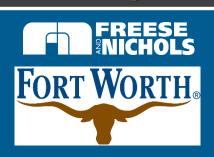


WATER/WASTEWATER IMPACT FEE UPDATE



EXHIBIT A: LAND USE ASSUMPTIONS - WATER (2022 – 2041)

PREPARED BY: FREESE AND NICHOLS, INC. 801 CHERRY STREET, SUITE 2800 FORT WORTH, TEXAS 76102 817-735-7300





Innovative approache Practical results Outstanding service

WATER & WASTEWATER IMPACT FEE UPDATE

EXHIBIT A: LAND USE ASSUMPTIONS - WATER (2022 – 2041)

Prepared for:

Fort Worth Water



July 22, 2021

Prepared by:

FREESE AND NICHOLS, INC. 801 Cherry Street, Suite 2800 Fort Worth, Texas 76102 817-735-7300



WATER & WASTEWATER IMPACT FEE UPDATE

Prepared for:

Fort Worth Water



FREESE AND NICHOLS, INC.
TEXAS REGISTERED
ENGINEERING FIRM
F-2144



FREESE AND NICHOLS, INC. TEXAS REGISTERED ENGINEERING FIRM F-2144 MAZEN H. KAWASMI

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FREESE AND NICHOLS, INC. TEXAS REGISTERED ENGINEERING FIRM F-2144



FREESE AND NICHOLS, INC. TEXAS REGISTERED ENGINEERING FIRM F-2144

Prepared by:

FREESE AND NICHOLS, INC.

801 Cherry Street, Suite 2800 Fort Worth, Texas 76102 817-735-7300

FTW20118



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- Appendix B Water Wholesale Customer Surveys
- Appendix C Water Wholesale Customer Population and Employment Projections



1.0 INTRODUCTION

Chapter 395 of the Texas Local Government Code requires an impact fee analysis before impact fees can be assessed. Chapter 395 defines an impact fee as "a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development." Chapter 395 identifies the following items as impact fee eligible costs:

- Construction contract price
- Surveying, engineering and inspection fees
- Land acquisition costs
- Cost of engineering studies
- Fees paid to the consultant preparing or updating the capital improvements plan (CIP)
- Projected interest charges and other finance costs for projects identified in the CIP

Chapter 395 also identifies items that impact fees cannot be used to pay for, such as:

- Construction, acquisition, or expansion of public facilities or assets other than those identified on the capital improvements plan
- Repair, operation or maintenance of existing or new capital improvements
- Upgrading, updating, expanding or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental or regulatory standards
- Upgrading, updating, expanding or replacing existing capital improvements to provide better service to existing development
- Administrative and operating costs of the political subdivision
- Principal payments and interest or other finance charges on bonds or other indebtedness,
 except as allowed above



In December 2019, the City of Fort Worth authorized Freese and Nichols, Inc. (FNI) to perform an update to the impact fee analysis on the City's water and wastewater systems. The purpose of this report is to address the methodology used in the development of the water land use assumptions. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment of water and wastewater impact fees.

The City updated its water land use assumptions and capital improvements plan in 1993, 1996, 1999, 2004, 2009, 2012 and 2017. This report updates the water land use assumptions for the years 2022, 2031 and 2041. This information will be used in the update of the water impact fees.



Willow Park

2.0 WATER SERVICE AREA

Grand Prairie

Chapter 395 defines the service area as the area within the corporate boundaries or extraterritorial jurisdiction, as determined under Chapter 42, of the political subdivision to be served by the capital improvements or facilities expansions specified in the capital improvements plan, except roadway facilities and storm water, drainage, and flood control facilities. The service area for Fort Worth's water system is defined as the city limits, portions of the unincorporated existing extraterritorial jurisdiction (ETJ), and wholesale customers. This service area is the area to which water service could be provided on a retail basis and to all wholesale water customers. **Figure A-1** shows the entire water service area for the City of Fort Worth.

The City of Fort Worth provides water to 33 wholesale customers which make up the water service area. For the purposes of this study, it is assumed that the wholesale customers will remain under contract with the City for the duration of the future planning periods (2022-2041). The wholesale customers are:

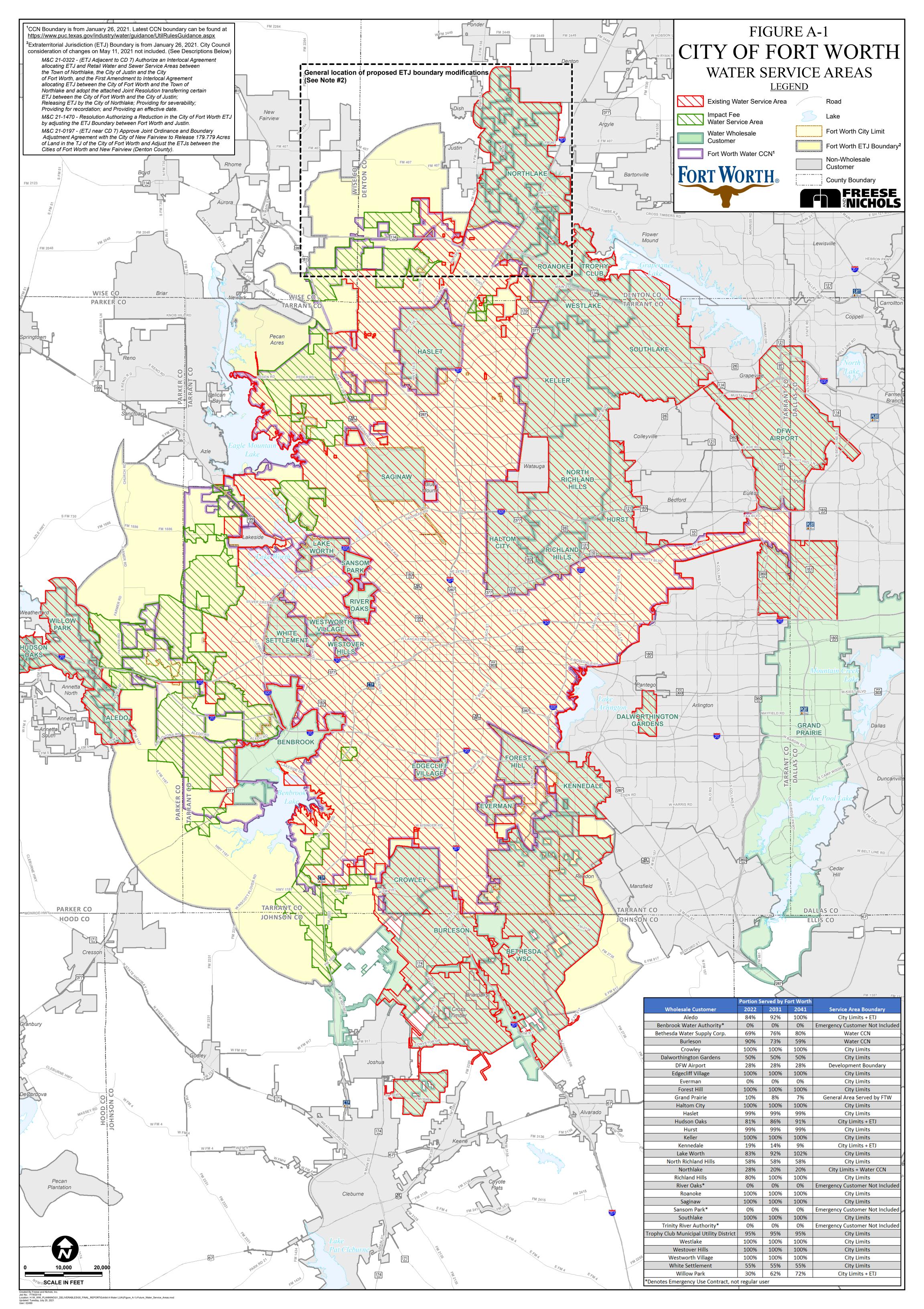
• Aledo	Haltom City	 Roanoke
Benbrook Water Authority	• Haslet	• Saginaw
Bethesda Water Supply Corp.	Hudson Oaks	Sansom Park
• Burleson	• Hurst	• Southlake
• Crowley	• Keller	Trinity River Authority- TCWSP
Dalworthington Gardens	• Kennedale	Trophy Club MUD No. 1
DFW Airport	Lake Worth	• Westlake
Edgecliff Village	North Richland Hills	Westover Hills
• Everman	 Northlake 	Westworth Village
Forest Hill	Richland Hills	White Settlement

Watauga is served by the City of Fort Worth through North Richland Hills and is not a direct wholesale customer. Fort Worth serves as an emergency provider for Benbrook Water Authority, River Oaks, Sansom Park and Trinity River Authority. The emergency use contract customers are not regular users and

River Oaks



therefore excluded from the land use assumptions and future water projections. Additionally, the City provides water service to unincorporated areas that are not included within its city limits or its wholesale customers' city limits. These areas are within Fort Worth's Certificate of Convenience and Necessity (CCN) and are included in the water service area. A map showing the CCNs within the City of Fort Worth's water service area can be found in **Appendix A**.





3.0 POPULATION AND EMPLOYMENT PROJECTIONS

Population and employment projections are important elements in the impact fee process. Water demands depend on the residential population and commercial development served by the distribution system and determine the sizing and location of system infrastructure. For the impact fee update, populations are projected for years 2022, 2031 and 2041. FNI utilized data from wholesale customer surveys, the Fort Worth Planning and Development Department and North Central Texas Council of Governments (NCTCOG) projections to determine the population and employment projections for the City of Fort Worth and its customers for the planning periods of 2022, 2031 and 2041. At the time of this study, 2020 U.S. Census information was not available. Historical NCTCOG information was utilized as the basis for the population and employment projections.

3.1 CITY OF FORT WORTH PROJECTIONS

FNI utilized development data from the City of Fort Worth Planning and Development Department, along with NCTCOG data, to develop population projections for the 2022, 2031 and 2041 planning periods. **Table 3-1** shows the City's population and employment projections and annual growth rate for each 10-year period.

Table 3-1 City of Fort Worth Retail Population and Employment Projections

	0.0, 0.10.0	or one moture is openium.		,
	Popul	lation	Employment	
Year	Amount	Annual Growth Rate*	Amount	Annual Growth Rate*
2022	911,970		615,009	
2031	1,133,678	2.2%	704,041	1.4%
2041	1,381,947	2.0%	827,648	1.6%

^{*}Population/employment growth and annual growth rate is based on development information from the Fort Worth Planning and Development Department and NCTCOG data.

The retail population is projected to increase 2.2% annually from 2022 to 2031 and 2.0% annually from 2031 to 2041. The retail employment is projected to increase 1.4% annually from 2022 to 2031 and 1.6% annually from 2031 to 2041.



3.2 WHOLESALE CUSTOMERS

Surveys were sent out by the City of Fort Worth to each wholesale customer to provide population and employment projections for each planning period. Wholesale customers were contacted with follow-up emails or phone calls if no survey was returned by the requested due date. If no survey was returned, FNI used projection information from NCTCOG to estimate population and employment. The wholesale customer surveys received by FNI can be found in **Appendix B**. The completed surveys were compared to NCTCOG projections. Adjustments were made to population and employment projections where necessary. **Table 3-2** summarizes the total served wholesale customer population and employment projections.

Table 3-2 Wholesale Customer Population and Employment Projections

	Population			yment
Year	Amount	Annual Growth Rate*	Amount	Annual Growth Rate*
2022	423,632		235,555	
2031	489,325	1.5%	255,528	0.8%
2041	542,969	1.0%	266,868	0.4%

^{*}Annual Growth Rate is based on information from NCTCOG and Wholesale Customer Surveys

The served wholesale population is projected to increase 1.5% annually from 2022 to 2031 and 1.0% annually from 2031 to 2041. The served wholesale employment is projected to increase 0.8% annually from 2022 to 2031 and 0.4% annually from 2031 to 2041. Detailed service population and employment projections broken down by each wholesale customer can be found in **Appendix C**.



3.3 TOTAL WATER SERVICE AREA

Table 3-3 shows the combined population and employment projections for the City of Fort Worth and its wholesale customers. The population is projected to increase 2.0% annually from 2022 to 2031 and 1.7% annually from 2031 to 2041. The employment is projected to increase 1.2% annually from 2022 to 2031 and 1.3% annually from 2031 to 2041.

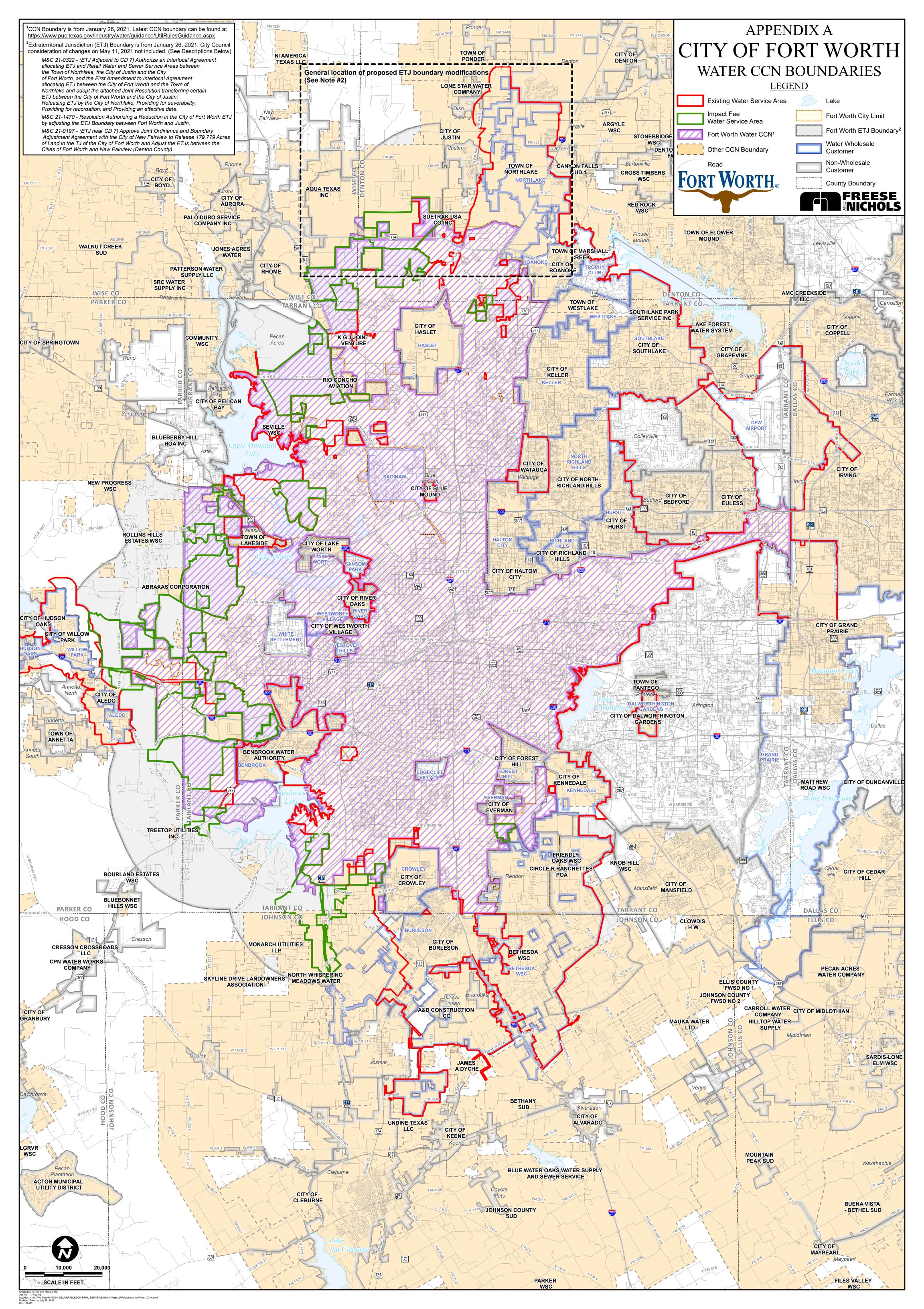
Table 3-3 Total Water Service Area Population and Employment Projections

	Population			Employment		
	2022	2031	2041	2022	2031	2041
City of Fort Worth	911,970	1,133,678	1,381,947	615,009	704,041	827,648
Wholesale Customers	423,632	489,325	542,969	235,555	255,528	266,868
TOTAL	1,335,602	1,623,003	1,924,916	850,564	959,569	1,094,516
Annual Growth Rate*		2.0%	1.7%		1.2%	1.3%

^{*}Annual Growth Rate is based on information from NCTCOG, the Fort Worth Planning and Development Department and Wholesale Customer Surveys



Appendix A Fort Worth Water Service Area CCN Map





Appendix B Water Wholesale Customer Surveys



April 2020

WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



FNI Responses in Blue

City Responses in Red

LEGEND

Demographics Information

1. Wholesale Customer Name: City of Aledo

2. Wholesale Customer Type: (Water)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections		
2019	5,087	
2020	4,662	
2030	6,736	
2040	8,254	

Employment Projections		
2019	18	
2020	961	
2030	1,062	
2040	1,162	

Water Service Information

5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)

6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)

7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)		
2020	0.65	
2030	0.94	
2040	1.16	

Maximum Day Demand		
Projections (MGD)		
2020	1.63	
2030	2.35	
2040	2.90	

Percentage of Water		
Demands Served by FTW		
2020	82%	
2030	90%	
2040	98%	

- 8. Will you require a larger and/or additional meter within the next 20 years?
- 9. Will your service area boundaries be expanded within the next 20 years?
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 12. Annual residential consumption per meter (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 13. Annual non-residential consumption per meter (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters			
Meter Size	Quantity		
5/8"	0		
3/4"	1,507		
1"	12		
1-1/2"	0		
2"	2		
3"	0		
4"	0		
6"	0		
8"	0		
10"	0		

Non-Residential Meters		
Meter Size	Quantity	
5/8"	0	
3/4"	94	
1"	18	
1-1/2"	10	
2"	22	
3"	3	
4"	3	
6"	0	
8"	0	
10"	0	

14. Are there any current ordinances concerning water impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: Benbrook Water Authority
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	22,933
2020	23,176
2030	28,314
2040	34,213

Employment Projections	
2019	6,132
2020	6,242
2030	7,342
2040	8,441

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	8
2030	8
2040	8

Maximum Day Demand	
Projections (MGD)	
2020	15
2030	15
2040	15

Percentage of Water		
Demands Served by FTW		
2020	0%	
2030	0%	
2040	0%	

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters		
Meter Size	Quantity	
5/8"	5,145	
3/4"	43	
1"	3,075	
1-1/2"	17	
2"	87	
3"	25	
4"	0	
6"	0	
8"	0	
10"	0	

Non-Residential Meters	
Meter Size	Quantity
5/8"	138
3/4"	4
1"	221
1-1/2"	54
2"	107
3"	11
4"	3
6"	2
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Resolutions and water impact fees.

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	
2030	
2040	

Peak Wet Weather	
Flow Projection (MGD)	
2020	
2030	
2040	

Percentage of Wastewater Flow Served by FTW		
2020	100%	
2030	100%	
2040	100%	

16. Existing number of wastewater customer	s SERVED	by Fort	Worth
--	----------	---------	-------

(Residential:_____, Non-Residential:______)

- 17. Will your service area boundaries be expanded in the next 20 years? (Y/N)
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	5,145
3/4"	43
1"	3,075
1-1/2"	17
2"	87
3"	25
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters		
Meter Size	Quantity	
5/8"	138	
3/4"	4	
1"	221	
1-1/2"	54	
2"	107	
3"	11	
4"	3	
6"	2	
8"	0	
10"	0	

20. Are there any current ordinances concerning wastewater impact fees within your utility?



WHOLESALE CUSTOMER SURVEY WATER/WASTEWATER SERVICE PROJECTIONS

NICHOLS

FOR IMPACT FEE STUDY April 2020

LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: Bethesda Water Supply Corp.
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	31,563
2020	31,869
2030	35,099
2040	38,656

Employment Projections		
2019	0	
2020	0	
2030	0	
2040	0	

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)		
2020	2,990,000	
2030	3,290,000	
2040	3,620,000	

Maximum Day Demand Projections (MGD)	
2020	8,630,000
2030	9,502,000
2040	10,400,000

Percentage of Water		
Demands Served by FTW		
2020	68%	
2030	75%	
2040	79%	

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters		
Meter Size	Quantity	
5/8"	10,293	
3/4"	8	
1"	42	
1-1/2"	4	
2"	2	
3"	1	
4"	0	
6"	0	
8"	0	

Non-Residential Meters	
Meter Size	Quantity
5/8"	142
3/4"	8
1"	44
1-1/2"	13
2"	55
3"	1
4"	8
6"	1
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes; \$1,000.00 equity buy-in fee per 5/8" meter equivalent.

Wastewater Service Information

10"

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow		
Projections		
2020	78,732	
2030	78,732	
2040	78,732	

Peak Wet Weather		
Flow Projections		
2020	101,041	
2030	101,041	
2040	101,041	

Percentage of Wastewater		
Flow Served by FTW		
2020	4%	
2030	4%	
2040	4%	

- 16. Existing number of wastewater customers SERVED by Fort Worth (Residential: 426_, Non-Residential: 0_)
- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters		
Meter Size	Quantity	
5/8"	10,293	
3/4"	8	
1"	42	
1-1/2"	4	
2"	2	
3"	1	
4"	0	
6"	0	
8"	0	
10"	n	

Non-Residential Meters	
Meter Size	Quantity
5/8"	142
3/4"	8
1"	44
1-1/2"	13
2"	55
3"	1
4"	8
6"	1
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? No.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Burleson
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	
2020	49,981
2030	77,949
2040	108,681

Employment Projections	
2019	22,925
2020	23,382
2030	26,700
2040	30,700

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	8.22
2030	9.68
2040	10.30

Maximum Day Demand	
Projections (MGD)	
2020	18.08
2030	21.29
2040	22.65

Percentage of Water		
Demands Served by FTW		
2020	93%	
2030	76%	
2040	62%	

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	13,746
3/4"	3
1"	202
1-1/2"	8
2"	1
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	484
3/4"	5
1"	287
1-1/2"	140
2"	285
3"	58
4"	6
6"	1
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes.

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	5.78
2030	8.94
2040	10.61

Peak Wet Weather Flow		
Projections (MGD)		
2020	17.22	
2030	27.97	
2040	33.63	

Percentage of Wastewater		
Flow Served by FTW		
2020	100%	
2030	100%	
2040	100%	

16. Existing number of wastewater customers S	ERVED by Fort Worth
---	----------------------------

(Residential:_____, Non-Residential:_____)

- 17. Will your service area boundaries be expanded in the next 20 years? Yes.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	13,746
3/4"	2
1"	3
1-1/2"	3
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	385
3/4"	0
1"	139
1-1/2"	101
2"	210
3"	20
4"	3
6"	1
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



LEGEND

FNI Responses in Blue

City Responses in Red

April 2020

Demographics Information

1. Wholesale Customer Name: City of Crowley

2. Wholesale Customer Type (Water and Wastewater)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	16,721
2020	18,053
2030	25,000
2040	35,000

Employment Projections	
2019	-
2020	3,089
2030	3,907
2040	4,861

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	3
2030	4
2040	5

Maximum Day Demand	
Projections (MGD)	
2020	7
2030	8
2040	10

Percentage of Water	
Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	6,467
3/4"	0
1"	35
1-1/2"	16
2"	30
3"	2
4"	0
6"	0
8"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	0
1"	59
1-1/2"	14
2"	48
3"	15
4"	0
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Ordinances in place.

Wastewater Service Information

10"

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	4
2030	12
2040	14

Peak Wet Weather Flow	
Projections (MGD)	
2020	5
2030	13
2040	15

Percentage of Wastewater	
Flow Served by FTW	
2020	100%
2030	100%
2040	100%

- 16. Existing number of wastewater customers SERVED by Fort Worth (Residential: 6,162 , Non-Residential: 660)
- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	6,467
3/4"	0
1"	35
1-1/2"	16
2"	30
3"	2
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	0
1"	59
1-1/2"	14
2"	48
3"	15
4"	0
6"	0
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Dalworthington Gardens
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	2,330
2020	2,350
2030	2,400
2040	2,500

Employment Projections	
2019	720
2020	730
2030	770
2040	800

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	15
2030	15
2040	15

Maximum Day Demand	
Projections (MGD)	
2020	320
2030	320
2040	320

Percentage of Water	
Demands Served by FTW	
2020	50%
2030	50%
2040	50%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	493
3/4"	62
1"	343
1-1/2"	10
2"	10
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	60
3/4"	14
1"	42
1-1/2"	3
2"	22
3"	0
4"	0
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Yes, ordinance 17-14 provides for access fees which are the fees passed through from Fort Worth to the city.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



FNI Responses in Blue

City Responses in Red

April 2020 <u>LEGEND</u>

Demographics Information

1. Wholesale Customer Name: DFW Airport

2. Wholesale Customer Type (Water)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	0
2020	0
2030	0
2040	0

Employment Projections	
2019	61,900
2020	61,900
2030	63,200
2040	64,624

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	1
2030	1
2040	1

Maximum Day Demand	
Projections (MGD)	
2020	2
2030	2
2040	2

Percentage of Water		
Demands Served by FTW		
2020	28%	
2030	28%	
2040	28%	

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	0
1"	0
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	4
3/4"	0
1"	10
1-1/2"	37
2"	351
3"	149
4"	78
6"	30
8"	5
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? No.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: Town of Edgecliff Village
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	3,220
2020	3,240
2030	3,260
2040	3,260

Employment Projections		
2019	1	
2020	1,622	
2030	1,810	
2040	1,912	

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Project	tions (MGD)
2020	0.44
2030	0.44
2040	0.44

Maximum Day Demand	
Projections (MGD)	
2020	1.15
2030	1.15
2040	1.15

Percentage of Water		
Demands Served by FTW		
2020	100%	
2030	100%	
2040	100%	

- 8. Will you require a larger and/or additional meter within the next 20 years? (Y/N)
- Will your service area boundaries be expanded within the next 20 years? (Y/N)
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	78
3/4"	1,257
1"	33
1-1/2"	5
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	3
1"	4
1-1/2"	0
2"	7
3"	0
4"	0
6"	1
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections	
2020	0.32
2030	0.33
2040	0.33

Peak Wet Weather Flow Projections	
2020	1.28
2030	1.32
2040	1.32

Percentage of Wastewater Flow Served by FTW	
2020	100%
2030	100%
2040	100%

16. Existing number of wastewater customers SERVED by Fort	Worth
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(Residential:_____, Non-Residential:_____)

- 17. Will your service area boundaries be expanded in the next 20 years? (Y/N)
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters		
Meter Size	Quantity	
5/8"	78	
3/4"	1,257	
1"	33	
1-1/2"	5	
2"	0	
3"	0	
4"	0	
6"	0	
8"	0	
10"	0	

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	3
1"	4
1-1/2"	0
2"	7
3"	0
4"	0
6"	1
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Everman
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	6,250
2020	6,500
2030	7,500
2040	8,000

Employment Projections	
2019	
2020	1,652
2030	1,724
2040	1,793

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	0
2030	0
2040	0

Maximum Day Demand	
Projections (MGD)	
2020	0
2030	0
2040	0

Percentage of Water	
Demands Served by FTW	
2020	0%
2030	0%
2040	0%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	1,817
1"	0
1-1/2"	0
2"	0
3"	0
4"	0
6"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	156
1"	14
1-1/2"	5
2"	11
3"	3
4"	1
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes.

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow	
Projections (MGD)	
2020	400,000
2030	600,000
2040	700,000

Peak Wet Weather Flow	
Projections (MGD)	
2020	300,000
2030	500,000
2040	600,000

Percentage of Wastewater	
Flow Served by FTW	
2020	100%
2030	100%
2040	100%

- 16. Existing number of wastewater customers SERVED by Fort Worth (Residential: <u>1,810</u>, Non-Residential: <u>153</u>)
- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	1,817
1"	0
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	156
1"	14
1-1/2"	5
2"	11
3"	3
4"	1
6"	0
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes.



WHOLESALE CUSTOMER SURVEY WATER/WASTEWATER SERVICE PROJECTIONS

THE REESE NICHOLS

FOR IMPACT FEE STUDY April 2020

LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: Forest Hill
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	13,000
2020	13,100
2030	13,150
2040	13,200

Employment Projections	
2019	9,550
2020	9,600
2030	9,712
2040	9,907

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	2.200
2030	2.200
2040	2.300

Maximum Day Demand		
Projections (MGD)		
2020	2.700	
2030	2.800	
2040	2.805	

Percentage of Water Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	4,559
1"	10
1-1/2"	38
2"	55
3"	1
4"	1
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	10
1"	7
1-1/2"	2
2"	6
3"	1
4"	1
6"	1
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes, see attached form.

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow	
Projections (MGD)	
2020	2.281
2030	2.200
2040	2.300

Peak Wet Weather	
Flow Projection (MGD)	
2020	2.180
2030	2.100
2040	2.100

Percentage of Wastewater		
Flow Served by FTW		
2020	100%	
2030	100%	
2040	100%	

16. Existing number of

wastewater customers SERVED by Fort Worth

(Residential: 4,329 , Non-Residential: 333)

- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	4,559
1"	10
1-1/2"	38
2"	55
3"	1
4"	1
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	10
1"	7
1-1/2"	2
2"	6
3"	1
4"	1
6"	1
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes, see attached documentation.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Grand Prairie
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	191,324
2020	193,237
2030	213,454
2040	235,786

Employment Projections	
2019	1
2020	127,795
2030	129,837
2040	129,837

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	2
2030	2
2040	2

Maximum Day Demand	
Projections (MGD)	
2020	2
2030	2
2040	2

Percentage of Water	
Demands Served by FTW	
2020	10%
2030	8%
2040	7%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	45,494
3/4"	0
1"	443
1-1/2"	155
2"	672
3"	13
4"	13
6"	39
8"	7
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	1,380
3/4"	0
1"	939
1-1/2"	611
2"	1,458
3"	87
4"	72
6"	18
8"	18
10"	4

12. Are there any current ordinances concerning water impact fees within your utility? No.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Haltom City
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	43,000
2020	43,500
2030	50,000
2040	50,000

Employment Projections	
2019	21,000
2020	21,300
2030	24,500
2040	24,500

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	4.4
2030	4.9
2040	4.9

Maximum Day Demand Projections (MGD)	
2020	8.8
2030	9.8
2040	9.8

Percentage of Water	
Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? (Y/N)
- 9. Will your service area boundaries be expanded within the next 20 years? (Y/N)
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters		
Meter Size	Quantity	
5/8"	11,369	
3/4"	0	
1"	4	
1-1/2"	0	
2"	37	
3"	1	
4"	0	
6"	0	
8"	0	
10"	0	

Non-Residential Meters		
Meter Size	Quantity	
5/8"	1,584	
3/4"	0	
1"	5	
1-1/2"	0	
2"	18	
3"	1	
4"	1	
6"	2	
8"	0	
10"	0	

12. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	
2030	
2040	

Peak Wet Weather Flow Projections (MGD)		
2020		
2030		
2040		

Percentage of Wastewater Flow Served by FTW		
2020	100%	
2030	100%	
2040	100%	

16. l	Existing nu	ımber of v	wastewater	customers	SERVED b	y Fort	Worth
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(Residential:_____, Non-Residential:_____)

- 17. Will your service area boundaries be expanded in the next 20 years? (Y/N)
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters		
Meter Size	Quantity	
5/8"	11,369	
3/4"	0	
1"	4	
1-1/2"	0	
2"	37	
3"	1	
4"	0	
6"	0	
8"	0	
10"	0	

Non-Residential Meters		
Meter Size	Quantity	
5/8"	1,584	
3/4"	0	
1"	5	
1-1/2"	0	
2"	18	
3"	1	
4"	1	
6"	2	
8"	0	
10"	0	

20. Are there any current ordinances concerning wastewater impact fees within your utility?



April 2020

WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY

LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

1. Wholesale Customer Name: City of Haslet

2. Wholesale Customer Type (Water)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections		
2019	1,888	
2020	2,000	
2030	6,700	
2040	11,000	

Employment Projections		
2019	10,000	
2020	11,500	
2030	12,400	
2040	12,600	

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)		
2020	650,000	
2030	950,000	
2040	1,200,000	

Maximum Day Demand		
Projections (MGD)		
2020	2,200,000	
2030	2,500,000	
2040	3,100,000	

Percentage of Water	
Demands Served by FTW	
2020	99%
2030	99%
2040	99%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	741
3/4"	7
1"	13
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	38
3/4"	2
1"	23
1-1/2"	6
2"	47
3"	11
4"	3
6"	2
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Yes. Ordinance Number 018-2013; Article 8.000; Section 8.100 and Section 8.200.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Hudson Oaks
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	2,968
2020	3,300
2030	4,200
2040	5,000

Employment Projections	
2019	1,515
2020	2,000
2030	2,600
2040	3,500

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	140,000
2030	170,000
2040	201,000

Maximum Day Demand		
Project	Projections (MGD)	
2020	345,180	
2030	438,378	
2040	521,669	

Percentage of Water	
Demands Served by FTW	
2020	80%
2030	85%
2040	90%

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	846
1"	11
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	0
1"	8
1-1/2"	2
2"	4
3"	0
4"	0
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?



WHOLESALE CUSTOMER SURVEY WATER/WASTEWATER SERVICE PROJECTIONS

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FOR IMPACT FEE STUDY April 2020

LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Hurst
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	38,187
2020	38,510
2030	39,637
2040	40,817

Employment Projections	
2019	26,296
2020	26,711
2030	30,861
2040	32,936

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	5
2030	5
2040	6

Maximum Day Demand	
Projections (MGD)	
2020	10
2030	10
2040	11

Percentage of Water	
Demands Served by FTW	
2020	99%
2030	99%
2040	99%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	9,454
3/4"	1
1"	1,517
1-1/2"	33
2"	4
3"	0
4"	1
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	465
3/4"	0
1"	367
1-1/2"	251
2"	239
3"	32
4"	18
6"	4
8"	1
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Ordinance #2353.

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow	
Projections (MGD)	
2020	4
2030	4
2040	5

Peak Wet Weather Flow	
Projections (MGD)	
2020	16
2030	16
2040	20

Percentage of Wastewater	
Flow Served by FTW	
2020	92%
2030	92%
2040	92%

- 16. Existing number of wastewater customers SERVED by Fort Worth (Residential: <u>10.477</u>, Non-Residential: <u>1,377</u>)
- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	9,454
3/4"	1
1"	1,517
1-1/2"	33
2"	4
3"	0
4"	1
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	465
3/4"	0
1"	367
1-1/2"	251
2"	239
3"	32
4"	18
6"	4
8"	1
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Ordinance #2353.



April 2020

WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Keller
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	45,614
2020	46,298
2030	51,580
2040	51,580

Employment Projections	
2019	12,852
2020	13,221
2030	14,698
2040	14,698

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	10.4
2030	11.6
2040	11.6

Maximum Day Demand	
Projections (MGD)	
2020	26.4
2030	29.5
2040	29.5

Percentage of Water Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? (Y/N)
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





0
Quantity
82
14,311
331
7
10
0
0
0
0
0

Non-Residential Meters	
Meter Size	Quantity
5/8"	370
3/4"	44
1"	370
1-1/2"	93
2"	288
3"	59
4"	7
6"	0
8"	3
10"	0

Grand Total: 14,741 Grand Total: 1,234

12. Are there any current ordinances concerning water impact fees within your utility? Yes, Ordinance 1741.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Kennedale
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	
2020	7,670
2030	10,820
2040	15,263

Employment Projections	
2019	
2020	4,616
2030	5,864
2040	7,119

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand		
Projections (MGD)		
2020	0.21	
2030	0.23	
2040	0.21	

Maximum Day Demand	
Projections (MGD)	
2020	0.47
2030	0.50
2040	0.47

Percentage of Water Demands Served by FTW	
2020	20%
2030	15%
2040	10%

- 8. Will you require a larger and/or additional meter within the next 20 years?
- 9. Will your service area boundaries be expanded within the next 20 years?
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	
3/4"	2,543
1"	313
1-1/2"	5
2"	4
3"	
4"	
6"	
8"	-
10"	

Non-Residential Meters	
Meter Size	Quantity
5/8"	
3/4"	229
1"	57
1-1/2"	13
2"	38
3"	44
4"	3
6"	
8"	
10"	

12. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)		
2020	0.69	
2030	0.97	
2040	1.37	

Peak Wet Weather Flow Projection (MGD)		
2020	2.76	
2030	3.88	
2040	5.48	

Percentage of Wastewater		
Flow Served by FTW		
2020	4%	
2030	4%	
2040	4%	

16. Existing number of

wastewater	customers	SEKVED	by Fo	rt wortn

(Residential:____, Non-Residential:____)

- 17. Will your service area boundaries be expanded in the next 20 years?
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters		
Meter Size	Quantity	
5/8"		
3/4"		
1"		
1-1/2"		
2"		
3"		
4"		
6"		
8"		
10"		

Non-Residential Meters		
Meter Size	Quantity	
5/8"		
3/4"		
1"		
1-1/2"		
2"		
3"		
4"		
6"		
8"		
10"		

20. Are there any current ordinances concerning wastewater impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Lake Worth
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections		
2019	4,584	
2020	4,957	
2030	5,831	
2040	6,468	

Employment Projections		
2019	3,125	
2020	3,137	
2030	3,779	
2040	3,850	

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)		
2020	600,000	
2030	1,000,000	
2040	1,250,000	

Maximum Day Demand		
Projections (MGD)		
2020	1,200,000	
2030	1,800,000	
2040	2,250,000	

Percentage of Water		
Demands Served by FTW		
2020	81%	
2030	90%	
2040	100%	

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



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Residential Meters		
Meter Size	Quantity	
5/8"	0	
3/4"	1,663	
1"	171	
1-1/2"	0	
2"	1	
3"	0	
4"	0	
6"	0	
8"	0	
10"	0	

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	123
1"	129
1-1/2"	46
2"	108
3"	15
4"	7
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes.

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	800,000
2030	1,000,000
2040	1,250,000

Peak Wet Weather Flow	
Projections (MGD)	
2020	1,700,000
2030	2,000,000
2040	2,250,000

Percenta	Percentage of Wastewater	
Flow S	Flow Served by FTW	
2020	100%	
2030	100%	
2040	100%	

- 16. Existing number of wastewater customers SERVED by Fort Worth (Residential: 2.030, Non-Residential: 0)
- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	1,663
1"	171
1-1/2"	0
2"	1
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	123
1"	129
1-1/2"	46
2"	108
3"	15
4"	7
6"	0
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of North Richland Hills
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	71,269
2020	72,000
2030	79,000
2040	88,000

Employment Projections	
2019	23,738
2020	23,964
2030	26,240
2040	28,764

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	6
2030	6
2040	7

Maximum Day Demand	
Projections (MGD)	
2020	11
2030	11
2040	12

Percentage of Water Demands Served by FTW	
2020	58%
2030	58%
2040	58%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



WHOLESALE CUSTOMER SURVEY WATER/WASTEWATER SERVICE PROJECTIONS



FOR IMPACT FEE STUDY April 2020

Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	19,429
1"	960
1-1/2"	8
2"	17
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	683
1"	404
1-1/2"	64
2"	827
3"	29
4"	18
6"	4
8"	2
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes.

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	2
2030	2
2040	2

Peak Wet Weather Flow	
Projections (MGD)	
2020	7
2030	7
2040	7

Percentage of Wastewater Flow Served by FTW	
2020	80%
2030	80%
2040	80%

16. Existing number of wastewater customers SERVED by Fort Worth

(Residential: <u>18,979</u>, Non-Residential: <u>2,031</u>)

- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	19,429
1"	960
1-1/2"	8
2"	17
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	683
1"	404
1-1/2"	64
2"	827
3"	29
4"	18
6"	4
8"	2
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



FNI Responses in Blue

City Responses in Red

April 2020 LEGEND

Demographics Information

1. Wholesale Customer Name: Town of Northlake

2. Wholesale Customer Type (Water)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	4,000
2020	8,000
2030	20,000
2040	30,000

Employment Projections	
2019	1,212
2020	1,212
2030	1,212
2040	1,212

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	0
2030	0
2040	0

Maximum Day Demand	
Projections (MGD)	
2020	0
2030	0
2040	0

Percentage of Water		
Demands Served by FTW		
2020	30%	
2030	20%	
2040	20%	

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	2,931
1"	96
1-1/2"	11
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	0
1"	0
1-1/2"	0
2"	113
3"	99
4"	1
6"	1
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Richland Hills
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	8,300
2020	8,300
2030	8,300
2040	8,300

Employment Projections	
2019	1
2020	8,937
2030	9,495
2040	10,072

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	1,200,000
2030	1,200,000
2040	1,200,000

Maximum Day Demand	
Projections (MGD)	
2020	2,500,000
2030	2,500,000
2040	2,500,000

Percentage of Water	
Demands Served by FTW	
2020	75%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	2
3/4"	2,778
1"	79
1-1/2"	17
2"	11
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	165
1"	85
1-1/2"	31
2"	42
3"	3
4"	2
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	1,500,000
2030	1,500,000
2040	1,500,000

Peak Wet Weather Flow Projections (MGD)	
2020	600,000
2030	600,000
2040	600,000

Percentage of Wastewater		
Flow Served by FTW		
2020	100%	
2030	100%	
2040	100%	

16. Existing number of wastewater customers SERVED by Fort Worth

(Residential: 2,686 , Non-Residential: 260)

- 17. Will your service area boundaries be expanded in the next 20 years? Yes.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	2
3/4"	2,778
1"	79
1-1/2"	17
2"	11
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	165
1"	85
1-1/2"	31
2"	42
3"	3
4"	2
6"	0
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of River Oaks
- 2. Wholesale Customer Type (Emergency Connection Water, 100% Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	7,427
2020	7,600
2030	8,152
2040	8,200

Employment Projections	
2019	7,619
2020	7,700
2030	8,200
2040	8,200

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040) (Emergency Connection Only) City of River Oaks has a surface water plant.

Average Day Demand Projections (MGD)	
2020	0
2030	0
2040	0

Maximum Day Demand	
Projections (MGD)	
2020	0
2030	0
2040	0

Percent	Percentage of Water Demands	
Served by FTW		
2020	0% (Emergency Only)	
2030	0% (Emergency Only)	
2040	0% (Emergency Only)	

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") 2,723 Residential Connections
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") 203 Non-Residential Customers





Residential Meters	
Meter Size	Quantity
5/8"	2,529
3/4"	15
1"	49
1-1/2"	9
2"	2
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	274
3/4"	0
1"	66
1-1/2"	41
2"	36
3"	2
4"	2
6"	5
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
 Cannot be measured. City of River Oaks and the City of Fort Worth have 14 interconnects. See attached contract and map for calculations.
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow	
Projections (MGD)	
2020	0.76
2030	0.82
2040	0.82

Peak Wet Weather	
Flow Projection (MGD)	
2020	3.04
2030	3.28
2040	3.28

Percentage of Wastewater	
Flow Served by FTW	
2020	100%
2030	100%
2040	100%

16. Existing number of

wastewater customers SERVED by Fort Worth

(Residential: 2,711 , Non-Residential: 191)

- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.



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19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") – Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	
3/4"	
1"	
1-1/2"	
2"	
3"	
4"	
6"	
8"	
10"	

Non-Residential Meters	
Meter Size	Quantity
5/8"	
3/4"	
1"	
1-1/2"	
2"	
3"	
4"	
6"	
8"	
10"	

20. Are there any current ordinances concerning wastewater impact fees within your utility? No, City of River Oaks collects only Fort Worth Impact Fee under any new development.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Roanoke
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	8,384
2020	8,612
2030	10,952
2040	13,929

Employment Projections	
2019	
2020	5,790
2030	6,700
2040	6,700

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	1,800,000
2030	2,200,000
2040	2,400,000

Maximum Day Demand	
Projections (MGD)	
2020	4,600,000
2030	5,500,000
2040	6,000,000

Percentage of Water Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	2,322
1"	101
1-1/2"	1
2"	2
3"	0
4"	1
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	239
1"	167
1-1/2"	56
2"	271
3"	44
4"	44
6"	4
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



LEGEND

FNI Responses in Blue

City Responses in Red

April 2020

Demographics Information

1. Wholesale Customer Name: City of Saginaw

2. Wholesale Customer Type (Water and Wastewater)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	22,380
2020	22,940
2030	29,364
2040	33,000

Employment Projections	
2019	11,311
2020	11,640
2030	15,195
2040	17,900

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	3.27
2030	4.18
2040	4.70

Maximum Day Demand		
Projections (MGD)		
2020	6.41	
2030	8.21	
2040	9.22	

Percentage of Water Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



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Residential Meters		
Meter Size	Quantity	
5/8"	7,950	
3/4"	0	
1"	0	
1-1/2"	0	
2"	0	
3"	0	
4"	0	
6"	0	
8"	0	
10"	0	

Non-Residential Meters		
Meter Size	Quantity	
5/8"	333	
3/4"	0	
1"	0	
1-1/2"	0	
2"	0	
3"	0	
4"	0	
6"	0	
8"	0	
10"	0	

Total: 7,950

Total: 333

12. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow			
Projections (MGD)			
2020 2.57			
2030 3.29			
2040	3.70		

Peak Wet Weather		
Flow Projection (MGD)		
2020	10.28	
2030	13.16	
2040	14.8	

Percentage of Wastewater		
Flow Served by FTW		
2020	100%	
2030	100%	
2040	100%	

16. Existing number of

wastewater customers	SERVED	by Fort	Worth
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(Residential:____, Non-Residential:____) Total: 8,283

- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters			
Meter Size	Quantity		
5/8"	7,950		
3/4"	0		
1"	0		
1-1/2"	0		
2"	0		
3"	0		
4"	0		
6"	0		
8"	0		
10"	0		

Total	l: '	7	a	5	N
Total	٠.	,,	•	J	v

Non-Residential Meters		
Meter Size	Quantity	
5/8"	333	
3/4"	0	
1"	0	
1-1/2"	0	
2"	0	
3"	0	
4"	0	
6"	0	
8"	0	
10"	0	

Total: 333

20. Are there any current ordinances concerning wastewater impact fees within your utility? Ordinance 2011-21 and Amending Ordinance 2011-22.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Sansom Park
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections		
2019	5,075	
2020	5,575	
2030	5,845	
2040	6,147	

Employment Projections	
2019	
2020	1,139
2030	1,219
2040	1,306

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	
2030	
2040	

Maximum Day Demand	
Projections (MGD)	
2020	
2030	
2040	

Percentage of Water Demands Served by FTW	
2020	0%
2030	0%
2040	0%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	1,413
3/4"	0
1"	0
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	110
3/4"	0
1"	1
1-1/2"	0
2"	1
3"	4
4"	0
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes.

Wastewater Service Information

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow	
Projections (MGD)	
2020	410,000
2030	500,000
2040	600,000

Peak Wet Weather	
Flow Projection (MGD)	
2020	460,000
2030	570,000
2040	680,000

Percentage of Wastewater	
Flow Served by FTW	
2020	100%
2030	100%
2040	100%

16. Existing number of

wastewater customers SERVED by Fort Worth

(Residential: 1,413, Non-Residential: 116)

- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	1,413
3/4"	0
1"	0
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	110
3/4"	0
1"	1
1-1/2"	0
2"	1
3"	4
4"	0
6"	0
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



LEGEND

FNI Responses in Blue

City Responses in Red

April 2020

Demographics Information

1. Wholesale Customer Name: City of Southlake

2. Wholesale Customer Type (Water)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	30,010
2020	32,269
2030	35,079
2040	39,888

Employment Projections	
2019	28,544
2020	28,829
2030	32,518
2040	36,207

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	10
2030	11
2040	12

Maximum Day Demand	
Projections (MGD)	
2020	20
2030	22
2040	24

Percentage of Water Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	969
3/4"	0
1"	8,544
1-1/2"	0
2"	23
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	48
3/4"	0
1"	849
1-1/2"	0
2"	533
3"	56
4"	38
6"	7
8"	2
10"	0

12. Are there any current ordinances concerning water impact fees within your utility?



FREESE

LEGEND

FNI Responses in Blue

City Responses in Red

April 2020

Demographics Information

- 1. Wholesale Customer Name: Trophy Club Municipal Utility District
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	13,308
2020	14,117
2030	14,117
2040	14,117

Employment Projections	
2019	-
2020	1,051
2030	1,141
2040	1,141

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	3,400,000
2030	3,800,000
2040	4,000,000

Maximum Day Demand	
Projections (MGD)	
2020	10,000,000
2030	10,000,000
2040	10,000,000

Percentage of Water		
Demands Served by FTW		
2020	95%	
2030	95%	
2040	95%	

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters	
Meter Size	Quantity
5/8"	2,467
3/4"	0
1"	2,054
1-1/2"	0
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	37
3/4"	0
1"	41
1-1/2"	31
2"	105
3"	21
4"	12
6"	2
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? No.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: Town of Westlake
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	1,610
2020	1,680
2030	4,263
2040	6,846

Employment Projections	
2019	13,241
2020	13,465
2030	21,878
2040	45,121

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	1.4
2030	2.5
2040	4.8

Maximum Day Demand	
Projections (MGD)	
2020	3.0
2030	5.7
2040	10.8

Percentage of Water	
Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Total Residential Meters: 630
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Total Non-Residential Meters: 182





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	137
1"	449
1-1/2"	34
2"	10
3"	0
4"	0
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	40
1"	41
1-1/2"	12
2"	74
3"	4
4"	9
6"	2
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? No.



April 2020

WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: Town of Westover Hills
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	682
2020	682
2030	682
2040	682

Employment Projections	
2019	576
2020	576
2030	576
2040	576

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	1
2030	1
2040	1

Maximum Day Demand	
Projections (MGD)	
2020	1
2030	1
2040	1

Percentage of Water	
Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years? No.
- 9. Will your service area boundaries be expanded within the next 20 years? No.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



WHOLESALE CUSTOMER SURVEY WATER/WASTEWATER SERVICE PROJECTIONS



FOR IMPACT FEE STUDY April 2020

Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	7
1"	110
1-1/2"	149
2"	41
3"	2
4"	1
6"	0
8"	0
10"	0

Non-Residential Meters	
Meter Size	Quantity
5/8"	2
3/4"	0
1"	0
1-1/2"	1
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

12. Are there any current ordinances concerning water impact fees within your utility? Yes, ordinance replicating those of Fort Worth.

- 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	0
2030	0
2040	0

Peak Wet Weather Flow	
Projections (MGD)	
2020	0
2030	0
2040	0

Percentage of Wastewater	
Flow Served by FTW	
2020	100%
2030	100%
2040	100%

- 16. Existing number of wastewater customers SERVED by Fort Worth (Residential: 219_, Non-Residential: 0_)
- 17. Will your service area boundaries be expanded in the next 20 years? No.
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	7
1"	110
1-1/2"	149
2"	41
3"	2
4"	1
6"	0
8"	0
10"	n

Non-Residential Meters	
Meter Size	Quantity
5/8"	2
3/4"	0
1"	0
1-1/2"	1
2"	0
3"	0
4"	0
6"	0
8"	0
10"	0

20. Are there any current ordinances concerning wastewater impact fees within your utility? Yes, matches what the City of Fort Worth has.



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



FNI Responses in Blue

City Responses in Red

LEGEND

Demographics Information

1. Wholesale Customer Name: Westworth Village

2. Wholesale Customer Type (Water and Wastewater)

3. City-Wide Population Projections (2019, 2020, 2030, 2040)

4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	
2020	3,157
2030	3,214
2040	3,272

Employment Projections	
2019	
2020	1,683
2030	1,778
2040	1,863

Water Service Information

5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)

6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)

7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)	
2020	0.34
2030	0.35
2040	0.36

Maximum Day Demand	
Projections (MGD)	
2020	0.85
2030	0.87
2040	0.90

Percentage of Water	
Demands Served by FTW	
2020	100%
2030	100%
2040	100%

- 8. Will you require a larger and/or additional meter within the next 20 years?
- 9. Will your service area boundaries be expanded within the next 20 years?
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 12. Annual residential consumption per meter (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 13. Annual non-residential consumption per meter (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



WHOLESALE CUSTOMER SURVEY WATER/WASTEWATER SERVICE PROJECTIONS

FREESE

FOR IMPACT FEE STUDY April 2020

Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	543
1"	6
1-1/2"	0
2"	3
3"	0
4"	0
6"	0
8"	0
10"	

Non-Residential Meters	
Meter Size	Quantity
5/8"	0
3/4"	3
1"	15
1-1/2"	6
2"	18
3"	2
4"	1
6"	1
8"	0
10"	0

14. Are there any current ordinances concerning water impact fees within your utility?

Wastewater Service Information

- 15. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 16. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
- 17. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow	
Projections (MGD)	
2020	0.32
2030	0.32
2040	0.33

Peak Wet Weather	
Flow Projection (MGD)	
2020	1.28
2030	1.28
2040	1.32

Percentage of Wastewater	
Flow Served by FTW	
2020	100%
2030	100%
2040	100%

18. Existing number of

wastewater cust	tomers SERVED by Fort Worth
(Residential:	, Non-Residential:)

- 19. Will your service area boundaries be expanded in the next 20 years?
- 20. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 21. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	
3/4"	
1"	
1-1/2"	
2"	
3"	
4"	
6"	
8"	
10"	

Non-Residential Meters	
Meter Size	Quantity
5/8"	
3/4"	
1"	
1-1/2"	
2"	
3"	
4"	
6"	
8"	
10"	

22. Are there any current ordinances concerning wastewater impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY



LEGEND

FNI Responses in Blue

City Responses in Red

April 2020

Demographics Information

- 1. Wholesale Customer Name: City of White Settlement
- 2. Wholesale Customer Type (Water and Wastewater)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	
2020	16,997
2030	17,522
2040	17,530

Employment Projections	
2019	
2020	8,216
2030	9,458
2040	10,353

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand	
Projections (MGD)	
2020	1.14
2030	1.18
2040	1.18

Maximum Day Demand Projections (MGD)	
2020	1.94
2030	2.01
2040	2.01

Percentage of Water Demands Served by FTW	
2020	55%
2030	55%
2040	55%

- 8. Will you require a larger and/or additional meter within the next 20 years?
- 9. Will your service area boundaries be expanded within the next 20 years?
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")



April 2020



Residential Meters	
Meter Size	Quantity
5/8"	2,760
3/4"	
1"	
1-1/2"	
2"	
3"	
4"	
6"	
8"	
10"	

Non-Residential Meters	
Meter Size	Quantity
5/8"	125
3/4"	0
1"	6
1-1/2"	25
2"	57
3"	7
4"	2
6"	1
8"	
10"	

- 12. Are there any current ordinances concerning water impact fees within your utility? Wastewater Service Information
 - 13. Average Day Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
 - 14. Peak Wet Weather Flow Projections SERVED by Fort Worth (2020, 2030, 2040)
 - 15. What percentage of your projected wastewater flows are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Flow Projections (MGD)	
2020	1.70
2030	1.75
2040	1.75

Peak Wet Weather Flow Projection (MGD)	
2020	6.80
2030	7.00
2040	7.00

Percentage of Wastewater Flow Served by FTW	
2020	100%
2030	100%
2040	100%

16. Existing number of

wastewater cust	tomers SERVED by For	t worth
(Residential:	, Non-Residential:)

- 17. Will your service area boundaries be expanded in the next 20 years?
- 18. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.
- 19. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10") Skip if you provided information in the previous section.





Residential Meters	
Meter Size	Quantity
5/8"	5,156
3/4"	
1"	
1-1/2"	
2"	
3"	
4"	
6"	
8"	
10"	

Non-Residential Meters	
Meter Size	Quantity
5/8"	236
3/4"	
1"	74
1-1/2"	46
2"	113
3"	13
4"	4
6"	1
8"	
10"	

20. Are there any current ordinances concerning wastewater impact fees within your utility?



WATER/WASTEWATER SERVICE PROJECTIONS FOR IMPACT FEE STUDY April 2020



LEGEND

FNI Responses in Blue City Responses in Red

Demographics Information

- 1. Wholesale Customer Name: City of Willow Park
- 2. Wholesale Customer Type (Water)
- 3. City-Wide Population Projections (2019, 2020, 2030, 2040)
- 4. City-Wide Employment Projections (2019, 2020, 2030, 2040)

Population Projections	
2019	5,500
2020	5,569
2030	10,000
2040	15,000

Employment Projections	
2019	95
2020	95
2030	95
2040	95

- 5. Average Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 6. Maximum Day Demand Projections SERVED by Fort Worth (2020, 2030, 2040)
- 7. What percentage of your projected water demands are anticipated to be served by Fort Worth? (2020, 2030, 2040)

Average Day Demand Projections (MGD)					
2020	0				
2030	0				
2040	0				

Maximum Day Demand							
Projections (MGD)							
2020	0						
2030	0						
2040	0						

Percentage of Water Demands Served by FTW					
2020	0%				
2030	60%				
2040	70%				

- 8. Will you require a larger and/or additional meter within the next 20 years? Yes.
- 9. Will your service area boundaries be expanded within the next 20 years? Yes.
- 10. Existing number of residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")
- 11. Existing number of non-residential water meters (5/8", 3/4", 1", 1-1/2", 2", 3", 4", 6", 8", 10")





Residential Meters								
Meter Size	Quantity							
5/8"	1,841							
3/4"	3							
1"	1							
1-1/2"	0							
2"	0							
3"	0							
4"	0							
6"	0							
8"	0							
10"	0							

Non-Residential Meters							
Meter Size	Quantity						
5/8"	75						
3/4"	7						
1"	35						
1-1/2"	17						
2"	26						
3"	5						
4"	4						
6"	4						
8"	0						
10"	0						

12. Are there any current ordinances concerning water impact fees within your utility? Yes.



Appendix C Population and Employment Projections



Appendix C Water Wholesale Customer Population and Employment Projections City of Fort Worth



Population			Employment			Portion Served by Fort Worth			Served Population			Served Employment			
Wholesale Customer	2022	2031	2041	2022	2031	2041	2022	2031	2041	2022	2031	2041	2022	2031	2041
Aledo	5,077	7,040	8,558	981	1,082	1,182	84%	92%	100%	4,265	6,477	8,558	824	995	1,182
Benbrook Water Authority*	24,204	29,494	35,393	6,462	7,562	8,661	0%	0%	0%	0	0	0	0	0	0
Bethesda Water Supply Corp.	32,515	35,810	39,367	0	0	0	69%	76%	80%	22,435	27,216	31,494	0	0	0
Burleson	55,575	84,095	114,827	24,046	27,500	31,500	90%	73%	59%	50,018	61,389	67,748	21,641	20,075	18,585
Crowley	19,442	27,000	37,000	157	180	205	100%	100%	100%	19,442	27,000	37,000	157	180	205
Dalworthington Gardens	2,360	2,420	2,520	738	776	806	50%	50%	50%	1,180	1,210	1,260	369	388	403
DFW Airport	0	0	0	62,160	63,485	64,909	28%	28%	28%	0	0	0	17,405	17,776	18,175
Edgecliff Village	3,244	3,260	3,260	1,860	1,912	1,912	100%	100%	100%	3,244	3,260	3,260	1,860	1,912	1,912
Everman	6,700	7,600	8,100	1,738	1,793	1,793	0%	0%	0%	0	0	0	0	0	0
Forest Hill	13,110	13,160	13,210	9,622	9,751	9,946	100%	100%	100%	13,110	13,160	13,210	9,622	9,751	9,946
Grand Prairie	197,280	217,920	240,252	128,204	129,837	129,837	10%	8%	7%	19,728	17,434	16,818	12,820	10,387	9,089
Haltom City	44,800	50,000	50,000	21,940	24,500	24,500	100%	100%	100%	44,800	50,000	50,000	21,940	24,500	24,500
Haslet	2,940	7,560	11,860	11,680	12,440	12,640	99%	99%	99%	2,911	7,484	11,741	11,563	12,316	12,514
Hudson Oaks	3,480	4,360	5,160	2,120	2,780	3,680	81%	86%	91%	2,819	3,750	4,696	1,717	2,391	3,349
Hurst	38,735	39,873	41,053	27,541	31,276	33,351	99%	99%	99%	38,348	39,474	40,642	27,266	30,963	33,017
Keller	47,354	51,580	51,580	13,516	14,698	14,698	100%	100%	100%	47,354	51,580	51,580	13,516	14,698	14,698
Kennedale	8,300	11,709	16,152	4,866	6,115	7,370	19%	14%	9%	1,577	1,639	1,454	925	856	663
Lake Worth	5,132	5,958	6,595	3,265	3,793	3,864	83%	92%	102%	4,260	5,481	6,727	2,710	3,490	3,941
North Richland Hills	73,400	80,800	89,800	24,419	26,745	29,269	58%	58%	58%	42,572	46,864	52,084	14,163	15,512	16,976
Northlake	10,400	22,000	32,000	1,212	1,212	1,212	28%	20%	20%	2,912	4,400	6,400	339	242	242
Richland Hills	8,300	8,300	8,300	9,603	10,072	10,072	80%	100%	100%	6,640	8,300	8,300	7,682	10,072	10,072
River Oaks*	7,710	8,162	8,210	7,800	8,200	8,200	0%	0%	0%	0	0	0	0	0	0
Roanoke	9,080	11,547	14,524	5,972	6,700	6,700	100%	100%	100%	9,080	11,547	14,524	5,972	6,700	6,700
Saginaw	24,225	30,091	33,727	12,351	15,736	18,441	100%	100%	100%	24,225	30,091	33,727	12,351	15,736	18,441
Sansom Park*	5,629	5,905	6,207	1,234	1,306	1,306	0%	0%	0%	0	0	0	0	0	0
Southlake	32,831	36,041	40,850	29,567	33,256	36,945	100%	100%	100%	32,831	36,041	40,850	29,567	33,256	36,945
Trinity River Authority*	0	0	0	0	0	0	0%	0%	0%	0	0	0	0	0	0
Trophy Club Municipal Utility District	14,117	14,117	14,117	1,069	1,141	1,141	95%	95%	95%	13,411	13,411	13,411	1,016	1,084	1,084
Westlake	1,276	1,751	2,356	13,168	14,518	15,912	100%	100%	100%	1,276	1,751	2,356	13,168	14,518	15,912
Westover Hills	682	682	682	576	576	576	100%	100%	100%	682	682	682	576	576	576
Westworth Village ¹	3,169	3,226	3,284	1,702	1,795	1,880	100%	100%	100%	3,169	3,226	3,284	1,702	1,795	1,880
White Settlement ¹	17,102	17,524	17,532	8,464	9,637	10,532	55%	55%	55%	9,406	9,638	9,643	4,655	5,300	5,793
Willow Park	6,455	11,000	16,000	95	95	95	30%	62%	72%	1,937	6,820	11,520	29	59	68
TOTAL	724,624	849,985	972,476	438,128	470,469	493,135				423,632	489,325	542,969	235,555	255,528	266,868

^{*}Denotes Emergency Use Contract, not regular user

¹Survey not received, data taken from the 2016 Impact Fee Update

Exhibit A: Land Use Assumptions - Water FREESE AND NICHOLS, INC. FREESE AND NICHOLS, INC. 801 CHERRY STREET, SUITE 2800 FORT WORTH, TEXAS 76102 817-735-7300

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