



# THE 2020 UTILITY SYSTEM

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## WATER SUPPLY SYSTEM

The City of Laredo uses surface water from the Rio Grande River as its source of raw water. The two plants in the City of Laredo are Jefferson Water Treatment Plant 65 Million Gallons per Day (MGD) and El Pico Water Treatment Plant 20 MGD for a combined capacity of 85 MGD. The average daily consumption during 2020 was approximately 34.75 million gallons per day and peak demand for 2020 was 44.21 million gallons per day. Connections to the water system as of September 30, 2020 were 75,854. The average number of service calls per month is 13,768 for a FY 2019-2020 total of 165,224. The system consists of approximately 1,129 miles of transmission and distribution lines and 8,280 Fire Hydrants.

The City of Laredo owns approximately 62,009 acre-feet of municipal water rights. The Jefferson Water Treatment Plant has two separate river intakes, two separate river pump structures and related multiple pump units. The electrical system includes underground electrical power distribution system including three electrical buildings housing motor control centers. The Supervisory Control and Data Acquisition (SCADA) system combined with magnetic flow meters and motor operated valves allow increased precision in chemical addition for reduced operating costs. The traveling water screens, flocculators, re-lift pumps and five clarifiers provide a more reliable hydraulic capacity. Twelve gravity filters allow the facility to respond to wide variations in river water turbidity. The two high service pump stations and three clear wells provide a uniform water system pressure. The process and electrical system enhance the reliability of the treatment process.

El Pico Water Treatment Plant was put in service in April 2015. El Pico Water Treatment Plant consists of a Raw Water Intake followed by the Raw Water Pump Station, Rapid Mix, Flocculation, Sedimentation, Filtration, Filter Building, Backwash Pumping, Backwash Equalization, Backwash Clarifier, Intermediate Pumping, Clearwell, High Service Pump Station, Sludge Thickener, Sludge Holding Tank, Sludge Dewatering, Dewatering Building, Chemical Building, Chemical Feed and Bulk Storage, Administration Building, Effluent Transmission Main, Electrical and Instrumentation including the SCADA control.

## WASTEWATER SYSTEM

The City of Laredo owns and operates six wastewater treatment plants, Zacate Creek Plant (14 MGD), South Laredo Plant (18 MGD), North Laredo Plant (2.9 MGD), Laredo Colombia Plant (0.035 MGD), Penitas Plant (0.074 MGD), and Unitec Plant (0.184 MGD) with a combined total design capacity of 35.25 million gallons per day ("MGD") and an average daily treatment of 17.61 MGD. 12,536,312 pounds of BOD are treated by all six wastewater treatment plants with a total bio-solids disposal cost of \$900,889.00. The Sewer system includes approximately 858 miles of sewer lines and 70 lift stations with 70,451 connections as of September 30, 2020.

### TABLE 1 - WATER STORAGE AND DISTRIBUTION



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At the present time the system incorporates the following treated water storage facilities:

<u>Location</u>	<u>No. Tanks</u>	<u>No. Clear Wells</u>	<u>Storage Capacity</u>
Jefferson St Water Treatment Plant		3	3,500,000 gallons
El Pico Water Treatment Plant		1	5,000,000 gallons
Lyon Street and Meadow Avenue	1		5,000,000 gallons
Milmo and Texas Avenue	2		2,000,000 gallons
MHOC	2		10,000,000 gallons
Sierra Vista	1		5,000,000 gallons
San Isidro NE	1		300,000 gallons
359 Hwy Booster	1		200,000 gallons
South Laredo	1 (elevated)		1,000,000 gallons
San Isidro EST	1 (elevated)		2,500,000 gallons
North Laredo (Highland)	1 (elevated)		1,000,000 gallons
Northwest Laredo	1 (elevated)		1,000,000 gallons
Las Blancas	1 (elevated)		500,000 gallons
Killam (TAMIU) Tank	1 (elevated)		2,000,000 gallons
Cuatro Vientos	1 (elevated)		2,000,000 gallons
Nixon Bartlett and Price	1 (elevated)		3,000,000 gallons
Daugherty and Hillside	1 (elevated)		<u>500,000 gallons</u>
<b>Total Treated Water Storage</b>			<u><b>44,500,000 gallons</b></u>

**TABLE 2 - WATER PRODUCTION (THOUSAND GALLONS)**

Historical water usage for the City is as follows:

<u>Fiscal Year Ended 9/30</u>	<u>Average Day Production (1,000 Gallons)</u>	<u>Peak Day Production (1,000 Gallons)</u>	<u>Total Yearly Production (1,000 Gallons)</u>
2011	32,600	47,470	11,726,000
2012	28,386	52,312	10,427,878
2013	35,528	48,000	11,883,850
2014	25,936	47,594	9,465,347
2015	31,900	54,389	11,654,700
2016	36,291	58,506	12,520,848
2017	34,050	49,616	12,434,677
2018	33,770	53,430	12,326,452
2019	33,904	52,918	12,374,989
2020	34,750	44,212	12,729,606



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**TABLE 3 - SEWAGE FLOW (THOUSAND GALLONS)**

Fiscal Year Ended 9-30	Average Day Sewage Flow (1,000 Gallons)	Peak Day Highest Flow (1,000 Gallons)	Total Yearly Flow (1,000 Gallons)
2011	18,783	24,234	6,855,795
2012	18,900	30,896	6,780,000
2013	19,300	33,356	6,849,845
2014	18,800	33,900	6,874,400
2015	19,701	29,824	7,190,787
2016	20,637	30,400	7,241,500
2017	19,500	43,375	6,917,746
2018	18,829	31,028	6,873,430
2019	18,445	26,593	6,733,821
2020	17612	29,132	6,446,900

**TABLE 4 - TEN LARGEST WATER/SEWER USERS (GALLONS)**

**TYPE OF BUSINESS**

**WATER CONSUMPTION**

United I.S.D.	122,597,500
Laredo Medical Center	81,774,900
Texas A&M University System	56,042,900
Laredo Community College	43,658,500
City of Laredo – Parks & Rec	28,656,700
New Webb County Jail	22,629,000
Laredo Regional Medical Center	14,766,200
Clarks Crossing Apartments	14,554,400
Doctors Hospital of Laredo	12,152,700
3E Civil Construction	10,892,900

**TYPE OF BUSINESS**

**SEWER CONSUMPTION**

Laredo Medical Center	81,774,900
New Webb County Jail	22,629,000
Texas A&M university system	20,951,200
Laredo Regional Medical Center	14,766,200
Clarks Crossing Apartments	14,554,400
Towne North Mobil Homes	10,739,700
Blue Beacon 68	10,331,500
City of Laredo Parks & Rec	10,279,100
Laredo Apartments, LLC	10,038,100
Raintree Association	9,229,600



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## TABLE 5 - MONTHLY WATER RATES

### Per Ordinance [2019-O-071](#) WATER RATES - RESIDENTIAL (EFFECTIVE 10/01/20)

Inside City Limits

**Meter sized based minimum monthly water charges** for metered consumption from zero to 2,000 gallons:

5/8" & 3/4" meter .....	\$11.05
1" meter .....	\$24.04
1 1/2" meter .....	\$34.01
2" meter .....	\$52.81

Per 1,000 gallons (for the next 2,000 gallons) per month in excess Of 2,000 gallons per month.....	2.16
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Per 1,000 gallons (for the next 6,000 gallons) per month in excess of 4,000 gallons per month.....	2.31
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Per 1,000 gallons (for the next 10,000 gallons) per month in excess of 10,000 gallons per month.....	2.39
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Per 1,000 gallons (for the next 10,000 gallons) per month in excess of 20,000 gallons per month.....	2.53
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Per 1,000 gallons (for the next 10,000 gallons) per month in excess of 30,000 gallons per month.....	2.70
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Per 1,000 gallons (for the next 10,000 gallons) per month in excess of 40,000 gallons per month.....	2.82
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Per 1,000 gallons per month in excess of 50,000 gallons per month.....	5.62
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### *Multi-Family and Commercial:*

**Meter sized based minimum monthly water charges** for metered consumption from zero to 2,000 gallons:

5/8" & 3/4" meter .....	\$ 41.59
1" meter .....	\$ 45.18
1 1/2" meter .....	\$ 50.25
2" meter .....	\$ 69.38
3" meter .....	\$137.97
4" meter .....	\$208.37
6" meter .....	\$375.28
8" meter .....	\$553.15



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**TABLE 5 - MONTHLY WATER RATES (CONTINUED)**

Per 1,000 gallons (for the next 2,000 gallons) per month in excess of 2,000 gallons per month.....	2.63
Per 1,000 gallons (for the next 6,000 gallons) per month in excess of 4,000 gallons per month.....	3.24
Per 1,000 gallons (for the next 30,000 gallons) per month in excess of 10,000 gallons per month.....	4.08
Per 1,000 gallons (for the next 110,000 gallons) per month in excess of 40,000 gallons per month.....	4.30
Per 1,000 gallons (for the next 150,000 gallons) per month in excess of 150,000 gallons per month.....	4.65
Per 1,000 gallons (for the next 300,000 gallons) per month in excess of 300,000 gallons per month.....	5.14
Per 1,000 gallons (for the next 400,000 gallons) per month in excess of 600,000 gallons per month.....	6.07
Per 1,000 gallons per month in excess of 1,000,000 gallons per month.....	6.21

**TABLE 6 - MONTHLY SEWER RATES (BASED ON WATER CONSUMPTION)**

Per Ordinance [2019-O-072](#)  
**SEWER RATES - RESIDENTIAL**  
**(EFFECTIVE 10/01/20)**

0 to 2,000 gallons	\$11.07
2,001 to 4,000 gallons	\$ 3.79
4,001 to 10,000 gallons	\$ 3.85
10,001 to 20,000 gallons	\$ 4.05
20,001 to 30,000 gallons	\$ 4.35
30,001 gallons and greater	\$ 4.35

Monthly charges are based on water consumption per 1,000 gallons.

Monthly sewer rate charges shall be based on metered water consumption as described with annual adjustments beginning on October 1, 2019 and every year that follows up to 2037.



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**TABLE 6 - MONTHLY SEWER RATES (CONTINUED)**

**SEWER RATES - MULTI-FAMILY AND  
COMMERCIAL  
(EFFECTIVE 10/01/20)**

0 to 2,000 gallons	\$ 29.65
2,001 to 4,000 gallons	\$ 3.06
4,001 to 10,000 gallons	\$ 3.12
10,001 to 40,000 gallons	\$ 3.57
40,001 to 150,000 gallons	\$ 3.69
150,001 to 300,000 gallons	\$ 4.72
300,001 to 600,000 gallons	\$ 4.72
600,001 to 1,000,000 gallons	\$ 5.39
1,000,001 gallons and greater	\$ 6.55

## **WATER CONSERVATION PROGRAM**

The Utilities Department Water Conservation Program is designed to provide practices, techniques, and technologies that help reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, and increase the recycling and reuse of water for the ultimate purpose of making available a water supply for future or alternative uses. The Water Conservation Program operates to implement and enforce the Water Conservation & Drought Contingency Ordinance. The program is divided into two sections; enforcement and public education. For enforcement there were a total of 52 warnings issued and 6 citations. For public education there were 3 various events by hosting proclamations, groundbreaking ceremonies, ribbon cutting ceremonies, career day events, and other city/civic events. The Water-Sense High Efficiency Toilet (HET) Rebate Program is designed to encourage water customers to replace old water wasting toilets with new high efficiency toilets. For each toilet replaced (maximum 2 per household per year), the City of Laredo Utilities Department provides the water customer with a standard one-hundred dollar (\$100.00) rebate, which is applied as a credit to the participants water account. Each installation of toilet is verified by water conservation inspectors, the old water wasting toilet(s) are destroyed (tank only) by the participating customer. The old toilets are reported to the Solid Waste Department and are scheduled for collection at each participant's address to be transported to the City of Laredo Landfill. During fiscal year 2019-2020, there were a total of 77 toilets rebates approved and applied. A total of 1 vehicle car wash permits were issued during this Fiscal Year.