue Bonds, Series 2011***

City of League City:

In this analysis we are comparing the different amount of savings the City can achieve through issuing a refunding or performing a cash defeasance of the Waterworks & Sewer System Revenue Bonds, Series 2011.

If the City were to initiate a cash defeasance of the Waterworks & Sewer System Revenue Bonds, Series 2011 the City would achieve savings of \$2,276,156 as the City would not have to pay the future interest payments associated with the Series 2011 bonds. (Appendix A)

However, when analyzing the savings that the City receives associated with the cash defeasance it is important to take into account the opportunity cost associated with the transaction. To illustrate this cost we found a Fannie Mae Agency Note with an interest rate of 1.96% that matures close to the final maturity of the bonds. We then assume the full amount of \$7,937,997, that otherwise would be used to pay off the bonds, is invested in this security. If the City were to invest their money in this agency they would achieve earnings of \$874,300 over the life of the note. After taking the interest earnings into account by subtracting \$874,300 from the \$2,276,156 in gross savings that the City would achieve if it pursued a cash defeasance, the City is left with net savings of \$1,401,857. (Appendix B)

The savings that the City would achieve by refunding the Waterworks & Sewer System Revenue Bonds, Series 2011 are \$1,412,309. (Appendix C)

If the opportunity cost is **not** taken into account the cash defeasance produces **\$863,847** more in savings than the refunding of the Series 2011 bonds. (Appendix D)

If the opportunity cost **is** taken into the amount of savings that the City will achieve by refunding the bonds are **\$10,453** greater than if the City were to pursue a cash defeasance. (Appendix D)

Please see the attached Appendix A, Appendix B, Appendix C, and Appendix D for supporting numbers.

Sincerely,



Joe Morrow  
Managing Director

## Appendix A: Cash Defeasance

A	B	C	D	
League City, Texas				
Proposed Cash Defeasance of WW&SS Series 2011				
Existing				
	S2011	Cash		
Date	Debt Service	Defeasance	Savings	
9/30/2020	\$ 350,394	\$ 7,937,997	\$ (7,587,603)	(B-C)
9/30/2021	968,581	-	968,581	
9/30/2022	958,869	-	958,869	
9/30/2023	947,769	-	947,769	
9/30/2024	930,331	-	930,331	
9/30/2025	916,109	-	916,109	
9/30/2026	900,375	-	900,375	
9/30/2027	882,644	-	882,644	
9/30/2028	868,206	-	868,206	
9/30/2029	847,000	-	847,000	
9/30/2030	829,000	-	829,000	
9/30/2031	814,875	-	814,875	
<b>Total</b>	<b>\$ 10,214,153</b>	<b>\$ 7,937,997</b>	<b>\$ 2,276,156</b>	

## Appendix B: Opportunity Cost of the Cash Defeasance

A	B	C	D	E	F
League City, Texas					
Opportunity Cost of the Cash Defeasance					
Investment Rate: 1.96% Fannie Mae Agency Note					
	Existing			Interest	
	S2011	Cash	Gross	Earned	Net
Date	Debt Service	Defeasance	Savings	@1.96% <sup>(1)</sup>	Savings
9/30/2020	\$ 350,394	\$ 7,937,997	\$ (7,587,603)	\$ 57,480	\$ (7,645,083)
9/30/2021	968,581	-	968,581	77,792	890,789
9/30/2022	958,869	-	958,869	77,792	881,076
9/30/2023	947,769	-	947,769	77,792	869,976
9/30/2024	930,331	-	930,331	77,792	852,539
9/30/2025	916,109	-	916,109	77,792	838,317
9/30/2026	900,375	-	900,375	77,792	822,583
9/30/2027	882,644	-	882,644	77,792	804,851
9/30/2028	868,206	-	868,206	77,792	790,414
9/30/2029	847,000	-	847,000	77,792	769,208
9/30/2030	829,000	-	829,000	77,792	751,208
9/30/2031	814,875	-	814,875	38,896	775,979
<b>Total</b>	<b>\$ 10,214,153</b>	<b>\$ 7,937,997</b>	<b>\$ 2,276,156</b>	<b>\$ 874,300</b>	<b>\$ 1,401,857</b>

(1) Assumes an investment of \$7,937,996.88

(2) Cost to defease the bonds

<b>Gross Savings</b>	<b>\$ 2,276,156</b>
<b>- Interest Earned</b>	<b>874,300</b>
<b>Net Savings</b>	<b><u>1,401,857</u></b>

**Appendix C: Refunding with Debt**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	
<b>League City, Texas</b>						
<b>Refunding of WW&amp;SS 2011</b>						
	Existing			New		
	S2011	DSF	Prior	Refunding		
Date	Debt Service	Transfer	Net Cash Flow	Debt Service	Savings	
9/30/2020	\$ 350,394	\$119,787	\$ 230,607	\$ 230,607	\$ -	<b>(D-E)</b>
9/30/2021	968,581	-	968,581	838,600	129,981	
9/30/2022	958,869	-	958,869	831,100	127,769	
9/30/2023	947,769	-	947,769	817,725	130,044	
9/30/2024	930,331	-	930,331	803,600	126,731	
9/30/2025	916,109	-	916,109	788,725	127,384	
9/30/2026	900,375	-	900,375	773,100	127,275	
9/30/2027	882,644	-	882,644	756,725	125,919	
9/30/2028	868,206	-	868,206	739,600	128,606	
9/30/2029	847,000	-	847,000	716,850	130,150	
9/30/2030	829,000	-	829,000	700,300	128,700	
9/30/2031	814,875	-	814,875	685,125	129,750	
<b>Total</b>	<b>\$ 10,214,153</b>	<b>\$ 119,787</b>	<b>\$ 10,094,367</b>	<b>\$ 8,682,057</b>	<b>\$ 1,412,309</b>	

**Appendix D: Summary of Results**

**League City, Texas  
Summary of Results**

	Excluding Opportunity Cost	Including Opportunity Cost
Cash Defeasance Savings	\$ 2,276,156	\$ 2,276,156
Less: Opportunity Cost	-	874,300
Less: Series 2011 Refunding Savings	1,412,309	1,412,309
<b>Net Defeasance Savings</b>	<b>\$ 863,847</b>	<b>\$ (10,453)</b>