

# HARLINGEN WATERWORKS SYSTEM

## 2023 Water and Wastewater Rate Study DRAFT Report

March 2024



**HARLINGEN WATERWORKS SYSTEM  
WATER AND WASTEWATER RATE STUDY  
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**Appendix A – Water and Wastewater Rate Model Scenario – “On-Time Inverted Block Rate with Higher Base Charge”**

## Acknowledgements

During the course of this rate study, several Harlingen Waterworks System (“HWWS”) employees expended considerable time and effort in assisting the project team. These employees included the Board of Trustees, City’s Commission, the Mayor, Mr. Tim Skoglund, Mr. David Sanchez, Mr. Jon Hedegard, Ms. Florita Rodriguez, and Mr. Ron De La Garza. The project team owes a debt of gratitude to the hard work, dedication, and professionalism of these individuals, without whom this project would not have been successfully completed.

The project team has relied upon the extensive data supplied by the HWWS. Thus, the integrity of the study is largely dependent upon the accuracy of this financial and customer data. Every effort has been made by the project team to validate and confirm the information contained herein prior to the preparation of the final study documents. **This report presents no assurance or guarantee that the forecast contained herein will be consistent with actual results or performances.** These represent forecasts based on a series of assumptions about future behavior and are not guarantees. Any changes in assumptions or actual events may result in significant revisions to the forecast and its conclusions. The cash flow projections and debt service coverage calculations are not intended to present overall financial positions, results of operations, and/or cash flows for the periods indicated, which is in conformity with guidelines for presentation of a forecast established by the American Institute of Certified Public Accountants.



# Executive Summary

## Background



In June 2023, Harlingen Waterworks System (“HWWS” or the “Utility”) engaged **Willdan Financial Services** to conduct a water and wastewater rate study and a long-term financial plan. HWWS was interested in developing a comprehensive water and wastewater rate plan for FY 2024 and beyond. The objective is to develop a long-term rate plan that will enable the Utility to recover sufficient funds to meet operating expenses, capital outlays, debt service and coverage requirements, while at the same time minimizing the impact on ratepayers.

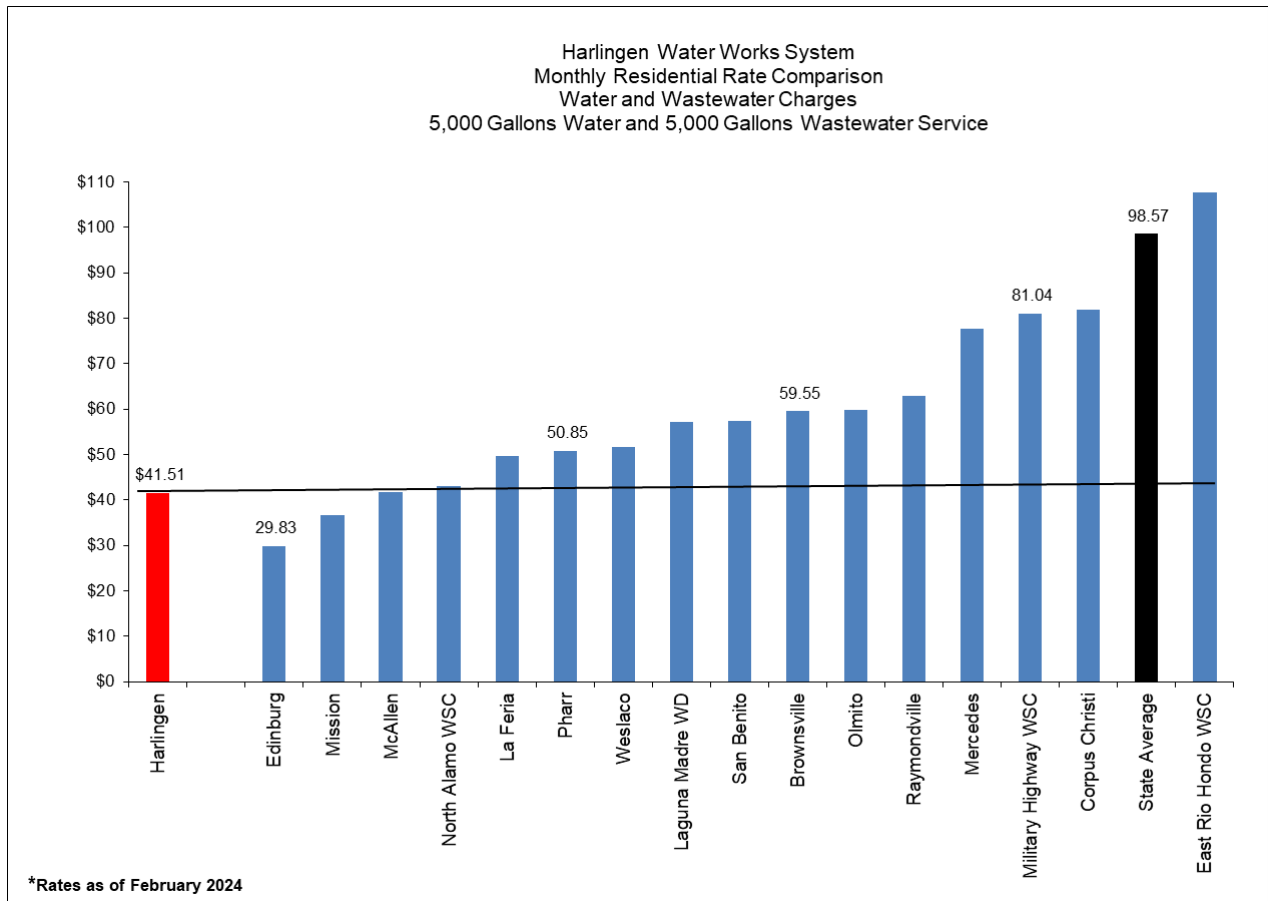
The Utility identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems’ current cost of service and revenue requirements.
- A forecast of operating expenses over the next ten years, taking into consideration salient factors such as cost of water and wastewater treatment, inflation, system growth, and increases in staffing levels.
- A thorough review of the water and wastewater systems’ known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt for the existing identified capital improvements.
- An estimate of current and forecast accounts, volumes, and billing units for the ten-year forecast period.
- A detailed analysis and comparison of the Utility’s current and proposed rates to rates in other surrounding communities.
- Analysis of wholesale rates, low income and senior discount, and implementation of the inverted block rate structure to encourage water conservation.

## Water and Wastewater Rate Comparison

**Chart ES-1** compares Harlingen Waterworks System’s current monthly water and wastewater charges to those of nearby cities in the region. A billing volume of 5,000 gallons for water and 5,000 gallons for wastewater was used for the residential comparison as it represents typical usage levels for an average household served by the Utility. The rate data is based on published rates and ordinances posted by each municipality on their websites as of February 2024. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. Since the majority of the current residential meters served by the Utility are 5/8”, the comparisons reflect 5/8” meters for the cities that charge by meter size.

**CHART ES-1**



## Water and Wastewater Customers and Meters – Test Year & Forecast

The majority of the water and wastewater accounts served by HWWS are residential, commercial & industrial, multi-housing apartments, and public services/institutional. Additionally, the utility has five wholesale water- and two wastewater customers: Town of Combes (water and wastewater), City of Primera (water and wastewater), City of Palm Valley (water only), East Rio Hondo (water only), and Military Hwy WSC (water only). **Table ES-2** presents total water connections by customer class for the Utility for the test year and forecast period. Total wastewater connections by customer class for the test year and forecast period are

presented in **Table ES-3**. As shown, overall water accounts are forecast to increase from **28,051** in the test year to **31,981** in FY 2033, an annual average increase of 1.47%. Similarly, wastewater accounts are forecast to increase from **22,157** in the test year to **25,277** in FY 2033. The addition of these new connections will likely result in both non-recurring connection fees and increasing monthly water and wastewater revenues.

TABLE ES-2

HARLINGEN WATERWORKS SYSTEM														
FORECAST TOTAL CUSTOMERS														
WATER Customer Classes														
Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condos Inside	Multi Housing Apts/Condos Outside	Public Services/Institutional Inside	Public Services/Institutional Outside	Town of Combes Inside	Town of Combes Outside	City of Primera	City of Palm Valley	East Rio Hondo	Military Hwy WSC	Total
<b>WATER Total Customers</b>														
FY 2018	19,141	2,972	2,216	108	684	62	623	8	4	3	1	1	1	25,824
FY 2019	19,291	3,015	2,256	105	693	64	624	7	4	3	1	1	1	26,065
FY 2020	19,560	3,055	2,278	105	691	67	616	7	4	3	1	1	1	26,390
FY 2021	19,895	3,098	2,309	105	705	67	622	8	4	3	1	1	1	26,819
FY 2022	20,177	3,139	2,326	101	723	68	633	8	4	3	1	1	1	27,184
FY 2023	20,413	3,157	2,356	101	738	68	634	8	2	3	1	1	1	27,483
TY 2024	20,860	3,207	2,408	106	752	69	635	8	1	1	1	1	1	28,051
FY 2025	21,173	3,255	2,445	107	763	70	635	8	1	1	1	1	1	28,462
FY 2026	21,490	3,304	2,481	109	775	71	635	8	1	1	1	1	1	28,880
FY 2027	21,813	3,354	2,518	111	786	72	635	8	1	1	1	1	1	29,303
FY 2028	22,140	3,404	2,556	112	798	73	635	8	1	1	1	1	1	29,733
FY 2029	22,472	3,455	2,595	114	810	75	635	8	1	1	1	1	1	30,169
FY 2030	22,809	3,507	2,633	116	822	76	635	8	1	1	1	1	1	30,612
FY 2031	23,151	3,559	2,673	117	835	77	635	8	1	1	1	1	1	31,061
FY 2032	23,498	3,613	2,713	119	847	78	635	8	1	1	1	1	1	31,517
FY 2033	23,851	3,667	2,754	121	860	79	635	8	1	1	1	1	1	31,981

TABLE ES-3

HARLINGEN WATERWORKS SYSTEM											
FORECAST TOTAL CUSTOMERS											
WASTEWATER Customer Classes											
Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condos Inside	Multi Housing Apts/Condos Outside	Public Services/Institutional Inside	Public Services/Institutional Outside	Town of Combes	City of Primera	Total	
<b>WASTEWATER Total Customers</b>											
FY 2018	16,484	1,089	1,756	26	615	47	390	6	1	1	20,414
FY 2019	16,608	1,120	1,785	23	625	49	391	5	1	1	20,607
FY 2020	16,817	1,134	1,793	23	624	52	386	5	1	1	20,836
FY 2021	17,076	1,152	1,819	23	634	51	386	6	1	1	21,149
FY 2022	17,328	1,168	1,834	23	643	52	393	7	1	1	21,449
FY 2023	17,543	1,172	1,848	22	650	53	393	7	1	1	21,690
TY 2024	17,933	1,194	1,882	22	670	54	393	7	1	1	22,157
FY 2025	18,202	1,211	1,911	23	680	55	393	7	1	1	22,483
FY 2026	18,475	1,230	1,939	23	690	56	393	7	1	1	22,815
FY 2027	18,753	1,248	1,968	23	700	56	393	7	1	1	23,151
FY 2028	19,034	1,267	1,998	24	711	57	393	7	1	1	23,492
FY 2029	19,319	1,286	2,028	24	721	58	393	7	1	1	23,838
FY 2030	19,609	1,305	2,058	24	732	59	393	7	1	1	24,190
FY 2031	19,903	1,325	2,089	25	743	60	393	7	1	1	24,547
FY 2032	20,202	1,344	2,120	25	754	61	393	7	1	1	24,909
FY 2033	20,505	1,365	2,152	26	766	62	393	7	1	1	25,277

## Net Revenue Requirement

According to the American Water Works Association (“AWWA”) **Manual M-1**, there are two primary generally accepted approaches to determining revenue requirements with additional hybrid variations. Manual M-1 specifically pertains to water ratemaking, although these principles are equally applicable to wastewater ratemaking. These are the **Cash Needs Approach** and the **Utility/Hybrid Approach**. While the Utility basis is generally recommended when providing service outside the city or to wholesale customers, there are hybrid methodologies that can be more applicable to certain situations, including that of HWWS.

To maintain consistency with national ratemaking standards, and to achieve a just and reasonable rate structure for all customers of the HWWS system, the revenue requirement logic built into the rate model is based on the Cash Needs Approach for Retail inside City water customers, Utility/Hybrid Basis for outside City customers, and Cash Needs with Percentage of Used and Useful for Wholesale water customers.

During the course of this engagement, the project team and HWWS staff evaluated several potential capital improvement plan funding options. The options differed in terms of timing and total magnitude of the expected expenditures. The three primary CIP options evaluated were as follows:

- 1) **Long Delay** – this encompassed a 5-year CIP that focused on eliminating all but the most immediate designated needs in order to overcome pre-existing commission issues.
- 2) **Moderate Delay** – this plan represented a 5-year CIP that overcomes pre-existing system issues and designated immediate known system limitations.
- 3) **On-Time** – this CIP plan is fully in accordance with master plans developed for the utility by outside engineers. The CIP plan and expenditures are intended to overcome pre-existing system issues and fund all identified short and long-term needs.

After review and analysis, HWWS staff determined that the **On-Time scenario** was the most appropriate funding scenario to utilize in the cost-of-service calculations.

Under the On-Time scenario, the Utility’s current CIP requirements over the next five years are estimated to be \$81,771,000 million for the water system and \$176,277,000 for the wastewater system, for a combined total of **\$258,048,000**.

**Table ES-4** presents the test year and ten-year forecast for the Utility’s net revenue requirement to be raised from rates. **The net revenue requirement includes operating expenses and debt service, less non-rate revenue.** The Utility currently has three outstanding debt obligations for which payments are made annually throughout the forecast period. In addition, the forecast assumes that the Utility will issue **\$253.0** million of new debt over the next 10 years to finance the expansion of its water distribution and wastewater collection infrastructure needed to meet customer growth projections. Non-rate revenues include income from connection fees, penalties, and other sources of income other than rate revenues. **Table ES-4** reveals that the net revenue requirement for the combined water and wastewater utility is forecast to increase from the test year total of **\$23,354,484** to **\$50,662,464** by FY 2033. Detailed calculations are presented in the rate model contained in **Appendix A** of this report.



TABLE ES-4

HARLINGEN WATERWORKS SYSTEM						
CURRENT AND FORECAST NET REVENUE REQUIREMENT						
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base						
	Operating Expenses	Capital Outlays	Debt Service	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement
<b>WATER Revenue Requirement</b>						
2024	\$ 12,999,330	\$ 896,802	\$ 783,875	\$ 14,680,007	\$ 1,363,673	\$ 13,316,334
2025	13,660,847	1,287,500	926,756	15,875,103	1,363,673	14,511,430
2026	14,361,642	1,326,125	1,497,263	17,185,030	1,363,673	15,821,357
2027	15,104,065	1,365,909	2,013,147	18,483,120	1,363,673	17,119,447
2028	15,890,813	1,406,886	3,392,460	20,690,159	1,363,673	19,326,486
2029	16,597,830	1,449,093	4,842,785	22,889,708	1,363,673	21,526,035
2030	17,194,562	1,492,565	5,196,524	23,883,652	1,363,673	22,519,979
2031	18,132,394	1,537,342	5,553,802	25,223,539	1,363,673	23,859,866
2032	19,127,340	1,583,463	5,737,094	26,447,897	1,363,673	25,084,224
2033	20,183,176	1,630,966	6,091,926	27,906,068	1,363,673	26,542,395
<b>WASTEWATER Revenue Requirement</b>						
2024	\$ 8,579,724	\$ 1,873,602	\$ 783,875	\$ 11,237,201	\$ 1,199,051	\$ 10,038,150
2025	9,047,552	1,287,500	926,756	11,261,807	1,199,051	10,062,756
2026	9,543,257	1,326,125	2,613,597	13,482,979	1,199,051	12,283,928
2027	10,068,635	1,365,909	6,279,371	17,713,914	1,199,051	16,514,863
2028	10,625,602	1,406,886	8,443,208	20,475,696	1,199,051	19,276,645
2029	11,216,208	1,449,093	9,309,564	21,974,864	1,199,051	20,775,813
2030	11,842,642	1,492,565	9,480,444	22,815,651	1,199,051	21,616,600
2031	12,507,247	1,537,342	9,654,864	23,699,453	1,199,051	22,500,402
2032	13,212,527	1,583,463	9,605,158	24,401,147	1,199,051	23,202,096
2033	13,961,161	1,630,966	9,726,992	25,319,120	1,199,051	24,120,069
<b>TOTAL Revenue Requirement</b>						
2024	\$ 21,579,054	\$ 2,770,404	\$ 1,567,750	\$ 25,917,208	\$ 2,562,724	\$ 23,354,484
2025	22,708,399	2,575,000	1,853,511	27,136,910	2,562,724	24,574,186
2026	23,904,899	2,652,250	4,110,860	30,668,009	2,562,724	28,105,285
2027	25,172,700	2,731,818	8,292,517	36,197,035	2,562,724	33,634,311
2028	26,516,415	2,813,772	11,835,668	41,165,855	2,562,724	38,603,131
2029	27,814,038	2,898,185	14,152,349	44,864,572	2,562,724	42,301,848
2030	29,037,204	2,985,131	14,676,968	46,699,303	2,562,724	44,136,579
2031	30,639,641	3,074,685	15,208,666	48,922,992	2,562,724	46,360,268
2032	32,339,867	3,166,925	15,342,252	50,849,044	2,562,724	48,286,320
2033	34,144,337	3,261,933	15,818,918	53,225,188	2,562,724	50,662,464

## Water and Wastewater Rate Design

During the course of this rate study, HWWS staff, the project team, the HWWS Board of Directors and the City Commission evaluated numerous alternative rate and cost of service scenarios. The scenarios evaluated included but are not limited to the following:

### Types of Rate Plans

- Status Quo
- Conservation-Based
- Higher Monthly Charges
- Lifeline
- Senior Citizen
- Elimination of Wastewater Winter Average

### Rate Plan Scenarios

- “Long-Delay” CIP Financing – Status Quo Rate Plan
- “Long-Delay” CIP Financing – Conservation Rate Plan
- “Long-Delay” CIP Financing – Conservation Rate Plan with Higher Monthly Charges
- “Moderate-Delay” CIP Financing – Status Quo Rate Plan
- “Moderate-Delay” CIP Financing – Conservation Rate Plan
- “Moderate-Delay” CIP Financing – Conservation Rate Plan with Higher Monthly Charges
- “On-Time” CIP Financing – Status Quo Rate Plan
- “On-Time” CIP Financing – Conservation Rate Plan
- “On-Time” CIP Financing – Conservation Rate Plan with Higher Monthly Charges
- Wholesale Rates – Higher Charges
- Lifeline/Senior Citizen Rate and Impact on Existing Rates

After significant analysis, review and deliberation, the Board and City Commission chose the following rate plan:

#### **“On-Time” CIP Financing – Conservation Rate Plan with Higher Monthly Charges**

There are three key aspects of this proposed rate plan that will impact monthly ratepayer charges. The first is that the plan is intended to fund all CIP projects identified by the City’s engineers. As shown in Section III, this represents a total of **\$258,048,000** over the next five years. The more CIP that is funded through the rate plan, the higher the rate adjustments that will be required.

The second key aspect involves the development of an inverted block conservation-based volume rate. The purpose of this rate is to charge greater amounts per 1,000 gallons at greater usage levels as a means to provide a financial disincentive for greater levels of water usage.

The third aspect involves increasing monthly base charges at a higher rate than volume rates. HWWS monthly charges are among the lowest in the region. The proposed rate plan is intended to increase HWWS’ monthly charges for 5,000 gallons to 50% of monthly bills within five years. The advantage of this is that this represents guaranteed revenue to the Utility, which lessens financial risk of shortfalls due to lower usage and/or weather conditions. However, this plan can be perceived as assessing a disproportionate increase on lower volume users.

The following is also notable about this proposed plan:

- The plan is a **five-year plan** with rate adjustments applied for each rate class starting in March 2024 and continuing in January of each year afterwards. The planning horizon for this rate plan is 5 years.
- The fuel charge for water and wastewater is eliminated.
- Outside city water customers continue the City's long-standing policy of paying 50.0% more for water service than inside city customers.
- The wastewater monthly charge for outside city customers remains the same as the inside city rate, with the exception of the monthly charge for residential customers. This monthly charge remains unchanged until it reaches a level of 50.0% greater than inside city customers.
- The most significant impact on rates is the amount of new debt required to fund CIP projects. Should the Utility choose to issue more or less debt than assumed in this study, or should different financing terms be available at the time the debt is issued, then the rate plans contained in this study may require revision.
- The adopted rate plan will ensure that all operating expenses and capital outlays are fully funded.
- The rate plan will allow the Utility to maintain an "AA" credit rating and sound financial standing so capital requirements can be funded with favorable terms when issuing new water and wastewater debt in the next decade.

**Table ES-5** presents a summary of this proposed water and wastewater rate plan.

**Table ES-6** presents the impact the proposed rate plan will have on ratepayers at various levels of consumption. The table presents the total monthly charge for water and wastewater at levels of 3,000, 10,000, 20,000 and 40,000 gallons.



TABLE ES-5

HARLINGEN WATERWORKS SYSTEM WATER RATE PLAN							
Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base							
Current			Proposed Rate Plan				
			Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Forecast Jan-28
<b>Water Rates -- Residential &amp; Commercial Inside</b>							
Monthly Minimum Charge							
	5/8"	\$ 7.93	\$ 9.91	\$ 12.39	\$ 15.49	\$ 19.36	\$ 23.23
	1"	10.07	13.16	17.16	22.34	29.04	34.85
	1 1/2"	14.56	19.85	26.86	36.15	48.40	58.08
	2"	33.02	43.35	56.77	74.20	96.80	116.16
	3"	49.17	65.92	87.98	116.94	154.88	185.86
	4"	112.87	192.55	305.02	461.68	677.61	813.13
	6"	231.80	378.39	583.79	868.24	1,258.42	1,510.11
	8"	426.15	746.45	1,200.27	1,834.35	2,710.45	3,252.54
Residential Volume Rate Per 1,000 Gal							
	-	3,000	1.25	1.25	1.25	1.25	1.25
	3,001	10,000	1.75	1.93	2.12	2.33	2.54
	10,001	20,000	2.50	2.75	3.03	3.33	3.63
	20,001	Above	3.00	3.30	3.63	3.99	4.35
Commercial Volume Rate Per 1,000 Gal							
	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66
	Fuel Cost Adjustment	0.06	-	-	-	-	-
<b>Water Rates -- Residential &amp; Commercial Outside</b>							
Monthly Minimum Charge							
	5/8"	\$ 12.49	\$ 14.87	\$ 18.59	\$ 23.23	\$ 29.04	\$ 34.85
	1"	15.09	19.74	25.74	33.51	43.56	52.27
	1 1/2"	21.86	29.77	40.29	54.22	72.60	87.12
	2"	49.55	65.02	85.16	111.31	145.20	174.24
	3"	73.77	98.88	131.96	175.41	232.32	278.79
	4"	169.32	288.83	457.52	692.52	1,016.42	1,219.70
	6"	346.97	567.59	875.68	1,302.36	1,887.63	2,265.16
	8"	639.24	1,119.68	1,800.41	2,751.53	4,065.67	4,878.81
Residential Volume Rate Per 1,000 Gal							
	-	3,000	1.88	1.88	1.88	1.88	1.88
	3,001	10,000	2.63	2.89	3.18	3.49	3.81
	10,001	20,000	3.75	4.13	4.54	4.99	5.44
	20,001	Above	4.50	4.95	5.45	5.99	6.53
Commercial Volume Rate Per 1,000 Gal							
	Volume Charge	2.48	2.75	3.02	3.32	3.66	3.99
	Fuel Cost Adjustment	0.06	-	-	-	-	-
<b>Wastewater Rates - Residential &amp; Comm Inside</b>							
Monthly Minimum Charge							
	5/8"	\$ 6.18	\$ 7.73	\$ 9.66	\$ 12.07	\$ 15.09	\$ 18.86
	1"	9.44	11.80	14.75	18.44	23.05	28.81
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34
	2"	25.77	32.21	40.27	50.33	62.92	78.64
	3"	52.97	66.21	82.77	103.46	129.32	161.65
	4"	134.60	168.25	210.31	262.89	328.61	410.77
	6"	276.08	345.10	431.38	539.22	674.02	842.53
	8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73
Volume Rate Per 1,000 Gal							
	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89
	Fuel Cost Adjustment	0.11	-	-	-	-	-
<b>Wastewater Rates - Residential &amp; Comm Outside</b>							
Monthly Minimum Charge							
	5/8"	\$ 20.50	\$ 20.50	\$ 20.50	\$ 20.50	\$ 22.63	\$ 28.29
	1"	20.50	20.50	20.50	20.50	22.63	28.29
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34
	2"	25.77	32.21	40.27	50.33	62.92	78.64
	3"	52.97	66.21	82.77	103.46	129.32	161.65
	4"	134.60	168.25	210.31	262.89	328.61	410.77
	6"	276.08	345.10	431.38	539.22	674.02	842.53
	8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73
Volume Rate Per 1,000 Gal							
	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89
	Fuel Cost Adjustment	0.11	-	-	-	-	-

TABLE ES-6

HARLINGEN WATERWORKS SYSTEM IMPACT ON MONTHLY CUSTOMER CHARGES						
Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base						
	Current	Proposed Rate Plan				
		Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Forecast Jan-28
<b>Residential Monthly Charge</b>						
3,000 Gal W Total	\$ 30.55	\$ 33.58	\$ 39.20	\$ 46.06	\$ 54.42	\$ 63.52
3,000 Gal WW Increase -- \$		<b>3.03</b>	<b>5.63</b>	<b>6.85</b>	<b>8.36</b>	<b>9.10</b>
Increase -- %		9.9%	16.8%	17.5%	18.2%	16.7%
10,000 Gal W Total	50.06	53.95	61.62	70.71	81.54	93.08
5,000 Gal WW Increase -- \$		<b>3.89</b>	<b>7.67</b>	<b>9.09</b>	<b>10.83</b>	<b>11.54</b>
Increase -- %		7.8%	14.2%	14.8%	15.3%	14.2%
20,000 Gal W Total	67.16	78.95	89.12	100.96	114.81	129.35
5,000 Gal WW Increase -- \$		<b>11.79</b>	<b>10.17</b>	<b>11.84</b>	<b>13.85</b>	<b>14.54</b>
Increase -- %		17.6%	12.9%	13.3%	13.7%	12.7%
<b>Commercial Monthly Charge</b>						
20,000 Gal W Total	\$ 168.39	\$ 193.44	\$ 226.71	\$ 267.17	\$ 316.62	\$ 365.83
20,000 Gal WW Increase -- \$		<b>25.05</b>	<b>33.27</b>	<b>40.46</b>	<b>49.44</b>	<b>49.21</b>
Increase -- %		14.9%	17.2%	17.8%	18.5%	15.5%
40,000 Gal W Total	277.99	311.32	356.38	409.81	473.52	536.85
40,000 Gal WW Increase -- \$		<b>33.33</b>	<b>45.06</b>	<b>53.43</b>	<b>63.71</b>	<b>63.33</b>

Table ES-7 on the next page presents the proposed rate plan and the cost of service rate for each of the Utility’s water and wastewater wholesale customers.



Table ES-7

HARLINGEN WATERWORKS SYSTEM WHOLESALE RATE PLAN						
	Current	Proposed Rate Plan				
		Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Forecast Jan-28
<b>WATER Rates</b>						
<b>Town of Combes Inside</b>						
Monthly Minimum Charge	\$ 954.03	\$ 1,192.54	\$ 1,490.67	\$ 1,863.34	\$ 2,329.17	\$ 2,795.01
Volume Rate/1,00 Gallons	1.45	1.61	1.77	1.95	2.14	2.34
Cost of Service Rate/1,000 gallons		3.41	3.67	3.96	4.24	4.73
<b>City of Primera</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		3.41	3.67	3.96	4.24	4.73
<b>City of Palm Valley</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		3.41	3.67	3.96	4.24	4.73
<b>East Rio Hondo</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		2.51	2.67	2.92	3.15	3.61
<b>Military Hwy WSC</b>						
Monthly Minimum Charge	\$ 100.00	\$ 125.00	\$ 156.25	\$ 195.31	\$ 244.14	\$ 292.97
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		2.51	2.67	2.92	3.15	3.61
<b>WASTEWATER Rates</b>						
<b>Town of Combes</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons						
-	2.80	3.11	3.42	3.76	4.14	4.51
6,500,001 Above	3.26	3.62	3.98	4.38	4.82	5.25
Cost of Service Rate/1,000 gallons		2.93	2.85	3.43	3.62	4.34
<b>City of Primera</b>						
Monthly Minimum Charge	\$ 861.00	\$ 1,076.25	\$ 1,345.31	\$ 1,681.64	\$ 2,102.05	\$ 2,627.56
Volume Rate/1,00 Gallons	1.37	1.52	1.67	1.84	2.02	2.21
Cost of Service Rate/1,000 gallons		2.34	2.43	3.00	3.11	3.81
Residential Volume Rate Per 1,000 Gal						



## SECTION I

# Introduction and Demographic Profile

## Background



In June 2023, Harlingen Waterworks System (“HWWS” or the “Utility”) engaged **Willdan Financial Services** to conduct a water and wastewater rate study and a long-term financial plan. The Utility was interested in developing a comprehensive water and wastewater rate plan for FY 2024 and beyond. The objective of this study is to develop a long-term rate plan that will enable the Utility to recover sufficient funds to meet operating expenses, capital outlays, debt service, and coverage requirements, while minimizing the impact of adjustments on ratepayers.

The Utility identified numerous objectives for this study, including but not limited to the following:

- A comprehensive analysis and evaluation of the water and wastewater systems’ current cost of service and revenue requirements.
- A forecast of operating expenses over the next ten years, taking into consideration such factors as inflation, system growth, salary adjustments, and increases in staffing levels.
- A thorough review of the water and wastewater systems’ known capital improvement needs, as well as a determination of the need for funding capital requirements through the issuance of long-term debt for the existing identified capital improvements.
- An estimate of current and forecast accounts, volumes, and billing units for the ten-year forecast period.
- A detailed analysis and comparison of the Utility’s current and proposed rates to rates charged by surrounding communities.
- Analysis of winter averages, wholesale rates, higher base charges, and inverted block rate structure and their effect on water and wastewater rates.
- A review of wholesale rates and cost of service, both current and forecast.
- Impact on rates of the potential adoption of alternative capital improvement financing plans.



## Report Organization

This report is organized into the following sections:

**Section I – Introduction and Demographic Profile** - outlines the background, objectives and scope of this rate study and long-term financial plan. It also presents the Utility’s current rate structure and a community profile of Harlingen. This includes a comparison of the Utility’s water and wastewater charges with other several neighboring cities.

**Section II – Water and Wastewater Test Year and Forecast Volumes** – analyzes the Utility’s customer base, total accounts and current volumes of treated water and wastewater. This section presents totals for the current year and a forecast ten years into the future.

**Section III – Water and Wastewater Test Year and Forecast Revenue Requirement** – outlines the process of analyzing the Utility’s current water and wastewater utility cost structure. The total current or “test year” revenue requirements are developed, and costs are functionalized between treatment, distribution/collection, administration, and customer billing. Using the test year as a basis, costs are forecast for a ten-year period.

**Section IV – Water and Wastewater Rate Designs** – summarize rate recommendations presented to the HWWS Board of Trustees and the City’s Commission which would enable HWWS to meet its revenue requirements over the next five years. This section also presents an analysis of the impact of this rate plan.

**Appendix A** – presents a hard copy printout of the interactive Microsoft Excel spreadsheet model summaries developed for HWWS to calculate water and wastewater current and future revenue requirements. The model automatically generates all calculations based on a set of defined user inputs and has an executive dashboard for users to develop real-time “what-if” scenarios.

## Community Overview



Harlingen is a vibrant city located in the Rio Grande Valley region of southern Texas. It is the second-largest city in Cameron County, and the fourth largest in the Rio Grande Valley.

Harlingen was established in 1904 as a result of the expansion of the St. Louis, Brownsville, and Mexico Railway. Originally a small agricultural town, it experienced significant growth in the early 20th century when irrigation systems were introduced, leading to increased agricultural production.

One of the notable historical events in Harlingen’s past is the opening of the Harlingen Army Airfield during World War II. This airfield played a crucial role in training pilots for the United States Army Air Corps and became the city’s municipal airport after the war.

Today, Harlingen is a bustling city with a diverse economy. It is known as the economic hub of Cameron County, attracting various industries such as healthcare, retail, and manufacturing.

The city is also known for its warm weather, birdwatching, and proximity to the Gulf of Mexico. Its serves as a gateway to popular tourist destinations in the region, including South Padre Island and the Mexican border.

### HWWS Leadership

The Harlingen Waterworks System is a public utility that operates under the oversight of the Harlingen City Commission, the City Manager, and the Mayor. The HWWS is governed by a five-member Board of Trustees that are appointed by the City Commission. The City Manager appoints a Waterworks Director who oversees day-to-day operations of the water system and ensures efficient delivery of water and wastewater services.

The Board of Trustees consists of Chairman, Vice-Chairman and three Board Members. All changes to the Utility’s water and wastewater rate structure must be approved by a vote of the Board.

Table I-1 lists currently serving HWWS officials.

TABLE I-1

HARLINGEN WATERWORKS SYSTEM	
HWWS OFFICIALS -- DECEMBER 2023	
Mayor and Board of Trustees	Senior Staff
<p><i>City Mayor</i> <span style="float: right;"><i>Norma Sepulveda</i></span></p> <p style="text-align: center;"><b>Board of Trustees</b></p> <p><i>Chairman</i> <span style="float: right;"><i>Chris Bartnesky</i></span></p> <p><i>Vice-Chairman</i> <span style="float: right;"><i>Enrique Del Angel</i></span></p> <p><i>Trustee 1</i> <span style="float: right;"><i>Michael Garza</i></span></p> <p><i>Trustee 2</i> <span style="float: right;"><i>Michael Murphy</i></span></p> <p><i>Trustee 3</i> <span style="float: right;"><i>Maru De La Paz</i></span></p>	<p><i>City Manager</i> <span style="float: right;"><i>Gabriel Gonzalez</i></span></p> <p style="text-align: center;"><b>HSSW Staff</b></p> <p><i>General Manager</i> <span style="float: right;"><i>Tim Skoglund</i></span></p> <p><i>Director of Water</i> <span style="float: right;"><i>David Sanchez</i></span></p> <p><i>Director of Wastewater</i> <span style="float: right;"><i>Jon Hedegard</i></span></p> <p><i>Director of Finance</i> <span style="float: right;"><i>Ron De La Garza</i></span></p> <p><i>Director of Customer Service</i> <span style="float: right;"><i>Florita Rodriguez</i></span></p>

### Water and Wastewater Current Rates

The water rate structure assesses a base charge for residential and non-residential customers based on their meter size. Additionally, all water accounts are charged a flat volume rate of \$1.65 plus a fuel adjustment charge of \$0.06 for each 1,000 gallons of actual water consumption. Outside City limits customers are charged higher rates than the inside City limits customers.

The Utility’s wastewater rate structure follows its water rate structure when customers are assessed a base charge depending on their water meter size and a flat volume rate of \$3.66 for each 1,000 gallons of wastewater flows. The fuel adjustment charge for wastewater is \$0.11 per 1,000 gallons. HWWS uses the winter averaging method to calculate wastewater flows.

Table I-2 on the next page summarizes the Utility’s current water and wastewater rate structure.

TABLE I-2

HARLINGEN WATERWORKS SYSTEM					
CURRENT WATER AND WASTEWATER RATES					
Water Rates			Wastewater Rates		
INSIDE City Limits			INSIDE City Limits		
Minimum Charge by Meter Size	5/8"	\$ 7.93	Minimum Charge by Meter Size	5/8"	\$ 6.18
	1"	10.07		1"	9.44
	1 1/2"	14.56		1 1/2"	21.41
	2"	33.02		2"	25.77
	3"	49.17		3"	52.97
	4"	112.87		4"	134.60
	6"	231.80		6"	276.08
	8"	426.15		8"	439.33
Volume Rate (per 1,000 Gallons)		\$ 1.65	Volume Rate (per 1,000 Gallons)		\$ 3.66
OUTSIDE City Limits			OUTSIDE City Limits		
Minimum Charge by Meter Size	5/8"	\$ 12.49	Minimum Charge by Meter Size	5/8"	\$ 20.50
	1"	15.09		1"	20.50
	1 1/2"	21.86		1 1/2"	21.41
	2"	49.55		2"	25.77
	3"	73.77		3"	52.97
	4"	169.32		4"	134.60
	6"	346.97		6"	276.08
	8"	639.24		8"	439.33
Volume Rate (per 1,000 Gallons)		\$ 2.48	Volume Rate (per 1,000 Gallons)		\$ 3.66
FUEL COST ADJUSTMENT (per 1,000 gallons)		\$ 0.06	FUEL COST ADJUSTMENT (per 1,000 gallons)		\$ 0.11

### Water and Wastewater Rate Comparison

Table I-3 compares HWWS’s monthly residential water and wastewater charges to those of nearby cities in the region. Chart I-4 presents the data graphically. Chart I-5 compares average annual charges for the cities in the comparison. Volumes of 5,000 gallons water and 5,000 gallons wastewater were used for the comparison as they represent typical usage levels for an average household in the City.

The rate data is based on published rates and ordinances posted by each municipality on their website. These rates do not include sales tax, activation or other charges beyond the basic minimum and volume charges. Comparisons such as these are for usage charges only. This type of comparison may have the unintended effect of discriminating against communities who choose to finance system expansions through current rates or revenue bonds, which are included in rates, as opposed to those who utilize general obligation bonds, which are funded through taxes. All else being equal, a City that primarily or exclusively uses general obligation bonds will have a lower water rate per 1,000 gallons but a higher tax rate.

The following points are also notable:

- Many cities do not assess rates that recover the full cost of service, choosing instead to subsidize their water and wastewater utilities with other revenues or to defer needed repairs and maintenance at the expense of system reliability and integrity.

- Some cities use tax bonds to fund water/wastewater system construction. This results in lower rates but higher ad valorem taxes.
- Since the majority of the current residential meters served by the Utility are 5/8", the comparisons reflect 5/8" meters for the cities that charge by meter size.

With these caveats in mind, the comparisons reveal that the HWWS rates are lower than rates of the majority of the similarly sized cities in the region. The Utility's current combined residential water and wastewater charges are approximately **2.4x** less than the statewide survey average.

TABLE I-3

<b>HARLINGEN WATERWORKS SYSTEM</b>			
<b>CURRENT MONTHLY RESIDENTIAL CHARGES FOR 5,000 GALLONS WATER; 5,000 GALLONS WASTEWATER; 5/8" METER</b>			
	<b>Water</b>	<b>Wastewater</b>	<b>Total</b>
<b>Harlingen</b>	<b>\$ 16.48</b>	<b>\$ 25.03</b>	<b>\$ 41.51</b>
Brownsville	27.67	31.88	59.55
Laguna Madre WD	22.12	35.08	57.20
McAllen	20.70	21.00	41.70
Edinburg	17.49	12.34	29.83
Raymondville	36.54	26.30	62.84
Weslaco	28.30	23.43	51.73
San Benito	26.62	30.68	57.30
Corpus Christi	27.26	54.64	81.90
Mercedes	39.47	38.18	77.65
North Alamo WSC	26.03	17.00	43.03
Olmito	33.35	26.48	59.83
East Rio Hondo WSC	56.25	51.50	107.75
Military Highway WSC	48.40	32.64	81.04
La Feria	25.25	24.35	49.60
Mission	20.50	16.25	36.75
Pharr	27.88	22.97	50.85
<b>State Average</b>	<b>\$ 52.91</b>	<b>\$ 45.66</b>	<b>\$ 98.57</b>

Source: Citys' Website; US Census Bureau & municipal websites

CHART I-4

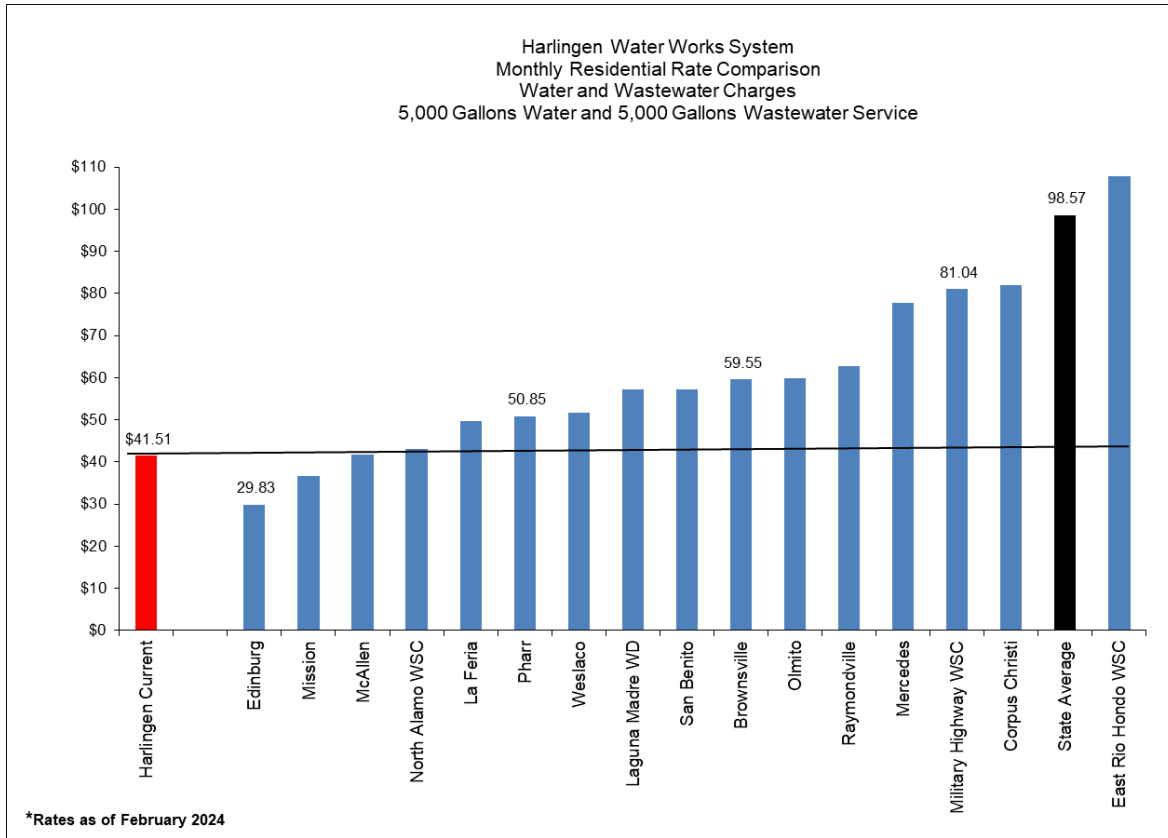
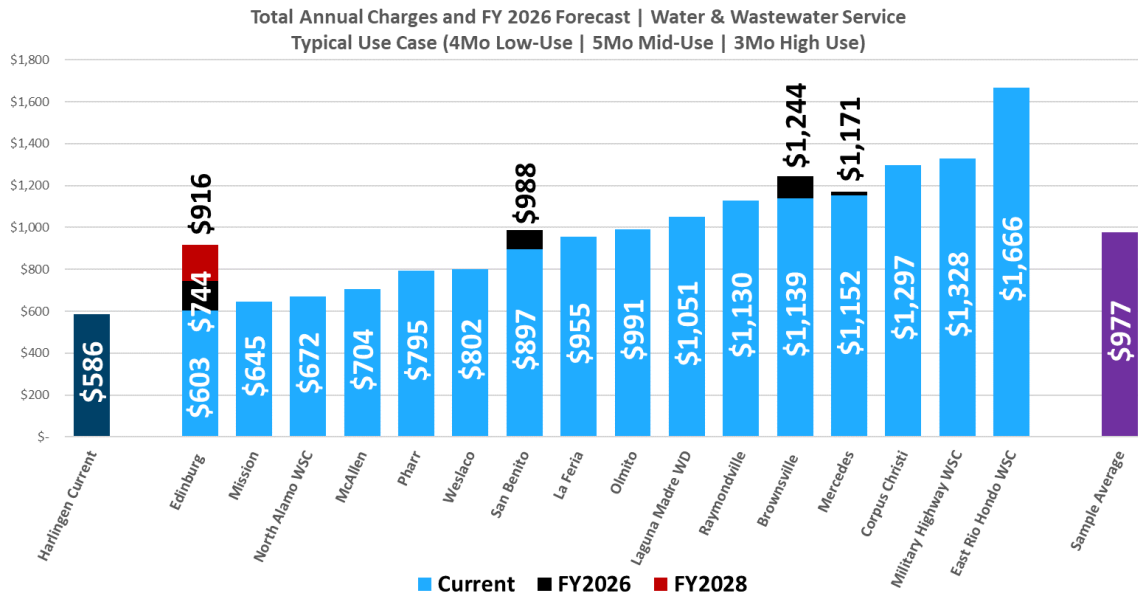


CHART I-5



*Section II*

## SECTION II

## Water & Wastewater Test Year and Forecast Volumes



In order to accurately forecast future revenues and expenses, it is necessary to examine current water and wastewater utility conditions. The first step in developing cost of service rates is to analyze patterns of usage, both for the system as a whole, and for specified customer classes.

For HWWS, monthly water and wastewater records were reviewed for the period of October 2017 through July 2023. These records provided summary information on the monthly water volumes distributed system wide as well as the number of accounts for each period by defined customer class and the associated revenues. Additionally, these records provided the number of accounts and revenues monthly for all classifications of wastewater customers.

According to standard utility ratemaking methodology, in order to allocate revenue requirements equitably among system users, customers must be classified into relatively homogeneous groups with similar usage characteristics or service demands. Costs are then allocated to the customer classes in proportion to the usage characteristics of each class. For the water system, costs are typically allocated to customers based on their average and peak water demands. For the wastewater system, costs are allocated to customers based on their estimated wastewater flows, and in some cases, based on wastewater strengths.

The project team finds these customer class distinctions to be reasonable and appropriate, meeting the criteria of homogenous groups with similar usage patterns.

In this section, the Utility's functional customer classes and test year usage patterns will be thoroughly analyzed. A ten-year projection of customers and usage will also be presented. These forecasts, along with the revenue requirements, will form the basis of the proposed rate design.

### Water and Wastewater Customers and Accounts – Test Year and Forecast

The majority of the water customers served by HWWS are Residential accounts, followed by Commercial & Industrial, Multi-Housing Apts., and Public Services & Institutional. In addition to these customer classes, the Utility has five wholesale water customers: Town of Combes, City of Primera, City of Palm Valley, East Rio Hondo WSC, and Military Highway WSC.

Similarly, the majority of wastewater customers are Residential accounts with the remaining being Commercial & Industrial, Multi-Housing Apartments and Public Services/Institutional. The Utility provides wholesale wastewater services to Town of Combes and City of Primera.

Table II-1 presents total water accounts for the Utility for the test year and forecast period.

For each of the historical years, the average number of accounts for the year is shown and the growth reflects the difference from one fiscal year to the next. Overall water accounts are expected to increase by approximately 450 accounts per year, from 28,051 in the test year to 31,981 in FY 2033, an average annual increase of 1.47%.

TABLE II-1

HARLINGEN WATERWORKS SYSTEM															
FORECAST TOTAL CUSTOMERS															
WATER Customer Classes															
	Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condos Inside	Multi Housing Apts/Condos Outside	Public Services/Institutional Inside	Public Services/Institutional Outside	Town of Combes Inside	Town of Combes Outside	City of Primera	City of Palm Valley	East Rio Hondo	Military Hwy WSC	Total
<b>WATER Total Customers</b>															
FY 2018	19,141	2,972	2,216	108	684	62	623	8	4	3	1	1	1	-	25,824
FY 2019	19,291	3,015	2,256	105	693	64	624	7	4	3	1	1	1	-	26,065
FY 2020	19,560	3,055	2,278	105	691	67	616	7	4	3	1	1	1	-	26,390
FY 2021	19,895	3,098	2,309	105	705	67	622	8	4	3	1	1	1	-	26,819
FY 2022	20,177	3,139	2,326	101	723	68	633	8	4	3	1	1	1	-	27,184
FY 2023	20,413	3,157	2,356	101	738	68	634	8	2	3	1	1	1	-	27,483
TY 2024	20,860	3,207	2,408	106	752	69	635	8	1	1	1	1	1	1	28,051
FY 2025	21,173	3,255	2,445	107	763	70	635	8	1	1	1	1	1	1	28,462
FY 2026	21,490	3,304	2,481	109	775	71	635	8	1	1	1	1	1	1	28,880
FY 2027	21,813	3,354	2,518	111	786	72	635	8	1	1	1	1	1	1	29,303
FY 2028	22,140	3,404	2,556	112	798	73	635	8	1	1	1	1	1	1	29,733
FY 2029	22,472	3,455	2,595	114	810	75	635	8	1	1	1	1	1	1	30,169
FY 2030	22,809	3,507	2,633	116	822	76	635	8	1	1	1	1	1	1	30,612
FY 2031	23,151	3,559	2,673	117	835	77	635	8	1	1	1	1	1	1	31,061
FY 2032	23,498	3,613	2,713	119	847	78	635	8	1	1	1	1	1	1	31,517
FY 2033	23,851	3,667	2,754	121	860	79	635	8	1	1	1	1	1	1	31,981
<b>WATER Annual New Customers</b>															
FY 2019	149	43	40	(3)	9	2	1	(1)	NA	NA	-	-	-	-	241
FY 2020	269	40	23	1	(2)	3	(8)	(0)	NA	NA	-	-	-	-	325
FY 2021	336	43	31	(1)	13	0	6	2	-	-	-	-	-	-	429
FY 2022	282	41	17	(3)	19	0	11	(0)	(0)	-	-	-	-	-	365
FY 2023	236	18	30	(0)	15	1	1	-	(2)	-	-	-	-	-	298
TY 2024	447	50	52	4	14	1	1	-	(1)	(2)	-	-	-	-	568
FY 2025	313	48	36	2	11	1	-	-	-	-	-	-	-	-	411
FY 2026	318	49	37	2	11	1	-	-	-	-	-	-	-	-	417
FY 2027	322	50	37	2	12	1	-	-	-	-	-	-	-	-	423
FY 2028	327	50	38	2	12	1	-	-	-	-	-	-	-	-	430
FY 2029	332	51	38	2	12	1	-	-	-	-	-	-	-	-	436
FY 2030	337	52	39	2	12	1	-	-	-	-	-	-	-	-	443
FY 2031	342	53	40	2	12	1	-	-	-	-	-	-	-	-	449
FY 2032	347	53	40	2	13	1	-	-	-	-	-	-	-	-	456
FY 2033	352	54	41	2	13	1	-	-	-	-	-	-	-	-	463

Table II-2 on the next page presents the project team’s ten-year forecast of wastewater account growth. Wastewater accounts are forecast to increase by approximately 359 accounts per year, from 22,157 in the test year to 25,277 in FY2033.



TABLE II-2

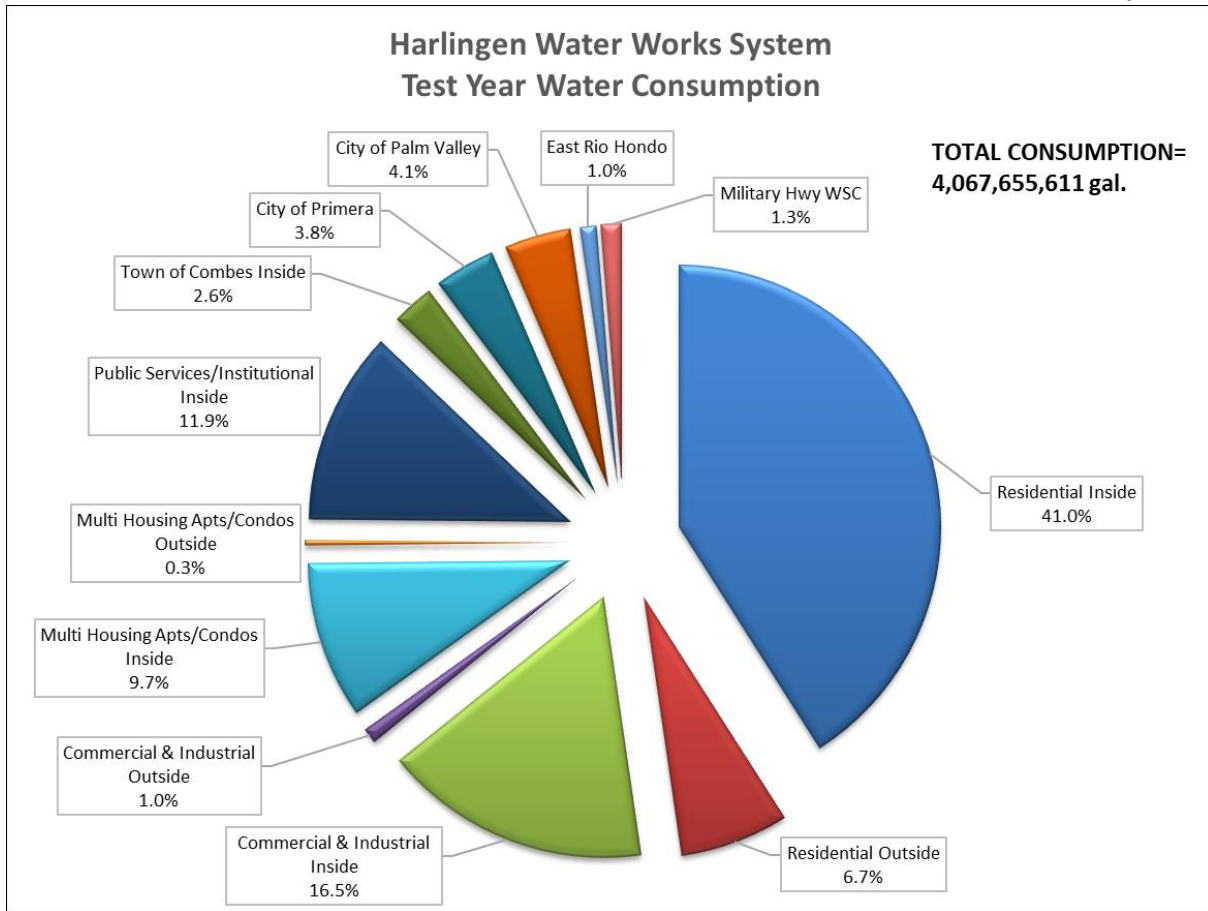
HARLINGEN WATERWORKS SYSTEM											
FORECAST TOTAL CUSTOMERS											
WASTEWATER Customer Classes											
	Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condo s Inside	Multi Housing Apts/Condo s Outside	Public Services/Ins titutional Inside	Public Services/In stitutional Outside	Town of Combes	City of Primera	Total
<b>WASTEWATER Total Customers</b>											
FY 2018	16,484	1,089	1,756	26	615	47	390	6	1	1	20,414
FY 2019	16,608	1,120	1,785	23	625	49	391	5	1	1	20,607
FY 2020	16,817	1,134	1,793	23	624	52	386	5	1	1	20,836
FY 2021	17,076	1,152	1,819	23	634	51	386	6	1	1	21,149
FY 2022	17,328	1,168	1,834	23	643	52	393	7	1	1	21,449
FY 2023	17,543	1,172	1,848	22	650	53	393	7	1	1	21,690
TY 2024	17,933	1,194	1,882	22	670	54	393	7	1	1	22,157
FY 2025	18,202	1,211	1,911	23	680	55	393	7	1	1	22,483
FY 2026	18,475	1,230	1,939	23	690	56	393	7	1	1	22,815
FY 2027	18,753	1,248	1,968	23	700	56	393	7	1	1	23,151
FY 2028	19,034	1,267	1,998	24	711	57	393	7	1	1	23,492
FY 2029	19,319	1,286	2,028	24	721	58	393	7	1	1	23,838
FY 2030	19,609	1,305	2,058	24	732	59	393	7	1	1	24,190
FY 2031	19,903	1,325	2,089	25	743	60	393	7	1	1	24,547
FY 2032	20,202	1,344	2,120	25	754	61	393	7	1	1	24,909
FY 2033	20,505	1,365	2,152	26	766	62	393	7	1	1	25,277
<b>WASTEWATER Annual New Customers</b>											
FY 2019	124	31	29	(2)	10	2	1				194
FY 2020	209	15	8	(0)	(1)	3	(5)				229
FY 2021	259	18	26	0	10	(0)	-	2	-	-	313
FY 2022	252	16	16	(1)	9	1	7	1	-	-	300
FY 2023	215	5	13	(1)	7	1	0	-	-	-	241
TY 2024	391	21	35	0	20	1	(0)	-	-	-	467
FY 2025	269	18	28	0	10	1	-	-	-	-	326
FY 2026	273	18	29	0	10	1	-	-	-	-	331
FY 2027	277	18	29	0	10	1	-	-	-	-	336
FY 2028	281	19	30	0	11	1	-	-	-	-	341
FY 2029	286	19	30	0	11	1	-	-	-	-	346
FY 2030	290	19	30	0	11	1	-	-	-	-	352
FY 2031	294	20	31	0	11	1	-	-	-	-	357
FY 2032	299	20	31	0	11	1	-	-	-	-	362
FY 2033	303	20	32	0	11	1	-	-	-	-	368

### Historical and Forecast Water Consumption

Total water system consumption data was analyzed over the same time period as customer data. A combination of consumption over the past 12 months and historical trends were used as the basis for the development of the forecast water and wastewater volumes within the rate model.

Chart II-3 on the next page presents total water consumption in percentages by customer class in the test year.

CHART II-3



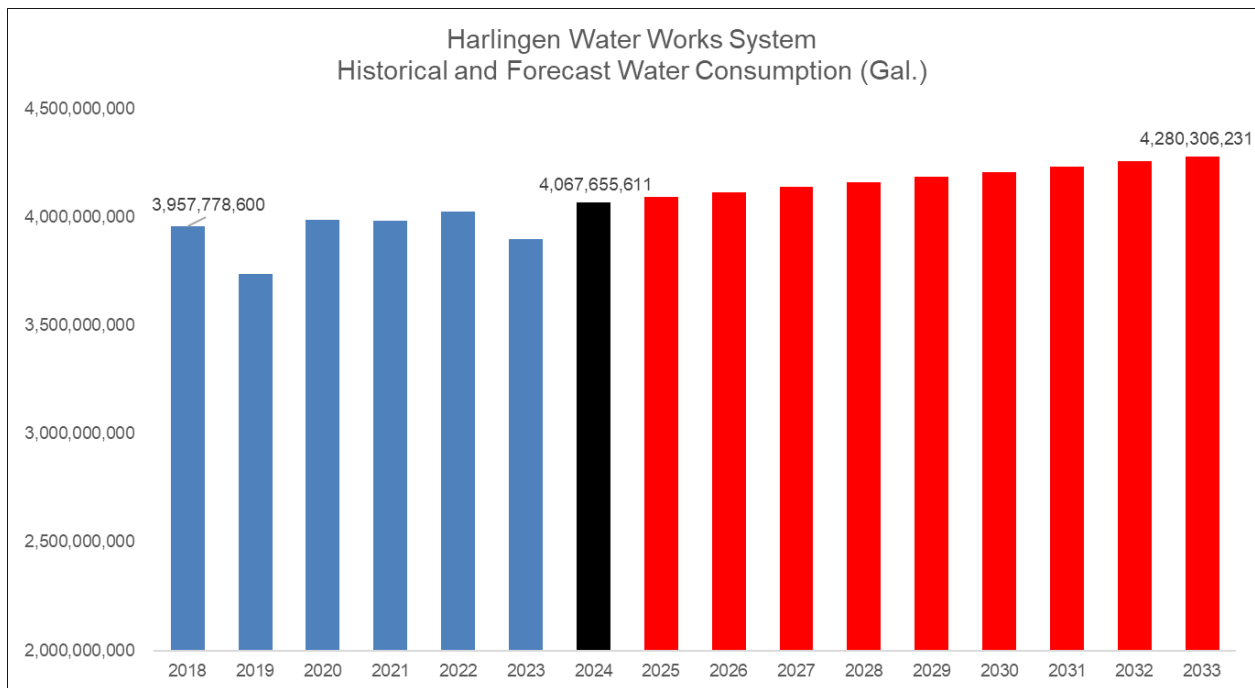
The project team prepared a ten-year forecast of water usage based on the historical data and forecast accounts growth. The table below reveals that water usage is expected to increase by an annual average of 0.57% during the forecast period. By FY 2033 water usage is expected to reach **4,280,306,231** gallons. The results of this forecast for water usage are presented in **Table II-4** and **Chart II-5**.



TABLE II-4

HARLINGEN WATERWORKS SYSTEM															
FORECAST BILLED CONSUMPTION															
WATER Customer Classes															
	Residential		Commercial & Industrial		Multi Housing		Public Services/Insti		Town of Combes	Town of Combes	City of Primera	City of Palm Valley	East Rio Hondo	Military Hwy WSC	Total
	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside					
<b>WATER Historical Volume</b>															
FY 2018	1,706,659,500	267,971,200	715,270,000	54,755,100	353,925,900	13,905,100	529,150,200	1,192,600	70,876,700	-	105,970,100	102,284,000	35,818,200	-	3,957,778,600
FY 2019	1,537,621,900	241,000,000	699,766,800	33,979,300	331,443,700	13,337,200	469,001,700	514,600	83,725,200	-	132,246,800	131,384,000	62,106,300	-	3,736,127,500
FY 2020	1,724,862,200	257,356,900	702,250,500	32,881,100	359,317,500	13,937,500	468,034,300	470,800	94,859,200	-	145,454,900	134,524,000	51,776,700	1,045,000	3,986,770,600
FY 2021	1,692,734,500	272,021,400	680,676,800	31,981,800	364,072,300	14,093,700	459,330,400	960,200	93,539,300	-	107,346,200	141,546,000	71,900,500	53,112,000	3,983,315,100
FY 2022	1,657,358,800	260,762,500	701,319,300	34,098,100	383,617,200	13,103,100	502,442,100	972,800	88,673,300	24,000	152,450,100	141,682,500	36,973,000	52,079,000	4,025,555,800
FY 2023	1,583,600,640	264,110,280	639,046,440	36,495,600	383,325,600	12,521,640	458,083,920	1,238,400	110,006,280	900,000	150,227,160	162,374,880	41,663,880	52,696,800	3,896,291,520
<b>WATER Forecast Volume</b>															
TY 2024	1,667,223,404	273,051,518	671,398,901	38,757,694	393,658,947	12,954,607	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,067,655,611
FY 2025	1,679,727,580	275,099,404	676,434,393	39,048,377	396,611,389	13,051,766	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,090,583,449
FY 2026	1,692,325,536	277,162,650	681,507,651	39,341,240	399,585,975	13,149,654	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,113,683,246
FY 2027	1,705,017,978	279,241,370	686,618,958	39,636,299	402,582,869	13,248,277	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,136,956,291
FY 2028	1,717,805,613	281,335,680	691,768,601	39,933,571	405,602,241	13,347,639	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,160,403,884
FY 2029	1,730,689,155	283,445,697	696,956,865	40,233,073	408,644,258	13,447,746	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,184,027,334
FY 2030	1,743,669,323	285,571,540	702,184,042	40,534,821	411,709,090	13,548,604	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,207,827,960
FY 2031	1,756,746,843	287,713,327	707,450,422	40,838,832	414,796,908	13,650,219	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,231,807,091
FY 2032	1,769,922,445	289,871,177	712,756,300	41,145,124	417,907,885	13,752,595	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,255,966,065
FY 2033	1,783,196,863	292,045,210	718,101,972	41,453,712	421,042,194	13,855,740	485,366,700	1,157,500	107,147,600	774,000	153,507,000	168,384,800	42,036,940	52,236,000	4,280,306,231

CHART II-5



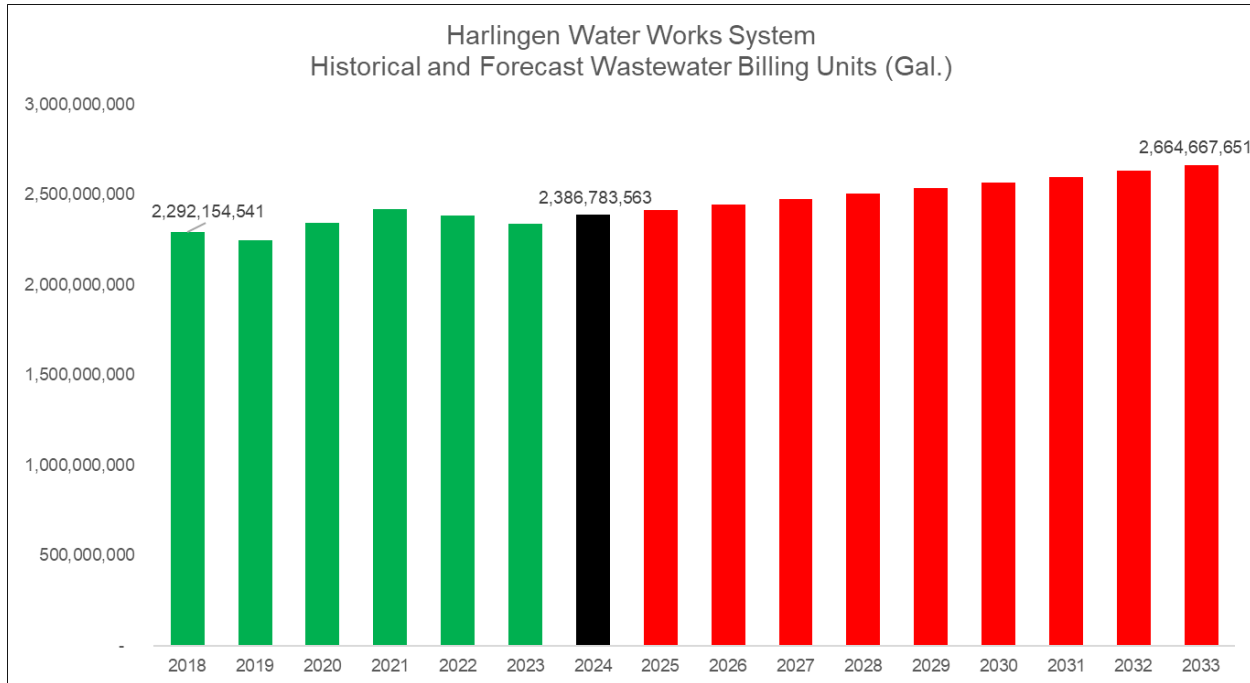
### Historical and Forecast Wastewater Flows

As with water-billed consumption, the project team prepared a ten-year forecast of wastewater billing units. The results of the forecast are presented in **Table II-6** and **Chart II-7**. The table reveals that wastewater billing units are forecast to increase by an annual average rate of 1.23% during the forecast period.

TABLE II-6

HARLINGEN WATERWORKS SYSTEM											
FORECAST BILLED CONSUMPTION											
WASTEWATER Customer Classes											
Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condos Inside	Multi Housing Apts/Condos Outside	Public Services/Institutional Inside	Public Services/Institutional Outside	Town of Combes	City of Primera	Total	
<b>WASTEWATER Historical Volume</b>											
FY 2018	923,744,100	59,378,300	544,538,226	32,494,346	309,474,300	7,502,900	294,572,869	1,066,800	52,575,700	66,807,000	2,292,154,541
FY 2019	868,805,700	57,395,800	545,249,000	15,316,200	300,186,400	7,300,700	292,728,500	399,000	70,288,700	90,483,000	2,248,153,000
FY 2020	966,629,900	60,407,500	526,785,400	8,836,600	325,479,800	8,032,100	270,725,600	395,000	79,637,200	98,965,000	2,345,894,100
FY 2021	995,800,900	65,627,200	530,724,300	8,051,300	333,117,900	7,864,800	266,149,700	916,000	93,020,300	118,722,000	2,419,994,400
FY 2022	936,404,414	62,798,700	550,824,800	8,229,400	354,890,600	7,771,200	281,821,700	783,000	78,281,300	100,177,000	2,381,982,114
FY 2023	955,141,242	64,960,320	498,092,160	10,906,080	357,876,240	7,805,760	276,145,080	1,027,320	77,787,480	86,997,600	2,336,739,282
<b>WASTEWATER Forecast Volume</b>											
TY 2024	968,260,478	65,621,017	518,722,416	11,011,792	366,296,439	8,048,222	282,061,200	953,400	77,315,600	88,493,000	2,386,783,563
FY 2025	982,784,385	66,605,332	526,503,252	11,176,969	371,790,885	8,168,945	282,061,200	953,400	77,315,600	88,493,000	2,415,852,968
FY 2026	997,526,151	67,604,412	534,400,801	11,344,623	377,367,749	8,291,479	282,061,200	953,400	77,315,600	88,493,000	2,445,358,415
FY 2027	1,012,489,043	68,618,478	542,416,813	11,514,793	383,028,265	8,415,851	282,061,200	953,400	77,315,600	88,493,000	2,475,306,443
FY 2028	1,027,676,378	69,647,756	550,553,065	11,687,515	388,773,689	8,542,089	282,061,200	953,400	77,315,600	88,493,000	2,505,703,691
FY 2029	1,043,091,524	70,692,472	558,811,361	11,862,827	394,605,294	8,670,220	282,061,200	953,400	77,315,600	88,493,000	2,536,556,899
FY 2030	1,058,737,897	71,752,859	567,193,531	12,040,770	400,524,374	8,800,274	282,061,200	953,400	77,315,600	88,493,000	2,567,872,904
FY 2031	1,074,618,965	72,829,152	575,701,434	12,221,381	406,532,239	8,932,278	282,061,200	953,400	77,315,600	88,493,000	2,599,658,650
FY 2032	1,090,738,250	73,921,589	584,336,956	12,404,702	412,630,223	9,066,262	282,061,200	953,400	77,315,600	88,493,000	2,631,921,182
FY 2033	1,107,099,324	75,030,413	593,102,010	12,590,773	418,819,676	9,202,256	282,061,200	953,400	77,315,600	88,493,000	2,664,667,651

CHART II-7



## Peaking Factors

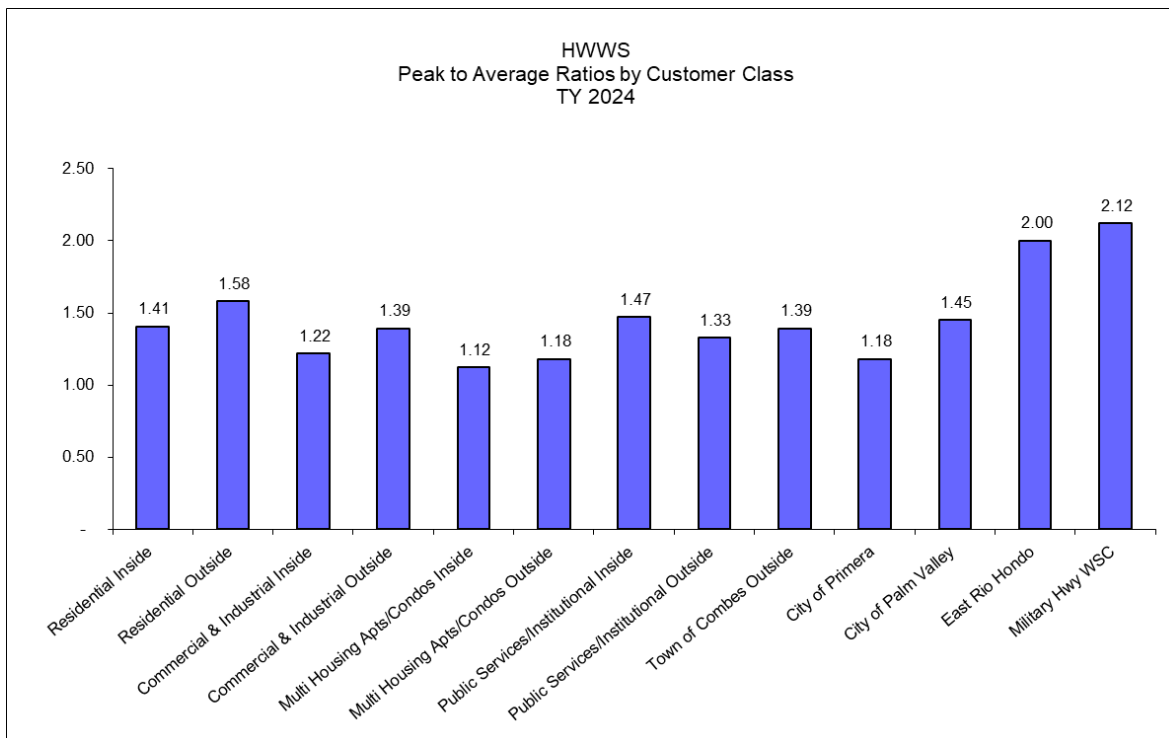
The cost of providing water to customers depends not only on the amount of water each class uses, but also on how that usage occurs over time. The maximum-day and maximum-hour peaking requirements of a water utility’s customers are an important influence on the utility’s costs. Because water utilities attempt to meet all of the demands of their customers, water systems are sized to meet customers’ peak requirements. Therefore, during off-peak periods, there are usually significant costs associated with the unused capacity of the system. These costs must be allocated to customers in proportion to the contribution of each customer class to the system peak, in order to develop equitable cost-based rates. Thus, it is necessary to determine the peak rate of use relative to the average rate of use for each class. This ratio is called a **Peaking Factor**.

The calculation of peaking factors for individual classes relies on available pumping and consumption information as well as professional judgment. It is accepted practice in the water industry to develop peaking factor estimates based on standard formulas using system peak day information and monthly customer class usage records. This is a conservative methodology, since customer class peaking factors based on peak months will inevitably be lower than the system-wide peaking factor, which is based on the peak day.

Based on AWWA guidelines, the customer class peaking factors calculated in this study are for non-coincidental peaks. The peaking factors developed for this analysis are based on the annualized water consumption by customer class from August 2022 to July 2023. The calculations of the peaking factors by class are presented graphically in **Chart II-8**.

A general ratemaking rule is that **the higher the peak to average ratio, the higher the unit cost of service for a given customer class**. While this is **not an absolute rule**, it is a good general indicator as to which customer classes are incurring the greatest costs to provide service. This principle will be examined more thoroughly in Section III.

CHART II-8



*Section III*

## SECTION III

## Water and Wastewater Forecast Revenue Requirement



In this section of the water and wastewater rate study and long-term financial plan, HWWS's test year and forecast water and wastewater utility revenue requirements are developed. The test year consists of the Utility's fiscal year, October 1, 2023 through September 30, 2024. The estimates presented in this section are based on the Utility's proposed budget for FY2024.

The calculation of a revenue requirement differs from a utility's budget in that it represents only that amount that must be raised through the Utility's user rates. This means that non-rate revenue (such as reconnection fees, late payment charges and interest) must be subtracted from the budgeted

operating and capital expenditures to determine the net revenue requirement to be raised from rates.

According to the American Water Works Association ("AWWA") **Manual M-1**, there are two primary generally accepted approaches to determining revenue requirements with additional hybrid variations. Manual M-1 specifically pertains to water ratemaking, although these principles are equally applicable to wastewater ratemaking. The approaches are defined within the manual as follows:

**Cash Needs Approach** – this approach seeks to ensure that utility revenues are sufficient to recover total cash needs for a given period. The revenue requirement components of this approach include O&M expenses, debt-service principal and interest payments, and capital outlays that are not funded by long-term debt. Depreciation expense is not considered to be a cash expense and is therefore not included. The cash-needs approach is generally used by government-owned utilities for *customers who reside inside the city limits* and is generally preferred by most government utilities.

**Utility/Hybrid Basis Approach** – When a government-owned utility provides service to customers outside its geographical limits, the situation is similar to that of an investor-owned utility to its customers because the owner provides service to non-owner customers (customers outside the geographical limits of the city). In this situation, the government-owned utility is entitled to a reasonable return from non-owner customers based on the value of the plant it constructs to provide service to these customers. In these cases, some version of the Utility/Hybrid Approach may be used. The main differences between using the Cash Basis and the Utility/Hybrid Basis in the development of the cost of service is that the cost basis under the Utility/Hybrid Basis includes depreciation and a return on investment but does not include capital outlays or debt principal in the calculation of the revenue requirement.

There are additional burdens for a utility employing the Utility/Hybrid Basis methodology as well, such as a greater complexity of accounting and record keeping issues due to the application of a rate of return on

various components of the utility's rate base and a requirement for the utility to track grants, system development charges, and other contributions in aid of construction associated with specific assets because they reduce the total value of the rate base.

While the Utility basis is generally recommended when providing service outside the city or to wholesale customers, there are hybrid methodologies that can be more applicable to certain situations, including that of HWWS.

To maintain consistency with national ratemaking standards, and to achieve a just and reasonable rate structure for all customers of the HWWS system, the revenue requirement logic built into the rate model is based on the Cash Needs Approach for Retail inside City water customers, Utility/Hybrid Basis for outside City customers, and Cash Needs with Percentage of Used and Useful for Wholesale water customers.

All data used in the development of the revenue requirements was obtained from the financial statements, budgets and other information provided by the Utility. Calculation summaries are presented in the rate model provided in **Appendix A** in conjunction with this report. For rate design purposes, revenue requirements are developed separately for the water and wastewater systems.

Further, **for the purposes of this report, the cost of service will be presented under the Cash Basis.** This is because the predominant number of customers of the HWWS system are subject to the Cash Basis. The Utility/Hybrid basis will be summarized later in this section.

In this section, current and forecast Operating Costs, Capital Outlays, Transfers, and Debt Service will be examined first. Non-rate revenues will be subtracted from the total to yield the Net Revenue Requirement.

## Operating Expenses and Capital Outlays – Test Year

**Table III-1** presents a summary of the Utility's test year 2024 budget for the water and wastewater system. Operating expenditures capture the primary operating expenses associated with the day-to-day management of the water and wastewater utility. The table examines operating expenses and capital outlays only; allocations for debt service are presented in the next section.





TABLE III-1

HARLINGEN WATERWORKS SYSTEM						
WATER Operating Expenses, Transfers and Capital Outlays						
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base						
		Net Budget	Treatment	Distribution	Admin	Customer Billing
Department Code						
<b>Operating &amp; Maintenance</b>						
A	Administration (01)	\$ 3,417,781	\$ -	\$ -	\$ 3,417,781	\$ -
WT	Water Treatment (04)	5,484,144	5,484,144	-	-	-
CM	Construction Maintenance (08)	482,210	241,105	241,105	-	-
DS	Distribution Services & Maintenance (13) & (05)	2,136,519	-	2,136,519	-	-
WOM	Water Operations Mgmt. (38)	679,226	339,613	339,613	-	-
CS	Customer Service (32)	799,450	-	-	-	799,450
<b>Total Operating &amp; Maintenance</b>		<b>12,999,330</b>	<b>6,064,862</b>	<b>2,717,237</b>	<b>3,417,781</b>	<b>799,450</b>
<b>Transfers</b>		-	-	-	-	-
<b>Capital Outlays</b>		<b>896,802</b>	<b>149,500</b>	<b>360,500</b>	<b>386,802</b>	-
<b>Total WATER Operating Expenses, Transfers and Capital Outlays</b>		<b>\$ 13,896,132</b>	<b>\$ 6,214,362</b>	<b>\$ 3,077,737</b>	<b>\$ 3,804,583</b>	<b>\$ 799,450</b>
WASTEWATER Operating Expenses, Transfers and Capital Outlays						
		Net Budget	Treatment	Distribution	Admin	Customer Billing
Department Code						
<b>Operating &amp; Maintenance</b>						
A	Administration (01)	\$ 2,699,638	\$ -	\$ -	\$ 2,699,638	\$ -
CS	Customer Service (32)	631,470	-	-	-	631,470
WWC	Wastewater Collection (12)	1,963,880	-	1,963,880	-	-
PT	Pretreatment (15)	316,000	316,000	-	-	-
WWOM	Wastewater Operations Mgmt. (39)	331,417	165,709	165,709	-	-
WWT	Wastewater Treatment (18)	2,637,319	2,637,319	-	-	-
<b>Total Operating &amp; Maintenance</b>		<b>8,579,724</b>	<b>3,119,028</b>	<b>2,129,589</b>	<b>2,699,638</b>	<b>631,470</b>
<b>Transfers</b>		-	-	-	-	-
<b>Capital Outlays</b>		<b>1,873,602</b>	<b>42,500</b>	<b>1,444,300</b>	<b>386,802</b>	-
<b>Total WW Operating Expenses, Transfers and Capital Outlays</b>		<b>\$ 10,453,326</b>	<b>\$ 3,161,528</b>	<b>\$ 3,573,889</b>	<b>\$ 3,086,440</b>	<b>\$ 631,470</b>
HARLINGEN WATERWORKS SYSTEM						
TEST YEAR Operating Expenses, Transfers and Capital Outlays						
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base						
		Net Budget	Treatment	Distribution	Admin	Customer Billing
Department Code						
<b>Operating &amp; Maintenance</b>						
A	Administration (01)	\$ 6,117,419	\$ -	\$ -	\$ 6,117,419	\$ -
WT	Water Treatment (04)	5,484,144	5,484,144	-	-	-
CM	Construction Maintenance (08)	482,210	241,105	241,105	-	-
DS	Distribution Services & Maintenance (13) & (05)	2,136,519	-	2,136,519	-	-
WOM	Water Operations Mgmt. (38)	679,226	339,613	339,613	-	-
CS	Customer Service (32)	1,430,920	-	-	-	1,430,920
WWC	Wastewater Collection (12)	1,963,880	-	1,963,880	-	-
PT	Pretreatment (15)	316,000	316,000	-	-	-
WWOM	Wastewater Operations Mgmt. (39)	331,417	165,709	165,709	-	-
WWT	Wastewater Treatment (18)	2,637,319	2,637,319	-	-	-
<b>Total Operating &amp; Maintenance</b>		<b>21,579,054</b>	<b>9,183,890</b>	<b>4,846,826</b>	<b>6,117,419</b>	<b>1,430,920</b>
<b>Transfers</b>		-	-	-	-	-
<b>Capital Outlays</b>		<b>2,770,404</b>	<b>192,000</b>	<b>1,804,800</b>	<b>773,604</b>	-
<b>Total System Operating Expenses, Transfers and Capital Outlays</b>		<b>\$ 24,349,458</b>	<b>\$ 9,375,890</b>	<b>\$ 6,651,626</b>	<b>\$ 6,891,023</b>	<b>\$ 1,430,920</b>

As the table shows, the total operating expenses and capital outlays in the test year are **\$24,349,458** of which \$13,896,132 is for the Water Utility, and \$10,453,326 is for the Wastewater Utility. Debt service is examined separately and in detail later in this section.

### Operating Expenses and Capital Outlays – Ten Year Forecast

**Table III-2** presents the project team’s ten-year forecast of the Utility’s operating expenses and capital outlays. Table III-2 reveals that water-related operating expenses and capital outlays are forecast to increase from the test year total of \$13,896,132 to \$21,814,143 by FY 2033. Wastewater-related operating costs and capital outlays are forecast to increase from the test year total of \$10,453,326 to \$15,592,127 by FY 2033. This represents an average annual increase of 4.9% for the combined water and wastewater utility. This forecast is based on the following set of assumptions:

- Most operating costs are expected to increase at an annual rate of 3.0%, which is approximately equivalent to the rate of inflation.
- In addition to anticipated inflationary increases, there are other factors that are considered when forecasting various expense items. One such factor is that certain expense categories are expected to increase at rates greater than the average inflation rate. Account growth and volume growth will also affect certain expense categories, and some of the expense items are vulnerable to a combination of these greater than average increases. Items that are affected by general inflation, premium escalation, and account growth are primarily energy related items such as gas and electric expenses, fuels, and lubricants.
- Certain expenses will increase at above-inflation rates, to reflect the rapid rate of increase of these costs. These expenses include chemicals, workers’ compensation, Medicare and insurance.
- Certain water and wastewater expenses are forecast to increase at a rate which reflects both inflation and the growth of new accounts.

Details behind these calculations can be found in the rate model contained in **Appendix A**.

**TABLE III-2**

HARLINGEN WATERWORKS SYSTEM									
FORECAST OPERATING EXPENSES AND CAPITAL OUTLAYS									
SCENARIO: 2024 01 22 – Scen IA – Long Delay – Status Quo									
	Water			Wastewater			Total Water & Wastewater		
	Operating Expense	Capital Outlays	Total	Operating Expense	Capital Outlays	Total	Operating Expense	Capital Outlays	Total
TY 2024	\$ 12,999,330	\$ 896,802	\$ 13,896,132	\$ 8,579,724	\$ 1,873,602	\$ 10,453,326	\$ 21,579,054	\$ 2,770,404	\$ 24,349,458
FY 2025	13,660,847	1,287,500	14,948,347	9,047,552	1,287,500	10,335,052	22,708,399	2,575,000	25,283,399
FY 2026	14,361,642	1,326,125	15,687,767	9,543,257	1,326,125	10,869,382	23,904,899	2,652,250	26,557,149
FY 2027	15,104,065	1,365,909	16,469,974	10,068,635	1,365,909	11,434,544	25,172,700	2,731,818	27,904,517
FY 2028	15,890,813	1,406,886	17,297,699	10,625,602	1,406,886	12,032,488	26,516,415	2,813,772	29,330,187
FY 2029	16,597,830	1,449,093	18,046,923	11,216,208	1,449,093	12,665,300	27,814,038	2,898,185	30,712,223
FY 2030	17,194,562	1,492,565	18,687,128	11,842,642	1,492,565	13,335,207	29,037,204	2,985,131	32,022,335
FY 2031	18,132,394	1,537,342	19,669,736	12,507,247	1,537,342	14,044,589	30,639,641	3,074,685	33,714,326
FY 2032	19,127,340	1,583,463	20,710,803	13,212,527	1,583,463	14,795,989	32,339,867	3,166,925	35,506,792
FY 2033	20,183,176	1,630,966	21,814,143	13,961,161	1,630,966	15,592,127	34,144,337	3,261,933	37,406,270

## Capital Improvement Plan

The purpose of the Capital Improvement Plan is to rehabilitate and maintain the existing system, expand the system and to service new growth. The capital improvement plan is an integral part of any long-term rate and financing plan.

During the course of this engagement, the project team and HWWS staff evaluated several potential capital improvement plan funding options. The options differed in terms of timing and total magnitude of the expected expenditures. The three primary CIP options evaluated were as follows:

- 4) **Long Delay** – this encompassed a 5-year CIP that focused on eliminating all but the most immediate designated needs in order to overcome pre-existing commission issues.
- 5) **Moderate Delay** – this plan represented a 5-year CIP that overcome pre-existing system issues and designated immediate known system limitations
- 6) **On-Time** – this CIP plan is fully in accordance with master plans developed for the utility by outside engineers. The CIP plan and expenditures are intended to overcome pre-existing system issues and fund all identified short and long-term needs.

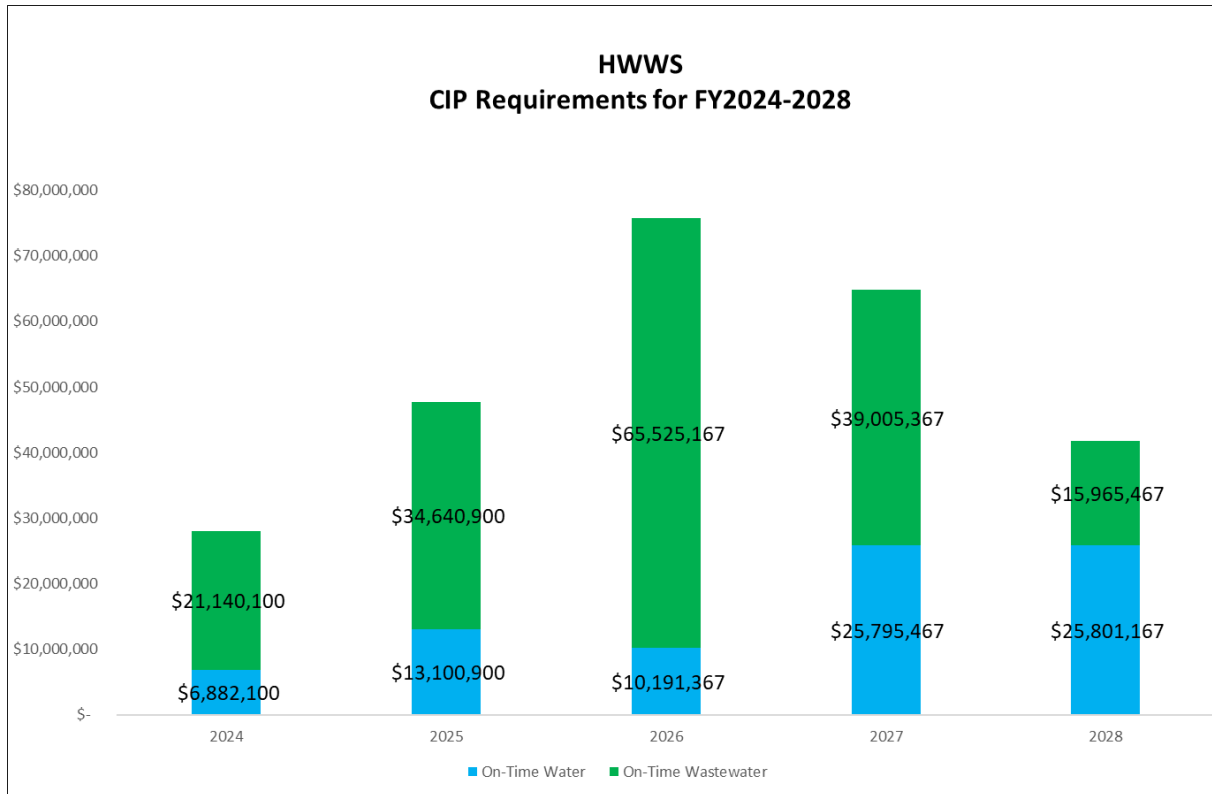
Each of the CIP plans had the following in common:

- All CIPs were for a designated 5-year period.
- The initial two years were consistent across all scenarios and allowed for \$18 million in EDAP funding (\$9 million grant and \$9 million loan).
- All assumptions related to working capital, debt service coverage, impact fees and other financial metrics were intended to be equivalent to current practice.

After review and analysis, HWWS staff determined that the **On-Time Scenario** was the most appropriate funding scenario to utilize in the cost-of-service calculations.

**Chart III-3** on the following page reveals that the Utility's current CIP requirements over the next five years are estimated to be \$81,771,000 million for the water system and \$176,277,000 for the wastewater system, for a combined total of **\$258,048,000**.

CHART III-3



### Existing and Forecast Debt Service

The Utility intends to finance its capital improvements through a combination of EDAP loans, grants, direct fund drawdown, impact fees, and new debt. At present, HWWS maintains debt service on three obligations. In addition, the forecast assumes that the Utility will issue **\$210,600,000** million in new debt over the next 5 years as a combination of bonds and EDAP loans. For the ten-year period the total new debt is forecast to be \$253,000,000. The new debt is forecast to have a 30-year term and 4.0% interest rate. New EDAP loans are expected to have a 20-year term and 4.0% interest rate.

Forecast new bond issues required to fund the On-Time scenario as well as additional assumed capital improvements over the next decade are presented in **Table III-4**.

TABLE III-4

<b>HARLINGEN WATERWORKS SYSTEM FORECAST BOND ISSUES</b>			
	<b>Water</b>	<b>Wastewater</b>	<b>Total</b>
2024	\$ 2,150,000	\$ 2,150,000	\$ 4,300,000
2025	9,150,000	27,150,000	36,300,000
2026	8,750,000	62,150,000	70,900,000
2027	23,400,000	36,700,000	60,100,000
2028	<u>24,450,000</u>	<u>14,550,000</u>	<u>39,000,000</u>
Sub-Total	67,900,000	142,700,000	<b>210,600,000</b>
2029	6,050,000	2,950,000	9,000,000
2030	6,050,000	2,950,000	9,000,000
2031	6,050,000	2,100,000	8,150,000
2032	6,050,000	2,100,000	8,150,000
2033	<u>6,050,000</u>	<u>2,050,000</u>	<u>8,100,000</u>
Sub-Total	<b>30,250,000</b>	<b>12,150,000</b>	<b>42,400,000</b>
<b>Total</b>	<b>\$ 98,150,000</b>	<b>\$ 154,850,000</b>	<b>\$ 253,000,000</b>

These assumptions are preliminary in nature and subject to change. Should the Utility Council choose to issue more or less debt than assumed in this study, or should different financing terms be available at the time the debt is issued, then the rate plans contained in this study may require revision.

Table III-4A presents current and forecast annual debt service to fund the CIP under current scenario.

TABLE III-4A

<b>HARLINGEN WATERWORKS SYSTEM</b>						
<b>CURRENT AND FORECAST DEBT SERVICE</b>						
<b>SCENARIO 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>						
<b>Year</b>	<b>Water</b>		<b>Wastewater</b>		<b>Total</b>	
	<b>Current</b>	<b>Forecast</b>	<b>Current</b>	<b>Forecast</b>		
2024	\$ 783,875	\$ -	\$ 783,875	\$ -	<b>\$ 1,567,750</b>	
2025	782,663	144,093	782,663	144,093	<b>1,853,511</b>	
2026	785,700	711,563	785,700	1,827,897	<b>4,110,860</b>	
2027	785,450	1,227,697	785,450	5,493,921	<b>8,292,517</b>	
2028	784,475	2,607,985	784,475	7,658,733	<b>11,835,668</b>	
2029	792,575	4,050,210	792,575	8,516,989	<b>14,152,349</b>	
2030	789,444	4,407,080	789,444	8,691,000	<b>14,676,968</b>	
2031	789,853	4,763,949	789,853	8,865,011	<b>15,208,666</b>	
2032	616,275	5,120,819	616,275	8,988,883	<b>15,342,252</b>	
2033	614,238	5,477,688	614,238	9,112,755	<b>15,818,918</b>	

### Non-Rate Revenues

Although sales revenues constitute the majority of the revenue received by HWWS for water and wastewater service, certain amount of revenue is accrued from non-rate sources. These revenues include other general revenues, miscellaneous charges and contractual receipts. These non-rate revenues are subtracted from the overall budget to determine the revenue requirement to be raised from rates. Annual non-rate revenue totals are presented in **Table III-5**.

TABLE III-5

HARLINGEN WATERWORKS SYSTEM				
FORECAST NON-RATE REVENUES				
SCENARIO:				
2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base				
		Water	Wastewater	Total Water & WW
2024	\$	1,363,673	\$ 1,199,051	\$ 2,562,724
2025		1,363,673	1,199,051	2,562,724
2026		1,363,673	1,199,051	2,562,724
2027		1,363,673	1,199,051	2,562,724
2028		1,363,673	1,199,051	2,562,724
2029		1,363,673	1,199,051	2,562,724
2030		1,363,673	1,199,051	2,562,724
2031		1,363,673	1,199,051	2,562,724
2032		1,363,673	1,199,051	2,562,724
2033		1,363,673	1,199,051	2,562,724

### Net Revenue Requirement – Cash Basis

The net revenue requirement differs from the Utility’s budget in that it represents only that amount that must be raised through the Utility’s water and wastewater rates. **Table III-6** presents HWWS net revenue requirements for the water and wastewater utility for the test year 2024 and forecast period. Under the current scenario, water net revenue requirement is expected to increase from \$13,316,334 in TY 2024 to \$26,542,395 in FY 2033. The wastewater net revenue requirement is expected to increase from \$10,038,150 in TY 2024 to \$24,120,069 in FY 2033. The combined water and wastewater net revenue requirement is expected to increase from **\$23,254,484** in TY 2024 to **\$50,662,464** in FY 2033. This represents an average annual increase of **9.0%**. Detailed calculations are presented in the rate model contained in **Appendix A** of this report.

TABLE III-6

HARLINGEN WATERWORKS SYSTEM						
CURRENT AND FORECAST NET REVENUE REQUIREMENT						
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base						
	Operating Expenses	Capital Outlays	Debt Service	Total Cost of Service	Less Non-Rate Revenues	Net Revenue Requirement
<b>WATER Revenue Requirement</b>						
2024	\$ 12,999,330	\$ 896,802	\$ 783,875	\$ 14,680,007	\$ 1,363,673	\$ 13,316,334
2025	13,660,847	1,287,500	926,756	15,875,103	1,363,673	14,511,430
2026	14,361,642	1,326,125	1,497,263	17,185,030	1,363,673	15,821,357
2027	15,104,065	1,365,909	2,013,147	18,483,120	1,363,673	17,119,447
2028	15,890,813	1,406,886	3,392,460	20,690,159	1,363,673	19,326,486
2029	16,597,830	1,449,093	4,842,785	22,889,708	1,363,673	21,526,035
2030	17,194,562	1,492,565	5,196,524	23,883,652	1,363,673	22,519,979
2031	18,132,394	1,537,342	5,553,802	25,223,539	1,363,673	23,859,866
2032	19,127,340	1,583,463	5,737,094	26,447,897	1,363,673	25,084,224
2033	20,183,176	1,630,966	6,091,926	27,906,068	1,363,673	26,542,395
<b>WASTEWATER Revenue Requirement</b>						
2024	\$ 8,579,724	\$ 1,873,602	\$ 783,875	\$ 11,237,201	\$ 1,199,051	\$ 10,038,150
2025	9,047,552	1,287,500	926,756	11,261,807	1,199,051	10,062,756
2026	9,543,257	1,326,125	2,613,597	13,482,979	1,199,051	12,283,928
2027	10,068,635	1,365,909	6,279,371	17,713,914	1,199,051	16,514,863
2028	10,625,602	1,406,886	8,443,208	20,475,696	1,199,051	19,276,645
2029	11,216,208	1,449,093	9,309,564	21,974,864	1,199,051	20,775,813
2030	11,842,642	1,492,565	9,480,444	22,815,651	1,199,051	21,616,600
2031	12,507,247	1,537,342	9,654,864	23,699,453	1,199,051	22,500,402
2032	13,212,527	1,583,463	9,605,158	24,401,147	1,199,051	23,202,096
2033	13,961,161	1,630,966	9,726,992	25,319,120	1,199,051	24,120,069
<b>TOTAL Revenue Requirement</b>						
2024	\$ 21,579,054	\$ 2,770,404	\$ 1,567,750	\$ 25,917,208	\$ 2,562,724	\$ 23,354,484
2025	22,708,399	2,575,000	1,853,511	27,136,910	2,562,724	24,574,186
2026	23,904,899	2,652,250	4,110,860	30,668,009	2,562,724	28,105,285
2027	25,172,700	2,731,818	8,292,517	36,197,035	2,562,724	33,634,311
2028	26,516,415	2,813,772	11,835,668	41,165,855	2,562,724	38,603,131
2029	27,814,038	2,898,185	14,152,349	44,864,572	2,562,724	42,301,848
2030	29,037,204	2,985,131	14,676,968	46,699,303	2,562,724	44,136,579
2031	30,639,641	3,074,685	15,208,666	48,922,992	2,562,724	46,360,268
2032	32,339,867	3,166,925	15,342,252	50,849,044	2,562,724	48,286,320
2033	34,144,337	3,261,933	15,818,918	53,225,188	2,562,724	50,662,464

### Water Utility Cost Functionalization

Once the total water and wastewater system costs have been identified, the next step in the rate development process is to isolate the costs associated with each system function. Some of these expenditures are a function of base water demand; others are based on the peak demands placed on the system. Certain costs

are associated with serving customers regardless of the volume of water use or wastewater discharge. The basic steps used to allocate the Utility’s water revenue requirements include the following:

1. Each system’s costs (revenue requirements) are categorized by utility function (i.e. treatment, distribution, administrative, customer). This process is known as *functionalization*.
2. Functionalized costs are classified based on the service characteristics or the types of demand served by the utility (base and maximum day). This process is known as *classification*.
3. Costs by service characteristic are allocated to customer classes in proportion to the service demands demonstrated by each class.

This three-step process allows for the allocation of system costs in the same terms as customer classes. The approaches described in this section follow standard industry practices. Water system costs are allocated to the following functions:

*Treatment* – the process by which raw water is converted to potable water

*Distribution* – the lines that carry water to individual customers’ properties

*Administration* – miscellaneous overhead and other non-operating costs

*Customer Billing* – the processes involved in billing and providing other services to customers

The project team allocated operating budget line-item expenses individually to system functions based on general guidelines, specific research and input from the HWWS staff. The results of the allocation process for the test year are summarized in **Table III-7**.

**TABLE III-7**

HARLINGEN WATERWORKS SYSTEM			
TEST YEAR WATER COST FUNCTIONALIZATION			
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base			
2024			
		Revenue	
Function		Requirement	Percent
Treatment	\$	5,712,932	42.9%
Distribution		3,427,052	25.7%
Administration		3,451,163	25.9%
Customer		<u>725,187</u>	<u>5.4%</u>
<b>Total</b>		<b>13,316,334</b>	<b>100.0%</b>



## Water Utility Cost Classification

The allocation of functionalized water system costs to service characteristics follows the base-extra capacity cost allocation method recommended by AWWA. Using this method, costs are segregated into the following categories:

*Base costs* – capital costs and O&M expenses associated with service to customers under average demand conditions. This category does not include any costs attributable to variations in water use resulting from peaks in demand. Base costs tend to vary directly with the total quantity of water used.

*Maximum Day/Extra Capacity costs* – costs attributable to facilities that are designed to meet peaking requirements. These costs include capital and operating charges for additional plant and system capacity beyond that required for average usage.

*Customer Billing costs* – costs associated with any aspect of customer service, including billing, accounting, and meter services. These costs are independent of the amount of water used and the size of the customer’s meter, and are not subject to peaking factors.

According to AWWA Manual M-1, in the base-extra capacity method, care must be taken in separating costs between those devoted to base capacity and those devoted to extra capacity. The peak to average factor is calculated by dividing the volume on the peak day of the year by the average daily volume. Facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 50% (1/2.0) to base, and 50% to extra capacity (Max Day). This means that facilities designed to meet maximum-day requirements, such as the treatment and distribution functions, are allocated 50% to base, and 50% to extra capacity.

All customer service-related costs are allocated 100% to customer billing. Administration costs are generally not directly assignable to individual classifications. Therefore, it is standard rate-making practice to allocate these costs on an indirect basis to service characteristics.

The system-wide costs by service characteristic are shown in **Table III-8**. As with cost functionalization, these percentages are not expected to change significantly in the forecast period.

TABLE III-8

HARLINGEN WATERWORKS SYSTEM			
TEST YEAR WATER COST CLASSIFICATION			
SCENARIO:			
2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base			
2024			
Revenue			
Function	Requirement	Percent	
Base	\$ 8,211,831	61.67%	
Maximum Day	4,105,916	30.83%	
Customer	<u>998,587</u>	<u>7.50%</u>	
<b>Total</b>	<b>13,316,334</b>	<b>100.0%</b>	

### Water Utility Cost Allocation

Allocation of costs by service characteristic to customer classes is based on the proportionate use levels of each characteristic by each class. The total water utility costs by customer class for the test year are summarized in **Table III-9** and for the ten-year forecast period in **Table III-10**.

TABLE III-9

HARLINGEN WATERWORKS SYSTEM		
TEST YEAR WATER COST ALLOCATION		
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base		
2024		
Function	Revenue Requirement	Percent
Residential Inside	\$ 5,715,344	42.9%
Residential Outside	1,377,928	10.3%
Commercial & Industrial Inside	1,795,752	13.5%
Commercial & Industrial Outside	157,759	1.2%
Multi Housing Apts/Condos Inside	937,239	7.0%
Multi Housing Apts/Condos Outside	44,422	0.3%
Public Services/Institutional Inside	1,579,996	11.9%
Public Services/Institutional Outside	4,623	0.0%
Town of Combes	368,303	2.8%
City of Primera	523,859	3.9%
City of Palm Valley	574,628	4.3%
East Rio Hondo	105,451	0.8%
Military Hwy WSC	131,028	1.0%
<b>Total</b>	<b>13,316,334</b>	<b>100.0%</b>

TABLE III-10

HARLINGEN WATERWORKS SYSTEM														
FORECAST WATER COST ALLOCATION														
SCENARIO 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base														
Year	Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condos Inside	Multi Housing Apts/Condos Outside	Public Services/Institutional Inside	Public Services/Institutional Outside	Town of Combes	City of Primera	City of Palm Valley	East Rio Hondo	Military Hwy WSC	Total
2024	\$ 5,715,344	\$ 1,377,928	\$ 1,795,752	\$ 157,759	\$ 937,239	\$ 44,422	\$ 1,579,996	\$ 4,623	\$ 368,303	\$ 523,859	\$ 574,628	\$ 105,451	\$ 131,028	\$ 13,316,334
2025	6,202,233	1,576,139	1,952,525	180,083	1,021,237	50,076	1,695,688	5,208	393,747	564,096	618,765	112,208	139,425	14,511,430
2026	6,790,562	1,706,135	2,136,519	195,142	1,117,234	54,222	1,841,625	5,595	424,424	608,046	666,974	122,573	152,305	15,821,357
2027	7,288,823	1,971,448	2,291,555	226,358	1,198,579	62,750	1,956,796	6,423	454,360	650,934	714,019	132,617	164,785	17,119,447
2028	8,229,339	2,261,706	2,584,469	260,495	1,351,595	72,077	2,188,413	7,319	507,273	726,740	797,172	151,562	188,326	19,326,486
2029	9,288,902	2,368,424	2,915,260	272,760	1,523,691	75,459	2,453,195	7,603	559,297	801,272	878,927	170,003	211,241	21,526,035
2030	9,756,361	2,465,211	3,061,518	283,910	1,599,922	78,528	2,557,648	7,851	579,925	830,824	911,344	172,541	214,395	22,519,979
2031	10,381,141	2,590,201	3,257,442	298,200	1,702,094	82,480	2,701,973	8,183	608,964	872,427	956,978	178,270	221,513	23,859,866
2032	10,957,224	2,701,798	3,438,596	310,815	1,796,591	85,988	2,832,113	8,466	634,643	909,217	997,334	183,469	227,973	25,084,224
2033	11,645,435	2,828,723	3,654,623	325,234	1,909,223	89,987	2,988,815	8,791	665,757	953,791	1,046,227	189,866	235,922	26,542,395

## Wastewater Utility Cost Functionalization and Classification

Wastewater system costs are allocated to the following functions:

*Treatment -- Volume* – the costs associated with treating wastewater volume discharges

*Collection* – the lines that transport wastewater from customers’ properties to the wastewater treatment plant

*Administration* – miscellaneous overhead and other non-operating costs

*Customer Billing* – the processes involved in billing and other services to customers

As was the case for the water system, wastewater utility operating budget line-item expenses are allocated individually to functions. The results of the allocation process are presented on **Table III-11**. As with the water utility, these percentages are not forecast to change significantly during the next five years.

TABLE III-11

HARLINGEN WATERWORKS SYSTEM			
TEST YEAR WASTEWATER COST FUNCTIONALIZATION			
SCENARIO:			
2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base			
2024			
Revenue			
Function	Requirement	Percent	
Treatment	\$ 3,248,985	32.4%	
Collection	3,467,970	34.5%	
Administration	2,757,106	27.5%	
Customer	<u>564,090</u>	<u>5.6%</u>	
<b>Total</b>	<b>10,038,150</b>	<b>100.0%</b>	

## Wastewater Utility Cost Allocation

Allocation of wastewater utility costs by service characteristic to customer classes is performed in the same manner as described for the water utility. The total wastewater utility costs by customer class for the test year are summarized in **Table III-12** and for the ten-year forecast period in **Table III-13**.

TABLE III-12

HARLINGEN WATERWORKS SYSTEM		
TEST YEAR WASTEWATER COST ALLOCATION		
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base		
2024		
Revenue		
Function	Requirement	Percent
Residential Inside	\$ 4,425,132	44.1%
Residential Outside	386,187	3.8%
Commercial & Industrial Inside	2,103,710	21.0%
Commercial & Industrial Outside	56,981	0.6%
Multi Housing Apts/Condos Inside	1,462,740	14.6%
Multi Housing Apts/Condos Outside	43,298	0.4%
Public Services/Institutional Inside	1,122,126	11.2%
Public Services/Institutional Outside	5,156	0.1%
Town of Combes	226,160	2.3%
City of Primera	<u>206,659</u>	<u>2.1%</u>
<b>Total</b>	<b>10,038,150</b>	<b>100.0%</b>

TABLE III-13

HARLINGEN WATERWORKS SYSTEM											
FORECAST WASTEWATER COST ALLOCATION											
SCENARIO: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base											
Year	Residential Inside	Residential Outside	Commercial & Industrial Inside	Commercial & Industrial Outside	Multi Housing Apts/Condos Inside	Multi Housing Apts/Condos Outside	Public Services/Institutional Inside	Public Services/Institutional Outside	Town of Combes	City of Primera	Total
2024	\$ 4,425,132	\$ 386,187	\$ 2,103,710	\$ 56,981	\$ 1,462,740	\$ 43,298	\$ 1,122,126	\$ 5,156	\$ 226,160	\$ 206,659	\$ 10,038,150
2025	4,424,462	427,099	2,098,335	63,115	1,458,515	47,936	1,102,260	5,624	220,247	215,166	\$ 10,062,756
2026	5,375,306	483,746	2,600,032	71,729	1,812,132	54,420	1,350,161	6,289	264,925	265,189	\$ 12,283,928
2027	7,259,929	563,861	3,606,030	83,993	2,522,208	63,633	1,853,051	7,244	280,025	274,890	\$ 16,514,863
2028	8,454,286	630,137	4,234,242	94,091	2,964,827	71,229	2,146,619	7,988	335,709	337,516	\$ 19,276,645
2029	9,148,496	655,704	4,589,026	97,842	3,213,896	74,085	2,292,675	8,185	347,505	348,398	\$ 20,775,813
2030	9,545,846	681,508	4,782,130	101,601	3,348,568	76,952	2,353,347	8,377	358,617	359,655	\$ 21,616,600
2031	9,965,755	706,019	4,985,891	105,152	3,490,644	79,667	2,416,841	8,545	370,329	371,560	\$ 22,500,402
2032	10,308,307	730,333	5,146,241	108,628	3,601,897	82,335	2,456,847	8,701	378,896	379,913	\$ 23,202,096
2033	10,747,391	756,314	5,357,183	112,348	3,748,780	85,188	2,519,123	8,870	391,746	393,127	\$ 24,120,069

### Net Revenue Requirement – Utility/Hybrid Basis

Calculating the cost of service for outside city customers under the Utility basis is a common and accepted practice in the Utility industry. The AWWA Manual M-1, generally considered to be the definitive source of ratemaking policy in the United States, recommends use of the Utility Basis to calculate the cost of service for outside customers. The Utility Basis differs from the Cash Basis in that it charges depreciation expense and a return on investment, to compensate cities for the risk and investment made in the provision of service to outside city customers. **Table III-14** outlines the difference between the Cash Basis and the Utility Basis.

The City’s comprehensive rate model includes a calculation of the cost of service, both in total and for the outside city customer classes. However, **this report has only outlined the cost of service via the cash basis**. The project team concluded that including the numerous detailed utility basis charts in this summary report would result in a document that was excessively lengthy.

**Table III-14**

HARLINGEN WATERWORKS SYSTEM			
Comparison of Revenue Requirements			
Revenue Requirement Component	Cash Basis		Utility Basis
O & M Expenses	X		X
Depreciation			X
Capital Outlays	X		
Debt Principal	X		
Debt Interest	X		
Return on Investment			X

However, a summary of the Utility Basis cost of service is included as **Table III-15**. This chart reveals that over the five-year rate plan forecast period, a utility basis calculation, which would be used for outside city customers, would result in a cost of service that is approximately 44.4% greater for water and 32.0% greater for wastewater than the cash basis cost of service calculations.

The comprehensive utility basis calculation contained in the rate model and summarized in this section clearly justifies the use of a 50.0% premium for water and 0% premium for most wastewater outside city customers, based on the higher cost of service that would be incurred to serve these customers.

It should be noted that for the purposes of this study, the Utility/Hybrid Basis calculation is based on a series of broad assumptions about the timing of debt funding, asset values, and rates of return. The assumptions in this study should not be considered to be definitive, and the project team reserves the right to revisit and adjust these assumptions should circumstances so warrant.

TABLE III-15

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>					
	2024	2025	2026	2027	2028
<b>TOTAL COST OF SERVICE</b>					
<b>CASH Basis</b>					
Operating Expenses	\$ 12,999,330	\$ 13,660,847	\$ 14,361,642	\$ 15,104,065	\$ 15,890,813
Capital Outlays	896,802	1,287,500	1,326,125	1,365,909	1,406,886
Transfers	-	-	-	-	-
Current Debt Service	783,875	782,663	785,700	785,450	784,475
Future Debt Service	-	144,093	711,563	1,227,697	2,607,985
Depreciation	-	-	-	-	-
Return	-	-	-	-	-
<b>Total Cost of Service</b>	<b>14,680,007</b>	<b>15,875,103</b>	<b>17,185,030</b>	<b>18,483,120</b>	<b>20,690,159</b>
Less Non-Rate Revenues	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673
<b>Net Revenue Requirement</b>	<b>13,316,334</b>	<b>14,511,430</b>	<b>15,821,357</b>	<b>17,119,447</b>	<b>19,326,486</b>
<b>UTILITY Basis</b>					
Operating Expenses	\$ 12,999,330	\$ 13,660,847	\$ 14,361,642	\$ 15,104,065	\$ 15,890,813
Capital Outlays	-	-	-	-	-
Transfers	-	-	-	-	-
Current Debt Service	-	-	-	-	-
Future Debt Service	-	-	-	-	-
Depreciation	1,977,100	2,659,331	3,293,197	4,348,957	5,404,998
Return	3,997,701	5,067,691	5,749,553	7,843,523	10,142,789
<b>Total Cost of Service</b>	<b>18,974,130</b>	<b>21,387,868</b>	<b>23,404,392</b>	<b>27,296,546</b>	<b>31,438,600</b>
Less Non-Rate Revenues	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673
<b>Net Revenue Requirement</b>	<b>17,610,457</b>	<b>20,024,195</b>	<b>22,040,719</b>	<b>25,932,873</b>	<b>30,074,927</b>
<b>Percent Greater than Cash Basis</b>	<b>32.2%</b>	<b>38.0%</b>	<b>39.3%</b>	<b>51.5%</b>	<b>55.6%</b>
<b>5 Year Average</b>	<b>44.4%</b>				
<b>TOTAL COST OF SERVICE</b>					
<b>CASH Basis</b>					
Operating Expenses	\$ 8,579,724	\$ 9,047,552	\$ 9,543,257	\$ 10,068,635	\$ 10,625,602
Capital Outlays	1,873,602	1,287,500	1,326,125	1,365,909	1,406,886
Transfers	-	-	-	-	-
Current Debt Service	783,875	782,663	785,700	785,450	784,475
Future Debt Service	-	144,093	1,827,897	5,493,921	7,658,733
Depreciation	-	-	-	-	-
Return	-	-	-	-	-
<b>Total Cost of Service</b>	<b>11,237,201</b>	<b>11,261,807</b>	<b>13,482,979</b>	<b>17,713,914</b>	<b>20,475,696</b>
Less Non-Rate Revenues	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051
<b>Net Revenue Requirement</b>	<b>10,038,150</b>	<b>10,062,756</b>	<b>12,283,928</b>	<b>16,514,863</b>	<b>19,276,645</b>
<b>UTILITY Basis</b>					
Operating Expenses	\$ 8,579,724	\$ 9,047,552	\$ 9,543,257	\$ 10,068,635	\$ 10,625,602
Capital Outlays	-	-	-	-	-
Transfers	-	-	-	-	-
Current Debt Service	-	-	-	-	-
Future Debt Service	-	-	-	-	-
Depreciation	1,801,569	1,931,695	2,236,727	2,706,905	3,068,791
Return	4,600,392	5,529,004	6,865,529	8,932,006	10,484,393
<b>Total Cost of Service</b>	<b>14,981,684</b>	<b>16,508,250</b>	<b>18,645,514</b>	<b>21,707,546</b>	<b>24,178,786</b>
Less Non-Rate Revenues	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051
<b>Net Revenue Requirement</b>	<b>13,782,633</b>	<b>15,309,199</b>	<b>17,446,463</b>	<b>20,508,495</b>	<b>22,979,735</b>
<b>Percent Greater than Cash Basis</b>	<b>37.3%</b>	<b>52.1%</b>	<b>42.0%</b>	<b>24.2%</b>	<b>19.2%</b>
<b>5 Year Average</b>	<b>32.0%</b>				

*Section IV*

## SECTION IV

# Water and Wastewater Rate Design



Rate design involves determining charges for each class of customers that will generate a desired level of revenue in accordance with AWWA and other industry cost of service rate-making principles. The water and wastewater rates developed in this section are designed to recover the test year and forecast revenue requirements while providing funding for the identified capital improvements and existing debt service.

In this section the project team presents the final recommended rate plan for the Utility.

During the course of this rate study, HWWS staff, the project team, the HWWS Board of Directors and the City Commission evaluated numerous alternative rate and cost of service scenarios. The scenarios evaluated included but are not limited to the following:

## Types of Rate Plans

- Status Quo
- Conservation-Based
- Higher Monthly Charges
- Lifeline
- Senior Citizen
- Elimination of Wastewater Winter Average

## Rate Plan Scenarios

- “Long-Delay” CIP Financing – Status Quo Rate Plan
- “Long-Delay” CIP Financing – Conservation Rate Plan
- “Long-Delay” CIP Financing – Conservation Rate Plan with Higher Monthly Charges
- “Moderate-Delay” CIP Financing – Status Quo Rate Plan
- “Moderate-Delay” CIP Financing – Conservation Rate Plan
- “Moderate-Delay” CIP Financing – Conservation Rate Plan with Higher Monthly Charges
- “On-Time” CIP Financing – Status Quo Rate Plan
- “On-Time” CIP Financing – Conservation Rate Plan
- “On-Time” CIP Financing – Conservation Rate Plan with Higher Monthly Charges
- Wholesale Rates – Higher Charges
- Lifeline/Senior Citizen Rate and Impact on Existing Rates



After significant analysis, review and deliberation, the Board and City Commission chose the following rate plan:

### **“On-Time” CIP Financing – Conservation Rate Plan with Higher Monthly Charges**

There are three key aspects of this proposed rate plan that will impact monthly ratepayer charges. The first is that the plan is intended to fund all CIP projects identified by the City’s engineers. As shown in Section III, this represents a total of **\$258,048,000** over the next five years. The more CIP that is funded through the rate plan, the higher the rate adjustments that will be required.

The second key aspect involves the development of an inverted block conservation-based volume rate. The purpose of this rate is to charge greater amounts per 1,000 gallons at greater usage levels as a means to provide a financial disincentive for greater levels of water usage. This rate block is intended to apply only to residential customers. The four identified rate blocks are as follows:

0 – 3,000 gallons

3,001 –10,000 gallons

10,001 – 20,000 gallons

20,001 – Above gallons

The project team has found that inverted block rates are generally successful at reducing per meter residential usage, as higher prices do indeed lead to more discretion in usage. At the same time, the lowest volume users, who typically (though not always) are low- and fixed-income residents, are charged the lowest per unit rate for services. However, higher volume users are subject to significant rate adjustments under this rate design format.

The third aspect involves increasing monthly base charges at a higher rate than volume rates. HWWS monthly charges are among the lowest in the region. **Table IV-1** compares the percentage of monthly charges recovered through a monthly charge on 5,000 gallons for cities in the Rio Grande Valle. The table reveals that HWWS is the lowest identified city.

The proposed rate plan is intended to increase HWWS’ monthly charges for 5,000 gallons to 50% of monthly bills within five years. The advantage of this is that this represents guaranteed revenue to the Utility, which lessens financial risk of shortfalls due to lower usage and/or weather conditions. However, this plan can be perceived as assessing a disproportionate increase on lower volume users.

Table IV-1

Entity	Fixed Fee Fraction of 5,000-gallon bill
McAllen	60%
BPUB	44% (lowest other than HWWS)
North Alamo WSC	67%
Weslaco	52%
East Rio Hondo WSC	75%
Mercedes	77%
San Benito	87%
Mission	56%
Pharr	71%
San Juan	59%
Military Highway WSC	82%
Edinburg	67%
La Feria	74%
Raymondville	67%
Olmito WSC	78%
Other Entity Average	67%
HWWS	34% (not considering winter avg. cap)

The following is also notable about this proposed rate plan:

- The plan is a **five-year plan** with rate adjustments applied for each rate class starting in March 2024 and continuing in January of each year afterwards. The planning horizon for this rate plan is 5 years.
- The fuel charge for water and wastewater is eliminated.
- Outside city water customers continue the City's long-standing policy of paying 50.0% more for water service than inside city customers.
- The wastewater monthly charge for outside city customers remains the same as the inside city rate, with the exception of the monthly charge for residential customers. This monthly charge remains unchanged until it reaches a level of 50.0% greater than inside city customers.
- The most significant impact on rates is the amount of new debt required to fund CIP projects. Should the Utility choose to issue more or less debt than assumed in this study, or should different financing terms be available at the time the debt is issued, then the rate plans contained in this study may require revision.
- The adopted rate plan will ensure that all operating expenses and capital outlays are fully funded.
- The rate plan will allow the Utility to maintain an "AA" credit rating and sound financial standing so capital requirements can be funded with favorable terms when issuing new water and wastewater debt in the next decade.

**Table IV-2** on the next page presents a summary of this proposed water and wastewater rate plan.

TABLE IV-2

HARLINGEN WATERWORKS SYSTEM WATER RATE PLAN							
Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base							
Current			Proposed Rate Plan				
			Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Forecast Jan-28
<b>Water Rates -- Residential &amp; Commercial Inside</b>							
Monthly Minimum Charge							
	5/8"	\$ 7.93	\$ 9.91	\$ 12.39	\$ 15.49	\$ 19.36	\$ 23.23
	1"	10.07	13.16	17.16	22.34	29.04	34.85
	1 1/2"	14.56	19.85	26.86	36.15	48.40	58.08
	2"	33.02	43.35	56.77	74.20	96.80	116.16
	3"	49.17	65.92	87.98	116.94	154.88	185.86
	4"	112.87	192.55	305.02	461.68	677.61	813.13
	6"	231.80	378.39	583.79	868.24	1,258.42	1,510.11
	8"	426.15	746.45	1,200.27	1,834.35	2,710.45	3,252.54
Residential Volume Rate Per 1,000 Gal							
	-	3,000	1.65	1.25	1.25	1.25	1.25
	3,001	10,000	0.06	1.75	1.93	2.12	2.33
	10,001	20,000	-	2.50	2.75	3.03	3.33
	20,001	Above	-	3.00	3.30	3.63	3.99
Commercial Volume Rate Per 1,000 Gal							
	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66
	Fuel Cost Adjustment	0.06	-	-	-	-	-
<b>Water Rates -- Residential &amp; Commercial Outside</b>							
Monthly Minimum Charge							
	5/8"	\$ 12.49	\$ 14.87	\$ 18.59	\$ 23.23	\$ 29.04	\$ 34.85
	1"	15.09	19.74	25.74	33.51	43.56	52.27
	1 1/2"	21.86	29.77	40.29	54.22	72.60	87.12
	2"	49.55	65.02	85.16	111.31	145.20	174.24
	3"	73.77	98.88	131.96	175.41	232.32	278.79
	4"	169.32	288.83	457.52	692.52	1,016.42	1,219.70
	6"	346.97	567.59	875.68	1,302.36	1,887.63	2,265.16
	8"	639.24	1,119.68	1,800.41	2,751.53	4,065.67	4,878.81
Residential Volume Rate Per 1,000 Gal							
	-	3,000	2.48	1.88	1.88	1.88	1.88
	3,001	10,000	0.06	2.63	2.89	3.18	3.49
	10,001	20,000	-	3.75	4.13	4.54	4.99
	20,001	Above	-	4.50	4.95	5.45	5.99
Commercial Volume Rate Per 1,000 Gal							
	Volume Charge	2.48	2.75	3.02	3.32	3.66	3.99
	Fuel Cost Adjustment	0.06	-	-	-	-	-
<b>Wastewater Rates - Residential &amp; Comm Inside</b>							
Monthly Minimum Charge							
	5/8"	\$ 6.18	\$ 7.73	\$ 9.66	\$ 12.07	\$ 15.09	\$ 18.86
	1"	9.44	11.80	14.75	18.44	23.05	28.81
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34
	2"	25.77	32.21	40.27	50.33	62.92	78.64
	3"	52.97	66.21	82.77	103.46	129.32	161.65
	4"	134.60	168.25	210.31	262.89	328.61	410.77
	6"	276.08	345.10	431.38	539.22	674.02	842.53
	8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73
Volume Rate Per 1,000 Gal							
	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89
	Fuel Cost Adjustment	0.11	-	-	-	-	-
<b>Wastewater Rates - Residential &amp; Comm Outside</b>							
Monthly Minimum Charge							
	5/8"	\$ 20.50	\$ 20.50	\$ 20.50	\$ 20.50	\$ 22.63	\$ 28.29
	1"	20.50	20.50	20.50	20.50	22.63	28.29
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34
	2"	25.77	32.21	40.27	50.33	62.92	78.64
	3"	52.97	66.21	82.77	103.46	129.32	161.65
	4"	134.60	168.25	210.31	262.89	328.61	410.77
	6"	276.08	345.10	431.38	539.22	674.02	842.53
	8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73
Volume Rate Per 1,000 Gal							
	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89
	Fuel Cost Adjustment	0.11	-	-	-	-	-

Table IV-3 presents the impact the proposed rate plan will have on ratepayers at various levels of consumption. The table presents the total monthly charge for water and wastewater at levels of 3,000, 10,000, 20,000 and 40,000 gallons.

Table IV-4 shows that debt coverage and fund balance totals are forecast to be sufficient under this proposed rate plan.

TABLE IV-3

HARLINGEN WATERWORKS SYSTEM IMPACT ON MONTHLY CUSTOMER CHARGES							
Scenario:		2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base					
		Proposed Rate Plan					
		Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Forecast Jan-28
<b>Residential Monthly Charge</b>							
3,000 Gal W	Total	\$ 30.55	\$ 33.58	\$ 39.20	\$ 46.06	\$ 54.42	\$ 63.52
3,000 Gal WW	Increase -- \$		3.03	5.63	6.85	8.36	9.10
	Increase -- %		9.9%	16.8%	17.5%	18.2%	16.7%
10,000 Gal W	Total	50.06	53.95	61.62	70.71	81.54	93.08
5,000 Gal WW	Increase -- \$		3.89	7.67	9.09	10.83	11.54
	Increase -- %		7.8%	14.2%	14.8%	15.3%	14.2%
20,000 Gal W	Total	67.16	78.95	89.12	100.96	114.81	129.35
5,000 Gal WW	Increase -- \$		11.79	10.17	11.84	13.85	14.54
	Increase -- %		17.6%	12.9%	13.3%	13.7%	12.7%
<b>Commercial Monthly Charge</b>							
20,000 Gal W	Total	\$ 168.39	\$ 193.44	\$ 226.71	\$ 267.17	\$ 316.62	\$ 365.83
20,000 Gal WW	Increase -- \$		25.05	33.27	40.46	49.44	49.21
	Increase -- %		14.9%	17.2%	17.8%	18.5%	15.5%
40,000 Gal W	Total	277.99	311.32	356.38	409.81	473.52	536.85
40,000 Gal WW	Increase -- \$		33.33	45.06	53.43	63.71	63.33

TABLE IV-4

	2024	2025	2026	2027	2028
<b>Water &amp; Sewer Fund Balance Drawdown</b>	(3,102,923)	(3,005,800)	(2,016,533)	(1,900,833)	33,367
<b>Water &amp; Sewer Ending Fund Balance</b>	18,872,178	17,182,086	16,946,895	16,109,757	17,543,373
<b>Debt Coverage Ratio</b>	1.43	3.10	2.08	1.46	1.36
<b>Days of Fund Balance</b>	266	231	202	162	156
<b>Use of Impact Fees to Fund CIP</b>	1,100,000	2,800,000	2,800,000	2,800,000	2,800,000

The projected rate revenues developed in this section are forecast to be sufficient to fund all operating and current scheduled capital obligations over the forecast period. Rate revenues will be sufficient to fund the water and wastewater existing debt service and future debt service over the forecast period. However, it should be noted that if there are any significant changes in the financial or growth assumptions in this study, the rate plan will need to be re-evaluated.

Table IV-5 presents forecast revenues for the five-year rate planning period.

Table IV-5

HARLINGEN WATERWORKS SYSTEM FORECAST REVENUES UNDER PROPOSED RATE PLAN						
		2024	2025	2026	2027	2028
<b>2</b>	<b>WATER Revenues</b>					
	<b>Water Revenues</b>					
	<u>Water Rate Revenue</u>					
W1	Residential Inside	\$ 4,252,568	\$ 5,969,645	\$ 7,025,393	\$ 8,329,569	\$ 9,737,085
W2	Residential Outside	1,015,830	1,450,834	1,703,709	2,014,919	2,350,352
W3	Commercial & Industrial Inside	1,599,214	1,892,040	2,222,003	2,626,707	3,039,509
W4	Commercial & Industrial Outside	127,995	149,036	172,158	199,891	228,570
W5	Multi Housing Apts/Condos Inside	830,616	960,704	1,105,675	1,279,138	1,456,681
W6	Multi Housing Apts/Condos Outside	51,491	61,516	72,776	86,632	100,999
W7	Public Services/Institutional Inside	1,052,790	1,220,115	1,405,884	1,629,616	1,849,769
W8	Public Services/Institutional Outside	6,178	7,644	9,282	11,338	13,373
W9	Town of Combes Inside	180,003	200,647	223,216	248,667	274,985
W10	Town of Combes Outside	2,048	2,273	2,500	2,750	3,006
W 11	City of Primera	271,823	299,891	329,880	362,868	396,661
W12	City of Palm Valley	298,167	328,957	361,852	398,037	435,105
W13	East Rio Hondo	74,437	82,123	90,336	99,369	108,623
W14	Military Hwy WSC	93,847	103,798	114,441	126,213	138,298
		9,857,006	12,729,223	14,839,104	17,415,714	20,133,015
	Water Reserve Fees	-	-	-	-	-
	Non-Rate Revenues	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673
	<b>Total Revenues</b>	<b>11,220,679</b>	<b>14,092,896</b>	<b>16,202,777</b>	<b>18,779,387</b>	<b>21,496,688</b>
<b>3</b>	<b>WASTEWATER Revenues</b>					
	<b>Wastewater Revenues</b>					
	<u>Wastewater Rate Revenue</u>					
WW1	Residential Inside	\$ 5,338,054	\$ 6,293,045	\$ 7,335,893	\$ 8,583,467	\$ 10,044,940
WW2	Residential Outside	550,775	587,174	625,670	689,475	802,366
WW5	Commercial & Industrial Inside	2,295,034	2,661,138	3,028,950	3,455,143	3,930,845
WW6	Commercial & Industrial Outside	52,494	56,809	64,702	73,858	84,094
WW5	Multi Housing Apts/Condos Inside	1,537,913	1,747,163	1,971,417	2,227,364	2,506,175
WW6	Multi Housing Apts/Condos Outside	46,988	55,752	65,346	76,891	90,528
WW7	Public Services/Institutional Inside	1,205,308	1,352,796	1,507,650	1,682,884	1,871,590
WW8	Public Services/Institutional Outside	5,897	6,935	8,049	9,380	10,941
WW9	Town of Combes	232,643	256,317	281,948	310,143	339,025
WW10	City of Primera	132,770	143,543	157,897	173,687	189,861
		11,397,876	13,160,672	15,047,524	17,282,291	19,870,366
	Non-Rate Revenues	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051
	<b>Total Revenues</b>	<b>12,596,927</b>	<b>14,359,723</b>	<b>16,246,575</b>	<b>18,481,342</b>	<b>21,069,417</b>

### Wholesale Rates

HWWS has maintained long-standing relationships with five wholesale water customers: Town of Combes, City of Primera, City of Palm Valley, East Rio Hondo WSC, and Military Highway WSC, and two wholesale wastewater customers: Town of Combs and City of Primera. These enduring partnerships have contributed to the utility’s operations and reflect HWWS’s commitment to providing essential services to the neighboring communities.

**Chart IV-6** and **Chart IV-7** demonstrate that in the test year wholesale customers were responsible for **12.9%** of overall water consumption and **6.9%** of wastewater flows. At the same time, wholesale revenue constituted only **8.5%** for water and **3.2%** for wastewater services.

CHART IV-6

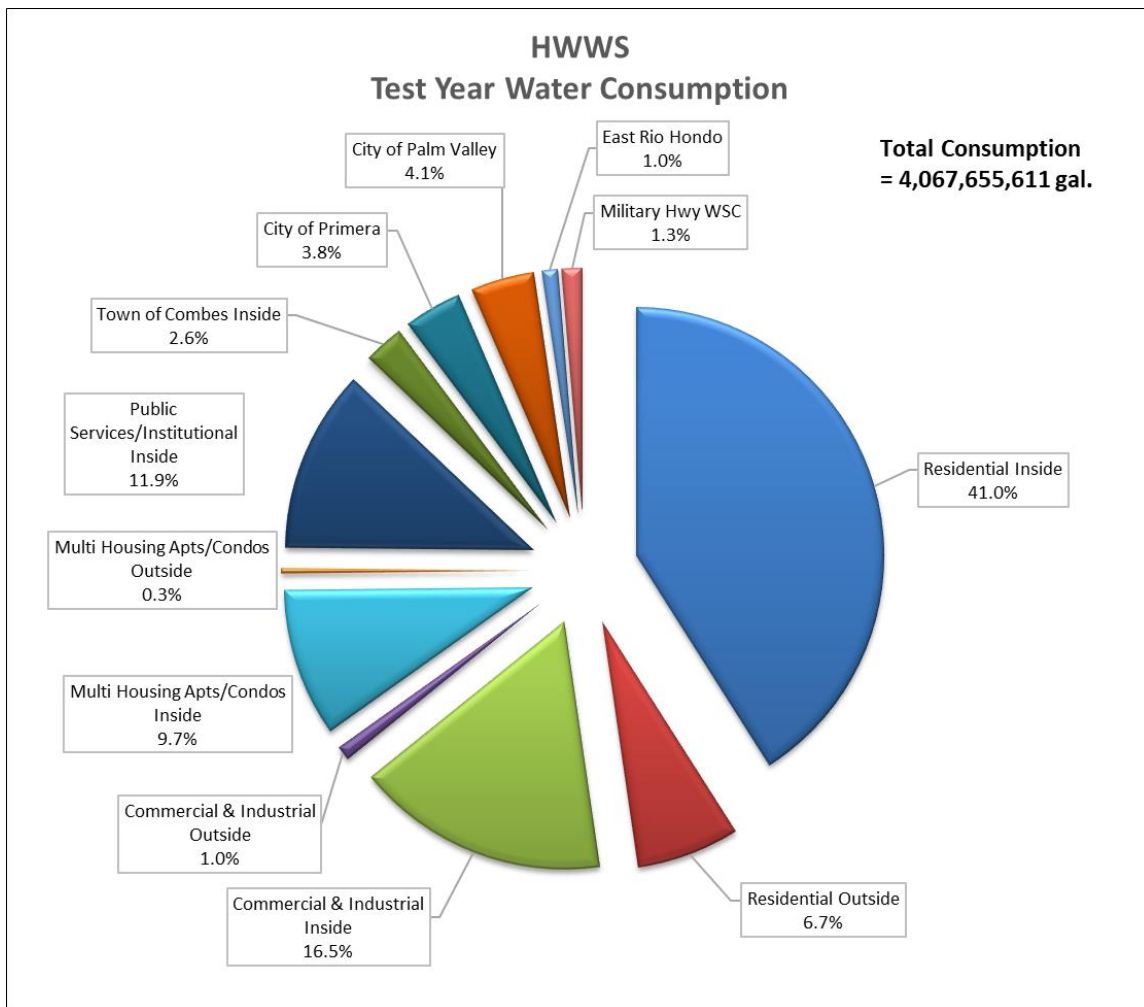
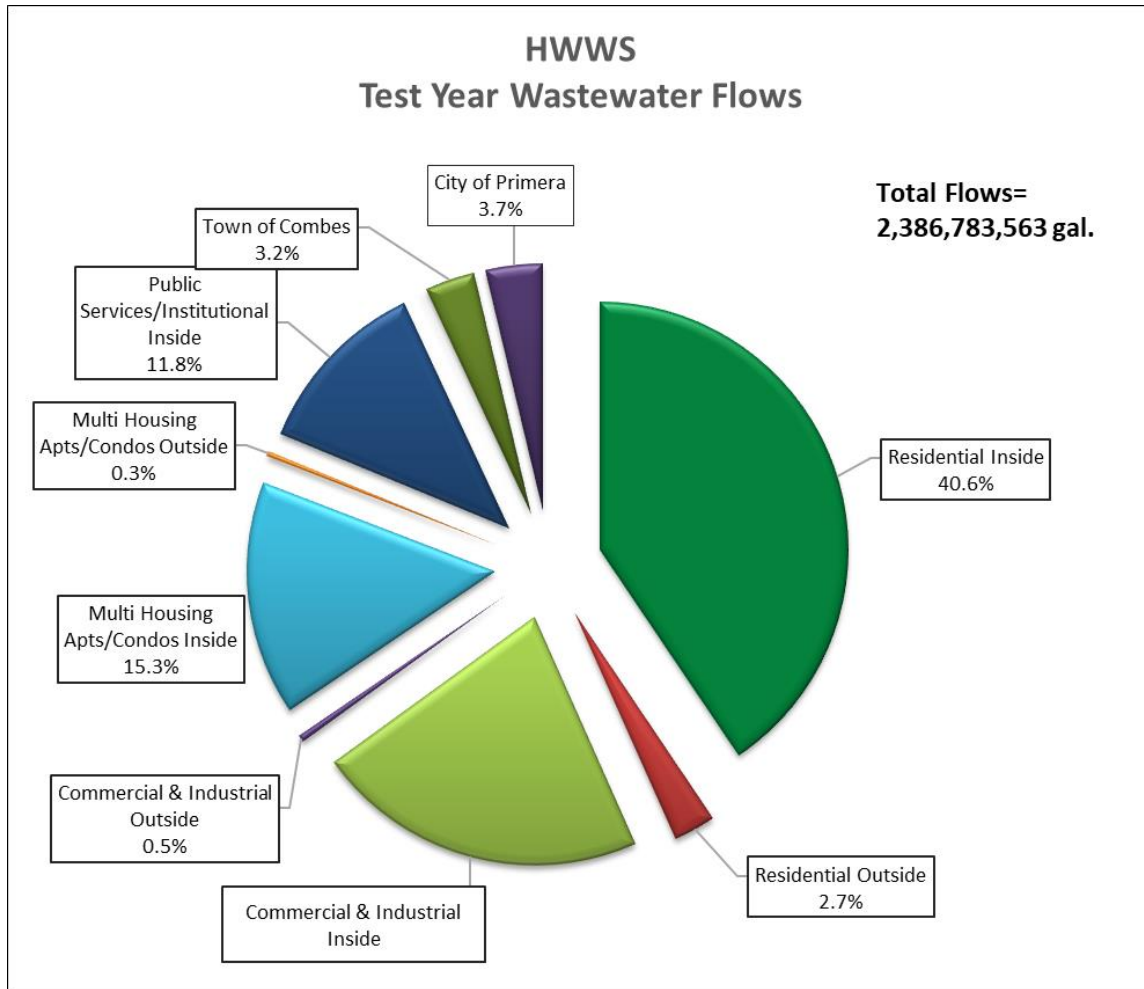


CHART IV-7



The project team has identified that wholesale rates are not recovering enough revenues to cover the cost of service for these customers. Considering that most wholesale contracts will expire in the near future, HWWS must use this opportunity to renegotiate better terms with its customers.

**Table IV-8** on the next page presents the proposed rate plan and the cost-of-service rate for each of the Utility's water and wastewater wholesale customers.

Table IV-8

HARLINGEN WATERWORKS SYSTEM WHOLESALE RATE PLAN						
	Current	Proposed Rate Plan				
		Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Forecast Jan-28
<b>WATER Rates</b>						
<b>Town of Combes Inside</b>						
Monthly Minimum Charge	\$ 954.03	\$ 1,192.54	\$ 1,490.67	\$ 1,863.34	\$ 2,329.17	\$ 2,795.01
Volume Rate/1,00 Gallons	1.45	1.61	1.77	1.95	2.14	2.34
Cost of Service Rate/1,000 gallons		3.41	3.67	3.96	4.24	4.73
<b>City of Primera</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		3.41	3.67	3.96	4.24	4.73
<b>City of Palm Valley</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		3.41	3.67	3.96	4.24	4.73
<b>East Rio Hondo</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		2.51	2.67	2.92	3.15	3.61
<b>Military Hwy WSC</b>						
Monthly Minimum Charge	\$ 100.00	\$ 125.00	\$ 156.25	\$ 195.31	\$ 244.14	\$ 292.97
Volume Rate/1,00 Gallons	1.65	1.83	2.01	2.22	2.44	2.66
Cost of Service Rate/1,000 gallons		2.51	2.67	2.92	3.15	3.61
<b>WASTEWATER Rates</b>						
<b>Town of Combes</b>						
Monthly Minimum Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Volume Rate/1,00 Gallons						
-	2.80	3.11	3.42	3.76	4.14	4.51
6,500,001 Above	3.26	3.62	3.98	4.38	4.82	5.25
Cost of Service Rate/1,000 gallons		2.93	2.85	3.43	3.62	4.34
<b>City of Primera</b>						
Monthly Minimum Charge	\$ 861.00	\$ 1,076.25	\$ 1,345.31	\$ 1,681.64	\$ 2,102.05	\$ 2,627.56
Volume Rate/1,00 Gallons	1.37	1.52	1.67	1.84	2.02	2.21
Cost of Service Rate/1,000 gallons		2.34	2.43	3.00	3.11	3.81
Residential Volume Rate Per 1,000 Gal						



## Notes on Rate Recommendations


The forecast and recommendations presented in this study represent a combination of the best information available from HWWS and the project team's expertise. However, this forecast relies in part on assumptions about future events and events beyond the control of the project team (such as account growth rates within the Utility). The forecast and recommendations contained in this study may be subject to revision if any of the following events occurs:

- Actual growth in accounts and consumed volumes is less than (or significantly greater than) forecast.
- Capital improvement plan funding costs increase significantly due to the rising cost of materials or other factors.
- An unforeseen event impacts the Utility, such as an extended recession, natural catastrophe or terrorist attack.
- Significant and long-lasting changes in weather patterns.
- Increases or decreases in interest rates, coverage requirements, or reserve requirements for long-term debt.
- The HWWS's budget levels or priorities change significantly from those forecast in this study.

It should be noted that none of these events are foreseen by the project team or HWWS at this time.

**If any of these events occur, the Utility may be compelled to consider further adjustments to its water and wastewater rates.**






# Harlingen Waterworks System

## Ten Year Rate Analysis and Pro Forma

### Fiscal Years 2024 - 2033



**Utility System**

Water  
Sewer  
Combined

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**Dashboard**

Projections  
Bill Comparison  
Comparable Utilities

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**Customer Class**

All Classes

---

**Years**

10  
5

**Total Net Revenues Available for Contingency**

**Debt Service**

**Total Revenues**

**Debt Coverage**

■ Water    ■ Sewer    **Combined Projections**

Future Debt Term: 30

Water Future Bond Issues		
	Alternative	Proposed
2024		\$ 2,150,000
2025		\$ 9,150,000
2026		\$ 8,750,000
2027		\$ 23,400,000
2028		\$ 24,450,000
2029		\$ 6,050,000
2030		\$ 6,050,000
2031		\$ 6,050,000
2032		\$ 6,050,000
2033		\$ 6,050,000
		\$ 98,150,000

Sewer Future Bond Issues		
	Alternative	Proposed
2024		\$ 2,150,000
2025		\$ 27,150,000
2026		\$ 62,150,000
2027		\$ 36,700,000
2028		\$ 14,550,000
2029		\$ 2,950,000
2030		\$ 2,950,000
2031		\$ 2,100,000
2032		\$ 2,100,000
2033		\$ 2,050,000
		154,850,000

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Water Rate Adjustments</b>										
Meter Charge	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Volume Charge	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
<b>Sewer Rate Adjustments</b>										
Base Charge	25.00%	25.00%	25.00%	25.00%	25.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Volume Charge - Residential	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Volume Charge - Non-Residential	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

	Effective Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33
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**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**1 Water Monthly Rates and Charges**

**CITY Water Rate and Charges**

**W1 Residential Inside**

**Monthly Minimum Charge**

Contract Base Charge (not based on meter size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
5/8"	-	7.93	9.91	12.39	15.49	19.36	23.23	24.63	26.10	27.67	29.33	31.09
1"	-	10.07	13.16	17.16	22.34	29.04	34.85	36.94	39.16	41.51	44.00	46.64
1 1/2"	-	14.56	19.85	26.86	36.15	48.40	58.08	61.57	65.26	69.18	73.33	77.73
2"	-	33.02	43.35	56.77	74.20	96.80	116.16	123.13	130.52	138.35	146.65	155.45
3"	-	49.17	65.92	87.98	116.94	154.88	185.86	197.01	208.83	221.36	234.64	248.72
4"	-	112.87	192.55	305.02	461.68	677.61	813.13	861.92	913.64	968.46	1,026.56	1,088.16
6"	-	231.80	378.39	583.79	868.24	1,258.42	1,510.11	1,600.71	1,696.76	1,798.56	1,906.48	2,020.86
8"	-	426.15	746.45	1,200.27	1,834.35	2,710.45	3,252.54	3,447.69	3,654.55	3,873.83	4,106.26	4,352.63

**Volume Rate/1,000 Gal**

-	3,000	1.65	1.25	1.25	1.25	1.25	1.25	1.33	1.40	1.49	1.58	1.67
3,001	10,000	0.06	1.75	1.93	2.12	2.33	2.54	2.69	2.85	3.02	3.21	3.40
10,001	20,000	-	2.50	2.75	3.03	3.33	3.63	3.84	4.08	4.32	4.58	4.85
20,001	Above	-	3.00	3.30	3.63	3.99	4.35	4.61	4.89	5.18	5.49	5.82
-	-	-	-	-	-	-	-	-	-	-	-	-

**W2 Residential Outside**

**Monthly Minimum Charge**

Contract Base Charge (not based on meter size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
5/8"	-	12.49	14.87	18.59	23.23	29.04	34.85	36.94	39.16	41.51	44.00	46.64
1"	-	15.09	19.74	25.74	33.51	43.56	52.27	55.41	58.73	62.26	65.99	69.95
1 1/2"	-	21.86	29.77	40.29	54.22	72.60	87.12	92.35	97.89	103.76	109.99	116.59
2"	-	49.55	65.02	85.16	111.31	145.20	174.24	184.70	195.78	207.53	219.98	233.18
3"	-	73.77	98.88	131.96	175.41	232.32	278.79	295.52	313.25	332.04	351.96	373.08
4"	-	169.32	288.83	457.52	692.52	1,016.42	1,219.70	1,292.88	1,370.46	1,452.68	1,539.85	1,632.24
6"	-	346.97	567.59	875.68	1,302.36	1,887.63	2,265.16	2,401.07	2,545.14	2,697.84	2,859.71	3,031.30

**Volume Rate/1,000 Gal**

-	3,000	2.48	1.88	1.88	1.88	1.88	1.88	1.99	2.11	2.23	2.37	2.51
3,001	10,000	0.06	2.63	2.89	3.18	3.49	3.81	4.04	4.28	4.54	4.81	5.10
10,001	20,000	-	3.75	4.13	4.54	4.99	5.44	5.77	6.11	6.48	6.87	7.28
20,001	Above	-	4.50	4.95	5.45	5.99	6.53	6.92	7.34	7.78	8.24	8.74
-	-	-	-	-	-	-	-	-	-	-	-	-

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

	Effective Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33
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**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**W3 Commercial & Industrial Inside**

<b>Monthly Minimum Charge</b>												
Contract Base Charge (not based on meter size)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5/8"		7.93		9.91		12.39		15.49		19.36		23.23
1"		10.07		13.16		17.16		22.34		29.04		34.85
1 1/2"		14.56		19.85		26.86		36.15		48.40		58.08
2"		33.02		43.35		56.77		74.20		96.80		116.16
3"		49.17		65.92		87.98		116.94		154.88		185.86
4"		112.87		192.55		305.02		461.68		677.61		813.13
6"		231.80		378.39		583.79		868.24		1,258.42		1,510.11
8"		426.15		746.45		1,200.27		1,834.35		2,710.45		3,252.54
10"		426.15		746.45		1,200.27		1,834.35		2,710.45		3,252.54
<b>Volume Rate/1,000 Gal</b>												
- Volume Charge		1.65		1.83		2.01		2.22		2.44		2.66
- Fuel Cost Adjustment		0.06		-		-		-		-		-
-		-		-		-		-		-		-
-		-		-		-		-		-		-
-		-		-		-		-		-		-

**W4 Commercial & Industrial Outside**

<b>Monthly Minimum Charge</b>												
Contract Base Charge (not based on meter size)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5/8"		12.49		14.87		18.59		23.23		29.04		34.85
1"		15.09		19.74		25.74		33.51		43.56		52.27
1 1/2"		21.86		29.77		40.29		54.22		72.60		87.12
2"		49.55		65.02		85.16		111.31		145.20		174.24
3"		73.77		98.88		131.96		175.41		232.32		278.79
4"		169.32		288.83		457.52		692.52		1,016.42		1,219.70
6"		346.97		567.59		875.68		1,302.36		1,887.63		2,265.16
8"		639.24		1,119.68		1,800.41		2,751.53		4,065.67		4,878.81
-		-		1,119.68		1,800.41		2,751.53		4,065.67		4,878.81
<b>Volume Rate/1,000 Gal</b>												
- Volume Charge		2.48		2.75		3.02		3.32		3.66		3.99
- Fuel Cost Adjustment		0.06		-		-		-		-		-
-		-		-		-		-		-		-
-		-		-		-		-		-		-
-		-		-		-		-		-		-

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33
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**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**W5 Multi Housing Apts/Condos Inside**

<b>Monthly Minimum Charge</b>															
Contract Base Charge (not based on meter size)		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5/8"			7.93		9.91		12.39		15.49		19.36		23.23		24.63
1"			10.07		13.16		17.16		22.34		29.04		34.85		36.94
1 1/2"			14.56		19.85		26.86		36.15		48.40		58.08		61.57
2"			33.02		43.35		56.77		74.20		96.80		116.16		123.13
3"			49.17		65.92		87.98		116.94		154.88		185.86		197.01
4"			112.87		192.55		305.02		461.68		677.61		813.13		861.92
6"			231.80		378.39		583.79		868.24		1,258.42		1,510.11		1,600.71
8"			426.15		746.45		1,200.27		1,834.35		2,710.45		3,252.54		3,447.69
10"			426.15		746.45		1,200.27		1,834.35		2,710.45		3,252.54		3,447.69
<b>Volume Rate/1,000 Gal</b>															
-	Volume Charge		1.65		1.83		2.01		2.22		2.44		2.66		2.82
-	Fuel Cost Adjustment		0.06		-		-		-		-		-		-
-			-		-		-		-		-		-		-
-			-		-		-		-		-		-		-

**W6 Multi Housing Apts/Condos Outside**

<b>Monthly Minimum Charge</b>															
Contract Base Charge (not based on meter size)		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5/8"			12.49		14.87		18.59		23.23		29.04		34.85		36.94
1"			15.09		19.74		25.74		33.51		43.56		52.27		55.41
1 1/2"			21.86		29.77		40.29		54.22		72.60		87.12		92.35
2"			49.55		65.02		85.16		111.31		145.20		174.24		184.70
3"			73.77		98.88		131.96		175.41		232.32		278.79		295.52
4"			169.32		288.83		457.52		692.52		1,016.42		1,219.70		1,292.88
6"			346.97		567.59		875.68		1,302.36		1,887.63		2,265.16		2,401.07
8"			639.24		1,119.68		1,800.41		2,751.53		4,065.67		4,878.81		5,171.54
10"			639.24		1,119.68		1,800.41		2,751.53		4,065.67		4,878.81		5,171.54
<b>Volume Rate/1,000 Gal</b>															
-	Volume Charge		2.48		2.75		3.02		3.32		3.66		3.99		4.22
-	Fuel Cost Adjustment		0.06		-		-		-		-		-		-
-			-		-		-		-		-		-		-
-			-		-		-		-		-		-		-



**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

	Effective Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33
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**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**W7 Public Services/Institutional Inside**

<u>Monthly Minimum Charge</u>													
Contract Base Charge (not based on meter size)		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5/8"			7.93		9.91		12.39		15.49		19.36		23.23
1"			10.07		13.16		17.16		22.34		29.04		34.85
1 1/2"			14.56		19.85		26.86		36.15		48.40		58.08
2"			33.02		43.35		56.77		74.20		96.80		116.16
3"			49.17		65.92		87.98		116.94		154.88		185.86
4"			112.87		192.55		305.02		461.68		677.61		813.13
6"			231.80		378.39		583.79		868.24		1,258.42		1,510.11
8"			426.15		746.45		1,200.27		1,834.35		2,710.45		3,252.54
10"			426.15		746.45		1,200.27		1,834.35		2,710.45		3,252.54
<u>Volume Rate/1,000 Gal</u>													
-	Volume Charge		1.65		1.83		2.01		2.22		2.44		2.66
-	Fuel Cost Adjustment		0.06		-		-		-		-		-
-			-		-		-		-		-		-

**W8 Public Services/Institutional Outside**

<u>Monthly Minimum Charge</u>													
Contract Base Charge (not based on meter size)		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5/8"			12.49		14.87		18.59		23.23		29.04		34.85
1"			15.09		19.74		25.74		33.51		43.56		52.27
1 1/2"			21.86		29.77		40.29		54.22		72.60		87.12
2"			49.55		65.02		85.16		111.31		145.20		174.24
3"			73.77		98.88		131.96		175.41		232.32		278.79
4"			169.32		288.83		457.52		692.52		1,016.42		1,219.70
6"			346.97		567.59		875.68		1,302.36		1,887.63		2,265.16
<u>Volume Rate/1,000 Gal</u>													
-	Volume Charge		2.48		2.75		3.02		3.32		3.66		3.99
-	Fuel Cost Adjustment		0.06		-		-		-		-		-
-			-		-		-		-		-		-

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33
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**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**W9 Town of Combes Inside**

<u>Monthly Minimum Charge</u>																							
Contract Base Charge (not based on meter size)	\$	954.03	\$	1,192.54	\$	1,490.67	\$	1,863.34	\$	2,329.17	\$	2,795.01	\$	2,962.71	\$	3,140.47	\$	3,328.90	\$	3,528.64	\$	3,740.35	
5/8"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
1"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
1 1/2"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
2"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
3"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
4"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
6"		954.03		1,192.54		1,490.67		1,863.34		2,329.17		2,795.01		2,962.71		3,140.47		3,328.90		3,528.64		3,740.35	
<u>Volume Rate/1,000 Gal</u>																							
-	Volume Charge	1.45		1.61		1.77		1.95		2.14		2.34		2.48		2.62		2.78		2.95		3.12	
-	Fuel Cost Adjustment	0.06		-		-		-		-		-		-		-		-		-		-	
-	-	-		-		-		-		-		-		-		-		-		-		-	

**W10 Town of Combes Outside**

<u>Monthly Minimum Charge</u>																							
Contract Base Charge (not based on meter size)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
5/8"		-		-		-		-		-		-		-		-		-		-		-	
1"		-		-		-		-		-		-		-		-		-		-		-	
1 1/2"		-		-		-		-		-		-		-		-		-		-		-	
2"		-		-		-		-		-		-		-		-		-		-		-	
3"		-		-		-		-		-		-		-		-		-		-		-	
4"		-		-		-		-		-		-		-		-		-		-		-	
6"		-		-		-		-		-		-		-		-		-		-		-	
8"		-		-		-		-		-		-		-		-		-		-		-	
10"		-		-		-		-		-		-		-		-		-		-		-	
<u>Volume Rate/1,000 Gal</u>																							
-	Volume Charge	2.48		2.75		3.03		3.33		3.66		3.99		4.23		4.49		4.76		5.04		5.34	
-	Fuel Cost Adjustment	0.06		-		-		-		-		-		-		-		-		-		-	
-	-	-		-		-		-		-		-		-		-		-		-		-	



HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**W 11 City of Primera**

**Monthly Minimum Charge**

5/8"	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
3/4"		-		-		-		-		-		-		-		-
1"		-		-		-		-		-		-		-		-
1 1/2"		-		-		-		-		-		-		-		-
2"		-		-		-		-		-		-		-		-
3"		-		-		-		-		-		-		-		-
4"		-		-		-		-		-		-		-		-
6"		-		-		-		-		-		-		-		-
8"		-		-		-		-		-		-		-		-
10"		-		-		-		-		-		-		-		-

**Volume Rate/1,000 Gal**

-	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	3.56
-	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-	-	-	-	-

**W12 City of Palm Valley**

**Monthly Minimum Charge**

5/8"	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
3/4"		-		-		-		-		-		-		-		-
1"		-		-		-		-		-		-		-		-
1 1/2"		-		-		-		-		-		-		-		-
2"		-		-		-		-		-		-		-		-
3"		-		-		-		-		-		-		-		-
4"		-		-		-		-		-		-		-		-
6"		-		-		-		-		-		-		-		-
8"		-		-		-		-		-		-		-		-
10"		-		-		-		-		-		-		-		-

**Volume Rate/1,000 Gal**

-	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	3.56
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<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**W13 East Rio Hondo**

**Monthly Minimum Charge**

5/8"	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
3/4"	-	-	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-	-	-

**Volume Rate/1,000 Gal**

-	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	3.56
-	Rel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-

**W14 Military Hwy WSC**

**Monthly Minimum Charge**

5/8"	\$	100.00	\$	125.00	\$	156.25	\$	195.31	\$	244.14	\$	292.97	\$	310.55	\$	329.18	\$	348.93	\$	369.87	\$	392.06
3/4"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
1"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
1 1/2"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
2"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
3"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
4"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
6"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
8"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											
10"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06											

**Volume Rate/1,000 Gal**

-	-	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	3.56
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<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>	
	<b>Current</b>	<b>Mar-24</b>	<b>Jan-25</b>	<b>Jan-26</b>	<b>Jan-27</b>	<b>Jan-28</b>	<b>Jan-29</b>	<b>Jan-30</b>	<b>Jan-31</b>	<b>Jan-32</b>	<b>Jan-33</b>

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**2 Wastewater Monthly Rates and Charges**

**Residential Inside**

**Monthly Minimum Charge**

5/8"	6.18	7.73	9.66	12.07	15.09	18.86	19.99	21.19	22.46	23.81	25.24
1"	9.44	11.80	14.75	18.44	23.05	28.81	30.54	32.37	34.31	36.37	38.55
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20

**Volume Rate/1,000 Gal**

- Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
- Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**Residential Outside**

**Monthly Minimum Charge**

5/8"	20.50	20.50	20.50	20.50	22.63	28.29	29.99	31.79	33.69	35.72	37.86
1"	20.50	20.50	20.50	20.50	22.63	28.29	29.99	31.79	33.69	35.72	37.86
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20

**Volume Rate/1,000 Gal**

- Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
- Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**Commercial & Industrial Inside**

**Monthly Minimum Charge**

5/8"	6.18	7.73	9.66	12.07	15.09	18.86	19.99	21.19	22.46	23.81	25.24
1"	9.44	11.80	14.75	18.44	23.05	28.81	30.54	32.37	34.31	36.37	38.55
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
10"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20

**Volume Rate/1,000 Gal**

- Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
- Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

	Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33
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**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**Commercial & Industrial Outside**

Monthly Minimum Charge

5/8"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
1"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
10"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20

Volume Rate/1,000 Gal

-	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
-	Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**Multi Housing Apts/Condos Inside**

Monthly Minimum Charge

5/8"	6.18	7.73	9.66	12.07	15.09	18.86	19.99	21.19	22.46	23.81	25.24
1"	9.44	11.80	14.75	18.44	23.05	28.81	30.54	32.37	34.31	36.37	38.55
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
10"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20

Volume Rate/1,000 Gal

-	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
-	Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**Multi Housing Apts/Condos Outside**

Monthly Minimum Charge

5/8"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
1"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
10"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20

Volume Rate/1,000 Gal

-	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
-	Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Current</b>	<b>Effective Mar-24</b>	<b>Effective Jan-25</b>	<b>Effective Jan-26</b>	<b>Effective Jan-27</b>	<b>Effective Jan-28</b>	<b>Effective Jan-29</b>	<b>Effective Jan-30</b>	<b>Effective Jan-31</b>	<b>Effective Jan-32</b>	<b>Effective Jan-33</b>

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

Public Services/Institutional Inside												
<b>Monthly Minimum Charge</b>												
	5/8"	6.18	7.73	9.66	12.07	15.09	18.86	19.99	21.19	22.46	23.81	25.24
	1"	9.44	11.80	14.75	18.44	23.05	28.81	30.54	32.37	34.31	36.37	38.55
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
	2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
	3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
	4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
	6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
	8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
	10"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
<b>Volume Rate/1,000 Gal</b>												
	- Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
	- Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

Public Services/Institutional Outside												
<b>Monthly Minimum Charge</b>												
	5/8"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
	1"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
	2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
	3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
	4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
	6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
<b>Volume Rate/1,000 Gal</b>												
	- Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
	- Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

Town of Combes												
<b>Monthly Minimum Charge</b>												
	5/8"	-	-	-	-	-	-	-	-	-	-	-
	1"	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	-	-	-	-	-	-	-	-	-
	2"	-	-	-	-	-	-	-	-	-	-	-
	3"	-	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-	-
<b>Volume Rate/1,000 Gal</b>												
	- 6,500,000	2.80	3.11	3.42	3.76	4.14	4.51	4.78	5.07	5.37	5.69	6.03
	- Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Current</b>	<b>Effective Mar-24</b>	<b>Effective Jan-25</b>	<b>Effective Jan-26</b>	<b>Effective Jan-27</b>	<b>Effective Jan-28</b>	<b>Effective Jan-29</b>	<b>Effective Jan-30</b>	<b>Effective Jan-31</b>	<b>Effective Jan-32</b>	<b>Effective Jan-33</b>

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**City of Primera**

**Monthly Minimum Charge**

5/8"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27
1"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27
1 1/2"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27
2"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27
3"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27
4"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27
6"	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27	3,516.27

**Volume Rate/1,000 Gal**

-	Volume Charge	1.37	1.52	1.67	1.84	2.02	2.21	2.34	2.48	2.63	2.79	2.95
-	Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**3 Residential Monthly Charges -- WATER**

**3,000 Gallons**

**Residential -- 5/8" Meter**

Total	\$ 13.06	\$ 13.66	\$ 16.14	\$ 19.24	\$ 23.11	\$ 26.98	\$ 28.60	\$ 30.32	\$ 32.14	\$ 34.06	\$ 36.11	\$ 36.11
Dollar Inc		0.60	2.48	3.10	3.87	3.87	1.62	1.72	1.82	1.93	2.04	2.04
Percent Inc		4.6%	18.1%	19.2%	20.1%	16.8%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%

**5,000 Gallons**

**Residential -- 5/8" Meter**

Total	\$ 16.48	\$ 17.16	\$ 19.99	\$ 23.47	\$ 27.77	\$ 32.06	\$ 33.98	\$ 36.02	\$ 38.18	\$ 40.48	\$ 42.90	\$ 42.90
Dollar Inc		0.68	2.83	3.48	4.30	4.29	1.92	2.04	2.16	2.29	2.43	2.43
Percent Inc		4.1%	16.5%	17.4%	18.3%	15.5%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%

**10,000 Gallons**

**Residential -- 5/8" Meter**

Total	25.03	25.91	29.62	34.06	39.42	44.75	47.44	50.29	53.30	56.50	59.89	59.89
Dollar Inc		0.88	3.70	4.45	5.35	5.34	2.69	2.85	3.02	3.20	3.39	3.39
Percent Inc		3.5%	14.3%	15.0%	15.7%	13.5%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>										
Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**20,000 Gallons**

**Residential -- 5/8" Meter**

Total	42.13	50.91	57.12	64.31	72.69	81.02	85.89	91.04	96.50	102.29	108.43
Dollar Inc		8.78	6.20	7.20	8.38	8.33	4.86	5.15	5.46	5.79	6.14
Percent Inc		20.8%	12.2%	12.6%	13.0%	11.5%	6.0%	6.0%	6.0%	6.0%	6.0%

**30,000 Gallons**

**Residential -- 5/8" Meter**

Total	59.23	80.91	90.12	100.61	112.62	124.55	132.02	139.94	148.34	157.24	166.67
Dollar Inc		21.68	9.20	10.50	12.01	11.93	7.47	7.92	8.40	8.90	9.43
Percent Inc		36.6%	11.4%	11.6%	11.9%	10.6%	6.0%	6.0%	6.0%	6.0%	6.0%

**4 Commercial Monthly Charges -- WATER**

**20,000 Gallons**

**Commercial -- 2" Meter**

Total	\$ 67.22	\$ 79.98	\$ 97.07	\$ 118.53	\$ 145.56	\$ 169.30	\$ 179.46	\$ 190.23	\$ 201.64	\$ 213.74	\$ 226.57
Dollar Inc		12.76	17.09	21.46	27.03	23.75	10.16	10.77	11.41	12.10	12.82
Percent Inc		19.0%	21.4%	22.1%	22.8%	16.3%	6.0%	6.0%	6.0%	6.0%	6.0%

**40,000 Gallons**

**Commercial -- 2" Meter**

Total	101.42	116.61	137.36	162.85	194.31	222.45	235.79	249.94	264.94	280.83	297.68
Dollar Inc		15.19	20.75	25.49	31.46	28.14	13.35	14.15	15.00	15.90	16.85
Percent Inc		15.0%	17.8%	18.6%	19.3%	14.5%	6.0%	6.0%	6.0%	6.0%	6.0%

**5 Residential Monthly Charges -- WASTEWATER**

**3,000 Gallons**

**Residential --5/8" meter**

Total	\$ 17.49	\$ 19.91	\$ 23.06	\$ 26.82	\$ 31.31	\$ 36.54	\$ 38.73	\$ 41.06	\$ 43.52	\$ 46.13	\$ 48.90
Dollar Inc		2.42	3.15	3.75	4.49	5.23	2.19	2.32	2.46	2.61	2.77
Percent Inc		13.9%	15.8%	16.3%	16.8%	16.7%	6.0%	6.0%	6.0%	6.0%	6.0%

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	Effective Mar-24	Effective Jan-25	Effective Jan-26	Effective Jan-27	Effective Jan-28	Effective Jan-29	Effective Jan-30	Effective Jan-31	Effective Jan-32	Effective Jan-33

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**5,000 Gallons**

**Residential --5/8" meter**

Total	\$ 25.03	\$ 28.04	\$ 32.00	\$ 36.65	\$ 42.12	\$ 48.33	\$ 51.23	\$ 54.30	\$ 57.56	\$ 61.02	\$ 64.68
Dollar Inc		3.01	3.96	4.65	5.48	6.21	2.90	3.07	3.26	3.45	3.66
Percent Inc		12.0%	14.1%	14.5%	14.9%	14.7%	6.0%	6.0%	6.0%	6.0%	6.0%

**10,000 Gallons**

**Residential --5/8" meter**

Total	43.88	48.35	54.34	61.23	69.16	77.80	82.47	87.42	92.66	98.22	104.11
Dollar Inc		4.47	5.99	6.88	7.93	8.64	4.67	4.95	5.24	5.56	5.89
Percent Inc		10.2%	12.4%	12.7%	13.0%	12.5%	6.0%	6.0%	6.0%	6.0%	6.0%

**15,000 Gallons**

**Residential --5/8" meter**

Total	62.73	68.66	76.69	85.81	96.20	107.27	113.71	120.53	127.76	135.43	143.55
Dollar Inc		5.93	8.03	9.12	10.39	11.07	6.44	6.82	7.23	7.67	8.13
Percent Inc		9.5%	11.7%	11.9%	12.1%	11.5%	6.0%	6.0%	6.0%	6.0%	6.0%

**20,000 Gallons**

**Residential --5/8" meter**

Total	81.58	88.98	99.03	110.39	123.23	136.74	144.94	153.64	162.86	172.63	182.99
Dollar Inc		7.40	10.06	11.35	12.85	13.51	8.20	8.70	9.22	9.77	10.36
Percent Inc		9.1%	11.3%	11.5%	11.6%	11.0%	6.0%	6.0%	6.0%	6.0%	6.0%

**6 Commercial Monthly Charges -- WASTEWATER**

**20,000 Gallons -- 2" Meter**

**Commercial -- 2" Meter**

Total	\$ 101.17	\$ 113.46	\$ 129.64	\$ 148.65	\$ 171.06	\$ 196.52	\$ 208.31	\$ 220.81	\$ 234.06	\$ 248.11	\$ 262.99
Dollar Inc		12.29	16.18	19.00	22.41	25.46	11.79	12.50	13.25	14.04	14.89
Percent Inc		12.2%	14.3%	14.7%	15.1%	14.9%	6.0%	6.0%	6.0%	6.0%	6.0%

**40,000 Gallons -- 2" Meter**

**Commercial -- 2" Meter**

Total	176.57	194.72	219.02	246.96	279.21	314.40	333.27	353.26	374.46	396.93	420.74
Dollar Inc		18.15	24.30	27.94	32.25	35.20	18.86	20.00	21.20	22.47	23.82
Percent Inc		10.3%	12.5%	12.8%	13.1%	12.6%	6.0%	6.0%	6.0%	6.0%	6.0%



<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>

**Forecast Summary**

**Scenario:** 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base

**1 Water and Wastewater Rates**

**Water Rates -- Residential**

<b>Monthly Minimum Charge --5/8"</b>	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
<b>Volume Rate Per 1,000 Gal</b>																
		3,000	1.65	1.25	1.25	1.25	1.25	1.25	1.33	1.40	1.49	1.58	1.67			

**Water Rates -- Commercial**

<b>Monthly Minimum Charge --2"</b>	\$	49.55	\$	65.02	\$	85.16	\$	111.31	\$	145.20	\$	174.24	\$	184.70	\$	195.78	\$	207.53	\$	219.98	\$	233.18	
<b>Volume Rate Per 1,000 Gal</b>																							
		3,000	2.48	2.75	3.02	3.32	3.66	3.99	4.22	4.48	4.75	5.03	5.33										

**Wastewater Rates - Residential**

Monthly Minimum Charge	0	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Volume Rate/1,000 Gal			3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89				

**Wastewater Rates - Commercial**

Monthly Minimum Charge	2"	\$	25.77	\$	32.21	\$	40.27	\$	50.33	\$	62.92	\$	78.64	\$	83.36	\$	88.36	\$	93.67	\$	99.29	\$	105.24
Volume Rate/1,000 Gal			3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89										

**2 Residential Standard Monthly Bill -- 1" Meter**

5,000 Gal	Total	5/5	\$	41.51	\$	45.20	\$	51.99	\$	60.12	\$	69.89	\$	80.39	\$	85.21	\$	90.33	\$	95.75	\$	101.49	\$	107.58
Water & WW	Increase -- \$			3.69		6.79		8.13		9.77		10.50		4.82		5.11		5.42		5.74		6.09		6.09
	Increase -- %			8.9%		15.0%		15.6%		16.3%		15.0%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%
10,000 Gal	Total	7/5	\$	68.91	\$	74.26	\$	83.96	\$	95.29	\$	108.58	\$	122.55	\$	129.91	\$	137.70	\$	145.96	\$	154.72	\$	164.01
Water; WW	Increase -- \$			5.35		9.70		11.33		13.29		13.98		7.35		7.79		8.26		8.76		9.28		9.28
	Increase -- %			7.8%		13.1%		13.5%		13.9%		12.9%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%
20,000 Gal	Total	15/10	\$	86.01	\$	99.26	\$	111.46	\$	125.54	\$	141.85	\$	158.82	\$	168.35	\$	178.45	\$	189.16	\$	200.51	\$	212.54
Water; 10K WW	Increase -- \$			13.25		12.20		14.08		16.31		16.97		9.53		10.10		10.71		11.35		12.03		12.03
	Increase -- %			15.4%		12.3%		12.6%		13.0%		12.0%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%

**Commercial Monthly Bill -- All Meters**

40,000 Gal	Total	\$	277.99	\$	311.32	\$	356.38	\$	409.81	\$	473.52	\$	536.85	\$	569.06	\$	603.20	\$	639.40	\$	677.76	\$	718.43	
Water & WW	Increase -- \$			33.33		45.06		53.43		63.71		63.33		32.21		34.14		36.19		38.36		40.67		40.67
	Increase -- %			12.0%		14.5%		15.0%		15.5%		13.4%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Forecast Summary</b>											
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>											
<b>3 Fund Balance, Revenues and Expenses</b>											
Beginning of TY Fund Balance	\$	24,074,703									
TY Transfer/Use		-									
<b>Revised Beginning Fund Balance</b>	<b>\$</b>	<b>24,074,703</b>	<b>\$ 18,872,178</b>	<b>\$ 17,182,086</b>	<b>\$ 16,946,895</b>	<b>\$ 16,109,757</b>	<b>\$ 17,543,373</b>	<b>\$ 19,091,870</b>	<b>\$ 21,969,576</b>	<b>\$ 26,042,408</b>	<b>\$ 31,829,675</b>
<b>Revenues and Expenses</b>											
Water Rate Revenues		9,857,006	12,729,223	14,839,104	17,415,714	20,133,015	22,024,858	23,575,376	25,235,782	27,013,914	28,918,171
WW Rate Revenues		11,397,876	13,160,672	15,047,524	17,282,291	19,870,366	21,799,887	23,413,309	25,146,718	27,009,073	29,010,005
Non-Rate Revenues		2,562,724	2,562,724	2,562,724	2,562,724	2,562,724	2,562,724	2,562,724	2,562,724	2,562,724	2,562,724
<b>Total Revenues</b>		<b>23,817,606</b>	<b>28,452,618</b>	<b>32,449,352</b>	<b>37,260,729</b>	<b>42,566,105</b>	<b>46,387,469</b>	<b>49,551,408</b>	<b>52,945,224</b>	<b>56,585,711</b>	<b>60,490,900</b>
Operating Expenses		21,579,054	22,708,399	23,904,899	25,172,700	26,516,415	27,814,038	29,037,204	30,639,641	32,339,867	34,144,337
<b>Net Revenues for Transfers,Capital Outlays and Debt Serv</b>		<b>2,238,552</b>	<b>5,744,219</b>	<b>8,544,453</b>	<b>12,088,029</b>	<b>16,049,690</b>	<b>18,573,431</b>	<b>20,514,204</b>	<b>22,305,583</b>	<b>24,245,844</b>	<b>26,346,563</b>
Capital Outlays		2,770,404	2,575,000	2,652,250	2,731,818	2,813,772	2,898,185	2,985,131	3,074,685	3,166,925	3,261,933
<b>Total Operating Expense/Capital Outlays</b>		<b>24,349,458</b>	<b>25,283,399</b>	<b>26,557,149</b>	<b>27,904,517</b>	<b>29,330,187</b>	<b>30,712,223</b>	<b>32,022,335</b>	<b>33,714,326</b>	<b>35,506,792</b>	<b>37,406,270</b>
<b>Net Revenues Available for Debt Service/Transfers</b>		<b>(531,852)</b>	<b>3,169,219</b>	<b>5,892,203</b>	<b>9,356,212</b>	<b>13,235,918</b>	<b>15,675,246</b>	<b>17,529,073</b>	<b>19,230,898</b>	<b>21,078,919</b>	<b>23,084,630</b>
Current Debt Service		1,567,750	1,565,325	1,571,400	1,570,900	1,568,950	1,585,150	1,578,888	1,579,706	1,232,550	1,228,475
Future Debt Service		-	288,186	2,539,460	6,721,617	10,266,718	12,567,199	13,098,080	13,628,960	14,109,702	14,590,443
<b>Total Debt Service</b>		<b>1,567,750</b>	<b>1,853,511</b>	<b>4,110,860</b>	<b>8,292,517</b>	<b>11,835,668</b>	<b>14,152,349</b>	<b>14,676,968</b>	<b>15,208,666</b>	<b>15,342,252</b>	<b>15,818,918</b>
<b>Transfers</b>											
Budgeted Transfers - Water		-	-	-	-	-	-	-	-	-	-
Budgeted Transfers - Wastewater		-	-	-	-	-	-	-	-	-	-
<b>Total Contingencies &amp; Transfers</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Cost of Service</b>		<b>25,917,208</b>	<b>27,136,910</b>	<b>30,668,009</b>	<b>36,197,035</b>	<b>41,165,855</b>	<b>44,864,572</b>	<b>46,699,303</b>	<b>48,922,992</b>	<b>50,849,044</b>	<b>53,225,188</b>
<b>Net Revenues</b>		<b>(2,099,602)</b>	<b>1,315,708</b>	<b>1,781,343</b>	<b>1,063,695</b>	<b>1,400,250</b>	<b>1,522,896</b>	<b>2,852,106</b>	<b>4,022,232</b>	<b>5,736,667</b>	<b>7,265,712</b>
Percent of COS		-8.1%	4.8%	5.8%	2.9%	3.4%	3.4%	6.1%	8.2%	11.3%	13.7%
<b>Direct Fund Balance Drawdown for CIP</b>		<b>(3,102,923)</b>	<b>(3,005,800)</b>	<b>(2,016,533)</b>	<b>(1,900,833)</b>	<b>33,367</b>	<b>25,600</b>	<b>25,600</b>	<b>50,600</b>	<b>50,600</b>	<b>600</b>
		TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
<b>Ending Water &amp; Sewer Combined Fund Balance</b>	<b>\$</b>	<b>18,872,178</b>	<b>\$ 17,182,086</b>	<b>\$ 16,946,895</b>	<b>\$ 16,109,757</b>	<b>\$ 17,543,373</b>	<b>\$ 19,091,870</b>	<b>\$ 21,969,576</b>	<b>\$ 26,042,408</b>	<b>\$ 31,829,675</b>	<b>\$ 39,095,987</b>
		TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
<b>Revenue Adequacy Tests</b>											
Total Exp (Budgetary Basis)		25,917,208	27,136,910	30,668,009	36,197,035	41,165,855	44,864,572	46,699,303	48,922,992	50,849,044	53,225,188
Expenses per Day		71,006	74,348	84,022	99,170	112,783	122,917	127,943	134,036	139,312	145,822
<b>FB as % of Operating (Goal is 25%)</b>		<b>291%</b>	<b>253%</b>	<b>221%</b>	<b>178%</b>	<b>170%</b>	<b>170%</b>	<b>188%</b>	<b>213%</b>	<b>250%</b>	<b>294%</b>
<b>Number of Working Capital Days</b>		<b>266</b>	<b>231</b>	<b>202</b>	<b>162</b>	<b>156</b>	<b>155</b>	<b>172</b>	<b>194</b>	<b>228</b>	<b>268</b>
Debt Coverage (excludes Capital Outlays and G/F Transfers)		1.43	3.10	2.08	1.46	1.36	1.31	1.40	1.47	1.58	1.67
<b>Portion of FB available for Annual Repair /Repl Fund</b>	<b>\$</b>	<b>17,097,027</b>	<b>\$ 15,323,393</b>	<b>\$ 14,846,347</b>	<b>\$ 13,630,508</b>	<b>\$ 14,723,794</b>	<b>\$ 16,018,954</b>	<b>\$ 18,770,993</b>	<b>\$ 22,691,518</b>	<b>\$ 28,346,864</b>	<b>\$ 35,450,426</b>



<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>																				
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033									
<b>Revenue and Expense Summary</b>																				
<b>Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>																				
<b>TOTAL Revenues and Expenses -- CASH BASIS</b>																				
<b>Revenues</b>																				
<u>Rate Revenue</u>																				
Water Rate Revenue	\$	9,857,006	\$	12,729,223	\$	14,839,104	\$	17,415,714	\$	20,133,015	\$	22,024,858	\$	23,575,376	\$	25,235,782	\$	27,013,914	\$	28,918,171
Wastewater Rate Revenue		11,397,876		13,160,672		15,047,524		17,282,291		19,870,366		21,799,887		23,413,309		25,146,718		27,009,073		29,010,005
		21,254,882		25,889,894		29,886,628		34,698,005		40,003,381		43,824,745		46,988,684		50,382,500		54,022,987		57,928,176
Water Reserve Fees		-		-		-		-		-		-		-		-		-		-
Non-Rate Revenues		2,562,724		2,562,724		2,562,724		2,562,724		2,562,724		2,562,724		2,562,724		2,562,724		2,562,724		2,562,724
<b>Total Revenues</b>		<b>23,817,606</b>		<b>28,452,618</b>		<b>32,449,352</b>		<b>37,260,729</b>		<b>42,566,105</b>		<b>46,387,469</b>		<b>49,551,408</b>		<b>52,945,224</b>		<b>56,585,711</b>		<b>60,490,900</b>
<b>Cost of Service</b>																				
<u>Department Code</u>																				
A Administration (01)	\$	6,117,419	\$	6,423,415	\$	6,745,954	\$	7,086,001	\$	7,444,580	\$	7,822,778	\$	8,221,753	\$	8,642,734	\$	9,087,029	\$	9,556,029
WT Water Treatment (04)		5,484,144		5,742,276		6,016,529		6,307,835		6,617,376		6,819,486		6,881,892		7,254,148		7,650,317		8,072,092
PT Pretreatment (15)		316,000		331,158		347,084		363,821		381,412		399,903		419,342		439,781		461,275		483,881
CM Construction Maintenance (08)		482,210		510,457		540,456		572,324		606,183		642,165		680,411		721,072		764,309		810,294
DS Distribution Services & Maintenance (13) & (05)		2,136,519		2,262,233		2,395,773		2,537,656		2,688,432		2,848,691		3,019,063		3,200,224		3,392,895		3,597,848
CS Customer Service (32)		1,430,920		1,510,871		1,595,559		1,685,282		1,780,358		1,881,126		1,987,949		2,101,211		2,221,326		2,348,733
WOM Water Operations Mgmt. (38)		679,226		713,024		748,509		785,765		824,881		865,951		909,071		954,346		1,001,881		1,051,792
WT Water Treatment (04)		-		-		-		-		-		-		-		-		-		-
WWC Wastewater Collection (12)		1,963,880		2,074,532		2,191,895		2,316,405		2,448,527		2,588,757		2,737,629		2,895,709		3,063,607		3,241,973
Total Operating Expenses		21,579,054		22,708,399		23,904,899		25,172,700		26,516,415		27,814,038		29,037,204		30,639,641		32,339,867		34,144,337
<b>Net Revenues for Transfers,Capital Outlays and Debt Service</b>		<b>2,238,552</b>		<b>5,744,219</b>		<b>8,544,453</b>		<b>12,088,029</b>		<b>16,049,690</b>		<b>18,573,431</b>		<b>20,514,204</b>		<b>22,305,583</b>		<b>24,245,844</b>		<b>26,346,563</b>
Capital Outlays		2,770,404		2,575,000		2,652,250		2,731,818		2,813,772		2,898,185		2,985,131		3,074,685		3,166,925		3,261,933
<b>Debt Service</b>																				
Debt Service -- Current		1,567,750		1,565,325		1,571,400		1,570,900		1,568,950		1,585,150		1,578,888		1,579,706		1,232,550		1,228,475
Debt Service -- Future		-		288,186		2,539,460		6,721,617		10,266,718		12,567,199		13,098,080		13,628,960		14,109,702		14,590,443
Total Debt Service		1,567,750		1,853,511		4,110,860		8,292,517		11,835,668		14,152,349		14,676,968		15,208,666		15,342,252		15,818,918
<b>Transfers</b>																				
Total Transfers		-		-		-		-		-		-		-		-		-		-
<b>Total Cost of Service</b>		<b>25,917,208</b>		<b>27,136,910</b>		<b>30,668,009</b>		<b>36,197,035</b>		<b>41,165,855</b>		<b>44,864,572</b>		<b>46,699,303</b>		<b>48,922,992</b>		<b>50,849,044</b>		<b>53,225,188</b>
<b>Net Revenues</b>		<b>24,861,007</b>		<b>(2,099,602)</b>		<b>1,315,708</b>		<b>1,781,343</b>		<b>1,063,695</b>		<b>1,400,250</b>		<b>1,522,896</b>		<b>2,852,106</b>		<b>4,022,232</b>		<b>5,736,667</b>
Percent of COS		-8.8%		4.6%		5.5%		2.9%		3.3%		3.3%		5.8%		7.6%		10.1%		12.0%
<b>Debt Coverage</b> (excludes Capital Outlays, G/F Transfers)		<b>1.43</b>		<b>3.10</b>		<b>2.08</b>		<b>1.46</b>		<b>1.36</b>		<b>1.31</b>		<b>1.40</b>		<b>1.47</b>		<b>1.58</b>		<b>1.67</b>

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Revenue and Expense Summary</b>											
<b>Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>											
<b>WATER Revenues and Expenses -- CASH BASIS</b>											
<b>Water Revenues</b>											
<u>Water Rate Revenue</u>											
W1	Residential Inside Scenario I	\$ 4,252,568	\$ 5,969,645	\$ 7,025,393	\$ 8,329,569	\$ 9,737,085	\$ 10,707,241	\$ 11,488,114	\$ 12,326,093	\$ 13,225,367	\$ 14,190,431
W2	Residential Outside Scenario I	1,015,830	1,450,834	1,703,709	2,014,919	2,350,352	2,582,625	2,770,415	2,971,899	3,188,077	3,420,026
W4	Commercial & Industrial Outside Scenario I	127,995	149,036	172,158	199,891	228,570	249,243	266,835	285,672	305,842	327,441
W9	Town of Combes Inside Scenario I	180,003	200,647	223,216	248,667	274,985	295,084	312,789	331,557	351,450	372,537
W10	Town of Combes Outside Scenario I	2,048	2,273	2,500	2,750	3,006	3,215	3,408	3,612	3,829	4,059
W3	Commercial & Industrial Inside	1,599,214	1,892,040	2,222,003	2,626,707	3,039,509	3,325,313	3,562,392	3,816,426	4,088,630	4,380,307
W5	Multi Housing Apts/Condos Inside	830,616	960,704	1,105,675	1,279,138	1,456,681	1,585,950	1,697,346	1,816,587	1,944,227	2,080,859
W6	Multi Housing Apts/Condos Outside	51,491	61,516	72,776	86,632	100,999	110,804	118,771	127,312	136,470	146,288
W7	Public Services/Institutional Inside	1,052,790	1,220,115	1,405,884	1,629,616	1,849,769	1,997,111	2,116,938	2,243,954	2,378,592	2,521,307
W8	Public Services/Institutional Outside	6,178	7,644	9,282	11,338	13,373	14,583	15,458	16,386	17,369	18,411
W 11	City of Primera	271,823	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
W12	City of Palm Valley	298,167	328,957	361,852	398,037	435,105	465,316	493,235	522,829	554,198	587,450
W13	East Rio Hondo	74,437	82,123	90,336	99,369	108,623	116,165	123,135	130,523	138,355	146,656
W14	Military Hwy WSC	93,847	103,798	114,441	126,213	138,298	148,006	156,886	166,299	176,277	186,854
		9,857,006	12,729,223	14,839,104	17,415,714	20,133,015	22,024,858	23,575,376	25,235,782	27,013,914	28,918,171
	Water Reserve Fees	-	-	-	-	-	-	-	-	-	-
	Non-Rate Revenues (includes Leander Water Reserve Fees)	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673	1,363,673
	<b>Total Revenues</b>	<b>11,220,679</b>	<b>14,092,896</b>	<b>16,202,777</b>	<b>18,779,387</b>	<b>21,496,688</b>	<b>23,388,531</b>	<b>24,939,049</b>	<b>26,599,455</b>	<b>28,377,587</b>	<b>30,281,844</b>
<b>Water Cost of Service</b>											
<u>Department Code</u>											
A	Administration (01)	\$ 3,417,781	\$ 3,588,740	\$ 3,768,941	\$ 3,958,924	\$ 4,159,261	\$ 4,370,559	\$ 4,593,465	\$ 4,828,665	\$ 5,076,892	\$ 5,338,920
WT	Water Treatment (04)	5,484,144	5,742,276	6,016,529	6,307,835	6,617,376	6,819,486	6,881,892	7,254,148	7,650,317	8,072,092
PT	Pretreatment (15)	-	-	-	-	-	-	-	-	-	-
CM	Construction Maintenance (08)	482,210	510,457	540,456	572,324	606,183	642,165	680,411	721,072	764,309	810,294
DS	Distribution Services & Maintenance (13) & (05)	2,136,519	2,262,233	2,395,773	2,537,656	2,688,432	2,848,691	3,019,063	3,200,224	3,392,895	3,597,848
CS	Customer Service (32)	799,450	844,118	891,433	941,561	994,680	1,050,979	1,110,660	1,173,939	1,241,047	1,312,229
WOM	Water Operations Mgmt. (38)	679,226	713,024	748,509	785,765	824,881	865,951	909,071	954,346	1,001,881	1,051,792
WWC	Wastewater Collection (12)	-	-	-	-	-	-	-	-	-	-
WWOM	Wastewater Operations Mgmt. (39)	-	-	-	-	-	-	-	-	-	-
WWT	Wastewater Treatment (18)	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>12,999,330</b>	<b>13,660,847</b>	<b>14,361,642</b>	<b>15,104,065</b>	<b>15,890,813</b>	<b>16,597,830</b>	<b>17,194,562</b>	<b>18,132,394</b>	<b>19,127,340</b>	<b>20,183,176</b>
	<b>Total Operating Expenses</b>	<b>12,999,330</b>	<b>13,660,847</b>	<b>14,361,642</b>	<b>15,104,065</b>	<b>15,890,813</b>	<b>16,597,830</b>	<b>17,194,562</b>	<b>18,132,394</b>	<b>19,127,340</b>	<b>20,183,176</b>
	<b>Net Revenues for Transfers,Capital Outlays and Debt Service</b>	<b>(1,778,651)</b>	<b>432,048</b>	<b>1,841,135</b>	<b>3,675,323</b>	<b>5,605,875</b>	<b>6,790,701</b>	<b>7,744,487</b>	<b>8,467,061</b>	<b>9,250,247</b>	<b>10,098,668</b>
	Capital Outlays	896,802	1,287,500	1,326,125	1,365,909	1,406,886	1,449,093	1,492,565	1,537,342	1,583,463	1,630,966
<b>Debt Service</b>											
	Debt Service -- Current	783,875	782,663	785,700	785,450	784,475	792,575	789,444	789,853	616,275	614,238
	Debt Service -- Future	-	144,093	711,563	1,227,697	2,607,985	4,050,210	4,407,080	4,763,949	5,120,819	5,477,688
	<b>Total Debt Service</b>	<b>783,875</b>	<b>926,756</b>	<b>1,497,263</b>	<b>2,013,147</b>	<b>3,392,460</b>	<b>4,842,785</b>	<b>5,196,524</b>	<b>5,553,802</b>	<b>5,737,094</b>	<b>6,091,926</b>
<b>Transfers</b>											
	Total Transfers	-	-	-	-	-	-	-	-	-	-



<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	

**Revenue Summary**

Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base

1 **TOTAL Revenues**

<b>Total Revenues</b>																				
Water Rate Revenues	\$	9,857,006	\$	12,729,223	\$	14,839,104	\$	17,415,714	\$	20,133,015	\$	22,024,858	\$	23,575,376	\$	25,235,782	\$	27,013,914	\$	28,918,171
Water Reserve Fees		-		-		-		-		-		-		-		-		-		-
Water Non-Rate Revenues		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673
<b>Total</b>		11,220,679		14,092,896		16,202,777		18,779,387		21,496,688		23,388,531		24,939,049		26,599,455		28,377,587		30,281,844
Wastewater Rate Revenues		11,397,876		13,160,672		15,047,524		17,282,291		19,870,366		21,799,887		23,413,309		25,146,718		27,009,073		29,010,005
Wastewater Non-Rate Revenues		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051
<b>Total</b>		12,596,927		14,359,723		16,246,575		18,481,342		21,069,417		22,998,938		24,612,360		26,345,769		28,208,124		30,209,056
<b>Total Revenues</b>		<b>23,817,606</b>		<b>28,452,618</b>		<b>32,449,352</b>		<b>37,260,729</b>		<b>42,566,105</b>		<b>46,387,469</b>		<b>49,551,408</b>		<b>52,945,224</b>		<b>56,585,711</b>		<b>60,490,900</b>
<b>Incremental Revenues</b>																				
Water Rate Revenues	\$	2,872,216	\$	2,109,882	\$	2,576,610	\$	2,717,301	\$	1,891,843	\$	1,550,518	\$	1,660,406	\$	1,778,132	\$	1,904,257	\$	1,904,257
Water Reserve Fees		-		-		-		-		-		-		-		-		-		-
Water Non-Rate Revenues		-		-		-		-		-		-		-		-		-		-
<b>Total</b>		2,872,216		2,109,882		2,576,610		2,717,301		1,891,843		1,550,518		1,660,406		1,778,132		1,904,257		1,904,257
Wastewater Rate Revenues		1,762,796		1,886,853		2,234,767		2,588,075		1,929,521		1,613,422		1,733,409		1,862,355		2,000,931		2,000,931
Wastewater Non-Rate Revenues		-		-		-		-		-		-		-		-		-		-
<b>Total</b>		1,762,796		1,886,853		2,234,767		2,588,075		1,929,521		1,613,422		1,733,409		1,862,355		2,000,931		2,000,931
<b>Total Revenues</b>				<b>4,635,012</b>		<b>3,996,734</b>		<b>4,811,377</b>		<b>5,305,376</b>		<b>3,821,364</b>		<b>3,163,940</b>		<b>3,393,816</b>		<b>3,640,487</b>		<b>3,905,188</b>

<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>

**Revenue Summary**

Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base

**2 WATER Revenues**

	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Water Revenues</b>											
<u>Water Rate Revenue</u>											
W1 Residential Inside	\$	4,252,568	\$ 5,969,645	\$ 7,025,393	\$ 8,329,569	\$ 9,737,085	\$ 10,707,241	\$ 11,488,114	\$ 12,326,093	\$ 13,225,367	\$ 14,190,431
W2 Residential Outside		1,015,830	1,450,834	1,703,709	2,014,919	2,350,352	2,582,625	2,770,415	2,971,899	3,188,077	3,420,026
W3 Commercial & Industrial Inside		1,599,214	1,892,040	2,222,003	2,626,707	3,039,509	3,325,313	3,562,392	3,816,426	4,088,630	4,380,307
W4 Commercial & Industrial Outside		127,995	149,036	172,158	199,891	228,570	249,243	266,835	285,672	305,842	327,441
W5 Multi Housing Apts/Condos Inside		830,616	960,704	1,105,675	1,279,138	1,456,681	1,585,950	1,697,346	1,816,587	1,944,227	2,080,859
W6 Multi Housing Apts/Condos Outside		51,491	61,516	72,776	86,632	100,999	110,804	118,771	127,312	136,470	146,288
W7 Public Services/Institutional Inside		1,052,790	1,220,115	1,405,884	1,629,616	1,849,769	1,997,111	2,116,938	2,243,954	2,378,592	2,521,307
W8 Public Services/Institutional Outside		6,178	7,644	9,282	11,338	13,373	14,583	15,458	16,386	17,369	18,411
W9 Town of Combes Inside		180,003	200,647	223,216	248,667	274,985	295,084	312,789	331,557	351,450	372,537
W10 Town of Combes Outside		2,048	2,273	2,500	2,750	3,006	3,215	3,408	3,612	3,829	4,059
W 11 City of Primera		271,823	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
W12 City of Palm Valley		298,167	328,957	361,852	398,037	435,105	465,316	493,235	522,829	554,198	587,450
W13 East Rio Hondo		74,437	82,123	90,336	99,369	108,623	116,165	123,135	130,523	138,355	146,656
W14 Military Hwy WSC		93,847	103,798	114,441	126,213	138,298	148,006	156,886	166,299	176,277	186,854
		<u>9,857,006</u>	<u>12,729,223</u>	<u>14,839,104</u>	<u>17,415,714</u>	<u>20,133,015</u>	<u>22,024,858</u>	<u>23,575,376</u>	<u>25,235,782</u>	<u>27,013,914</u>	<u>28,918,171</u>
Water Reserve Fees		-	-	-	-	-	-	-	-	-	-
Non-Rate Revenues		<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>	<u>1,363,673</u>
<b>Total Revenues</b>		<b>11,220,679</b>	<b>14,092,896</b>	<b>16,202,777</b>	<b>18,779,387</b>	<b>21,496,688</b>	<b>23,388,531</b>	<b>24,939,049</b>	<b>26,599,455</b>	<b>28,377,587</b>	<b>30,281,844</b>

**Incremental Revenues**

	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<u>Water Rate Revenue</u>											
W1 Residential Inside	\$	1,717,077	\$ 1,055,748	\$ 1,304,176	\$ 1,407,516	\$ 970,156	\$ 780,873	\$ 837,980	\$ 899,274	\$ 965,064	
W2 Residential Outside		435,004	252,875	311,210	335,433	232,273	187,790	201,484	216,179	231,949	
W3 Commercial & Industrial Inside		292,826	329,963	404,704	412,802	285,803	237,080	254,034	272,204	291,677	
W4 Commercial & Industrial Outside		21,041	23,122	27,733	28,679	20,673	17,592	18,837	20,170	21,599	
W5 Multi Housing Apts/Condos Inside		130,088	144,971	173,463	177,543	129,269	111,396	119,241	127,640	136,632	
W6 Multi Housing Apts/Condos Outside		10,025	11,261	13,855	14,367	9,805	7,967	8,541	9,158	9,818	
W7 Public Services/Institutional Inside		167,326	185,769	223,731	220,154	147,342	119,827	127,016	134,637	142,715	
W8 Public Services/Institutional Outside		1,465	1,638	2,056	2,035	1,211	875	928	983	1,042	
W9 Town of Combes Inside		20,644	22,569	25,452	26,318	20,099	17,705	18,767	19,893	21,087	
W10 Town of Combes Outside		224	227	250	256	209	193	204	217	230	
W 11 City of Primera		28,069	29,989	32,988	33,792	27,542	25,452	26,979	28,598	30,314	
W12 City of Palm Valley		30,789	32,896	36,185	37,067	30,211	27,919	29,594	31,370	33,252	
W13 East Rio Hondo		7,686	8,212	9,034	9,254	7,542	6,970	7,388	7,831	8,301	
W14 Military Hwy WSC		9,951	10,642	11,772	12,085	9,708	8,880	9,413	9,978	10,577	
		<u>2,872,216</u>	<u>2,109,882</u>	<u>2,576,610</u>	<u>2,717,301</u>	<u>1,891,843</u>	<u>1,550,518</u>	<u>1,660,406</u>	<u>1,778,132</u>	<u>1,904,257</u>	
Water Reserve Fees		-	-	-	-	-	-	-	-	-	
Non-Rate Revenues		-	-	-	-	-	-	-	-	-	
<b>Total Revenues</b>		<b>2,872,216</b>	<b>2,109,882</b>	<b>2,576,610</b>	<b>2,717,301</b>	<b>1,891,843</b>	<b>1,550,518</b>	<b>1,660,406</b>	<b>1,778,132</b>	<b>1,904,257</b>	



<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>

**Revenue Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

<b>3 WASTEWATER Revenues</b>																				
<b>Wastewater Revenues</b>																				
<u>Wastewater Rate Revenue</u>																				
WW1 Residential Inside	\$	5,338,054	\$	6,293,045	\$	7,335,893	\$	8,583,467	\$	10,044,940	\$	11,092,669	\$	11,934,603	\$	12,840,439	\$	13,815,029	\$	14,863,589
WW2 Residential Outside		550,775		587,174		625,670		689,475		802,366		889,303		956,801		1,029,422		1,107,555		1,191,618
WW5 Commercial & Industrial Inside		2,295,034		2,661,138		3,028,950		3,455,143		3,930,845		4,302,127		4,628,658		4,979,974		5,357,954		5,764,622
WW6 Commercial & Industrial Outside		52,494		56,809		64,702		73,858		84,094		92,060		99,047		106,565		114,653		123,356
WW5 Multi Housing Apts/Condos Inside		1,537,913		1,747,163		1,971,417		2,227,364		2,506,175		2,733,039		2,940,477		3,163,659		3,403,781		3,662,128
WW6 Multi Housing Apts/Condos Outside		46,988		55,752		65,346		76,891		90,528		100,159		107,761		115,940		124,740		134,207
WW7 Public Services/Institutional Inside		1,205,308		1,352,796		1,507,650		1,682,884		1,871,590		2,012,974		2,133,753		2,261,778		2,397,485		2,541,334
WW8 Public Services/Institutional Outside		5,897		6,935		8,049		9,380		10,941		11,946		12,663		13,423		14,228		15,082
WW9 Town of Combes		232,643		256,317		281,948		310,143		339,025		362,565		384,319		407,378		431,821		457,730
WW10 City of Primera		132,770		143,543		157,897		173,687		189,861		203,044		215,227		228,140		241,829		256,338
		11,397,876		13,160,672		15,047,524		17,282,291		19,870,366		21,799,887		23,413,309		25,146,718		27,009,073		29,010,005
Non-Rate Revenues		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051		1,199,051
<b>Total Revenues</b>		<b>12,596,927</b>		<b>14,359,723</b>		<b>16,246,575</b>		<b>18,481,342</b>		<b>21,069,417</b>		<b>22,998,938</b>		<b>24,612,360</b>		<b>26,345,769</b>		<b>28,208,124</b>		<b>30,209,056</b>

**Incremental Revenues**

Wastewater Rate Revenue

WW1 Residential Inside	\$	954,991	\$	1,042,848	\$	1,247,574	\$	1,461,473	\$	1,047,730	\$	841,934	\$	905,836	\$	974,589	\$	1,048,561
WW2 Residential Outside		36,399		38,496		63,805		112,891		86,936		67,498		72,621		78,133		84,063
WW5 Commercial & Industrial Inside		366,104		367,812		426,193		475,702		371,282		326,531		351,315		377,980		406,669
WW6 Commercial & Industrial Outside		4,315		7,893		9,156		10,236		7,967		6,987		7,518		8,088		8,702
WW5 Multi Housing Apts/Condos Inside		209,250		224,255		255,946		278,811		226,864		207,438		223,182		240,122		258,347
WW6 Multi Housing Apts/Condos Outside		8,764		9,594		11,544		13,638		9,630		7,602		8,179		8,800		9,468
WW7 Public Services/Institutional Inside		147,488		154,855		175,234		188,706		141,384		120,778		128,025		135,707		143,849
WW8 Public Services/Institutional Outside		1,039		1,114		1,331		1,561		1,005		717		760		805		854
WW9 Town of Combes		23,673		25,632		28,195		28,882		23,540		21,754		23,059		24,443		25,909
WW10 City of Primera		10,772		14,354		15,790		16,175		13,183		12,183		12,914		13,688		14,510
		1,762,796		1,886,853		2,234,767		2,588,075		1,929,521		1,613,422		1,733,409		1,862,355		2,000,931
Non-Rate Revenues		-		-		-		-		-		-		-		-		-
<b>Total Revenues</b>		<b>1,762,796</b>		<b>1,886,853</b>		<b>2,234,767</b>		<b>2,588,075</b>		<b>1,929,521</b>		<b>1,613,422</b>		<b>1,733,409</b>		<b>1,862,355</b>		<b>2,000,931</b>

<b>HARLINGEN WATERWORKS SYSTEM</b>													
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>													
	<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>		

**Water Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**1 Water Monthly Rates and Charges**

**Residential Inside**

**Monthly Minimum Charge**

Base Charge	5/8"	\$	7.93	\$	9.91	\$	12.39	\$	15.49	\$	19.36	\$	23.23	\$	24.63	\$	26.10	\$	27.67	\$	29.33	\$	31.09
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**Volume Rate/1,000 Gal**

-	3,000	1.65	1.25	1.25	1.25	1.25	1.25	1.25	1.33	1.40	1.49	1.58	1.67
3,001	10,000	0.06	1.75	1.93	2.12	2.33	2.54	2.69	2.85	3.02	3.21	3.40	
10,001	20,000	-	2.50	2.75	3.03	3.33	3.63	3.84	4.08	4.32	4.58	4.85	
20,001	Above	-	3.00	3.30	3.63	3.99	4.35	4.61	4.89	5.18	5.49	5.82	
-	-	-	-	-	-	-	-	-	-	-	-	-	

**Commercial**

**Monthly Minimum Charge**

ract Base Charge (not based on meter size)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
5/8"		12.49		14.87		18.59		23.23		29.04		34.85		36.94		39.16		41.51		44.00		46.64	
1"		15.09		19.74		25.74		33.51		43.56		52.27		55.41		58.73		62.26		65.99		69.95	
1 1/2"		21.86		29.77		40.29		54.22		72.60		87.12		92.35		97.89		103.76		109.99		116.59	
2"		49.55		65.02		85.16		111.31		145.20		174.24		184.70		195.78		207.53		219.98		233.18	
3"		73.77		98.88		131.96		175.41		232.32		278.79		295.52		313.25		332.04		351.96		373.08	
4"		169.32		288.83		457.52		692.52		1,016.42		1,219.70		1,292.88		1,370.46		1,452.68		1,539.85		1,632.24	
6"		346.97		567.59		875.68		1,302.36		1,887.63		2,265.16		2,401.07		2,545.14		2,697.84		2,859.71		3,031.30	
8"		639.24		1,119.68		1,800.41		2,751.53		4,065.67		4,878.81		5,171.54		5,481.83		5,810.74		6,159.38		6,528.95	
0		-		1,119.68		1,800.41		2,751.53		4,065.67		4,878.81		5,171.54		5,481.83		5,810.74		6,159.38		6,528.95	

**Volume Rate Per 1,000 Gal - Commercial**

Volume Charge	2.48	2.75	3.02	3.32	3.66	3.99	4.22	4.48	4.75	5.03	5.33
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**2.1 Residential Monthly Bill**

5,000 Gallons	Total	\$	16.48	\$	17.16	\$	19.99	\$	23.47	\$	27.77	\$	32.06	\$	33.98	\$	36.02	\$	38.18	\$	40.48	\$	42.90
	Dollar Inc		0.68		2.83		3.48		4.30		4.29		4.29		1.92		2.04		2.16		2.29		2.43
	Percent Inc		4.1%		16.5%		17.4%		18.3%		15.5%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%
10,000 Gallons	Total		25.03		25.91		29.62		34.06		39.42		44.75		47.44		50.29		53.30		56.50		59.89
	Dollar Inc		0.88		3.70		4.45		5.35		5.34		5.34		2.69		2.85		3.02		3.20		3.39
	Percent Inc		3.5%		14.3%		15.0%		15.7%		13.5%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%
20,000 Gallons	Total		42.13		50.91		57.12		64.31		72.69		81.02		85.89		91.04		96.50		102.29		108.43
	Dollar Inc		8.78		6.20		7.20		8.38		8.33		8.33		4.86		5.15		5.46		5.79		6.14
	Percent Inc		20.8%		12.2%		12.6%		13.0%		11.5%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%
30,000 Gallons	Total		59.23		80.91		90.12		100.61		112.62		124.55		132.02		139.94		148.34		157.24		166.67
	Dollar Inc		21.68		9.20		10.50		12.01		12.01		11.93		7.47		7.92		8.40		8.90		9.43
	Percent Inc		36.6%		11.4%		11.6%		11.9%		10.6%		6.0%		6.0%		6.0%		6.0%		6.0%		6.0%

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Water Summary</b>											
<b>Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>											
<b>2.2 Commercial Monthly Bill --</b>											
20,000 Gallons											
Contract Base Charge (not ba	\$ 49.60	\$ 54.95	\$ 60.44	\$ 66.48	\$ 73.13	\$ 79.71	\$ 84.50	\$ 89.57	\$ 94.94	\$ 100.64	\$ 106.67
5/8"	62.09	69.81	79.03	89.72	102.17	114.56	121.44	128.72	136.45	144.63	153.31
1"	64.69	74.68	86.18	100.00	116.69	131.99	139.91	148.30	157.20	166.63	176.63
1 1/2"	71.46	84.71	100.73	120.71	145.73	166.84	176.85	187.46	198.70	210.63	223.26
2"	99.15	119.97	145.60	177.79	218.33	253.96	269.19	285.35	302.47	320.61	339.85
3"	123.37	153.83	192.40	241.89	305.46	358.50	380.01	402.81	426.98	452.60	479.76
4"	218.92	343.77	517.96	759.00	1,089.55	1,299.42	1,377.38	1,460.02	1,547.63	1,640.48	1,738.91
6"	396.57	622.53	936.12	1,368.84	1,960.77	2,344.87	2,485.57	2,634.70	2,792.78	2,960.35	3,137.97
8"	688.84	1,174.62	1,860.85	2,818.01	4,138.81	4,958.52	5,256.03	5,571.40	5,905.68	6,260.02	6,635.62
0	49.60	1,174.62	1,860.85	2,818.01	4,138.81	4,958.52	5,256.03	5,571.40	5,905.68	6,260.02	6,635.62
40,000 Gallons											
Contract Base Charge (not ba	\$ 99.20	\$ 109.89	\$ 120.88	\$ 132.97	\$ 146.26	\$ 159.43	\$ 168.99	\$ 179.13	\$ 189.88	\$ 201.27	\$ 213.35
5/8"	111.69	124.76	139.46	156.20	175.30	194.28	205.93	218.29	231.39	245.27	259.99
1"	114.29	129.63	146.62	166.48	189.82	211.70	224.40	237.87	252.14	267.27	283.30
1 1/2"	121.06	139.66	161.17	187.19	218.86	246.55	261.34	277.02	293.64	311.26	329.94
2"	148.75	174.91	206.04	244.27	291.47	333.67	353.69	374.91	397.41	421.25	446.53
3"	172.97	208.77	252.84	308.37	378.59	438.22	464.51	492.38	521.92	553.24	586.43
4"	268.52	398.72	578.40	825.49	1,162.68	1,379.13	1,461.88	1,549.59	1,642.57	1,741.12	1,845.59
6"	446.17	677.48	996.56	1,435.32	2,033.90	2,424.59	2,570.06	2,724.27	2,887.72	3,060.99	3,244.65
8"	738.44	1,229.57	1,921.29	2,884.49	4,211.94	5,038.24	5,340.53	5,660.96	6,000.62	6,360.66	6,742.30
0	99.20	1,229.57	1,921.29	2,884.49	4,211.94	5,038.24	5,340.53	5,660.96	6,000.62	6,360.66	6,742.30
<b>3 Total Accounts</b>											
Total Accounts		28,051	28,462	28,880	29,303	29,733	30,169	30,612	31,061	31,517	31,981
New Accounts			411	417	423	430	436	443	449	456	463
Avg. Annual Growth Rate			1.47%	1.47%	1.47%	1.47%	1.47%	1.47%	1.47%	1.47%	1.47%
<b>4 Annual Water Consumption</b>											
W1 Residential Inside		1,667,223,404	1,679,727,580	1,692,325,536	1,705,017,978	1,717,805,613	1,730,689,155	1,743,669,323	1,756,746,843	1,769,922,445	1,783,196,863
W2 Residential Outside		273,051,518	275,099,404	277,162,650	279,241,370	281,335,680	283,445,697	285,571,540	287,713,327	289,871,177	292,045,210
W3 Commercial & Industrial Inside		671,398,901	676,434,393	681,507,651	686,618,958	691,768,601	696,956,865	702,184,042	707,450,422	712,756,300	718,101,972
W4 Commercial & Industrial Outside		38,757,694	39,048,377	39,341,240	39,636,299	39,933,571	40,233,073	40,534,821	40,838,832	41,145,124	41,453,712
W5 Multi Housing Apts/Condos Inside		393,658,947	396,611,389	399,585,975	402,582,869	405,602,241	408,644,258	411,709,090	414,796,908	417,907,885	421,042,194
W6 Multi Housing Apts/Condos Outside		12,954,607	13,051,766	13,149,654	13,248,277	13,347,639	13,447,746	13,548,604	13,650,219	13,752,595	13,855,740
W7 Public Services/Institutional Inside		485,366,700	485,366,700	485,366,700	485,366,700	485,366,700	485,366,700	485,366,700	485,366,700	485,366,700	485,366,700
W8 Public Services/Institutional Outside		1,157,500	1,157,500	1,157,500	1,157,500	1,157,500	1,157,500	1,157,500	1,157,500	1,157,500	1,157,500
W9 Town of Combes Inside		107,147,600	107,147,600	107,147,600	107,147,600	107,147,600	107,147,600	107,147,600	107,147,600	107,147,600	107,147,600
W10 Town of Combes Outside		774,000	774,000	774,000	774,000	774,000	774,000	774,000	774,000	774,000	774,000
W11 City of Primera		153,507,000	153,507,000	153,507,000	153,507,000	153,507,000	153,507,000	153,507,000	153,507,000	153,507,000	153,507,000
W12 City of Palm Valley		168,384,800	168,384,800	168,384,800	168,384,800	168,384,800	168,384,800	168,384,800	168,384,800	168,384,800	168,384,800
W13 East Rio Hondo		42,036,940	42,036,940	42,036,940	42,036,940	42,036,940	42,036,940	42,036,940	42,036,940	42,036,940	42,036,940
W14 Military Hwy WSC		52,236,000	52,236,000	52,236,000	52,236,000	52,236,000	52,236,000	52,236,000	52,236,000	52,236,000	52,236,000
<b>Total System</b>		<b>4,067,655,611</b>	<b>4,090,583,449</b>	<b>4,113,683,246</b>	<b>4,136,956,291</b>	<b>4,160,403,884</b>	<b>4,184,027,334</b>	<b>4,207,827,960</b>	<b>4,231,807,091</b>	<b>4,255,966,065</b>	<b>4,280,306,231</b>

HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL

	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033										
<b>Water Summary</b>																					
Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base																					
<b>5 Revenues and Expenses -- CASH BASIS</b>																					
<b>Water Revenues</b>																					
<b>Water Rate Revenue</b>																					
W1 Residential Inside	\$	4,252,568	\$	5,969,645	\$	7,025,393	\$	8,329,569	\$	9,737,085	\$	10,707,241	\$	11,488,114	\$	12,326,093	\$	13,225,367	\$	14,190,431	
W2 Residential Outside		1,015,830		1,450,834		1,703,709		2,014,919		2,350,352		2,582,625		2,770,415		2,971,899		3,188,077		3,420,026	
W3 Commercial & Industrial Inside		1,599,214		1,892,040		2,222,003		2,626,707		3,039,509		3,325,313		3,562,392		3,816,426		4,088,630		4,380,307	
W4 Commercial & Industrial Outside		127,995		149,036		172,158		199,891		228,570		249,243		266,835		285,672		305,842		327,441	
W5 Multi Housing Apts/Condos Inside		830,616		960,704		1,105,675		1,279,138		1,456,681		1,585,950		1,697,346		1,816,587		1,944,227		2,080,859	
W6 Multi Housing Apts/Condos Outside		51,491		61,516		72,776		86,632		100,999		110,804		118,771		127,312		136,470		146,288	
W7 Public Services/Institutional Inside		1,052,790		1,220,115		1,405,884		1,629,616		1,849,769		2,116,938		2,243,954		2,378,592		2,521,307		2,680,859	
W8 Public Services/Institutional Outside		6,178		7,644		9,282		11,338		13,373		14,583		15,458		16,386		17,369		18,411	
W9 Town of Combes Inside		180,003		200,647		223,216		248,667		274,985		295,084		312,789		331,557		351,450		372,537	
W10 Town of Combes Outside		2,048		2,273		2,500		2,750		3,006		3,215		3,408		3,612		3,829		4,059	
W 11 City of Primera		271,823		299,891		329,880		362,868		396,661		424,202		449,654		476,634		505,232		535,546	
W9 City of Palm Valley		298,167		328,957		361,852		398,037		435,105		465,316		493,235		522,829		554,198		587,450	
W10 East Rio Hondo		74,437		82,123		90,336		99,369		108,623		116,165		123,135		130,523		138,355		146,656	
W 11 Military Hwy WSC		93,847		103,798		114,441		126,213		138,298		148,006		156,886		166,299		176,277		186,854	
		9,857,006		12,729,223		14,839,104		17,415,714		20,133,015		22,024,858		23,575,376		25,235,782		27,013,914		28,918,171	
Non-Rate Revenues (includes Leander Water Reserve Fees)		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673		1,363,673	
<b>Total Revenues</b>		<b>11,220,679</b>		<b>14,092,896</b>		<b>16,202,777</b>		<b>18,779,387</b>		<b>21,496,688</b>		<b>23,388,531</b>		<b>24,939,049</b>		<b>26,599,455</b>		<b>28,377,587</b>		<b>30,281,844</b>	
<b>Water Cost of Service</b>																					
<b>Budget Code</b>																					
P Wages & Benefits	\$	6,392,471	\$	6,712,094	\$	7,047,699	\$	7,400,084	\$	7,770,088	\$	8,158,593	\$	8,566,522	\$	8,994,848	\$	9,444,591	\$	9,916,820	
SU Supplies & Maintenance		3,215,937		3,473,211		3,751,068		4,051,154		4,375,246		4,725,266		5,103,287		5,511,550		5,952,474		6,428,672	
O Other		699,092		702,956		707,111		711,391		715,800		593,403		310,567		315,384		320,345		325,456	
SE Contractual Services		2,691,830		2,772,585		2,855,763		2,941,436		3,029,679		3,120,569		3,214,186		3,310,612		3,409,930		3,512,228	
0 #N/A		-		-		-		-		-		-		-		-		-		-	
0 #N/A		-		-		-		-		-		-		-		-		-		-	
0 #N/A		-		-		-		-		-		-		-		-		-		-	
0 #N/A		-		-		-		-		-		-		-		-		-		-	
0 #N/A		-		-		-		-		-		-		-		-		-		-	
<b>Total</b>		<b>12,999,330</b>		<b>13,660,847</b>		<b>14,361,642</b>		<b>15,104,065</b>		<b>15,890,813</b>		<b>16,597,830</b>		<b>17,194,562</b>		<b>18,132,394</b>		<b>19,127,340</b>		<b>20,183,176</b>	
<b>Department Code</b>																					
A Administration (01)	\$	3,417,781	\$	3,588,740	\$	3,768,941	\$	3,958,924	\$	4,159,261	\$	4,370,559	\$	4,593,465	\$	4,828,665	\$	5,076,892	\$	5,338,920	
WT Water Treatment (04)		5,484,144		5,742,276		6,016,529		6,307,835		6,617,376		6,819,486		6,881,892		7,254,148		7,650,317		8,072,092	
PT Pretreatment (15)		-		-		-		-		-		-		-		-		-		-	
CM Construction Maintenance (08)		482,210		510,457		540,456		572,324		606,183		642,165		680,411		721,072		764,309		810,294	
DS Distribution Services & Maintenance (13) & (05)		2,136,519		2,262,233		2,395,773		2,537,656		2,688,432		2,848,691		3,019,063		3,200,224		3,392,895		3,597,848	
CS Customer Service (32)		799,450		844,118		891,433		941,561		994,680		1,050,979		1,110,660		1,173,939		1,241,047		1,312,229	
WOM Water Operations Mgmt. (38)		679,226		713,024		748,509		785,765		824,881		865,951		909,071		954,346		1,001,881		1,051,792	
WWT Wastewater Treatment (18)		-		-		-		-		-		-		-		-		-		-	
<b>Total</b>		<b>12,999,330</b>		<b>13,660,847</b>		<b>14,361,642</b>		<b>15,104,065</b>		<b>15,890,813</b>		<b>16,597,830</b>		<b>17,194,562</b>		<b>18,132,394</b>		<b>19,127,340</b>		<b>20,183,176</b>	
Total Operating Expenses												12,999,330	13,660,847	14,361,642	15,104,065	15,890,813	16,597,830	17,194,562	18,132,394	19,127,340	20,183,176
<b>Net Revenues for Transfers,Capital Outlays and Debt Service</b>												<b>(1,778,651)</b>	<b>432,048</b>	<b>1,841,135</b>	<b>3,675,323</b>	<b>5,605,875</b>	<b>6,790,701</b>	<b>7,744,487</b>	<b>8,467,061</b>	<b>9,250,247</b>	<b>10,098,668</b>
Capital Outlays												896,802	1,287,500	1,326,125	1,365,909	1,406,886	1,449,093	1,492,565	1,537,342	1,583,463	1,630,966

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Water Summary</b>											
<b>Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>											
<b>Debt Service</b>											
Debt Service -- Current		783,875	782,663	785,700	785,450	784,475	792,575	789,444	789,853	616,275	614,238
Debt Service -- Future		-	144,093	711,563	1,227,697	2,607,985	4,050,210	4,407,080	4,763,949	5,120,819	5,477,688
Total Debt Service		783,875	926,756	1,497,263	2,013,147	3,392,460	4,842,785	5,196,524	5,553,802	5,737,094	6,091,926
<b>Transfers</b>											
Budgeted Transfers		-	-	-	-	-	-	-	-	-	-
Total Transfers		-	-	-	-	-	-	-	-	-	-
<b>Total Cost of Service</b>		<b>14,680,007</b>	<b>15,875,103</b>	<b>17,185,030</b>	<b>18,483,120</b>	<b>20,690,159</b>	<b>22,889,708</b>	<b>23,883,652</b>	<b>25,223,539</b>	<b>26,447,897</b>	<b>27,906,068</b>
<b>Net Revenues</b>		<b>(3,459,328)</b>	<b>(1,782,207)</b>	<b>(982,253)</b>	<b>296,267</b>	<b>806,529</b>	<b>498,823</b>	<b>1,055,397</b>	<b>1,375,916</b>	<b>1,929,690</b>	<b>2,375,776</b>
Percent of COS		-30.8%	-12.6%	-6.1%	1.6%	3.8%	2.1%	4.2%	5.2%	6.8%	7.8%
<b>Debt Coverage</b> (excludes Capital Outlays, G/F Transfers)		<b>(2.27)</b>	<b>0.47</b>	<b>1.23</b>	<b>1.83</b>	<b>1.65</b>	<b>1.40</b>	<b>1.49</b>	<b>1.52</b>	<b>1.61</b>	<b>1.66</b>

<b>HARLINGEN WATERWORKS SYSTEM</b>												
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>												
<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>		

**Wastewater Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**1 Wastewater Monthly Rates and Charges**

**Residential Inside**

Monthly Minimum Charge	5/8"	\$ 6.18	\$ 7.73	\$ 9.66	\$ 12.07	\$ 15.09	\$ 18.86	\$ 19.99	\$ 21.19	\$ 22.46	\$ 23.81	\$ 25.24
Volume Rate/1,000 Gal		3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89

**Commercial**

**Monthly Minimum Charge**

0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5/8"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72	88.72
1"	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72	88.72
1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44	92.64
2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24	111.44
3"	52.97	66.21	82.77	103.46	129.32	161.55	171.35	181.63	192.53	204.08	216.33	229.28
4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.56	549.70	582.73
6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49	1,194.20
8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20	1,899.73
10"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20	1,899.73

**Volume Rate Per 1,000 Gal - Commercial**

Volume Charge	\$ 3.66	\$ 4.06	\$ 4.47	\$ 4.92	\$ 5.41	\$ 5.89	\$ 6.25	\$ 6.62	\$ 7.02	\$ 7.44	\$ 7.89
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**2.1 Residential Monthly Bill --**

5,000 Gallons	Total	\$ 25.03	\$ 28.04	\$ 32.00	\$ 36.65	\$ 42.12	\$ 48.33	\$ 51.23	\$ 54.30	\$ 57.56	\$ 61.02	\$ 64.68
	Dollar Inc		3.01	3.96	4.65	5.48	6.21	2.90	3.07	3.26	3.45	3.66
	Percent Inc		12.0%	14.1%	14.5%	14.9%	14.7%	6.0%	6.0%	6.0%	6.0%	6.0%
10,000 Gallons	Total	43.88	48.35	54.34	61.23	69.16	77.80	82.47	87.42	92.66	98.22	104.11
	Dollar Inc		4.47	5.99	6.88	7.93	8.64	4.67	4.95	5.24	5.56	5.89
	Percent Inc		10.2%	12.4%	12.7%	13.0%	12.5%	6.0%	6.0%	6.0%	6.0%	6.0%
15,000 Gallons	Total	62.73	68.66	76.69	85.81	96.20	107.27	113.71	120.53	127.76	135.43	143.55
	Dollar Inc		5.93	8.03	9.12	10.39	11.07	6.44	6.82	7.23	7.67	8.13
	Percent Inc		9.5%	11.7%	11.9%	12.1%	11.5%	6.0%	6.0%	6.0%	6.0%	6.0%
20,000 Gallons	Total	81.58	88.98	99.03	110.39	123.23	136.74	144.94	153.64	162.86	172.63	182.99
	Dollar Inc		7.40	10.06	11.35	12.85	13.51	8.20	8.70	9.22	9.77	10.36
	Percent Inc		9.1%	11.3%	11.5%	11.6%	11.0%	6.0%	6.0%	6.0%	6.0%	6.0%

HARLINGEN WATERWORKS SYSTEM												
WATER/WASTEWATER COST OF SERVICE MODEL												
Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		

**Wastewater Summary**

Scen: **2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**2.2 Commercial Monthly Bill -- 2" Meter**

20,000 Gallons	0	\$ 73.20	\$ 81.25	\$ 89.38	\$ 98.31	\$ 108.15	\$ 117.88	\$ 124.95	\$ 132.45	\$ 140.40	\$ 148.82	\$ 157.75
5/8"		93.70	106.88	121.41	138.35	158.20	180.44	191.27	202.74	214.91	227.80	241.47
1"		93.70	106.88	121.41	138.35	158.20	180.44	191.27	202.74	214.91	227.80	241.47
1 1/2"		94.61	108.01	122.83	140.13	160.42	183.22	194.21	205.86	218.22	231.31	245.19
2"		98.97	113.46	129.64	148.65	171.06	196.52	208.31	220.81	234.06	248.11	262.99
3"		126.17	147.46	172.14	201.77	237.47	279.53	296.30	314.08	332.93	352.90	374.08
4"		207.80	249.50	299.69	361.21	436.76	528.65	560.36	593.99	629.63	667.40	707.45
6"		349.28	426.35	520.75	637.53	782.17	960.41	1,018.03	1,079.12	1,143.86	1,212.49	1,285.24
8"		512.53	630.41	775.83	956.38	1,180.73	1,458.61	1,546.12	1,638.89	1,737.23	1,841.46	1,951.95
10"		512.53	630.41	775.83	956.38	1,180.73	1,458.61	1,546.12	1,638.89	1,737.23	1,841.46	1,951.95

40,000 Gallons	0	\$ 146.40	\$ 162.50	\$ 178.75	\$ 196.63	\$ 216.29	\$ 235.76	\$ 249.90	\$ 264.90	\$ 280.79	\$ 297.64	\$ 315.50
5/8"		166.90	188.13	210.79	236.67	266.34	298.32	316.22	335.19	355.30	376.62	399.22
1"		166.90	188.13	210.79	236.67	266.34	298.32	316.22	335.19	355.30	376.62	399.22
1 1/2"		167.81	189.27	212.21	238.45	268.56	301.10	319.16	338.31	358.61	380.13	402.94
2"		172.17	194.72	219.02	246.96	279.21	314.40	333.27	353.26	374.46	396.93	420.74
3"		199.37	228.72	261.52	300.09	345.61	397.41	421.26	446.53	473.32	501.72	531.83
4"		281.00	330.75	389.07	459.52	544.91	646.53	685.32	726.44	770.02	816.22	865.20
6"		422.48	507.60	610.13	735.85	890.32	1,078.29	1,142.99	1,211.56	1,284.26	1,361.31	1,442.99
8"		585.73	711.67	865.21	1,054.70	1,288.88	1,576.49	1,671.08	1,771.34	1,877.62	1,990.28	2,109.70
10"		585.73	711.67	865.21	1,054.70	1,288.88	1,576.49	1,671.08	1,771.34	1,877.62	1,990.28	2,109.70

**3 Total Accounts**

<b>Total Accounts</b>	<b>22,157</b>	<b>22,483</b>	<b>22,815</b>	<b>23,151</b>	<b>23,492</b>	<b>23,838</b>	<b>24,190</b>	<b>24,547</b>	<b>24,909</b>	<b>25,277</b>
New Accounts		326	331	336	341	346	352	357	362	368
Avg. Annual Growth Rate		1.47%	1.47%	1.47%	1.47%	1.47%	1.47%	1.48%	1.48%	1.48%

**4 Annual Wastewater Billing Units**

WW1 Residential Inside	968,260,478	982,784,385	997,526,151	1,012,489,043	1,027,676,378	1,043,091,524	1,058,737,897	1,074,618,965	1,090,738,250	1,107,099,324
WW2 Residential Outside	65,621,017	66,605,332	67,604,412	68,618,478	69,647,756	70,692,472	71,752,859	72,829,152	73,921,589	75,030,413
WW3 Commercial & Industrial Inside	518,722,416	526,503,252	534,400,801	542,416,813	550,553,065	558,811,361	567,193,531	575,701,434	584,336,956	593,102,010
WW4 Commercial & Industrial Outside	11,011,792	11,176,969	11,344,623	11,514,793	11,687,515	11,862,827	12,040,770	12,221,381	12,404,702	12,590,773
WW5 Multi Housing Apts/Condos Inside	366,296,439	371,790,885	377,367,749	383,028,265	388,773,689	394,605,294	400,524,374	406,532,239	412,630,223	418,819,676
WW6 Multi Housing Apts/Condos Outside	8,048,222	8,168,945	8,291,479	8,415,851	8,542,089	8,670,220	8,800,274	8,932,278	9,066,262	9,202,256
WW7 Public Services/Institutional Inside	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200
WW8 Public Services/Institutional Outside	953,400	953,400	953,400	953,400	953,400	953,400	953,400	953,400	953,400	953,400
WW9 Town of Combes	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600
WW10 City of Primera	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000
<b>Total System</b>	<b>2,386,783,563</b>	<b>2,415,852,968</b>	<b>2,445,358,415</b>	<b>2,475,306,443</b>	<b>2,505,703,691</b>	<b>2,536,556,899</b>	<b>2,567,872,904</b>	<b>2,599,658,650</b>	<b>2,631,921,182</b>	<b>2,664,667,651</b>

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>													
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
<b>Wastewater Summary</b>													
<b>Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>													
<b>5 Revenues and Expenses -- CASH BASIS</b>													
<b>Wastewater Revenues</b>													
<b>Wastewater Rate Revenue</b>													
WW1 Residential Inside	\$	5,338,054	\$ 6,293,045	\$ 7,335,893	\$ 8,583,467	\$ 10,044,940	\$ 11,092,669	\$ 11,934,603	\$ 12,840,439	\$ 13,815,029	\$ 14,863,589		
WW2 Residential Outside		550,775	587,174	625,670	689,475	802,366	889,303	956,801	1,029,422	1,107,555	1,191,618		
WW5 Commercial & Industrial Inside		2,295,034	2,661,138	3,028,950	3,455,143	3,930,845	4,302,127	4,628,658	4,979,974	5,357,954	5,764,622		
WW6 Commercial & Industrial Outside		52,494	56,809	64,702	73,858	84,094	92,060	99,047	106,565	114,653	123,356		
WW5 Multi Housing Apts/Condos Inside		1,537,913	1,747,163	1,971,417	2,227,364	2,506,175	2,733,039	2,940,477	3,163,659	3,403,781	3,662,128		
WW6 Multi Housing Apts/Condos Outside		46,988	55,752	65,346	76,891	90,528	100,159	107,761	115,940	124,740	134,207		
WW7 Public Services/Institutional Inside		1,205,308	1,352,796	1,507,650	1,682,884	1,871,590	2,012,974	2,133,753	2,261,778	2,397,485	2,541,334		
WW8 Public Services/Institutional Outside		5,897	6,935	8,049	9,380	10,941	11,946	12,663	13,423	14,228	15,082		
WW9 Town of Combes		232,643	256,317	281,948	310,143	339,025	362,565	384,319	407,378	431,821	457,730		
WW10 City of Primera		132,770	143,543	157,897	173,687	189,861	203,044	215,227	228,140	241,829	256,338		
		11,397,876	13,160,672	15,047,524	17,282,291	19,870,366	21,799,887	23,413,309	25,146,718	27,009,073	29,010,005		
Non-Rate Revenues		1,199,051	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051	1,199,051		
<b>Total Revenues</b>		<b>12,596,927</b>	<b>14,359,723</b>	<b>16,246,575</b>	<b>18,481,342</b>	<b>21,069,417</b>	<b>22,998,938</b>	<b>24,612,360</b>	<b>26,345,769</b>	<b>28,208,124</b>	<b>30,209,056</b>		
<b>Wastewater Cost of Service</b>													
<b>Budget Code</b>													
P Wages & Benefits	\$	4,986,138	\$ 5,235,445	\$ 5,497,217	\$ 5,772,078	\$ 6,060,682	\$ 6,363,716	\$ 6,681,902	\$ 7,015,997	\$ 7,366,797	\$ 7,735,137		
SU Supplies & Maintenance		2,214,260	2,391,401	2,582,713	2,789,330	3,012,477	3,253,475	3,513,753	3,794,853	4,098,442	4,426,317		
O Other		107,284	110,502	113,817	117,232	120,749	124,371	128,103	131,946	135,904	139,981		
SE Contractual Services		1,272,042	1,310,203	1,349,509	1,389,994	1,431,694	1,474,645	1,518,884	1,564,451	1,611,384	1,659,726		
0 #N/A		-	-	-	-	-	-	-	-	-	-		
0 #N/A		-	-	-	-	-	-	-	-	-	-		
0 #N/A		-	-	-	-	-	-	-	-	-	-		
0 #N/A		-	-	-	-	-	-	-	-	-	-		
<b>Total Operating Costs</b>		<b>8,579,724</b>	<b>9,047,552</b>	<b>9,543,257</b>	<b>10,068,635</b>	<b>10,625,602</b>	<b>11,216,208</b>	<b>11,842,642</b>	<b>12,507,247</b>	<b>13,212,527</b>	<b>13,961,161</b>		
<b>Department Code</b>													
A Administration (01)	\$	2,699,638	\$ 2,834,675	\$ 2,977,013	\$ 3,127,077	\$ 3,285,319	\$ 3,452,219	\$ 3,628,288	\$ 3,814,068	\$ 4,010,137	\$ 4,217,109		
WT Water Treatment (04)		-	-	-	-	-	-	-	-	-	-		
PT Pretreatment (15)		316,000	331,158	347,084	363,821	381,412	399,903	419,342	439,781	461,275	483,881		
CM Construction Maintenance (08)		-	-	-	-	-	-	-	-	-	-		
DS Distribution Services & Maintenance (13) & (05)		-	-	-	-	-	-	-	-	-	-		
CS Customer Service (32)		631,470	666,753	704,126	743,721	785,678	830,148	877,289	927,272	980,279	1,036,504		
WOM Water Operations Mgmt. (38)		-	-	-	-	-	-	-	-	-	-		
WWC Wastewater Collection (12)		1,963,880	2,074,532	2,191,895	2,316,405	2,448,527	2,588,757	2,737,629	2,895,709	3,063,607	3,241,973		
WWT Wastewater Treatment (18)		2,637,319	2,792,488	2,957,836	3,134,081	3,321,996	3,522,410	3,736,216	3,964,370	4,207,903	4,467,920		
<b>Total</b>		<b>8,579,724</b>	<b>9,047,552</b>	<b>9,543,257</b>	<b>10,068,635</b>	<b>10,625,602</b>	<b>11,216,208</b>	<b>11,842,642</b>	<b>12,507,247</b>	<b>13,212,527</b>	<b>13,961,161</b>		
Total Operating Expenses		8,579,724	9,047,552	9,543,257	10,068,635	10,625,602	11,216,208	11,842,642	12,507,247	13,212,527	13,961,161		
<b>Net Revenues for Transfers,Capital Outlays and Debt Serv</b>		<b>4,017,202</b>	<b>5,312,171</b>	<b>6,703,318</b>	<b>8,412,707</b>	<b>10,443,815</b>	<b>11,782,730</b>	<b>12,769,718</b>	<b>13,838,522</b>	<b>14,995,597</b>	<b>16,247,895</b>		
Capital Outlays		1,873,602	1,287,500	1,326,125	1,365,909	1,406,886	1,449,093	1,492,565	1,537,342	1,583,463	1,630,966		



<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Wastewater Summary**

**Scen: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**Debt Service**

Debt Service -- Current	783,875	782,663	785,700	785,450	784,475	792,575	789,444	789,853	616,275	614,238
Debt Service -- Future	-	144,093	1,827,897	5,493,921	7,658,733	8,516,989	8,691,000	8,865,011	8,988,883	9,112,755
<b>Total Debt Service</b>	<b>783,875</b>	<b>926,756</b>	<b>2,613,597</b>	<b>6,279,371</b>	<b>8,443,208</b>	<b>9,309,564</b>	<b>9,480,444</b>	<b>9,654,864</b>	<b>9,605,158</b>	<b>9,726,992</b>

**Net Revenues for Contingencies & Transfers**

	1,359,725	3,097,915	2,763,596	767,428	593,721	1,024,073	1,796,708	2,646,316	3,806,977	4,889,936
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**Transfers**

Budgeted Transfers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Transfers</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Total Cost of Service**

	11,237,201	11,261,807	13,482,979	17,713,914	20,475,696	21,974,864	22,815,651	23,699,453	24,401,147	25,319,120
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<b>Net Revenues</b>	<b>1,359,725</b>	<b>3,097,915</b>	<b>2,763,596</b>	<b>767,428</b>	<b>593,721</b>	<b>1,024,073</b>	<b>1,796,708</b>	<b>2,646,316</b>	<b>3,806,977</b>	<b>4,889,936</b>
Percent of COS	10.8%	21.6%	17.0%	4.2%	2.8%	4.5%	7.3%	10.0%	13.5%	16.2%
<b>Debt Coverage</b> (excludes Debt, Cap Outlays, G/F Transfers)	<b>5.12</b>	<b>5.73</b>	<b>2.56</b>	<b>1.34</b>	<b>1.24</b>	<b>1.27</b>	<b>1.35</b>	<b>1.43</b>	<b>1.56</b>	<b>1.67</b>

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

2024      2025      2026      2027      2028      2029      2030      2031      2032      2033

**Customer Bill Impact Summary**

**Scenario:      2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**WATER Revenues**

W1	Residential Inside	\$ 4,252,568	\$ 5,969,645	\$ 7,025,393	\$ 8,329,569	\$ 9,737,085	\$ 10,707,241	\$ 11,488,114	\$ 12,326,093	\$ 13,225,367	\$ 14,190,431
W2	Residential Outside	1,015,830	1,450,834	1,703,709	2,014,919	2,350,352	2,582,625	2,770,415	2,971,899	3,188,077	3,420,026
W3	Commercial & Industrial Inside	1,599,214	1,892,040	2,222,003	2,626,707	3,039,509	3,325,313	3,562,392	3,816,426	4,088,630	4,380,307
W4	Commercial & Industrial Outside	127,995	149,036	172,158	199,891	228,570	249,243	266,835	285,672	305,842	327,441
W5	Multi Housing Apts/Condos Inside	830,616	960,704	1,105,675	1,279,138	1,456,681	1,585,950	1,697,346	1,816,587	1,944,227	2,080,859
W6	Multi Housing Apts/Condos Outside	51,491	61,516	72,776	86,632	100,999	110,804	118,771	127,312	136,470	146,288
W7	Public Services/Institutional Inside	1,052,790	1,220,115	1,405,884	1,629,616	1,849,769	1,997,111	2,116,938	2,243,954	2,378,592	2,521,307
W8	Public Services/Institutional Outside	6,178	7,644	9,282	11,338	13,373	14,583	15,458	16,386	17,369	18,411
W9	Town of Combes Inside	180,003	200,647	223,216	248,667	274,985	295,084	312,789	331,557	351,450	372,537
W10	Town of Combes Outside	2,048	2,273	2,500	2,750	3,006	3,215	3,408	3,612	3,829	4,059
W 11	City of Primera	271,823	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
W9	City of Palm Valley	298,167	328,957	361,852	398,037	435,105	465,316	493,235	522,829	554,198	587,450
W10	East Rio Hondo	74,437	82,123	90,336	99,369	108,623	116,165	123,135	130,523	138,355	146,656
W 11	Military Hwy WSC	93,847	103,798	114,441	126,213	138,298	148,006	156,886	166,299	176,277	186,854
		9,857,006	12,729,223	14,839,104	17,415,714	20,133,015	22,024,858	23,575,376	25,235,782	27,013,914	28,918,171

**Average Annual Accounts**

W1	Residential Inside	20,860	21,173	21,490	21,813	22,140	22,472	22,809	23,151	23,498	23,851
W2	Residential Outside	3,207	3,255	3,304	3,354	3,404	3,455	3,507	3,559	3,613	3,667
W3	Commercial & Industrial Inside	2,408	2,445	2,481	2,518	2,556	2,595	2,633	2,673	2,713	2,754
W4	Commercial & Industrial Outside	106	107	109	111	112	114	116	117	119	121
W5	Multi Housing Apts/Condos Inside	752	763	775	786	798	810	822	835	847	860
W6	Multi Housing Apts/Condos Outside	69	70	71	72	73	75	76	77	78	79
W7	Public Services/Institutional Inside	635	635	635	635	635	635	635	635	635	635
W8	Public Services/Institutional Outside	8	8	8	8	8	8	8	8	8	8
W9	Town of Combes Inside	1	1	1	1	1	1	1	1	1	1
W10	Town of Combes Outside	1	1	1	1	1	1	1	1	1	1
W 11	City of Primera	1	1	1	1	1	1	1	1	1	1
W9	City of Palm Valley	1	1	1	1	1	1	1	1	1	1
W10	East Rio Hondo	1	1	1	1	1	1	1	1	1	1
W 11	Military Hwy WSC	1	1	1	1	1	1	1	1	1	1
		28,051	28,462	28,880	29,303	29,733	30,169	30,612	31,061	31,517	31,981

**Average Bill Per Account**

W1	Residential Inside	\$ 16.99	\$ 23.50	\$ 27.24	\$ 31.82	\$ 36.65	\$ 39.71	\$ 41.97	\$ 44.37	\$ 46.90	\$ 49.58
W2	Residential Outside	26.39	37.14	42.97	50.07	57.54	62.29	65.83	69.58	73.54	77.72
W3	Commercial & Industrial Inside	55.33	64.50	74.63	86.92	99.09	106.80	112.73	118.98	125.58	132.56
W4	Commercial & Industrial Outside	100.80	115.63	131.60	150.54	169.59	182.20	192.18	202.70	213.81	225.52
W5	Multi Housing Apts/Condos Inside	92.05	104.90	118.94	135.57	152.10	163.15	172.03	181.40	191.28	201.69
W6	Multi Housing Apts/Condos Outside	62.02	73.00	85.08	99.78	114.61	123.88	130.82	138.16	145.91	154.10
W7	Public Services/Institutional Inside	138.16	160.12	184.50	213.86	242.75	262.09	277.81	294.48	312.15	330.88
W8	Public Services/Institutional Outside	64.36	79.62	96.69	118.10	139.30	151.91	161.03	170.69	180.93	191.78
W9	Town of Combes Inside	15,000.24	16,720.54	18,601.29	20,722.29	22,915.44	24,590.34	26,065.77	27,629.71	29,287.49	31,044.74
W10	Town of Combes Outside	170.69	189.39	208.33	229.17	250.51	267.90	283.97	301.01	319.07	338.22
W 11	City of Primera	22,651.88	24,990.94	27,490.03	30,239.04	33,055.05	35,350.19	37,471.20	39,719.47	42,102.64	44,628.80
W9	City of Palm Valley	24,847.28	27,413.05	30,154.35	33,169.78	36,258.72	38,776.31	41,102.89	43,569.06	46,183.20	48,954.20
W10	East Rio Hondo	6,203.08	6,843.61	7,527.98	8,280.77	9,051.92	9,680.43	10,261.26	10,876.93	11,529.55	12,221.32
W 11	Military Hwy WSC	7,820.57	8,649.85	9,536.71	10,517.73	11,524.80	12,333.80	13,073.82	13,858.25	14,689.75	15,571.13

**Increase/(Decrease) -- Dollars**

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<b>HARLINGEN WATERWORKS SYSTEM</b>										
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>										
	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>

**Customer Bill Impact Summary**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

		<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>
W1	<b>Residential Inside</b>	\$ 6.51	\$ 3.75	\$ 4.58	\$ 4.83	\$ 3.06	\$ 2.27	\$ 2.40	\$ 2.53	\$ 2.68	
W2	Residential Outside	10.75	5.83	7.10	7.47	4.75	3.54	3.74	3.96	4.18	
W3	Commercial & Industrial Inside	9.16	10.13	12.29	12.17	7.72	5.92	6.25	6.60	6.97	
W4	Commercial & Industrial Outside	14.84	15.97	18.94	19.05	12.61	9.98	10.53	11.10	11.72	
W5	Multi Housing Apts/Condos Inside	12.84	14.04	16.63	16.54	11.05	8.88	9.36	9.88	10.42	
W6	Multi Housing Apts/Condos Outside	10.98	12.09	14.70	14.83	9.27	6.94	7.34	7.75	8.19	
W7	Public Services/Institutional Inside	21.96	24.38	29.36	28.89	19.34	15.73	16.67	17.67	18.73	
W8	Public Services/Institutional Outside	15.26	17.07	21.42	21.20	12.61	9.11	9.66	10.24	10.86	
W9	Town of Combes Inside	1,720.30	1,880.75	2,121.00	2,193.15	1,674.90	1,475.42	1,563.95	1,657.78	1,757.25	
W10	Town of Combes Outside	18.70	18.94	20.83	21.34	17.39	16.07	17.04	18.06	19.14	
W 11	City of Primera	2,339.06	2,499.09	2,749.00	2,816.01	2,295.14	2,121.01	2,248.27	2,383.17	2,526.16	
W9	City of Palm Valley	2,565.76	2,741.30	3,015.43	3,088.94	2,517.59	2,326.58	2,466.17	2,614.14	2,770.99	
W10	East Rio Hondo	640.54	684.36	752.80	771.15	628.51	580.83	615.68	652.62	691.77	
W 11	Military Hwy WSC	829.28	886.86	981.02	1,007.07	809.00	740.03	784.43	831.50	881.38	

**Increase/(Decrease) -- Percent**

W1	<b>Residential Inside</b>	<b>38.3%</b>	<b>15.9%</b>	<b>16.8%</b>	<b>15.2%</b>	<b>8.3%</b>	<b>5.7%</b>	<b>5.7%</b>	<b>5.7%</b>	<b>5.7%</b>	
W2	Residential Outside	40.7%	15.7%	16.5%	14.9%	8.3%	5.7%	5.7%	5.7%	5.7%	
W3	Commercial & Industrial Inside	16.6%	15.7%	16.5%	14.0%	7.8%	5.5%	5.5%	5.5%	5.6%	
W4	Commercial & Industrial Outside	14.7%	13.8%	14.4%	12.7%	7.4%	5.5%	5.5%	5.5%	5.5%	
W5	Multi Housing Apts/Condos Inside	14.0%	13.4%	14.0%	12.2%	7.3%	5.4%	5.4%	5.4%	5.4%	
W6	Multi Housing Apts/Condos Outside	17.7%	16.6%	17.3%	14.9%	8.1%	5.6%	5.6%	5.6%	5.6%	
W7	Public Services/Institutional Inside	15.9%	15.2%	15.9%	13.5%	8.0%	6.0%	6.0%	6.0%	6.0%	
W8	Public Services/Institutional Outside	23.7%	21.4%	22.2%	17.9%	9.1%	6.0%	6.0%	6.0%	6.0%	
W9	Town of Combes Inside	11.5%	11.2%	11.4%	10.6%	7.3%	6.0%	6.0%	6.0%	6.0%	
W10	Town of Combes Outside	11.0%	10.0%	10.0%	9.3%	6.9%	6.0%	6.0%	6.0%	6.0%	
W 11	City of Primera	10.3%	10.0%	10.0%	9.3%	6.9%	6.0%	6.0%	6.0%	6.0%	

<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	

**Input Area -- Rate Calculator**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

Water Rates		1-Mar-24	1-Jan-25	1-Jan-26	1-Jan-27	1-Jan-28	1-Jan-29	1-Jan-30	1-Jan-31	1-Jan-32	1-Jan-33
Elasticity Adjustment on Volume		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Month of Adjustment (Oct = 1)		6	4	4	4	4	4	4	4	4	4
Fiscal Year Oct 1 - Sept 30											
Outside City Premium -- Water		50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Meter Charge		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Charge		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Annual Adjustment</b>											
Base Charge (all classes)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
OR by Indiv Rate Class:	Dashboard										
W1 Residential Inside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W2 Residential Outside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W3 Commercial & Industrial Inside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W4 Commercial & Industrial Outside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W5 Multi Housing Apts/Condos Inside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W6 Multi Housing Apts/Condos Outside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W7 Public Services/Institutional Inside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W8 Public Services/Institutional Outside		25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W9 Town of Combes Inside	Wholesale	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W10 Town of Combes Outside	Wholesale	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W11 City of Primera	Wholesale	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W12 City of Palm Valley	Wholesale	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W13 East Rio Hondo	Wholesale	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W14 Military Hwy WSC	Wholesale	25.00%	25.00%	25.00%	25.00%	20.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W1 Residential Inside	Dashboard	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W2 Residential Outside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W3 Commercial & Industrial Inside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W4 Commercial & Industrial Outside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W5 Multi Housing Apts/Condos Inside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W6 Multi Housing Apts/Condos Outside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W7 Public Services/Institutional Inside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W8 Public Services/Institutional Outside		11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W9 Town of Combes Inside	Wholesale	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W10 Town of Combes Outside	Wholesale	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W11 City of Primera	Wholesale	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W12 City of Palm Valley	Wholesale	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W13 East Rio Hondo	Wholesale	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
W14 Military Hwy WSC	Wholesale	11.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%	6.00%
<b>W1 Residential Inside</b>											
Base Charge	Contract Base Charge (not based on meter size)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Base Charge	5/8"	7.93	9.91	12.39	15.49	19.36	23.23	24.63	26.10	27.67	29.33
Base Charge	1"	10.07	13.16	17.16	22.34	29.04	34.85	36.94	39.16	41.51	44.00
Base Charge	1 1/2"	14.56	19.85	26.86	36.15	48.40	58.08	61.57	65.26	69.18	73.33
Base Charge	2"	33.02	43.35	56.77	74.20	96.80	116.16	123.13	130.52	138.35	146.65
Base Charge	3"	49.17	65.92	87.98	116.94	154.88	185.86	197.01	208.83	221.36	234.64
Base Charge	4"	112.87	192.55	305.02	461.68	677.61	813.13	861.92	913.64	968.46	1,028.16
Base Charge	6"	231.80	378.39	583.79	868.24	1,258.42	1,510.11	1,600.71	1,696.76	1,796.48	1,906.48
Base Charge	8"	426.15	746.45	1,200.27	1,834.35	2,710.45	3,252.54	3,447.69	3,654.55	3,873.83	4,106.26
Usage Charge		-	3.00	1.65	1.25	1.25	1.25	1.25	1.33	1.40	1.49
	3,001	10,000	0.06	1.75	1.93	2.12	2.33	2.54	2.69	2.85	3.02
	10,001	20,000		2.50	2.75	3.03	3.33	3.63	3.84	4.08	4.32
	20,001	Above		3.00	3.30	3.63	3.99	4.35	4.61	4.89	5.18
				-	-	-	-	-	-	-	-



HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Input Area -- Rate Calculator**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

		Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>W6</b>	<b>Multi Housing Apts/Condos Outside</b>											
	Contract Base Charge (not based on meter size)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Base Charge 5/8"	12.49	14.87	18.59	23.23	29.04	34.85	36.94	39.16	41.51	44.00	46.64
	Base Charge 1"	15.09	19.74	25.74	33.51	43.56	52.27	55.41	58.73	62.26	65.99	69.95
	Base Charge 1 1/2"	21.86	29.77	40.29	54.22	72.60	87.12	92.35	97.89	103.76	109.99	116.59
	Base Charge 2"	49.55	65.02	85.16	111.31	145.20	174.24	184.70	195.78	207.53	219.98	233.18
	Base Charge 3"	73.77	98.88	131.96	175.41	232.32	278.79	295.52	313.25	332.04	351.96	373.08
	Base Charge 4"	169.32	288.83	457.52	692.52	1,016.42	1,219.70	1,292.88	1,370.46	1,452.68	1,539.85	1,632.24
	Base Charge 6"	346.97	567.59	875.68	1,302.36	1,887.63	2,265.16	2,401.07	2,545.14	2,697.84	2,859.71	3,031.30
	Base Charge 8"	639.24	1,119.68	1,800.41	2,751.53	4,065.67	4,878.81	5,171.54	5,481.83	5,810.74	6,159.38	6,528.95
	Base Charge 10"	639.24	1,119.68	1,800.41	2,751.53	4,065.67	4,878.81	5,171.54	5,481.83	5,810.74	6,159.38	6,528.95
	Usage Charge	2.48	2.75	3.02	3.32	3.66	3.99	4.22	4.48	4.75	5.03	5.33
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-
<b>W7</b>	<b>Public Services/Institutional Inside</b>											
	Contract Base Charge (not based on meter size)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Base Charge 5/8"	7.93	9.91	12.39	15.49	19.36	23.23	24.63	26.10	27.67	29.33	31.09
	Base Charge 1"	10.07	13.16	17.16	22.34	29.04	34.85	36.94	39.16	41.51	44.00	46.64
	Base Charge 1 1/2"	14.56	19.85	26.86	36.15	48.40	58.08	61.57	65.26	69.18	73.33	77.73
	Base Charge 2"	33.02	43.35	56.77	74.20	96.80	116.16	123.13	130.52	138.35	146.65	155.45
	Base Charge 3"	49.17	65.92	87.98	116.94	154.88	185.86	197.01	208.83	221.36	234.64	248.72
	Base Charge 4"	112.87	192.55	305.02	461.68	677.61	813.13	861.92	913.64	968.46	1,026.56	1,088.16
	Base Charge 6"	231.80	378.39	583.79	868.24	1,258.42	1,510.11	1,600.71	1,696.76	1,798.56	1,906.48	2,020.86
	Base Charge 8"	426.15	746.45	1,200.27	1,834.35	2,710.45	3,252.54	3,447.69	3,654.55	3,873.83	4,106.26	4,352.63
	Base Charge 10"	426.15	746.45	1,200.27	1,834.35	2,710.45	3,252.54	3,447.69	3,654.55	3,873.83	4,106.26	4,352.63
	Usage Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	3.56
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-
<b>W8</b>	<b>Public Services/Institutional Outside</b>											
	on meter size)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Base Charge 5/8"	12.49	14.87	18.59	23.23	29.04	34.85	36.94	39.16	41.51	44.00	46.64
	Base Charge 1"	15.09	19.74	25.74	33.51	43.56	52.27	55.41	58.73	62.26	65.99	69.95
	Base Charge 1 1/2"	21.86	29.77	40.29	54.22	72.60	87.12	92.35	97.89	103.76	109.99	116.59
	Base Charge 2"	49.55	65.02	85.16	111.31	145.20	174.24	184.70	195.78	207.53	219.98	233.18
	Base Charge 3"	73.77	98.88	131.96	175.41	232.32	278.79	295.52	313.25	332.04	351.96	373.08
	Base Charge 4"	169.32	288.83	457.52	692.52	1,016.42	1,219.70	1,292.88	1,370.46	1,452.68	1,539.85	1,632.24
	Base Charge 6"	346.97	567.59	875.68	1,302.36	1,887.63	2,265.16	2,401.07	2,545.14	2,697.84	2,859.71	3,031.30
	Base Charge 8"	639.24	1,119.68	1,800.41	2,751.53	4,065.67	4,878.81	5,171.54	5,481.83	5,810.74	6,159.38	6,528.95
	Base Charge 10"	639.24	1,119.68	1,800.41	2,751.53	4,065.67	4,878.81	5,171.54	5,481.83	5,810.74	6,159.38	6,528.95
	Usage Charge	2.48	2.75	3.02	3.32	3.66	3.99	4.22	4.48	4.75	5.03	5.33
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-
<b>W9</b>	<b>Town of Combes Inside</b>											
	Contract Base Charge (not based on meter size)	\$ 954.03	\$ 1,192.54	\$ 1,490.67	\$ 1,863.34	\$ 2,329.17	\$ 2,795.01	\$ 2,962.71	\$ 3,140.47	\$ 3,328.90	\$ 3,528.64	\$ 3,740.35
	Base Charge 5/8"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Base Charge 1"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Base Charge 1 1/2"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Base Charge 2"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Base Charge 3"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Base Charge 4"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Base Charge 6"	954.03	1,192.54	1,490.67	1,863.34	2,329.17	2,795.01	2,962.71	3,140.47	3,328.90	3,528.64	3,740.35
	Usage Charge	1.45	1.61	1.77	1.95	2.14	2.34	2.48	2.62	2.78	2.95	3.12
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Input Area -- Rate Calculator**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

<b>W10</b>	<b>Town of Combes Outside</b>	See "Wholesale Customers monthly to 2018 DDL.xlsx"										
	Contract Base Charge (not based on meter size)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Base Charge 5/8"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1 1/2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 3"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 6"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 8"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 10"	-	-	-	-	-	-	-	-	-	-	
	Usage Charge											
	Volume Charge	2.48	2.75	3.03	3.33	3.66	3.99	4.23	4.49	4.76	5.04	
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	
<b>W11</b>	<b>City of Primavera</b>	See "Wholesale Customers monthly to 2018 DDL.xlsx"										
	Base Charge 5/8"	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Base Charge 3/4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1 1/2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 3"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 6"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 8"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 10"	-	-	-	-	-	-	-	-	-	-	
	Usage Charge											
	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	
<b>W12</b>	<b>City of Palm Valley</b>	See "Wholesale Customers monthly to 2018 DDL.xlsx"										
	Base Charge 5/8"	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Base Charge 3/4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1 1/2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 3"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 6"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 8"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 10"	-	-	-	-	-	-	-	-	-	-	
	Usage Charge											
	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	
<b>W13</b>	<b>East Rio Hondo</b>	See "Wholesale Customers monthly to 2018 DDL.xlsx"										
	Base Charge 5/8"	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Base Charge 3/4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 1 1/2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 2"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 3"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 4"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 6"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 8"	-	-	-	-	-	-	-	-	-	-	
	Base Charge 10"	-	-	-	-	-	-	-	-	-	-	
	Usage Charge											
	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL												
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	

**Input Area -- Rate Calculator**

Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve

<b>W14 Military Hwy WSC</b>												
Base Charge	5/8"	\$ 100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	3/4"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	1"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	1 1/2"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	2"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	3"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	4"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	6"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	8"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
	10"	100.00	125.00	156.25	195.31	244.14	292.97	310.55	329.18	348.93	369.87	392.06
Usage Charge	Volume Charge	1.65	1.83	2.01	2.22	2.44	2.66	2.82	2.99	3.16	3.35	3.56
	Fuel Cost Adjustment	0.06	-	-	-	-	-	-	-	-	-	-

**Wastewater Rates**

Base Charge		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Volume Charge	Residential	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Non-Residential	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Annual Adjustment**

<b>Base Charge -- All Classes</b>												
	Dashboard	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	6.00%	6.00%	6.00%	6.00%	6.00%
<b>Volume Charge</b>												
WW1	Residential Inside	Dashboard	11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW2	Residential Outside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW3	Commercial & Industrial Inside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW4	Commercial & Industrial Outside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW5	Multi Housing Apts/Condos Inside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW6	Multi Housing Apts/Condos Outside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW7	Public Services/Institutional Inside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW8	Public Services/Institutional Outside		11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW9	Town of Combes	Wholesale	11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%
WW10	City of Primera	Wholesale	11.00%	10.00%	10.00%	10.00%	10.00%	9.00%	6.00%	6.00%	6.00%	6.00%

**Residential Inside**

<b>Base Charge (Wtr Mtr Size)</b>												
Base Charge	5/8"	\$ 6.18	\$ 7.73	\$ 9.66	\$ 12.07	\$ 15.09	\$ 18.86	\$ 19.99	\$ 21.19	\$ 22.46	\$ 23.81	\$ 25.24
	1"	9.44	11.80	14.75	18.44	23.05	28.81	30.54	32.37	34.31	36.37	38.55
	1 1/2"	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
	2"	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
	3"	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
	4"	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
	6"	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
	8"	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
Usage Charge	Volume Charge	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
	Fuel Cost Adjustment	0.11	-	-	-	-	-	-	-	-	-	-

**Residential Outside**

<b>Base Charge (Wtr Mtr Size)</b>												
Base Charge	5/8"	232%	\$ 20.50	\$ 20.50	\$ 20.50	\$ 20.50	\$ 22.63	\$ 28.29	\$ 29.99	\$ 31.79	\$ 33.69	\$ 35.72
	1"	117%	20.50	20.50	20.50	20.50	22.63	28.29	29.99	31.79	33.69	35.72
	1 1/2"	0%	21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49
	2"	0%	25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29
	3"	0%	52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08
	4"	0%	134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58
	6"	0%	276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67
	8"	0%	439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64
Usage Charge	Volume Charge	0%	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44
	Fuel Cost Adjustment	0%	0.11	-	-	-	-	-	-	-	-	-





		HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL									
		Current	2024	2025	2026	2027	2028	2029	2030	2031	2032

**Input Area -- Rate Calculator**  
**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

<b>Public Services/Institutional Outside</b>													
<b>Base Charge</b>		(Wtr Mtr Size)											
5/8"		\$	20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
1"			20.50	25.63	32.03	40.04	50.05	62.56	66.31	70.29	74.51	78.98	83.72
1 1/2"			21.41	26.76	33.45	41.82	52.27	65.34	69.26	73.41	77.82	82.49	87.44
2"			25.77	32.21	40.27	50.33	62.92	78.64	83.36	88.36	93.67	99.29	105.24
3"			52.97	66.21	82.77	103.46	129.32	161.65	171.35	181.63	192.53	204.08	216.33
4"			134.60	168.25	210.31	262.89	328.61	410.77	435.41	461.54	489.23	518.58	549.70
6"			276.08	345.10	431.38	539.22	674.02	842.53	893.08	946.67	1,003.47	1,063.67	1,127.49
8"			439.33	549.16	686.45	858.07	1,072.58	1,340.73	1,421.17	1,506.44	1,596.83	1,692.64	1,794.20
<b>Usage Charge</b>		<b>Volume Charge</b>	3.66	4.06	4.47	4.92	5.41	5.89	6.25	6.62	7.02	7.44	7.89
		<b>Fuel Cost Adjustment</b>	0.11	-	-	-	-	-	-	-	-	-	-

<b>Town of Combes</b>													
<b>Base Charge</b>			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
5/8"			-	-	-	-	-	-	-	-	-	-	-
1"			-	-	-	-	-	-	-	-	-	-	-
1 1/2"			-	-	-	-	-	-	-	-	-	-	-
2"			-	-	-	-	-	-	-	-	-	-	-
3"			-	-	-	-	-	-	-	-	-	-	-
4"			-	-	-	-	-	-	-	-	-	-	-
6"			-	-	-	-	-	-	-	-	-	-	-
8"			-	-	-	-	-	-	-	-	-	-	-
10"			-	-	-	-	-	-	-	-	-	-	-
<b>Usage Charge</b>		-	6,500,000		2.80	3.11	3.42	3.76	4.14	4.51	4.78	5.07	5.37
		6,500,001	Above		3.26	3.62	3.98	4.38	4.82	5.25	5.56	5.90	6.25
			Fuel Cost Adjustment		0.11	-	-	-	-	-	-	-	-

<b>City of Primera</b>													
<b>Base Charge</b>			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
5/8"		\$	861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
1"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
1 1/2"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
2"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
3"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
4"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
6"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
8"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
10"			861.00	1,076.25	1,345.31	1,681.64	2,102.05	2,627.56	2,785.22	2,952.33	3,129.47	3,317.24	3,516.27
<b>Usage Charge</b>		<b>Volume Charge</b>	1.37	1.52	1.67	1.84	2.02	2.21	2.34	2.48	2.63	2.79	2.95
		<b>Fuel Cost Adjustment</b>	0.11	-	-	-	-	-	-	-	-	-	-

<b>Net Revenues Available for Contingency and Coverage</b>												
Water			(3,459,328)	(1,782,207)	(982,253)	296,267	806,529	498,823	1,055,397	1,375,916	1,929,690	2,375,776
Wastewater			1,359,725	3,097,915	2,763,596	767,428	593,721	1,024,073	1,796,708	2,646,316	3,806,977	4,889,936
<b>Total</b>			<b>(2,099,602)</b>	<b>1,315,708</b>	<b>1,781,343</b>	<b>1,063,695</b>	<b>1,400,250</b>	<b>1,522,896</b>	<b>2,852,106</b>	<b>4,022,232</b>	<b>5,736,667</b>	<b>7,265,712</b>
<b>Debt Coverage</b>			-9.9%	5.1%	6.0%	3.1%	3.5%	3.5%	6.1%	8.0%	10.6%	12.5%
Water Fund Only			(2.27)	0.47	1.23	1.83	1.65	1.40	1.49	1.52	1.61	1.66
WW Fund Only			5.12	5.73	2.56	1.34	1.24	1.27	1.35	1.43	1.56	1.67
Combined W & WW Funds			1.43	3.10	2.08	1.46	1.36	1.31	1.40	1.47	1.58	1.67
<b>FB Days of Operating Expenses</b>			<b>266</b>	<b>231</b>	<b>202</b>	<b>162</b>	<b>156</b>	<b>155</b>	<b>172</b>	<b>194</b>	<b>228</b>	<b>268</b>
	25% of Operating Costs % Attainment		<b>291%</b>	<b>253%</b>	<b>221%</b>	<b>178%</b>	<b>170%</b>	<b>170%</b>	<b>188%</b>	<b>213%</b>	<b>250%</b>	<b>294%</b>

HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL

Current 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033

Input Area -- Rate Calculator

Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve

WATER Rate Revenues

W1 Residential Inside

Table with columns for years (2024-2033) and rows for Base Charge, Contract Base Charge, Volume charge, and Combined Charge for residential inside services. Includes pipe sizes 5/8", 1", 1 1/2", 2", 3", 4", 6" and total revenue calculations.

W2 Residential Outside

Table with columns for years (2024-2033) and rows for Base Charge, Contract Base Charge, Volume charge, and Combined Charge for residential outside services. Includes pipe sizes 5/8", 1", 1 1/2", 2", 3", 4", 6" and total revenue calculations.



HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL										
Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Input Area -- Rate Calculator**  
**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

**W5 Multi Housing Apts/Condos Inside**

<u>Base Charge</u>										
Contract Base Charge (not based on meter size)										
5/8"	51,959	68,364	86,737	110,048	135,634	151,598	163,104	175,483	188,803	203,133
1"	16,733	23,144	30,598	40,388	50,330	56,253	60,523	65,116	70,059	75,376
1 1/2"	10,082	14,589	19,958	27,160	34,122	38,138	41,032	44,147	47,497	51,103
2"	42,892	59,629	79,150	104,858	130,800	146,195	157,291	169,229	182,074	195,893
3"	703	999	1,350	1,816	2,275	2,543	2,735	2,943	3,166	3,407
4"	-	-	-	-	-	-	-	-	-	-
6"	11,176	19,159	29,187	43,220	55,448	61,974	66,678	71,738	77,183	83,042
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Sub-Total	133,545	185,884	246,980	327,490	408,609	456,699	491,363	528,657	568,782	611,953
<u>Volume charge</u>										
Volume Charge	685,262	774,820	858,694	951,648	1,048,072	1,129,250	1,205,983	1,287,929	1,375,444	1,468,906
Fuel Cost Adjustment	11,810	-	-	-	-	-	-	-	-	-
Sub-Total	697,072	774,820	858,694	951,648	1,048,072	1,129,250	1,205,983	1,287,929	1,375,444	1,468,906
Total	830,616	960,704	1,105,675	1,279,138	1,456,681	1,585,950	1,697,346	1,816,587	1,944,227	2,080,859
<u>Combined Charge</u>										
Contract Base Charge (not based on meter size)										
5/8"	\$ 501,895	\$ 568,485	\$ 640,996	\$ 724,305	\$ 812,130	\$ 880,491	\$ 941,526	\$ 1,006,799	\$ 1,076,606	\$ 1,151,263
1"	128,038	146,863	167,711	192,343	217,681	236,566	253,088	270,767	289,683	309,924
1 1/2"	55,359	64,915	75,732	88,972	102,197	111,486	119,364	127,801	136,836	146,512
2"	129,672	156,088	186,051	223,331	261,277	286,778	307,427	329,567	353,306	378,761
3"	1,646	2,048	2,512	3,104	3,693	4,071	4,367	4,686	5,028	5,395
4"	-	-	-	-	-	-	-	-	-	-
6"	14,005	22,305	32,673	47,083	59,703	66,558	71,573	76,967	82,767	89,005
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	\$ 830,616	\$ 960,704	\$ 1,105,675	\$ 1,279,138	\$ 1,456,681	\$ 1,585,950	\$ 1,697,346	\$ 1,816,587	\$ 1,944,227	\$ 2,080,859

**W6 Multi Housing Apts/Condos Outside**

<u>Base Charge</u>										
Contract Base Charge (not based on meter size)										
5/8"	7,349	9,459	12,001	15,227	18,767	20,976	22,568	24,281	26,124	28,106
1"	2,339	3,236	4,279	5,647	7,038	7,866	8,463	9,105	9,796	10,540
1 1/2"	1,261	1,824	2,495	3,395	4,265	4,767	5,129	5,518	5,937	6,388
2"	6,295	8,750	11,614	15,387	19,194	21,452	23,081	24,833	26,717	28,745
3"	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Sub-Total	17,244	23,269	30,389	39,656	49,263	55,061	59,241	63,737	68,575	73,779
<u>Volume charge</u>										
Volume Charge	33,858	38,247	42,387	46,976	51,735	55,742	59,530	63,575	67,895	72,509
Cost Adjustment	389	-	-	-	-	-	-	-	-	-
Sub-Total	34,247	38,247	42,387	46,976	51,735	55,742	59,530	63,575	67,895	72,509
Total	51,491	61,516	72,776	86,632	100,999	110,804	118,771	127,312	136,470	146,288
<u>Combined Charge</u>										
Contract Base Charge (not based on meter size)										
5/8"	\$ 29,509	\$ 34,207	\$ 39,428	\$ 45,623	\$ 52,243	\$ 57,044	\$ 61,087	\$ 65,418	\$ 70,056	\$ 75,024
1"	7,879	9,423	11,135	13,246	15,407	16,883	18,093	19,389	20,779	22,269
1 1/2"	3,275	4,073	4,988	6,158	7,308	8,046	8,631	9,258	9,931	10,653
2"	10,828	13,812	17,225	21,604	26,041	28,830	30,960	33,247	35,703	38,342
3"	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	\$ 51,491	\$ 61,516	\$ 72,776	\$ 86,632	\$ 100,999	\$ 110,804	\$ 118,771	\$ 127,312	\$ 136,470	\$ 146,288

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Input Area -- Rate Calculator**  
**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

**W7 Public Services/Institutional Inside**

	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Base Charge</b>											
Contract Base Charge (not based on meter size)											
5/8"	-	-	-	-	-	-	-	-	-	-	-
1"	17,343	22,482	28,102	35,127	42,655	46,970	49,789	52,776	55,942	59,299	
1 1/2"	17,839	24,309	31,664	41,176	50,554	55,669	59,009	62,549	66,302	70,280	
2"	16,102	22,954	30,939	41,481	51,344	56,538	59,931	63,527	67,338	71,378	
3"	115,925	158,776	207,644	271,021	333,075	366,775	388,781	412,108	436,835	463,045	
4"	4,143	5,805	7,724	10,241	12,638	13,917	14,752	15,637	16,576	17,570	
6"	7,330	12,841	19,654	29,070	36,862	40,592	43,027	45,609	48,345	51,246	
8"	14,645	24,736	37,124	54,161	68,458	75,385	79,908	84,702	89,784	95,171	
10"	-	-	-	-	-	-	-	-	-	-	
Sub-Total	-	193,326	271,903	362,851	482,279	595,586	655,846	695,196	736,908	781,123	827,990
<b>Volume charge</b>											
Volume Charge											
-	844,902	948,212	1,043,034	1,147,337	1,254,183	1,341,266	1,421,742	1,507,046	1,597,469	1,693,317	
Fuel Cost Adjustment											
-	14,561	-	-	-	-	-	-	-	-	-	-
Sub-Total	-	859,463	948,212	1,043,034	1,147,337	1,254,183	1,341,266	1,421,742	1,507,046	1,597,469	1,693,317
Total		1,052,790	1,220,115	1,405,884	1,629,616	1,849,769	1,997,111	2,116,938	2,243,954	2,378,592	2,521,307
<b>Combined Charge</b>											
Contract Base Charge (not based on meter size)											
5/8"	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1"	236,608	264,388	294,199	327,834	362,619	389,152	412,501	437,251	463,486	491,295	
1 1/2"	191,085	215,445	241,913	272,450	303,365	326,034	345,596	366,332	388,312	411,610	
2"	121,674	139,428	159,060	182,414	205,401	221,292	234,570	248,644	263,563	279,376	
3"	458,357	536,568	623,215	728,149	832,773	901,169	955,239	1,012,553	1,073,307	1,137,705	
4"	12,264	14,764	17,580	21,082	24,489	26,591	28,186	29,877	31,670	33,570	
6"	12,744	18,814	26,224	36,298	44,762	49,041	51,983	55,102	58,408	61,913	
8"	20,059	30,708	43,695	61,389	76,359	83,833	88,863	94,195	99,847	105,838	
10"	-	-	-	-	-	-	-	-	-	-	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-Total	\$ -	\$ 1,052,790	\$ 1,220,115	\$ 1,405,884	\$ 1,629,616	\$ 1,849,769	\$ 1,997,111	\$ 2,116,938	\$ 2,243,954	\$ 2,378,592	\$ 2,521,307

**W8 Public Services/Institutional Outside**

	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Base Charge</b>											
Contract Base Charge (not based on meter size)											
5/8"	-	-	-	-	-	-	-	-	-	-	-
1"	328	416	520	651	790	870	922	977	1,036	1,098	
1 1/2"	418	570	742	965	1,185	1,305	1,383	1,466	1,554	1,647	
2"	310	441	595	798	987	1,087	1,153	1,222	1,295	1,373	
3"	2,062	2,824	3,693	4,821	5,924	6,524	6,915	7,330	7,770	8,236	
4"	-	-	-	-	-	-	-	-	-	-	
6"	-	-	-	-	-	-	-	-	-	-	
Sub-Total	-	3,118	4,252	5,551	7,234	8,886	9,785	10,373	10,995	11,655	12,354
<b>Volume charge</b>											
Volume Charge											
-	3,025	3,392	3,731	4,104	4,486	4,798	5,086	5,391	5,714	6,057	
Fuel Cost Adjustment											
-	35	-	-	-	-	-	-	-	-	-	-
Sub-Total	-	3,060	3,392	3,731	4,104	4,486	4,798	5,086	5,391	5,714	6,057
Total		6,178	7,644	9,282	11,338	13,373	14,583	15,458	16,386	17,369	18,411
<b>Combined Charge</b>											
Contract Base Charge (not based on meter size)											
5/8"	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1"	1,093	1,264	1,453	1,677	1,912	2,069	2,193	2,325	2,465	2,612	
1 1/2"	1,183	1,418	1,675	1,991	2,306	2,504	2,654	2,814	2,983	3,162	
2"	692	865	1,061	1,311	1,548	1,687	1,788	1,896	2,009	2,130	
3"	3,210	4,096	5,092	6,360	7,607	8,323	8,822	9,352	9,913	10,507	
4"	-	-	-	-	-	-	-	-	-	-	
6"	-	-	-	-	-	-	-	-	-	-	
Total	\$ -	\$ 6,178	\$ 7,644	\$ 9,282	\$ 11,338	\$ 13,373	\$ 14,583	\$ 15,458	\$ 16,386	\$ 17,369	\$ 18,411

<b>HARLINGEN WATERWORKS SYSTEM</b>											
<b>WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	<b>Current</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>

**Input Area -- Rate Calculator**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve**

**W9 Town of Combes Inside**

<u>Base Charge</u>											
Contract Base Charge (not based on meter size)	12,879	16,696	20,869	26,087	31,677	34,882	36,975	39,193	41,545	44,037	
5/8"	-	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-
Sub-Total	<u>12,879</u>	<u>16,696</u>	<u>20,869</u>	<u>26,087</u>	<u>31,677</u>	<u>34,882</u>	<u>36,975</u>	<u>39,193</u>	<u>41,545</u>	<u>44,037</u>	
<u>Volume charge</u>											
Volume Charge	163,909	183,951	202,346	222,581	243,309	260,202	275,815	292,363	309,905	328,500	
Fuel Cost Adjustment	3,214	-	-	-	-	-	-	-	-	-	-
Sub-Total	<u>167,123</u>	<u>183,951</u>	<u>202,346</u>	<u>222,581</u>	<u>243,309</u>	<u>260,202</u>	<u>275,815</u>	<u>292,363</u>	<u>309,905</u>	<u>328,500</u>	
Total	180,003	200,647	223,216	248,667	274,985	295,084	312,789	331,557	351,450	372,537	
<u>Combined Charge</u>											
Contract Base Charge (not based on meter size)	180,003	200,647	223,216	248,667	274,985	295,084	312,789	331,557	351,450	372,537	
5/8"	-	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-
Total	<u>\$ 180,003</u>	<u>\$ 200,647</u>	<u>\$ 223,216</u>	<u>\$ 248,667</u>	<u>\$ 274,985</u>	<u>\$ 295,084</u>	<u>\$ 312,789</u>	<u>\$ 331,557</u>	<u>\$ 351,450</u>	<u>\$ 372,537</u>	

**W10 Town of Combes Outside**

<u>Base Charge</u>											
Contract Base Charge (not based on meter size)	-	-	-	-	-	-	-	-	-	-	-
5/8"	-	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-	-
Sub-Total	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>Volume charge</u>											
Volume Charge	2,025	2,273	2,500	2,750	3,006	3,215	3,408	3,612	3,829	4,059	
Fuel Cost Adjustment	23	-	-	-	-	-	-	-	-	-	-
Sub-Total	<u>2,048</u>	<u>2,273</u>	<u>2,500</u>	<u>2,750</u>	<u>3,006</u>	<u>3,215</u>	<u>3,408</u>	<u>3,612</u>	<u>3,829</u>	<u>4,059</u>	
Total	2,048	2,273	2,500	2,750	3,006	3,215	3,408	3,612	3,829	4,059	
<u>Combined Charge</u>											
Contract Base Charge (not based on meter size)	2,048	2,273	2,500	2,750	3,006	3,215	3,408	3,612	3,829	4,059	
5/8"	-	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-	-
Total	<u>\$ 2,048</u>	<u>\$ 2,273</u>	<u>\$ 2,500</u>	<u>\$ 2,750</u>	<u>\$ 3,006</u>	<u>\$ 3,215</u>	<u>\$ 3,408</u>	<u>\$ 3,612</u>	<u>\$ 3,829</u>	<u>\$ 4,059</u>	

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL										
Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Input Area -- Rate Calculator**

Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve

**W 11 City of Primera**

<u>Base Charge</u>										
5/8"	-	-	-	-	-	-	-	-	-	-
3/4"	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Sub-Total	-	-	-	-	-	-	-	-	-	-
<u>Volume charge</u>										
- Volume Charge	267,217	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
- Fuel Cost Adjustment	4,605	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Sub-Total	271,823	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
Total	271,823	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
<u>Combined Charge</u>										
5/8"	271,823	299,891	329,880	362,868	396,661	424,202	449,654	476,634	505,232	535,546
3/4"	-	-	-	-	-	-	-	-	-	-
1"	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	\$ 271,823	\$ 299,891	\$ 329,880	\$ 362,868	\$ 396,661	\$ 424,202	\$ 449,654	\$ 476,634	\$ 505,232	\$ 535,546

**W12 City of Palm Valley**

<u>Contract Base Charge (not based on meter size)</u>										
5/8"	\$ 298,167	\$ 328,957	\$ 361,852	\$ 398,037	\$ 435,105	\$ 465,316	\$ 493,235	\$ 522,829	\$ 554,198	\$ 587,450
1"	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	\$ 298,167	\$ 328,957	\$ 361,852	\$ 398,037	\$ 435,105	\$ 465,316	\$ 493,235	\$ 522,829	\$ 554,198	\$ 587,450

**W13 East Rio Hondo**

<u>Contract Base Charge (not based on meter size)</u>										
5/8"	\$ 74,437	\$ 82,123	\$ 90,336	\$ 99,369	\$ 108,623	\$ 116,165	\$ 123,135	\$ 130,523	\$ 138,355	\$ 146,656
1"	-	-	-	-	-	-	-	-	-	-
1 1/2"	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-
4"	-	-	-	-	-	-	-	-	-	-
6"	-	-	-	-	-	-	-	-	-	-
8"	-	-	-	-	-	-	-	-	-	-
10"	-	-	-	-	-	-	-	-	-	-
Total	\$ 74,437	\$ 82,123	\$ 90,336	\$ 99,369	\$ 108,623	\$ 116,165	\$ 123,135	\$ 130,523	\$ 138,355	\$ 146,656





HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL

Current     2024     2025     2026     2027     2028     2029     2030     2031     2032     2033

Input Area -- Rate Calculator

Scenario:     2024 02 27 -- Scen IIB -- On Time -- Inve

WW Rate Revenues

WW	Description	Wholesale	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
WW1	Residential Inside		\$	5,338,054	\$ 6,293,045	\$ 7,335,893	\$ 8,583,467	\$ 10,044,940	\$ 11,092,669	\$ 11,934,603	\$ 12,840,439	\$ 13,815,029	\$ 14,863,589
WW2	Residential Outside			550,775	587,174	625,670	689,475	802,366	889,303	956,801	1,029,422	1,107,555	1,191,618
WW3	Commercial & Industrial Inside			2,295,034	2,661,138	3,028,950	3,455,143	3,930,845	4,302,127	4,628,658	4,979,974	5,357,954	5,764,622
WW4	Commercial & Industrial Outside			52,494	56,809	64,702	73,858	84,094	92,060	99,047	106,565	114,653	123,356
WW5	Multi Housing Apts/Condos Inside			1,537,913	1,747,163	1,971,417	2,227,364	2,506,175	2,733,039	2,940,477	3,163,659	3,403,781	3,662,128
WW6	Multi Housing Apts/Condos Outside			46,988	55,752	65,346	76,891	90,528	100,159	107,761	115,940	124,740	134,207
WW7	Public Services/Institutional Outside			1,205,308	1,352,796	1,507,650	1,682,884	1,871,590	2,012,974	2,133,753	2,261,778	2,397,485	2,541,334
WW8	Public Services/Institutional Inside			5,897	6,935	8,049	9,380	10,941	12,663	14,423	16,228	18,082	20,018
WW9	Town of Combes	Wholesale		232,643	256,317	281,948	310,143	339,025	362,565	384,319	407,378	431,821	457,730
WW10	City of Primera	Wholesale		132,770	143,543	157,897	173,687	189,861	203,044	215,227	228,140	241,829	256,338
	Sub-Total			11,997,876	13,160,672	15,047,524	17,282,291	19,870,366	21,799,887	23,413,309	25,146,718	27,009,073	29,010,005

WW1	Residential Inside	(Wtr Mtr Size)	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	5/8"		\$	5,016,950	\$ 5,908,021	\$ 6,880,651	\$ 8,043,011	\$ 9,402,594	\$ 10,379,930	\$ 11,167,767	\$ 12,015,400	\$ 12,927,369	\$ 13,908,556
	1"			292,407	349,587	412,341	488,326	578,892	641,825	690,539	742,951	799,341	860,011
	1 1/2"			26,990	33,315	40,319	48,977	59,598	66,599	71,654	77,092	82,944	89,239
	2"			1,707	2,122	2,582	3,153	3,856	4,316	4,643	4,996	5,375	5,783
	3"			-	-	-	-	-	-	-	-	-	-
	4"			-	-	-	-	-	-	-	-	-	-
	6"			-	-	-	-	-	-	-	-	-	-
	8"			-	-	-	-	-	-	-	-	-	-
	<b>Total</b>			5,338,054	6,293,045	7,335,893	8,583,467	10,044,940	11,092,669	11,934,603	12,840,439	13,815,029	14,863,589

WW2	Residential Outside	(Wtr Mtr Size)	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	5/8"			522,436	556,635	592,782	652,906	759,624	841,890	905,790	974,539	1,048,507	1,128,089
	1"			26,286	28,007	29,825	32,851	38,220	42,359	45,574	49,033	52,755	56,759
	1 1/2"			2,053	2,532	3,063	3,718	4,522	5,053	5,436	5,849	6,293	6,771
	2"			-	-	-	-	-	-	-	-	-	-
	3"			-	-	-	-	-	-	-	-	-	-
	4"			-	-	-	-	-	-	-	-	-	-
	6"			-	-	-	-	-	-	-	-	-	-
	8"			-	-	-	-	-	-	-	-	-	-
	<b>Total</b>			550,775	587,174	625,670	689,475	802,366	889,303	956,801	1,029,422	1,107,555	1,191,618

WW3	Commercial & Industrial Inside	(Wtr Mtr Size)	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	5/8"			1,271,260	1,461,987	1,650,794	1,866,564	2,102,112	2,293,080	2,467,124	2,654,379	2,855,847	3,072,605
	1"			477,217	551,730	626,215	712,121	807,300	882,539	949,523	1,021,592	1,099,131	1,182,555
	1 1/2"			242,654	285,161	328,751	380,205	439,302	483,184	519,857	559,314	601,766	647,440
	2"			237,370	280,340	324,700	377,372	438,400	483,018	519,679	559,122	601,560	647,218
	3"			39,869	48,194	57,015	67,726	80,541	89,384	96,168	103,467	111,321	119,770
	4"			14,668	18,330	22,317	27,267	33,370	37,354	40,189	43,239	46,521	50,052
	6"			4,877	6,223	7,708	9,569	11,896	13,377	14,392	15,485	16,660	17,925
	8"			-	-	-	-	-	-	-	-	-	-
	10"			7,119	9,173	11,451	14,319	17,922	20,192	21,725	23,374	25,148	27,057
	<b>Total</b>			2,295,034	2,661,138	3,028,950	3,455,143	3,930,845	4,302,127	4,628,658	4,979,974	5,357,954	5,764,622

WW4	Commercial & Industrial Outside	(Wtr Mtr Size)	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	5/8"			30,919	33,437	38,066	43,431	49,422	54,094	58,200	62,617	67,370	72,483
	1"			11,892	12,860	14,641	16,704	19,008	20,805	22,385	24,084	25,912	27,878
	1 1/2"			4,782	5,177	5,898	6,735	7,671	8,398	9,036	9,721	10,459	11,253
	2"			4,902	5,335	6,098	6,988	7,992	8,762	9,427	10,143	10,913	11,741
	3"			-	-	-	-	-	-	-	-	-	-
	4"			-	-	-	-	-	-	-	-	-	-
	6"			-	-	-	-	-	-	-	-	-	-
	8"			-	-	-	-	-	-	-	-	-	-
	10"			-	-	-	-	-	-	-	-	-	-
	<b>Total</b>			52,494	56,809	64,702	73,858	84,094	92,060	99,047	106,565	114,653	123,356



HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Input Area -- Rate Calculator</b>											
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve</b>											
<b>WW5 Multi Housing Apts/Condos Inside</b>	(Wtr Mtr Size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5/8"	960,369	1,085,535	1,219,210	1,370,396	1,532,623	1,668,028	1,794,631	1,930,844	2,077,395	2,235,069
	1"	242,529	275,010	309,776	349,326	392,176	427,363	459,800	494,699	532,246	572,644
	1 1/2"	106,392	121,926	138,663	158,032	179,604	196,503	211,418	227,464	244,729	263,304
	2"	207,797	238,971	272,626	311,764	355,698	389,652	419,227	451,046	485,281	522,114
	3"	2,908	3,406	3,948	4,593	5,342	5,887	6,334	6,815	7,332	7,889
	4"	-	-	-	-	-	-	-	-	-	-
	6"	17,917	22,315	27,193	33,253	40,732	45,605	49,066	52,790	56,797	61,108
	<b>Total</b>	<b>1,537,913</b>	<b>1,747,163</b>	<b>1,971,417</b>	<b>2,227,364</b>	<b>2,506,175</b>	<b>2,733,039</b>	<b>2,940,477</b>	<b>3,163,659</b>	<b>3,403,781</b>	<b>3,662,128</b>
<b>WW6 Multi Housing Apts/Condos Outside</b>	(Wtr Mtr Size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5/8"	30,670	36,345	42,553	50,016	58,817	65,050	69,988	75,300	81,015	87,164
	1"	7,010	8,307	9,726	11,432	13,444	14,869	15,997	17,211	18,518	19,923
	1 1/2"	2,666	3,165	3,710	4,366	5,142	5,690	6,122	6,586	7,086	7,624
	2"	6,641	7,936	9,357	11,076	13,125	14,550	15,654	16,843	18,121	19,496
	3"	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>46,988</b>	<b>55,752</b>	<b>65,346</b>	<b>76,891</b>	<b>90,528</b>	<b>100,159</b>	<b>107,761</b>	<b>115,940</b>	<b>124,740</b>	<b>134,207</b>
<b>WW7 Public Services/Institutional Inside</b>	(Wtr Mtr Size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5/8"	295,209	328,268	362,750	401,093	441,149	472,746	501,111	531,177	563,048	596,831
	1"	232,119	258,754	286,587	317,693	350,477	375,955	398,512	422,423	447,768	474,635
	1 1/2"	148,791	167,272	186,697	208,739	232,586	250,311	265,330	281,249	298,124	316,012
	2"	492,753	555,538	621,645	697,000	779,153	839,415	889,780	943,167	999,757	1,059,743
	3"	14,103	16,149	18,320	20,847	23,697	25,667	27,207	28,840	30,570	32,404
	4"	9,256	10,931	12,731	14,888	17,429	19,052	20,195	21,406	22,691	24,052
	6"	13,076	15,883	18,921	22,625	27,100	29,828	31,618	33,515	35,526	37,658
	<b>Total</b>	<b>1,205,308</b>	<b>1,352,796</b>	<b>1,507,650</b>	<b>1,682,884</b>	<b>1,871,590</b>	<b>2,012,974</b>	<b>2,133,753</b>	<b>2,261,778</b>	<b>2,397,485</b>	<b>2,541,334</b>
<b>WW8 Public Services/Institutional Outside</b>	(Wtr Mtr Size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5/8"	1,620	1,898	2,195	2,549	2,963	3,231	3,425	3,631	3,848	4,079
	1"	810	949	1,098	1,275	1,481	1,616	1,713	1,815	1,924	2,040
	1 1/2"	822	965	1,118	1,300	1,512	1,650	1,749	1,854	1,966	2,083
	2"	2,644	3,124	3,639	4,256	4,984	5,449	5,776	6,123	6,490	6,879
	3"	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>5,897</b>	<b>6,935</b>	<b>8,049</b>	<b>9,380</b>	<b>10,941</b>	<b>11,946</b>	<b>12,663</b>	<b>13,423</b>	<b>14,228</b>	<b>15,082</b>
<b>WW9 Town of Combes</b>	(Wtr Mtr Size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5/8"	232,643	256,317	281,948	310,143	339,025	362,565	384,319	407,378	431,821	457,730
	1"	-	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	-	-	-	-	-	-	-	-
	2"	-	-	-	-	-	-	-	-	-	-
	3"	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>232,643</b>	<b>256,317</b>	<b>281,948</b>	<b>310,143</b>	<b>339,025</b>	<b>362,565</b>	<b>384,319</b>	<b>407,378</b>	<b>431,821</b>	<b>457,730</b>
<b>WW10 City of Primera</b>	(Wtr Mtr Size)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5/8"	132,770	143,543	157,897	173,687	189,961	203,044	215,227	228,140	241,829	256,338
	1"	-	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	-	-	-	-	-	-	-	-
	2"	-	-	-	-	-	-	-	-	-	-
	3"	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	<b>132,770</b>	<b>143,543</b>	<b>157,897</b>	<b>173,687</b>	<b>189,961</b>	<b>203,044</b>	<b>215,227</b>	<b>228,140</b>	<b>241,829</b>	<b>256,338</b>
<b>Total Revenues</b>		<b>\$ 11,397,876</b>	<b>\$ 13,160,672</b>	<b>\$ 15,047,524</b>	<b>\$ 17,282,291</b>	<b>\$ 19,870,366</b>	<b>\$ 21,799,887</b>	<b>\$ 23,413,309</b>	<b>\$ 25,146,718</b>	<b>\$ 27,009,073</b>	<b>\$ 29,010,005</b>

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL

Current 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033

Input Area -- Rate Calculator Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve

Table with columns for categories (Residential Inside, Commercial & Industrial, etc.) and years (2024-2033). Includes sub-totals for Net Revenues and Revenues.

Summary table for Revenues with columns: Revenues, Water Rate Revenues, WW Rate Revenues, Non-Rate Revenues, and values for each year from 2024 to 2033.

WATER -- Customer and Usage Data

Table showing Net Annual Volume after Minimum for Residential Inside, Residential Outside, Commercial & Industrial Inside, and Commercial & Industrial Outside across various volume and cost adjustment scenarios.





HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Input Area -- Rate Calculator</b>											
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve</b>											
<b>Multi Housing Apts/Condos Outsid Total</b>		<b>830</b>	<b>843</b>	<b>855</b>	<b>868</b>	<b>881</b>	<b>894</b>	<b>908</b>	<b>921</b>	<b>935</b>	<b>949</b>
Contract Base Charge (not based on meter size)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5/8"		64.71%	64.71%	64.71%	64.71%	64.71%	64.71%	64.71%	64.71%	64.71%	64.71%
1"		16.18%	16.18%	16.18%	16.18%	16.18%	16.18%	16.18%	16.18%	16.18%	16.18%
1 1/2"		5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%
2"		13.24%	13.24%	13.24%	13.24%	13.24%	13.24%	13.24%	13.24%	13.24%	13.24%
3"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Public Services/Institutional Inside Total</b>		<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>	<b>7,620</b>
Contract Base Charge (not based on meter size)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5/8"		25.51%	25.51%	25.51%	25.51%	25.51%	25.51%	25.51%	25.51%	25.51%	25.51%
1"		20.16%	20.16%	20.16%	20.16%	20.16%	20.16%	20.16%	20.16%	20.16%	20.16%
1 1/2"		12.28%	12.28%	12.28%	12.28%	12.28%	12.28%	12.28%	12.28%	12.28%	12.28%
2"		39.84%	39.84%	39.84%	39.84%	39.84%	39.84%	39.84%	39.84%	39.84%	39.84%
3"		0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%
4"		0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%
6"		0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%
8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Public Services/Institutional Outsid Total</b>		<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>
Contract Base Charge (not based on meter size)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5/8"		25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
1"		25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
1 1/2"		12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
2"		37.50%	37.50%	37.50%	37.50%	37.50%	37.50%	37.50%	37.50%	37.50%	37.50%
3"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Town of Combes Inside Total</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
Contract Base Charge (not based on meter size)		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
5/8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1 1/2"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Town of Combes Outside Total</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
Contract Base Charge (not based on meter size)		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
5/8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1 1/2"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10"		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Input Area -- Rate Calculator</b>											
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve</b>											
City of Primera	<b>Total</b>	12	12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on meter size)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1 1/2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
City of Palm Valley	<b>Total</b>	12	12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on meter size)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1 1/2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
East Rio Hondo	<b>Total</b>	12	12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on meter size)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1 1/2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Military Hwy WSC	<b>Total</b>	12	12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on meter size)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1 1/2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Total System</b>		336,616	341,548	346,554	351,636	356,794	362,029	367,342	372,736	378,210	383,766
		TRUE									
<b>Customer Class Units -- LUE's - Water</b>		LUEs									
<b>Residential Inside</b>	<b>Total</b>	271,697	275,772	279,909	284,108	288,369	292,695	297,085	301,541	306,065	310,656
	Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-
	5/8"	1.0	237,485	241,047	244,662	248,332	252,057	255,838	259,676	263,571	267,525
	1"	2.5	30,098	30,549	31,007	31,472	31,945	32,424	32,910	33,404	33,905
	1 1/2"	5.0	3,724	3,780	3,837	3,894	3,953	4,012	4,072	4,133	4,195
	2"	8.0	391	397	403	409	415	421	427	434	440
	3"	16.0	-	-	-	-	-	-	-	-	-
	4"	25.0	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-



			<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>										
			Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Input Area -- Rate Calculator</b>													
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve</b>													
<b>Residential Outside</b>	<b>Total</b>			<b>41,795</b>	<b>42,422</b>	<b>43,058</b>	<b>43,704</b>	<b>44,360</b>	<b>45,025</b>	<b>45,700</b>	<b>46,386</b>	<b>47,082</b>	<b>47,788</b>
	Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-	-
	5/8"	1.0	36,508	37,056	37,611	38,176	38,748	39,329	39,919	40,518	41,126	41,743	41,743
	1"	2.5	4,640	4,709	4,780	4,852	4,925	4,998	5,073	5,149	5,227	5,305	5,305
	1 1/2"	5.0	549	558	566	575	583	592	601	610	619	628	628
	2"	8.0	98	99	101	102	104	105	107	108	110	112	112
	3"	16.0	-	-	-	-	-	-	-	-	-	-	-
	4"	25.0	-	-	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-	-	-
<b>Commercial &amp; Industrial Inside</b>	<b>Total</b>			<b>76,013</b>	<b>77,154</b>	<b>78,311</b>	<b>79,486</b>	<b>80,678</b>	<b>81,888</b>	<b>83,116</b>	<b>84,363</b>	<b>85,628</b>	<b>86,913</b>
	Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-	-
	5/8"	1.0	16,996	17,251	17,510	17,773	18,039	18,310	18,585	18,863	19,146	19,433	19,433
	1"	2.5	15,354	15,584	15,818	16,055	16,296	16,541	16,789	17,041	17,296	17,556	17,556
	1 1/2"	5.0	13,736	13,942	14,151	14,364	14,579	14,798	15,020	15,245	15,474	15,706	15,706
	2"	8.0	20,610	20,920	21,233	21,552	21,875	22,203	22,536	22,874	23,218	23,566	23,566
	3"	16.0	5,470	5,552	5,635	5,720	5,806	5,893	5,981	6,071	6,162	6,254	6,254
	4"	25.0	1,832	1,859	1,887	1,915	1,944	1,973	2,003	2,033	2,063	2,094	2,094
	6"	50.0	611	620	629	638	648	658	668	678	688	698	698
	8"	80.0	-	-	-	-	-	-	-	-	-	-	-
	10"	115.0	1,404	1,425	1,447	1,468	1,490	1,513	1,535	1,558	1,582	1,605	1,605
<b>Commercial &amp; Industrial Outside</b>	<b>Total</b>			<b>3,114</b>	<b>3,160</b>	<b>3,208</b>	<b>3,256</b>	<b>3,305</b>	<b>3,354</b>	<b>3,404</b>	<b>3,456</b>	<b>3,507</b>	<b>3,560</b>
	Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-	-
	5/8"	1.0	757	768	780	792	803	816	828	840	853	866	866
	1"	2.5	672	682	692	702	713	723	734	745	756	768	768
	1 1/2"	5.0	611	620	629	638	648	658	668	678	688	698	698
	2"	8.0	879	892	906	919	933	947	961	976	990	1,005	1,005
	3"	16.0	195	198	201	204	207	210	214	217	220	223	223
	4"	25.0	-	-	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-	-	-
<b>Multi Housing Apts/Condos Inside</b>	<b>Total</b>			<b>23,370</b>	<b>23,720</b>	<b>24,076</b>	<b>24,437</b>	<b>24,804</b>	<b>25,176</b>	<b>25,554</b>	<b>25,937</b>	<b>26,326</b>	<b>26,721</b>
	Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-	-
	5/8"	1.0	5,824	5,912	6,000	6,090	6,182	6,274	6,368	6,464	6,561	6,659	6,659
	1"	2.5	3,602	3,656	3,711	3,766	3,823	3,880	3,939	3,998	4,058	4,118	4,118
	1 1/2"	5.0	2,930	2,974	3,019	3,064	3,110	3,157	3,204	3,252	3,301	3,351	3,351
	2"	8.0	8,987	9,121	9,258	9,397	9,538	9,681	9,826	9,974	10,123	10,275	10,275
	3"	16.0	195	198	201	204	207	210	214	217	220	223	223
	4"	25.0	-	-	-	-	-	-	-	-	-	-	-
	6"	50.0	1,832	1,859	1,887	1,915	1,944	1,973	2,003	2,033	2,063	2,094	2,094
	8"	80.0	-	-	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-	-	-
<b>Multi Housing Apts/Condos Outsid</b>	<b>Total</b>			<b>1,996</b>	<b>2,026</b>	<b>2,057</b>	<b>2,088</b>	<b>2,119</b>	<b>2,151</b>	<b>2,183</b>	<b>2,216</b>	<b>2,249</b>	<b>2,283</b>
	Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-	-
	5/8"	1.0	537	545	553	562	570	579	587	596	605	614	614
	1"	2.5	336	341	346	351	356	362	367	373	378	384	384
	1 1/2"	5.0	244	248	252	255	259	263	267	271	275	279	279
	2"	8.0	879	892	906	919	933	947	961	976	990	1,005	1,005
	3"	16.0	-	-	-	-	-	-	-	-	-	-	-
	4"	25.0	-	-	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-	-	-

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Input Area -- Rate Calculator</b>											
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve</b>											
<b>Public Services/Institutional Inside Total</b>		<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>	<b>39,504</b>
Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-
5/8"	1.0	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944
1"	2.5	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840
1 1/2"	5.0	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680	4,680
2"	8.0	24,288	24,288	24,288	24,288	24,288	24,288	24,288	24,288	24,288	24,288
3"	16.0	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152
4"	25.0	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
6"	50.0	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
8"	80.0	-	-	-	-	-	-	-	-	-	-
10"	115.0	-	-	-	-	-	-	-	-	-	-
<b>Public Services/Institutional Outsic Total</b>		<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>	<b>432</b>
Contract Base Charge (not based on r	1.0	-	-	-	-	-	-	-	-	-	-
5/8"	1.0	24	24	24	24	24	24	24	24	24	24
1"	2.5	60	60	60	60	60	60	60	60	60	60
1 1/2"	5.0	60	60	60	60	60	60	60	60	60	60
2"	8.0	288	288	288	288	288	288	288	288	288	288
3"	16.0	-	-	-	-	-	-	-	-	-	-
4"	25.0	-	-	-	-	-	-	-	-	-	-
6"	50.0	-	-	-	-	-	-	-	-	-	-
8"	80.0	-	-	-	-	-	-	-	-	-	-
10"	115.0	-	-	-	-	-	-	-	-	-	-
<b>Town of Combes Inside Total</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
Contract Base Charge (not based on r	1.0	12	12	12	12	12	12	12	12	12	12
5/8"	1.0	-	-	-	-	-	-	-	-	-	-
1"	2.5	-	-	-	-	-	-	-	-	-	-
1 1/2"	5.0	-	-	-	-	-	-	-	-	-	-
2"	8.0	-	-	-	-	-	-	-	-	-	-
3"	16.0	-	-	-	-	-	-	-	-	-	-
4"	25.0	-	-	-	-	-	-	-	-	-	-
6"	50.0	-	-	-	-	-	-	-	-	-	-
8"	80.0	-	-	-	-	-	-	-	-	-	-
10"	115.0	-	-	-	-	-	-	-	-	-	-
<b>Town of Combes Outside Total</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
Contract Base Charge (not based on r	1.0	12	12	12	12	12	12	12	12	12	12
5/8"	1.0	-	-	-	-	-	-	-	-	-	-
1"	2.5	-	-	-	-	-	-	-	-	-	-
1 1/2"	5.0	-	-	-	-	-	-	-	-	-	-
2"	8.0	-	-	-	-	-	-	-	-	-	-
3"	16.0	-	-	-	-	-	-	-	-	-	-
4"	25.0	-	-	-	-	-	-	-	-	-	-
6"	50.0	-	-	-	-	-	-	-	-	-	-
8"	80.0	-	-	-	-	-	-	-	-	-	-
10"	115.0	-	-	-	-	-	-	-	-	-	-
<b>City of Primera Total</b>		<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
Contract Base Charge (not based on r	1.0	12	12	12	12	12	12	12	12	12	12
5/8"	1.0	-	-	-	-	-	-	-	-	-	-
1"	2.5	-	-	-	-	-	-	-	-	-	-
1 1/2"	5.0	-	-	-	-	-	-	-	-	-	-
2"	8.0	-	-	-	-	-	-	-	-	-	-
3"	16.0	-	-	-	-	-	-	-	-	-	-
4"	25.0	-	-	-	-	-	-	-	-	-	-
6"	50.0	-	-	-	-	-	-	-	-	-	-
8"	80.0	-	-	-	-	-	-	-	-	-	-
10"	115.0	-	-	-	-	-	-	-	-	-	-

HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033

**Input Area -- Rate Calculator**

Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve

<b>City of Palm Valley</b>	<b>Total</b>		12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on r	1.0	12	12	12	12	12	12	12	12	12
	5/8"	1.0	-	-	-	-	-	-	-	-	-
	1"	2.5	-	-	-	-	-	-	-	-	-
	1 1/2"	5.0	-	-	-	-	-	-	-	-	-
	2"	8.0	-	-	-	-	-	-	-	-	-
	3"	16.0	-	-	-	-	-	-	-	-	-
	4"	25.0	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-
<b>East Rio Hondo</b>	<b>Total</b>		12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on r	1.0	12	12	12	12	12	12	12	12	12
	5/8"	1.0	-	-	-	-	-	-	-	-	-
	1"	2.5	-	-	-	-	-	-	-	-	-
	1 1/2"	5.0	-	-	-	-	-	-	-	-	-
	2"	8.0	-	-	-	-	-	-	-	-	-
	3"	16.0	-	-	-	-	-	-	-	-	-
	4"	25.0	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-
<b>Military Hwy WSC</b>	<b>Total</b>		12	12	12	12	12	12	12	12	12
	Contract Base Charge (not based on r	1.0	12	12	12	12	12	12	12	12	12
	5/8"	1.0	-	-	-	-	-	-	-	-	-
	1"	2.5	-	-	-	-	-	-	-	-	-
	1 1/2"	5.0	-	-	-	-	-	-	-	-	-
	2"	8.0	-	-	-	-	-	-	-	-	-
	3"	16.0	-	-	-	-	-	-	-	-	-
	4"	25.0	-	-	-	-	-	-	-	-	-
	6"	50.0	-	-	-	-	-	-	-	-	-
	8"	80.0	-	-	-	-	-	-	-	-	-
	10"	115.0	-	-	-	-	-	-	-	-	-
<b>Total System</b>			457,993	464,263	470,627	477,086	483,642	490,296	497,051	503,906	510,865

**WASTEWATER -- Customer & Usage Data**

**Customer Class Units -- Base Annual Usage**

WW1	Residential Inside	968,260,478	982,784,385	997,526,151	1,012,489,043	1,027,676,378	1,043,091,524	1,058,737,897	1,074,618,965	1,090,738,250	1,107,099,324
WW2	Residential Outside	65,621,017	66,605,332	67,604,412	68,618,478	69,647,756	70,692,472	71,752,859	72,829,152	73,921,589	75,030,413
WW3	Commercial & Industrial Inside	518,722,416	526,503,252	534,400,801	542,416,813	550,553,065	558,811,361	567,193,531	575,701,434	584,336,956	593,102,010
WW4	Commercial & Industrial Outside	11,011,792	11,176,969	11,344,623	11,514,793	11,687,515	11,862,827	12,040,770	12,221,381	12,404,702	12,590,773
WW5	Multi Housing Apts/Condos Inside	366,296,439	371,790,885	377,367,749	383,028,265	388,773,689	394,605,294	400,524,374	406,532,239	412,630,223	418,819,676
WW6	Multi Housing Apts/Condos Outside	8,048,222	8,168,945	8,291,479	8,415,851	8,542,089	8,670,220	8,800,274	8,932,278	9,066,262	9,202,256
WW7	Public Services/Institutional Inside	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200	282,061,200
WW8	Public Services/Institutional Outside	953,400	953,400	953,400	953,400	953,400	953,400	953,400	953,400	953,400	953,400
WW9	Town of Combes	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600	77,315,600
WW10	City of Primera	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000	88,493,000
	<b>Total Wastewater and Reclaimed Water</b>	2,386,783,563	2,415,852,968	2,445,358,415	2,475,306,443	2,505,703,691	2,536,556,899	2,567,872,904	2,599,658,650	2,631,921,182	2,664,667,651



**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
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**Input Area -- Rate Calculator**  
Scenario: **2024 02 27 -- Scen IIB -- On Time -- Inve**

		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Commercial & Industrial Inside	<b>Total</b>	<b>22,589</b>	<b>22,927</b>	<b>23,271</b>	<b>23,620</b>	<b>23,975</b>	<b>24,334</b>	<b>24,699</b>	<b>25,070</b>	<b>25,446</b>	<b>25,827</b>
	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	5/8"	58.76%	58.76%	58.76%	58.76%	58.76%	58.76%	58.76%	58.76%	58.76%	58.76%
	1"	21.24%	21.24%	21.24%	21.24%	21.24%	21.24%	21.24%	21.24%	21.24%	21.24%
	1 1/2"	9.51%	9.51%	9.51%	9.51%	9.51%	9.51%	9.51%	9.51%	9.51%	9.51%
	2"	8.92%	8.92%	8.92%	8.92%	8.92%	8.92%	8.92%	8.92%	8.92%	8.92%
	3"	1.19%	1.19%	1.19%	1.19%	1.19%	1.19%	1.19%	1.19%	1.19%	1.19%
	4"	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%
	6"	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Commercial & Industrial Outside	<b>Total</b>	<b>269</b>	<b>273</b>	<b>277</b>	<b>281</b>	<b>285</b>	<b>289</b>	<b>294</b>	<b>298</b>	<b>303</b>	<b>307</b>
	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	5/8"	59.09%	59.09%	59.09%	59.09%	59.09%	59.09%	59.09%	59.09%	59.09%	59.09%
	1"	22.73%	22.73%	22.73%	22.73%	22.73%	22.73%	22.73%	22.73%	22.73%	22.73%
	1 1/2"	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%
	2"	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%	9.09%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Multi Housing Apts/Condos Inside	<b>Total</b>	<b>8,034</b>	<b>8,155</b>	<b>8,277</b>	<b>8,401</b>	<b>8,527</b>	<b>8,655</b>	<b>8,785</b>	<b>8,917</b>	<b>9,050</b>	<b>9,186</b>
	Contract Base Charge (not based on meter size)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	5/8"	64.44%	64.44%	64.44%	64.44%	64.44%	64.44%	64.44%	64.44%	64.44%	64.44%
	1"	15.96%	15.96%	15.96%	15.96%	15.96%	15.96%	15.96%	15.96%	15.96%	15.96%
	1 1/2"	6.53%	6.53%	6.53%	6.53%	6.53%	6.53%	6.53%	6.53%	6.53%	6.53%
	2"	12.46%	12.46%	12.46%	12.46%	12.46%	12.46%	12.46%	12.46%	12.46%	12.46%
	3"	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Multi Housing Apts/Condos Outside	<b>Total</b>	<b>647</b>	<b>657</b>	<b>667</b>	<b>677</b>	<b>687</b>	<b>697</b>	<b>708</b>	<b>718</b>	<b>729</b>	<b>740</b>
	Contract Base Charge (not based on meter size)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	5/8"	66.04%	66.04%	66.04%	66.04%	66.04%	66.04%	66.04%	66.04%	66.04%	66.04%
	1"	15.09%	15.09%	15.09%	15.09%	15.09%	15.09%	15.09%	15.09%	15.09%	15.09%
	1 1/2"	5.66%	5.66%	5.66%	5.66%	5.66%	5.66%	5.66%	5.66%	5.66%	5.66%
	2"	13.21%	13.21%	13.21%	13.21%	13.21%	13.21%	13.21%	13.21%	13.21%	13.21%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Public Services/Institutional Inside	<b>Total</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>	<b>4,716</b>
	Contract Base Charge (not based on meter size)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	5/8"	25.95%	25.95%	25.95%	25.95%	25.95%	25.95%	25.95%	25.95%	25.95%	25.95%
	1"	20.10%	20.10%	20.10%	20.10%	20.10%	20.10%	20.10%	20.10%	20.10%	20.10%
	1 1/2"	12.21%	12.21%	12.21%	12.21%	12.21%	12.21%	12.21%	12.21%	12.21%	12.21%
	2"	39.69%	39.69%	39.69%	39.69%	39.69%	39.69%	39.69%	39.69%	39.69%	39.69%
	3"	1.02%	1.02%	1.02%	1.02%	1.02%	1.02%	1.02%	1.02%	1.02%	1.02%
	4"	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%
	6"	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%	0.51%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

<b>HARLINGEN WATERWORKS SYSTEM WATER/WASTEWATER COST OF SERVICE MODEL</b>											
	Current	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>Input Area -- Rate Calculator</b>											
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inve</b>											
Public Services/Institutional Outside	<b>Total</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>	<b>84</b>
	Contract Base Charge (not based on meter size)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	5/8"	28.57%	28.57%	28.57%	28.57%	28.57%	28.57%	28.57%	28.57%	28.57%	28.57%
	1"	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%
	1 1/2"	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%
	2"	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%	42.86%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Town of Combes	<b>Total</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
	Contract Base Charge (not based on meter size)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1 1/2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
City of Primera	<b>Total</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
	Contract Base Charge (not based on meter size)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	5/8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	1 1/2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	3"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	6"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	8"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	10"	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Total Wastewater</b>		<b>265,886</b>	<b>269,778</b>	<b>273,753</b>	<b>277,787</b>	<b>281,882</b>	<b>286,038</b>	<b>290,256</b>	<b>294,538</b>	<b>298,884</b>	<b>303,296</b>



**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year 2024	Percent Grant Funded	Total CIP/ Project	2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base											Total CIP			
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total	Yrs 1-5	Yrs 6-10		
<b>Input Area -- UNFUNDED Capital Improvement Plan</b>																	
<b>Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base</b>																	
<b>Water Administration</b>																	
Building Envelope Rehabilitation - Main Office	0.0%	2,944,000	\$ 2,944,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2,944,000	2,944,000	-
Lobby Security Remodeling - Main Office	0.0%	500,000	500,000	-	-	-	-	-	-	-	-	-	-	-	500,000	500,000	-
2nd Floor Remodeling - Main Office	0.0%	108,000	108,000	-	-	-	-	-	-	-	-	-	-	-	108,000	108,000	-
Generator - Main Office	100.0%	462,000	-	-	-	462,000	-	-	-	-	-	-	-	-	462,000	462,000	-
Yard Improvements - Warehouse	0.0%	1,728,000	-	1,728,000	-	-	-	-	-	-	-	-	-	-	1,728,000	1,728,000	-
Fuel Storage System - Warehouse	0.0%	210,000	-	-	-	210,000	-	-	-	-	-	-	-	-	210,000	210,000	-
Generator - Warehouse	0.0%	560,000	-	-	-	-	560,000	-	-	-	-	-	-	-	560,000	560,000	-
<b>Total Water Administration</b>	6,512,000		3,552,000	1,728,000	-	672,000	560,000	-	-	-	-	-	-	6,512,000	6,512,000	-	
<b>Water Customer</b>																	
Annual Meter Replacement	0.0%	1,020,000	\$ 204,000	\$ 204,000	\$ 204,000	\$ 204,000	\$ 204,000	\$ 204,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1,020,000	1,020,000	-
Lead Service Line Field Survey	0.0%	2,272,000	-	2,272,000	-	-	-	-	-	-	-	-	-	-	2,272,000	2,272,000	-
Large Meter Installation Upgrade	0.0%	2,376,000	475,000	475,000	475,000	475,000	476,000	-	-	-	-	-	-	-	2,376,000	2,376,000	-
AMI Meter Replacement	0.0%	15,034,000	-	-	5,011,333	5,011,333	5,011,333	-	-	-	-	-	-	-	15,034,000	15,034,000	-
Annual Meter Replacement - Intermediate Term	0.0%	1,020,000	-	-	-	-	-	204,000	204,000	204,000	204,000	204,000	204,000	-	1,020,000	-	1,020,000
Annual Meter Replacement - Long Term (2034-2043)	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Water - Customer</b>	21,722,000		679,000	2,951,000	5,690,333	5,690,333	5,691,333	204,000	204,000	204,000	204,000	204,000	204,000	21,722,000	20,702,000	1,020,000	
<b>Raw Water Supply</b>																	
Water Rights Purchase - Short Term	0.0%	1,375,000	\$ 275,000	\$ 275,000	\$ 275,000	\$ 275,000	\$ 275,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1,375,000	1,375,000	-	
Local System Participation/Sponsorship - Short Term	0.0%	2,500,000	500,000	500,000	500,000	500,000	500,000	-	-	-	-	-	-	2,500,000	2,500,000	-	
Pier Replacement at MFR Reservoir Intake	0.0%	507,000	50,700	456,300	-	-	-	-	-	-	-	-	-	507,000	507,000	-	
Raw Water Line Upgrade Ph. 1 - Jefferson St. to DT WTP Reser	0.0%	7,434,000	743,400	6,690,600	-	-	-	-	-	-	-	-	-	7,434,000	7,434,000	-	
Water Rights Purchase - Intermediate Term	0.0%	1,375,000	-	-	-	-	-	275,000	275,000	275,000	275,000	275,000	275,000	1,375,000	-	1,375,000	
Local System Participation/Sponsorship - Intermediate Term	0.0%	3,000,000	-	-	-	-	-	600,000	600,000	600,000	600,000	600,000	600,000	3,000,000	-	3,000,000	
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	16,191,000		1,569,100	7,921,900	775,000	775,000	775,000	875,000	875,000	875,000	875,000	875,000	875,000	16,191,000	11,816,000	4,375,000	
<b>Total Water CIP</b>	119,940,000																
<b>Total Unfunded Water CIP</b>			6,882,100	13,100,900	10,191,367	25,795,467	25,801,167	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	119,940,000	81,771,000	38,169,000	
<b>Summary</b>																	
<b>Dollars</b>																	
Treatment	-	\$ 10,872,000	\$ 437,000	\$ -	\$ 1,490,433	\$ 3,429,233	\$ 1,310,333	\$ 841,000	\$ 841,000	\$ 841,000	\$ 841,000	\$ 841,000	\$ 841,000	-	-	-	-
Distribution	64,643,000	64,643,000	645,000	500,000	2,235,600	15,228,900	17,464,500	5,713,800	5,713,800	5,713,800	5,713,800	5,713,800	5,713,800	64,643,000	36,074,000	28,569,000	
Administration	6,512,000	6,512,000	3,552,000	1,728,000	-	672,000	560,000	-	-	-	-	-	-	6,512,000	6,512,000	-	
Customer	21,722,000	21,722,000	679,000	2,951,000	5,690,333	5,690,333	5,691,333	204,000	204,000	204,000	204,000	204,000	204,000	21,722,000	20,702,000	1,020,000	
Supply	16,191,000	16,191,000	1,569,100	7,921,900	775,000	775,000	775,000	875,000	875,000	875,000	875,000	875,000	875,000	16,191,000	11,816,000	4,375,000	
<b>Total</b>	109,068,000	119,940,000	6,882,100	13,100,900	10,191,367	25,795,467	25,801,167	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	119,940,000	81,771,000	38,169,000	
<b>Percent</b>																	
Treatment	9.1%		6.3%	0.0%	14.6%	13.3%	5.1%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	0.0%	0.0%	0.0%	
Distribution	53.9%		9.4%	3.8%	21.9%	59.0%	67.7%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	53.9%	44.1%	74.8%	
Administration	5.4%		51.6%	13.2%	0.0%	2.6%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	8.0%	0.0%	
Customer	18.1%		9.9%	22.5%	55.8%	22.1%	22.1%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	18.1%	25.3%	2.7%	
Supply	13.5%		22.8%	60.5%	7.6%	3.0%	3.0%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	13.5%	14.5%	11.5%	
<b>Total</b>	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	90.9%	91.8%	89.0%	





**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year 2024	Percent Grant Funded	Total CIP/ Project	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total	Total CIP	
														Yrs 1-5	Yrs 6-10

**Input Area -- UNFUNDED Capital Improvement Plan**  
**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

<b>Wastewater Administration</b>																
Future Project	0.0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total WW Administration</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Wastewater Customer</b>																
Future Project	0.0%	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total WW Customer</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cumulative EDAP Projects</b>																
WWTP Influent LS Upgrade (33 MGD)	0.0%	\$ 27,801,000	\$ 2,780,100	\$ 25,020,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	27,801,000	27,801,000	-
Little Creek Interceptor Complete Replacement (30", 48")	0.0%	41,034,000	-	-	41,034,000	-	-	-	-	-	-	-	-	41,034,000	41,034,000	-
LS-5 Outfall Sewer Extension (12")	0.0%	395,000	-	-	395,000	-	-	-	-	-	-	-	-	395,000	395,000	-
LS-2 & LS-50 Elimination Sewers (8")	0.0%	484,000	-	-	484,000	-	-	-	-	-	-	-	-	484,000	484,000	-
LS-23 Elimination Sewer (42")	0.0%	4,101,000	-	-	4,101,000	-	-	-	-	-	-	-	-	4,101,000	4,101,000	-
LS-9 Upgrade & Force Main Re-Route (5.36 MGD, 16")	0.0%	6,179,000	-	-	6,179,000	-	-	-	-	-	-	-	-	6,179,000	6,179,000	-
LS-19 Elimination Sewer (30")	0.0%	11,486,000	-	-	-	11,486,000	-	-	-	-	-	-	-	11,486,000	11,486,000	-
LS-20 Elimination Sewer (27")	0.0%	7,626,000	-	-	7,626,000	-	-	-	-	-	-	-	-	7,626,000	7,626,000	-
Design of Remaining EDAP Subprojects (12-18)	0.0%	7,923,000	7,923,000	-	-	-	-	-	-	-	-	-	-	7,923,000	7,923,000	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Future Project	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total WW Reclaimed Water</b>		107,029,000	10,703,100	25,020,900	52,193,000	19,112,000	-	-	-	-	-	-	107,029,000	107,029,000	107,029,000	-
Total Wastewater and Reclaimed Wa		194,355,000														
<b>Total Unfunded Wastewater CIP</b>		194,355,000	21,140,100	34,640,900	65,525,167	39,005,367	15,965,467	4,140,600	4,140,600	3,265,600	3,265,600	3,265,600	194,355,000	176,277,000	18,078,000	
<b>Summary</b>																
<b>Dollars</b>																
Treatment	\$ 2,500,000	\$ 2,500,000	2,500,000	-	-	-	-	-	-	-	-	-	2,500,000	2,500,000	-	-
Collection	84,826,000	84,826,000	7,937,000	9,620,000	13,332,167	19,893,367	15,965,467	4,140,600	4,140,600	3,265,600	3,265,600	3,265,600	84,826,000	66,748,000	18,078,000	
Administration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reclaimed Water	107,029,000	107,029,000	10,703,100	25,020,900	52,193,000	19,112,000	-	-	-	-	-	-	107,029,000	107,029,000	107,029,000	
<b>Total</b>	\$ 194,355,000	194,355,000	21,140,100	34,640,900	65,525,167	39,005,367	15,965,467	4,140,600	4,140,600	3,265,600	3,265,600	3,265,600	194,355,000	176,277,000	18,078,000	
<b>Percent</b>																
Treatment	1.3%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.4%	0.0%	
Collection	43.6%	37.5%	27.8%	20.3%	51.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	43.6%	37.9%	100.0%	
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Reclaimed Water	55.1%	50.6%	72.2%	79.7%	49.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	55.1%	60.7%	0.0%	
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	



HARLINGEN WATERWORKS SYSTEM	
WATER/WASTEWATER COST OF SERVICE MODEL	

Test Year 2024	Percent Grant Funded	Total CIP/ Project	2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base										Total CIP	
			2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total	Yrs 1-5

**Input Area -- UNFUNDED Capital Improvement Plan**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**Water Capital Improvement Plan -- Financing**

Beginning Balance -- Fund 27 - Utility CIP Fund (Not Impact Fee Project or Revenue related)		\$	12,037,352	\$	10,114,890	\$	8,699,990	\$	8,658,623	\$	7,663,157	\$	7,711,990	\$	7,528,190	\$	7,344,390	\$	7,160,590	\$	6,976,790				
<b>Sources of Capital:</b>																									
Budgeted Transfer of Bond Proceeds	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Water Impact Fees	\$	12,900,000	300,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000					
Direct Utility Fund Balance Drawdown	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Grant Funding	\$	3,645,639	2,509,639	1,136,000	8,750,000	23,400,000	24,450,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	98,150,000	67,900,000	30,250,000		
Plus Amount Funded by Long-Term Debt	\$	98,150,000	2,150,000	9,150,000	8,750,000	23,400,000	24,450,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000	6,050,000					
<b>Total Sources</b>			4,959,639	11,686,000	10,150,000	24,800,000	25,850,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000	7,450,000					
<b>Uses of Capital:</b>																									
Water Revenue Funded Capital Improvement Plan		119,940,000	6,882,100	13,100,900	10,191,367	25,795,467	25,801,167	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	7,633,800	119,940,000	81,771,000	38,169,000		
<b>Ending Balance Water CIP Fund</b>	<b>A</b>		10,114,890	8,699,990	8,658,623	7,663,157	7,711,990	7,528,190	7,344,390	7,160,590	6,976,790	6,792,990													

**Wastewater Capital Improvement Plan -- Financing**

Beginning Balance -- Fund 27 - Utility CIP Fund (Not Impact Fee Project or Revenue related)		\$	12,037,352	\$	10,856,890	\$	9,265,990	\$	7,290,823	\$	6,385,457	\$	6,369,990	\$	6,579,390	\$	6,788,790	\$	7,023,190	\$	7,257,590				
<b>Sources of Capital:</b>																									
Budgeted Transfer of Bond Proceeds	\$	10,000,000	10,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Wastewater Impact Fees	\$	13,400,000	800,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000					
Direct Utility Fund Balance Drawdown	\$	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Grant funding	\$	11,509,639	7,009,639	4,500,000	62,150,000	36,700,000	14,550,000	2,950,000	2,950,000	2,100,000	2,100,000	2,050,000									154,850,000	142,700,000	12,150,000		
Plus Amount Funded by Long-Term Debt	\$	154,850,000	2,150,000	27,150,000	62,150,000	36,700,000	14,550,000	2,950,000	2,950,000	2,100,000	2,100,000	2,050,000													
<b>Total Sources</b>			19,959,639	33,050,000	63,550,000	38,100,000	15,950,000	4,350,000	4,350,000	3,500,000	3,500,000	3,450,000									253,000,000	210,600,000	42,400,000		
<b>Uses of Capital:</b>																									
WW Revenue Funded Capital Improvement Plan		194,355,000	21,140,100	34,640,900	65,525,167	39,005,367	15,965,467	4,140,600	4,140,600	3,265,600	3,265,600	3,265,600	194,355,000	176,277,000	18,078,000						194,355,000	176,277,000	18,078,000		
<b>Total Balance WW CIP Funding</b>	<b>B</b>		314,295,000	10,856,890	9,265,990	7,290,823	6,385,457	6,369,990	6,579,390	6,788,790	7,023,190	7,257,590	7,441,990								314,295,000	258,048,000	56,247,000		
<b>Ending Balance Fund 27 - Utility CIP Fund (Not Impact Fee Project or Revenue related)</b>	<b>A+B</b>		20,971,780	17,965,980	15,949,447	14,048,613	14,081,980	14,107,580	14,133,180	14,183,780	14,234,380	14,234,980													

**Beginning Utility Fund Balance**

	\$	24,074,703	18,872,178	17,182,086	16,946,895	16,109,757	17,543,373	19,091,870	21,969,576	26,042,408	31,829,675
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Direct Fund Draw Down for CIP	\$	(3,102,923)	(3,005,800)	(2,016,533)	(1,900,833)	33,367	25,600	25,600	50,600	50,600	600
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<b>Total Direct Utility Fund Balance Drawdown</b>	\$	-	-	-	-	-	-	-	-	-	-
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Number of Working Capital Days		266	231	202	162	156	155	172	194	228	268
Combined % Operating- Fund Balance		291%	253%	221%	178%	170%	170%	188%	213%	250%	294%

**HARLINGEN WATERWORKS SYSTEM  
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year 2024	Percent Grant Funded	Total CIP/ Project	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total	Total CIP Yrs 1-5	Yrs 6-10
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**Input Area -- UNFUNDED Capital Improvement Plan**

**Scenario: 2024 02 27 -- Scen IIB -- On Time -- Inverted Block Higher Base**

**TOTAL CAPITAL IMP PLAN o Be Funded through Revenues and Fund Balance**

													<u>Current Dollars</u>											
<b>Current Dollars</b>																								
Water Treatment -- BCRWP	\$	437,000	\$	-	\$	1,490,433	\$	3,429,233	\$	1,310,333	\$	841,000	\$	841,000	\$	841,000	\$	841,000	\$	10,872,000	\$	6,667,000	\$	4,205,000
Water Distribution		645,000		500,000		2,235,600		15,228,900		17,464,500		5,713,800		5,713,800		5,713,800		5,713,800		64,643,000		36,074,000		28,569,000
Administration		3,552,000		1,728,000		-		672,000		560,000		-		-		-		-		6,512,000		6,512,000		-
Supply		1,569,100		7,921,900		775,000		775,000		775,000		875,000		875,000		875,000		875,000		16,191,000		11,816,000		4,375,000
WW Treatment		2,500,000		-		-		-		-		-		-		-		-		2,500,000		2,500,000		-
WW Collection		7,937,000		9,620,000		13,332,167		19,893,367		15,965,467		4,140,600		4,140,600		3,265,600		3,265,600		84,826,000		66,748,000		18,078,000
Reclaimed Water		10,703,100		25,020,900		52,193,000		19,112,000		-		-		-		-		-						
<b>Total</b>		<b>27,343,200</b>		<b>44,790,800</b>		<b>70,026,200</b>		<b>59,110,500</b>		<b>36,075,300</b>		<b>11,570,400</b>		<b>11,570,400</b>		<b>10,695,400</b>		<b>10,695,400</b>		<b>292,573,000</b>		<b>237,346,000</b>		<b>55,227,000</b>
<b>Inflated Dollars</b>																								
CCI Escalator				3.0%																				
Water Treatment -- BCRWP	\$	450,110	\$	-	\$	1,535,146	\$	3,532,110	\$	1,349,643	\$	866,230	\$	866,230	\$	866,230	\$	866,230	\$	11,198,160	\$	6,867,010	\$	4,331,150
Water Distribution		664,350		515,000		2,302,668		15,685,767		17,988,435		5,885,214		5,885,214		5,885,214		5,885,214		66,582,290		37,156,220		29,426,070
Administration		3,658,560		1,779,840		-		692,160		576,800		-		-		-		-		6,707,360		6,707,360		-
Supply		1,616,173		8,159,557		798,250		798,250		798,250		901,250		901,250		901,250		901,250		16,676,730		12,170,480		4,506,250
WW Treatment		2,575,000		-		-		-		-		-		-		-		-		2,575,000		2,575,000		-
WW Collection		8,175,110		9,908,600		13,732,132		20,490,168		16,444,431		4,264,818		4,264,818		3,363,568		3,363,568		87,370,780		68,750,440		18,620,340
Reclaimed Water		11,024,193		25,771,527		53,758,790		19,685,360		-		-		-		-		-						
<b>Total</b>		<b>28,163,496</b>		<b>46,134,524</b>		<b>72,126,986</b>		<b>60,883,815</b>		<b>37,157,559</b>		<b>11,917,512</b>		<b>11,917,512</b>		<b>11,016,262</b>		<b>11,016,262</b>		<b>301,350,190</b>		<b>244,466,380</b>		<b>56,883,810</b>



HARLINGEN  
WATERWORKS  
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