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Water & Wastewater Impact Fee Update

EXHIBIT A: Land Use Assumptions Water Facilities 2013- 2033

Prepared for:

City of Fort Worth Water Department



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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.” In September 2001, Senate Bill 243 amended Chapter 395, thus creating the current procedure for implementing impact fees. 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 April 2012, 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 facilities 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 and 2009. This report updates the water facilities land use assumptions for the years 2013, 2023 and 2033. This information will be used in the update of the water impact fees.

2.0 WATER SERVICE AREA

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, 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 31 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 (2013-2033). The wholesale customers are:

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

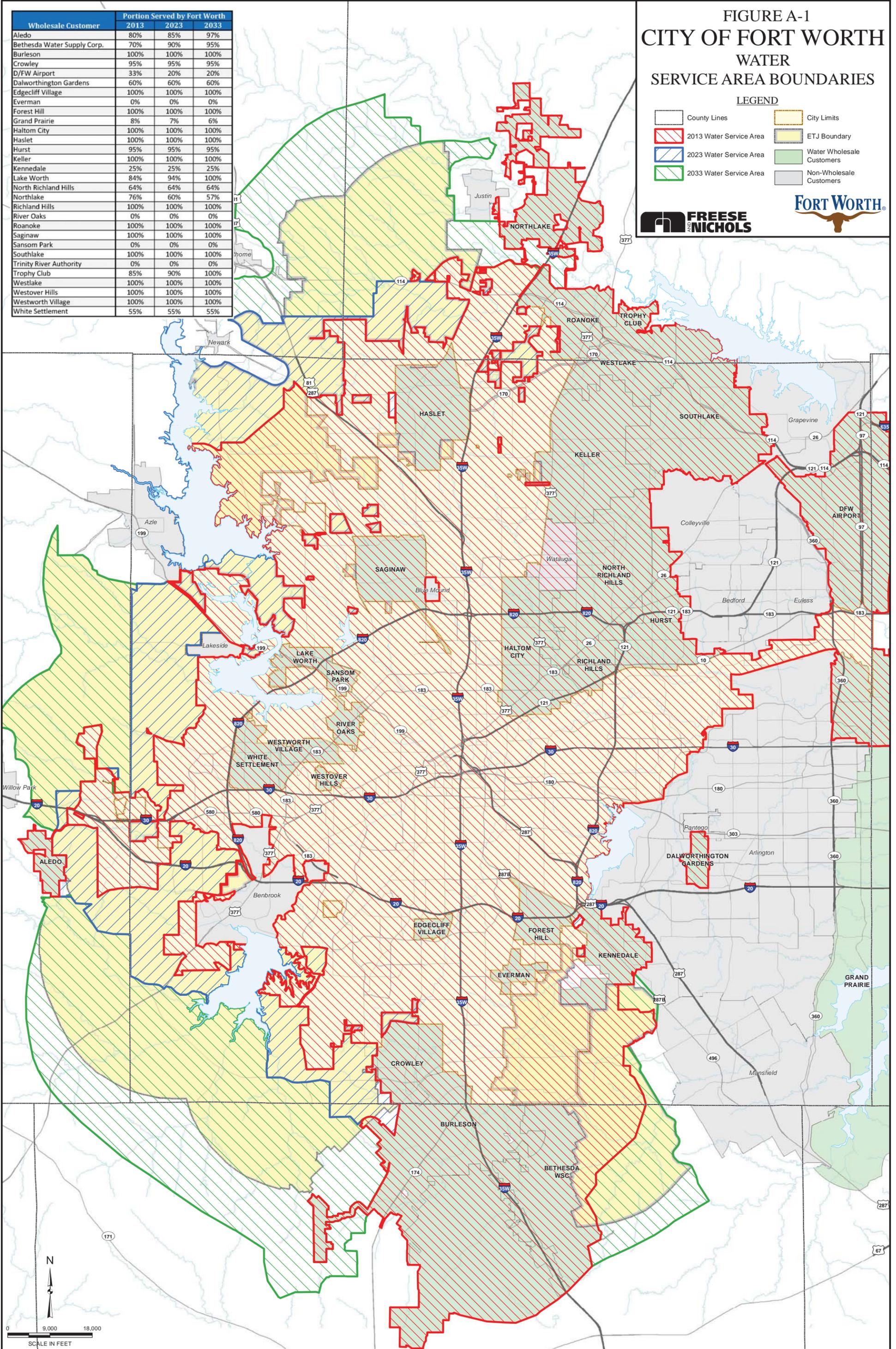
Watauga is served by the City of Fort Worth through North Richland Hills and is not a direct wholesale customer. Fort Worth serves as an emergency provider for River Oaks and Sansom Park. River Oaks and Sansom Park are excluded from the land use assumptions and future water facilities projections. Additionally, 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 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**.

FIGURE A-1 CITY OF FORT WORTH WATER SERVICE AREA BOUNDARIES

Wholesale Customer	Portion Served by Fort Worth		
	2013	2023	2033
Aledo	80%	85%	97%
Bethesda Water Supply Corp.	70%	90%	95%
Burleson	100%	100%	100%
Crowley	95%	95%	95%
D/FW Airport	33%	20%	20%
Dalworthington Gardens	60%	60%	60%
Edgecliff Village	100%	100%	100%
Everman	0%	0%	0%
Forest Hill	100%	100%	100%
Grand Prairie	8%	7%	6%
Haltom City	100%	100%	100%
Haslet	100%	100%	100%
Hurst	95%	95%	95%
Keller	100%	100%	100%
Kennedale	25%	25%	25%
Lake Worth	84%	94%	100%
North Richland Hills	64%	64%	64%
Northlake	76%	60%	57%
Richland Hills	100%	100%	100%
River Oaks	0%	0%	0%
Roanoke	100%	100%	100%
Saginaw	100%	100%	100%
Sansom Park	0%	0%	0%
Southlake	100%	100%	100%
Trinity River Authority	0%	0%	0%
Trophy Club	85%	90%	100%
Westlake	100%	100%	100%
Westover Hills	100%	100%	100%
Westworth Village	100%	100%	100%
White Settlement	55%	55%	55%

- LEGEND**
- County Lines
 - 2013 Water Service Area
 - 2023 Water Service Area
 - 2033 Water Service Area
 - City Limits
 - ETJ Boundary
 - Water Wholesale Customers
 - Non-Wholesale Customers



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 2013, 2023 and 2033. 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 2013, 2023 and 2033.

3.1 CITY OF FORT WORTH PROJECTIONS

FNI utilized NCTCOG data, along with data from the City of Fort Worth Planning and Development Department, to develop population projections for the 2013, 2023 and 2033 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

Year	Population		Employment	
	Amount	Annual Growth Rate*	Amount	Annual Growth Rate*
2013	767,810	--	525,108	--
2023	1,033,754	3.0%	642,268	2.0%
2033	1,302,156	2.3%	745,976	1.5%

*Annual Growth Rate is based on information from NCTCOG and the Fort Worth Planning and Development Department

The retail population is projected to annually increase 3.0% from 2013 to 2023 and 2.3% from 2023 to 2033. The retail employment is projected to annually increase 2.0% from 2013 to 2023 and 1.5% from 2023 to 2033.

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 to check for validity and consistency. 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 Service Population and Employment Projections

Year	Population		Employment	
	Amount	Annual Growth Rate*	Amount	Annual Growth Rate*
2013	365,804	--	181,500	--
2023	450,163	2.1%	222,315	2.1%
2033	521,814	1.5%	253,591	1.3%

*Annual Growth Rate is based on information from NCTCOG, Fort Worth Wastewater Master Plan, and Wholesale Customer Surveys

The served wholesale population is projected to annually increase 2.1% from 2013 to 2023 and 1.5% from 2023 to 2033. The served wholesale employment is projected to annually increase 2.1% from 2013 to 2023 and 1.3% from 2023 to 2033. 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 customer cities. The population is projected to annually increase 2.7% from 2013 to 2023 and 2.1% from 2023 to 2033. The employment is projected to annually increase 2.0% from 2013 to 2023 and 1.5% from 2023 to 2033.

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

	Population			Employment		
	2013	2023	2033	2013	2023	2033
City of Fort Worth	767,810	1,033,754	1,302,156	525,108	642,268	745,976
Wholesale Customers	365,804	450,163	521,814	181,500	222,315	253,591
TOTAL	1,133,614	1,483,917	1,823,970	706,608	864,583	999,567
Annual Growth Rate*	--	2.7%	2.1%	--	2.0%	1.5%

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

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