2023 JOINT REGULATORY PLAN REVIEW
TECHNICAL MEMORANDUM

TO: Mike Turco

CC: Robert Thompson and Ashley Greuter

FROM: Courtney Corso and Jason Afinowicz

SUBJECT: Task A: Projected Water Needs Evaluation Technical Memorandum

DATE: March 6, 2024

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INTRODUCTION

In 2020, the Harris-Galveston Subsidence District (HGSD) and the Fort Bend Subsidence District (FBSD), collectively the "Subsidence Districts", initiated the effort to commence the 2023 Joint Regulatory Plan Review (JRPR) to facilitate evaluation of the two Subsidence Districts' regulatory frameworks through the year 2100. This ambitious plan provides a crucial knowledge base for the entire region by assessing the need for groundwater management in order to prevent subsidence and provide water resources required for the area's robust growth. Key steps of the JRPR include the development of long-term water demands, identification and assessment of alternative water supplies, and the evaluation of various regulatory scenarios in updated subsidence modeling applications to provide informed input to the Boards of the respective Subsidence Districts for consideration of future groundwater management. This memorandum summarizes the methodology and results of the development of projections of future population growth in the region and estimations of future water demand for municipal, domestic, industrial, mining, and agricultural purposes.

ASSOCIATED PLANNING PROCESSES

In developing the projected water needs methodology for the JRPR process, consideration was given to associated planning processes anticipated to benefit from the study. The earlier HGSD/FBSD Regional Groundwater Update Project (RGUP) has already demonstrated its importance as a vital information resource for the region for nearly a decade. These benefits will be enhanced even further by the JRPR, which has not only generated a wealth of information regarding projected population and water demands at a fine spatial scale, but has also extended the projection horizon to the year 2100 and considered in greater detail the influence of climate conditions on per-capita water demands. This data will facilitate not only the planning of individual stakeholders within the regulated community, but also play an important role in the Regional Water Plan (RWP), State Water Plan (SWP), and Groundwater Management Area (GMA) processes.

Stakeholders

The population and water demand data generated by the JRPR will assist regulated communities in understanding when and where population growth and associated water demands are expected to occur within their boundaries. This, in turn, facilitates their own planning activities regarding the location, size, recipients, and timing of alternative water supply infrastructure in order to meet the regulatory requirements of the Subsidence Districts. The planning value of the JRPR is further enhanced by the participation of water systems and regional water authorities as stakeholders, including the contribution of insights and data into the projection methodology described in this memorandum. Additionally, because of the broad geographic footprint of the study area, the planning benefits of the JRPR to water providers extend well beyond the Subsidence District counties.

Regional and State Water Planning and the GMA Process

Because of the importance of the Texas Water Development Board (TWDB) RWP and SWP processes in evaluating future water management strategies and infrastructure funding opportunities, the 2013 RGUP was designed to not only support groundwater management within the Subsidence Districts, but also to allow TWDB planning processes to reflect local conditions and planning efforts more closely. This led to TWDB adoption of RGUP projections for the five-county urban core of the Region H Water Planning Area for the 2016 RWP, marking the first and only time to date that TWDB has approved a large-scale alternative to its municipal projection methodology.

The 2023 JRPR projections have been used as the basis for population and municipal water demand projections in the 2026 Region H RWP. The projections adapted for use by Region H were approved by TWDB in November 2023.

Key benefits of the JRPR to the RWP process include:

- Closer alignment of projections and processes for local and regional planning;
- Availability of detailed municipal projection information at the Census block level rather than the more consolidated utility-level projections for the default TWDB methodology;
- More accurate reflection of the regulatory availability of groundwater within Subsidence District counties that is consistent with HGSD/FBSD regulatory limits on production and conversion schedules;
- More accurate representation of planned future infrastructure projects for the regulated community;
- Facilitation of more advanced analyses of potential future strategies, including supplies such as reuse which are influenced by population density and proximity to other infrastructure; and
- Improved perspective and understanding of potential far-term strategies through the extension of the data horizon beyond that used for the RWP.

Furthermore, the Texas Water Code requires GMAs to consider the water supply need and water management strategies included in the SWP as part of the development process for Desired

Future Conditions. The planning benefits of the JRPR to the SWP processes may also therefore also impact the GMA process, particularly for GMA 14.

METHODOLOGY OVERVIEW

Projections of water demands in the study include demands for retail municipal (residential, institutional, and commercial served by public water systems), industrial, agricultural, mining, and exempt (single-family domestic) water users for each decade in the period 2020 through 2100. Associated analyses included the following major elements, described in greater detail in subsequent sections of the memorandum.

- **Projections of Population and Total Water Demand:** Development of municipal demand projections required long-term population projections as well as estimates of expected per-capita demands. A population growth forecast was generated using the Small Area Model-Houston (SAM-Houston) regional economic growth model. Then, coarse-scale growth forecasts generated by SAM-Houston at the Census tract level were refined using local, short-term development data and various spatial datasets. Baseline per-capita demand values, which represent expected demand under average climate conditions in gallons per-capita per day (GPCD), were estimated for each municipal water user. Similarly, an assumed per-capita demand value was applied to projected populations that are expected to be supplied by exempt (single-family) domestic wells. Industrial, agricultural, and mining water demands were adapted from draft projections developed at the county level by TWDB for use in the 2026 RWPs. The development of population, per-capita demand, and total water demand projections are described in detail throughout this memorandum.
- **Portion of Total Water Demand Allocated to Groundwater Pumping:** The portion of baseline demands expected to be met by groundwater supplies was estimated for each year in the study period. Estimates of the groundwater portion of municipal supplies considered existing Groundwater Reduction Plans (GRPs), existing Subsidence District regulations in the 2013 Regulatory Plans, historical usage patterns, and anticipated development of new public water systems (PWS) to serve new population growth. All domestic demand associated with the population not anticipated to be served by PWS is expected to be met from groundwater from private wells. The groundwater portions of non-municipal supplies were primarily based on historical usage data. More detail is provided in these subsections:
    - ***Determination of Municipal Groundwater Demand in Baseline Scenario***
    - ***Industrial Water Demand Projection Methodology***
    - ***Mining Water Demand Projection Methodology***
    - ***Agricultural Water Demand Projection Methodology***
- **Baseline Scenario Assumptions:** Groundwater portions of municipal demand were developed for the baseline scenario to represent the most likely groundwater demand under current Subsidence District regulations. Most water users or groups of users with GRPs are expected to closely match the regulated groundwater percentages each year, with exceptions in HGSD Regulatory Area 1 and limited other areas. The section ***Determination of Municipal Groundwater Demand in Baseline Scenario*** discusses these assumptions in greater detail. Alternative scenarios may consider variations in per-capita demand due to alternative climate scenarios, assumptions of municipal conservation, and/or year-to-year variations in demand.

The baseline scenario and alternative scenarios are discussed in greater detail in a separate technical memorandum related to Task D of the 2023 JRPR.

- **Implementation of Projections in Modeling:** The total projected groundwater demand in each year was distributed across the model grid of the Gulf Coast Land Subsidence and Groundwater Flow Model (GULF-2023) based on the anticipated locations of groundwater pumping. The distribution of demands in GULF-2023 is discussed in a separate technical memorandum related to Task D of the 2023 JRPR.

Detailed procedures for projecting population and water demands are described in the following sections.

STAKEHOLDER INVOLVEMENT

Stakeholder outreach and involvement has been a critical component of the JRPR process. In addition to the stakeholder meetings hosted by the Subsidence Districts throughout the study, two major phases of stakeholder involvement contributed to the development of population and municipal water demand projections: (1) a stakeholder survey in fall 2021 and (2) a stakeholder feedback process in fall 2022.

In September 2021, an online survey was sent to 75 entities, including municipalities and major water providers in Harris, Fort Bend, Galveston, Brazoria, and Montgomery counties. The distribution also included the Harris, Fort Bend, and Galveston County Commissioners Courts. Responses were received from September through December of 2021, including direct responses through the online survey, supplemental data and documents via email, and phone calls. Overall, 32 entities provided some level of response. Information collected included historical retail and wholesale water use data, service area boundaries, potential service area expansions, connection counts, water sources, conservation plans, and future supply plans. This information was helpful in delineating service areas to allocate projected populations to water supply systems and in developing per-capita demand projections. A list of the entities surveyed and the types of responses received can be found in **Appendix A**.

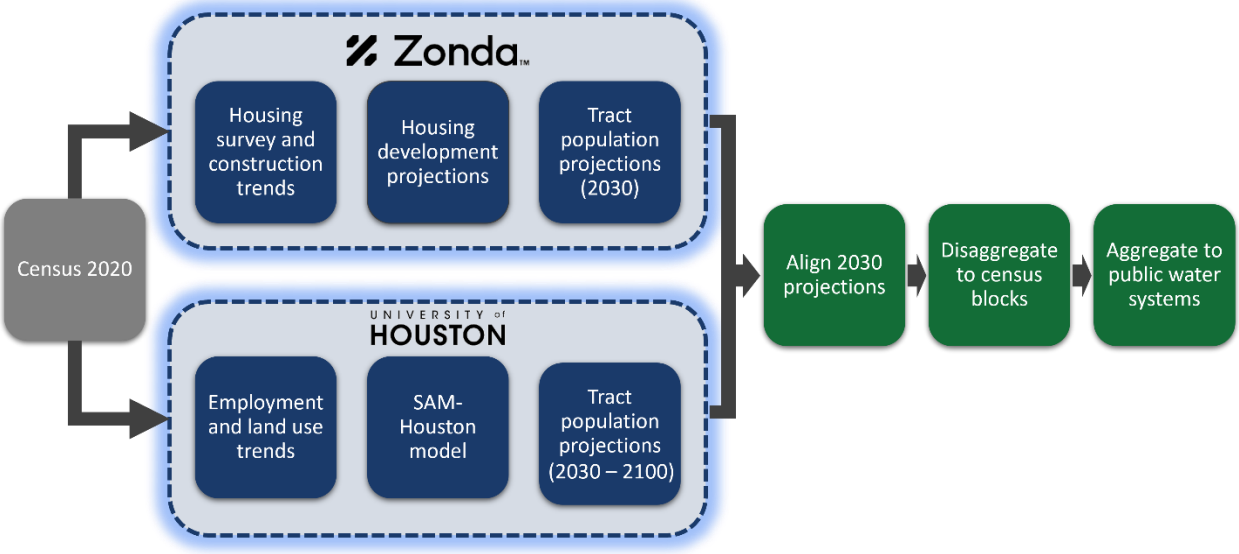
In October 2022, stakeholder feedback was requested via email on draft population projections. Draft population projections by county, Census tract, and water utility service area were provided via an interactive web mapping application. Feedback was received from eight entities, and population projections in Fort Bend County were adjusted at the tract, block, and utility levels to incorporate stakeholder information.

POPULATION PROJECTION

Overview of Approach

The process to develop a detailed spatial distribution of projected population for each decade from 2030 through 2100 is illustrated in ***Figure 1*** and described below.

Figure 1 – Population Projection Development Process



1. Population data from the 2020 Census was used as the baseline for 2030 to 2100 projections.

2. Decadal projections for 2030 through 2100 were developed by the University of Houston (UH) using the SAM-Houston economic growth model. More detail is provided in the ***Long-term Projections Using Small Area Model-Houston*** subsection below.

3. Refined near-term projections through 2030 were developed by Zonda for Fort Bend County, southeastern Waller County, HGSD Regulatory Area 3, and part of HGSD Regulatory Area 2 using local trends in home construction, household sizes, and projected growth based on a variety of data sources, including the Zonda quarterly housing survey data. More detail is provided in the ***Near-term Projections in Selected Areas*** subsection below.

4. Freese & Nichols, Inc. (FNI), UH, and Zonda reviewed the tract-level 2030 population projections generated by both UH and Zonda to identify differences in the two projection methodologies and make adjustments. More detail is provided in the ***Alignment of 2030 Projections*** subsection below.

5. The final tract-level population projections were distributed to census blocks and then allocated to individual municipal water users. More detail is provided in the ***Distribution from Tracts to Blocks and Public Water Systems*** subsection below.

Long-term Projections Using Small Area Model-Houston

The SAM-Houston model was used in the 2013 RGUP to develop long-term population projections for decades 2020 through 2070 for Brazoria, Fort Bend, Galveston, Harris, and Montgomery counties. In 2020, during the initial phases of the JRPR, the SAM-Houston model was updated to include Austin, Chambers, Liberty, Waller, and Wharton counties, and the projection period was

extended to 2100. Additionally, recent trends in developable land area were used to refine the SAM-Houston land use module so that geographic allocation of population growth better reflects constraints such as available vacant space and existing land use intensity. Finally, refinements to projections considered updated conveyance zone mapping in the lower Brazos River Basin to prevent the model from allocating growth to areas that are at high risk of flooding. Refinements in Fort Bend County also reflected feedback from stakeholders to better align near-term growth forecasts with current development ordinances. This process reduced near-term densification of developed areas in northern and eastern Fort Bend County and allocated a larger share of the county growth to currently undeveloped areas.

Tract-level populations predicted by SAM-Houston were refined after the SAM-Houston model execution. Most of the post-processing was applied to smooth out fluctuations between decades which were deemed unrealistic, while a few tracts were adjusted to give greater weighting to available land than to proximity to employment centers. All post-processing was done at the tract level, and county totals predicted by SAM-Houston were maintained. More detail on the SAM-Houston modeling approach is provided in **Appendix B**.

Projected population by county is shown in ***Figure 2*** and ***Figure 3***, as well as **Appendix D Table D-1**. Projected population growth in each tract is shown as a percentage change relative to 2020 population in ***Figure 4*** and ***Figure 5***.

Figure 2 – 2020 Census Population and 2030-2100 JRPR Population Forecast by County (Counties Exceeding 500,000 Residents)

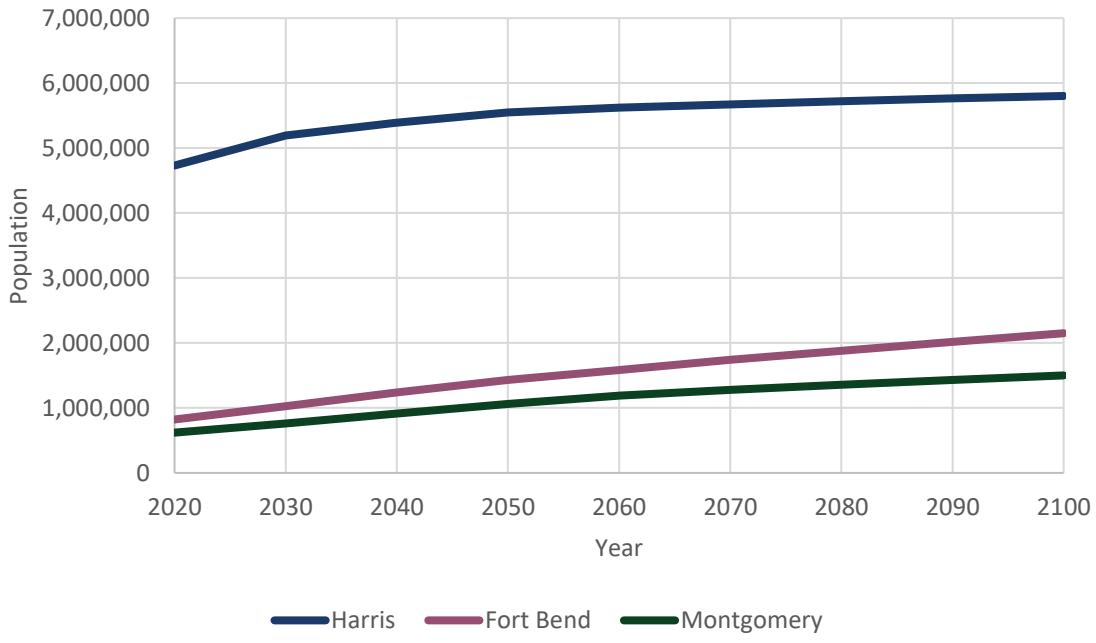


Figure 3 – 2020 Census Population and 2030-2100 JRPR Population Forecast by County (Counties Not Exceeding 500,000 Residents)

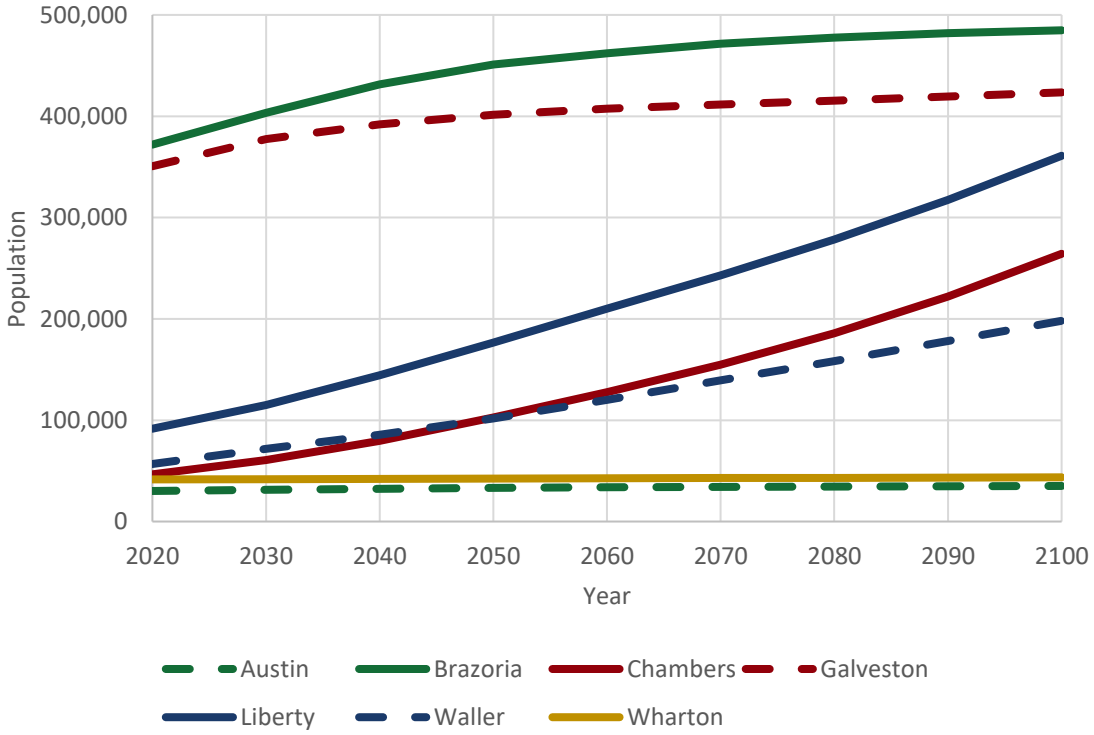


Figure 4 – Projected Percent Change in Population by Census Tract, 2020 to 2050

Population growth projected to occur in each Census tract by 2050 is shown as a percentage change relative to 2020 population.

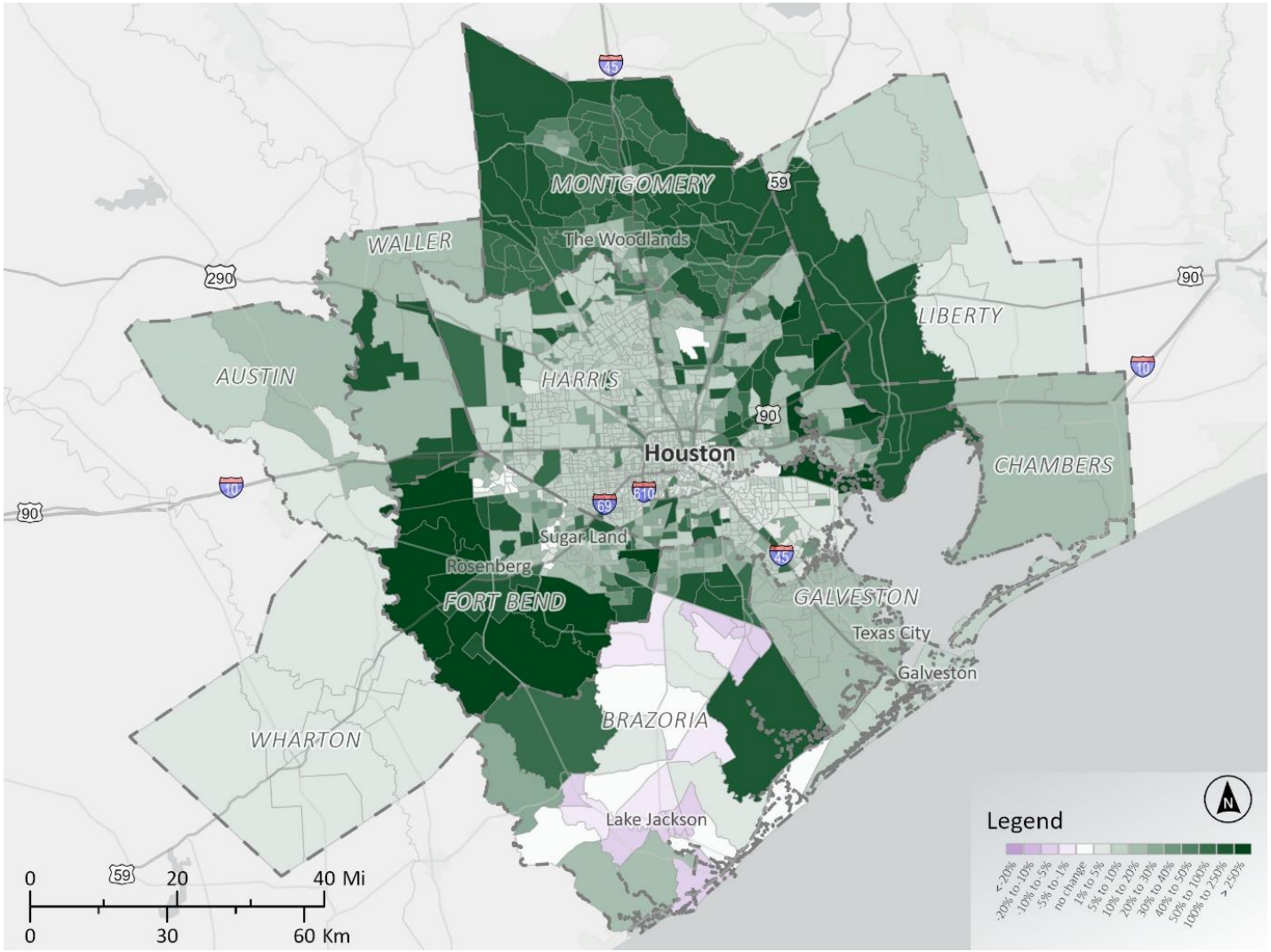
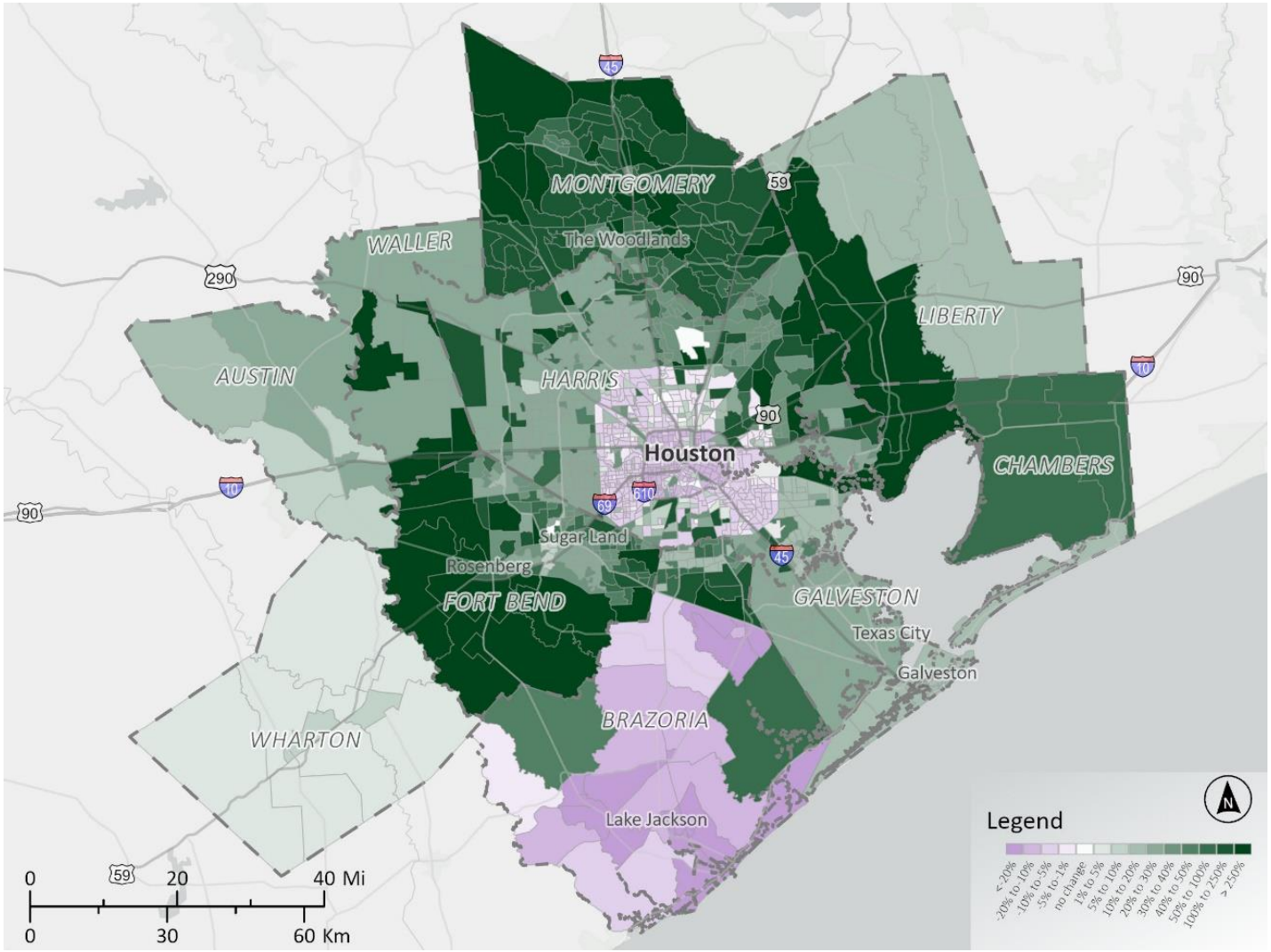


Figure 5 - Projected Percent Change in Population by Census Tract, 2020 to 2100

Population growth projected to occur in each Census tract by 2100 is shown as a percentage change relative to 2020 population.



Near-term Projections in Selected Areas

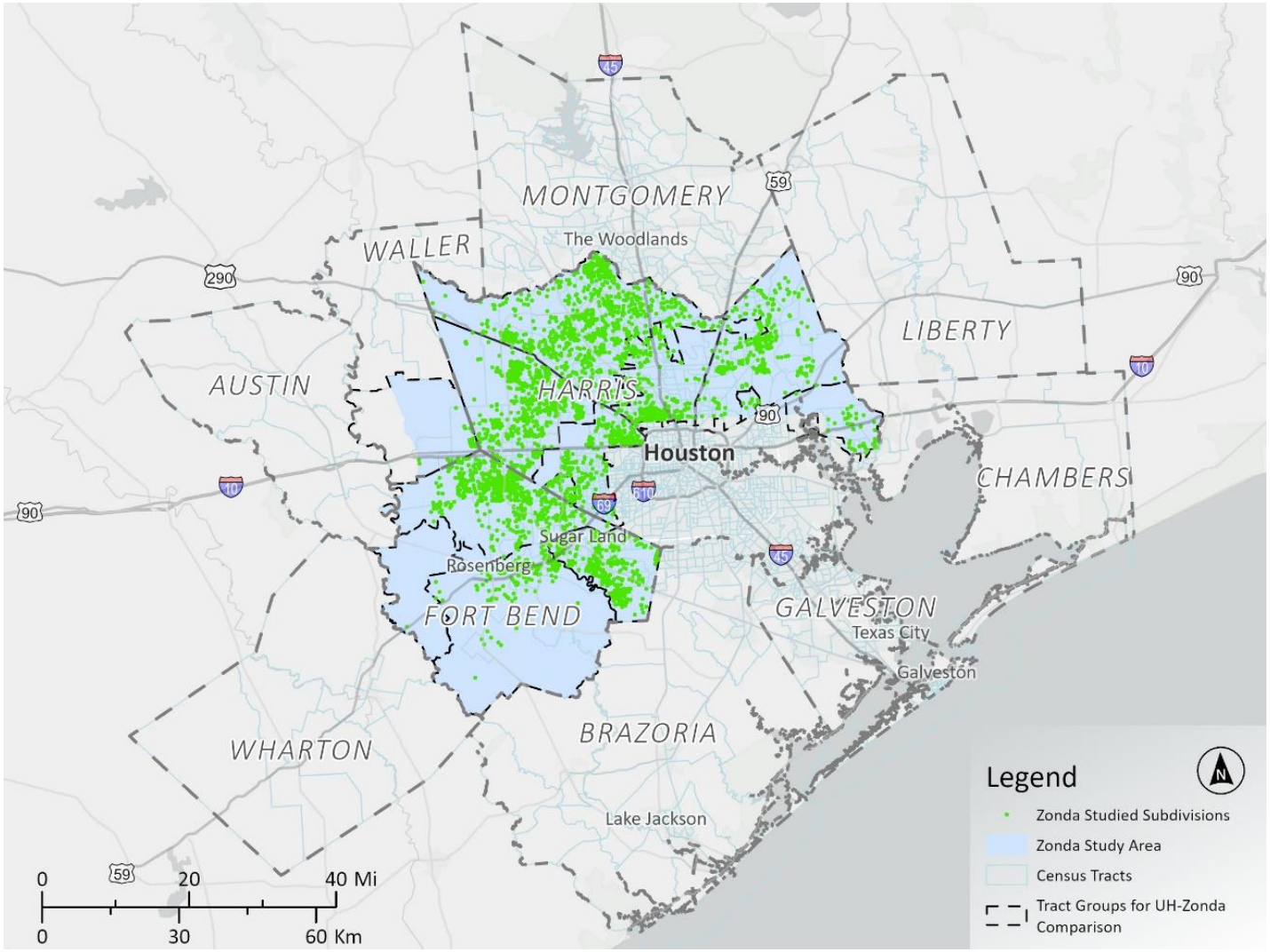
Zonda developed population growth projections for years 2021 through 2030 for Census tracts in Fort Bend County, southeastern Waller County, HGSD Regulatory Area 3, and a portion of HGSD Regulatory Area 2 (***Figure 6***). Based on numerous sources of demographic data and real estate development information (see ***Appendix C***), Zonda estimated the expected number of new homes in over 4,000 subdivisions or apartment developments and summarized forecasts by Census tract. More detail is provided in ***Appendix C***.

Alignment of 2030 Projections

FNI aggregated 2030 tract-level projections from UH and Zonda into sub-county "tract groups" as shown in ***Figure 6***. Zonda predictions of near-term growth differed from the UH forecasts using the SAM-Houston model. Overall, Zonda projected higher growth by 2030 within the overlapping study area than UH projected. The consultant team selected the UH projections (developed with the SAM-Houston model) for use in projecting the magnitude of population growth in each Census tract. While the SAM-Houston tract-level projections were used for the magnitude of growth, the Zonda projections were utilized in determining the spatial distribution of near-term (2020 to 2030) growth within each tract.

Figure 6 – Study Area for Near-Term Detailed Forecasts by Zonda

Zonda developed population growth projections for years 2021 through 2030 for individual subdivisions and Census tracts in Fort Bend County, southeastern Waller County, HGSD Regulatory Area 3, and a portion of HGSD Regulatory Area 2.



Distribution from Tracts to Blocks and Public Water Systems

Disaggregation of Projected Growth to Census Blocks

The smallest geographic area for which Census data are available is the block; blocks are aggregated into block groups, then tracts, then counties, and finally states[1]. Census tracts vary widely in size, with tracts typically being much larger in less densely populated areas. Because of this, tract-level projections do not provide sufficient resolution to determine where water demands will increase, especially in rural areas that may see significant growth over the next several decades.

FNI disaggregated the tract-level population projections developed by UH to individual Census blocks using a large number of spatial datasets, including data from Zonda, and assumptions about what locations and conditions attract or deter development. The following principles were applied in the disaggregation process:

- Tract-to-block distribution was completed one decade at a time, with spatial information, such as available land for development, being updated for use in the next decade.
- In each decade, if the tract population was increasing, the population from the previous decade remained in previously assigned blocks. Only the new growth in the tract population in that decade was distributed among the remaining space available for development in blocks within the tract.
- Once all developable space in a tract was filled, remaining increases were achieved by increasing the density of existing residential space. This principle implies that existing development may be replaced by denser development over time. The population density at which currently available space is anticipated to be developed is a key assumption that impacts when redevelopment may begin; this density is discussed in more detail below. Similarly, in cases in which a tract's population is decreasing, the reduction in population is distributed across blocks proportional to the area in each block. Area that is never available for residential or commercial development (e.g., cemeteries and airports) was excluded from the proportional area calculation.

A custom geoprocessing toolkit was developed to determine where growth within each Census tract is most likely to occur over time based on these assumptions and numerous input datasets. The input factors were processed as regionwide gridded datasets with a 209-ft x 209-ft cell size (approximately 1 acre per cell). Different datasets were weighted differently based on assumptions of which factors will most influence distribution of growth. Subdivision-level data from Zonda regarding near-term (2020 to 2030) growth was weighted most highly in the first decade, as it reflects an in-depth study of development in the region. Similarly, developments in progress, as identified from aerial imagery, were also weighted highly in the first decade of growth. Routes of major transportation corridors were weighted next most likely to influence future development locations throughout the JRPR planning period. Other influencing factors from most to least influence included highways, floodplains, and wetlands. These factors and

[1] More information on Census geographic units can be found at https://www.census.gov/programs-surveys/geography/about/glossary.html.

their assigned weights are summarized in ***Table 1***. Most of these inputs were assumed to attract growth and are illustrated in ***Figure 7***, while areas assumed to deter growth (wetlands and floodplains) are shown in ***Figure 8***. After considering all of these factors, equally weighted areas within a tract were prioritized such that growth would be located in proximity to existing and recent development.

Table 1 – Development Factors and Assigned Scores for Population Growth Prioritization in Each One-Acre Grid Cell

Category and Description	Factor	Class	Class Score (2030)	Class Score (2040)	Class Score (2050-2100)
Factors Deterring Development: Areas closer to features in this category are scored lower (less likely to attract development)	Floodplains	Not in Floodplain	4	4	4
		In 0.2% Floodplain (500-year)	3	3	1
		In 1% Floodplain (100-year)	1	1	0
	Wetlands	Not in Wetland	4	4	4
		In a Wetland	1	1	1
Factors Attracting Development: Areas closer to features in this category are scored higher (more likely to attract development)	Highways (excluding major corridors)	within 0.5 mile of highway	5	5	5
		within 1.0 mile of highway	4	4	4
		within 1.5 miles of highway	3	3	3
		within 2.0 miles of highway	2	2	2
		more than 2.0 miles from highway	1	1	1
	Major Transportation Corridors	within 0.5 mile of major corridor	8	8	8
		within 1.0 mile of major corridor	6	6	6
		within 1.5 miles of major corridor	4	4	4
		within 2.0 miles of major corridor	3	3	3
		more than 2.0 miles from major corridor	1	1	1
	Area of In-Progress Development	Development in progress	10	0	0
		No development in progress identified	0	0	0
	Proximity to Planned Development and Anticipated Development Size	very near a planned subdivision or near a large planned subdivision	20	0	0
		near a planned subdivision	4	0	0
		somewhat near a planned subdivision	2	0	0
		not near new subdivisions	0	0	0

Horizontal growth (sprawl) was also not permitted in some areas, as shown in ***Figure 9***. Areas shaded in dark gray indicate areas that are considered to be perpetually unavailable for development or redevelopment, which include flood control reservoirs, floodways, open water, coastal marshes, national wildlife refuges, state parks, parks, cemeteries, airports, large water treatment plant sites, large industrial complexes, and right-of-way (including right-of-way associated with railroads, highways, interstates, some drainage channels, and some flood control

basins). Areas shaded in dark red indicate areas that had already been developed at a medium or high density based on 2019 data from the National Land Cover Dataset. New growth was not applied in these areas until redevelopment was initiated (i.e., once all developable space in a tract was filled).

Figure 7 – Spatial Features Assumed to Attract New Development

Grid cells of approximately 1 acre were assigned values representing the likelihood of new development in that cell. Higher scores were assigned to cells near features such as major transportation corridors, other highways, planned or in-progress development, existing development, and recent development.

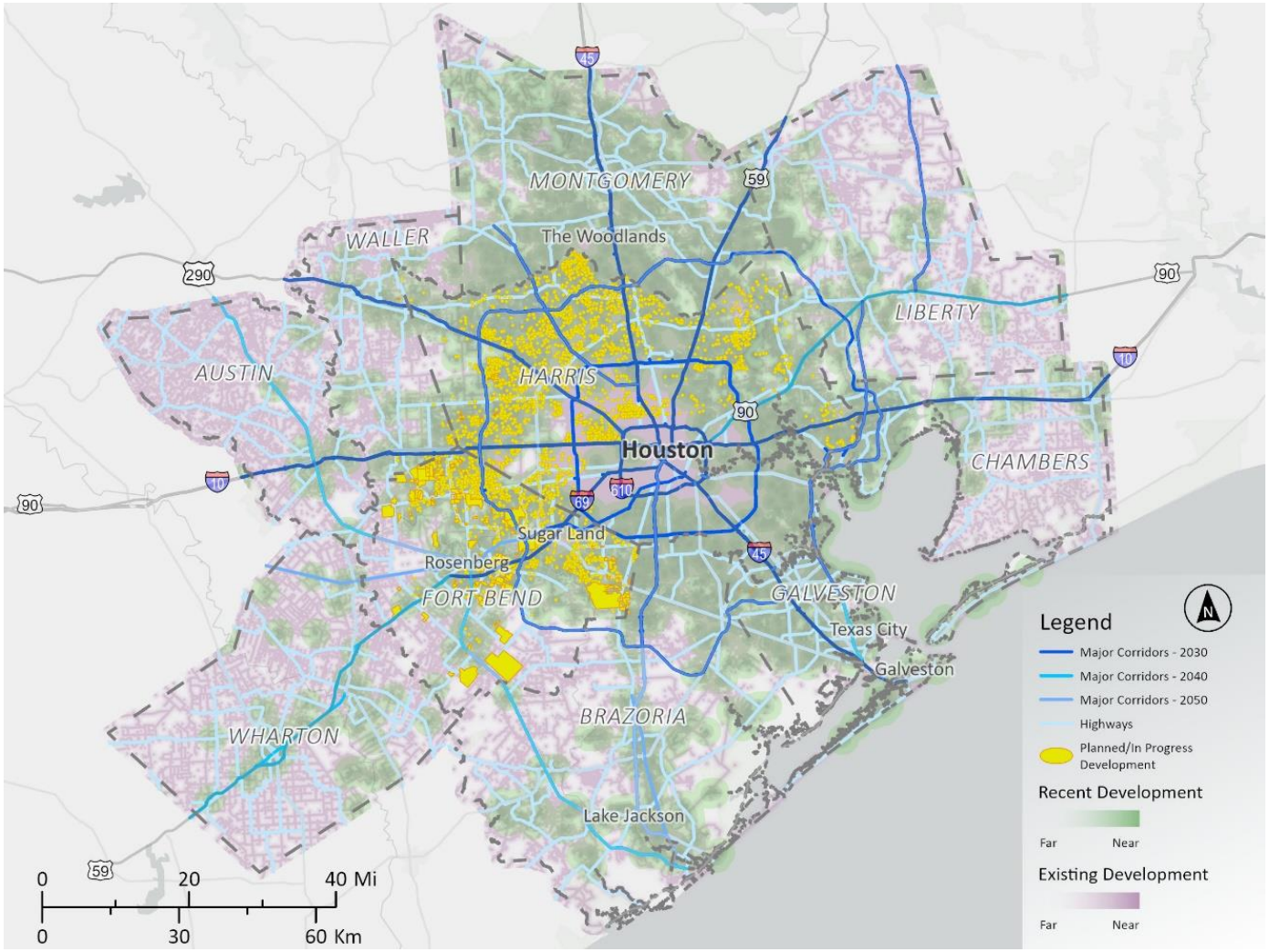


Figure 8 – Spatial Features Assumed to Deter Development

Grid cells of approximately 1 acre were assigned values representing the likelihood of new development in that cell. Lower scores were assigned to cells near or within wetlands and floodplains.

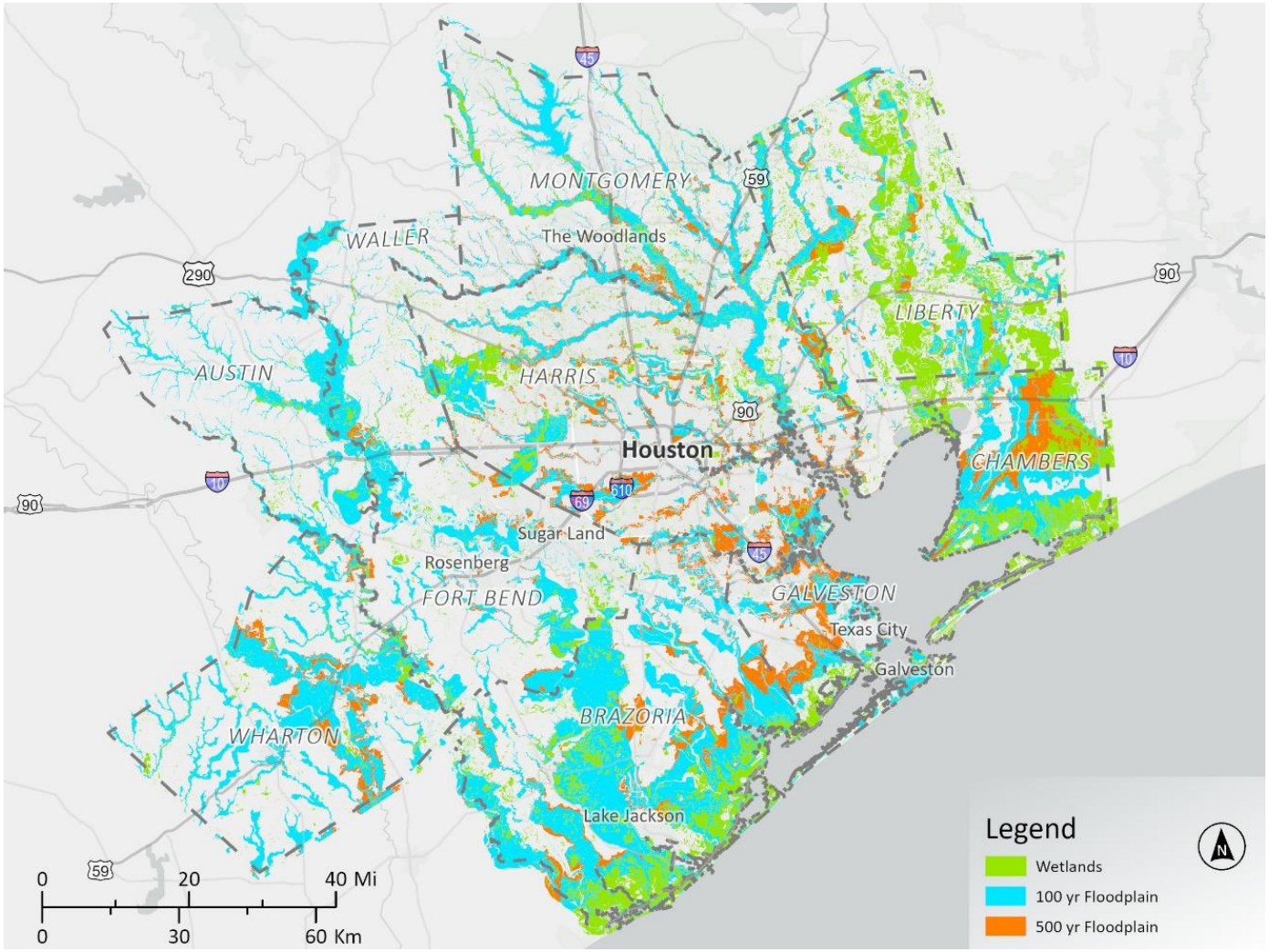
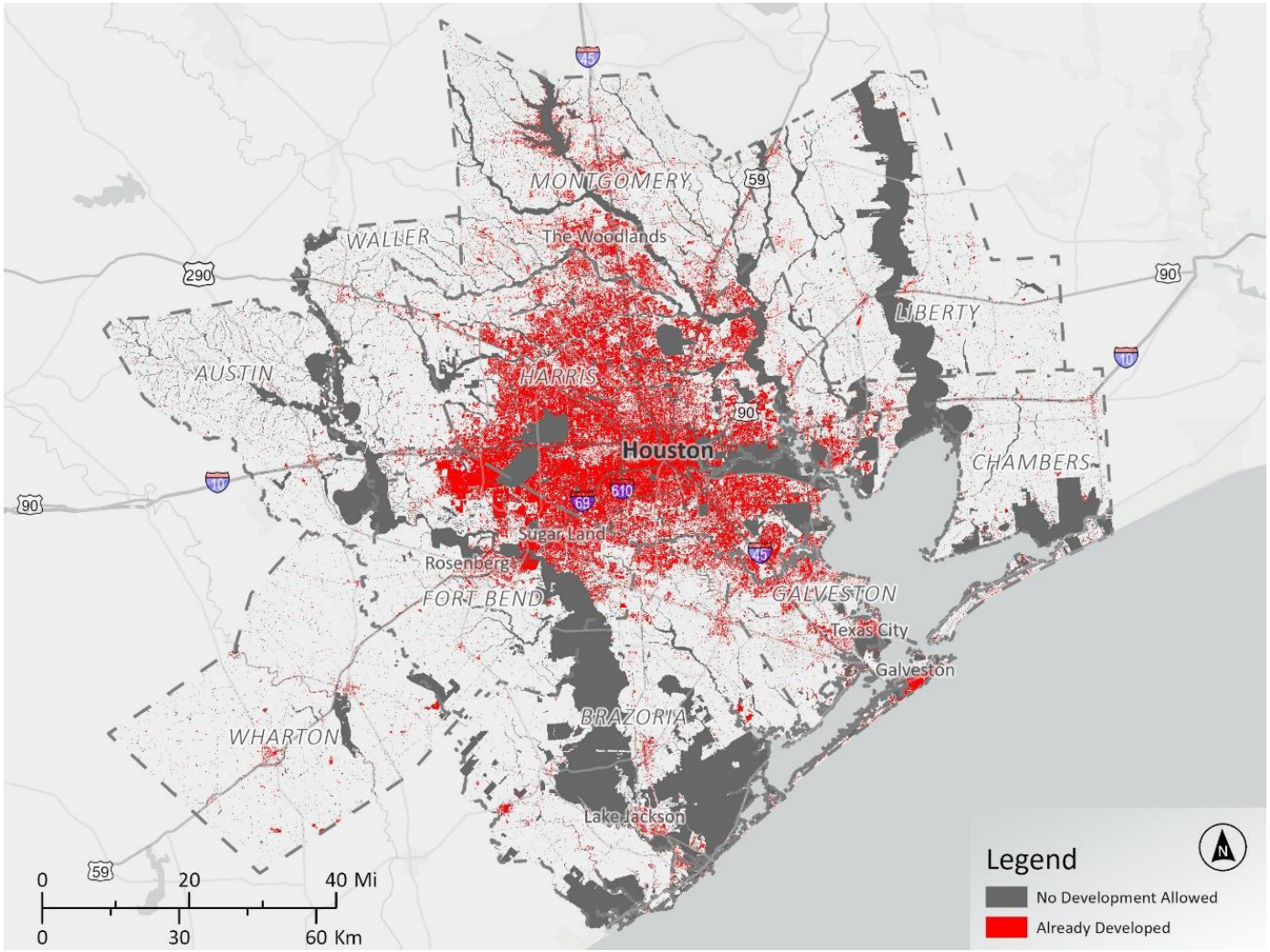


Figure 9 – Areas in Which No New Development is Applied

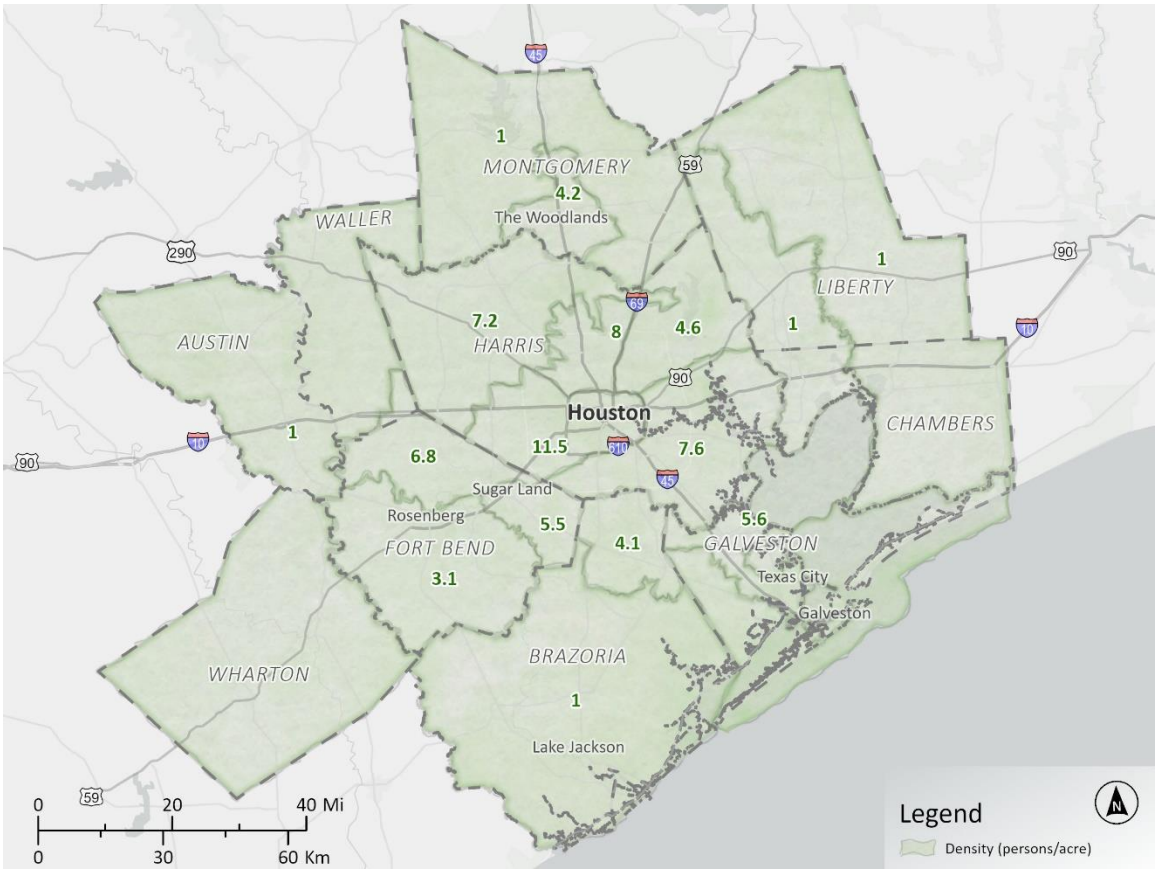
When distributing projected growth in each Census tract to smaller areas, no new development was assigned to areas that are already developed at a medium or high intensity (shown in red; data from the National Land Cover Dataset, 2019). Areas shaded in dark gray indicate areas that are considered to be perpetually unavailable for development or redevelopment.



The population density at which currently available space was anticipated to be initially developed is a key assumption in the tract-to-block disaggregation process. Once the grid cells in each tract had been prioritized in each decade based on the datasets discussed above, the projected growth in that decade was distributed to cells in priority order based on an expected initial population density (EIPD). EIPD values were estimated based on population density data by block group in 2020. Density values from blocks were not used due to artificial noise in the block-level population values that could produce unrealistic density values. The study area was divided into 16 large areas, or "density polygons," within which new growth is assumed to follow similar behavior and develop at the same population density. For example, northern Fort Bend County and southeastern Waller County comprise a single density polygon, as these areas are expected to follow similar development patterns. A single EIPD value was assigned to each of these 16 density polygons (***Figure 10***). The EIPD of each density polygon was set to the median of the 2020 population density values of block groups within that polygon. A minimum density of 1 person/acre was set, which was used in Austin, Waller, and Wharton Counties and less populous regions of Montgomery, Chambers, Liberty, and Brazoria Counties.

Figure 10 – Expected Initial Population Density (persons per acre)

Population growth was applied to grid cells which were identified for new development using the population density values shown here.

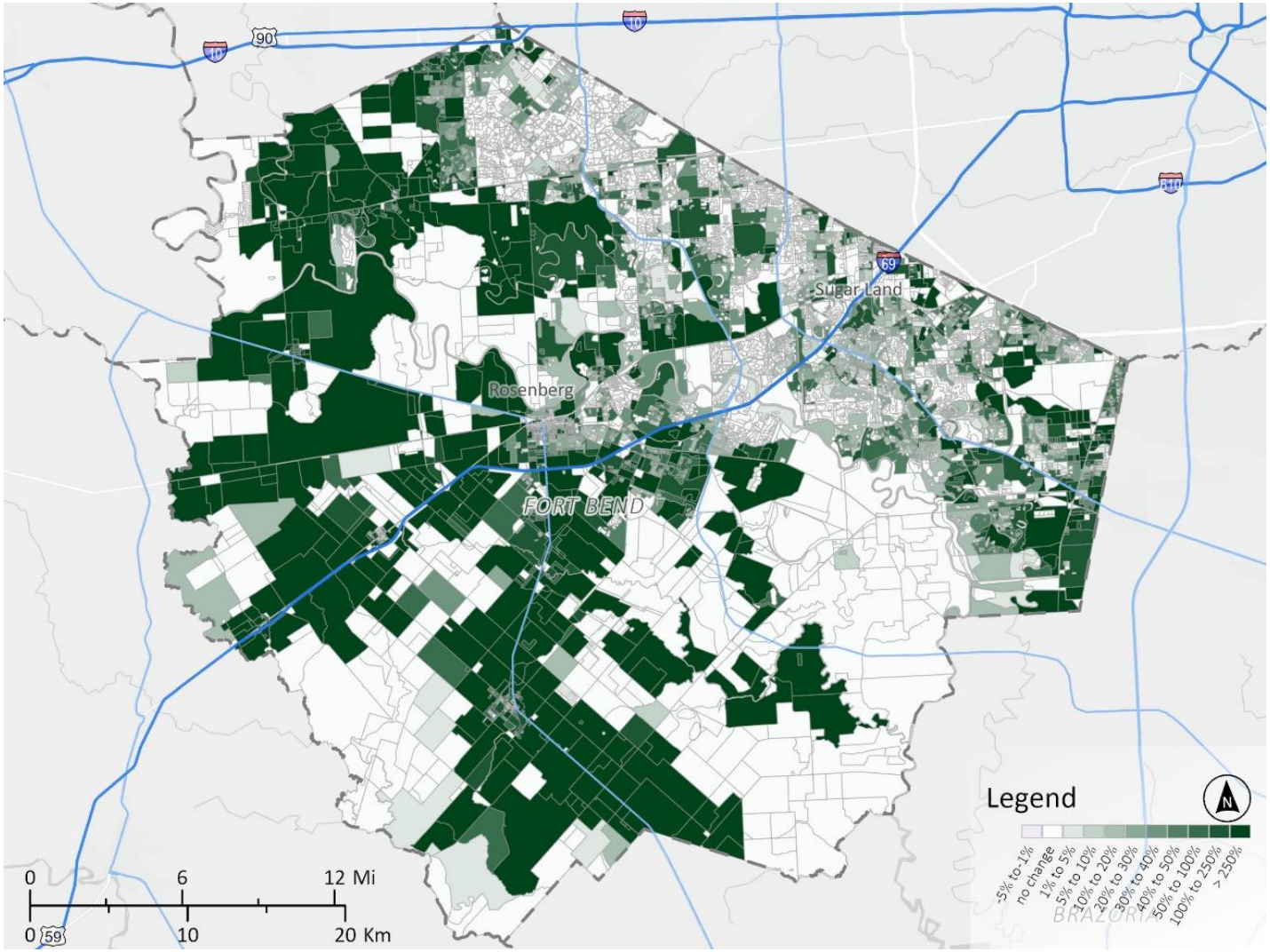


After repeating the disaggregation process in each decade to distribute increases (and decreases) in population from the tract level to Census blocks, block-level population changes were added to

Census 2020 block populations to determine the total expected population in each block each decade. These fine-scale data (example in ***Figure 11***) were then re-aggregated by Water User, as described in the next section.

Figure 11 – Projected Percent Change in Population by Census Block (Fort Bend County), 2020 to 2050

Population projections at the Census tract level were distributed to smaller Census blocks based on various spatial datasets and assumptions of population density. Population growth projected to occur in each Census block in Fort Bend County by 2050 is shown as a percentage change relative to 2020 population.



Delineation of Water User Service Areas

In order to develop water demand projections based on projected population, the study area was divided into spatial units that align with water demand locations, referred to herein as "water users." Service area boundaries of PWS were obtained from the TWDB[2] on 11/16/2021. These boundaries were updated based on information from stakeholders, including feedback received from 30 stakeholders in response to the Fall 2021 JRPR Stakeholder Survey (see **Appendix A**). In response to this survey, the cities of Fulshear and Houston provided polygons for multiple service areas within their water supply systems. The two service areas served by Fulshear were evaluated separately for the JRPR due to anticipated differences in per-capita demand. Although per-capita demand was not evaluated separately for individual service areas in the City of Houston, these areas were maintained so that population and demand could be summarized in smaller units within the city's extensive overall service area. Maps were also obtained from city, utility, and regional water authority websites to update boundaries. Finally, a topology was applied to the water user boundary layer in ArcGIS, and adjustments were made as needed to remove any overlaps between adjacent systems. ***Figure 12*** shows existing PWS service areas in the study area.

In 2020, approximately 91% of the study area population lived within the service areas of existing PWS. The remaining population is assumed to use groundwater pumped from private wells. The area outside existing PWS was divided into geographical units to represent anticipated service areas of Future PWS, which may include potential new PWS or expansions of existing PWS service areas. Areas for expansion were delineated based on the extraterritorial jurisdiction of cities. When boundaries for anticipated new PWS were not known, areas where new development is expected were grouped together based on what major wholesale provider or regional authority would be likely to serve or have jurisdiction over new systems in that area. Future PWS areas also include service areas of existing systems that could not be identified in the Texas Commission on Environmental Quality (TCEQ) Drinking Water Watch database of PWS. The remaining space was designated as Non-PWS area, within which all future water use is anticipated to continue to be met by private (domestic) water wells. Future PWS areas delineated in this study are described in ***Table 2*** and are shown in ***Figure 12***.

[2] Texas Water Service Boundary Viewer, developed by TWDB, is available at https://www3.twdb.texas.gov/apps/WaterServiceBoundaries/Home/Overview.

Figure 12 – Water User Service Area Boundaries in the JRPR Study Area

In order to develop water demand projections based on projected population, the study area was divided into spatial units that align with water demand, referred to as water users, which include service areas of existing public water systems (PWS) and areas of future anticipated demand.

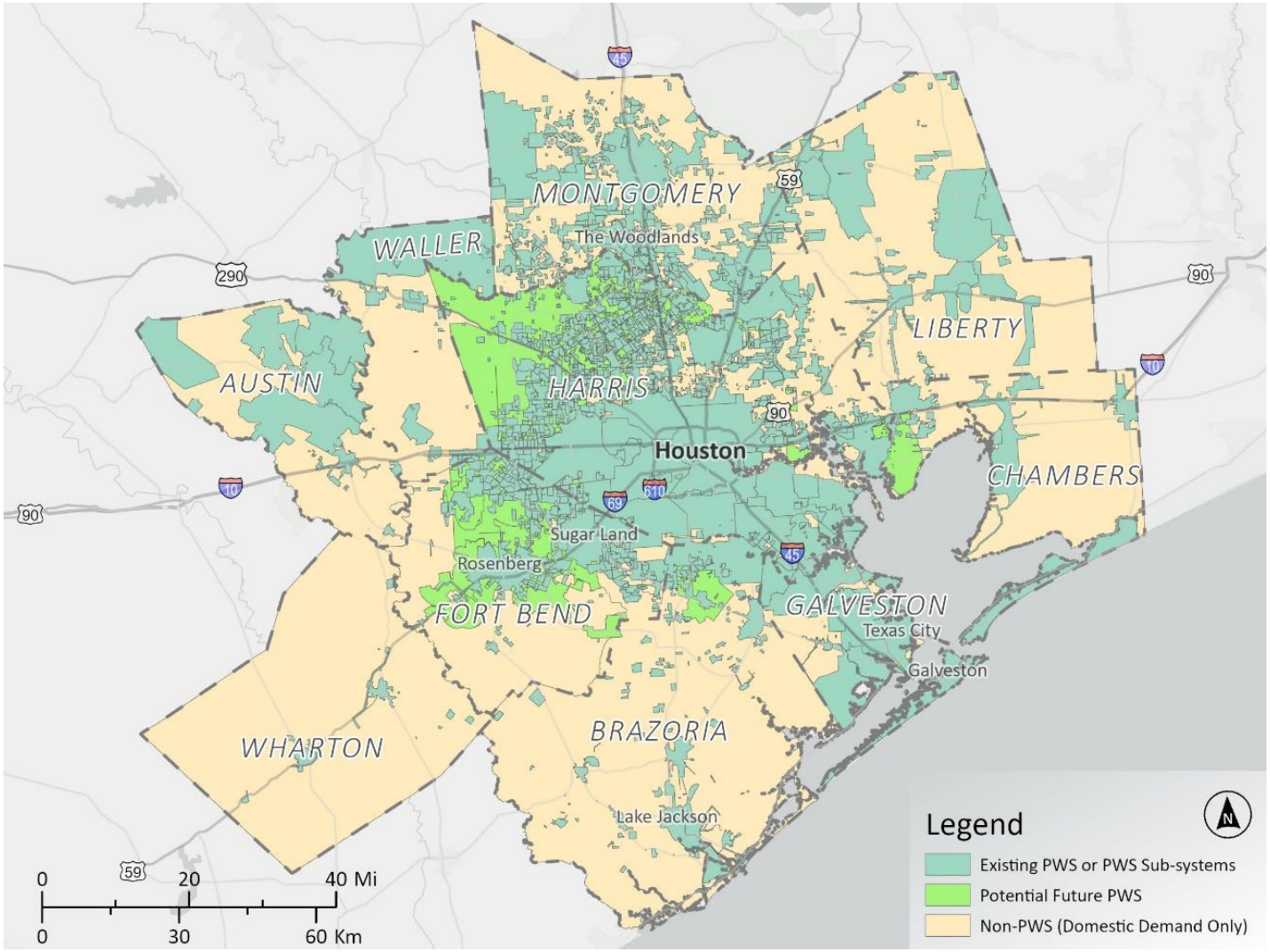


Table 2 – Areas Expected to be Served by PWS in the Future

County Name	Areas with Potential New PWS	Potential Expansions of Existing PWS	Existing Service Areas Not Shown as PWS
Brazoria	-	▪ City of Manvel	-
Chambers	▪ Future PWS in Baytown Area Water Authority[1]	-	-
Fort Bend	▪ Fulshear Lakes ▪ George Ranch ▪ Tamarron West ▪ No. 152 Walnut Creek and Millers Pond in Rosenberg ETJ ▪ No. 231 Bridlewood Meadows in Rosenberg ETJ ▪ No. 250 Star Bridge in Rosenberg ETJ ▪ No. 253 in Rosenberg ETJ ▪ Future PWS in North Fort Bend Water Authority	▪ City of Fulshear ▪ City of Richmond ▪ City of Rosenberg ▪ City of Sugar Land	-
Harris	▪ Future PWS in North Channel Water Authority ▪ Future PWS in North Harris County Regional Water Authority ▪ Future PWS in West Harris County Regional Water Authority	-	▪ SC Utilities ▪ Tower Oaks Plaza MUD
Montgomery	-	-	▪ Tejas Creek

1. Primarily in Chambers County with some area in Harris County.

Allocation of Population to Water User Service Areas

After distributing decadal population projections to individual census blocks, these values were re-aggregated by water user.

1. Blocks were intersected with the revised Water User service area boundaries shown in ***Figure 12***. The intersection polygons were then intersected with the HGSD and FBSD regulatory area boundaries, and the resulting polygons are referred to as "Mapping Units." These are the smallest spatial units to which population and municipal or domestic water demand are assigned.
2. Each Mapping Unit polygon was assigned a fraction of the total Census block that it is a part of, and decadal population in each block is multiplied by that fraction to allocate the block-

level population to the Mapping Units (***Equation 1***). The fraction of block to use for allocation was developed as follows:

a. If less than 40% of the block area falls outside an existing or future PWS service area, it is assumed that the entire population of the block is or will be served by a PWS. The non-PWS portion of the block is ignored, and the block's population is allocated to intersected existing or future PWS based on the fraction of those areas (***Equation 2***).

b. If 40% or more of the block area falls outside an existing or future PWS service area, it is assumed that part of the block's population is not served by any PWS and uses private wells. In this case, each Mapping Unit is assigned its fraction of the total block based on its area (***Equation 3***).

3. The population of a Water User service area in each decade is the sum of population assigned to each Mapping Unit in that Water User service area.

$$Mapping\ Unit\ Population = Block\ Population\ x\ Fraction\ for\ Allocation \quad \textbf{Equation 1}$$

$$Fraction\ for\ Allocation = \frac{Mapping\ Unit\ Area}{Area\ of\ Block\ Intersecting\ Any\ PWS} \quad \textbf{Equation 2}$$

$$Fraction\ for\ Allocation = \frac{Mapping\ Unit\ Area}{Total\ Area\ of\ Block} \quad \textbf{Equation 3}$$

Projected population by Water User in each decade is tabulated in **Appendix D Table D-2**, and **Appendix D Table D-3** summarizes population projections by GRP.

Summary of Projected Population Growth

Overall, growth in the urban core within Harris County is projected to remain strong in the first three decades of the study period but to slow after 2050. In the latter half of the century, population is expected to shift outward, with most growth occurring in outer Harris County and surrounding counties. Substantial growth is projected in Fort Bend and Montgomery counties throughout the study period. These trends are illustrated in ***Figure 13*** and ***Figure 14***, which show the spatial distribution of growth in the region by county and sub-county areas. The growth in these areas is also summarized in ***Table 3***.

Figure 13 – Projected Change in Population in Counties and Sub-County Areas, 2020 to 2050

The study area is divided into counties and, in some cases, sub-county areas to demonstrate the spatial trends in population growth projected to occur between 2020 and 2050.

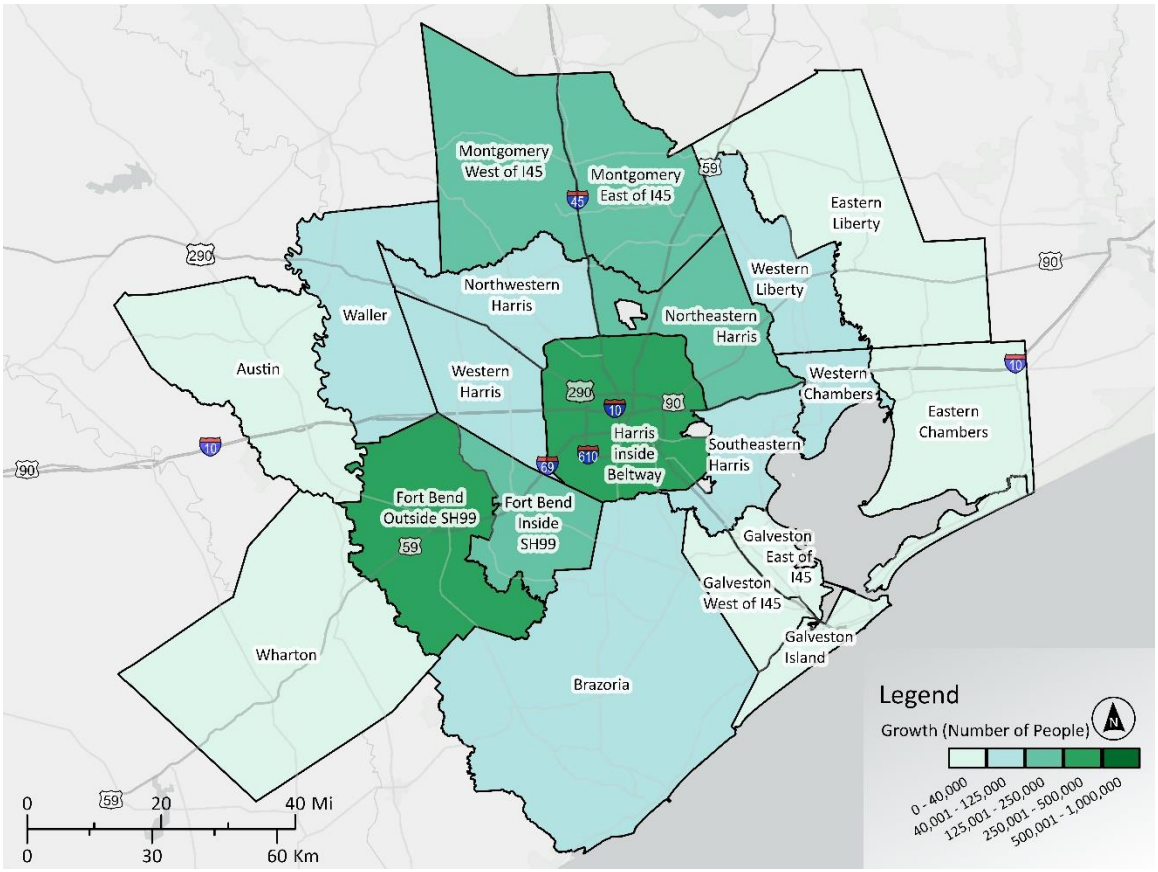


Figure 14 – Projected Change in Population in Counties and Sub-County Areas, 2020 to 2100

The study area is divided into counties and, in some cases, sub-county areas to demonstrate the spatial trends in population growth projected to occur between 2020 and 2100.

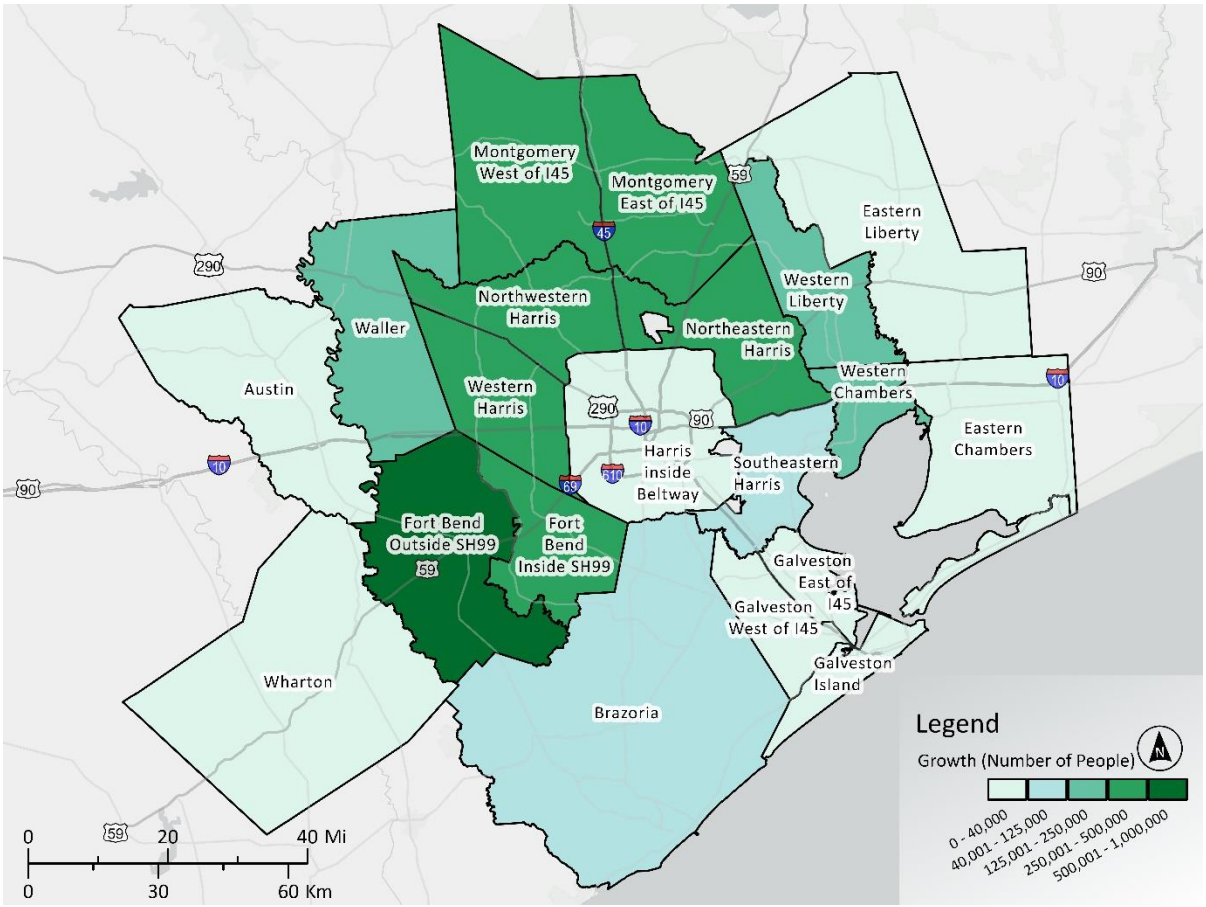


Table 3 – Projected Change in Population in Counties and Sub-County Areas

County or Sub-County Area	Projected Population Growth	
	2020 to 2050	2020 to 2100
Austin County	3,199	4,939
Brazoria County	79,000	112,798
Eastern Chambers County	2,528	9,542
Western Chambers County	53,456	208,135
Fort Bend County, inside SH99	183,047	384,553
Fort Bend County, outside SH99	425,296	942,430
Galveston Island	5,062	7,131
Galveston County, mainland west of I-45	20,264	29,115
Galveston County, mainland east of I-45	25,509	36,623
Harris County, inside Beltway 8	303,370	39,059

County or Sub-County Area	Projected Population Growth	
	2020 to 2050	2020 to 2100
Western Harris County, outside Beltway 8	102,758	270,401
Northwestern Harris County, outside Beltway 8	103,772	266,732
Northeastern Harris County, outside Beltway 8	236,025	377,514
Southeastern Harris County, outside Beltway 8	70,523	116,728
Eastern Liberty County	7,071	23,475
Western Liberty County	77,983	245,887
Montgomery County, west of I-45	209,564	424,596
Montgomery County, east of I-45	233,715	455,609
Waller County	44,843	141,310
Wharton County	765	2,060

MUNICIPAL WATER DEMAND PROJECTION

Overview of Municipal Water Demand

Municipal water demands are demands that can be expected to grow over time due to growth in population. These include retail municipal demand associated with PWS and domestic demand. Retail municipal demand refers to water supplied by PWS directly to end users, including commercial, institutional, and residential users. Domestic demand refers to residential water use supplied by a resident-owned private groundwater well, which is typically of a size and capacity to be exempt from permitting requirements by the local groundwater conservation district or subsidence district.

Water Use Data Collection

Municipal water demand projections depend on historical water use data. Annual water use data for an extended historical period (2010 through 2020) were collected from multiple sources in order to assess trends in per-capita demand across a variety of climate conditions, as well as to determine what portion of historical water demand in each system has been met with groundwater supply. Data sources are explained in greater detail in the sections below.

Stakeholder Data

In response to the Fall 2021 JRPR Stakeholder Survey sent to 75 entities, 19 entities provided historical water use data (see **Appendix A**). Data provided included retail water use for some or all years from 2010 to 2020. In some cases, total use by source water type was also provided. Additionally, five municipal wholesale water providers provided information on water sales to customer PWS.

Texas Water Development Board Data

Historical water intake data was downloaded from TWDB in the database report "Water Use Survey Historical Municipal Use by Region." This data was downloaded for all entities in regional water planning areas H, K, and P. Records include total intakes by each PWS each year, with

information on self-supply, seller if purchased, location of the source, and whether the source water is groundwater, surface water, or reuse. The report "Water Use Survey Historical Industrial Use by Region" was also downloaded for Region H, which includes all JRPR counties except Wharton County. Retail water use was estimated by summing the total water intake of an entity each year and subtracting other intake records that were sold by that entity, so that total retail water use represents intakes less sales.

Historical water use data have also been compiled by TWDB for use in the development of demand projections for the 2026 regional water plans. The TWDB performed reviews of and in some cases revisions to water use records and population estimates from the Water Use Surveys as part of the process of developing initial water demand projections for regional water planning groups to review.

Subsidence District Data

HGSD and FBSD provided historical groundwater pumping records and alternative water use records for years 2010 through 2020. These data are organized by individual well, with information on Permittee and Well Owner. Well records were matched to PWS. However, because this information reflects the total groundwater production of an entity rather than the final retail use, this information was typically not used directly in the development of per-capita demand data. However, the data from the HGSD and FBSD databases were compared to information from other sources to identify data gaps or potential errors in data from TWDB or individual stakeholders.

Texas Commission on Environmental Quality Information

The TCEQ Drinking Water Watch Database was used to supplement historical water use data by identifying or confirming whether some PWS provide wholesale water to other systems. The Drinking Water Watch Database was not reviewed for every system but was used as a reference when historical water use seemed high and indicated possible wholesale supply in addition to retail use.

Preferential Use of Data Sources

All data provided by retail and wholesale water providers were reviewed and considered for use in determining historical per-capita demands. In many cases, one source would have the most complete record for a particular water user. Per-capita demands were only estimated using sources with at least five years of water use records. For systems with historical data available from multiple sources, historical use was manually compared between sources to identify potential causes of difference. The TWDB Water Use Survey data include information on sold water, which was subtracted from total intakes to estimate only total retail demand (including system losses) of each PWS. Data obtained directly from stakeholders, especially for member districts of regional water authorities, primarily reflected groundwater production by and alternative water sales to PWS, but sales between individual PWS were not captured. In these cases, TCEQ Drinking Water Watch and/or TWDB data were reviewed, and TWDB data were preferentially used for PWS with wholesale supply.

Evaluation of Historical Per-Capita Demands

For each PWS, the annual average per-capita demand was calculated for each year with data available from 2010 to 2020 using historical water use data and estimates of historical population.

Historical water use is discussed in the previous subsection on ***Preferential Use of Data Sources***. The primary goal of evaluating different data sources was to identify the best estimate of non-wholesale water use by a system, to include residential, commercial, and institutional uses, as well as water loss in the system.

Historical population was typically estimated using the existing service area boundary and Census block populations from the 2010 Census, with interim years estimated using linear interpolation, but in some cases, this was not appropriate. For example, some systems have expanded service area boundaries since 2010. Some PWS had not yet been developed in 2010, and population was added in a few years as homes were added to a service area. Additionally, it is difficult to accurately estimate the population of service areas which do not align closely with 2010 or 2020 Census block boundaries. In these cases, population estimates were supplemented by reviewing connection count data, estimated population reported to TWDB in the annual Water Use Survey, and estimates from TWDB for use in regional water planning.

The estimation of historical per-capita demand for each year for each PWS followed a multi-step process to calculate initial estimates, check for potentially erroneous values, and either identify a reasonable alternative calculation or remove erroneous values. Some PWS were evaluated in groups. For example, if a single master municipal utility district (MUD), such as Cinco MUD 1, served multiple customer MUDs, the total water intake of the master MUD and the combined population of the group was used to calculate annual average per-capita demand for the group as a whole. In a few cases, two PWS were grouped together when service area boundaries aligned poorly with Census block boundaries, making it difficult to distinguish the population in individual service areas. In grouped systems, confidence is higher in the group per-capita demand estimate than in individual MUD estimates.

Additionally, annual average per-capita demand was estimated for some GRPs (***Table 4***) using total historical water use and population aggregated from PWS associated with the GRP. In a few cases, the GRP average per-capita demand was based on aggregated water use and population for only a subset of water systems within the group for which the available water use data came from a consistent source. The application of the GRP aggregate per-capita demand is described in the following section, ***Determination of Baseline Per-Capita Demands***.

Table 4 – Groundwater Reduction Plan Groups for which Annual Series of Aggregate Historical Per-Capita Demand was Developed

Groundwater Reduction Plan	Number of PWS Represented in Aggregate Per-Capita Demand*
Central Harris County Regional Water Authority	11
Clear Lake City Water Authority	5
Fort Bend County WCID 2	4
Missouri City	27
North Channel Water Authority	11
North Fort Bend Water Authority	65
North Harris County Regional Water Authority	251
Richmond	8
Rosenberg	11
West Harris County Regional Water Authority	48

**May not include all PWS associated with the GRP due to data availability and/or quality*

After initially calculating per-capita demands for PWS or groups, unreasonably low annual values were excluded from the time series for each system. Values less than 60 GPCD were excluded for any system, but a system-specific lower outlier boundary was also calculated using ***Equation 4***. If values in each year varied widely (maximum value greater than or equal to twice the minimum value) and any individual values were less than the lower outlier boundary, those low values were removed. This approach was intended to avoid removing too many values while excluding years that had a high possibility of being unrealistically low due to data reporting errors or other issues.

$$Lower\ Outlier\ Boundary\ =\ Q1\ -\ 1.5\ x\ (Q3\ -\ Q1) \qquad \textbf{Equation 4}$$

Where Q1 = 25th percentile of time series and
Q3 = 75th percentile of time series for a given PWS

Estimated historical per-capita demands were compared to estimates by TWDB for Water User Groups, developed for use in the 2026 Region H RWP. The TWDB estimates were not used directly as the regional planning definition of Water User Groups is not the same as the Water Users studied in the JRPR, but this dataset was useful in reviewing calculations for potential quality issues and was sometimes used in place of calculated values when deemed appropriate.

Furthermore, of the 1,437 existing PWS in the JRPR study area, historical per-capita demands for 661 PWS were deemed unusable for projecting future water demands. Most of these are very small utilities, and these 661 PWS account for only 3.0% of the total study area population in 2020. ***Table 5*** summarizes the reasons that historical demands for specific PWS were not used. In these cases, modeled per-capita demands based on groups of PWS – either by GRP where available or otherwise by average historical per-capita demand – were used to project future demands for these systems. This approach is described in further detail in ***Determination of Baseline Per-Capita Demands***.

Table 5 – Summary of PWS for which Historical Per-Capita Demands were not used in Municipal Demand Projections

Number of PWS	Percent of 2020 Study Area Population	Flag	Flag Description
9	0.5%	Bad Data	Water use records and/or population estimates do not produce consistent or reasonable GPCD values.
163	1.4%	Insufficient Data	Years with available water use data or population estimates are too few to rely on for GPCD under multiple climatic conditions.
453	0.7%	Small Population	Population estimate in 2020 is <=400.
10	<0.1%	Insufficient Data and Small Population	Years with available water use data or population estimates are too few to rely on for GPCD under multiple climatic conditions, and 2020 population estimate is <=400.
4	<0.1%	Boundary	PWS service area boundary aligns poorly with Census block boundaries, making it difficult to estimate historical population with reasonable certainty.
2	<0.1%	Location	PWS service area is mostly outside the JRPR study area.
12	<0.1%	High Non-residential Demand	Significant non-residential demand skews per-capita demand estimates.
1	<0.1%	Wholesale only	No retail population.
7	0.2%	Low GPCD	Estimates in all years with data available were less than 60 GPCD.
661	***3.0%***	***Total***	

Finally, nine PWS had extremely high historical water use relative to historical population due to a large commercial or institutional customer base. For these systems, total demand projections were evaluated differently than other systems. A per-capita demand was assigned to each of these systems based on similar systems using the same approach as for the 661 PWS for which historical demands were not applied. This per-capita demand was used to estimate demand directly attributed to population (which includes both residential and some non-residential demand). Then, additional demand due to the large non-residential customer(s) was estimated using ***Equation 5*** and held constant throughout the projection period. Finally, total demand for the system in any future year (j) was calculated using ***Equation 6***.

$$Expected\ Annual\ NonPopulation\ Demand\ = \quad \textbf{Equation 5}$$

$$Average\ Total\ Annual\ Retail\ Water\ Use_{2010-2020} - \{Population_{2020}\ x\ Applied\ GPCD\ x\ 365.25 \frac{days}{year}\}$$

$$Total\ Demand_j = Population_j x\ AppliedGPCD + Expected\ Annual\ NonPopulation\ Demand \quad \textbf{Equation 6}$$

Determination of Baseline Per-Capita Demands

The baseline demand scenario uses a per-capita demand value for each PWS that represents expected demands under average climate conditions. Rural domestic (exempt) demand associated with population living outside PWS service areas was assigned a baseline per-capita demand value of 100 GPCD based on the per-capita use rate assigned to rural domestic usage in 1980-2018 in the historical pumping estimates for the GULF 2023 model[3]. The 2013 RGUP used average water use per person over the period 2000 to 2008 to estimate an average GPCD value in each water system. That period included both dry and wet years, and drought index data indicated that the average condition over the nine-year period was approximately normal. The approach proposed for the 2023 JRPR is similar, relying on data from 2010 to 2020. However, instead of directly averaging historical demand, the updated approach attempts to identify the underlying base level of demand separate from the influence of climate conditions.

Several types of regressions were evaluated for this analysis, including linear, logarithmic, and power regression. Based on initial analysis, it was determined that power regression provided a better fit than a linear model. Water demand tends to be relatively constant during normal to wet conditions and typically increases sharply under hot and dry conditions. Power regression takes the form of ***Equation 7***, which is equivalent to ***Equation 8***, where the dependent variable *y* is GPCD and the independent variable *x* is the selected climate variable.

$$y = e^{A} * (x)^{b} \qquad \textbf{Equation 7}$$

$$\ln(y) = A + b * \ln(x) \qquad \textbf{Equation 8}$$

Because per-capita demand is being modeled on an annual basis, selected climate variables are representative of key conditions over the course of a one-year period that are most related to average demand in that year. Variables that were evaluated include the annual and summer averages of Palmer Drought Severity Index (PDSI) and Palmer Hydrologic Drought Index values. Different definitions of the summer period were tested ranging from as early as March to as late as October. Historical drought index data were obtained from the National Centers for Environmental Information (NCEI), which is operated by the National Oceanic and Atmospheric Administration (NOAA). NCEI provides monthly PDSI and PHDI by geographic units called "climate divisions[4]." The majority of the study area is located in climate division 4108 (Upper Coast of Texas), so PDSI and PHDI data from climate division 4108 were used in the evaluation of climate conditions and historical water demands. Histograms of R^2 values for all water systems were reviewed in order to evaluate the fit of each climate variable. Models were fitted to data grouped by maximum GPCD, minimum GPCD, and average GPCD. Additionally, R^2 values were compared for models fitted to different climate variables. It was found that the summer average PDSI, using

[3] HGSD. (2022). "Estimation of Historical Pumping and Development of MODFLOW Well Package for the Northern Part of the Gulf Coast Aquifer in Texas, 1900 to 2018". Prepared by INTERA for Harris-Galveston Subsidence District.

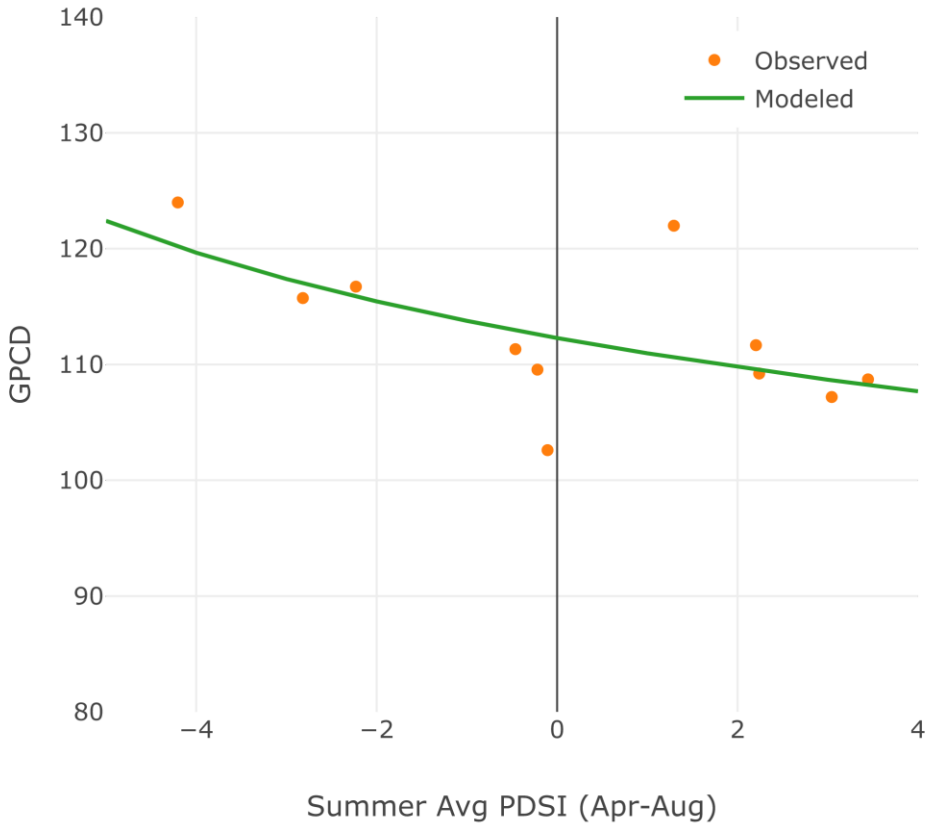
[4] More information on climate divisions can be found at https://www.ncei.noaa.gov/access/monitoring/dyk/us-climate-divisions.

the average of monthly values for April through August, had the strongest fit with annual GPCD data.

Since the PDSI is calculated based on temperature and a water balance model, it is correlated with other climate variables like total precipitation or average temperature; regression models were therefore developed using only the PDSI values. As an illustration, the model fitted to City of Houston is shown in ***Figure 15***, where $A = 5.01$ and $b = -0.124$. The R^2 value of this model is 0.36. Note that PDSI values range from roughly negative four (driest) to positive four (wettest). Since the log of a negative number is undefined, PDSI + 10 was used as the independent variable when fitting the power regression model.

Figure 15 – Weather-based Per-capita Demand Model for the City of Houston[5]

A power regression model has been fitted to summer average PDSI (Palmer Drought Severity Index) and per-capita demand in the City of Houston based on historical annual values from 2010 through 2020.



A regression equation was developed for each PWS that had at least five years of historical population and water use data. For consistency, the same climate variable was used as the

[5] Regression model for City of Houston per-capita demand includes aggregate demand and population for all retail service areas served by City of Houston, including five unique public water systems: City of Houston, UD 5 Kingwood, Belleau Woods, District 73, and District 82.

predictor (independent variable) for all PWSs. These individual equations were ultimately used for 636 of the 1,438 systems analyzed, and these systems make up over 90% of the 2020 population of the study area.

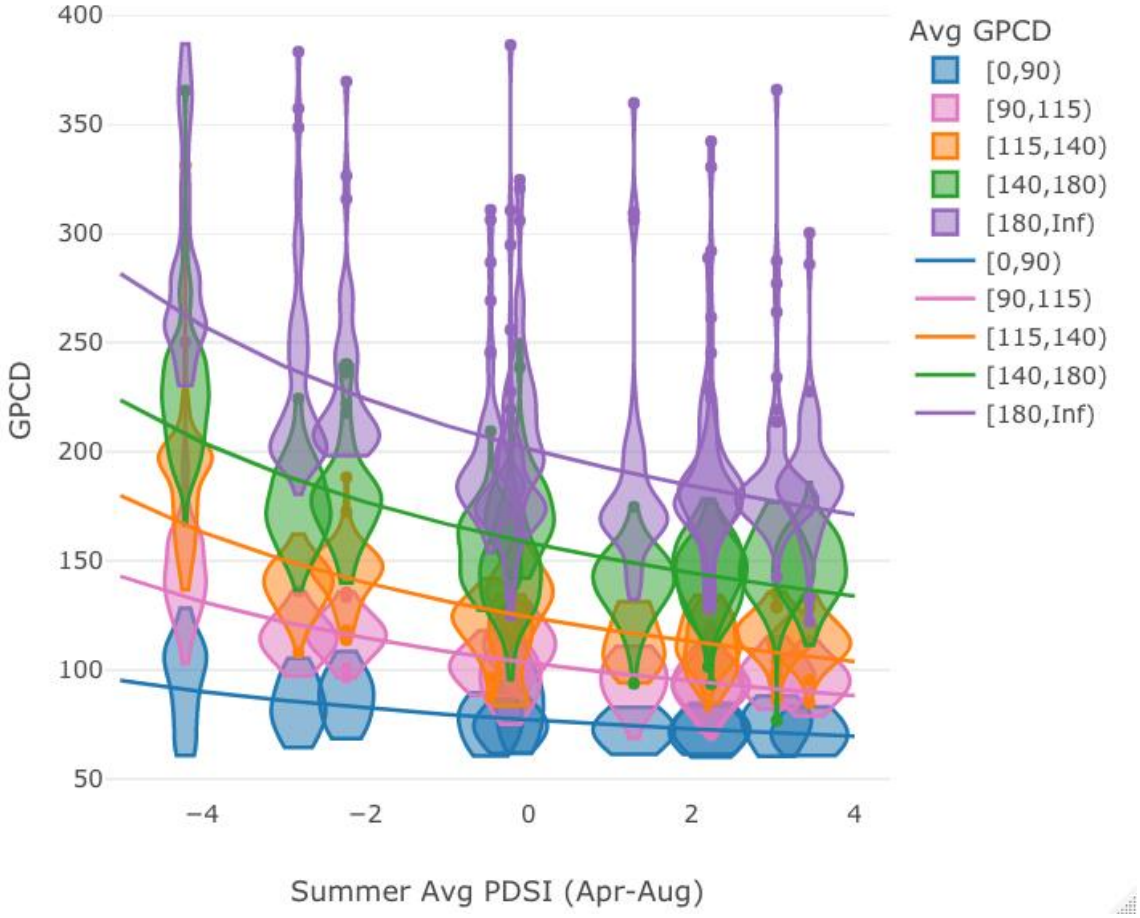
Some water systems did not exhibit a negative correlation with PDSI data, or they did not have enough historical data to fit an individual model. To develop demand projections for these systems, regression models were also fitted to aggregated and grouped data as follows.

First, a model was fitted to each of the aggregated per-capita demand series developed for GRPs, which are listed in ***Table 4***. For entities associated with a GRP, the aggregate GRP per-capita demand equation was used if there was not a suitable individual equation.

Second, individual systems were grouped by average GPCD from 2010-2020, and a regression model was fitted to the GPCD data within each cluster of systems. In this case, rather than calculate an aggregate GPCD based on total population and total demand, the models were fitted to all GPCD values for the individual systems. This allows each system to have equal weight in the regression equation regardless of system size. If the data are aggregated within these groups, the regression equations become dominated by the few systems with the largest populations. Water systems were only included in the grouped model if the individual regression equation had an R^2 value of at least 0.6 and the direction of the correlation indicated higher demand during dry years. The regression curves for each of these groups are presented in ***Figure 16***, along with the distribution of individual GPCD values in each group at each PDSI value. For water systems that did not have a suitable individual equation and were not a member of one of the GRPs listed in ***Table 4***, an equation was assigned based on the average GPCD of that system from 2010-2020. Some systems did not have GPCD values from the JRPR analysis but did have a GPCD from TWDB Water User Group (WUG) level data. In these cases, the WUG GPCD was utilized to assign a grouped regression equation. For a small number of systems with no historical GPCD data and not served by one of the GRPs, the domestic per-capita rate of 100 GPCD was assigned.

Figure 16 – Weather-based Per-capita Demand Models for Water Systems Grouped by Average Per-capita Demand

Individual public water systems were grouped by average per-capita demand from 2010-2020, and a regression model was fitted to the data within each cluster of systems. This chart shows the regression model curves as well as the distribution of individual GPCD (gallons per-capita per day) values in each group.



After developing these regression equations, a baseline GPCD for each water system was calculated using a summer average PDSI value of -0.3, which is the historical median of PDSI values in climate division 4108 from 1895-2021. The baseline GPCD developed for each Water User is shown in **Appendix E Table E-1**. These equations can be applied to alternative climate scenarios using different expected values of summer average PDSI.

For many PWS, the baseline per-capita demand estimated from this approach is similar to the average historical per-capita demand. However, anomalous data from a single year has less of an impact than if a direct average was used. Additionally, the regression models can be used to generate alternate per-capita demand values under various climate conditions in additional scenarios. If climate conditions in future scenarios are more extreme than conditions in the historical period (2010-2020) from which the models are developed, certainty in the predicted per-capita demands will decrease, as demands will be projected based on conditions not seen in

the historical period. However, this approach still provides the flexibility to make an estimate of the changes to per-capita demands under such conditions.

Projection of Future Municipal Water Demands

Municipal water demand projections in each year (2020 through 2100) were developed for each water user based on the projected population of that water user. Annual population values were interpolated between the decadal population projections using simple linear interpolation within each Census block. As described in the preceding sections, each PWS will have projections for total population and baseline water demand. Total baseline demand in a PWS in each year (j) will be calculated as shown in ***Equation 9*** using the baseline per-capita demand ($GPCD$).

$$Total\ Demand_j = Pop_j GPCD \qquad \textbf{\textit{Equation 9}}$$

Although historical water use data are available for 2020, an estimated demand for each water user is calculated in 2020 by multiplying 2020 population by baseline GPCD values. This approach generated a baseline demand estimate in 2020 under normal climate conditions, from which annual demand for 2021-2029 could be calculated by interpolation between 2020 and 2030 estimates.

Projected total municipal water demand by Water User in each decade is tabulated in **Appendix E Table E-1**, and **Appendix E Table E-2** summarizes municipal water demand projections by GRP.

Determination of Municipal Groundwater Demand in Baseline Scenario

This section discusses the approach to assigning levels of groundwater use to municipal water users in the Baseline Scenario. Discussion of other scenarios and associated assumptions, as well as the process of distributing projected groundwater demand to different aquifers, is not included in this memorandum.

The fraction of demand assigned to groundwater in each year in the Baseline Scenario considers historical groundwater usage versus alternative water usage, as well as allowable percentage of demand from groundwater under the Subsidence Districts' Regulatory Plans. Modeled Available Groundwater from the joint planning process was not used as a constraint on projected groundwater demands. Historical percentages of water use met with groundwater supplies are based on years 2016 to 2020. The longer period of 2010-2020 was not used, as the more recent 5-year period is expected to better reflect existing alternative water infrastructure.

The Baseline Scenario is intended to simulate an anticipated future condition that may occur under the current Regulatory Plans[6]. Total municipal demand in the Baseline Scenario assumes

[6] Harris-Galveston Subsidence District: Regulatory Plan 2013, adopted January 2013, amended May 2013 and April 2021. Fort Bend Subsidence District: 2013 District Plan, adopted August 2013, amended June 2022.

that per-capita demand represents expected demand in a year of average climate conditions and remains constant over time for each water user.

The groundwater demand assigned to municipal water users in the Baseline Scenario is based on the following assumptions:

Harris and Galveston Counties

- In Area 1, entities were assigned the same percentage of groundwater as was observed historically from 2016 to 2020. In most cases, this is substantially less than the allowed 10%.
- In Areas 2 and 3, entities that are part of a GRP use the historical groundwater percentage to represent 2020 through 2024. In the limited number of cases where documentation from the GRP sponsor indicates additional conversion of an entity between 2020 and 2024, the percentage for the entity was adjusted to meet the planned conversion. If the aggregate groundwater demand for a GRP was calculated as under-converting, the fraction applied in 2020-2024 for partially converting entities was adjusted to meet regulations at the GRP level. Beginning in 2025, the percentage groundwater assigned to each water user in a GRP is adjusted so that the GRP Aggregate Groundwater Demand meets regulatory requirements. Fractions assigned to individual water users in a GRP may differ from each other based on available information from the most recent GRP document or other stakeholder information.
- Entities that are not part of a GRP will use the same percentage of groundwater as was observed historically from 2016 to 2020, based on the assumption that without a GRP, future conversions to meet regulations may not be implemented.

Fort Bend County

- Entities that are part of a GRP use the historical groundwater percentage to represent 2020 through 2026. In the limited number of cases where documentation from the GRP sponsor indicates additional conversion of an entity between 2020 and 2026, the percentage for the entity was adjusted to meet the planned conversion. If the aggregate groundwater demand for a GRP was calculated as under-converting, the fraction applied in 2020-2026 for partially converting entities was adjusted to meet regulations. Beginning in 2027, the percentage groundwater assigned to each water user in a GRP is adjusted so that the GRP Aggregate Groundwater Demand meets regulatory requirements. Fractions assigned to individual water users in a GRP may differ from each other based on available information from the most recent GRP document or other stakeholder information.
- Entities that are not part of a GRP in Fort Bend County do not have any known alternative supplies and are set to 100% groundwater throughout the study period.

Counties Outside Subsidence Districts

- Any growth in water demand in Montgomery County is assumed to be supplied by groundwater; alternative water supplies are shown to remain at the average annual volume from 2016-2020.

- Future water demands in remaining counties outside the Subsidence Districts (e.g., Austin, Brazoria, Chambers, Liberty, Waller, and Wharton) are assumed to use the same percentage of groundwater as was observed historically from 2016 to 2020.

In all counties, entities without any historical water use data or information from a GRP or wholesale provider are assumed to rely entirely on groundwater. These entities account for less than 1% of groundwater demand assigned to existing PWS in 2020 and less than 2% in 2040.

INDUSTRIAL WATER DEMAND PROJECTION

Industrial Characteristics of Study Area

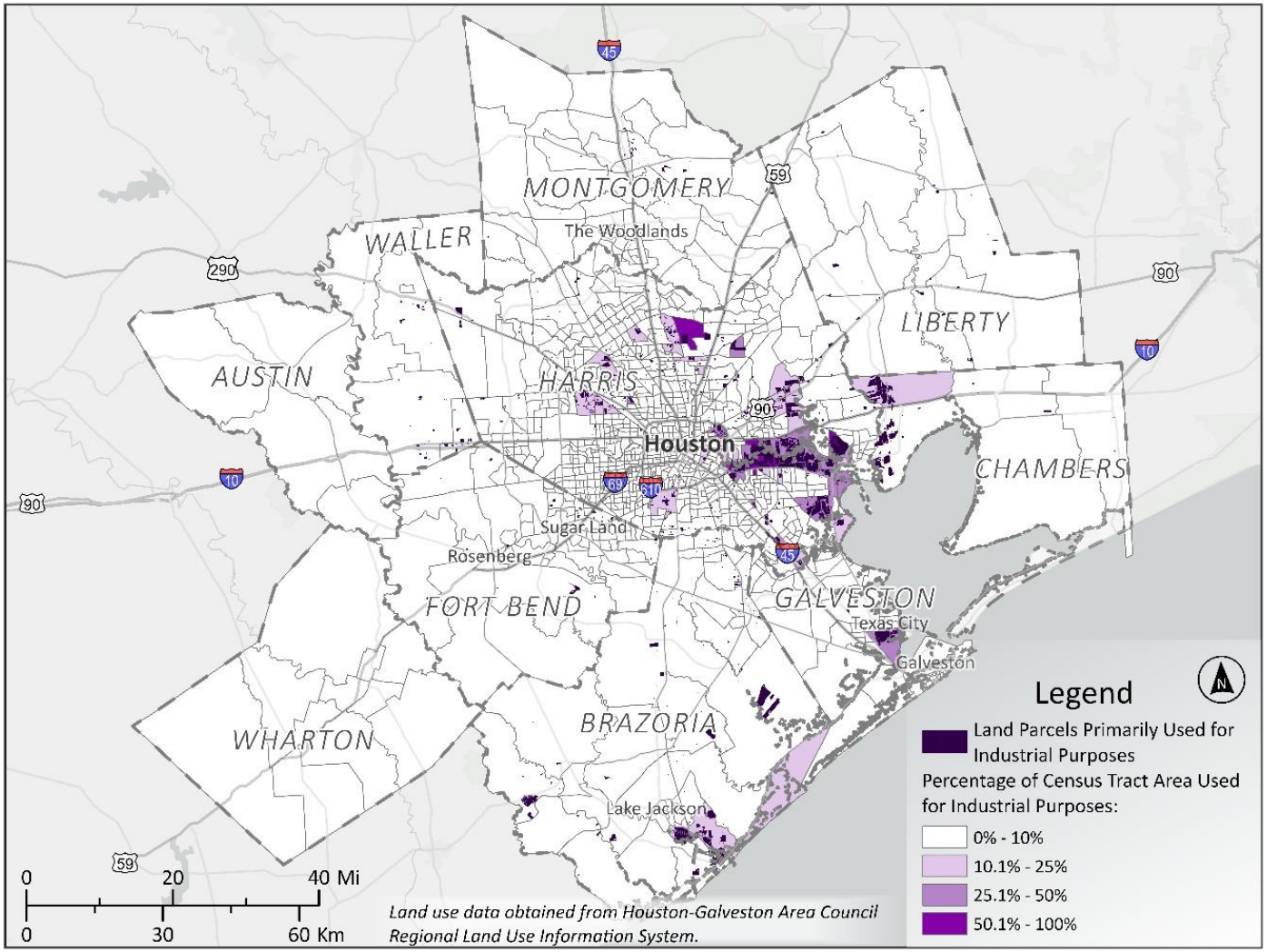
The study area has a long history of robust industrial development, with the energy sector and related industries playing an important role in rapid urbanization. In addition to acting as a key long-term driver of employment and population growth, this generates substantial demands for water for industrial processes and cooling. While the local economy has diversified over recent decades, petroleum refining and chemical production remain the largest industries in the region with an economic and resource impact extending to the national level; the region is home to nearly one third of U.S. petroleum industries and two thirds of the country's petrochemical production. Equipment and component manufacturing, technology, electric power generation, as well as paper and pulp industries also contribute to the local economy.

Industrial activities occur at various scales throughout the study area, with several particularly large aggregations of refining and chemical production facilities in coastal areas in proximity to extensive surface water resources as well as major ports and overland shipping hubs (***Figure 17***). Heavily industrialized areas to the east of Houston include the Buffalo Bayou and State Highway (SH) 225 corridors, the Baytown industrial complex, and the Mont Belvieu area. To the southeast of Houston, industrial centers are present along the SH 3 and SH 146 corridors and the substantial Texas City industrial complex. An extremely large industrial center is also present along the Brazos River in southern Brazoria County, extending from the City of Lake Jackson through the Freeport area and to the Gulf of Mexico, with additional large facilities to the west in the City of Sweeny and the Old Ocean community.

While some groundwater production infrastructure is present within these industrial centers, the scale of the industrial operations necessitates a reliance primarily on surface water, either diverted under an entity's own water rights or purchased from a large wholesale water provider. Local industries often leverage this surface water to great benefit through internal reuse processes.

Figure 17 – Census Tracts with Industrial Land Use

Industrial activities occur at various scales throughout the study area, with several particularly large aggregations of refining and chemical production facilities in coastal areas. Census tracts are shaded based on the percentage of land area used for industrial purposes. Smaller parcels within each tract that are used primarily for industrial purposes are also shown.



Industrial Water Demand Projection Methodology

In addition to municipal water demand, demand from the industrial sector was also projected. The 2013 RGUP relied on projections from the TWDB, which were developed for use in the 2017 SWP. In the 2023 JRPR, the draft manufacturing water demand projections released in January 2022 by TWDB for potential use in the 2026 RWP were used for the years 2030-2080, and the 2080 values were held constant through 2100. The methodology for these projections is briefly described below.

1. Identify the year during the most recent five years of available data (2015-2019) with the highest water use for manufacturing. The baseline water demand is the manufacturing water use in each county- region split during that year, with an additional adjustment for potential unaccounted water use. This unaccounted water use adjustment is based on the U.S. Census Bureau's 2010-2019 County Business Patterns (CBP).

2. The baseline water use was escalated to the first year of the projections (2030) using the historical growth rate of manufacturing water use from 2010-2019, which was 0.96% per year.

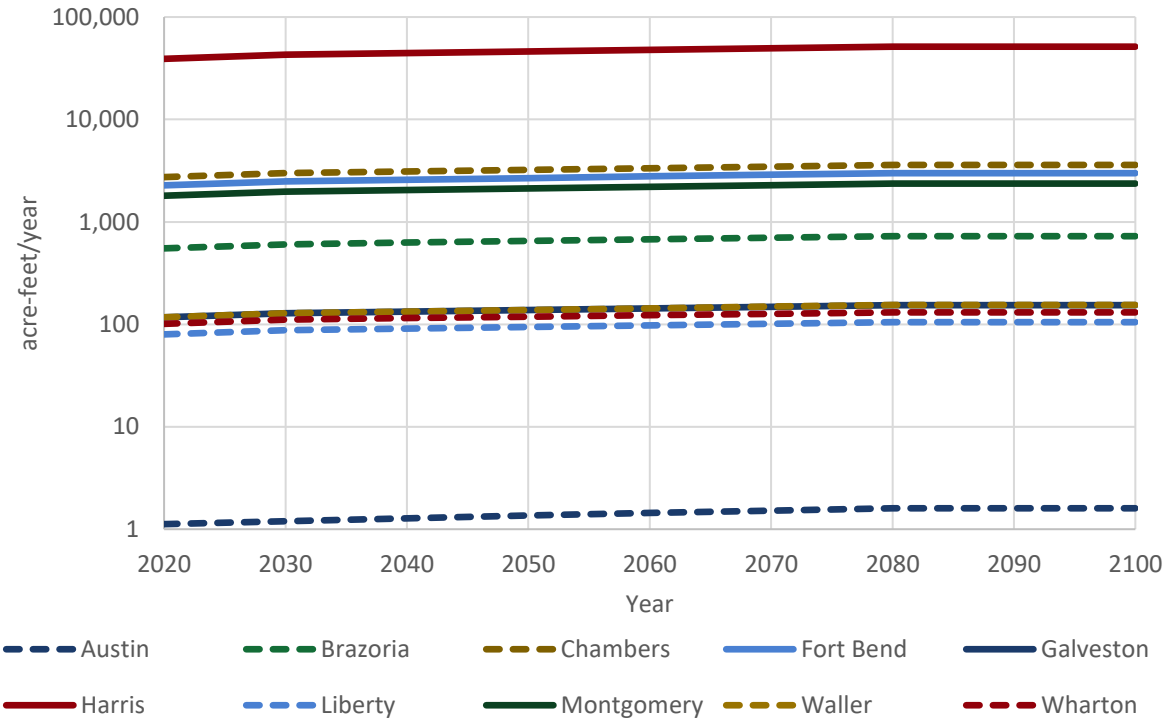
3. The statewide annual growth rate in number of establishments in the manufacturing segment from the 2010-2019 CBP of 0.37% was then used to estimate water demand for 2040-2080.

To estimate the portion of projected industrial demand associated with groundwater use, the average historical percentage of demand supplied by groundwater, reuse, and surface water was calculated for each county over the period 2010-2019. The county-level demand projections were then multiplied by the historical groundwater percentage for that county. These projections were spatially disaggregated by INTERA for input to the GULF-2023 model.

Summary of Projected Industrial Groundwater Demand

Projected industrial groundwater demand by county is shown in ***Figure 18***, as well as **Appendix F Table F-1**.

Figure 18 – Projected Industrial Groundwater Demand by County



MINING WATER DEMAND PROJECTION

Mining Water Demand Projection Methodology

Groundwater demand for mining was estimated using a similar method to industrial demands. The TWDB projections for the 2026 RWP were adopted for 2030 through 2080 and the 2080 value was held constant for 2080-2100. The TWDB projections, in turn, were based on the results of a detailed study on mining and water use completed by the University of Texas Bureau of Economic Geology in 2022. The projected mining water use for counties in the study area is primarily for aggregate mining.

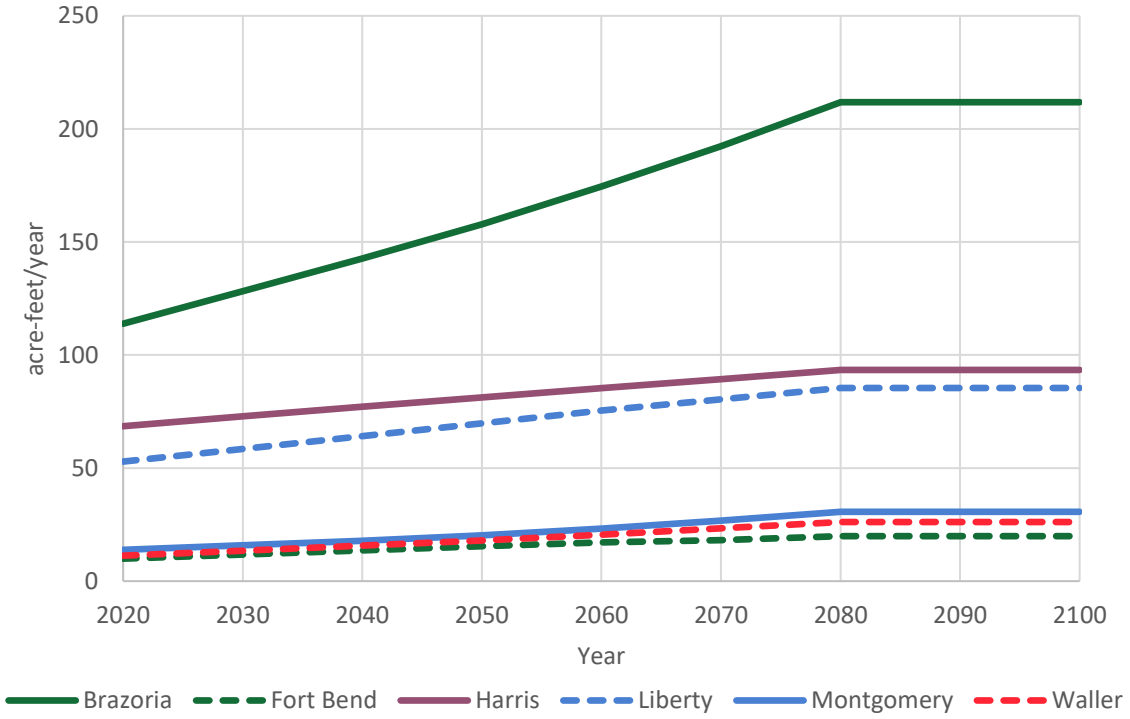
To estimate the portion of projected mining demand associated with groundwater use, the average historical percentage of demand supplied by groundwater, reuse, and surface water was calculated for each county over the period 2010-2019. The county-level demand projections were then multiplied by the historical groundwater percentage for that county. These projections were spatially disaggregated by INTERA for input to the GULF-2023 model.

Summary of Projected Groundwater Demand for Mining

Projected groundwater demand for mining use by county is shown in ***Figure 19***, as well as **Appendix G Table G-1**. Projected groundwater demand for mining is less than 2 acre-feet per year in each of Austin, Chambers, Galveston, and Wharton Counties.

Figure 19 – Projected Groundwater Demand for Mining Use by County

Counties with less than 2 acre-feet per year groundwater mining demand are excluded from this chart.



AGRICULTURAL WATER DEMAND PROJECTION

Agricultural Characteristics of Study Area

Outside of urban and suburban developments, the rural portions of the study area are home to a diverse range of agricultural operations. Hay and forage production are widespread, although somewhat limited in prevalence in the forested northern and northeastern portions of the area. Cotton, corn, sorghum, and soybeans are common in the western counties (e.g., Austin, Waller, Wharton, Fort Bend, and Brazoria), with some soybean production also occurring in Liberty County. While these crops are of economic importance, within the study area only a small percentage of the associated acreage is irrigated, as water needs are met in large part through rainfall during typical growing seasons.

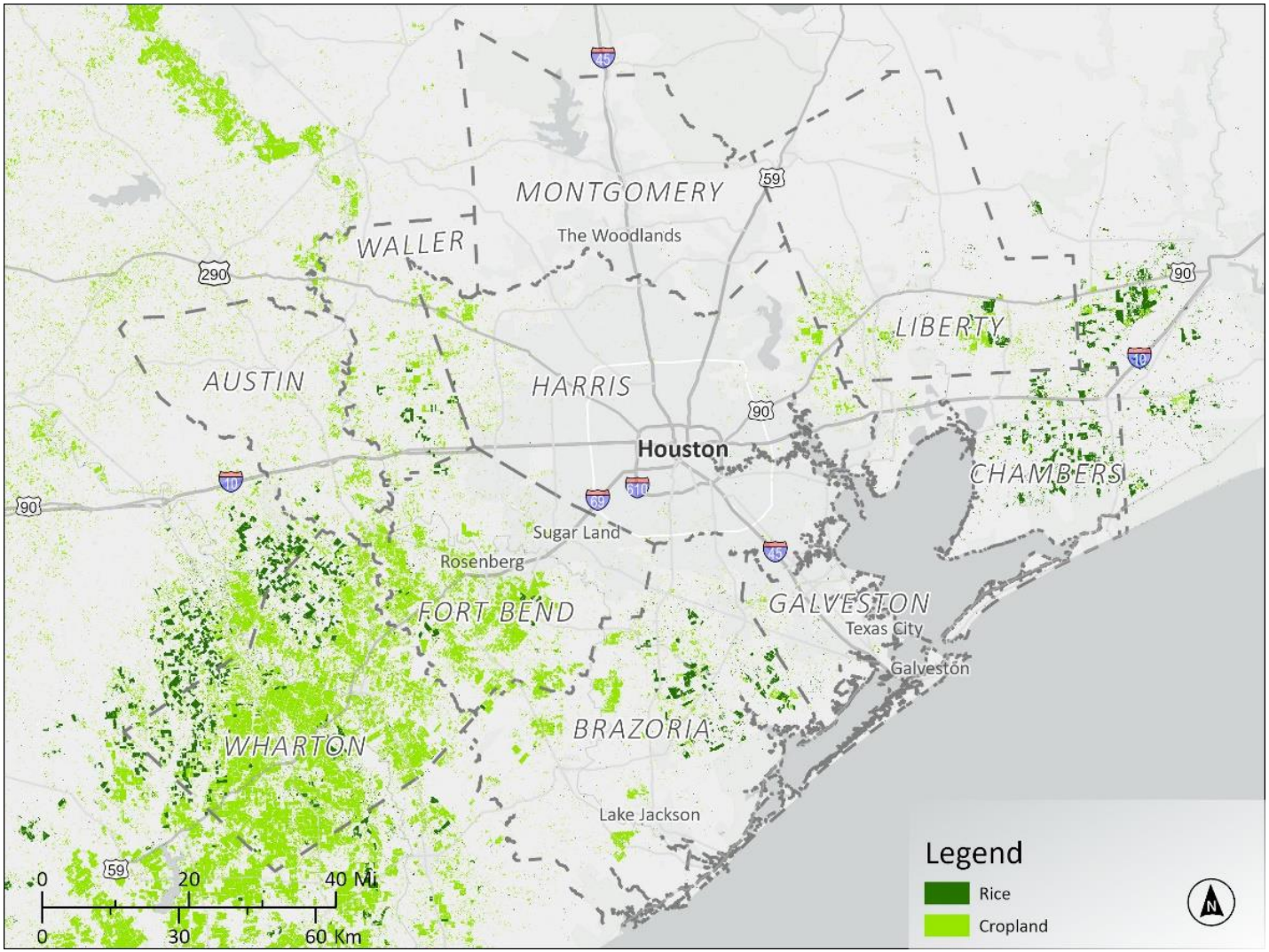
The presence of coastal lowlands, along with extensive surface water supplies and canal systems, have historically supported the production of rice within the study area. The dependence of rice on flood irrigation for production and weed suppression makes it an extremely water-intensive crop and results in the majority of estimated irrigation water demand in the study area. Major rice acreage is present in eastern Chambers County and the adjacent southern Liberty County, central and eastern Brazoria County and overlapping slightly into Galveston County, and in northern and western Wharton County. Some rice acreage is also present in Austin, Waller, and

Fort Bend Counties (***Figure 20***). While some production in western Wharton County is supplied by groundwater from large-diameter wells, rice in most of the study area is irrigated using surface water. This is due to high per-acre demands, groundwater regulation, and the cost of high-capacity wells.

In addition to row crops, the rural portions of the study area include livestock production, primarily consisting of cattle, horses, and hogs. Livestock water demands are smaller than those for crop irrigation and are met primarily by small stock ponds and through localized groundwater production from small agricultural wells.

Figure 20 – Study Area Agricultural Demand Centers

Various crops are grown in the study area. Rice acreage is shown separately from other cropland, as rice production accounts for the majority of estimated irrigation water use in the study area.



Agricultural Water Demand Projection Methodology

Projected agricultural water demands for crop irrigation and livestock production were estimated using a similar method to the agricultural water use projections for the 2021 and 2026 RWPs. The TWDB methodology for agricultural water demand projections was adapted for use in the JRPR as follows.

FSA crop acreage data and Texas Agricultural Statistics Service livestock headcounts from 2010 through 2019 were reviewed to identify potential rapid shifts in production or clear increasing or decreasing trends. For irrigation demand, this analysis was focused primarily on rice production. Historical water use for crop irrigation shows variability over time that can primarily be attributed to cycles of wetter and drier climatic conditions. Acreage tended to be lower during 2012, in the middle of a drought, and higher during 2016, which was a wetter period. FNI averaged the most recent ten years (2010-2019) to capture a range of wet and dry periods. There did not appear to be any significant trends over time in acreage, so the demand projection for each category was held constant for 2030 through 2100 at the 10-year average irrigation water demand in each county.

Water demand for livestock did show a shift following the drought of the early 2010s. Headcounts decreased significantly in 2012 due to dry conditions and rising costs for water and feed. In some counties, headcounts have recovered to 2010 levels, but in others a new lower baseline has been established. Therefore, a more recent five-year average from 2015-2019 was applied to estimate total livestock water demand, which is equivalent to the TWDB baseline demand projections for the 2026 RWP. Similar to the irrigation data, there was not a clear trend that is expected to persist over time, so a constant projection for was used 2030-2100.

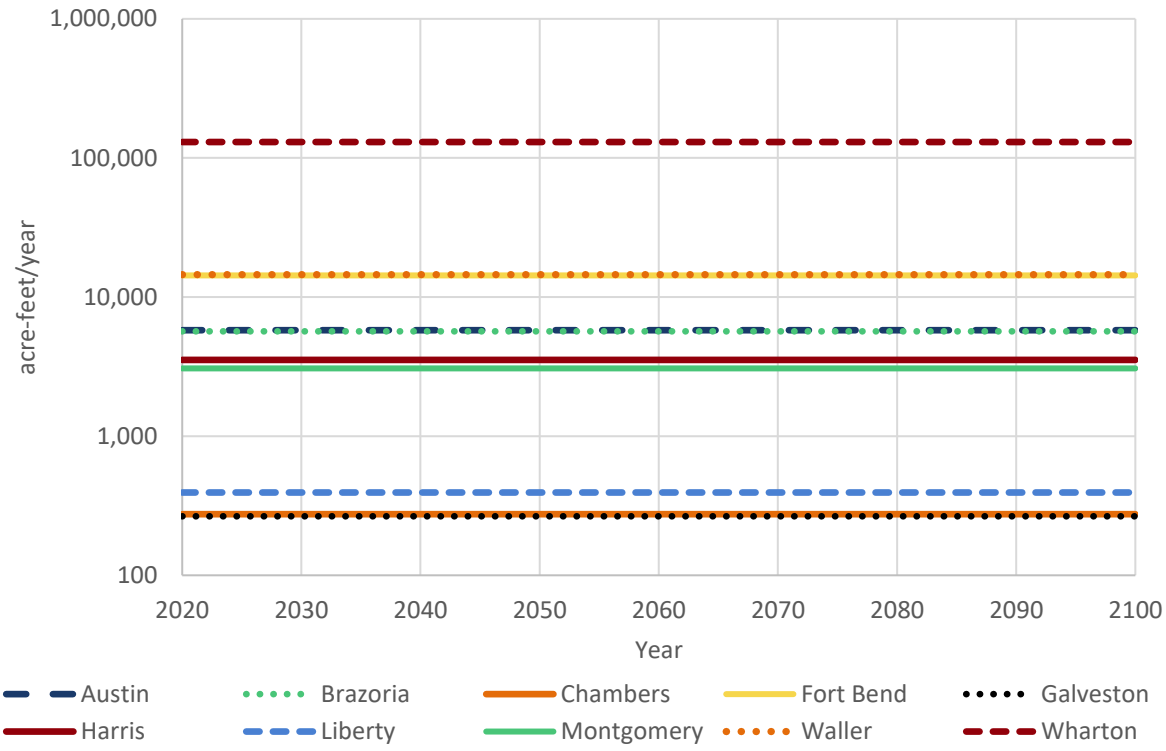
To estimate the portion of irrigation and livestock demand that would be supplied by groundwater, FNI subtracted the ten- or five-year average of historical surface water use from the total demand projection, respectively. Historical reuse was minimal and was ignored.

Agricultural demand for groundwater was disaggregated from county-level data by INTERA for input into the GULF-2023 model.

Summary of Projected Agricultural Groundwater Demand

Projected agricultural groundwater demand by county is shown in ***Figure 21***, as well as **Appendix H Table H-1**.

Figure 21 – Projected Agricultural Groundwater Demand by County



APPENDIX A

FALL 2021 STAKEHOLDER SURVEY AND SUMMARY OF RESPONSES

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2023 Joint Regulatory Plan Review

Joint Regulatory Plan Review: Stakeholder Survey
Introduction

Thank you for taking the time to fill out this survey for the Harris-Galveston Subsidence District and Fort Bend Subsidence District. Your feedback is essential to the development of appropriate water demand scenarios as part of the Joint Regulatory Plan Review. If you have any questions and/or additional feedback regarding this survey, please contact Philip Taucer at philip.taucer@freese.com.

Please take a moment to review the following guidance before starting the survey:

- A .pdf version of the survey is available at **this link**. It is recommended that you use the .pdf as a reference to help gather your data prior to completing the online survey.
- If you do not wish to utilize the online survey form and prefer to respond to the survey using a scanned printout, Excel spreadsheet, text file, or other similar format, please email your data to our consultant team at the email address above.
- Several portions of the survey offer the option to upload data directly through the online form. The upload feature can accept files up to 16 MB in size in .pdf, .doc, or .docx file formats. For larger files or alternate formats, please email your data to our consultant team at the email address above.
- If you wish to return to an earlier portion of the survey, use the "Prev" button at the bottom of the page. Please do **NOT** use the "Back" button on your browser. You can navigate back to previous sections at any time as long as you have not yet submitted the completed survey.
- You can close your browser and return to your stopping point later, but to do so without losing your data you **MUST** be on the same computer **AND** allow your browser to store cookies. Each page is only saved after you click "**Next**" at the bottom.

2023 Joint Regulatory Plan Review

Joint Regulatory Plan Review: Stakeholder Survey
Section 1. General Information

*** Please enter contact information for your water system below.**

Name of Water Provider:

Survey Completed By:

Contact E-Mail:

Contact Phone Number:

*** What is the primary type of water supply provided by this water provider? Select from dropdown below. If none of the options describes your entity, please select "Other (Not Listed)".**

If you selected 'Other', please describe your entity type:

Joint Regulatory Plan Review: Stakeholder Survey
Section 2. Service Area

The location of current and future demands is essential to the process of identifying and modeling projections of groundwater pumpage over time. FNI requests updated information from the Project Stakeholders regarding their current boundaries and the boundaries of any member units that make up the stakeholder's system.

The current service area boundary shown for your system is shown in a web map at the link below. This map will let you review and print the boundary and, if desired, sketch proposed changes.

[Click here for the Water Service Data Collection Web Map]

[Click here for the detailed web map instructions]

Does the boundary in the web map above accurately reflect the service area of your system?

- ○ The mapped boundary accurately reflects the current retail service area.
- ○ The mapped boundary accurately reflects the current retail service area and also encompasses the service area(s) of some or all of the customers or member districts served by this entity.
- ○ No, boundary is out of date.

Please provide the current boundary of your retail service area. GIS data (shapefile or geodatabase) is preferred if available.

- ○ I am providing spatial data (shapefile or geodatabase) of service area boundaries.
- ○ I am providing a PDF map of service area boundaries.

PDF maps up to 16MB in size may be uploaded using the link below. For larger maps or for GIS data, please email datasets to philip.taucer@freese.com

Choose File | Choose File | No file chosen

Do you anticipate expansion of your retail service area?

- ○ Yes
- ○ No, service area is at build-out.

If yes, please provide any available information on the timing and location of anticipated expansion of your system's retail service area.

If you would like to provide any additional data, please use the link below or email to philip.taucer@freese.com.

Choose File | Choose File | No file chosen

Joint Regulatory Plan Review: Stakeholder Survey
Section 3. Historical Water Use and Water Sales

Total water demand will be used to determine current per capita water needs and to project future trends in water demands. In order to develop demand projections that reflect trends in different use categories and in years of varying hydrologic conditions, FNI requests detailed records from the Project Stakeholders about water usage and customer connections from the years 2010 through 2020.

Please provide estimates of the number of metered connections to retail customers for each customer type listed below. If available, please estimate by customer type. Otherwise, fill out the Total Connection Count table and leave individual customer type tables blank.

Single Family Residential:

2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	

Multi-Family Residential:

2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	

Non-Residential:

2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	

Total Connection Count:

2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	

2023 Joint Regulatory Plan Review

Joint Regulatory Plan Review: Stakeholder Survey
Section 3. Historical Water Use and Water Sales (continued)

What are your system's current sources of water? Please select all that apply.

- [ ] Groundwater (Gulf Coast Aquifer)
- [ ] Groundwater (Other Aquifer):
- [ ] Other (surface water, reuse, etc.):

If 'Groundwater (Other Aquifer)', please describe which aquifer(s) are used:

If your system utilizes any water sources other than groundwater (surface water, saline surface water, reuse, etc.), please describe these sources:

Please provide any data available on water use by this water system and your customers during the period 2010 through 2020 (inclusive).

A template is available for download at the link below to fill out historical water use records on either a monthly or annual basis. The template also includes space for wholesale water sales. It is recommended that you use the template for reference to determine what kind of data to provide. However, data will be accepted in any form and does not have to be recorded on the provided template. Because the survey platform does not permit uploads of spreadsheet data, please email datasets to philip.taucer@freese.com.

Click to download Historical Water Use Data Template.

Is there any additional information you would like to share regarding historical water use or per capita demand?

Joint Regulatory Plan Review: Stakeholder Survey

Section 3. Historical Water Use and Water Sales (continued)

Please list any water systems to which your system has a permanent (normally open) interconnect and whether you supply water to or receive water from each system. Alternatively, you may provide a file listing these interconnections.

Interconnected System #1 Name

Interconnect Type

- [ ] My entity provides water to the connected system.
- [ ] My entity receives water from the connected system.

Interconnected System #2 Name

Interconnect Type

- [ ] My entity provides water to the connected system.
- [ ] My entity receives water from the connected system.

Interconnected System #3 Name

Interconnect Type

- [ ] My entity provides water to the connected system.
- [ ] My entity receives water from the connected system.

Additional Systems

Data on additional systems may be uploaded using the link below or emailed to philip.taucer@freese.com.

Choose File | Choose File | No file chosen

2023 Joint Regulatory Plan Review

Joint Regulatory Plan Review: Stakeholder Survey
Section 4. Water Conservation

FNI requests available water conservation planning information to inform long-term trends in per capita water use.

Please provide any available information on reductions in water demand that have been achieved through conservation measures, programs, or projects.

Additional data that you would like to share on demand reduction may be uploaded using the link below or emailed to philip.taucer@freese.com.

Choose File | Choose File | No file chosen

Does your system plan to implement or continue any new and/or ongoing programs or projects to manage or reduce water demand?

- ○ Yes
- ○ No

If yes, please describe the conservation measures, programs, and/or projects you plan to implement and any available information on timing and quantity of expected reductions in water demand. Please use the comment box and/or upload any available data to provide relevant information.

If you would like to provide any additional data, please use the link below or email to philip.taucer@freese.com.

Choose File Choose File No file chosen

2023 Joint Regulatory Plan Review

Joint Regulatory Plan Review: Stakeholder Survey
Section 5. Future Supplies

Groundwater modeling scenarios will be developed based on the distribution of demands served by groundwater. To differentiate these demands from those to be met by surface water, FNI requests information regarding the projected conversion schedules for water utilities served by the Project Stakeholders.

Does your system plan to implement any future alternative water supplies, including but not limited to the development and/or purchase of alternative supplies to convert existing groundwater supply to alternative sources and/or to meet growth beyond existing supplies?

- ○ Yes
- ○ No

If yes, please describe your plans for implementing alternative supplies, including sources, timing, and quantity of supplies. Please use the comment box and/or upload any available data to provide relevant information.

If you would like to provide any additional data, please use the link below or email to philip.taucer@freese.com

Choose File | Choose File | No file chosen

If your water system sells wholesale water, please provide any relevant information on the anticipated timing and amount of future contracts using the table below or by uploading relevant files.

A template is available for download at the link below to provide information on future wholesale water contracts. It is recommended that you use the template for reference to determine what kind of data to provide. However, data will be accepted in any form and does not have to be recorded on the provided template. Because the survey platform does not permit uploads of spreadsheet data, please email datasets to philip.taucer@freese.com.

Click to download Wholesale Water Template.

2023 Joint Regulatory Plan Review

Joint Regulatory Plan Review: Stakeholder Survey
Section 6: Additional Information

Do you have any additional comments, questions, or information that you wish to share with HGSD and FBSD regarding the Joint Regulatory Plan Review project?

Table A-1 – Summary of Responses to Fall 2021 Stakeholder Survey

Entity	Primary County	Online Survey Response	Information Provided by Respondent		
			Service Area Boundary	Historical Water Use Data	Wholesale Water Data
Bacliff MUD	Galveston	None	No	No	No
Baytown Area Water Authority	Harris	None	No	No	No
Bayview MUD	Galveston	Yes	Yes [1]	No	No
Central Harris County Regional Water Authority	Harris	None	No	No	No
City of Alvin	Brazoria	Yes	Yes [1]	No	No
City of Arcola	Fort Bend	None	No	No	No
City of Bayou Vista	Galveston	None	No	No	No
City of Baytown	Harris	None	No	No	No
City of Beasley	Fort Bend	None	No	No	No
City of Bellaire	Harris	None	No	No	No
City of Bunker Hill Village	Harris	None	No	No	No
City of Clear Lake Shores	Galveston	None	No	No	No
City of Conroe	Montgomery	None	No	No	No
City of Deer Park	Harris	None	No	No	No
City of Dickinson	Galveston	None	No	No	No
City of Friendswood	Multiple	Yes	Yes	Yes	No
City of Fulshear	Fort Bend	Yes	Yes	Yes	No
City of Galena Park	Harris	Yes	Yes	Yes	No
City of Galveston	Galveston	None	No	No	No
City of Hedwig Village	Harris	Yes	Yes	No	No
City of Hilshire Village	Harris	None	No	No	No
City of Hitchcock	Galveston	Yes	Yes	Yes	No
City of Houston	Harris	Yes	Yes	Yes	Yes
City of Humble	Harris	Yes	Yes	No	No
City of Hunters Creek Village	Harris	Yes	Yes	No	No
City of Jacinto City	Harris	None	No	No	No
City of Jamaica Beach	Galveston	None	No	No	No
City of Katy	Multiple	None	No	No	No
City of Kemah	Galveston	Yes	Yes [1]	No	No
City of Kendleton	Fort Bend	None	No	No	No
City of La Marque	Galveston	None	No	No	No
City of La Porte	Harris	None	No	No	No

1 - Spatial or map data was not provided, but entity provided some information regarding service area boundary, which may have included agreement with currently mapped boundaries.

Table A-1 – Summary of Responses to Fall 2021 Stakeholder Survey (continued)

Entity	Primary County	Online Survey Response	Information Provided by Respondent		
			Service Area Boundary	Historical Water Use Data	Wholesale Water Data
City of League City	Galveston	Yes	Yes [1]	Yes	No
City of Manvel	Brazoria	Yes	Yes	Yes	No
City of Meadows Place	Fort Bend	None	No	No	No
City of Missouri City	Fort Bend	None	No	No	No
City of Nassau Bay	Harris	None	No	No	No
City of Needville	Fort Bend	None	No	No	No
City of Orchard	Fort Bend	Yes	Yes [1]	No	No
City of Pasadena	Harris	None	No	No	No
City of Pearland	Brazoria	Yes	Yes	Yes	No
City of Piney Point Village	Harris	Yes	Yes	No	No
City of Pleak	Fort Bend	None	No	No	No
City of Richmond	Fort Bend	Yes	Yes	Yes	No
City of Rosenberg	Fort Bend	None	No	No	No
City of Santa Fe	Galveston	None	No	No	No
City of Seabrook	Harris	None	No	No	No
City of Simonton	Fort Bend	None	No	No	No
City of Southside Place	Harris	None	No	No	No
City of Spring Valley Village	Harris	None	No	No	No
City of Stafford	Fort Bend	None	No	No	No
City of Sugar Land	Fort Bend	Yes	Yes	Yes	Yes
City of Texas City	Galveston	None	No	No	No
City of Tiki Island	Galveston	None	No	No	No
City of West University Place	Harris	Yes	Yes	Yes	No
City of Weston Lakes	Fort Bend	Yes	Yes [1]	No	No
Clear Lake City Water Authority	Harris	None	No	No	No
Fort Bend County MUD 25	Fort Bend	Yes	Yes	Yes	No
Fort Bend County WCID 2	Fort Bend	None	No	No	No
Galveston County FWSD 6	Galveston	Yes	No	No	No
Galveston County MUD 12	Galveston	Yes	Yes	Yes	No
Galveston County WCID 1	Galveston	Yes	Yes	No	No
Galveston County WCID 12	Galveston	None	No	No	No
Galveston County WCID 8	Galveston	None	No	No	No
North Channel Water Authority	Harris	None	No	No	No

1 - Spatial or map data was not provided, but entity provided some information regarding service area boundary, which may have included agreement with currently mapped boundaries.

Table A-1 – Summary of Responses to Fall 2021 Stakeholder Survey (continued)

Entity	Primary County	Online Survey Response	Information Provided by Respondent		
			Service Area Boundary	Historical Water Use Data	Wholesale Water Data
North Fort Bend Water Authority	Fort Bend	Yes	Yes	Yes	Yes
North Harris County Regional Water Authority	Harris	None	Yes	Yes	Yes
NRG	Multiple	Yes	Yes	Yes	Yes
Pecan Grove MUD #1	Fort Bend	None	No	No	No
San Leon MUD	Galveston	Yes	Yes	Yes	No
The Woodlands Water Agency	Montgomery	Yes	Yes	Yes	No
Town of Thompsons	Fort Bend	None	No	No	No
Village of Fairchilds	Fort Bend	Yes	Yes [1]	No	No
West Fort Bend Water Authority	Fort Bend	Yes	Yes	No	No
West Harris County Regional Water Authority	Harris	Yes	No	Yes	Yes

1 - Spatial or map data was not provided, but entity provided some information regarding service area boundary, which may have included agreement with currently mapped boundaries.

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APPENDIX B

PROGRESS REPORT FOR 2020:

UPDATES TO SAM-HOUSTON MODELING METHODOLOGY

The following is a description of the Small Area Model-Houston (SAM-Houston), including a progress report on updates to the SAM-Houston modeling methodology as of February 2021.

SAM- HOUSTON
Progress Report for 2020

POPULATION AND EMPLOYMENT PROJECTIONS: TEN COUNTY METROPOLITAN AREA

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February, 2021

SAM- HOUSTON

EXECUTIVE OVERVIEW

The goal of the **S**mall **A**rea **M**odel- Houston (SAM- Houston) is to allocate metropolitan-wide population and employment forecasts to each Census tract in the ten counties that form the core of the Houston metropolitan area, Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller, and Wharton Counties. SAM-Houston combines a unique modelling strategy with sophisticated statistical processing of a wide variety of data sources about the Houston area. The SAM- Houston model has four distinct advantages as a local forecasting tool:

*SAM- Houston forecasts are modelled using current theories of urban development. The premise underlying the SAM- Houston model is that all population must be supported by employment. Urban development theory can therefore be utilized to predict how population and employment will be located over the city as Houston grows over time. An important element of the model is the location of employment subcenters, additional to the traditional downtown center, that concentrate employment in alternative areas.

*The theory for the SAM- Houston model is put into practice by using advanced statistical (econometric) techniques appropriate for processing geographically based urban data. Employment subcenters are identified using locally weighted regression. The Statistical Module specifies the process of change using weighted cubic spline regression. These statistical processes incorporate the important elements of urban development theory including leapfrog development, where development often occurs unevenly as more distant locations are developed before areas nearer to downtown; and multi-centric business centers, where there are numerous concentrations of employment throughout the metropolitan area

(as opposed to employment exclusively downtown).

*SAM- Houston forecasts are statistically grounded by the present level of land use and development. Application of the Statistical Module through the Land Use Module is based upon existing land use, and land use densities. Changes over time are based on urban development theory applied to the specific current conditions, which allows for historical and policy forces to shape the urban environment. The underlying statistical process captures development and redevelopment consistent with the Houston specific experience.

*The SAM- Houston forecasts are flexible. The model can allocate growth to individual Census tracts from any metropolitan area forecasting scenario. We are building a statistically based forecasting model based on employment in industries that produce goods traded in national and international markets.

*The very long range forecasts, post 2050, anticipate a shift in the level and structure of industrial activity as the nation, and world, shift away from petroleum-based products. The SAM-Houston forecasts are based on the patterns of other major US cities that have seen employment declines in their core industries. The very long-range forecasts then incorporate the re-development of the city as new industries emerge.

Census tract level estimates of population will be based on Census data from 1970 through 2020, while employment is based on both Census and private sector data from 1990 through 2020. Additionally, the Land Use Module employs Appraisal District data from each county. The SAM-Houston forecasts are available for every ten years from 2030 through 2100. The model predicts that Houston will continue to decentralize, and that population will decentralize more rapidly than employment. Our goal is to incorporate major industrial change in the very long range forecasts.

SAM- HOUSTON

POPULATION AND EMPLOYMENT FORECASTS

The goal of the **S**mall **A**rea **M**odel- Houston (SAM- Houston) is to provide population and employment forecasts by Census tract for the Houston metropolitan area. This is an ambitious goal, as there has not been another available statistical methodology for projecting future population and employment at the micro-geographic level, especially for long time periods. The forecasts presented here, however, are a result of an innovative modelling strategy that has achieved the objective of providing a solid theoretical and statistical foundation upon which to determine how future growth will be allocated among various places in the Houston metropolitan area. SAM- Houston population and employment forecasts are being made available for the ten county region, including Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller and Wharton Counties.

This discussion is intended to describe the primary features of the SAM- Houston model, and the progress that has been made for the HGSD project. The SAM- Houston model contains two modules. The first, the Statistical Module, is built on current urban development theory, and relies exclusively on statistical modeling representative of the application of the urban development theory to the Houston area. The Land Use Module is the second important element. It describes how the statistical results are modulated by current land use data. This segment relies on expressing the theory consistently with existing land uses, and with current land use densities, although the results are not formally unique from a mathematical perspective. The land use module ensures, however, that the population and employment forecasts are consistent with each other, and are consistent with the available vacant land in each neighborhood.

1. Modelling Strategy

This section describes the two separate components, or modules, of the SAM- Houston model. The statistical module is the core, as it translates established urban development theory into a statistical model for the Houston metropolitan area. The second module compares the statistical forecasts to the available developable land, and adjusts the forecasts to reflect current land use patterns and available vacant land. The goal of this modelling strategy is to develop a flexible planning tool, appropriate for widely disparate applications, that is nonetheless sensitive to current development within Houston.

2. The Statistical Module

There are four elements of the statistical module used to prepare the SAM- Houston forecasts. First, we statistically identify the employment subcenters throughout the Houston area, incorporating not only employment density but also influence on neighboring areas. Second, we estimate a model of population and employment allocation throughout the Houston metropolitan region. Third, we determine how the allocation of population and employment has changed over the last five decades. Fourth, we use an aggregate population and employment forecast for the metropolitan region, and allocate the forecasted population and employment to individual Census tracts.

Employment subcenters are an important theoretical innovation in understanding urban economies over the last three decades. Specifically, firms tend to locate near each other to achieve what are called agglomeration economies. Agglomeration economies mean that it is cheaper and more effective for firms to locate near each other, although current research is still attempting to determine the relative importance of the several reasons for doing so. Among them are that firms can be suppliers and customers for each other, it is more efficient for customers to search among

products when they are co-located, it is more efficient for firms and workers to search for each other when they are in proximity, and technological innovation can occur more rapidly through formal and informal interactions.

The problem with grouping together, however, is the resulting congestion. As growth causes congestion to build, markets have responded by moving clusters of employment outside of the traditional downtown areas. These new clusters are called employment subcenters, as the firms attempt to achieve most of the advantages of agglomeration without the costs of congestion. Employment subcenters in general are the subject of much recent research, as the process and causes of attraction are not yet fully understood. Our research on Houston has nonetheless found that these subcenters are economically important, and further that they are generally diversified as to industry focus despite the real estate labels. Irrespective, however, subcenters have been growing in importance across the country, as well as in Houston in particular, and our forecasting methodology accounts for their continued growth as the Houston economy grows.

Our identification of employment subcenters is accomplished through locally weighted regression, a semi-parametric technique that provides a detailed look at employment data to determine not only areas of higher than expected employment based on the relationship to downtown, but which is also based on the influence of a geographic point on employment in nearby areas. One of the interesting consequences of our modeling is that we find that only downtown has influence over the entire shape of Houston; the other employment subcenters (even the Galleria) have influence on less than the entire city. We take the limitations of subcenter influence into account in our modeling.

The second element of the statistical component of the SAM- Houston forecasting model is constructing an empirical description of the fundamental urban development theories. The

foundation of the forecasting model uses economic theories that describe the distribution of population and employment throughout an urban area. In particular, all demographic change must be supported by employment opportunities. That is, all population change, whether from changes among the current resident population due to births and deaths, or from migration, must be supported economically. Employment opportunities arise because of demand for local products from economies in the rest of the world outside of Houston (called base employment), and from residents' demand for goods and services provided locally (called secondary employment). Base employment occurs in sectors that supply products to those outside the local economy, and represents the primary reason for a city's location. Base employment is generally concentrated in downtown, and in the other employment subcenters of the city.

Non-base employment, or secondary employment, provides goods and services to local businesses and residents. The SAM- Houston model consists of a statistical description of how population tends to be concentrated around base employment centers, and then is spread more uniformly throughout the rest of the city. Secondary employment follows a similar pattern. It tends to be concentrated around base employment centers to serve both other businesses as well as the general population. In addition, however, secondary employment follows the population throughout the city. The concentrations we model are measured as persons (or employees) per square mile. Variations in this measure represent both the capacity utilization of available land, as well as the intensity with which land is utilized.

One important step this past summer for data collection has been employment data. The employment data assembled for these purposes is from the Local Origin-Destination Employment Survey (LODES) project of the US Census. This project uses the long-form survey of the Census to locate employment, so that the location of the firm is the information in the data. This data

allows us to locate the employment centers including those outside of downtown, and it is important for balancing the use of vacant land between people and firms. The advantage of the Census data over, for example, the data from County Business Patterns is that the data is based on the location of employers, rather than employees. Further, the Census data is available by Census tract, rather than aggregated across the entire county.

The third element of the statistical module involves determination of how population and employment dispersion has changed over time, and a forecast of how population and employment dispersion will change in the future. On average, cities throughout the country have been decentralizing at least since 1950. Two trends driving decentralization are decreases in transportation costs (especially travel time), and technological changes reducing the need for geographic proximity among firms in different industries.

The rate of decentralization is determined by examining the rate of decentralization in the Houston area since 1970. The period from 1970 to 1980 was a prosperous period for Houston, but one in which population growth outpaced improvements in the transportation infrastructure. The opposite pattern was experienced in the 1980-90 period, as transportation development proceeded much more rapidly than population growth. The 1990-2000 period is more similar to the pattern from 70-80, in that the city continued to disperse, although toward the end of the period increases in congestion and other transportation costs slowed the trend toward decentralization. The 2000-2010 period has been the most difficult to model, as Houston has maintained its own economic cycles but nested within the influence of national shocks. Further, it appears that the City's growth westward is slowing, and that future growth is veering northwards. We have not yet fully addressed whether the most recently completed decade is following the trend in the first decade of this century.

Other trends, however, are also important for determining the rate of urban decentralization. In large part, decentralization does not involve people living in the city moving to the suburbs. Instead, decentralization occurs when new people moving to Houston disproportionately decide to move to the suburbs instead of into the central city. Thus decentralization can be accelerated by population growth, as the number of new residents indicates that people are mobile, and thus the shape of the city can change more quickly. A difficult forecasting element is that migration to Houston is as much a product of economic conditions elsewhere as the economic conditions in Houston. Finally, the policy health of each political jurisdiction is potentially important, and can markedly change how and where economic growth occurs. Consideration of the current policy trends in the City of Houston government are allowed to slightly influence our forecasting model.

This past summer we conducted another study, to protect against any delays in the basic Census data. Specifically, the Census Bureau has initiated a project within the American Community Survey (ACS), so that starting in 2010 using survey methods, annual population data is created for each Census tract. These ACS data were collected, and we compared the core statistical process results of the model for 2010. That is, the statistical basis of the SAM-Houston model is to describe the economic shape of the Houston metropolitan area using a statistical model that accounts for several of the central economic forces that shape the Houston region. This statistical description has been based on the most recent Census actual population counts. Rather than use the actual Census counts, however, we did the identical statistical process using the ACS survey data for 2010. The survey counts, and overall statistical pattern, are very similar using either data source. We of course found minor differences between the survey data and the actual population counts, but we call these differences minor because they did not impact the overall statistical distribution of population. Thus, we believe this evidence is one reason the ACS survey

data should be sufficient for most purposes for forecasting the distribution of population in the Houston region.

In addition to the comparison of the Census counts to the ACS survey data for 2010, we used the ACS survey data to build a statistical distribution of population for each of the subsequent years through 2018. We did this to get a picture of whether the ACS data suggests a population growth process that is similar to the past. That is, Houston has followed a relatively similar overall growth pattern since 1970, where Houston has been not only spreading out and growing primarily westward, but where growth is also concentrated based on the non-downtown employment subcenters of the city. Thus, we estimated the foundation of the SAM-Houston model for each year from 2011 through 2018. Our statistical comparison entails an examination of how the statistical shape of the city compares to 2010, and depends on the shape of the statistical changes based on the ACS as compared to forecast changes from the past. We believe this evidence again strongly indicates that the ACS survey data offers a reasonable alternative on which to base our forecasting procedures. Based on some of the data differences between the Census and survey methods, we did a preliminary exploration of some smoothing procedures over time. These procedures would reduce the annual differences that sometimes occurred between the Census and survey results, and which are sometimes apparent in differences between years of the ACS survey. At the same time, however, since the thrust of our forecasting is by decade, the minor variation in the annual data is not expected to be important or influential for the final forecasts. Based on the success of the ACS showing population growth dynamics, as well as the success of the ACS data at illustrating the economic shape of the city, we thus believe the ACS data offers an excellent alternative to the actual Census counts. We thus have a potentially important alternative provision if for any reason the Census count releases are delayed.

Another important force we expect to explore is the increase in frequency of flooding events in Houston. It will be difficult to assess the impact of more frequent and more severe storms in Houston on its overall growth rate, but we collected data in two dimensions to attempt to do so. First, we will do a concentrated study of the Meyerland area to assess how people have responded to being flooded in three consecutive years. We collected the basic real estate and demographic data for this study, although it will take significant processing to be ready to use this coming summer. The other approach will be to examine behavior and outcomes for cities in economic decline, which we discuss at the end of this section.

Employment, both base and secondary, is generally more concentrated than is population. Employment has also tended to decentralize, although at a somewhat slower rate than population. While technological change may serve to accelerate the speed of employment decentralization, the growing influence of the employment subcenters seems to have become much more important in the new century than earlier. As with population, the speed of employment decentralization shows a significant decrease in the 1980s compared to earlier time periods, while the decades since the 1990s seems to exhibit a return to earlier patterns. Thus, we expect that the rate of decentralization will proceed at a rate that is reflective of the last twenty years, as improvements in transportation will not be able to compensate completely for increases in costs, and increases in congestion. The COVID experience, and growth in working at home, also has yet to be assessed. The somewhat unanswered question is how independent the employment subcenters will grow compared to downtown. We believe the employment centers will remain linked to each other, and to downtown in important ways, but this is an area in which future changes may be surprising given our statistical past. One of the indicators of this process is that the statistical distinction between counties is much less pronounced than in the past, thus the entire ten county region seems

firmly rooted to the same economic growth process.

The fourth element of the statistical module involves recognition of the growth allocation process that is the result of the SAM- Houston model described above. That is, the SAM- Houston model is structured to allocate metropolitan-wide population and employment forecasts among each of the various Census tracts within the metropolitan region. The actual forecasts for each Census tract of course depend on an aggregate forecast for the Houston metropolitan region. The aggregate forecasts used to develop past estimates for population and employment were developed by the Institute for Regional Forecasting (IRF) through the HEMS (Houston Economic Multi-Sector) model as well as their longer term forecasts. The forecasts from the IRF have performed well in the past, and are based on objective economic criteria. They have also compared well to forecasts from the Texas State Data Center, and the Texas Water Development Board. Unfortunately, not only are the IRF forecasts unavailable, neither they nor other sources extend to the year 2100. We therefore have accessed the information to build our own forecasting model based on the IRF format to be used through the year 2050.

After that time, however, we believe shifts away from petroleum, including drilling as well as refining, will begin to severely impact the economic characteristics of the greater Houston area. We have two approaches to investigate this anticipated event. In the first, we will use past cycles in the petroleum industry to assess how industrial contraction impacted population, as well as the proportion of employment in other industries. Part of our analysis will be to determine how downturns have changed the economic shape of the Houston region, and whether those spatial adjustments were temporary or permanent.

The other avenue is to examine other US cities that have gone through a cycle of growth and decline. The data we collected this past summer is needed to evaluate other US cities that have

gone through a cycle similar to what we anticipate for Houston. That is, we collected data on the 70 largest US cities over time from 1980, and in some cases earlier. Some of these cities have seen their major industries shrink, and some of them have since rebounded and resumed a growth path. Others have seen their major industries shrink, and have not had a substantial rebound. We believe that public sector actions are one of the determinants as to which path an urban area follows. Thus, we have proposed to examine major US cities that have followed both paths, renewal and decay, to be able to statistically distinguish whether there are a set of measurable public policy actions that determine the difference. Because this process has a large number of unknowns, and because this is academically the project with the highest returns, we are working on the conceptualization of this project during the academic year. This process is only possible because of the successful construction of the detailed data by city. Our information collected includes the major public sector fiscal decisions. These decisions include taxation, revenue from other governments, and debt. They also include the sectoral balance of expenditures between categories (for example safety versus transportation).

Finally, we have also collected employment data by major industry. The industrial classifications are called NAICS codes (which have superceded SIC codes). Our use of this data is at a moderate level of aggregation, indicated by what are called 2-digit industries This data shows metropolitan area employment compared to national employment, so that we are able to quantify how the industrial strength of cities compare to the nation as a whole. The employment data will allow an assessment of the relative economic strength, and its dynamic progression over time. Based on the data construction and our intellectual progression so far this semester, we believe we will have a reasonable model upon which to base a long-range forecasting effort in the Summer of 2021.

3. The Land Use Module

The land use module is a statistical process designed to adapt the results from the statistical module to current land use patterns using two steps. First, basic land use data is used to evaluate the capacity of an area for development. Second, a re-allocation model is developed and utilized to adjust the forecasts to be consistent with the development capacity of the land.

The development capacity of an area depends on two fundamental elements. One is the amount of land available for development, and the other is the intensity with which the land is employed. The SAM- Houston forecasts thus must be modulated to be consistent with the available vacant land, and to be consistent with expected future intensity of land use.

Vacant land data to be used in the 2020 SAM-Houston forecasts was collected from the Harris County Appraisal District (HCAD). The HCAD data is organized by parcel, and we assign each parcel to a Census tract. Developed and developable land is designated by the HCAD land use codes. The SAM-Houston model allocates vacant land to commercial and residential land uses consistent with the patterns existing for the developed parcels. The Houston-Galveston Area Council (HGAC) has a database similar to that for HCAD, and we also utilize the HGAC data to rationalize the land use codes. A model which examines past land use, and which examines differences across tracts, is used to forecast gross land use intensity and how it will change over time with re-development.

We find that land use intensity is directly related to land utilization. That is, areas with low amounts of vacant land are also likely to utilize the available land more intensely. The distinction is termed gross density which is the percentage of land that is not vacant, compared to net density which is the number of residents or employees per built area. This view translates directly into population density, where gross density is the number of people in an overall Census tract (or any

fixed area), while net density is the number of people per developed area. Thus, as Houston grows vacant land will be reduced in areas already rather developed, so gross population density is likely to increase. Further, through redevelopment as well as because of the character of construction on the formerly vacant land, net density may increase as well. This is consistent with the underlying pricing, as pricing and density are related. As land prices increase the incentive to utilize vacant land increases, and when land is more expensive the incentive to house more people per land area will increase as well.

The land use intensities, however, will vary depending on the initial use. Thus vacant land will be expected to develop closest to the optimal economic intensity, while already developed land will only intensify gradually as redevelopment occurs. Thus in the central areas of Houston, inside Loop 610 for example, changes in land use density would be expected to occur more slowly than in the outlying areas since many of the changes will be due to redevelopment rather than construction on vacant land. For areas farther from the central business district, however, development will cause the amount of vacant land to fall and its average intensity of use to increase.

Over most of the Houston area, land use controls are not restrictive, in that development will be permitted to occur at the economically relevant level. The model, however, allows land use in the incorporated areas with restrictive land use controls to increase more slowly than elsewhere (for example the Memorial villages). There is not currently information on the extent to which existing neighborhood deed restrictions limit land use. Our response to this phenomenon is that the current restrictions are reflected in the current land use, and thus basing future changes on the existing patterns will allow this feature of Houston to be reflected in the final outcomes.

The measurement of vacant land combined with an analysis of land use densities allows

determination of the population and employment capacity of an area. The final step in this determination is to split developable capacity between population and employment. We generally allow existing land use to dictate the proportion of an area devoted to population or employment. For relatively undeveloped areas we impute patterns of land use from similarly situated areas. In addition, however, we allow the basic SAM- Houston model to alter land use proportions to the extent certain areas are developing predominately in one or the other of the two potential land uses (population or employment). Also important in this determination is that employment tends to be more concentrated toward downtown than population.

The second step in the land use module is to adapt the forecasts from the statistical model to the capacity for development. The adaptation of the statistical forecasts is accomplished by re-allocating growth that cannot be accommodated by existing vacant (developable) land. Growth that cannot be accommodated within a tract with projected land use densities is called “overflow” population or employment. Our reallocation process starts first by keeping "overflow" population or employment nearby, and then progressively search for areas similar in distance to the city center in other directions consistent with the underlying statistical model. That is, overflow population or employment from one Census tract is first allocated proportionately to other, non-overflow, tracts within the same quadrant from downtown and within a band of only a few miles. This procedure is possible because unlike past Census tract boundaries, the boundaries for the recent three Census are consistent with this modelling framework. We believe restricting forecasts from the statistical model to be consistent with the developable capacity of each Census tract provides an important "reality check" to the forecasts. At the same time, we have taken a rather conservative approach to the reallocation process. That is, we have reallocated the minimum amount of population or employment consistent with the land use model. This is because Houston has been unique among

cities in re-engineering its physical structure to accommodate the desires of the population as reflected through the market.

Based on the substantial progress outlined above, we believe we will be in good shape to build the forecasting model in the Summer of 2021. The Census population count data are following their release schedule with only minor delays. Further, our detailed study of the ACS sampling data compared to the actual Census counts revealed that the ACS data are sufficiently accurate to form the basis of the model. It is not yet clear when the employment data will be released, but it appears likely it will be during the summer of 2021. Irrespective of the release date of the employment data, we will have sufficient information to run the SAM-Houston model in the summer of 2021. As with any forecast, there is greater uncertainty the longer the forecast period. We expect we will iterate the longer run forecasts considerably, and thus forecasts after 2050 will not be finalized until the end of the Summer of 2021 or early Fall. Further, we will need to work with Metrostudy to harmonize the forecasts between their work and ours. Given that we will need all summer to produce the SAM-Houston forecasts, this work will be completed during the Fall of 2021.

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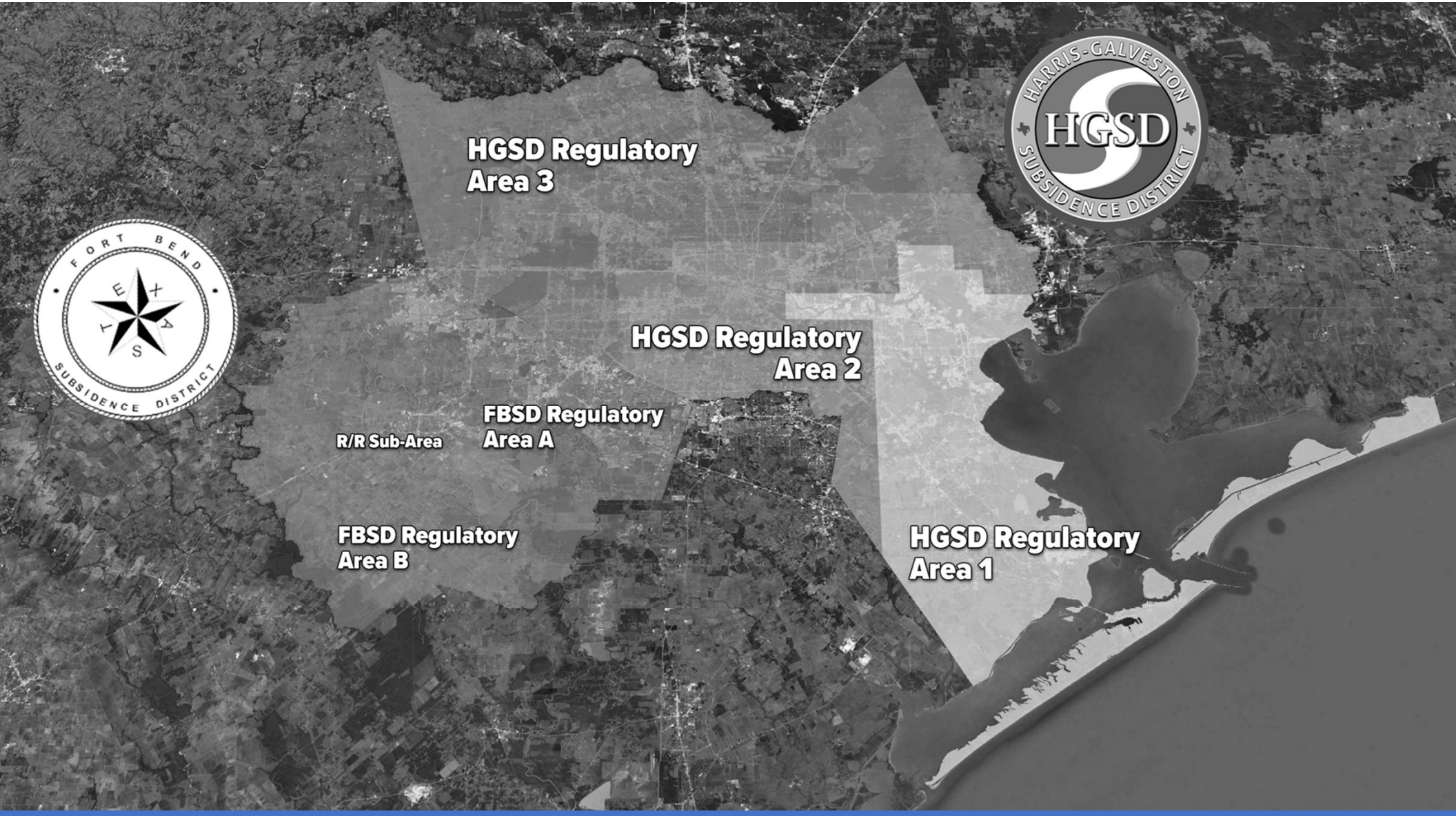
APPENDIX C

NEAR-TERM POPULATION AND HOUSEHOLD FORECAST METHODOLOGY

The following is a description of the methodology applied by Metrostudy to forecast near-term development. This document describes a study area in Fort Bend County and HGSD Regulatory Area 3, but the same approach was later applied to portions of Waller County and HGSD Area 2.



HARRIS-GALVESTON SUBSIDENCE DISTRICT – 2023 REGULATORY PLAN REVIEW

Population and Household Forecast Methodology
Freese and Nichols
Houston, Texas
December 2020

Meyers RESEARCH + metrostudy

BACKGROUND & OBJECTIVES

As part of the 2023 regulatory review process for the Harris-Galveston Subsidence District, Freese and Nichols is seeking household and population forecast figures through 2030 for Census Tracts within Fort Bend County (Fort Bend Subsidence District) and Area 3 of Harris County (Harris County Subsidence Districts). These forecast figures will be utilized to develop water demand tabulations for the Harris-Galveston Subsidence District. As detailed in this methodology overview, our forecast figures will be based upon several sources, including Metrostudy's proprietary quarterly housing survey, Census Bureau data, and third-party data demographic and housing market data sources.

KEY CONTACTS

The following key team members will participate in this analysis:

Tim Sullivan, Senior Managing Principal, oversees our Advisory practice. With over 38 years of experience, Mr. Sullivan is an expert in residential and mixed-use feasibility studies, strategic planning and product development, and regularly conducts market analyses around the United States and internationally.

Bryan Glasshagel, Senior Vice President. Mr. Glasshagel has over 20 years of experience in the real estate and banking industries and has directed analyses of residential and commercial projects throughout Texas and the United States, including master planned communities, active adult housing, high-rise and urban projects, and commercial real estate developments.

Lawrence Dean, Regional Director. Mr. Dean has served the Houston and broader Texas real estate industry since 2001. Prior to becoming Houston's Regional Director, he led a team of Metrostudy's consulting practice advising homebuilders, developers, and investors on specific sites and potential development programs. Mr. Dean has also previously held management roles in land acquisition and development for several public homebuilders and was Vice President of a local boutique consulting firm.

Ryan Early, Managing Director. Mr. Early has over 14 years of extensive experience with GIS and database management and analysis of varying types (highest and best-use, market positioning, fiscal impact, economic blight, litigation support, M&A, etc.) across all land-uses (residential, commercial, office, industrial, recreation, etc.).

Additional support will be provided as needed.

LIMITING CONDITIONS

Client is responsible for representations about the development plans, marketing expectations and for disclosure of any significant information that might affect the ultimate realization of the projected results. There will usually be differences between projected and actual results because events and circumstances frequently do not occur as expected, and the difference may be material. We have no responsibility to update our report for events and circumstances occurring after the date of our report. Payment of any and all of our fees and expenses is not in any way contingent upon any factor other than our providing services related to this report.

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Company Background

Harris-Galveston Subsidence District – 2023 Regulatory Plan Review

Founded in 1975, Meyers Research / Metrostudy is the leading national housing data intelligence firm in the United States. We work with audiences across the housing industry to streamline access to critical information and drive new opportunities. We exist to inform, advise, and connect the next generation of housing industry experts, leveraging the information, insights, and people that move the industry forward.

Local and national teams with deep industry knowledge. Our national data and advisory team includes 50 technologists, 60 advisors, and 500 researchers. Our team is focused on delivering the housing industry's most comprehensive platforms covering over 275 housing and economic metrics. Our advisory team is a trusted advisor to clients, providing market feasibility and customized strategic research for a variety of land uses.

Metrostudy was founded in Houston and has been the market's leading provider of housing market data for over 45 years. While Metrostudy expanded to cover most of the nation's major metropolitan areas with its proprietary quarterly housing survey, the company's roots are in the Houston MSA. Meyers Research-Metrostudy is the leading provider of housing market data in the Houston MSA and is recognized for its consulting expertise on development, marketing, and economic issues. Meyers Research-Metrostudy provides feasibility studies and strategic consulting services on residential and commercial real estate projects across the market. Clients include builders, developers, lenders, equity partners, municipalities, and other entities.

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Building the future of housing™

Meyers RESEARCH

metrostudy

Methodology

Harris-Galveston Subsidence District – 2023 Regulatory Plan Review

In order to create household and population forecasts through 2030 for the HGSD, we will utilize our proprietary database of single-family housing activity. Metrostudy's proprietary database is centered on a quarterly survey of all new single-family residential development in the Houston MSA. Company surveyors visually inspect all known residential developments and account for all stages of development activity within each community:

- ❑ Future platted lots
- ❑ Lots under active development
- ❑ Vacant developed lots
- ❑ Homes under construction
- ❑ Finished vacant homes
- ❑ Occupied homes

Based on the above, residential development activity is tracked for each community from conceptual stage through build-out. Company surveyors not only assess the physical development of lots and homes, but also collect data and information on home prices, community amenities, and other community details (active builders, HOA dues, property tax rates, etc.). With over 45 years of historical data, Metrostudy's proprietary survey data creates a unique ability for our firm to monitor the supply and demand trends behind new household formations across the market. This extensive survey data and our in-depth knowledge of the local housing market allows us to accurately forecast household and population figures for various geographies within the Houston MSA.

In addition to our proprietary housing survey data, select secondary data sources are also utilized in our household and population forecasts. As part our forecast process, we will also utilize secondary sources of information to supplement our proprietary housing survey data:

- ❑ Census Bureau / American Community survey
- ❑ Neustar (third party demographic data provider)
- ❑ ESRI (third party demographic data provider)
- ❑ Apartment Data Services (third party apartment data provider)
- ❑ ALN Apartment Data, Inc. (third party apartment data provider)
- ❑ Local land developers and engineers
- ❑ Local planning and zoning offices at various municipalities

Our analysis will focus on household and population forecasts for select areas in Fort Bend and Harris counties. Our analysis will provide household and population projections at the Census Tract level for the following areas:

- ❑ Fort Bend County (Fort Bend Subsidence District)
- ❑ Area 3 of Harris County (Harris County Subsidence Districts).

Our household and population forecasts will be derived from a multi-step process. The following outline details the steps and methodology that Meyers Research-Metrostudy will undertake as it relates to generating household and population estimates for the study area:

Step #1 – Historic Population Growth (Control Totals)

Our first step will be to examine prior population growth across the Houston MSA and in the study area for this analysis. These trends will provide a foundation or control totals for the population growth within each location. We will assess population growth from 1970 to 2020.

Step #2 – Historic Population to Household Ratios

Utilizing Census Bureau data, our next step will be to determine the number of new residents it took to generate one new occupied housing unit between 2010 and 2020 (household formation rate) for the overall market and the study area included in this assessment:

$$\textit{People Per New Occupied Houshold} = \frac{\textit{(2020 Population - 2010 Population)}}{\textit{(2020 Occupied Housing Units - 2010 Occupied Housing Units)}}$$

The household formation rate will be utilized to convert projected household growth to projected population growth in the study area for this engagement.

Step #3 – Projecting Single-Family Household Growth

In order to project single-family household growth in the study area, we will complete the following steps using our proprietary housing survey data:

- ❑ Assess single-family housing starts and closing trends at the subdivision level to project the pace at which new homes will close over the forecast period.
- ❑ Identify homes under construction and finished vacant homes to determine the extent and location of housing activity over the forecast period.
- ❑ Identify vacant developed lots and future platted lots to determine the extent and location of housing activity over the forecast period.
- ❑ Assess the development potential of vacant parcels in the study area.
- ❑ Project annual household growth across the forecast period at the subdivision level for active and future subdivisions in the study area.

Projected annual growth forecasts will take future infrastructure improvements and other factors into account.

Step #4 – Projecting Multifamily Household Growth

In order to project multifamily household growth in the study area, we will complete the following steps using data from third party sources such as Apartment Data Services and ALN Apartment Data, Inc.:

- ❑ Assess construction and lease-up pace trends at apartment communities to project the pace at which new projects will be added/occupied over the forecast period.
- ❑ Identify under construction, planned, and proposed apartment projects to determine the extent and location of multifamily activity over the forecast period.
- ❑ Project annual household growth across the forecast period at the project level for active, under construction, and future communities in the study area.

In addition to reviewing third party apartment data, we will also review large master planned communities in the study area to determine if multifamily projects are planned for future parcels within the communities.

Step #5 – Projecting Overall Population Growth

Once the annual single-family and multifamily household projections are completed for each subdivision or project, the projected household figures will be aggregated to the 2020 Census Tracts. We will convert the household growth projections into population growth by applying the household formation rate detailed in Step 2.

Step #6 – Report Creation & Delivery

A summary of our research will be presented in a concise, presentation style report that includes both written findings and key illustrative exhibits such as trend charts and graphs. Details will be provided as needed for subareas (i.e. Fort Bend County and Area 3 of Harris County). In addition to the summary of our research, we will provide Excel and other files detailing our forecast figures to Freese and Nichols and other parties as requested (i.e. Dr. Steven Craig and team at the University of Houston).

Hypothetical Subdivision Forecast

Harris-Galveston Subsidence District – 2023 Regulatory Plan Review

Harvest Green is a master planned community in Richmond (Fort Bend County) that will include over 2,600 homes at build-out. The following select steps illustrate how single-family subdivisions will generally be assessed as part of the forecast process:

Step #2 – Historic Population to Household Ratios

The following is the household formation ratio for Fort Bend County (comparing 2020 to 210 population and occupied housing unit figures from Census/ESRI):

$$3.09 \quad \text{People Per New Occupied Houshold} = \frac{836{,}775 - 585{,}375}{268{,}710 - 187{,}384}$$

Step #3 – Projecting Single-Family Household Growth

The following summarizes the forecast approach for projected household growth for Harvest Green:

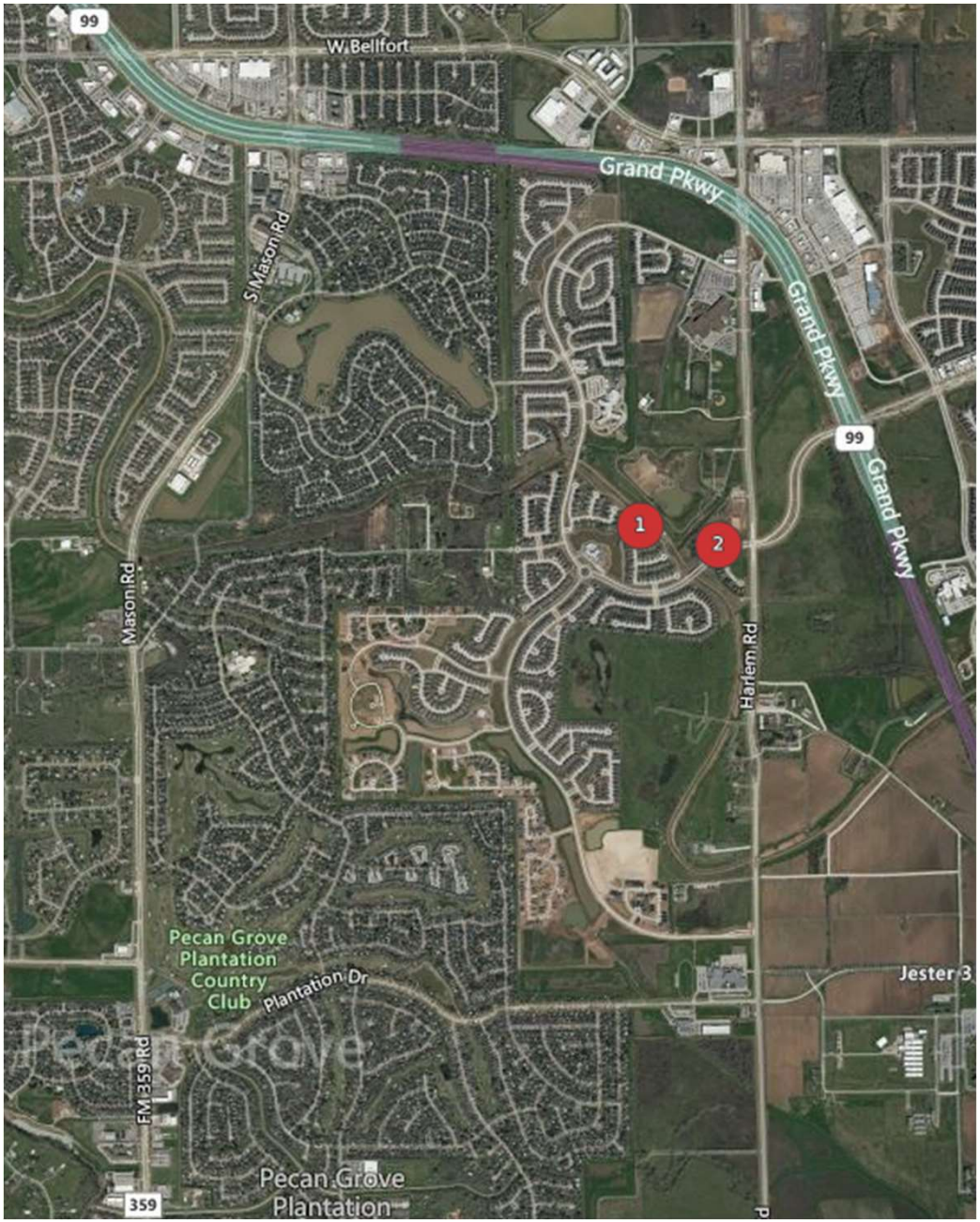
- ❑ Average of 350 annual new home starts and 344 annual new home closings since the beginning of 2019.
- ❑ As of 3Q20, 33 finished vacant homes, 123 homes under construction, 290 vacant developed lots, and 690 future lots remain to be sold/occupied.

With 1,136 homes/lots remaining and an annual closing pace of 344 homes per year, Harvest Green will continue to add new households through 2024.

Step #5 – Projecting Overall Population Growth

Based upon an average of 3.09 people per household, future closing activity at Harvest Green could generate the following new household and population levels:

	Households	Population		Households	Population
4Q20	86	266	2023	344	1,063
2021	344	1,063	2024	18	56
2022	344	1,063	Total:	1,136	3,510



COMPANY EXPERIENCE – MEYERS RESEARCH

Appendix

Meyers Research is a nation-wide research firm guiding real estate investors throughout the country. Our highly educated and experienced consulting staff believes in providing the highest quality service possible to our clients, which means completing the exact analysis they need. Based in Costa Mesa, CA and Washington, DC, we are home to over 140 experts in 10 offices across the country.

Our company offers a unique research tool known as Zonda that offers an edge to our research with easy access real-time data at a local level across the United States. Our local Zonda database provides our team with a history of new and resale housing information, maps, comprehensive data, and many other metrics we use in our analyses to begin the reporting process with greater accuracy -- quickly, accurately and cost-effectively -- with on the ground and in person research. Zonda provides access to over 275 metrics influencing the housing industry including monthly and annual historical trends, future projections and real-time narrative reported by seasoned analysts across the country.

Our senior executive team are thought leaders that individually have more than 30 years of experience in housing and real estate research. With our advisory services, we have navigated builders through different housing cycles and have a deep understanding of local markets. Our consulting team has a broad range of housing expertise and experience spanning the country including consumer research, feasibility studies, portfolio valuation, business planning, and custom research designed to make better decisions related to any real estate investment.

Zonda and Our Research

- Competitive Analysis throughout the Country
- Exclusive Access to our Research & Consulting Executives
- Metro Analysis & Housing Trends
- Apartment Analysis & Forecast
- Exclusive Client Events
- Presentations & Webinars
- Proprietary Surveys

Advisory

- For-Sale, Apartment, Commercial & Mixed Use
- Resort & International Development
- Strategic Direction & Planning
- Home Builder Operations Assessment
- Demand Analysis
- Consumer Research & Focus Groups
- Custom Economic Analysis & Forecasting
- Litigation Support & Expert Witness
- Financial Modeling
- Project & Product Positioning

Consumer and Product Strategy

- Consumer and Product Insights
- Tactical and Marketing Strategies
- Product Design Advisory
- Custom Consumer Research
- Customer Shop Research

COMPANY EXPERIENCE - METROSTUDY

Appendix

Metrostudy, a Hanley Wood company, is the leading provider of primary and secondary market information to the housing and related industries nationwide. In addition to providing information, the company is recognized for its consulting expertise on development, marketing, and economic issues, and is a key source of research studies evaluating the marketability of residential and commercial real estate projects. Builders, developers, financial institutions, manufacturers, retailers, telecommunications providers, government entities, and numerous, adjacent industries rely on Metrostudy's research, expertise, and intelligence to support strategic business decisions at the local, regional, and national market level.

When you partner with Metrostudy, we guarantee that you will know your market. Our research offers the most complete, accurate, and useful information available. And we not only provide the information – we can analyze what it means and help you apply it to your business.

Our research.

Metrostudy maintains the nation's most comprehensive database of housing market information, using hundreds of dedicated field researchers and investing millions of dollars annually. Our researchers drive the streets of every platted new home subdivision, inspect every home site, and record primary data on housing activity every 90 days to deliver the most accurate market data on active and future construction in the industry. Our core research is complemented by strategic third-party data that we rigorously cleanse and distill to improve accuracy and relevancy. We gather deeds, tax assessor's records, demographics, as well as robust economic data that provide insight into local market health and the national economy. When our clients make decisions, they have confidence knowing their teams are utilizing the most complete and accurate information available.

Our analysis.

Metrostudy's consulting team provides strategic decision support and comprehensive due diligence services for a variety of business scenarios. Clients engage Metrostudy on a local, regional, and national basis. Our in-market and national strategists are recognized experts in identifying the market forces and ecosystem pitfalls your investments or projects will face. Using our research, marketing, and sales expertise, we will deliver a highly personalized service with clear and relevant analysis from the best data available. We immerse ourselves in your marketplace and will be attentive to your particular needs. We are here to help you understand how to minimize risk and maximize profits for your business, so you can make decisions with confidence.

Our consulting team has completed thousands of residential and commercial studies for homebuilders, developers, lenders, Wall Street opportunity funds, retailers, utilities, and government agencies across the country, including 18 of the top 20 national residential homebuilders. We produce everything from quick preliminary analyses to fully documented studies customized to your needs. For a complete list of major residential study types offered, please visit our Consulting Information at our website www.metrostudy.com.

Thank you!

This analysis was prepared by Meyers Research, LLC.

APPENDIX D

POPULATION PROJECTION SUMMARY TABLES

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Table D-1 – Population Projections by County (Census Count shown for 2020)

County	2020	2030	2040	2050	2060	2070	2080	2090	2100
Austin	30,167	31,300	32,379	33,366	33,805	34,125	34,449	34,776	35,106
Brazoria	372,031	403,497	431,420	451,031	462,189	471,475	477,538	481,950	484,829
Chambers	46,571	60,631	79,788	102,555	127,668	154,853	185,792	221,998	264,248
Fort Bend	822,779	1,025,010	1,239,696	1,431,122	1,584,937	1,738,819	1,879,698	2,016,963	2,149,762
Galveston	350,682	377,403	392,019	401,517	407,589	411,701	415,342	419,503	423,551
Harris	4,731,145	5,193,657	5,392,541	5,547,593	5,621,183	5,671,911	5,720,523	5,763,789	5,801,579
Liberty	91,628	115,074	144,265	176,682	209,923	243,006	278,364	317,578	360,990
Montgomery	620,443	759,919	913,804	1,063,722	1,187,174	1,277,864	1,355,552	1,429,893	1,500,648
Waller	56,794	71,599	85,525	101,637	119,998	139,204	158,434	178,145	198,104
Wharton	41,570	41,827	42,080	42,335	42,591	42,848	43,107	43,368	43,630

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Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	1485 LIMITED CRYSTAL SPRINGS WATER CO	18	24	24	26	28	30	32	34
Current PWS	2920 WEST SUBDIVISION	225	225	225	225	225	225	225	225
Current PWS	5TH STREET WATER SYSTEM	2,607	2,607	2,732	2,799	2,993	3,170	3,248	3,318
Current PWS	ACORN VILLAGE MOBILE HOME PARK	27	39	40	41	41	42	41	39
Current PWS	ADDICKS UTILITY DISTRICT	5,821	5,932	6,018	6,103	6,222	6,396	6,655	7,243
Current PWS	AFTON PARK WATER SYSTEM	69	77	102	102	105	109	111	111
Current PWS	AIRPORT HEIGHTS	37	39	52	64	63	63	67	70
Current PWS	ALBURY MANOR UTILITY COMPANY	208	219	230	232	247	261	284	288
Current PWS	ALDINE FOREST SUBDIVISION	73	73	73	79	76	76	71	59
Current PWS	ALDINE GARDENS MOBILE HOME PARK	30	32	45	46	45	45	43	39
Current PWS	ALDINE MEADOWS	171	171	186	241	234	234	224	201
Current PWS	ALDINE OAKS MHP	112	164	164	164	163	163	159	151
Current PWS	ALDINE VILLAGE SUBDIVISION	716	716	717	718	713	713	689	635
Current PWS	ALICE ACRES MOBILE HOME SUBDIVISION	392	561	561	561	561	619	641	662
Current PWS	ALLENDALE WATER SYSTEM	191	209	218	223	226	228	237	246
Current PWS	ALLENWOOD SUBDIVISION	279	362	629	697	753	795	840	886
Current PWS	ALTON THEISS SUBDIVISION	15	15	15	15	16	16	17	17
Current PWS	AMBERWOOD SUBDIVISION	310	338	503	529	552	559	588	636
Current PWS	AMERICASA AT CYPRESS MEADOWS	14	14	14	14	14	14	14	14
Current PWS	AMES MINGLEWOOD WSC	1,212	1,212	1,214	1,214	1,281	1,345	1,449	1,578
Current PWS	ANCHOR ROAD MOBILE HOME PARK	15	15	15	14	14	14	13	13
Current PWS	ANGLE ACRES WATER SYSTEM	8	8	8	8	8	8	7	7
Current PWS	ANGLECREST SUBDIVISION	154	154	153	151	148	144	138	131
Current PWS	APACHE MOBILE HOME PARK	31	31	43	46	45	46	44	39
Current PWS	APACHELAND MOBILE HOME SUBDIVISION	92	92	92	92	92	92	92	92
Current PWS	ARMADILLO WOODS SUBDIVISION	565	701	775	824	866	896	928	961
Current PWS	ARROWHEAD LAKE & FRONTIER LAKE	1,265	1,518	1,680	1,780	1,872	1,941	2,014	2,089
Current PWS	ATASCOCITA ACRES SUBDIVISION	974	974	974	974	974	974	974	980
Current PWS	ATASCOCITA VILLAGE MOBILE HOME PARK	231	231	231	231	231	241	269	311
Current PWS	AUSTIN COUNTY WSC 1	1,469	1,641	1,824	1,905	1,965	2,026	2,086	2,148
Current PWS	AUSTIN COUNTY WSC 2	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461
Current PWS	AUSTIN COUNTY WSC 3	1,552	1,683	1,741	1,770	1,770	1,770	1,779	1,779
Current PWS	AUSTIN COUNTY WSC 4	1,865	1,876	1,882	1,896	1,896	1,896	1,897	1,897
Current PWS	AUTUMN ACRES WATER SYSTEM	235	241	241	242	242	242	242	242
Current PWS	AUTUMN SHADOWS MOBILE HOME PARK	13	15	15	15	14	14	13	13
Current PWS	AZALEA ESTATES MOBILE HOME COMMUN	44	44	44	44	44	44	44	44
Current PWS	BACLIFF MUD	9,095	9,397	9,574	9,703	9,772	9,834	9,936	10,019
Current PWS	BAKER ROAD MUD	1,000	1,033	1,031	1,029	1,107	1,150	1,210	1,318
Current PWS	BALABAN APARTMENTS 1	45	46	48	49	48	48	46	43
Current PWS	BALABAN APARTMENTS 2	21	22	22	23	22	23	22	20
Current PWS	BAMMEL FOREST UTILITY	1,009	1,009	1,010	1,014	1,025	1,036	1,050	1,227
Current PWS	BAMMEL OAKS ESTATES 1	91	91	91	91	91	100	100	102
Current PWS	BAMMEL OAKS ESTATES 2	466	475	475	480	532	559	700	743
Current PWS	BAMMEL UTILITY DISTRICT	2,137	2,170	2,177	2,212	2,301	2,315	2,486	2,555
Current PWS	BAR D RANCHETTES	14	14	14	14	14	14	14	14
Current PWS	BARKALOO HOMEOWNERS ASSOCIATION	11	11	11	11	11	9	9	9

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	BARKER CYPRESS MUD	7,609	7,782	7,888	7,951	8,228	8,487	8,926	9,606
Current PWS	BARROW RANCH	449	538	714	853	1,005	1,178	1,384	1,563
Current PWS	BATEMAN WATER WORKS	2	2	1	1	1	1	1	1
Current PWS	BAUER RANCH SUBDIVISION	1,172	1,172	1,172	1,173	1,173	1,173	1,173	1,173
Current PWS	BAY PLACE SUBDIVISION	68	94	127	157	189	226	270	309
Current PWS	BAYBROOK MUD 1	2,337	2,472	2,503	2,519	2,587	2,670	2,959	3,252
Current PWS	BAYER WATER SYSTEM	3,879	4,101	4,011	3,921	3,916	3,934	3,943	4,386
Current PWS	BAYOU COLONY SUBDIVISION	73	73	72	72	72	71	69	66
Current PWS	BAYOU FOREST VILLAGE MOBILE HOME PARK	57	57	67	74	73	75	74	71
Current PWS	BAYOU SHADOWS WATER SYSTEM	44	44	44	43	43	42	41	40
Current PWS	BAYRIDGE SUBDIVISION WATER SYSTEM	59	59	89	104	120	139	162	181
Current PWS	BAYVIEW MUD	1,458	1,546	1,600	1,633	1,656	1,675	1,697	1,720
Current PWS	BEACON ESTATES WSC	404	404	404	404	404	404	404	404
Current PWS	BEAU VIEW UTILITIES	74	91	100	109	115	121	127	132
Current PWS	BEAUMONT PLACE	3,409	3,651	5,174	5,527	5,418	5,434	5,266	4,891
Current PWS	BEE CREEK ESTATES	101	160	233	269	293	311	329	349
Current PWS	BEECHNUT MUD	2,046	2,047	2,041	2,035	2,111	2,112	2,118	2,565
Current PWS	BEECHWOOD SUBDIVISION	181	182	180	178	175	170	162	154
Current PWS	BELL WATER	13	14	15	15	19	24	24	24
Current PWS	BELLA VISTA	1,704	2,186	2,293	2,437	2,685	2,953	3,249	3,579
Current PWS	BENDER CREEK APARTMENTS	92	92	92	92	90	90	87	80
Current PWS	BENDERS LANDING WATER PLANT 1 & 2	6,412	7,622	8,342	8,719	9,278	9,672	10,089	10,521
Current PWS	BENNETT WOODS	262	523	626	719	733	733	743	756
Current PWS	BENTWOOD ESTATES MHP	6	6	6	6	6	6	6	6
Current PWS	BERGVILLE ADDITION	35	39	53	63	62	62	60	57
Current PWS	BERNARD ACRES	21	21	21	21	21	20	20	19
Current PWS	BERNARD OAKS SUBDIVISION	149	148	148	144	141	133	126	118
Current PWS	BERNARD RIVER OAKS	10	10	10	10	10	9	9	8
Current PWS	BERRY HILL ESTATES	147	147	147	147	147	148	151	178
Current PWS	BFT FAMILY TRAILER PARK	4	4	4	5	5	5	5	6
Current PWS	BIG OAKS MUD	6,878	6,910	6,929	7,234	7,477	7,716	7,919	8,401
Current PWS	BIG OAKS RANCHETTE SUBDIVISION	15	18	25	29	30	30	30	31
Current PWS	BIG THICKET LAKE ESTATES 1	100	100	100	100	100	100	100	100
Current PWS	BILMA PUD	4,196	4,209	4,211	4,219	4,245	4,245	4,245	4,262
Current PWS	BINFORD PLACE SUBDIVISION	65	65	65	65	65	65	65	65
Current PWS	BISSONNET MUD	9,335	9,521	9,516	9,498	9,770	10,010	10,478	10,998
Current PWS	BLACK OAK WATER SYSTEM	12	32	151	154	154	154	154	180
Current PWS	BLACKS FERRY WATER	40	39	39	37	36	34	33	31
Current PWS	BLAKETREE MUD 1	142	265	465	509	509	509	739	757
Current PWS	BLUE BELL MANOR SUBDIVISION	3,678	3,679	3,792	3,835	3,759	3,755	3,636	3,365
Current PWS	BLUE RIDGE WEST MUD	7,226	7,258	7,393	7,794	7,944	8,097	8,250	8,648
Current PWS	BLUE SAGE GARDENS SUBDIVISION	82	98	99	103	106	106	104	102
Current PWS	BLUEBONNET MOBILE HOME PARK	17	17	27	27	27	27	26	25
Current PWS	BOLING MWD	565	565	565	565	565	565	565	565
Current PWS	BOLIVAR PENINSULA SUD	2,987	3,018	3,033	3,048	3,053	3,056	3,061	3,062
Current PWS	BOUDREAUX GARDENS	50	55	56	58	61	64	73	82

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	BOULAIS MOBILE HOME PARK	11	13	17	20	20	20	19	18
Current PWS	BOYS & GIRLS COUNTRY	45	45	45	45	45	45	45	45
Current PWS	BRANDI ESTATES	68	66	65	64	62	59	56	53
Current PWS	BRANDYWINE OAKS	60	60	60	60	60	60	60	60
Current PWS	BRANDYWINE PINES	304	304	304	304	304	304	304	304
Current PWS	BRAZORIA COUNTY FWSD 1 DAMON	821	915	914	914	914	913	905	893
Current PWS	BRAZORIA COUNTY MUD 2	3,846	4,046	4,186	4,377	4,442	4,427	4,354	4,260
Current PWS	BRAZORIA COUNTY MUD 21	4,748	4,879	4,879	4,916	4,919	4,895	4,805	4,691
Current PWS	BRAZORIA COUNTY MUD 22	2,804	2,837	2,838	2,839	3,000	3,094	3,102	3,136
Current PWS	BRAZORIA COUNTY MUD 24	796	796	885	885	912	1,013	1,047	1,160
Current PWS	BRAZORIA COUNTY MUD 25	4,361	4,461	4,468	4,511	4,556	4,614	4,632	4,651
Current PWS	BRAZORIA COUNTY MUD 29	4,322	4,652	4,656	4,687	4,813	4,914	4,967	5,043
Current PWS	BRAZORIA COUNTY MUD 3	4,185	4,303	4,355	4,466	4,590	4,654	4,733	4,748
Current PWS	BRAZORIA COUNTY MUD 31	3,277	3,277	3,246	3,246	3,238	3,193	3,117	3,030
Current PWS	BRAZORIA COUNTY MUD 32	375	375	372	372	370	365	357	346
Current PWS	BRAZORIA COUNTY MUD 39	1,695	1,851	1,851	1,973	2,051	2,077	2,117	2,160
Current PWS	BRAZORIA COUNTY MUD 40	302	356	356	467	533	539	602	654
Current PWS	BRAZORIA COUNTY MUD 55	1,787	1,787	1,763	1,744	1,720	1,673	1,622	1,566
Current PWS	BRAZORIA COUNTY MUD 6	7,252	7,735	7,808	8,054	8,233	8,352	8,373	8,344
Current PWS	BRAZORIA COUNTY SHERIFFS OFFICE DETENTIO	20	20	20	20	19	19	18	17
Current PWS	BRAZOS LAKES WATER SUPPLY	220	369	654	1,027	1,214	1,352	1,435	1,604
Current PWS	BRAZOS RIVER CLUB	0	0	0	0	0	0	0	0
Current PWS	BRIAR MEADOWS	321	321	317	316	313	307	298	288
Current PWS	BRIDGEPOINT SUBDIVISION	658	812	841	945	1,031	1,094	1,162	1,232
Current PWS	BRIDGESTONE MUD	17,909	18,052	18,347	18,625	19,288	19,605	20,177	21,358
Current PWS	BRIDLEWOOD ESTATES WATER SYSTEM	2,318	3,698	5,049	6,123	7,060	7,606	7,909	7,975
Current PWS	BRITTMOORE UTILITY	3,519	3,547	3,548	3,583	3,739	3,801	3,847	4,094
Current PWS	BROOKSHIRE MWD	5,628	5,866	5,875	5,951	6,458	6,955	7,443	7,865
Current PWS	BRUSHY CREEK UTILITY	229	229	237	252	256	257	265	274
Current PWS	CADDO VILLAGE	881	951	975	999	1,019	1,034	1,050	1,067
Current PWS	CALICO FARMS SUBDIVISION	23	23	23	22	21	20	19	18
Current PWS	CANAL TERRACE SUBDIVISION	533	533	533	533	533	531	531	531
Current PWS	CANDLELIGHT HILLS SUBDIVISION	1,690	1,727	1,740	1,749	1,771	1,819	1,900	2,047
Current PWS	CANEY CREEK UTILITY	14	15	15	15	15	15	18	24
Current PWS	CAPE MALIBU WSC	162	162	162	162	162	162	162	182
Current PWS	CARBY MOBILE HOME PARK	53	53	53	53	52	52	50	47
Current PWS	CAROL NORRA MHP	2	2	2	2	2	2	2	2
Current PWS	CARRIAGE HILLS	1,853	2,781	3,448	3,697	3,866	5,591	5,948	6,202
Current PWS	CARRIAGE TRAIL SUBDIVISION	11	33	37	48	61	75	91	105
Current PWS	CASTLEWOOD MUD	2,690	2,769	2,790	2,811	2,868	2,937	3,102	3,265
Current PWS	CASTLEWOOD SUBDIVISION	1,382	1,388	1,425	1,425	1,415	1,415	1,379	1,292
Current PWS	CEDAR BAYOU ESTATES	75	120	153	187	159	138	138	138
Current PWS	CEDAR BAYOU PARK	371	434	648	678	563	474	565	797
Current PWS	CEDAR CREEK FOREST MOBILE HOME COMMUNITY	112	128	134	140	143	143	155	159
Current PWS	CEDAR CREEK RANCH SUBDIVISION	30	30	30	30	30	30	30	30
Current PWS	CEDAR CREEK WATER SYSTEM	599	678	753	920	1,124	1,153	1,215	1,274

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CEDAR ESTATES SUBDIVISION	60	69	71	73	96	135	172	174
Current PWS	CEDAR OAKS MOBILE HOME COMMUNITY	117	117	117	117	117	117	117	117
Current PWS	CENTENNIAL PLACE	30	30	30	30	30	37	52	74
Current PWS	CHAMBERS COUNTY MUD 1	2,179	2,594	3,074	3,600	4,156	4,776	5,464	6,748
Current PWS	CHAMPION LAKES ESTATES WATER PLANT	508	510	510	510	511	543	543	625
Current PWS	CHAMPIONS MUD	3,242	3,407	3,460	3,527	3,746	4,019	4,375	5,016
Current PWS	CHAPARRAL PLACE WATER SYSTEM	115	133	138	144	149	155	160	166
Current PWS	CHAPMANS MHP	188	188	188	275	281	281	281	283
Current PWS	CHARTERWOOD MUD	4,126	4,181	4,201	4,218	4,372	4,501	4,713	4,834
Current PWS	CHATEAU WOODS MUD	3,099	4,100	4,166	4,277	4,332	4,451	4,503	4,509
Current PWS	CHELFORD CITY MUD	9,356	9,507	9,602	9,845	10,161	10,451	10,803	11,442
Current PWS	CHELFORD ONE MUD	5,032	5,201	5,202	5,183	5,294	5,393	5,477	5,839
Current PWS	CHENANGO RANCH	128	128	127	127	125	124	118	113
Current PWS	CHIMNEY HILL MUD	5,269	5,269	5,269	5,270	5,271	5,274	5,282	5,345
Current PWS	CHINQUAPIN PREPARATORY SCHOOL	5	5	5	5	5	5	5	5
Current PWS	CHOCTAW SUBDIVISION	14	14	14	14	13	13	12	12
Current PWS	CIMARRON COUNTRY	1,460	2,083	2,498	2,782	3,021	3,202	3,394	3,591
Current PWS	CIMARRON MUD	11,846	11,991	12,127	12,194	12,734	13,116	13,534	14,333
Current PWS	CINCO MUD 1	1,388	1,389	1,391	1,405	1,427	1,499	1,559	1,704
Current PWS	CINCO MUD 10	2,757	2,808	2,829	2,968	3,076	3,209	3,321	3,588
Current PWS	CINCO MUD 12	1,958	1,958	1,958	2,019	2,098	2,174	2,240	2,399
Current PWS	CINCO MUD 14	5,234	5,238	5,301	5,312	5,377	5,452	5,575	5,869
Current PWS	CINCO MUD 2	3,844	3,844	3,845	4,016	4,150	4,285	4,396	4,672
Current PWS	CINCO MUD 3	2,272	2,356	2,357	2,413	2,464	2,593	2,657	2,829
Current PWS	CINCO MUD 5	2,526	2,531	2,656	2,814	2,924	3,036	3,134	3,355
Current PWS	CINCO MUD 6	2,689	2,731	2,787	2,857	2,937	3,082	3,180	3,470
Current PWS	CINCO MUD 7	4,638	4,673	4,732	4,904	5,044	5,181	5,294	5,566
Current PWS	CINCO MUD 8	3,939	3,969	3,981	4,018	4,093	4,136	4,164	4,301
Current PWS	CINCO MUD 9	3,967	3,997	4,026	4,117	4,275	4,390	4,544	4,835
Current PWS	CINCO SOUTHWEST MUD 1	474	474	474	584	612	639	662	714
Current PWS	CINCO SOUTHWEST MUD 2	6,384	6,385	6,405	6,670	6,913	7,153	7,360	7,848
Current PWS	CINCO SOUTHWEST MUD 3 DAYCARE	6,040	6,050	6,050	6,250	6,435	6,617	6,771	7,138
Current PWS	CINCO SOUTHWEST MUD 4	5,809	5,870	5,999	6,211	6,343	6,476	6,642	7,037
Current PWS	CITY OF ALVIN	26,404	27,446	29,129	29,260	29,038	29,158	29,060	29,496
Current PWS	CITY OF ANAHUAC	1,996	1,996	1,997	1,997	2,106	2,122	2,233	2,601
Current PWS	CITY OF ANGLETON	19,244	19,285	19,056	18,640	18,168	17,524	16,739	15,876
Current PWS	CITY OF ARCOLA	2,239	3,367	4,765	5,206	5,552	6,092	6,317	6,758
Current PWS	CITY OF BAYTOWN	105,303	123,156	131,240	135,507	135,955	136,348	144,414	158,698
Current PWS	CITY OF BEASLEY	667	1,508	1,820	2,038	2,118	2,155	2,269	2,295
Current PWS	CITY OF BELLAIRE	17,749	18,105	18,129	18,152	17,882	17,696	16,996	15,646
Current PWS	CITY OF BELLVILLE	4,333	4,399	4,534	4,599	4,654	4,715	4,766	4,838
Current PWS	CITY OF BRAZORIA	2,834	2,816	2,811	2,754	2,694	2,598	2,480	2,349
Current PWS	CITY OF BRAZOS COUNTRY	524	524	524	524	524	524	524	524
Current PWS	CITY OF BUNKER HILL VILLAGE	3,938	4,140	4,142	4,143	4,155	4,140	4,016	3,735
Current PWS	CITY OF CLEVELAND	7,976	8,930	10,011	11,007	12,022	13,015	14,086	15,305
Current PWS	CITY OF CLUTE	10,231	9,993	9,897	9,633	9,346	8,960	8,517	8,033

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CITY OF CONROE	97,770	119,199	150,040	180,569	198,690	216,713	228,935	239,245
Current PWS	CITY OF DAISETTA	931	931	931	931	931	931	931	931
Current PWS	CITY OF DANBURY	1,673	1,698	1,694	1,670	1,643	1,587	1,521	1,449
Current PWS	CITY OF DAYTON	12,738	15,907	18,311	20,787	22,614	24,619	27,388	30,145
Current PWS	CITY OF DEER PARK	34,900	35,227	35,472	35,576	35,722	35,581	37,006	39,401
Current PWS	CITY OF DEVERS	543	543	543	543	545	548	548	549
Current PWS	CITY OF EL CAMPO	12,522	12,584	12,676	12,757	12,819	12,874	12,944	13,016
Current PWS	CITY OF FREEPORT	10,289	10,049	9,951	9,709	9,444	9,078	8,645	8,169
Current PWS	CITY OF FREEPORT SLAUGHTER ROAD	19	19	19	19	19	19	18	18
Current PWS	CITY OF FRIENDSWOOD	43,968	45,471	46,237	46,817	47,358	47,836	48,836	50,000
Current PWS	CITY OF FULSHEAR - CROSS CREEK RANCH	17,352	25,593	25,650	25,650	25,730	25,805	25,805	25,805
Current PWS	CITY OF FULSHEAR - OLD TOWN	7,199	15,539	16,051	17,179	18,642	19,661	19,671	21,687
Current PWS	CITY OF GALENA PARK	10,952	11,062	11,372	11,504	11,677	11,172	10,838	10,080
Current PWS	CITY OF GALVESTON	57,160	57,523	58,340	58,817	59,213	59,588	59,986	60,328
Current PWS	CITY OF HEMPSTEAD	6,638	6,824	6,828	6,861	6,912	6,915	6,952	6,981
Current PWS	CITY OF HILLCREST VILLAGE	679	665	661	647	630	607	580	551
Current PWS	CITY OF HILSHIRE VILLAGE	809	809	809	810	804	800	787	729
Current PWS	CITY OF HITCHCOCK	7,403	7,639	7,646	7,684	7,748	7,800	7,863	7,896
Current PWS	CITY OF HOUSTON BELLEAU WOODS	582	604	1,533	1,779	1,851	1,928	2,000	2,207
Current PWS	CITY OF HOUSTON DISTRICT 73	9,481	14,501	14,641	14,779	14,794	14,793	15,312	16,250
Current PWS	CITY OF HOUSTON DISTRICT 82	1,275	3,473	3,508	3,544	3,544	3,588	3,706	3,900
Current PWS	CITY OF HOUSTON UD 5 - KINGWOOD	81,440	83,091	88,418	90,789	93,128	94,803	98,765	105,083
Current PWS	CITY OF HUMBLE	23,654	24,530	28,051	29,693	30,661	31,130	32,686	34,990
Current PWS	CITY OF JACINTO CITY	9,664	9,753	10,096	10,229	10,387	9,842	9,547	8,879
Current PWS	CITY OF JAMAICA BEACH	1,085	1,085	1,085	1,088	1,088	1,088	1,088	1,088
Current PWS	CITY OF JERSEY VILLAGE	9,298	9,638	9,732	9,789	10,061	10,415	10,886	11,683
Current PWS	CITY OF KATY	27,018	35,779	40,059	42,547	45,600	47,797	51,776	55,344
Current PWS	CITY OF KENDLETON	287	1,573	1,573	1,573	1,643	1,687	1,687	1,734
Current PWS	CITY OF LA MARQUE	18,972	20,245	20,868	21,282	21,555	21,794	22,085	22,328
Current PWS	CITY OF LA PORTE	35,478	38,029	38,352	38,592	37,390	38,350	39,630	42,103
Current PWS	CITY OF LAKE JACKSON	26,886	26,227	25,974	25,428	24,812	23,928	22,868	21,696
Current PWS	CITY OF LEAGUE CITY	122,123	127,656	131,067	132,979	134,410	135,752	137,350	139,087
Current PWS	CITY OF LIBERTY	8,205	8,337	8,502	8,696	8,793	8,867	8,956	8,994
Current PWS	CITY OF LIVERPOOL	570	570	564	550	529	498	462	424
Current PWS	CITY OF MAGNOLIA	3,168	3,780	4,417	4,634	4,773	4,933	5,138	5,352
Current PWS	CITY OF MANVEL	4,432	6,442	7,635	8,001	8,540	9,651	10,316	10,761
Current PWS	CITY OF MEADOWS PLACE	4,996	5,161	5,392	5,711	5,904	6,095	6,257	6,644
Current PWS	CITY OF MISSOURI CITY MUSTANG BAYOU WATE	9,956	11,693	12,515	12,883	13,560	13,875	14,216	14,742
Current PWS	CITY OF MONT BELVIEU	11,343	14,480	15,162	18,748	22,674	27,175	32,523	37,162
Current PWS	CITY OF MONTGOMERY	2,845	3,643	3,809	3,900	3,982	4,040	4,144	4,230
Current PWS	CITY OF MORGANS POINT	304	323	323	323	320	309	311	314
Current PWS	CITY OF NASSAU BAY	5,405	5,467	5,494	5,513	5,532	5,514	5,768	6,172
Current PWS	CITY OF NEEDVILLE	3,261	5,267	6,147	6,332	6,390	6,418	6,669	6,895
Current PWS	CITY OF OAK RIDGE NORTH	3,167	3,752	3,975	4,448	4,412	4,412	4,701	4,770
Current PWS	CITY OF ORCHARD	297	297	887	930	961	971	982	987
Current PWS	CITY OF OYSTER CREEK	1,209	1,209	1,201	1,157	1,110	1,052	989	923

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CITY OF PANORAMA VILLAGE	2,970	3,095	3,174	3,256	3,341	3,428	3,519	3,611
Current PWS	CITY OF PASADENA	141,838	143,881	144,992	145,479	145,508	145,155	142,547	136,109
Current PWS	CITY OF PASADENA EL CARY ESTATES	495	495	501	508	517	513	519	520
Current PWS	CITY OF PEARLAND	147,620	164,930	171,519	178,004	182,867	185,725	188,006	189,422
Current PWS	CITY OF PEARLAND MUD 1	5,132	5,246	5,324	5,336	5,343	5,350	5,306	5,215
Current PWS	CITY OF PRAIRIE VIEW	3,813	4,660	5,045	5,509	6,059	6,464	6,821	7,259
Current PWS	CITY OF RICHMOND	18,106	19,556	20,541	20,738	21,374	22,341	22,677	22,810
Current PWS	CITY OF RICHWOOD	4,596	4,492	4,449	4,325	4,192	4,013	3,808	3,583
Current PWS	CITY OF ROSENBERG	53,516	66,373	77,631	85,487	91,320	96,510	100,999	104,070
Current PWS	CITY OF SEABROOK	13,856	14,105	14,306	14,390	14,374	14,317	15,017	16,029
Current PWS	CITY OF SEALY	7,139	7,480	7,893	8,071	8,205	8,287	8,363	8,428
Current PWS	CITY OF SHENANDOAH	5,206	6,252	6,480	6,704	6,771	6,815	6,969	7,346
Current PWS	CITY OF SHOREACRES	1,534	1,534	1,543	1,546	1,555	1,561	1,664	1,664
Current PWS	CITY OF SOUTH HOUSTON	16,605	16,915	17,017	17,063	17,109	17,098	16,585	15,425
Current PWS	CITY OF SOUTHSIDE PLACE	1,903	1,940	1,941	1,941	1,896	1,862	1,768	1,609
Current PWS	CITY OF SPLENDORA	11,527	15,047	18,813	23,786	27,905	28,398	29,814	31,466
Current PWS	CITY OF SPRING VALLEY VILLAGE	4,317	4,445	4,447	4,447	4,417	4,402	4,260	3,964
Current PWS	CITY OF SUGAR LAND	85,026	88,882	92,111	94,325	96,651	99,463	101,611	105,060
Current PWS	CITY OF SUGAR LAND - GREATWOOD	11,809	11,842	11,892	11,935	12,015	12,183	12,289	12,371
Current PWS	CITY OF SUGAR LAND - NEW TERRITORY	15,076	15,115	15,143	15,234	15,377	15,599	15,758	15,857
Current PWS	CITY OF SUGAR LAND RIVER PARK	4,020	4,020	4,020	4,020	4,023	4,132	4,199	4,230
Current PWS	CITY OF SWEENY	3,110	3,118	3,103	3,071	3,027	2,932	2,809	2,676
Current PWS	CITY OF TEXAS CITY	57,263	59,723	61,462	62,597	63,368	64,047	64,796	65,574
Current PWS	CITY OF TOMBALL	16,645	18,045	20,593	21,721	23,140	23,694	24,711	26,302
Current PWS	CITY OF WALLER	2,861	3,179	3,364	3,436	3,547	3,621	3,720	4,034
Current PWS	CITY OF WALLIS	1,308	1,308	1,308	1,308	1,311	1,318	1,322	1,325
Current PWS	CITY OF WEBSTER	11,307	11,675	11,734	11,756	11,802	11,763	12,224	13,131
Current PWS	CITY OF WEST COLUMBIA	4,291	4,280	4,241	4,179	4,112	4,003	3,848	3,679
Current PWS	CITY OF WEST UNIVERSITY PLACE	15,512	15,777	15,795	15,773	15,342	15,085	14,316	13,010
Current PWS	CITY OF WHARTON	8,718	8,783	8,839	8,871	8,910	8,963	9,009	9,047
Current PWS	CITY OF WILLIS	6,593	7,061	7,519	7,913	8,252	8,507	8,779	9,059
Current PWS	CITY OF WOOD BRANCH VILLAGE	1,664	2,122	2,699	3,599	3,706	3,813	4,096	4,297
Current PWS	CLASSIC PINES SUBDIVISION	215	215	215	215	215	224	251	290
Current PWS	CLAY ROAD MUD	4,955	4,992	5,003	5,039	5,137	5,280	5,485	5,829
Current PWS	CLEAR BROOK CITY MUD	20,487	20,622	20,526	20,430	20,643	20,744	21,156	21,868
Current PWS	CLEAR CREEK FOREST SECTION 12	1,228	1,629	1,681	1,740	1,779	1,803	1,856	1,910
Current PWS	CLEAR LAKE CITY WATER AUTHORITY	64,300	65,597	66,388	66,795	67,140	66,365	69,152	73,577
Current PWS	CLEAR WATER COVE INC	395	426	426	426	426	426	427	429
Current PWS	CLEVELAND MH AND RV PARK	0	0	0	0	0	0	0	0
Current PWS	CLOVER CREEK MUD	654	748	896	933	962	992	1,022	1,053
Current PWS	CNP UTILITY DISTRICT	9,245	9,430	9,758	9,850	10,050	10,214	10,622	11,400
Current PWS	COE COUNTRY	931	1,198	1,267	1,381	1,454	1,515	1,579	1,644
Current PWS	COE INDUSTRIAL PARK	10	10	10	10	10	10	10	10
Current PWS	COLES CROSSING	2,353	3,398	4,696	5,946	7,304	8,847	10,654	12,640
Current PWS	COLONIAL HILLS	707	707	707	708	703	703	680	626
Current PWS	COLONY COVE SUBDIVISION WATER SYSTEM	64	64	64	64	64	64	64	72

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	COLONY M H SUBDIVISION WS	48	48	77	84	82	84	83	79
Current PWS	COLONY TRAILS SUBDIVISION	255	255	253	253	253	249	243	237
Current PWS	COMMODORE COVE IMPROVEMENT DISTRICT	65	65	64	63	62	60	58	55
Current PWS	CONROE BAY WATER SEWER SUPPLY	102	103	126	132	137	140	143	146
Current PWS	CONROE OAKS	34	42	62	63	64	65	68	71
Current PWS	CONROE RESORT	755	805	877	951	1,024	1,100	1,180	1,260
Current PWS	CORBELLO WATER SYSTEM	163	164	166	166	168	168	171	174
Current PWS	CORINTHIAN POINT MUD 2	631	687	813	854	889	918	947	975
Current PWS	CORNERSTONE MOBILE HOME COMMUNITY	10	20	20	20	21	40	52	52
Current PWS	CORNERSTONES MUD	4,963	5,035	5,052	5,084	5,260	5,377	5,575	5,935
Current PWS	CORONADO COUNTRY	53	112	113	120	123	123	123	123
Current PWS	COTTAGE GARDENS	1,573	1,573	1,579	1,579	1,641	1,658	1,699	1,764
Current PWS	COTTON BAYOU PARK	36	48	54	63	72	83	96	106
Current PWS	COTTONWOOD PARK WATER SYSTEM	253	272	275	275	274	273	265	247
Current PWS	COUNTRY ACRE ESTATES	75	74	73	71	70	67	64	59
Current PWS	COUNTRY CLUB GREENS	142	149	152	154	163	174	191	193
Current PWS	COUNTRY CREEK ESTATES WATER SYSTEM	293	293	404	413	424	424	431	464
Current PWS	COUNTRY LIVING APARTMENTS	178	178	178	178	178	178	171	158
Current PWS	COUNTRY LIVING MOBILE HOME PARK	8	34	35	36	33	30	30	30
Current PWS	COUNTRY MEADOWS	143	140	138	135	131	125	119	112
Current PWS	COUNTRY ROAD PARK	119	121	125	125	126	124	116	98
Current PWS	COUNTRY TERRACE SUBDIVISION	1,212	1,211	1,211	1,211	1,211	1,199	1,199	1,199
Current PWS	COUNTRY WEST	1,589	1,794	1,803	1,857	1,912	1,969	2,028	2,087
Current PWS	COUNTRYSIDE MOBILE HOME PARK	3	3	3	3	3	3	3	3
Current PWS	COUSHATTE CAMPGROUND	71	71	71	71	71	71	71	71
Current PWS	CREEKSIDE ACRES WATER SYSTEM	532	639	696	697	699	723	747	778
Current PWS	CREEKSIDE ESTATES SOUTH	1,154	1,196	1,224	1,231	1,219	1,217	1,180	1,098
Current PWS	CREEKSIDE VILLAGE	2,101	2,103	2,103	2,103	2,157	2,220	2,285	2,350
Current PWS	CRICKETT HILL ESTATES	84	88	89	89	94	127	158	169
Current PWS	CROSBY MUD	6,845	7,599	7,665	7,972	8,492	8,496	8,500	8,526
Current PWS	CROWN RANCH SUBDIVISION	274	606	872	985	1,168	1,263	1,450	1,526
Current PWS	CRYSTAL FOREST SUBDIVISION	1,091	1,169	1,283	1,323	1,359	1,389	1,450	1,513
Current PWS	CRYSTAL LAKE ESTATES	46	46	46	46	46	46	46	46
Current PWS	CRYSTAL SPRINGS SUBDIVISION	181	247	352	539	726	720	750	784
Current PWS	CRYSTAL SPRINGS WATER COMPANY CHASEWOOD	106	136	154	178	193	203	214	226
Current PWS	CY CHAMP PUD	4,441	4,508	4,535	4,537	4,575	4,617	4,714	4,840
Current PWS	CYPRESS BEND SUBDIVISION	1,456	1,457	1,457	1,457	1,457	1,457	1,480	1,922
Current PWS	CYPRESS BROOK ESTATES	13	13	13	13	13	13	13	13
Current PWS	CYPRESS CREEK RANCH	7	7	7	7	7	7	8	8
Current PWS	CYPRESS CREEK UTILITY DISTRICT	2,852	2,868	2,875	2,881	2,898	2,954	3,099	3,386
Current PWS	CYPRESS CROSSING	119	124	124	124	179	195	211	211
Current PWS	CYPRESS FIELDS SUBDIVISION	2,112	2,155	2,308	2,390	2,611	2,691	2,901	3,329
Current PWS	CYPRESS FOREST PUD	5,356	5,403	5,422	5,434	5,502	5,610	5,798	6,205
Current PWS	CYPRESS FOREST WATER SYSTEM	581	581	581	581	582	634	755	835
Current PWS	CYPRESS GARDENS MOBILE HOME SUBDIVISION	27	27	27	27	27	27	27	27
Current PWS	CYPRESS HILL MUD 1	10,126	10,193	10,224	10,315	10,577	10,791	11,038	11,254

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CYPRESS HILL SUBDIVISION	20	20	20	20	20	20	20	20
Current PWS	CYPRESS KLEIN UTILITY DISTRICT WIMBLETON	3,284	3,349	3,372	3,396	3,472	3,550	3,654	3,848
Current PWS	CYPRESS LAKES WATER SYSTEM	213	213	213	213	213	213	213	213
Current PWS	CYPRESS PASS ESTATES	91	93	93	93	93	108	113	118
Current PWS	CYPRESS PLACE	76	76	76	76	76	76	76	76
Current PWS	CYPRESS VILLAGE TRAILER & RV PARK	21	21	21	21	21	21	21	21
Current PWS	CYPRESSWOOD ESTATES	214	237	288	322	351	372	394	418
Current PWS	CYPRESSWOOD MHP	81	81	81	81	81	81	81	83
Current PWS	CYPRESSWOOD UTILITY DISTRICT	5,057	5,072	5,113	5,151	5,262	5,353	5,623	5,946
Current PWS	DAYTON CREEK WATER SYSTEM	132	132	132	132	132	132	132	132
Current PWS	DAYTON OAKS ESTATE	32	34	37	39	39	42	44	46
Current PWS	DECKER HILLS	3,872	4,328	4,730	4,916	5,137	5,306	5,483	5,664
Current PWS	DECKER OAKS	607	634	636	641	645	652	658	665
Current PWS	DECKER WOODS SUBDIVISION	489	643	648	671	700	722	744	766
Current PWS	DEER GLEN WATER SYSTEM	1,962	2,549	2,671	2,801	2,901	3,015	3,126	3,243
Current PWS	DEER PINES SUBDIVISION	18	20	34	40	58	59	65	84
Current PWS	DEER RIDGE SUBDIVISION	103	112	140	157	171	182	193	204
Current PWS	DEER RUN	253	279	302	316	344	359	364	378
Current PWS	DEER TRAIL MOBILE HOME PARK	56	57	68	71	70	70	68	63
Current PWS	DEERWOOD SUBDIVISION	1,734	1,875	2,075	2,079	2,079	2,079	2,084	2,084
Current PWS	DEL LAGO ESTATES WSC	199	206	219	232	246	260	275	290
Current PWS	DELYNN WATER SYSTEM	40	69	131	131	121	114	114	114
Current PWS	DEMI JOHN PLACE WATER SYSTEM	102	102	102	101	100	96	92	87
Current PWS	DIAMOND HEAD WSC	246	252	258	265	272	278	286	293
Current PWS	DOBBIN PLANTERSVILLE WSC 1	9,736	15,749	21,722	26,075	29,340	30,974	32,678	35,062
Current PWS	DOBBIN PLANTERSVILLE WSC 2	3	4	6	7	8	8	10	11
Current PWS	DOGWOOD HILLS	811	1,105	1,598	1,776	1,922	2,032	2,147	2,266
Current PWS	DOGWOOD TREE WATER SYSTEM	28	38	38	38	38	38	37	35
Current PWS	DOMESTIC WATER COMPANY ROYAL FOREST SUBD	1,386	1,399	1,435	1,581	1,721	1,748	1,846	1,903
Current PWS	DORSETT PLACE	38	38	38	38	37	41	41	39
Current PWS	DOWDELL PUD	6,460	6,648	6,863	6,925	7,169	7,391	7,675	8,182
Current PWS	EAST MONTGOMERY COUNTY MUD 3	572	692	802	976	999	1,129	1,255	1,291
Current PWS	EAST MONTGOMERY COUNTY MUD 6	2,159	2,277	2,588	3,167	3,622	3,561	3,666	3,788
Current PWS	EAST MONTGOMERY COUNTY MUD 7	484	694	952	1,422	1,790	1,781	1,866	1,969
Current PWS	EAST PLANTATION UTILITY DISTRICT	1,182	1,193	1,707	1,976	1,937	1,947	2,055	2,133
Current PWS	EASTWOOD HILLS SUBDIVISION	184	255	255	255	256	279	310	314
Current PWS	ED LOU MOBILE HOME PARK	15	15	15	15	15	15	15	15
Current PWS	ED LOU MOBILE HOME PARK 2	8	8	8	8	10	11	11	15
Current PWS	EL DORADO MOBILE HOME COMMUNITY	571	571	599	614	599	599	577	526
Current PWS	EL DORADO UTILITY DISTRICT	3,343	3,459	3,740	3,815	3,893	3,928	4,080	4,263
Current PWS	EMERALD FOREST UTILITY DISTRICT	5,836	5,901	5,954	5,974	6,077	6,207	6,398	6,611
Current PWS	EMERALD LAKES SUBDIVISION	1,257	1,293	1,335	1,451	1,566	1,651	1,741	1,832
Current PWS	EMERSON ESTATES	1,869	2,080	2,206	2,226	2,243	2,245	2,250	2,251
Current PWS	ENCANTO REAL UTILITY DISTRICT	2,724	2,724	2,927	3,153	3,260	3,510	3,708	4,243
Current PWS	ENCHANTED COVE WATER SYSTEM	34	35	67	73	78	82	87	91
Current PWS	ENCHANTED FOREST	64	91	115	128	139	148	157	166

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	ENCHANTED VALLEY ESTATES WSC	289	380	398	416	471	491	525	632
Current PWS	ENCINO ESTATES	96	104	110	115	126	134	139	143
Current PWS	ESTATES OF HOLLY LAKES	90	90	90	90	90	90	90	90
Current PWS	ESTATES OF LEGENDS RANCH	1,095	1,168	1,249	1,367	1,447	1,530	1,616	1,705
Current PWS	ESTATES OF WILLOW CREEK	584	586	587	587	590	593	598	599
Current PWS	ESTATES WATER CORP	38	46	46	46	46	46	46	46
Current PWS	ESTATES WOODLAND II	101	114	127	140	151	160	168	177
Current PWS	EVERETT SQUARE WINDCREST ESTATES	463	508	591	647	695	733	771	812
Current PWS	FAIRFIELD ESTATES	294	304	311	319	342	390	392	393
Current PWS	FAIRVIEW ACRES MOBILE HOME SUBDIVISION	53	53	53	53	53	53	53	53
Current PWS	FAIRVIEW GARDENS MHP	4	4	4	4	5	7	7	9
Current PWS	FAIRWAY CROSSING	801	1,036	1,036	1,036	1,045	1,108	1,108	1,108
Current PWS	FAIRWAY MOBILE HOME VILLAGE	3	5	5	5	5	6	8	8
Current PWS	FALLBROOK UTILITY DISTRICT	6,606	6,644	6,754	6,804	6,766	6,712	6,504	6,037
Current PWS	FALLS OF WILDWOOD	11	16	34	37	37	39	41	44
Current PWS	FAR HILLS UTILITY DISTRICT	1,184	1,500	1,737	1,897	2,031	2,130	2,234	2,342
Current PWS	FATIMA FAMILY VILLAGE MHP	22	22	22	22	22	22	21	19
Current PWS	FAULKEY GULLY MUD	6,232	6,288	6,444	6,542	6,805	6,881	7,172	7,743
Current PWS	FIRST COLONY MUD 9	7,804	7,895	8,332	8,717	9,122	9,468	9,708	10,060
Current PWS	FIVE OAKS ESTATES	125	125	125	125	125	125	125	125
Current PWS	FIVE OAKS MOBILE HOME SUBDIVISION	698	698	698	698	698	703	708	721
Current PWS	FLAMINGO LAKES LOT OWNERS ASSOCIATION IN	62	70	98	108	110	110	110	111
Current PWS	FLORA 6	7	7	7	8	8	8	8	8
Current PWS	FLORA 7	7	15	20	20	20	24	41	43
Current PWS	FOREST HILLS MUD	2,935	2,936	2,936	2,936	2,911	2,894	2,799	2,590
Current PWS	FOREST MANOR SUBDIVISION	211	476	476	476	476	476	476	520
Current PWS	FOREST TRACE	711	712	778	822	921	982	1,005	1,030
Current PWS	FOREST WOODS SUBDIVISION	144	146	150	153	154	154	154	154
Current PWS	FORT BEND COUNTY FWSD 1	10,300	16,453	18,769	19,421	20,285	21,126	21,647	22,718
Current PWS	FORT BEND COUNTY FWSD 2	7,719	7,998	8,583	9,000	9,485	10,006	10,372	11,291
Current PWS	FORT BEND COUNTY MUD 115 RIVERSTONE	1,489	1,506	1,652	1,681	1,738	1,777	1,810	1,813
Current PWS	FORT BEND COUNTY MUD 116 CANYON GATE	4,190	4,883	4,887	4,970	5,032	5,127	5,185	5,213
Current PWS	FORT BEND COUNTY MUD 118	4,811	4,816	4,920	4,920	4,922	4,959	5,016	5,090
Current PWS	FORT BEND COUNTY MUD 119	5,155	5,156	5,193	5,273	5,387	5,530	5,678	5,962
Current PWS	FORT BEND COUNTY MUD 121	3,809	3,809	3,809	3,809	3,809	3,809	3,820	3,830
Current PWS	FORT BEND COUNTY MUD 122	3,529	3,541	3,544	3,641	3,691	3,784	3,871	4,081
Current PWS	FORT BEND COUNTY MUD 123	4,549	4,571	4,645	4,768	4,917	5,063	5,192	5,502
Current PWS	FORT BEND COUNTY MUD 124	2,707	2,881	2,915	2,981	3,047	3,114	3,165	3,296
Current PWS	FORT BEND COUNTY MUD 128	11,342	11,525	11,600	11,601	11,807	12,077	12,232	12,317
Current PWS	FORT BEND COUNTY MUD 129	5,320	5,445	5,497	5,576	5,682	5,926	5,994	6,054
Current PWS	FORT BEND COUNTY MUD 130	1,749	1,749	1,756	1,760	1,760	1,760	1,774	1,841
Current PWS	FORT BEND COUNTY MUD 131	1,545	1,647	1,727	1,763	2,000	2,129	2,131	2,148
Current PWS	FORT BEND COUNTY MUD 132	2,553	3,000	3,520	3,806	4,080	4,175	4,290	4,368
Current PWS	FORT BEND COUNTY MUD 133	7,214	7,992	8,128	8,263	8,410	8,727	8,832	8,832
Current PWS	FORT BEND COUNTY MUD 134B	8,073	8,173	8,587	8,694	8,953	9,110	9,310	9,728
Current PWS	FORT BEND COUNTY MUD 134C	7,448	7,448	7,478	7,479	7,519	7,597	7,601	7,756

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	FORT BEND COUNTY MUD 134D	2,771	2,972	3,282	3,282	3,347	3,484	3,504	3,513
Current PWS	FORT BEND COUNTY MUD 134E	1,786	1,816	1,941	1,941	1,974	2,045	2,130	2,171
Current PWS	FORT BEND COUNTY MUD 140 RIVERS EDGE	2,265	2,266	2,283	2,284	2,607	2,859	3,023	3,071
Current PWS	FORT BEND COUNTY MUD 141	466	626	813	961	1,178	1,365	1,369	1,375
Current PWS	FORT BEND COUNTY MUD 142	10,314	11,054	11,891	12,388	13,370	13,828	14,050	14,294
Current PWS	FORT BEND COUNTY MUD 143 WATER VIEW ESTA	6,170	6,256	6,448	6,633	6,966	7,116	7,265	7,780
Current PWS	FORT BEND COUNTY MUD 145 RIO VISTA	968	968	969	969	969	969	991	1,130
Current PWS	FORT BEND COUNTY MUD 146	4,633	5,074	5,091	5,092	5,096	5,124	5,164	5,243
Current PWS	FORT BEND COUNTY MUD 149	5,158	5,173	5,321	5,332	5,354	5,448	5,559	5,565
Current PWS	FORT BEND COUNTY MUD 151	9,804	11,236	13,335	13,525	13,895	14,265	14,586	15,368
Current PWS	FORT BEND COUNTY MUD 152	3,486	3,488	3,508	3,678	3,839	3,854	3,933	4,106
Current PWS	FORT BEND COUNTY MUD 155	4,100	5,005	6,075	6,927	7,670	8,101	8,342	8,394
Current PWS	FORT BEND COUNTY MUD 156	1,736	1,842	1,844	1,844	1,844	1,844	1,844	1,844
Current PWS	FORT BEND COUNTY MUD 158	2,416	2,733	3,136	3,458	3,739	3,903	3,993	4,011
Current PWS	FORT BEND COUNTY MUD 162	2,847	2,850	3,081	3,366	4,238	4,600	4,944	5,124
Current PWS	FORT BEND COUNTY MUD 165	4,814	4,814	4,852	4,865	4,896	4,995	5,094	5,330
Current PWS	FORT BEND COUNTY MUD 182	7,219	10,213	10,232	10,232	10,254	10,259	10,259	10,260
Current PWS	FORT BEND COUNTY MUD 184	1,706	1,729	1,768	2,105	2,270	2,280	2,362	2,540
Current PWS	FORT BEND COUNTY MUD 185	2,576	2,624	2,625	2,658	2,724	2,832	2,907	3,079
Current PWS	FORT BEND COUNTY MUD 189	714	813	919	966	1,280	1,452	1,454	1,476
Current PWS	FORT BEND COUNTY MUD 19	996	1,000	1,001	1,001	1,001	1,046	1,063	1,063
Current PWS	FORT BEND COUNTY MUD 190	2,714	2,718	2,721	2,922	3,055	3,183	3,296	3,523
Current PWS	FORT BEND COUNTY MUD 192	378	402	402	402	402	402	409	409
Current PWS	FORT BEND COUNTY MUD 194	2,958	3,136	3,249	3,249	3,249	3,385	3,524	3,860
Current PWS	FORT BEND COUNTY MUD 2	7,012	7,078	7,147	7,208	7,399	7,585	7,728	8,065
Current PWS	FORT BEND COUNTY MUD 206 VICTORIAN GARDE	1,586	1,586	1,586	1,586	1,624	1,640	1,708	1,782
Current PWS	FORT BEND COUNTY MUD 213	21	801	1,390	1,400	1,414	1,723	1,723	2,489
Current PWS	FORT BEND COUNTY MUD 218	872	985	1,444	1,810	2,129	2,316	2,419	2,440
Current PWS	FORT BEND COUNTY MUD 220	1,493	2,323	2,323	2,323	2,399	2,399	2,399	2,399
Current PWS	FORT BEND COUNTY MUD 23	14,580	15,088	15,089	15,228	15,362	15,466	15,643	16,367
Current PWS	FORT BEND COUNTY MUD 24	2,968	3,295	3,295	3,295	3,307	3,321	3,324	3,367
Current PWS	FORT BEND COUNTY MUD 25	12,698	13,090	13,254	13,284	13,432	13,575	13,819	14,323
Current PWS	FORT BEND COUNTY MUD 26 QUAIL GREEN WEST	5,570	5,810	6,005	6,347	6,486	6,661	6,785	7,147
Current PWS	FORT BEND COUNTY MUD 30	17,544	18,057	18,641	19,591	20,320	20,901	21,508	22,648
Current PWS	FORT BEND COUNTY MUD 34	5,287	5,455	5,726	5,872	6,144	6,372	6,520	6,904
Current PWS	FORT BEND COUNTY MUD 35	7,139	7,180	7,263	7,321	7,481	7,666	7,879	8,352
Current PWS	FORT BEND COUNTY MUD 37	1,346	1,370	1,375	1,375	1,379	1,392	1,425	1,487
Current PWS	FORT BEND COUNTY MUD 41	2,844	2,917	3,077	3,086	3,171	3,284	3,355	3,565
Current PWS	FORT BEND COUNTY MUD 42 WAT PLAT	3,791	3,971	4,079	4,184	4,295	4,418	4,535	4,818
Current PWS	FORT BEND COUNTY MUD 46	2,479	2,712	2,895	2,983	2,990	2,998	2,998	3,059
Current PWS	FORT BEND COUNTY MUD 47	2,455	2,455	2,455	2,455	2,455	2,607	2,703	2,940
Current PWS	FORT BEND COUNTY MUD 48	4,152	4,216	4,263	4,508	4,628	4,685	4,768	4,860
Current PWS	FORT BEND COUNTY MUD 49	867	907	907	907	1,000	1,000	1,046	1,241
Current PWS	FORT BEND COUNTY MUD 5	2,587	3,096	3,617	3,847	3,901	3,933	4,002	4,015
Current PWS	FORT BEND COUNTY MUD 50	7,390	8,515	9,518	10,224	10,637	10,943	11,218	11,825
Current PWS	FORT BEND COUNTY MUD 57	6,117	6,118	6,118	6,431	6,644	6,853	7,032	7,459

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	FORT BEND COUNTY MUD 58	12,266	12,306	12,429	12,539	12,679	12,816	12,918	13,266
Current PWS	FORT BEND COUNTY MUD 66	937	1,275	1,772	2,168	2,512	2,713	2,825	2,848
Current PWS	FORT BEND COUNTY MUD 81 WESTON LAKES	2,568	2,568	3,747	4,602	5,069	5,396	5,439	5,737
Current PWS	FORT BEND COUNTY WCID 2	36,884	40,105	41,972	43,496	44,836	46,423	47,623	50,268
Current PWS	FORT BEND COUNTY WCID 3	617	618	618	618	668	700	1,238	1,293
Current PWS	FORT BEND COUNTY WCID 8	43	43	43	43	43	43	43	43
Current PWS	FOUNTAINHEAD MUD	5,855	6,026	6,085	6,116	6,237	6,362	6,484	6,811
Current PWS	FOUNTAINVIEW SUBDIVISION	2,148	2,164	2,203	2,245	2,196	2,208	2,132	1,956
Current PWS	FOUR SEASONS MHP	3	3	3	3	3	3	3	3
Current PWS	FREEMAN RANCH	109	109	109	109	285	411	492	492
Current PWS	FRONTIER WATER	1,003	1,003	1,411	1,527	1,527	1,527	1,528	1,783
Current PWS	FRY ROAD MUD	3,149	3,209	3,231	3,254	3,334	3,430	3,581	3,857
Current PWS	FULBROOK SUBDIVISION WATER PLANT	768	1,389	1,964	2,616	3,319	3,714	3,773	4,630
Current PWS	FULSHEAR MUD 3A	3,857	4,520	5,168	5,205	5,230	5,238	5,244	5,258
Current PWS	G & W WSC	10,992	11,187	11,386	11,556	11,702	11,907	12,319	12,933
Current PWS	G & W WSC WOODLAND LAKES WATER SYSTEM	13	13	13	13	13	13	13	13
Current PWS	GALVESTON COUNTY FWSD 6 TIKI ISLAND	1,107	1,107	1,107	1,107	1,107	1,107	1,107	1,107
Current PWS	GALVESTON COUNTY MUD 12	2,301	2,302	2,302	2,302	2,302	2,302	2,302	2,302
Current PWS	GALVESTON COUNTY WCID 1	26,453	27,401	27,883	28,220	28,472	28,677	28,928	29,154
Current PWS	GALVESTON COUNTY WCID 12	3,426	3,534	3,604	3,632	3,657	3,680	3,704	3,729
Current PWS	GALVESTON COUNTY WCID 19	648	763	821	859	868	875	888	920
Current PWS	GALVESTON COUNTY WCID 8	4,276	4,378	4,446	4,465	4,478	4,488	4,491	4,519
Current PWS	GEMSTONE ESTATES SUBDIVISION	273	311	366	436	469	490	520	545
Current PWS	GENERATION PARK MANAGEMENT DISTRICT	5,962	11,533	13,690	14,595	15,147	15,357	15,814	16,739
Current PWS	GLENWOOD MOBILE HOME SUBDIVISION	72	72	72	72	72	72	72	72
Current PWS	GOLDENROD WSC	71	71	157	157	163	191	222	434
Current PWS	GRAND ESTATES	774	774	774	774	775	775	804	827
Current PWS	GRAND HARBOR WATER SYSTEM	2,148	2,317	2,410	2,428	2,590	2,701	2,789	2,871
Current PWS	GRAND LAKES MUD 1	3,541	3,541	3,541	3,541	3,541	3,600	3,692	3,904
Current PWS	GRAND LAKES MUD 2	2,301	2,301	2,301	2,308	2,351	2,416	2,492	2,674
Current PWS	GRAND LAKES MUD 4	3,812	3,812	3,812	3,901	4,036	4,168	4,278	4,551
Current PWS	GRAND MISSION MUD 1	6,173	6,185	6,213	6,371	6,453	6,570	6,650	6,954
Current PWS	GRAND MISSION MUD 2	4,695	4,775	5,169	5,594	5,838	6,130	6,231	6,601
Current PWS	GRAND OAKS MUD	1,147	1,211	1,227	1,246	1,276	1,301	1,328	1,354
Current PWS	GRANDE SAN JACINTO WATER SYSTEM	3,455	3,762	4,810	5,238	5,756	6,319	6,936	7,621
Current PWS	GRANGER SUBDIVISION	57	57	57	57	57	57	57	57
Current PWS	GRANT ROAD ESTATES MOBILE HOME SUB	128	128	129	130	138	140	144	152
Current PWS	GRANT ROAD PUD	2,572	2,662	2,671	2,699	2,712	2,765	2,818	2,969
Current PWS	GRANTWOOD SUBDIVISION	167	169	169	169	169	169	174	314
Current PWS	GRASSLANDS	502	509	503	499	493	481	465	446
Current PWS	GRAY UTILITY SERVICE	1,310	1,477	1,517	1,798	2,102	2,451	2,866	3,225
Current PWS	GREEN MEADOWS WSC	5	5	5	5	5	5	5	5
Current PWS	GREEN TRAILS MUD	1,971	2,017	2,018	2,020	2,068	2,105	2,237	2,438
Current PWS	GREENBRIAR ESTATES	60	106	160	219	281	351	428	572
Current PWS	GREENGATE ACRES SUBDIVISION	487	502	630	702	712	771	824	881
Current PWS	GREENLAND SQUARE SUBDIVISION WS	222	222	174	125	125	125	125	266

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	GREENS ROAD MOBILE HOME COMMUNITY	613	620	620	620	620	620	620	620
Current PWS	GREENVILLA MOBILE HOME PARK	48	48	49	49	49	49	49	49
Current PWS	GREENWOOD UTILITY DISTRICT	9,992	10,069	10,069	10,077	9,994	10,012	9,626	8,759
Current PWS	GREENWOOD VILLAGE	3,492	3,643	3,647	3,693	3,669	3,679	3,570	3,317
Current PWS	H & L NEW GULF	172	172	172	172	172	172	172	172
Current PWS	H O E WSC	713	810	843	885	1,009	1,177	1,443	1,807
Current PWS	HACKBERRY CREEK SUBDIVISION	194	253	262	302	348	399	460	514
Current PWS	HARBORSIDE	182	201	236	245	287	295	310	322
Current PWS	HARDIN WSC	4,194	4,272	4,366	4,461	4,631	4,848	5,017	5,261
Current PWS	HARRIS COUNTY FWSD 1A	2,682	2,698	2,711	2,711	2,733	2,654	2,688	3,042
Current PWS	HARRIS COUNTY FWSD 1B	951	1,064	1,201	1,246	1,320	1,439	2,009	2,613
Current PWS	HARRIS COUNTY FWSD 27	2,932	3,482	3,682	3,793	4,384	4,193	4,428	4,744
Current PWS	HARRIS COUNTY FWSD 45	514	522	557	567	567	574	584	603
Current PWS	HARRIS COUNTY FWSD 47	2,785	2,798	2,950	3,039	3,032	3,049	3,040	3,069
Current PWS	HARRIS COUNTY FWSD 51	18,175	18,802	18,967	19,063	18,886	18,913	18,325	17,008
Current PWS	HARRIS COUNTY FWSD 58	1,661	1,670	1,670	1,670	1,670	1,670	1,683	1,685
Current PWS	HARRIS COUNTY FWSD 6	2,105	2,105	2,105	2,105	2,105	2,094	2,140	2,299
Current PWS	HARRIS COUNTY FWSD 61	14,296	14,652	14,817	14,965	15,510	15,888	16,596	17,543
Current PWS	HARRIS COUNTY IMPROVEMENT DISTRICT 18	5,510	6,184	7,090	7,346	7,487	7,487	7,524	7,681
Current PWS	HARRIS COUNTY LEADERSHIP ACADEMY	1	1	1	0	0	0	0	0
Current PWS	HARRIS COUNTY MUD 1	8,522	8,532	8,536	8,545	8,600	8,632	8,656	8,927
Current PWS	HARRIS COUNTY MUD 102	10,200	10,323	10,482	10,552	10,977	11,254	11,672	12,398
Current PWS	HARRIS COUNTY MUD 104	3,582	3,582	3,582	3,582	3,631	3,731	3,825	4,080
Current PWS	HARRIS COUNTY MUD 105	10,736	11,128	11,010	10,896	11,111	11,341	11,792	12,393
Current PWS	HARRIS COUNTY MUD 106	4,454	4,531	4,689	4,773	4,956	5,019	5,254	5,647
Current PWS	HARRIS COUNTY MUD 109	9,219	9,320	9,483	9,537	9,593	9,637	9,821	10,032
Current PWS	HARRIS COUNTY MUD 11	3,722	3,722	3,722	3,722	3,691	3,673	3,550	3,282
Current PWS	HARRIS COUNTY MUD 118	6,611	6,629	6,680	6,702	6,645	6,618	6,405	5,929
Current PWS	HARRIS COUNTY MUD 119	6,759	6,944	6,945	6,946	6,902	6,880	6,672	6,201
Current PWS	HARRIS COUNTY MUD 120	12,828	13,057	13,110	13,129	13,411	13,632	14,146	14,995
Current PWS	HARRIS COUNTY MUD 122	1,353	1,399	1,395	1,391	1,410	1,498	1,575	1,876
Current PWS	HARRIS COUNTY MUD 127	7,520	7,616	7,690	7,763	7,875	8,015	8,205	8,472
Current PWS	HARRIS COUNTY MUD 130	2,664	2,730	2,765	2,799	2,840	2,902	3,207	3,355
Current PWS	HARRIS COUNTY MUD 132	6,564	6,736	6,961	7,047	7,254	7,360	7,794	8,292
Current PWS	HARRIS COUNTY MUD 136	2,673	2,673	2,673	2,673	2,673	2,673	2,673	2,802
Current PWS	HARRIS COUNTY MUD 144	2,519	2,645	2,683	2,702	2,790	2,926	3,059	3,285
Current PWS	HARRIS COUNTY MUD 147	2,563	2,687	2,681	2,676	2,738	2,784	2,878	3,059
Current PWS	HARRIS COUNTY MUD 148 KINGSLAKE	6,223	6,378	7,018	7,324	7,337	7,350	6,896	5,875
Current PWS	HARRIS COUNTY MUD 149	3,986	4,064	4,094	4,122	4,221	4,340	4,524	4,830
Current PWS	HARRIS COUNTY MUD 150	9,398	9,531	9,619	9,695	10,227	10,426	10,809	11,487
Current PWS	HARRIS COUNTY MUD 151	6,746	6,861	7,002	7,078	7,382	7,439	7,590	7,939
Current PWS	HARRIS COUNTY MUD 152	8,559	8,722	9,018	9,130	9,439	9,551	9,956	10,628
Current PWS	HARRIS COUNTY MUD 153	8,972	9,136	9,385	9,491	9,795	9,906	10,313	10,978
Current PWS	HARRIS COUNTY MUD 154	10,425	10,549	10,815	10,892	11,193	11,316	11,659	12,282
Current PWS	HARRIS COUNTY MUD 155	2,736	2,783	2,800	2,817	2,966	3,117	3,232	3,420
Current PWS	HARRIS COUNTY MUD 156	1,524	1,557	1,583	1,609	1,688	1,765	1,830	2,005

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 157	14,933	15,187	15,050	14,931	15,279	15,505	15,958	16,903
Current PWS	HARRIS COUNTY MUD 158	6,916	7,010	6,994	6,984	7,040	7,181	7,353	7,580
Current PWS	HARRIS COUNTY MUD 16	3,037	3,151	3,186	3,218	3,340	3,415	3,551	3,644
Current PWS	HARRIS COUNTY MUD 162	2,634	2,695	2,725	2,744	2,750	2,812	2,940	3,162
Current PWS	HARRIS COUNTY MUD 163	4,830	4,900	4,932	4,962	5,005	5,024	5,169	5,458
Current PWS	HARRIS COUNTY MUD 165	26,689	27,375	27,321	27,252	27,951	28,401	29,681	30,985
Current PWS	HARRIS COUNTY MUD 166	3,947	4,021	4,051	4,097	4,200	4,313	4,496	4,860
Current PWS	HARRIS COUNTY MUD 167	15,647	15,856	15,931	16,007	16,348	16,770	17,303	18,321
Current PWS	HARRIS COUNTY MUD 168	9,296	9,369	9,430	9,486	9,721	10,006	10,340	10,902
Current PWS	HARRIS COUNTY MUD 170	230	244	256	275	276	283	328	403
Current PWS	HARRIS COUNTY MUD 171	1,149	1,408	1,415	1,428	1,439	1,439	1,516	1,560
Current PWS	HARRIS COUNTY MUD 172	2,571	2,617	2,617	2,630	2,699	2,790	2,887	3,131
Current PWS	HARRIS COUNTY MUD 173	3,790	3,840	3,847	3,852	3,925	4,062	4,329	4,548
Current PWS	HARRIS COUNTY MUD 179	3,146	3,147	3,148	3,148	3,173	3,195	3,258	3,306
Current PWS	HARRIS COUNTY MUD 18 HEATHERWOOD HUNTERS	3,485	3,550	3,563	3,604	3,663	3,725	4,110	4,481
Current PWS	HARRIS COUNTY MUD 180	6,171	6,302	6,331	6,361	6,478	6,643	6,971	7,395
Current PWS	HARRIS COUNTY MUD 183	3,535	3,535	3,555	3,555	3,588	3,605	3,781	3,907
Current PWS	HARRIS COUNTY MUD 185	2,696	2,749	2,768	2,786	2,846	2,918	3,020	3,213
Current PWS	HARRIS COUNTY MUD 186	2,417	2,425	2,447	2,452	2,483	2,582	2,723	2,888
Current PWS	HARRIS COUNTY MUD 188	5,956	6,044	6,089	6,117	6,188	6,281	6,444	6,730
Current PWS	HARRIS COUNTY MUD 189	3,979	4,118	4,162	4,193	4,330	4,508	4,737	5,115
Current PWS	HARRIS COUNTY MUD 191	2,574	2,617	2,647	2,665	2,727	2,751	2,848	2,994
Current PWS	HARRIS COUNTY MUD 196	6,845	6,875	6,887	6,893	7,037	7,191	7,340	7,646
Current PWS	HARRIS COUNTY MUD 200 CRANBROOK	9,704	9,872	9,932	9,970	10,120	10,245	10,337	10,622
Current PWS	HARRIS COUNTY MUD 202	2,912	2,933	2,938	2,954	3,054	3,107	3,144	3,258
Current PWS	HARRIS COUNTY MUD 205	1,901	1,902	1,903	1,915	1,985	2,076	2,216	2,341
Current PWS	HARRIS COUNTY MUD 208	3,339	3,397	3,414	3,429	3,471	3,552	3,701	3,948
Current PWS	HARRIS COUNTY MUD 211	1,015	1,015	1,020	1,034	1,085	1,129	1,184	1,194
Current PWS	HARRIS COUNTY MUD 213-A	4,170	4,977	4,977	4,977	4,977	4,977	5,067	5,837
Current PWS	HARRIS COUNTY MUD 215	1,638	1,672	1,678	1,704	1,731	1,778	1,808	1,885
Current PWS	HARRIS COUNTY MUD 216	2,461	2,515	2,505	2,495	2,506	2,524	2,547	2,635
Current PWS	HARRIS COUNTY MUD 217	2,886	2,925	2,930	2,930	3,015	3,140	3,263	3,452
Current PWS	HARRIS COUNTY MUD 220	1,092	1,144	1,145	1,145	1,137	1,133	1,099	1,025
Current PWS	HARRIS COUNTY MUD 221	5,623	5,681	5,803	5,856	5,979	6,035	6,260	6,686
Current PWS	HARRIS COUNTY MUD 222	4,808	4,914	4,960	4,986	5,021	5,102	5,281	5,435
Current PWS	HARRIS COUNTY MUD 23	3,809	3,816	3,816	3,816	3,786	3,770	3,648	3,383
Current PWS	HARRIS COUNTY MUD 230	5,052	5,155	5,213	5,263	5,454	5,620	5,807	6,032
Current PWS	HARRIS COUNTY MUD 231	231	231	289	319	370	431	515	625
Current PWS	HARRIS COUNTY MUD 233	720	759	766	772	792	831	923	1,127
Current PWS	HARRIS COUNTY MUD 238	8,237	8,263	8,271	8,282	8,412	8,512	8,665	8,991
Current PWS	HARRIS COUNTY MUD 239	6,166	6,193	6,194	6,201	6,227	6,394	6,696	7,056
Current PWS	HARRIS COUNTY MUD 24	9,764	9,922	9,977	10,050	10,202	10,420	10,771	11,290
Current PWS	HARRIS COUNTY MUD 248	2,357	2,420	2,457	2,488	2,607	2,681	2,726	2,840
Current PWS	HARRIS COUNTY MUD 249	2,988	2,988	2,936	2,874	2,896	2,909	2,980	3,075
Current PWS	HARRIS COUNTY MUD 25 BROOK HOLLOW WEST S	164	182	182	182	181	181	177	168
Current PWS	HARRIS COUNTY MUD 250	703	808	831	898	963	1,001	1,059	1,156

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 255	1,038	1,038	1,038	1,038	1,038	1,038	1,146	1,227
Current PWS	HARRIS COUNTY MUD 257	2,757	2,796	2,814	2,824	2,889	2,937	3,019	3,181
Current PWS	HARRIS COUNTY MUD 26	15,070	15,203	15,778	16,076	16,424	16,595	17,154	18,082
Current PWS	HARRIS COUNTY MUD 261	1,044	1,086	1,115	1,126	1,123	1,130	1,104	1,036
Current PWS	HARRIS COUNTY MUD 264	3,479	3,503	3,508	3,513	3,550	3,600	3,703	3,910
Current PWS	HARRIS COUNTY MUD 275	589	596	601	602	611	626	659	704
Current PWS	HARRIS COUNTY MUD 276	4,564	4,653	4,684	4,695	4,801	4,925	5,200	5,591
Current PWS	HARRIS COUNTY MUD 278	9,870	9,984	10,672	10,923	11,049	11,131	11,352	11,803
Current PWS	HARRIS COUNTY MUD 280	2,983	2,983	2,983	2,983	2,983	2,988	3,001	3,187
Current PWS	HARRIS COUNTY MUD 281	3,621	3,639	3,848	3,935	4,151	4,200	4,320	4,568
Current PWS	HARRIS COUNTY MUD 282	4,115	4,147	4,486	4,624	4,974	5,047	5,227	5,531
Current PWS	HARRIS COUNTY MUD 284	4,421	4,533	4,574	4,591	4,678	4,755	5,060	5,426
Current PWS	HARRIS COUNTY MUD 285	12,160	12,297	13,233	14,236	14,064	14,218	14,117	13,734
Current PWS	HARRIS COUNTY MUD 286	894	894	894	894	905	1,026	1,026	1,036
Current PWS	HARRIS COUNTY MUD 287	4,807	4,847	5,725	6,237	7,210	7,374	8,169	8,768
Current PWS	HARRIS COUNTY MUD 290	9,655	9,883	10,472	10,713	11,058	11,183	11,627	12,366
Current PWS	HARRIS COUNTY MUD 304	5,188	5,231	5,389	5,450	5,663	5,813	6,201	6,677
Current PWS	HARRIS COUNTY MUD 316	870	870	870	870	870	886	938	1,028
Current PWS	HARRIS COUNTY MUD 319	964	964	964	964	964	964	964	964
Current PWS	HARRIS COUNTY MUD 321	1,239	1,366	1,401	1,414	1,401	1,395	1,354	1,263
Current PWS	HARRIS COUNTY MUD 322 FAIRFIELD VILLAGE	3,903	3,903	3,910	3,911	3,985	4,016	4,092	4,238
Current PWS	HARRIS COUNTY MUD 33	5,599	5,687	5,713	5,740	5,905	5,977	6,185	6,679
Current PWS	HARRIS COUNTY MUD 341	2,002	2,008	2,056	2,084	2,148	2,197	2,268	2,386
Current PWS	HARRIS COUNTY MUD 342	4,265	4,316	5,233	5,656	5,677	5,773	5,968	6,291
Current PWS	HARRIS COUNTY MUD 344	4,474	5,426	5,426	5,426	5,432	5,436	5,580	5,612
Current PWS	HARRIS COUNTY MUD 345	3,819	3,854	3,876	3,898	4,064	4,079	4,197	4,417
Current PWS	HARRIS COUNTY MUD 354	6,495	6,518	6,525	6,572	6,771	6,947	7,244	7,569
Current PWS	HARRIS COUNTY MUD 358	674	765	810	811	847	855	864	965
Current PWS	HARRIS COUNTY MUD 36	1,849	1,947	2,651	2,950	2,967	3,062	3,252	3,610
Current PWS	HARRIS COUNTY MUD 360	3,889	3,889	3,903	3,924	3,986	4,111	4,269	4,571
Current PWS	HARRIS COUNTY MUD 361	4,837	4,911	5,175	5,288	5,425	5,475	5,649	5,938
Current PWS	HARRIS COUNTY MUD 364	5,561	5,562	5,589	5,603	5,716	5,745	5,854	6,060
Current PWS	HARRIS COUNTY MUD 365	4,049	4,053	4,059	4,064	4,090	4,158	4,203	4,516
Current PWS	HARRIS COUNTY MUD 367	5,894	5,939	6,282	6,704	7,166	7,304	7,593	8,089
Current PWS	HARRIS COUNTY MUD 368	11,725	11,985	12,103	12,219	12,401	12,530	12,808	13,227
Current PWS	HARRIS COUNTY MUD 370	4,628	4,663	4,751	4,778	4,914	5,017	5,165	5,398
Current PWS	HARRIS COUNTY MUD 371	1,717	1,719	1,722	1,729	1,784	1,797	1,929	1,961
Current PWS	HARRIS COUNTY MUD 372	2,585	2,734	2,732	2,736	2,812	2,906	3,156	3,589
Current PWS	HARRIS COUNTY MUD 374 CYPRESS CREEK LAKE	4,129	4,244	4,244	4,269	4,271	4,271	4,271	4,320
Current PWS	HARRIS COUNTY MUD 383	4,845	4,883	5,074	5,114	5,367	5,507	5,720	6,138
Current PWS	HARRIS COUNTY MUD 387	26	26	26	26	26	26	26	26
Current PWS	HARRIS COUNTY MUD 389	2,158	2,166	2,186	2,196	2,321	2,321	2,372	2,385
Current PWS	HARRIS COUNTY MUD 391	8,369	8,544	8,600	8,609	8,734	8,839	9,034	9,769
Current PWS	HARRIS COUNTY MUD 396	3,731	3,731	4,143	4,538	4,914	4,979	5,155	5,452
Current PWS	HARRIS COUNTY MUD 397	5,256	5,307	5,653	5,735	6,153	6,244	6,450	6,801
Current PWS	HARRIS COUNTY MUD 399	2,768	2,784	2,801	2,817	2,842	2,865	2,935	3,099

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 400 - EAST	3,752	3,850	4,029	4,065	4,279	4,316	4,378	4,611
Current PWS	HARRIS COUNTY MUD 400 - WEST	5,751	5,781	6,168	6,359	6,483	6,561	6,721	6,986
Current PWS	HARRIS COUNTY MUD 401	3,887	3,911	3,950	3,969	4,192	4,276	4,449	4,663
Current PWS	HARRIS COUNTY MUD 405	256	256	215	173	173	173	173	181
Current PWS	HARRIS COUNTY MUD 412	4,322	4,423	5,040	5,292	5,381	5,458	5,649	5,968
Current PWS	HARRIS COUNTY MUD 418	986	2,059	2,059	2,059	2,256	2,269	2,305	2,498
Current PWS	HARRIS COUNTY MUD 419	11,911	12,111	12,111	12,111	12,154	12,209	12,309	12,610
Current PWS	HARRIS COUNTY MUD 420	1,699	1,699	1,799	1,800	1,757	1,757	1,691	1,544
Current PWS	HARRIS COUNTY MUD 421	1,595	1,715	3,325	3,916	3,898	3,910	3,883	3,819
Current PWS	HARRIS COUNTY MUD 422	1,477	1,478	2,148	2,423	2,434	2,497	2,623	2,834
Current PWS	HARRIS COUNTY MUD 423	1,043	1,074	1,135	1,154	1,226	1,249	1,334	1,462
Current PWS	HARRIS COUNTY MUD 43	5,841	5,885	5,940	5,940	5,999	6,129	6,526	7,048
Current PWS	HARRIS COUNTY MUD 432	4,064	4,064	4,064	4,066	4,169	4,468	4,744	5,239
Current PWS	HARRIS COUNTY MUD 433	4,933	4,933	4,933	4,933	4,933	4,933	4,934	4,934
Current PWS	HARRIS COUNTY MUD 434	1,471	1,471	1,397	1,323	1,323	1,323	1,323	1,323
Current PWS	HARRIS COUNTY MUD 44	2,084	2,084	2,085	2,087	2,095	2,116	2,145	2,163
Current PWS	HARRIS COUNTY MUD 449	4,590	5,021	5,088	5,088	5,118	5,156	5,190	5,519
Current PWS	HARRIS COUNTY MUD 454	34	34	49	56	70	73	92	113
Current PWS	HARRIS COUNTY MUD 457	2,263	2,263	2,263	2,263	2,263	2,263	2,263	2,525
Current PWS	HARRIS COUNTY MUD 458	574	934	951	980	1,004	1,004	1,181	1,269
Current PWS	HARRIS COUNTY MUD 46	4,526	4,526	4,541	4,550	4,550	4,551	4,590	4,869
Current PWS	HARRIS COUNTY MUD 468	2,863	2,867	2,869	2,871	2,879	2,925	2,973	3,219
Current PWS	HARRIS COUNTY MUD 48	478	489	508	511	528	542	583	657
Current PWS	HARRIS COUNTY MUD 480	111	121	133	142	175	175	205	476
Current PWS	HARRIS COUNTY MUD 489	6,792	7,971	7,971	7,971	7,971	8,394	9,027	9,916
Current PWS	HARRIS COUNTY MUD 49	8,827	9,038	9,542	9,802	9,830	9,860	9,768	9,624
Current PWS	HARRIS COUNTY MUD 494	2,877	2,932	3,131	3,213	3,316	3,353	3,487	3,784
Current PWS	HARRIS COUNTY MUD 495	3,819	3,819	3,819	3,819	3,819	3,819	3,819	3,819
Current PWS	HARRIS COUNTY MUD 5	6,571	6,679	6,745	6,805	6,958	7,190	7,506	7,911
Current PWS	HARRIS COUNTY MUD 50	3,595	3,681	3,836	3,892	4,071	4,180	4,539	4,920
Current PWS	HARRIS COUNTY MUD 500	867	867	867	867	867	867	867	867
Current PWS	HARRIS COUNTY MUD 501	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352
Current PWS	HARRIS COUNTY MUD 502	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,094
Current PWS	HARRIS COUNTY MUD 504	2,015	2,015	2,025	2,030	2,038	2,062	2,189	2,303
Current PWS	HARRIS COUNTY MUD 53	20,684	21,101	21,764	22,005	22,635	22,863	23,641	24,937
Current PWS	HARRIS COUNTY MUD 530	1,515	1,609	1,622	1,643	1,726	1,827	1,992	2,117
Current PWS	HARRIS COUNTY MUD 531	1,067	1,067	1,067	1,067	1,069	1,077	1,086	1,109
Current PWS	HARRIS COUNTY MUD 536	2,084	2,084	2,084	2,084	2,085	2,085	2,084	2,088
Current PWS	HARRIS COUNTY MUD 537	280	281	282	279	271	267	253	231
Current PWS	HARRIS COUNTY MUD 538	385	385	385	385	385	385	385	448
Current PWS	HARRIS COUNTY MUD 542	166	186	193	200	221	241	256	313
Current PWS	HARRIS COUNTY MUD 55 HERITAGE PARK	15,587	15,782	15,609	15,444	15,535	15,637	15,922	16,798
Current PWS	HARRIS COUNTY MUD 551	870	922	922	922	959	1,026	1,065	1,101
Current PWS	HARRIS COUNTY MUD 558	181	204	212	221	245	267	284	349
Current PWS	HARRIS COUNTY MUD 58	1,847	1,847	1,847	1,847	1,847	1,847	1,848	1,903
Current PWS	HARRIS COUNTY MUD 6 CARRIAGE LANE	3,732	3,748	3,755	3,756	3,725	3,709	3,584	3,306

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 61	2,236	2,241	2,374	2,422	2,492	2,527	2,558	2,611
Current PWS	HARRIS COUNTY MUD 62	2,199	2,237	2,258	2,268	2,515	2,574	2,698	2,901
Current PWS	HARRIS COUNTY MUD 63	221	223	224	224	313	411	655	1,051
Current PWS	HARRIS COUNTY MUD 64	4,349	4,349	4,349	4,349	4,357	4,361	4,382	4,454
Current PWS	HARRIS COUNTY MUD 65	4,341	4,384	4,384	4,384	4,384	4,490	4,686	4,988
Current PWS	HARRIS COUNTY MUD 69	3,376	3,396	3,418	3,422	3,531	3,568	3,652	3,728
Current PWS	HARRIS COUNTY MUD 70	6,140	6,267	6,311	6,355	6,481	6,589	6,848	7,274
Current PWS	HARRIS COUNTY MUD 71	14,008	14,355	15,147	15,522	16,140	16,571	17,118	18,164
Current PWS	HARRIS COUNTY MUD 8	5,110	5,237	5,515	5,636	5,551	5,564	5,390	5,012
Current PWS	HARRIS COUNTY MUD 81	10,478	10,709	10,711	10,711	11,000	11,204	11,650	12,418
Current PWS	HARRIS COUNTY MUD 82	13,496	13,717	13,944	13,944	14,320	14,444	14,753	15,490
Current PWS	HARRIS COUNTY MUD 86	3,771	3,842	3,909	4,055	4,274	4,396	4,632	4,968
Current PWS	HARRIS COUNTY MUD 96	8,521	8,547	9,146	9,388	9,442	9,516	9,723	10,087
Current PWS	HARRIS COUNTY UD 14	3,125	3,140	3,162	3,176	3,165	3,206	3,170	3,153
Current PWS	HARRIS COUNTY UD 15	3,751	3,766	3,766	3,766	3,847	3,921	4,026	4,225
Current PWS	HARRIS COUNTY UD 16	6,948	7,098	7,237	7,343	7,511	7,636	7,873	8,159
Current PWS	HARRIS COUNTY UTILITY DISTRICT 6	9,310	9,477	9,537	9,589	9,825	10,092	10,505	11,187
Current PWS	HARRIS COUNTY WCID 1	8,523	8,645	9,022	9,176	9,715	9,801	10,061	10,524
Current PWS	HARRIS COUNTY WCID 109	7,331	7,406	7,433	7,486	7,559	7,695	8,003	8,381
Current PWS	HARRIS COUNTY WCID 110	6,967	7,113	7,313	7,379	7,735	7,904	8,097	8,463
Current PWS	HARRIS COUNTY WCID 113 ENCHANTED VILLAGE	1,209	1,245	1,261	1,279	1,331	1,346	1,432	1,655
Current PWS	HARRIS COUNTY WCID 114	5,161	5,295	5,350	5,383	5,481	5,605	5,901	6,386
Current PWS	HARRIS COUNTY WCID 116	2,967	3,049	3,327	3,444	3,656	3,661	3,745	3,748
Current PWS	HARRIS COUNTY WCID 119	8,632	8,789	8,813	8,844	8,994	9,156	9,404	9,926
Current PWS	HARRIS COUNTY WCID 132	2,484	2,639	2,640	2,640	2,663	2,791	2,844	3,027
Current PWS	HARRIS COUNTY WCID 133	6,198	6,353	6,362	6,369	6,325	6,305	6,115	5,685
Current PWS	HARRIS COUNTY WCID 136	3,064	3,138	3,256	3,331	3,490	3,496	3,664	3,918
Current PWS	HARRIS COUNTY WCID 156	814	815	815	815	815	810	825	895
Current PWS	HARRIS COUNTY WCID 161	1,113	1,113	1,113	1,113	1,097	1,068	1,068	1,068
Current PWS	HARRIS COUNTY WCID 21	14,628	15,486	17,585	18,269	18,385	18,717	19,622	20,863
Current PWS	HARRIS COUNTY WCID 36	15,901	16,508	16,858	17,031	16,904	16,930	16,433	15,316
Current PWS	HARRIS COUNTY WCID 50 EL LAGO	3,181	3,187	3,187	3,187	3,176	3,164	3,195	3,407
Current PWS	HARRIS COUNTY WCID 70	1,512	1,512	1,512	1,512	1,512	1,512	1,513	1,532
Current PWS	HARRIS COUNTY WCID 74	5,713	5,782	5,963	5,979	5,897	5,904	5,704	5,263
Current PWS	HARRIS COUNTY WCID 84	5,928	6,004	6,169	6,360	6,456	6,566	6,927	7,398
Current PWS	HARRIS COUNTY WCID 89	4,779	4,839	4,836	4,833	4,798	4,798	4,646	4,301
Current PWS	HARRIS COUNTY WCID 91	2,660	2,806	2,841	2,868	2,933	2,991	3,307	3,505
Current PWS	HARRIS COUNTY WCID 92	3,473	3,550	3,314	3,078	3,051	3,162	3,486	3,649
Current PWS	HARRIS COUNTY WCID 96	8,240	8,414	9,562	9,907	9,706	9,740	9,425	8,720
Current PWS	HARRIS COUNTY WCID 99	1,890	2,022	2,160	2,189	2,219	2,229	2,275	2,376
Current PWS	HARRIS COUNTY WCID FONDREN ROAD	2,863	2,936	2,936	2,937	2,917	2,907	2,817	2,613
Current PWS	HARRIS FORT BEND COUNTIES MUD 1	4,437	4,475	4,526	4,628	4,714	4,805	4,924	5,256
Current PWS	HARRIS FORT BEND COUNTIES MUD 5	3,865	3,899	3,936	4,091	4,302	4,424	4,536	4,785
Current PWS	HARRIS MONTGOMERY COUNTIES MUD 386	14,823	15,060	15,138	15,226	15,386	15,616	16,070	16,953
Current PWS	HARRIS MONTGOMERY COUNTIES MUD 386 MAY V	2,710	2,818	2,822	2,831	2,853	3,027	3,296	3,475
Current PWS	HARRIS-FORT BEND COUNTIES MUD 3	6,232	6,474	6,464	6,460	6,537	6,583	6,931	7,283

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HASTINGS HOMEOWNERS WATER SYSTEM	183	217	249	298	308	726	726	726
Current PWS	HAVENSHIRE WATER SYSTEM	16	23	30	34	35	36	39	42
Current PWS	HAZY HOLLOW EAST ESTATES	2,479	2,758	2,824	2,833	2,834	2,868	2,936	3,005
Current PWS	HEATHERGATE ESTATES	278	293	293	293	293	293	564	568
Current PWS	HEATHERLOCH MUD	3,493	3,506	3,508	3,512	3,555	3,644	3,765	4,091
Current PWS	HEAVENS MOBILE HOME PARK	12	12	14	15	15	16	15	15
Current PWS	HEIGHTS COUNTRY SUBDIVISION	98	98	135	140	153	166	226	254
Current PWS	HERITAGE OAKS SUBDIVISION	369	403	411	418	426	439	452	465
Current PWS	HERMANN OAKS MOBILE HOME VILLAGE	39	39	39	39	38	38	37	34
Current PWS	HERON LAKES ESTATES	2,498	2,564	2,564	2,565	2,592	2,703	2,908	2,993
Current PWS	HIDDEN FOREST ESTATES	361	380	384	384	384	384	389	407
Current PWS	HIGH MEADOWS RANCH WATER SUPPLY	2,858	4,151	4,937	5,470	5,914	6,257	6,616	6,990
Current PWS	HIGHLAND BAYOU ESTATES WSC	36	36	36	36	36	36	36	36
Current PWS	HIGHLAND MEADOWS MOBILE HOME PARK	21	21	21	21	20	20	20	18
Current PWS	HIGHLAND MOBILE HOME SUBDIVISION	3	3	3	3	3	3	3	3
Current PWS	HIGHLAND RIDGE SUBDIVISION	435	435	435	435	435	435	435	435
Current PWS	HIGHLINE OAKS WATER UTILITY	223	268	343	344	348	348	354	355
Current PWS	HILLGREEN SUBDIVISION WATER CO	86	104	175	248	322	317	328	342
Current PWS	HILLSIDE ESTATES WATER SYSTEM	38	38	38	38	38	38	38	38
Current PWS	HOLIDAY SHORES	278	275	275	266	257	245	233	219
Current PWS	HOLLY OAKS MOBILE HOME PARK	16	16	16	16	16	16	16	16
Current PWS	HOMELAND SUBDIVISION	2	2	2	2	2	2	2	2
Current PWS	HOMESTEAD OAKS MOBILE HOME COMM	35	35	35	35	35	35	35	35
Current PWS	HOOKS MOBILE HOME PARK	150	150	150	150	149	149	144	132
Current PWS	HOOP N HOLLER LAKE ESTATES	254	254	254	254	254	254	254	254
Current PWS	HORSEPEN BAYOU MUD	6,213	6,270	6,345	6,375	6,488	6,647	6,800	7,063
Current PWS	HOUSE CORRAL STREET WATER SYSTEM	6	6	6	6	6	6	6	6
Current PWS	HOUSTON SA_Acres Homes 2030_EWPP	189,912	193,543	197,287	198,873	197,302	196,432	190,192	176,603
Current PWS	HOUSTON SA_Bellaire Braes 2030_EWPP	110,088	112,923	112,956	113,155	115,388	117,894	122,692	130,883
Current PWS	HOUSTON SA_EWPP I 2030_EWPP	264,799	269,241	271,598	272,880	269,173	269,966	257,907	236,918
Current PWS	HOUSTON SA_EWPP I 2030_SEWPP-W	142,551	147,267	158,024	162,591	160,439	161,415	156,469	145,551
Current PWS	HOUSTON SA_EWPP III 2030_EWPP	283,595	295,058	308,173	313,354	309,274	308,445	296,777	274,094
Current PWS	HOUSTON SA_Isolated Groundwater 2030_NEWPP	4,144	4,250	4,637	4,800	5,001	5,073	5,329	5,762
Current PWS	HOUSTON SA_Katy Addicks 2030_EWPP	201,965	206,653	207,131	207,388	212,003	216,186	223,479	235,492
Current PWS	HOUSTON SA_NEWPP 2030_NEWPP	127,246	131,226	137,877	141,411	141,734	142,629	141,587	138,081
Current PWS	HOUSTON SA_SEWPP 2030_SEWPP-SE	119,443	126,601	130,331	131,723	129,095	129,300	128,557	125,603
Current PWS	HOUSTON SA_Sims Bayou 2030_EWPP	230,908	242,748	253,304	258,796	258,395	260,138	255,188	244,170
Current PWS	HOUSTON SA_Southwest 2030_EWPP	444,620	452,697	455,273	456,483	450,522	447,327	431,066	398,194
Current PWS	HOUSTON SA_Spring Branch 2030_EWPP	115,828	117,842	118,890	119,473	119,353	119,002	115,759	108,325
Current PWS	HOUSTON SA_UKN 2030_	0	0	0	0	0	0	0	0
Current PWS	HOUSTON SA_West Lake Houston Parkway Cost Share 2030_NEWPP	8,312	8,470	9,267	9,599	9,877	10,003	10,402	11,067
Current PWS	HOUSTON SA_Willowchase 2030_NEWPP	8,404	8,655	8,719	8,795	9,031	9,185	9,425	10,077
Current PWS	HOUSTON SUBURBAN HEIGHTS MHP	31	31	42	47	46	46	45	41
Current PWS	HUFFMAN HEIGHTS SUBDIVISION	232	361	366	370	370	370	384	407
Current PWS	HUFFMAN HOLLOW APARTMENTS	6	6	6	6	6	6	6	6
Current PWS	HULON LAKES SUBDIVISION	1,030	1,146	1,181	1,290	1,381	1,446	1,515	1,587

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HUNGERFORD MUD 1	284	287	288	288	288	306	319	323
Current PWS	HUNTER PLACE	173	173	173	173	173	173	173	173
Current PWS	HUNTERS COVE SEC 1	4	4	5	6	9	9	10	12
Current PWS	HUNTERS COVE SUB SOUTH	14	14	36	43	51	61	73	83
Current PWS	HUNTERS GLEN MUD	10,664	10,888	11,351	11,524	11,829	11,942	12,268	12,870
Current PWS	HUNTERS RETREAT	1,108	1,345	1,396	1,407	1,443	1,484	1,536	1,589
Current PWS	HUNTERS VILLAGE SUBDIVISION	114	161	161	161	161	161	165	165
Current PWS	HUNTINGTON ESTATES	302	336	491	493	497	500	517	519
Current PWS	HWY 59 ESTATES	271	467	519	563	648	740	841	955
Current PWS	HYDIES CROSSING	95	95	101	107	141	174	193	203
Current PWS	IMPERIAL VALLEY MHC	1,045	1,045	1,045	1,055	1,055	1,055	1,081	1,130
Current PWS	INDIAN SPRINGS WATER SYSTEM	260	263	292	315	317	318	318	319
Current PWS	INDIGO LAKES WATER SYSTEM	2,614	3,633	4,878	5,428	5,820	6,113	6,425	6,747
Current PWS	INDIGO RANCH	672	880	950	1,009	1,059	1,096	1,135	1,176
Current PWS	INTERSTATE MUD	5,224	5,370	5,361	5,351	5,441	5,566	5,756	6,071
Current PWS	INVERNESS FOREST IMPROVEMENT DISTRICT	3,003	3,218	3,412	3,493	3,700	3,801	4,150	4,457
Current PWS	IS ZEN CENTER LOTUS LAKE	37	37	37	38	43	46	50	53
Current PWS	ISAACSON MUD	443	443	443	443	443	443	443	443
Current PWS	J & L TERRY LANE	25	25	41	63	55	49	49	64
Current PWS	J M P UTILITIES	191	190	188	183	178	170	162	153
Current PWS	JACKRABBIT ROAD PUD	9,503	9,731	9,790	9,806	10,113	10,333	10,679	11,264
Current PWS	JOHNSONS WATER SERVICE	41	62	64	74	81	82	81	80
Current PWS	JONES CREEK TERRACE	907	910	905	885	861	826	786	741
Current PWS	JONES CREEKWOOD	36	49	49	49	47	46	44	42
Current PWS	JOY VILLAGE	54	81	98	143	180	179	187	196
Current PWS	K & B WATERWORKS	79	82	85	92	93	93	93	93
Current PWS	K ESTATES WATER SYSTEM	67	69	73	74	77	79	85	91
Current PWS	K LAKE TERRACE	84	86	88	89	91	92	96	100
Current PWS	KEENAN WSC	1,119	1,545	2,157	2,431	2,627	2,796	3,066	3,235
Current PWS	KENWOOD SUBDIVISION WATER SYSTEM	195	195	195	195	190	190	184	170
Current PWS	KEY LARGO UTILITIES	0	0	0	0	0	0	0	0
Current PWS	KICKAPOO FARMS SUBDIVISION	16	16	12	8	8	8	8	8
Current PWS	KICKAPOO PRESERVE SUBDIVISION	57	57	57	57	57	57	57	57
Current PWS	KINGDOM HEIGHTS WATER SYSTEM	2,217	2,334	2,334	2,334	2,334	2,334	2,352	2,352
Current PWS	KINGMONT MOBILE HOME PARK	149	162	162	162	161	161	157	146
Current PWS	KINGS MANOR MUD	3,996	4,055	4,123	4,195	4,272	4,351	4,433	4,517
Current PWS	KINGSBRIDGE MUD	9,140	9,154	9,312	9,598	9,968	10,245	10,434	10,885
Current PWS	KINGSLAND ESTATES WSC	416	433	431	430	434	463	471	511
Current PWS	KIPLING OAKS 1	1,208	1,236	1,261	1,319	1,376	1,419	1,465	1,512
Current PWS	KIPLING OAKS AND TIMBERGREEN	1,111	1,175	1,444	1,549	1,641	1,698	1,757	1,818
Current PWS	KIRKMONT MUD	2,472	2,522	2,502	2,481	2,494	2,500	2,590	2,740
Current PWS	KITZWOOD SUBDIVISION	21	21	21	21	21	21	21	21
Current PWS	KLEIN PUD	2,934	2,934	2,941	2,948	3,003	3,023	3,080	3,196
Current PWS	KLEINWOOD MUD	3,641	3,699	3,720	3,733	3,808	3,984	4,139	4,421
Current PWS	KUCERA FARMS SUBDIVISION	93	93	92	91	90	89	86	83
Current PWS	LA CASITA HOMES II	9	9	9	9	9	9	9	8

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	LAIRD ESTATES	95	96	96	96	96	96	96	96
Current PWS	LAKE BONANZA WSC	2,440	2,960	3,521	3,918	4,199	4,393	4,596	4,805
Current PWS	LAKE CONROE FOREST SUBDIVISION	548	548	548	557	568	576	585	594
Current PWS	LAKE CONROE HILLS MUD	1,709	2,014	2,083	2,153	2,224	2,298	2,373	2,449
Current PWS	LAKE CONROE TERRACE WATER SYSTEM	53	56	57	57	57	57	61	80
Current PWS	LAKE CONROE VILLAGE	1,124	1,144	1,152	1,154	1,169	1,173	1,182	1,193
Current PWS	LAKE CONROE WEST	146	165	169	175	180	185	190	194
Current PWS	LAKE CREEK FALLS	377	621	1,087	1,225	1,237	1,547	1,797	2,073
Current PWS	LAKE CREEK FOREST	729	865	1,247	1,543	1,571	1,609	1,706	1,776
Current PWS	LAKE FOREST FALLS SUBDIVISION	284	346	479	523	563	591	622	654
Current PWS	LAKE FOREST UTILITY DISTRICT	5,294	5,302	5,302	5,301	5,302	5,302	5,305	5,426
Current PWS	LAKE HOUSTON STORAGE	43	42	60	64	63	64	61	54
Current PWS	LAKE JACKSON MOBILE HOME PARK & RV	6	6	6	5	5	5	5	5
Current PWS	LAKE LIVINGSTON BIG THICKET LAKE 2	174	174	174	174	174	174	174	174
Current PWS	LAKE LIVINGSTON HORSESHOE LAKE ESTATES	152	152	152	152	152	152	152	152
Current PWS	LAKE LIVINGSTON NEW RIVER LAKE ESTATES	72	72	72	72	72	72	72	72
Current PWS	LAKE LORRAINE WS	114	170	177	177	177	184	193	201
Current PWS	LAKE LOUISE SUBDIVISION	362	362	362	370	379	384	389	396
Current PWS	LAKE MUD	8,575	8,856	9,029	9,099	9,558	9,650	9,920	10,373
Current PWS	LAKE SOUTH WSC	258	277	288	313	337	357	379	401
Current PWS	LAKE WINDCREST WATER SYSTEM	3,788	5,006	5,846	6,447	6,863	7,175	7,504	7,838
Current PWS	LAKEHOUSE WATER PLANT	18	18	18	18	18	18	85	307
Current PWS	LAKELAND WATER SYSTEM	371	452	464	467	507	517	532	539
Current PWS	LAKES OF FAIRHAVEN	1,544	1,755	1,784	1,832	1,903	2,023	2,231	2,437
Current PWS	LAKES OF MAGNOLIA	750	758	766	774	783	792	801	811
Current PWS	LAKES OF MISSION GROVE	512	512	578	654	997	1,343	1,776	1,813
Current PWS	LAKES OF ROSEHILL WATER SYSTEM	1,158	1,185	1,433	1,534	1,653	1,721	1,876	2,201
Current PWS	LAKESIDE ESTATES SUBDIVISION	142	142	142	142	142	142	142	142
Current PWS	LAKESIDE ESTATES WATER SYSTEM	10	10	10	10	10	10	10	10
Current PWS	LAKEVIEW POINTE APARTMENTS	2	3	3	3	3	3	4	4
Current PWS	LAKEVIEW WATER	156	156	230	233	240	254	275	296
Current PWS	LAKEWOOD COLONY	165	217	228	237	237	241	241	243
Current PWS	LAKEWOOD ON LAKE CONROE POA	121	182	226	260	278	296	314	333
Current PWS	LANGHAM CREEK UTILITY DISTRICT	11,536	11,791	11,870	11,978	12,235	12,490	12,927	13,689
Current PWS	LAS PLAYAS	28	28	27	27	27	26	24	23
Current PWS	LAZY ACRES MOBILE HOME PARK	2	2	2	2	2	2	2	2
Current PWS	LAZY LANE MOBILE HOME PARK	44	68	68	68	69	70	76	77
Current PWS	LAZY RIVER IMPROVEMENT DISTRICT	1,145	1,213	1,253	1,319	1,380	1,444	1,513	1,581
Current PWS	LEANING OAK MOBILE HOME PARK	27	27	27	27	27	27	27	27
Current PWS	LEANING TOWERING OAKS SUBDIVISION	83	83	122	141	194	219	252	284
Current PWS	LEE RIDGE SUBDIVISION	166	253	361	451	489	804	999	1,183
Current PWS	LEISURE LANE RV RESORT MAGNOLIA	8	15	21	23	25	26	28	31
Current PWS	LIBERTY COUNTY FWSD 1 HULL	486	486	486	486	486	486	486	486
Current PWS	LILLIPUT FARMS WATER SYSTEM	76	78	111	173	180	187	206	220
Current PWS	LINCECUM WATER POWERS ADDITION	7	7	7	7	7	7	6	6
Current PWS	LINCOLN SQUARE SUBDIVISION PWS	562	575	932	1,059	1,149	1,178	1,228	1,311

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	LIVE OAK ESTATES	221	221	221	221	262	262	308	353
Current PWS	LOCH NESS COVE SUBDIVISION WATER SYSTEM	84	84	84	84	84	84	84	92
Current PWS	LONE PINE SUBDIVISION	71	71	71	71	71	71	71	71
Current PWS	LONE STAR PUBLIC WATER SYSTEM	1,713	1,835	1,900	1,971	2,008	2,066	2,107	2,150
Current PWS	LONE WILLOW MHP WEST	37	38	38	38	38	38	37	34
Current PWS	LONE WILLOW MOBILE HOME PARK	38	38	38	38	38	38	37	34
Current PWS	LONGHORN MOBILE HOME COMMUNITY	90	90	90	90	91	95	95	100
Current PWS	LONGHORN TOWN UTILITY DISTRICT	1,925	1,933	1,926	1,918	1,921	1,973	2,034	2,075
Current PWS	LORI HEIGHTS MOBILE HOME SUBDIVISION	30	30	30	30	30	30	30	30
Current PWS	LOST LAKES	27	46	66	85	105	129	158	182
Current PWS	LOUETTA NORTH PUD	4,033	4,034	4,055	4,073	4,153	4,289	4,462	4,757
Current PWS	LOUETTA ROAD UTILITY DISTRICT	1,398	1,461	1,490	1,517	1,586	1,649	1,753	1,934
Current PWS	LUCE BAYOU PUD	454	870	878	887	887	894	919	960
Current PWS	M B MOBILE HOME PARK	5	5	5	5	5	5	5	5
Current PWS	MADING LANE WATER SYSTEM	309	309	304	300	294	294	285	265
Current PWS	MAGNOLIA COUNTRY RV PARK	1	1	3	3	3	3	3	4
Current PWS	MAGNOLIA RESERVE WATER PLANT	209	236	249	260	270	279	287	298
Current PWS	MALCOMSON ROAD UTILITY DISTRICT	6,704	6,882	7,017	7,116	7,548	7,669	7,894	8,209
Current PWS	MALLARD LAKE CLUB	1	1	1	1	1	1	1	1
Current PWS	MANVEL ROAD TERRACE SUBDIVISION	258	280	281	294	305	304	298	292
Current PWS	MAPLE LEAF MOBILE HOME SUBDIVISION	1,090	1,105	1,202	1,221	1,196	1,196	1,157	1,072
Current PWS	MAREK ROAD WATER SYSTEM	97	97	97	109	108	114	112	105
Current PWS	MARK V ESTATES	51	50	49	48	47	45	43	40
Current PWS	MARKS GLEN SUBDIVISION	99	99	99	99	99	99	99	99
Current PWS	MARLIN MARINA WATER SYSTEM	1	1	1	1	1	1	1	1
Current PWS	MARY FRANCIS SUBDIVISION	1,979	2,091	2,099	2,161	2,143	2,151	2,091	1,949
Current PWS	MASON CREEK UTILITY DISTRICT	7,462	7,556	7,561	7,567	7,719	7,869	8,183	8,714
Current PWS	MASON LAKE WATER SYSTEM	4	4	4	4	4	4	4	4
Current PWS	MAXIM PRODUCTION SUBDIVISION	1	1	1	1	1	1	1	1
Current PWS	MAYDE CREEK MUD	5,811	5,881	5,903	5,945	6,086	6,240	6,500	6,932
Current PWS	MAYWOOD ACRES	148	290	307	338	393	444	503	568
Current PWS	MCFARLAND VILLAGE APARTMENTS	14	14	15	15	15	16	16	15
Current PWS	MCGEE PLACE	145	217	455	455	417	387	388	388
Current PWS	MEACHEN MEADOWS SUBDIVISION WATER SYSTEM	110	110	110	567	1,059	1,056	1,140	1,207
Current PWS	MEADOW GLEN CRYSTAL SPRINGS WATER	577	896	1,007	1,078	1,169	1,198	1,235	1,248
Current PWS	MEADOWCREEK MUD	1,722	1,728	1,783	1,818	1,845	1,872	1,949	2,082
Current PWS	MEADOWHILL REGIONAL MUD	8,159	8,235	8,399	8,541	8,659	8,832	9,037	9,484
Current PWS	MEADOWLAKE ESTATES	1,277	1,287	1,287	1,287	1,287	1,287	1,287	1,287
Current PWS	MEADOWLAND SUBDIVISION	274	274	295	299	411	411	416	448
Current PWS	MEADOWLARK SUBDIVISION	91	91	99	99	99	99	99	111
Current PWS	MEADOWVIEW ESTATES	29	29	29	29	29	29	29	29
Current PWS	MEADOWVIEW ESTATES II	32	32	32	32	32	32	32	32
Current PWS	MEADOWVIEW SUBDIVISION	77	77	79	79	142	142	142	142
Current PWS	MELROSE MOBILE HOME PARK	48	48	48	48	48	48	46	43
Current PWS	MEMORIAL HILLS UTILITY DISTRICT	1,545	1,700	1,701	1,702	1,703	1,704	1,705	1,705
Current PWS	MEMORIAL MUD	6,897	7,009	6,998	6,987	7,115	7,133	7,406	7,848

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	MEMORIAL VILLAGES WATER AUTHORITY	11,229	11,343	12,250	12,636	12,450	12,448	12,075	11,233
Current PWS	MERCY WSC	674	674	675	675	675	717	767	834
Current PWS	MESQUITE MHP	13	13	13	13	13	13	13	12
Current PWS	MILL CREEK ESTATES	110	110	110	110	110	110	110	110
Current PWS	MILLER MHP	12	12	20	20	19	19	19	18
Current PWS	MILLERS CROSSING	162	176	192	217	238	253	270	287
Current PWS	MILLS ROAD MUD	5,297	5,418	5,445	5,486	5,562	5,627	5,773	6,104
Current PWS	MINK BRANCH VALLEY	59	69	109	124	134	141	148	156
Current PWS	MISSION BEND MUD 1	7,066	7,273	7,606	7,832	8,000	8,205	8,474	9,030
Current PWS	MISSION BEND MUD 2	10,784	11,123	11,109	11,095	11,287	11,531	11,950	12,672
Current PWS	MOBILE HOME ESTATES	252	279	280	281	282	281	276	261
Current PWS	MONTEBELLO UTILITY	1,349	1,503	1,817	1,890	2,039	2,204	2,383	2,581
Current PWS	MONTGOMERY COUNTY FWSD 6	391	486	508	531	554	579	604	629
Current PWS	MONTGOMERY COUNTY MUD 105	1,218	1,297	1,370	1,431	1,505	1,555	1,608	1,664
Current PWS	MONTGOMERY COUNTY MUD 111	463	776	926	999	1,047	1,078	1,152	1,229
Current PWS	MONTGOMERY COUNTY MUD 112	3,515	3,743	3,990	4,004	4,097	5,174	5,354	5,483
Current PWS	MONTGOMERY COUNTY MUD 115	4,820	4,958	5,157	5,271	5,457	5,637	5,829	6,019
Current PWS	MONTGOMERY COUNTY MUD 119 SPRING TRAILS	9,636	10,595	11,052	11,518	11,989	12,477	12,981	13,498
Current PWS	MONTGOMERY COUNTY MUD 126	999	1,150	1,482	1,908	2,256	2,225	2,302	2,390
Current PWS	MONTGOMERY COUNTY MUD 127	2,827	2,870	2,894	2,909	3,010	3,124	3,243	3,364
Current PWS	MONTGOMERY COUNTY MUD 137	498	751	956	1,066	1,135	1,167	1,236	1,325
Current PWS	MONTGOMERY COUNTY MUD 139	1,657	1,895	2,419	2,936	2,988	3,049	3,217	3,338
Current PWS	MONTGOMERY COUNTY MUD 141	377	445	512	542	564	587	610	634
Current PWS	MONTGOMERY COUNTY MUD 15	7,165	7,647	7,795	7,913	8,104	8,316	8,537	8,744
Current PWS	MONTGOMERY COUNTY MUD 16 WHITE OAK PLANT	728	1,047	1,613	2,167	2,235	2,301	2,477	2,604
Current PWS	MONTGOMERY COUNTY MUD 164	168	220	238	273	417	441	468	495
Current PWS	MONTGOMERY COUNTY MUD 18	4,706	5,005	5,187	5,359	5,532	5,712	5,898	6,087
Current PWS	MONTGOMERY COUNTY MUD 19	2,755	2,801	2,824	2,847	2,847	2,864	2,898	3,009
Current PWS	MONTGOMERY COUNTY MUD 24 COUNTRY COLONY	1,058	1,295	1,346	1,398	1,451	1,507	1,567	1,628
Current PWS	MONTGOMERY COUNTY MUD 36	4,837	4,877	4,933	4,962	5,168	5,444	5,938	6,233
Current PWS	MONTGOMERY COUNTY MUD 39	4,748	5,081	5,325	5,548	5,759	5,978	6,205	6,438
Current PWS	MONTGOMERY COUNTY MUD 42	819	914	1,239	1,586	1,794	1,782	1,861	1,938
Current PWS	MONTGOMERY COUNTY MUD 46	25,812	27,857	28,816	29,207	30,445	35,985	38,203	39,636
Current PWS	MONTGOMERY COUNTY MUD 47	21,753	22,040	22,252	22,340	23,043	26,880	28,608	29,484
Current PWS	MONTGOMERY COUNTY MUD 56	571	623	722	746	782	803	828	843
Current PWS	MONTGOMERY COUNTY MUD 6	6,617	6,757	6,874	6,937	7,321	7,503	8,097	8,530
Current PWS	MONTGOMERY COUNTY MUD 60	10,213	11,048	11,349	11,406	11,868	12,159	13,042	13,756
Current PWS	MONTGOMERY COUNTY MUD 67	8,828	9,290	9,369	9,456	9,854	10,814	11,353	11,794
Current PWS	MONTGOMERY COUNTY MUD 7	9,684	9,857	10,175	10,268	10,653	10,870	11,536	11,932
Current PWS	MONTGOMERY COUNTY MUD 8	4,127	4,286	4,430	4,577	4,726	4,881	5,041	5,205
Current PWS	MONTGOMERY COUNTY MUD 83	2,178	2,282	2,364	2,444	2,524	2,602	2,684	2,767
Current PWS	MONTGOMERY COUNTY MUD 84	2,439	2,583	2,700	2,809	2,916	3,021	3,131	3,242
Current PWS	MONTGOMERY COUNTY MUD 88	3,686	3,702	3,716	3,724	3,840	3,972	4,107	4,245
Current PWS	MONTGOMERY COUNTY MUD 89	5,561	5,714	5,891	6,080	6,311	6,550	6,798	7,053
Current PWS	MONTGOMERY COUNTY MUD 9	4,886	5,025	5,202	5,384	5,569	5,761	5,956	6,157
Current PWS	MONTGOMERY COUNTY MUD 94	5,779	6,252	6,476	6,706	6,938	7,180	7,429	7,682

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	MONTGOMERY COUNTY MUD 95	3,367	4,220	4,560	4,583	4,690	4,728	4,755	4,759
Current PWS	MONTGOMERY COUNTY MUD 96	945	1,094	1,182	1,253	1,318	1,376	1,437	1,498
Current PWS	MONTGOMERY COUNTY MUD 98	2,437	2,502	2,576	2,654	2,734	2,816	2,901	2,989
Current PWS	MONTGOMERY COUNTY MUD 99	1,516	1,675	1,937	2,016	2,189	2,200	2,222	2,258
Current PWS	MONTGOMERY COUNTY UD 2	1,640	1,886	1,941	1,998	2,055	2,114	2,175	2,238
Current PWS	MONTGOMERY COUNTY UD 3	2,259	2,338	2,432	2,529	2,627	2,726	2,830	2,936
Current PWS	MONTGOMERY COUNTY UD 4	3,445	3,561	3,696	3,837	3,979	4,126	4,279	4,436
Current PWS	MONTGOMERY COUNTY WCID 1	4,162	4,814	4,992	5,019	5,166	5,295	5,621	5,881
Current PWS	MONTGOMERY PLACE WATER SYSTEM	191	194	230	235	235	289	327	372
Current PWS	MONTGOMERY TRACE WATER SYSTEM	18,253	23,376	27,539	30,124	30,755	32,157	33,645	35,256
Current PWS	MOORELAND SUBDIVISION WATER SYSTEM	167	200	277	277	278	281	290	335
Current PWS	MORELAND SUBDIVISION	367	420	511	513	515	521	538	623
Current PWS	MORTON ROAD MUD	3,144	3,253	3,283	3,308	3,351	3,440	3,589	3,844
Current PWS	MOSTYN MANOR	715	834	876	888	903	908	931	954
Current PWS	MOUNT HOUSTON ROAD MUD	7,988	8,162	8,187	8,189	8,119	8,088	7,838	7,271
Current PWS	MOUNT HOUSTON SQUARE	3	3	3	4	4	4	4	4
Current PWS	MOUNT PLEASANT VILLAGE WATER SYSTEM	172	188	223	244	250	250	250	251
Current PWS	NEW CANEY MUD	17,475	21,696	24,651	27,264	29,482	30,559	31,901	33,323
Current PWS	NEW DANVILLE COMMUNITY	12	23	32	40	40	40	41	42
Current PWS	NEW ULM WSC	229	229	229	229	229	229	229	229
Current PWS	NEWPORT MUD	12,664	12,706	13,607	14,143	14,729	14,746	15,331	16,114
Current PWS	NIAGRA PUBLIC WATER SUPPLY	141	146	146	145	145	145	145	145
Current PWS	NITSCH & SON UTILITY	1,855	1,855	1,855	1,855	1,855	1,855	1,790	1,646
Current PWS	NORTH BELT FOREST SUBDIVISION WATER SYST	1,971	2,070	2,239	2,288	2,325	2,341	2,442	2,617
Current PWS	NORTH BELT UTILITY DISTRICT	2,805	2,812	3,253	3,450	3,470	3,522	3,595	3,619
Current PWS	NORTH FOREST MUD	1,244	1,245	1,264	1,264	1,265	1,321	1,344	1,361
Current PWS	NORTH GREEN MUD	4,745	4,858	5,006	5,084	5,181	5,228	5,395	5,726
Current PWS	NORTH LAKE ESTATES	66	108	185	208	228	243	258	274
Current PWS	NORTH MISSION GLEN MUD	9,304	9,330	9,410	9,520	9,712	9,899	10,101	10,612
Current PWS	NORTH PARK PUD	3,216	3,273	3,361	3,395	3,517	3,552	3,696	3,950
Current PWS	NORTH POINT VILLA	98	98	96	94	92	93	90	81
Current PWS	NORTH WOODS ESTATES	80	80	80	81	81	81	145	182
Current PWS	NORTHAMPTON MUD	6,826	7,249	7,370	7,491	7,639	7,792	8,051	8,257
Current PWS	NORTHCREST RANCH WATER SYSTEM	1,422	2,026	2,431	2,734	2,773	2,836	2,850	2,915
Current PWS	NORTHEAST HARRIS COUNTY MUD 1 EDGEWOOD V	506	508	509	509	511	536	542	545
Current PWS	NORTHEAST HARRIS COUNTY MUD 1 SHELDON RI	317	318	320	320	321	322	324	326
Current PWS	NORTHGATE CROSSING MUD 1	2,833	2,833	2,671	2,508	2,485	2,485	2,485	2,513
Current PWS	NORTHGATE CROSSING MUD 2	3,682	3,764	3,542	3,325	3,295	3,340	3,349	3,357
Current PWS	NORTHPARK WSC	162	162	208	230	249	279	303	330
Current PWS	NORTHWEST FREEWAY MUD	3,113	3,113	3,113	3,113	3,113	3,113	3,113	3,113
Current PWS	NORTHWEST HARRIS COUNTY MUD 10	7,915	8,061	8,349	8,487	9,010	9,226	9,599	9,921
Current PWS	NORTHWEST HARRIS COUNTY MUD 12	5,089	5,468	5,470	5,474	5,475	5,506	5,725	5,817
Current PWS	NORTHWEST HARRIS COUNTY MUD 15	5,724	5,754	6,195	6,417	6,888	7,031	7,282	7,740
Current PWS	NORTHWEST HARRIS COUNTY MUD 16	3,539	3,638	3,664	3,702	3,834	3,941	4,044	4,244
Current PWS	NORTHWEST HARRIS COUNTY MUD 19	3,984	4,287	4,299	4,332	4,440	4,630	4,713	5,179
Current PWS	NORTHWEST HARRIS COUNTY MUD 20	2,645	2,696	2,710	2,710	2,710	2,719	2,760	2,922

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	NORTHWEST HARRIS COUNTY MUD 21	1,199	1,268	1,285	1,309	1,321	1,376	1,462	1,603
Current PWS	NORTHWEST HARRIS COUNTY MUD 22	3,960	4,011	4,019	4,024	4,099	4,165	4,219	4,312
Current PWS	NORTHWEST HARRIS COUNTY MUD 23	4,610	4,692	4,754	4,805	4,916	5,067	5,331	5,782
Current PWS	NORTHWEST HARRIS COUNTY MUD 24	1,109	1,196	1,197	1,197	1,195	1,211	1,220	1,226
Current PWS	NORTHWEST HARRIS COUNTY MUD 28	1,803	1,846	1,755	1,663	1,663	1,702	1,785	1,951
Current PWS	NORTHWEST HARRIS COUNTY MUD 29	3,021	3,065	3,146	3,184	3,335	3,366	3,472	3,655
Current PWS	NORTHWEST HARRIS COUNTY MUD 30	3,685	3,758	3,901	3,945	4,039	4,069	4,130	4,222
Current PWS	NORTHWEST HARRIS COUNTY MUD 32	4,051	4,077	4,284	4,354	4,657	4,737	4,920	5,215
Current PWS	NORTHWEST HARRIS COUNTY MUD 36	2,122	2,122	2,135	2,145	2,153	2,170	2,212	2,267
Current PWS	NORTHWEST HARRIS COUNTY MUD 5	22,927	23,049	24,646	25,466	27,018	27,388	28,201	29,540
Current PWS	NORTHWEST HARRIS COUNTY MUD 6	1,828	1,848	1,879	1,885	1,945	1,980	2,059	2,181
Current PWS	NORTHWEST HARRIS COUNTY MUD 9	5,530	5,623	5,701	5,729	5,823	5,953	6,145	6,499
Current PWS	NORTHWEST PARK MUD	19,200	19,616	19,765	19,781	19,571	19,565	18,910	17,452
Current PWS	NORTHWEST PINES MOBILE HOME COMMUNITY	799	801	802	803	812	829	835	893
Current PWS	NORTHWOOD MUD 1	528	528	528	528	528	528	528	606
Current PWS	NORTHWOODS MOBILE HOME PARK	4	4	4	4	5	7	7	9
Current PWS	NORTHWOODS WSC	630	644	682	684	739	739	740	742
Current PWS	NOTTINGHAM COUNTRY MUD	8,334	8,622	8,605	8,588	8,781	8,978	9,366	9,917
Current PWS	O ACES MHP	12	12	12	12	12	10	10	10
Current PWS	OAK BEND ESTATES	41	41	41	40	40	38	36	34
Current PWS	OAK CREEK II	145	173	246	323	386	381	395	411
Current PWS	OAK CREST OF MANVEL	682	682	683	684	684	684	684	684
Current PWS	OAK HIGH WS	111	111	111	111	111	111	111	111
Current PWS	OAK HILL ESTATES WATER SYSTEM	573	573	704	759	817	820	879	979
Current PWS	OAK HOLLOW SUBDIVISION	1,594	1,595	1,597	1,621	1,633	1,633	1,634	1,705
Current PWS	OAK MANOR	354	354	354	368	370	384	416	450
Current PWS	OAK MANOR MUD	413	413	408	406	402	395	383	370
Current PWS	OAK MEADOWS ESTATES SUBDIVISION	18	18	17	17	17	17	17	16
Current PWS	OAK MEADOWS SUBDIVISION II AND III	17	17	21	25	34	37	41	46
Current PWS	OAK TREE SUBDIVISION	325	498	607	664	735	755	798	871
Current PWS	OAKLAND VILLAGE MOBILE HOME COMMUN	77	77	87	89	88	88	86	80
Current PWS	OAKMONT PUD	3,653	3,790	3,791	3,791	3,802	3,808	3,829	3,895
Current PWS	OAKS AT HOUSTON POINT	44	44	118	155	195	240	295	341
Current PWS	OAKS OF ROSEHILL	64	64	64	64	64	64	64	64
Current PWS	OAKS OF TRINITY SUBDIVISION	398	774	1,014	1,307	1,600	1,924	2,274	2,663
Current PWS	OAKWOOD ACRES	101	154	243	272	297	315	335	355
Current PWS	OAKWOOD VILLAGE MOBILE HOME SUBDIVISION	142	147	148	148	153	155	163	249
Current PWS	OAKWOOD WATER SYSTEM	173	221	240	253	264	273	282	291
Current PWS	OCEAN MOBILE HOME PARK	139	139	156	167	179	194	211	226
Current PWS	OLD EGYPT SUBDIVISION	2,562	2,720	2,929	3,027	3,100	3,193	3,336	3,459
Current PWS	OLD MILL LAKE	254	349	371	377	379	388	405	424
Current PWS	OLD SNAKE RIVER ESTATES EAST	171	171	171	171	171	171	171	171
Current PWS	OLD TAMINA WSC	580	699	1,485	1,915	1,900	2,025	2,284	2,471
Current PWS	OLSEN ESTATES WATER SYSTEM	113	123	126	156	187	224	268	306
Current PWS	ORANGE GROVE WATER SUPPLY	1,436	1,436	1,887	1,922	1,904	1,915	1,883	1,804
Current PWS	ORCHARD CROSSING SUBDIVISION	193	193	193	193	193	193	193	193

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	OYSTER CREEK ESTATES	4	4	4	4	4	4	4	3
Current PWS	P & B WATER SYSTEM	263	263	299	299	293	293	284	264
Current PWS	PADOK TIMBERS SUBDIVISION WS	51	51	51	51	51	51	51	52
Current PWS	PALM CREST	124	124	123	123	122	119	115	110
Current PWS	PALMER PLANTATION MUD 1	1,882	1,893	1,893	1,893	1,910	1,989	1,992	2,029
Current PWS	PALMER PLANTATION MUD 2	2,714	2,715	2,720	2,720	2,721	2,722	2,722	2,734
Current PWS	PALMETTO SUBDIVISION	184	184	196	198	205	205	205	205
Current PWS	PALOMA ACRES SUBDIVISION	159	159	157	156	154	150	144	139
Current PWS	PARADISE COVE WATER SYSTEM	246	247	314	330	343	353	363	373
Current PWS	PARK FOREST WATER SYSTEM	214	215	215	218	235	258	288	354
Current PWS	PARKLAND ESTATES	433	432	432	432	423	422	407	372
Current PWS	PARKWAY UTILITY DISTRICT	6,534	6,679	6,685	6,692	6,643	6,645	6,439	5,970
Current PWS	PATTISON WSC	1,492	1,505	1,583	1,624	1,666	1,702	1,746	1,992
Current PWS	PATTON VILLAGE EAST WATER SYSTEM	665	743	1,344	1,768	1,820	1,869	2,004	2,100
Current PWS	PATTON VILLAGE WEST WATER SYSTEM	656	793	993	1,276	1,308	1,341	1,430	1,493
Current PWS	PEACH CREEK COLONY	176	177	209	271	279	287	306	320
Current PWS	PEACH CREEK OAKS SUBDIVISION	199	201	243	323	385	381	395	412
Current PWS	PEACH CREEK PLANTATION WATER SYSTEM	765	923	1,177	1,549	2,102	2,254	2,606	2,927
Current PWS	PEAKES PARK	7	15	20	26	29	29	29	34
Current PWS	PEARLAND ACRES MHP	264	264	302	304	304	304	306	311
Current PWS	PECAN GROVE MUD	12,692	13,786	14,451	14,712	14,843	15,034	15,252	15,328
Current PWS	PEEK ROAD MOBILE HOME PARK	29	29	29	29	29	29	29	29
Current PWS	PEEK ROAD UTILITIES	472	568	568	568	571	572	578	593
Current PWS	PETERSON PLACE SUBDIVISION WATER SYSTEM	113	116	120	122	131	164	166	167
Current PWS	PIN OAK MOBILE HOME PARK	292	297	308	314	308	310	299	277
Current PWS	PINE COLONY MOBILE HOME PARK	429	429	429	429	429	429	429	429
Current PWS	PINE GROVE ESTATES WATER SYSTEM	73	73	73	73	73	73	73	73
Current PWS	PINE KNOB SUBDIVISION	6	6	6	6	14	14	14	14
Current PWS	PINE LAKE SUBDIVISION NORTH WSC	171	220	265	265	267	276	285	295
Current PWS	PINE OAK FOREST WATER	628	694	709	709	711	716	723	737
Current PWS	PINE TRAILS UTILITY	7,155	7,494	7,663	7,754	7,632	7,647	7,394	6,834
Current PWS	PINE VILLAGE PUD	2,876	2,989	3,005	3,064	3,010	3,018	2,927	2,719
Current PWS	PINE VISTA MOBILE HOME VILLAGE	166	205	213	216	217	222	227	232
Current PWS	PINEDALE MOBILE HOME COMMUNITY	194	195	196	200	203	206	209	211
Current PWS	PINEHURST DECKER PRAIRIE WSC	1,514	1,900	2,255	2,696	2,920	3,065	3,227	3,395
Current PWS	PINEWOOD PLACE MOBILE HOME COMMUNITY	931	962	989	1,012	1,052	1,057	1,068	1,079
Current PWS	PINEY POINT SUBDIVISION	134	142	204	281	281	288	322	336
Current PWS	PIONEER TRAILS SUBDIVISION	815	849	942	959	1,017	1,095	1,121	1,151
Current PWS	PITCAIRN WSC	260	262	263	281	294	356	406	456
Current PWS	PLANTATION MUD	3,900	4,007	4,215	4,269	4,333	4,437	4,497	4,526
Current PWS	PLANTATION ON COTTON BAYOU	1,489	1,561	2,057	2,347	2,665	3,028	3,463	3,838
Current PWS	PLEASANT FOREST SUBDIVISION	71	87	96	102	107	112	116	120
Current PWS	PLEASANT MEADOWS SUBDIVISION	25	25	25	25	91	93	95	111
Current PWS	PLEASANTDALE SUBDIVISION	42	43	66	86	99	102	109	126
Current PWS	POINT AQUARIUS MUD	2,725	3,339	3,829	4,157	4,320	4,489	4,663	4,840
Current PWS	PONDEROSA FOREST UTILITY DISTRICT	6,123	6,129	6,149	6,178	6,303	6,471	6,522	6,942

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	PORTER SUD	29,274	35,914	39,551	42,109	44,098	46,225	48,306	50,554
Current PWS	PORTER TERRACE	494	523	544	565	587	609	632	655
Current PWS	POSTWOOD MUD	2,849	2,864	2,881	2,893	2,939	2,928	2,985	3,134
Current PWS	POWDER MILL ESTATES	208	214	214	214	214	214	215	215
Current PWS	PRAIRIE VIEW A&M UNIVERSITY	6,049	6,145	6,189	6,242	6,302	6,378	6,523	6,735
Current PWS	PRESTONWOOD FOREST UTILITY DISTRICT	3,763	3,833	3,859	3,880	3,974	4,075	4,212	4,343
Current PWS	PROVENCE WATER SYSTEM	163	163	163	163	163	163	163	163
Current PWS	PYSSENS LIVE OAK ESTATES SUBDIVISION	70	70	70	70	70	70	70	70
Current PWS	QUAIL HOLLOW MOBILE HOME PARK	58	58	62	63	63	64	64	64
Current PWS	QUAIL MEADOWS SUBDIVISION	146	157	158	164	171	170	167	163
Current PWS	QUAIL VALLEY UTILITY DISTRICT	11,284	11,730	11,885	12,637	13,029	13,415	13,838	14,858
Current PWS	QUAILWOOD WATER SYSTEM	62	62	64	64	71	71	71	90
Current PWS	R&K WEIMAN MHP	177	190	192	193	222	232	240	266
Current PWS	RAIN RIVER ESTATES	104	104	104	104	104	104	104	104
Current PWS	RALSTON ACRES WATER SUPPLY CORPORATION	530	867	867	867	863	863	846	809
Current PWS	RAMBLEWOOD UTILITY & WSC	173	173	189	202	203	203	229	288
Current PWS	RANCH CREST SUBDIVISION	1,150	1,342	1,383	1,385	1,407	1,439	1,473	1,507
Current PWS	RANCHO SAN VICENTE	13	13	13	13	13	13	13	13
Current PWS	RANKIN ROAD WEST MUD	2,383	2,423	2,460	2,506	2,563	2,655	2,707	2,864
Current PWS	RAYFORD ROAD MUD	8,450	8,652	8,879	9,031	9,298	9,572	9,948	10,193
Current PWS	RAYWOOD WATER SYSTEM	80	80	80	80	80	83	83	83
Current PWS	RAYWOOD WSC	709	709	709	729	786	871	871	871
Current PWS	RED OAK RANCH WATER SYSTEM	643	943	1,097	1,523	1,564	1,616	1,753	1,850
Current PWS	RED OAK TERRACE	77	77	77	77	77	77	77	77
Current PWS	REDWOOD ESTATES MOBILE HOME PARK	286	308	308	308	305	305	290	257
Current PWS	REED ESTATES WATER SYSTEM	131	157	201	214	208	209	200	180
Current PWS	REID ROAD MUD 1	6,413	6,489	6,567	6,597	6,716	6,890	7,159	7,648
Current PWS	REID ROAD MUD 2	3,495	3,595	3,618	3,627	3,683	3,771	3,912	4,145
Current PWS	REMINGTON MUD 1	13,873	14,152	14,242	14,343	14,566	14,904	15,579	16,562
Current PWS	REMINGTON PLACE	242	345	415	521	626	739	864	1,004
Current PWS	RENES WATER SYSTEM	90	90	90	90	89	89	86	79
Current PWS	RENN ROAD MUD	4,608	4,689	4,769	4,817	4,913	5,013	5,169	5,460
Current PWS	RESERVOIR ACRES SUBDIVISION	1,269	1,371	1,604	1,711	1,963	2,014	2,051	2,174
Current PWS	RICE UNIVERSITY	2,770	2,798	2,837	2,854	2,911	2,911	2,765	2,765
Current PWS	RICEWOOD MUD	5,474	5,632	5,704	5,748	5,854	5,983	6,236	6,664
Current PWS	RICHEY ROAD MUD	84	84	84	84	84	84	134	134
Current PWS	RILEY ROAD ESTATES WS	1	1	1	1	1	1	2	2
Current PWS	RIMWICK FOREST	182	238	296	371	380	400	422	445
Current PWS	RIO VILLA WSC	53	310	310	310	310	310	313	313
Current PWS	RIO VISTA SUBDIVISION	562	627	1,176	1,623	1,985	1,965	2,045	2,137
Current PWS	RIVER CLUB WATER	325	392	438	469	495	515	536	557
Current PWS	RIVER OAKS	39	38	38	37	35	34	32	30
Current PWS	RIVER OAKS SUBDIVISION	143	175	196	222	251	284	323	357
Current PWS	RIVER PLANTATION MUD	2,636	3,365	3,924	4,923	4,849	4,852	5,126	5,353
Current PWS	RIVER RANCH	190	199	199	199	199	199	204	204
Current PWS	RIVER RUN WATER SYSTEM	14	14	13	12	12	11	10	10

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	RIVERBEND RV PARK AND RESORT	17	17	18	18	50	57	64	70
Current PWS	RIVERBOAT BEND TRAILER PARK	133	261	306	373	438	522	604	694
Current PWS	RIVERSIDE ESTATES	37	37	37	37	37	36	35	34
Current PWS	RIVERTON RANCH	31	31	31	31	31	31	31	31
Current PWS	RIVERWALK SUBDIVISION	2,459	2,991	3,500	3,778	4,013	4,183	4,361	4,533
Current PWS	RIVERWOOD ESTATES	336	341	396	501	527	563	614	666
Current PWS	RIVERWOOD FOREST	846	846	846	854	961	1,330	1,492	2,484
Current PWS	RIVERWOOD SUBDIVISION WATER SYSTEM	157	157	155	151	147	142	135	127
Current PWS	ROBIN COVE WATER SUBDIVISION	38	38	38	38	39	39	39	39
Current PWS	ROCKY CREEK ESTATES	13	13	9	6	6	6	6	6
Current PWS	ROGERS ROAD WATER SYSTEM	1,250	1,467	1,530	1,650	1,770	1,858	1,950	2,045
Current PWS	ROLLAN HEIGHTS SUBDIVISION	24	24	24	24	24	24	24	24
Current PWS	ROLLING CREEK UTILITY DISTRICT	4,287	4,289	4,290	4,295	4,311	4,315	4,324	4,372
Current PWS	ROLLING FOREST SUBDIVISION	93	119	119	139	145	148	148	148
Current PWS	ROLLING FORK PUD	2,372	2,436	2,522	2,554	2,524	2,528	2,441	2,249
Current PWS	ROLLING HILLS COLONY WATER SYSTEM	460	460	460	460	460	460	460	460
Current PWS	ROLLING OAKS	287	305	317	318	464	596	596	613
Current PWS	ROMAN FOREST CONSOLIDATED MUD	1,607	2,178	2,763	3,564	3,940	3,958	4,158	4,331
Current PWS	ROMAN FOREST PUD 3	136	165	745	1,159	1,415	1,424	1,513	1,604
Current PWS	ROMAN FOREST PUD 4	87	381	722	1,175	1,532	1,530	1,610	1,704
Current PWS	ROSEMEADOWS III	712	779	1,150	1,274	1,835	1,841	1,895	1,898
Current PWS	ROSEWOOD MOBILE HOME PARK	57	57	57	57	57	57	55	51
Current PWS	ROSHARON ROAD ESTATES SUBDIVISION	132	132	131	131	131	129	125	121
Current PWS	ROSHARON TOWNSHIP	231	280	279	279	277	272	267	260
Current PWS	ROVING MEADOWS WATER SYSTEM	92	92	92	92	92	92	92	92
Current PWS	ROYAL COACH MOBILE HOME VILLAGE	767	767	780	780	828	837	861	901
Current PWS	ROYAL LAKES ESTATES	682	880	1,016	1,477	1,565	1,758	1,965	2,171
Current PWS	ROYAL RIDGE	42	41	41	39	38	36	34	32
Current PWS	ROYALWOOD MUD	1,919	1,923	2,039	2,241	2,194	2,205	2,147	1,982
Current PWS	RUSTIC OAKS SUBDIVISION	29	65	66	68	74	78	82	87
Current PWS	RYAN LONG SUBDIVISION 2 WATER SYSTEM	21	21	25	25	26	26	26	26
Current PWS	SADDLE & SURREY ACRES WATER SYSTEM	82	82	83	83	87	90	93	97
Current PWS	SAGEMEADOW UTILITY DISTRICT	7,231	7,319	7,270	7,221	7,321	7,436	7,724	8,034
Current PWS	SAKO PROPERTIES	34	37	101	112	124	125	139	142
Current PWS	SAM HOUSTON LAKE ESTATES 1	46	46	46	46	46	46	46	46
Current PWS	SAN BERNARD RIVER ESTATES	28	28	28	28	27	26	24	22
Current PWS	SAN JO UTILITIES	20	22	22	23	23	24	24	25
Current PWS	SAN LEON MUD	6,246	6,470	6,643	6,702	6,765	6,827	6,901	6,974
Current PWS	SANDY MEADOW ESTATES SUBDIVISION	103	103	102	102	101	99	96	92
Current PWS	SANDY RIDGE SUBDIVISION	14	14	14	14	14	30	31	45
Current PWS	SAVANNAH PLANTATION SUBDIVISION	241	241	238	238	235	231	225	216
Current PWS	SEDONA LAKES MUD 1	1,820	1,916	2,130	2,219	2,232	2,270	2,290	2,376
Current PWS	SELLERS ESTATES MOBILE HOME COMM	115	122	123	129	130	130	126	117
Current PWS	SENDERA LAKE ESTATES	944	1,160	1,398	1,553	1,682	1,783	1,889	1,998
Current PWS	SENDERA RANCH	1,342	2,203	3,040	3,187	3,196	4,181	4,909	5,747
Current PWS	SEQUOIA IMPROVEMENT DISTRICT	895	894	895	895	883	884	852	782

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	SERENITY WOODS SUBDIVISION	258	335	360	384	392	406	422	438
Current PWS	SETTLERS CROSSING	142	235	254	254	254	257	265	276
Current PWS	SETTLERS CROSSING WATER SYSTEM	57	57	57	57	57	57	57	57
Current PWS	SETTLERS CROSSING WATER SYSTEM 2	30	30	30	30	30	30	30	30
Current PWS	SETTLERS ESTATES SEC II	26	26	26	26	26	26	26	26
Current PWS	SETTLERS MEADOWS WATER SYSTEM	33	33	33	33	33	33	33	33
Current PWS	SHADOW BAY SUBDIVISION	484	560	562	579	594	605	616	627
Current PWS	SHADOW GROVE ESTATES	116	122	340	356	366	366	366	367
Current PWS	SHADY ACRES	34	48	52	57	61	64	67	71
Current PWS	SHADY BROOK ACRES	118	180	202	212	222	231	241	251
Current PWS	SHADY CREEK SECTION 3 WATER SYSTEM	46	46	46	44	42	40	38	35
Current PWS	SHADY OAKS ESTATES	415	487	537	627	672	688	700	760
Current PWS	SHADY OAKS MHP	4	4	4	4	4	4	4	4
Current PWS	SHARONDALE SUBDIVISION	84	99	99	99	99	98	96	94
Current PWS	SHASLA PUD	2,149	2,149	2,199	2,199	2,412	2,412	2,448	2,474
Current PWS	SHAW ACRES	518	518	518	525	554	571	620	662
Current PWS	SHELDON ROAD MUD	1,911	1,936	1,951	1,953	1,965	1,971	2,017	2,040
Current PWS	SIENNA PLANTATION MANAGEMENT DISTRICT	1,702	2,020	2,262	2,297	2,430	2,447	2,447	2,452
Current PWS	SIENNA PLANTATION MUD 10	8,151	8,194	8,651	8,905	9,041	9,356	9,475	9,530
Current PWS	SIENNA PLANTATION MUD 12	5,522	6,134	6,510	6,646	6,861	7,235	7,531	7,636
Current PWS	SIENNA PLANTATION MUD 2	6,473	6,641	6,798	6,848	6,859	6,897	6,965	6,978
Current PWS	SIENNA PLANTATION MUD 3	8,231	8,348	8,594	8,865	9,006	9,138	9,248	9,263
Current PWS	SIENNA PLANTATION MUD 4	7,729	7,731	7,947	7,961	8,156	8,404	8,491	8,574
Current PWS	SIENNA PLANTATION THE WOODS	1,334	1,334	1,334	1,334	1,343	1,356	1,362	1,371
Current PWS	SILVERWOODS SUBDIVISION	56	58	59	59	61	64	83	100
Current PWS	SIX LAKES SUBDIVISION	100	100	100	100	100	100	100	100
Current PWS	SJOLANDER ROAD MOBILE HOME PARK	129	129	129	129	82	46	61	152
Current PWS	SK MOBILE HOME PARK	0	0	0	0	0	0	0	0
Current PWS	SKY LAKES WSC	349	349	349	349	349	349	349	349
Current PWS	SNUG HARBOR SUBDIVISION	46	46	45	44	42	39	35	31
Current PWS	SONOMA RIDGE-MCCALL SOUND	179	229	257	284	306	323	341	359
Current PWS	SOUTH CLEVELAND WSC	7,602	11,706	15,701	19,054	23,080	27,341	32,108	37,389
Current PWS	SOUTH DAYTON OAKS	12	20	59	63	68	68	79	92
Current PWS	SOUTH MEADOWS EAST	329	322	318	307	295	280	263	244
Current PWS	SOUTH MEADOWS WEST	263	258	255	246	237	225	212	197
Current PWS	SOUTH TAYLOR LAKE VILLAGE WSC	130	131	133	133	133	132	173	189
Current PWS	SOUTHAMPTON SUBDIVISION	382	523	581	824	829	833	925	1,030
Current PWS	SOUTHERN CROSSING WATER SYSTEM PHASE 2	555	778	858	994	1,163	1,342	1,542	1,765
Current PWS	SOUTHERN MONTGOMERY COUNTY MUD	8,608	9,053	9,113	9,149	9,439	9,650	10,101	10,532
Current PWS	SOUTHERN OAKS WATER SYSTEM	56	98	106	134	156	180	206	235
Current PWS	SOUTHERN WATER	4,864	4,892	5,148	5,283	5,172	5,158	4,989	4,616
Current PWS	SOUTHWEST ENVIRONMENTAL RESOURCES	307	626	765	827	881	912	929	934
Current PWS	SOUTHWEST HARRIS COUNTY MUD 1	1,696	1,751	1,751	1,758	1,750	1,748	1,705	1,598
Current PWS	SOUTHWOOD ESTATES	347	369	369	371	372	372	371	369
Current PWS	SPANISH COVE PUD	391	605	605	605	781	781	781	781
Current PWS	SPENCER ROAD PUD	4,286	4,425	4,559	4,605	4,821	5,012	5,279	5,862

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	SPLENDORA WOODS	429	429	429	429	429	429	429	429
Current PWS	SPRING CREEK FOREST	127	127	119	112	111	111	111	151
Current PWS	SPRING CREEK FOREST PUD	2,437	2,443	2,451	2,460	2,481	2,492	2,508	2,711
Current PWS	SPRING CREEK UTILITY DISTRICT	10,112	10,432	10,792	11,128	11,468	11,789	12,225	12,662
Current PWS	SPRING CREEK VALLEY ESTATES	116	126	126	126	126	126	128	128
Current PWS	SPRING FOREST SUBDIVISION	841	873	946	958	1,066	1,248	1,298	1,550
Current PWS	SPRING MEADOWS MUD	4,516	5,492	5,528	5,528	5,528	5,528	5,543	5,542
Current PWS	SPRING OAKS SUBDIVISION	104	104	104	104	104	104	104	104
Current PWS	SPRING PRESERVE WATER SYSTEM	4	4	4	4	4	4	4	4
Current PWS	SPRING WEST MUD	2,611	2,709	2,764	2,865	3,211	3,309	3,475	3,701
Current PWS	SPRINGMONT SUBDIVISION	426	466	472	479	499	500	502	505
Current PWS	SRALLA MOBILE HOME PARK	8	9	11	11	12	12	13	13
Current PWS	STABLE GATES	601	610	840	960	1,037	1,062	1,105	1,177
Current PWS	STANLEY LAKE MUD	3,833	3,970	4,093	4,217	4,326	4,476	4,621	4,771
Current PWS	STERLING ESTATES	33	33	33	33	33	33	32	31
Current PWS	STETTNER ADDITION	99	99	99	99	99	99	96	88
Current PWS	STILLWATER ESTATES	229	284	315	428	437	473	494	522
Current PWS	STONE HEDGE ESTATES	13	17	36	54	72	71	74	77
Current PWS	STONECREST RANCH	224	599	833	939	962	962	987	1,011
Current PWS	STONERIDGE LAKE SUBDIVISION	62	62	62	61	60	59	57	55
Current PWS	STRAIGHTWAY TRAINING CENTER	3	3	3	3	3	3	3	3
Current PWS	SUBURBAN MOBILE HOME PARK 2	7	7	7	7	10	11	11	15
Current PWS	SUGARBERRY PLACE	1,245	1,245	1,250	1,250	1,297	1,307	1,338	1,387
Current PWS	SUMMER LAKE RANCH	1,115	1,115	1,602	1,807	1,815	1,863	1,957	2,114
Current PWS	SUN RANCH WATER SYSTEM	73	73	73	73	73	481	517	566
Current PWS	SUNBELT FWSD HEATHER GLEN SUBDIVISION	2,855	2,866	2,878	2,885	2,893	2,879	2,785	2,575
Current PWS	SUNBELT FWSD HIGH MEADOWS SUBDIVISION	9,150	9,193	9,371	9,465	9,339	9,372	9,069	8,395
Current PWS	SUNBELT FWSD NORTHLINE TERRACE	3,400	3,484	3,651	3,727	3,665	3,670	3,550	3,289
Current PWS	SUNBELT FWSD OAKGLEN SUBDIVISION	669	676	676	676	668	668	645	595
Current PWS	SUNBELT FWSD OAKWILDE SUBDIVISION	6,896	7,277	7,330	7,529	7,451	7,460	7,226	6,705
Current PWS	SUNBELT FWSD WOODLAND OAKS SUBDIVISION	4,152	4,208	4,208	4,209	4,177	4,160	4,031	3,737
Current PWS	SUNCREEK ESTATES SECTION 1	363	363	362	362	358	351	340	328
Current PWS	SUNCREEK RANCH SECTION 2	182	182	181	179	177	173	167	161
Current PWS	SUNDOWN MOBILE HOME PARK	85	85	85	85	84	84	82	75
Current PWS	SUNRISE RANCH	27	33	36	38	38	41	43	45
Current PWS	SUNSET MOBILE HOME PARK 1	12	13	18	18	18	18	17	15
Current PWS	SUNSET MOBILE HOME PARK 2	24	24	24	24	23	23	22	20
Current PWS	SWEA GARDENS ESTATES	52	55	55	55	54	54	53	49
Current PWS	SWEETGUM FOREST	156	156	156	156	156	188	226	261
Current PWS	TALL CEDARS MOBILE HOME SUBDIVISION	58	58	58	58	61	61	61	61
Current PWS	TALL PINES UTILITY	219	219	219	219	219	219	219	220
Current PWS	TALLOWS MOBILE HOME PARK	23	24	34	34	33	33	32	29
Current PWS	TARA PARK WATER SYSTEM	209	209	209	209	209	209	209	209
Current PWS	TARKINGTON SUD	5,514	5,623	5,781	5,914	6,096	6,241	6,402	6,496
Current PWS	TASFIELD	212	234	234	234	232	232	224	208
Current PWS	TATTOR ROAD MUD	4,834	4,966	5,041	5,042	5,208	5,159	5,188	5,378

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	TBCD WEST TREATMENT PLANT	3,289	3,683	4,026	4,389	4,771	5,244	5,663	5,970
Current PWS	TBCD WINNIE STOWELL	4,928	5,349	5,752	5,889	6,160	6,482	7,022	7,194
Current PWS	TDCJ ID DARRINGTON UNIT	1,745	1,745	1,715	1,715	1,697	1,669	1,625	1,573
Current PWS	TDCJ JESTER 1 UNIT	329	398	412	484	484	587	600	601
Current PWS	TDCJ RAMSEY AREA	1,809	1,809	1,791	1,773	1,749	1,707	1,649	1,583
Current PWS	TDCJ SCOTT UNIT	982	965	950	931	910	887	851	813
Current PWS	TEJAS LAKES SUBDIVISION	182	436	673	677	680	683	685	712
Current PWS	TELGE MANOR MHP	119	119	122	128	137	140	144	152
Current PWS	TELGE TERRACE MOBILE HOME SUBDIVISION	62	62	62	62	62	62	62	62
Current PWS	TEPATITLAN MOBILE HOME PARK	9	9	9	13	12	12	11	10
Current PWS	TERRANOVA WEST MUD	2,491	2,491	2,491	2,496	2,541	2,581	2,627	2,747
Current PWS	TEXABA SUBDIVISION	475	596	765	806	888	933	948	986
Current PWS	TEXAS LANDING UTILITIES DEERWOOD	122	122	182	227	266	266	266	266
Current PWS	TEXAS LANDING UTILITIES GOODE CITY	178	298	318	318	318	318	326	326
Current PWS	TEXAS NATIONAL MUD	591	750	885	928	969	1,009	1,046	1,088
Current PWS	THE COMMONS WATER SUPPLY INC	2,963	2,963	2,963	2,963	2,963	2,963	2,963	2,963
Current PWS	THE OAKS	22	23	25	27	29	31	33	34
Current PWS	THE RANCH SUBDIVISION	303	303	443	480	495	496	536	582
Current PWS	THE WOODLANDS METRO CENTER MUD	1,730	2,115	2,133	2,139	2,199	2,272	2,682	2,875
Current PWS	THE WOODLANDS MUD 1	6,864	7,086	7,362	7,402	7,660	7,900	8,571	9,109
Current PWS	THOUSAND OAKS	1,053	1,161	1,434	1,680	1,772	1,844	1,918	1,997
Current PWS	THUNDERBIRD UTILITY DISTRICT 1	3,202	3,228	3,448	3,487	3,565	3,762	3,877	4,296
Current PWS	THUNDERBIRD UTILITY DISTRICT SYSTEM 2	1,435	1,526	1,629	1,656	1,680	1,698	1,715	1,734
Current PWS	TIDWELL FOREST NEW SUBDIVISION	688	750	750	756	751	751	729	680
Current PWS	TIFFANY WATER	65	69	75	79	87	93	99	99
Current PWS	TIMBER CREEK ESTATES	52	52	49	46	46	46	46	62
Current PWS	TIMBER LANE UTILITY DISTRICT	17,768	17,999	18,434	18,623	19,085	19,235	19,803	20,705
Current PWS	TIMBER LINE ESTATES	353	488	524	888	936	936	1,049	1,170
Current PWS	TIMBER RIDGE SECTION 2	167	168	217	244	268	297	331	361
Current PWS	TIMBER SWITCH WATER PLANT	77	78	155	155	155	155	163	177
Current PWS	TIMBERCREST VILLAGE	1,271	1,311	1,311	1,311	1,347	1,353	1,380	1,491
Current PWS	TIMBERDALE MOBILE HOME SUBDIVISION	32	32	32	32	32	32	32	32
Current PWS	TIMBERLAKE IMPROVEMENT DISTRICT	2,029	2,045	2,068	2,084	2,098	2,104	2,109	2,111
Current PWS	TIMBERLAND ESTATES	3,548	4,213	4,569	4,730	4,891	5,056	5,231	5,398
Current PWS	TIMBERLOCH ESTATES	704	832	850	883	910	931	954	977
Current PWS	TIMBERWILDE MH SUBDIVISION	481	489	530	539	551	591	824	824
Current PWS	TOWER GLEN ESTATES	346	480	526	568	660	702	739	777
Current PWS	TOWER OAK BEND WSC	245	251	257	261	294	307	321	321
Current PWS	TOWER TERRACE	1,149	1,323	1,525	1,747	1,984	2,247	2,538	3,082
Current PWS	TOWER WOODS	40	40	49	49	70	70	70	70
Current PWS	TOWERING OAKS AND ROSEWOOD HILLS SUBDIVI	1,535	1,672	1,814	1,907	1,985	2,043	2,105	2,169
Current PWS	TOWN OF CUT AND SHOOT	10,488	13,013	15,408	17,596	19,538	19,939	20,755	21,614
Current PWS	TOWN OF HOLIDAY LAKES	1,008	1,008	1,004	993	979	954	921	880
Current PWS	TOWN OF QUINTANA	26	26	26	26	26	26	26	26
Current PWS	TOWN OF WOODLOCH	540	695	935	987	1,032	1,079	1,128	1,178
Current PWS	TRAIL OF THE LAKES MUD	10,402	10,547	10,861	11,018	11,373	11,457	11,819	12,492

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	TRAILWOOD SUBDIVISION	303	303	303	303	303	303	303	375
Current PWS	TREASURE ISLAND MUD	99	99	99	96	93	89	85	79
Current PWS	TREICHEL WOODS ESTATES	91	91	91	91	91	91	91	91
Current PWS	TRINITY AT WINDFERN MOBILE HOME PARK	95	95	106	115	113	112	109	101
Current PWS	TRINITY COVE SUBDIVISION	32	52	75	100	127	156	189	250
Current PWS	TRINITY ROYAL COACH TRAILS MOBILE HOME	123	123	123	123	122	122	118	109
Current PWS	TRINITY SPRING OAKS MOBILE HOME PARK	93	93	114	126	136	136	136	166
Current PWS	TURTLE COVE	59	59	58	56	54	51	48	45
Current PWS	TURTLE CREEK	484	608	705	766	816	854	894	935
Current PWS	TURTLE CREEK VILLAGE	27	27	27	28	28	28	28	28
Current PWS	TWIN LAKES CLUB	67	67	66	66	66	66	64	61
Current PWS	TWIN OAKS MHP HARRIS	100	225	227	229	229	229	236	249
Current PWS	URBAN ACRES SUBDIVISION	6	6	6	6	6	6	6	6
Current PWS	VACEK COUNTRY MEADOWS	58	58	58	58	58	58	106	142
Current PWS	VALLEY RANCH MUD 1	3,322	3,849	4,145	4,280	4,413	4,554	4,702	4,850
Current PWS	VAN MANOR MOBILE HOME PARK	15	16	24	24	24	24	24	23
Current PWS	VARNER CREEK UTILITY DISTRICT	2,363	2,363	2,307	2,307	2,292	2,231	2,148	2,056
Current PWS	VILLA UTILITIES	53	53	53	53	53	53	53	53
Current PWS	VILLAGE ESTATES MOBILE HOME PARK	1	1	1	1	1	1	1	1
Current PWS	VILLAGE OF NEW KENTUCKY	334	334	334	334	334	334	334	334
Current PWS	VILLAGE OF SURFSIDE BEACH	630	630	617	589	560	526	492	455
Current PWS	VILLAGE TRACE WATER SYSTEM	159	159	162	162	163	163	163	163
Current PWS	VILLAS OF WILLOWBROOK	174	180	180	180	183	183	183	183
Current PWS	VISTA UTILITIES	32	73	79	112	148	190	239	281
Current PWS	VISTA VERDE WATER SYSTEMS	111	117	148	152	153	154	157	160
Current PWS	WAGON WHEEL ESTATES WATER SYSTEM	448	470	492	554	567	569	560	553
Current PWS	WALLER COUNTY ROAD IMPROVEMENT DIST 1	1,124	1,837	3,324	5,958	7,045	7,808	7,842	8,044
Current PWS	WALNUT COVE WSC	1,118	1,119	1,270	1,306	1,334	1,352	1,370	1,393
Current PWS	WALNUT CREEK SUBDIVISION	523	523	793	958	1,032	1,101	1,216	1,349
Current PWS	WALNUT SPRINGS	670	915	953	1,025	1,084	1,129	1,177	1,225
Current PWS	WALRAVEN SUBDIVISION	347	628	636	644	644	644	673	721
Current PWS	WASHINGTON COUNTY RAILROAD	768	861	962	1,022	1,057	1,090	1,125	1,160
Current PWS	WATERSTONE ESTATES	156	156	156	156	156	157	157	158
Current PWS	WAYNEWOOD PLACE CIVIC ASSOCIATION	160	160	160	160	163	163	167	170
Current PWS	WEBB WAY SUBDIVISION	2	3	6	10	13	15	20	30
Current PWS	WELLBORN ACRES	10	10	10	17	17	17	17	18
Current PWS	WEST END WSC	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128
Current PWS	WEST HARDIN WSC	448	448	448	448	448	448	448	448
Current PWS	WEST HARRIS COUNTY MUD 1	1,518	1,556	1,556	1,556	1,539	1,531	1,480	1,369
Current PWS	WEST HARRIS COUNTY MUD 10	6,666	6,799	6,940	7,032	7,357	7,550	7,854	8,360
Current PWS	WEST HARRIS COUNTY MUD 11	6,503	6,606	6,764	6,857	7,033	7,194	7,410	7,749
Current PWS	WEST HARRIS COUNTY MUD 14	2,811	2,881	2,906	2,934	3,019	3,094	3,192	3,348
Current PWS	WEST HARRIS COUNTY MUD 15	919	964	997	1,023	1,120	1,213	1,319	1,490
Current PWS	WEST HARRIS COUNTY MUD 17	2,077	2,107	2,116	2,122	2,151	2,178	2,250	2,377
Current PWS	WEST HARRIS COUNTY MUD 2 CHASE	5,005	5,057	6,040	6,457	7,082	7,325	7,683	8,188
Current PWS	WEST HARRIS COUNTY MUD 21	1,120	1,121	1,162	1,174	1,180	1,178	1,170	1,169

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	WEST HARRIS COUNTY MUD 4	1,847	1,869	1,878	1,886	1,970	2,077	2,190	2,374
Current PWS	WEST HARRIS COUNTY MUD 5	1,709	1,812	1,848	1,882	1,998	2,098	2,174	2,257
Current PWS	WEST HARRIS COUNTY MUD 6	2,816	2,871	2,868	2,855	2,866	2,896	2,968	3,090
Current PWS	WEST HARRIS COUNTY MUD 7	4,749	4,797	4,800	4,816	4,890	4,968	5,125	5,579
Current PWS	WEST HARRIS COUNTY MUD 9	4,212	4,225	4,253	4,292	4,396	4,481	4,644	4,919
Current PWS	WEST HOUSTON MOBILE HOME COMMUNITY	399	427	431	435	500	522	540	598
Current PWS	WEST MEMORIAL MUD	3,930	3,962	4,061	4,108	4,366	4,435	4,611	4,916
Current PWS	WEST MONTGOMERY UTILITY	2,559	2,623	2,810	2,888	2,844	2,828	2,738	2,545
Current PWS	WEST PARK MUD	2,348	2,398	2,432	2,450	2,561	2,689	2,815	2,978
Current PWS	WESTADOR MUD	2,847	2,891	2,906	2,917	2,979	3,084	3,186	3,322
Current PWS	WESTERN HILLS CRYSTAL SPRINGS WATER	311	332	353	364	390	414	423	432
Current PWS	WESTERN HOMES SUBDIVISION	775	775	890	890	855	855	801	678
Current PWS	WESTERN MOBILE HOME PARK	22	22	22	22	20	20	19	14
Current PWS	WESTERN PINES MHP	974	979	984	987	1,012	1,056	1,089	1,146
Current PWS	WESTERN TRAILS SUBDIVISION	22	22	29	36	68	94	112	131
Current PWS	WESTFIELD GARDEN MOBILE HOME PARK	622	627	627	627	621	621	599	554
Current PWS	WESTFIELD MEADOWS	9	9	9	9	9	9	9	8
Current PWS	WESTGATE SUBDIVISION	180	206	206	207	249	329	357	357
Current PWS	WESTLAKE MUD 1	4,075	4,170	4,208	4,252	4,314	4,382	4,562	4,861
Current PWS	WESTMONT MOBILE HOME COMMUNITY	143	143	143	148	152	154	157	159
Current PWS	WESTON MUD	5,737	5,817	5,850	5,883	6,011	6,165	6,352	6,779
Current PWS	WESTWOOD NORTH WSC	3,408	3,599	4,099	4,162	4,162	4,900	5,431	6,047
Current PWS	WESTWOOD SUBDIVISION - BRAZORIA	18	18	18	18	18	37	38	56
Current PWS	WESTWOOD SUBDIVISION - WALLER	2	2	2	2	2	2	2	2
Current PWS	WEYBRIDGE SUBDIVISION WATER SYSTEM	93	93	92	89	87	83	79	75
Current PWS	WHARTON COUNTY WCID 1 LOUISE	710	710	710	710	710	710	710	710
Current PWS	WHARTON COUNTY WCID 2	1,604	1,604	1,604	1,615	1,634	1,635	1,635	1,635
Current PWS	WHEAT MEADOW MOBILE HOME PARK SECTION I	10	10	10	10	10	10	9	9
Current PWS	WHEAT MEADOW MOBILE HOME PARK SECTION II	3	3	3	3	3	3	3	3
Current PWS	WHISPER MEADOWS MOBILE HOME SUBDIVISION	22	23	23	23	28	34	40	46
Current PWS	WHISPERING PINES	518	586	592	641	661	683	705	727
Current PWS	WHITE OAK BEND MUD	1,672	1,703	1,714	1,719	1,788	1,830	1,898	2,010
Current PWS	WHITE OAK HILLS	85	109	178	187	256	267	267	267
Current PWS	WHITE OAK MANOR MOBILE HOME PARK	742	742	742	742	735	729	703	648
Current PWS	WHITE OAK RANCH SECTION ONE	174	319	996	1,591	1,810	1,847	2,016	2,159
Current PWS	WHITE OAK VALLEY ESTATES	813	865	878	878	878	897	922	949
Current PWS	WHITE OAK WATER SUPPLY CORPORATION	1,753	2,114	2,311	2,680	2,854	3,111	3,459	3,841
Current PWS	WHITEWING SUBDIVISION	4	4	4	6	8	16	36	85
Current PWS	WILCO WATER	16	16	16	16	15	15	14	14
Current PWS	WILLOW CREEK FARMS MUD	4,081	4,320	5,059	5,447	5,560	5,561	5,561	5,563
Current PWS	WILLOW OAKS MOBILE HOME SUBDIVISION	322	322	322	322	322	322	322	322
Current PWS	WILLOW POINT MUD	1,883	2,738	3,474	3,524	3,625	3,720	3,804	3,999
Current PWS	WILLOW RIVER FARMS	2	2	2	2	2	2	2	2
Current PWS	WILSHIRE SUBDIVISION	106	110	113	113	114	114	114	117
Current PWS	WINCHESTER PLACE	75	98	109	114	119	124	129	134
Current PWS	WINDFERN FOREST UTILITY DISTRICT	4,821	4,830	4,922	4,964	4,910	4,903	4,745	4,397

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	WINDSONG PARK	7	7	7	7	7	7	7	7
Current PWS	WINDSONG SUBDIVISION	24	24	24	24	24	29	41	59
Current PWS	WINDWOOD WATER SYSTEM	233	233	233	233	233	233	233	239
Current PWS	WINTERHAVEN SUBDIVISION	148	148	148	148	201	222	254	255
Current PWS	WOLF GLEN WATER SYSTEM	88	88	88	86	83	81	78	74
Current PWS	WOLFE AIR PARK	31	34	49	188	217	241	328	391
Current PWS	WOOD ACRES MHP	8	8	8	12	15	15	16	17
Current PWS	WOOD OAKS WATER WORKS	7	7	7	7	7	6	6	6
Current PWS	WOOD TRACE MUD 1	1,568	1,607	1,656	1,759	1,850	1,919	1,991	2,065
Current PWS	WOODCREEK MUD	2,882	2,882	2,882	2,882	2,882	2,882	2,882	2,882
Current PWS	WOODCREEK PHASE II	70	70	86	110	110	112	121	131
Current PWS	WOODCREEK SUBDIVISION SEC I	17	17	28	31	31	32	35	39
Current PWS	WOODGATE MOBILE HOME VILLAGE	76	76	76	76	76	76	73	68
Current PWS	WOODHAVEN ESTATES	62	83	91	103	111	116	121	127
Current PWS	WOODLAND ACRES SUBDIVISION	709	729	897	995	1,092	1,203	1,333	1,446
Current PWS	WOODLAND LAKES ESTATES WSC	329	340	360	376	392	404	416	429
Current PWS	WOODLAND OAKS SUBDIVISION	3,951	4,457	4,886	5,178	5,424	5,611	5,806	6,008
Current PWS	WOODLAND RANCH	273	312	329	348	352	352	357	362
Current PWS	WOODLANDS HILLS WATER	1,227	1,227	1,227	1,227	1,227	1,228	1,228	1,228
Current PWS	WOODLOCH MHP	145	145	145	145	141	141	136	123
Current PWS	WOODRIDGE ESTATES WATER SYSTEM	122	170	266	359	360	363	365	377
Current PWS	WOODRIDGE MUD	2,012	2,312	2,448	2,586	2,726	2,870	3,021	3,176
Current PWS	WOODRIDGE PARK SUBDIVISION	14	14	18	21	29	32	35	39
Current PWS	WOODWAY SUBDIVISION WATER SYSTEM	633	633	818	888	934	1,007	1,082	1,168
Current PWS	YESTERDAYS CROSSING	24	42	43	55	60	60	61	61
Current PWS	ZAM ZAM WATER SUPPLY	14	19	19	19	19	19	19	18
Future PWS	EXPANSION CITY OF FULSHEAR	11,178	24,907	29,228	32,451	35,118	38,287	38,709	42,742
Future PWS	EXPANSION CITY OF MANVEL	10,324	14,149	19,546	22,827	26,464	30,993	36,918	41,701
Future PWS	EXPANSION CITY OF RICHMOND	15,909	21,345	27,006	30,399	33,168	35,036	37,096	38,322
Future PWS	EXPANSION CITY OF ROSENBERG	16,810	24,678	36,055	52,645	69,207	82,662	97,299	105,644
Future PWS	EXPANSION CITY OF SUGAR LAND	5,997	6,538	6,849	7,195	7,896	8,655	9,464	10,014
Future PWS	FULSHEAR LAKES	2,958	3,521	3,532	3,536	3,617	3,630	3,646	3,661
Future PWS	Future PWS Baytown Area Water Authority	8,089	16,438	24,420	32,980	39,768	47,647	57,663	70,504
Future PWS	Future PWS NFBWA	43,729	59,809	75,743	90,792	99,890	108,578	113,016	122,273
Future PWS	Future PWS NHCRWA	148,402	154,720	165,787	170,579	180,302	186,562	198,086	216,126
Future PWS	Future PWS North Channel Water Authority	5,871	6,557	6,748	6,889	6,936	6,971	7,135	7,358
Future PWS	Future PWS WHCRWA	56,815	65,360	65,824	65,965	69,379	73,345	78,041	86,422
Future PWS	GEORGE RANCH	4,629	8,474	17,065	24,334	35,352	40,382	46,704	52,015
Future PWS	No. 152 Walnut Creek and Millers Pond in Rosenberg ETJ	195	263	482	548	550	556	556	558
Future PWS	No. 231 Bridlewood Meadows in Rosenberg ETJ	471	475	477	654	893	1,134	1,220	1,279
Future PWS	No. 250 Star Bridge in Rosenberg ETJ	52	673	673	723	978	1,162	1,301	1,481
Future PWS	No. 253 in Rosenberg ETJ	22	103	834	924	1,627	2,422	2,532	2,576
Future PWS	SC UTILITIES	275	283	282	283	296	314	332	357
Future PWS	TAMARRON WEST	3,853	7,985	8,894	8,894	8,894	8,894	8,894	8,894
Future PWS	TEJAS CREEK	508	645	661	666	709	746	784	825
Future PWS	TOWER OAKS PLAZA MUD	556	564	586	596	609	614	627	627

Table D-2 – Population Projections by Water User

Water User Type	Water User Name	2030	2040	2050	2060	2070	2080	2090	2100
NonPWS	No System - Domestic Use	545,602	672,480	797,281	902,594	996,780	1,077,381	1,166,353	1,263,737
NonPWS	NonPWS West Fort Bend Water Authority	48,960	122,287	208,816	275,270	344,564	412,861	491,833	548,146

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Table D-3 – Population Projections by Groundwater Reduction Plan

GRP Sponsor	Description [1]	2030	2040	2050	2060	2070	2080	2090	2100
Central Harris County Regional Water Authority	Existing PWS	55,019	55,769	56,416	56,874	58,328	59,323	60,838	63,302
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**55,019**	**55,769**	**56,416**	**56,874**	**58,328**	**59,323**	**60,838**	**63,302**
City of Houston	Existing PWS	2,580,894	2,660,779	2,732,336	2,764,962	2,756,636	2,766,711	2,724,179	2,628,092
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**2,580,894**	**2,660,779**	**2,732,336**	**2,764,962**	**2,756,636**	**2,766,711**	**2,724,179**	**2,628,092**
City of Missouri City	Existing PWS	135,196	140,646	145,152	148,957	152,369	156,038	158,951	164,218
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**135,196**	**140,646**	**145,152**	**148,957**	**152,369**	**156,038**	**158,951**	**164,218**
City of Richmond	Existing PWS	30,994	33,143	34,151	34,432	35,503	36,894	38,040	38,453
	Future Growth Areas	15,909	21,345	27,006	30,399	33,168	35,036	37,096	38,322
	Total	**46,903**	**54,488**	**61,157**	**64,831**	**68,671**	**71,930**	**75,136**	**76,775**
City of Rosenberg	Existing PWS	82,504	99,230	115,664	127,969	138,163	145,822	152,100	156,814
	Future Growth Areas	17,550	26,192	38,521	55,494	73,255	87,936	102,908	111,538
	Total	**100,054**	**125,422**	**154,185**	**183,463**	**211,418**	**233,758**	**255,008**	**268,352**
City of Sugar Land	Existing PWS	132,562	137,071	140,811	143,747	146,657	150,638	153,560	157,542
	Future Growth Areas	5,997	6,538	6,849	7,195	7,896	8,655	9,464	10,014
	Total	**138,559**	**143,609**	**147,660**	**150,942**	**154,553**	**159,293**	**163,024**	**167,556**
Clear Lake City Water Authority	Existing PWS	71,762	73,123	73,943	74,369	74,717	73,889	76,986	81,901
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**71,762**	**73,123**	**73,943**	**74,369**	**74,717**	**73,889**	**76,986**	**81,901**
Fort Bend County MUD 25	Existing PWS	12,698	13,090	13,254	13,284	13,432	13,575	13,819	14,323
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**12,698**	**13,090**	**13,254**	**13,284**	**13,432**	**13,575**	**13,819**	**14,323**

GRP Sponsor	Description [1]	2030	2040	2050	2060	2070	2080	2090	2100
Fort Bend County WCID 2	Existing PWS	45,840	49,272	51,491	53,397	55,143	57,186	58,703	62,106
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**45,840**	**49,272**	**51,491**	**53,397**	**55,143**	**57,186**	**58,703**	**62,106**
North Channel Water Authority	Existing PWS	104,007	107,390	112,222	114,994	115,194	116,110	116,730	116,376
	Future Growth Areas	5,871	6,557	6,748	6,889	6,936	6,971	7,135	7,358
	Total	**109,878**	**113,947**	**118,970**	**121,883**	**122,130**	**123,081**	**123,865**	**123,734**
North Fort Bend Water Authority	Existing PWS	340,670	378,063	394,569	406,404	420,180	432,811	441,401	462,492
	Future Growth Areas	41,943	80,292	110,058	135,603	158,467	175,367	186,565	205,181
	Total	**382,613**	**458,355**	**504,627**	**542,007**	**578,647**	**608,178**	**627,966**	**667,673**
North Harris County Regional Water Authority	Existing PWS	721,406	735,598	752,230	760,824	782,354	796,577	821,224	862,383
	Future Growth Areas	29,885	36,219	47,307	52,110	61,859	68,142	79,697	97,762
	Total	**751,291**	**771,817**	**799,537**	**812,934**	**844,213**	**864,719**	**900,921**	**960,145**
Pecan Grove MUD	Existing PWS	12,692	13,786	14,451	14,712	14,843	15,034	15,252	15,328
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**12,692**	**13,786**	**14,451**	**14,712**	**14,843**	**15,034**	**15,252**	**15,328**
West Fort Bend Water Authority	Existing PWS	0	0	0	0	0	0	0	0
	Future Growth Areas	48,960	122,287	208,816	275,270	344,564	412,861	491,833	548,146
	Total	**48,960**	**122,287**	**208,816**	**275,270**	**344,564**	**412,861**	**491,833**	**548,146**
West Harris County Regional Water Authority	Existing PWS	618,219	641,054	652,343	658,815	677,241	692,208	720,293	762,938
	Future Growth Areas	16,314	24,859	25,323	25,464	28,878	32,844	37,540	45,921
	Total	**634,533**	**665,913**	**677,666**	**684,279**	**706,119**	**725,052**	**757,833**	**808,859**

1. *Future Growth Areas are areas outside existing Public Water Systems (PWS) that are expected to develop into new PWS over time or to eventually receive water supply from existing PWS in the GRP. In NHCRWA, NFBWA, and WHCRWA, the existing (2020) population of undeveloped area outside of planned developments within each Authority's jurisdiction is assumed to use domestic well water and continue using domestic supply, so the 2020 population is excluded from the future population estimates of these three GRPs. In other GRPs, it is assumed that all population may eventually be served by a PWS in the GRP, so the entirety of the population in this area is included in this table.*

APPENDIX E

MUNICIPAL DEMAND PROJECTION SUMMARY TABLES

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Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	1485 LIMITED CRYSTAL SPRINGS WATER CO	126.4	1	1	1	1	1	1	1	2
Current PWS	2920 WEST SUBDIVISION	128.2	11	11	11	11	11	11	11	11
Current PWS	5TH STREET WATER SYSTEM	79.8	76	76	80	82	87	92	95	97
Current PWS	ACORN VILLAGE MOBILE HOME PARK	100.0	1	1	1	2	2	2	1	1
Current PWS	ADDICKS UTILITY DISTRICT	92.9	198	201	204	207	211	217	226	246
Current PWS	AFTON PARK WATER SYSTEM	104.7	3	3	4	4	4	4	4	4
Current PWS	AIRPORT HEIGHTS	77.9	1	1	1	2	2	2	2	2
Current PWS	ALBURY MANOR UTILITY COMPANY	128.2	10	10	11	11	12	12	13	14
Current PWS	ALDINE FOREST SUBDIVISION	104.7	3	3	3	3	3	3	3	2
Current PWS	ALDINE GARDENS MOBILE HOME PARK	77.9	1	1	1	1	1	1	1	1
Current PWS	ALDINE MEADOWS	104.7	7	7	7	9	9	9	9	8
Current PWS	ALDINE OAKS MHP	100.0	4	6	6	6	6	6	6	6
Current PWS	ALDINE VILLAGE SUBDIVISION	189.2	50	50	50	50	49	49	48	44
Current PWS	ALICE ACRES MOBILE HOME SUBDIVISION	128.2	18	26	26	26	26	29	30	31
Current PWS	ALLENDALE WATER SYSTEM	160.8	11	12	13	13	13	13	14	14
Current PWS	ALLENWOOD SUBDIVISION	110.4	11	15	25	28	30	32	34	36
Current PWS	ALTON THEISS SUBDIVISION	128.2	1	1	1	1	1	1	1	1
Current PWS	AMBERWOOD SUBDIVISION	128.2	15	16	24	25	26	26	28	30
Current PWS	AMERICASA AT CYPRESS MEADOWS	128.2	1	1	1	1	1	1	1	1
Current PWS	AMES MINGLEWOOD WSC	77.9	34	34	35	35	36	38	41	45
Current PWS	ANCHOR ROAD MOBILE HOME PARK	100.0	1	1	1	1	1	1	0	0
Current PWS	ANGLE ACRES WATER SYSTEM	77.9	0	0	0	0	0	0	0	0
Current PWS	ANGLECREST SUBDIVISION	77.9	4	4	4	4	4	4	4	4
Current PWS	APACHE MOBILE HOME PARK	204.4	2	2	3	3	3	3	3	3
Current PWS	APACHELAND MOBILE HOME SUBDIVISION	100.0	3	3	3	3	3	3	3	3
Current PWS	ARMADILLO WOODS SUBDIVISION	87.2	18	22	25	26	28	29	30	31
Current PWS	ARROWHEAD LAKE & FRONTIER LAKE	77.9	36	43	48	51	53	55	57	59
Current PWS	ATASCOCITA ACRES SUBDIVISION	128.2	46	46	46	46	46	46	46	46
Current PWS	ATASCOCITA VILLAGE MOBILE HOME PARK	77.9	7	7	7	7	7	7	8	9
Current PWS	AUSTIN COUNTY WSC 1	104.7	56	63	70	73	75	78	80	82
Current PWS	AUSTIN COUNTY WSC 2	85.0	45	45	45	45	45	45	45	45
Current PWS	AUSTIN COUNTY WSC 3	104.7	59	64	67	68	68	68	68	68
Current PWS	AUSTIN COUNTY WSC 4	77.9	53	53	54	54	54	54	54	54
Current PWS	AUTUMN ACRES WATER SYSTEM	77.9	7	7	7	7	7	7	7	7
Current PWS	AUTUMN SHADOWS MOBILE HOME PARK	160.8	1	1	1	1	1	1	1	1
Current PWS	AZALEA ESTATES MOBILE HOME COMMUN	128.2	2	2	2	2	2	2	2	2
Current PWS	BACLIFF MUD	77.7	258	267	272	275	277	279	282	284
Current PWS	BAKER ROAD MUD	167.4	61	63	63	63	68	70	74	81
Current PWS	BALABAN APARTMENTS 1	126.4	2	2	2	2	2	2	2	2
Current PWS	BALABAN APARTMENTS 2	104.7	1	1	1	1	1	1	1	1
Current PWS	BAMMEL FOREST UTILITY	83.4	31	31	31	31	31	32	32	37
Current PWS	BAMMEL OAKS ESTATES 1	128.2	4	4	4	4	4	5	5	5
Current PWS	BAMMEL OAKS ESTATES 2	128.2	22	22	22	22	25	26	33	35
Current PWS	BAMMEL UTILITY DISTRICT	190.5	149	151	152	154	160	161	173	178
Current PWS	BAR D RANCHETTES	126.4	1	1	1	1	1	1	1	1
Current PWS	BARKALOO HOMEOWNERS ASSOCIATION	104.7	0	0	0	0	0	0	0	0

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	BARKER CYPRESS MUD	108.1	300	307	312	314	325	335	353	379
Current PWS	BARROW RANCH	100.0	16	20	26	31	37	43	51	57
Current PWS	BATEMAN WATER WORKS	77.9	0	0	0	0	0	0	0	0
Current PWS	BAUER RANCH SUBDIVISION	128.2	55	55	55	55	55	55	55	55
Current PWS	BAY PLACE SUBDIVISION	126.4	3	4	6	7	9	10	12	14
Current PWS	BAYBROOK MUD 1	104.7	125	130	131	132	134	137	148	160
Current PWS	BAYER WATER SYSTEM	129.2	183	193	189	185	185	186	186	207
Current PWS	BAYOU COLONY SUBDIVISION	77.9	2	2	2	2	2	2	2	2
Current PWS	BAYOU FOREST VILLAGE MOBILE HOME PARK	77.9	2	2	2	2	2	2	2	2
Current PWS	BAYOU SHADOWS WATER SYSTEM	104.7	2	2	2	2	2	2	2	2
Current PWS	BAYRIDGE SUBDIVISION WATER SYSTEM	77.9	2	2	3	3	3	4	5	5
Current PWS	BAYVIEW MUD	79.8	42	45	47	48	48	49	49	50
Current PWS	BEACON ESTATES WSC	100.0	15	15	15	15	15	15	15	15
Current PWS	BEAU VIEW UTILITIES	104.7	3	3	4	4	4	5	5	5
Current PWS	BEAUMONT PLACE	77.9	97	104	147	157	154	155	150	139
Current PWS	BEE CREEK ESTATES	104.7	4	6	9	10	11	12	13	13
Current PWS	BEECHNUT MUD	161.7	121	121	121	120	125	125	125	152
Current PWS	BEECHWOOD SUBDIVISION	77.9	5	5	5	5	5	5	5	4
Current PWS	BELL WATER	100.0	0	0	1	1	1	1	1	1
Current PWS	BELLA VISTA	123.3	77	98	103	110	121	133	146	161
Current PWS	BENDER CREEK APARTMENTS	77.9	3	3	3	3	3	3	2	2
Current PWS	BENDERS LANDING WATER PLANT 1 & 2	316.7	742	882	965	1,009	1,073	1,119	1,167	1,217
Current PWS	BENNETT WOODS	77.9	7	15	18	20	21	21	21	21
Current PWS	BENTWOOD ESTATES MHP	100.0	0	0	0	0	0	0	0	0
Current PWS	BERGVILLE ADDITION	77.9	1	1	2	2	2	2	2	2
Current PWS	BERNARD ACRES	100.0	1	1	1	1	1	1	1	1
Current PWS	BERNARD OAKS SUBDIVISION	77.9	4	4	4	4	4	4	4	3
Current PWS	BERNARD RIVER OAKS	77.9	0	0	0	0	0	0	0	0
Current PWS	BERRY HILL ESTATES	128.2	7	7	7	7	7	7	7	8
Current PWS	BFT FAMILY TRAILER PARK	104.7	0	0	0	0	0	0	0	0
Current PWS	BIG OAKS MUD	92.3	232	233	234	244	252	260	267	283
Current PWS	BIG OAKS RANCHETTE SUBDIVISION	160.8	1	1	1	2	2	2	2	2
Current PWS	BIG THICKET LAKE ESTATES 1	104.7	4	4	4	4	4	4	4	4
Current PWS	BILMA PUD	191.4	293	294	294	295	297	297	297	298
Current PWS	BINFORD PLACE SUBDIVISION	128.2	3	3	3	3	3	3	3	3
Current PWS	BISSONNET MUD	79.8	272	277	277	277	285	292	305	321
Current PWS	BLACK OAK WATER SYSTEM	100.0	0	1	6	6	6	6	6	7
Current PWS	BLACKS FERRY WATER	104.7	2	1	1	1	1	1	1	1
Current PWS	BLAKETREE MUD 1	204.4	11	20	35	38	38	38	55	57
Current PWS	BLUE BELL MANOR SUBDIVISION	143.8	193	193	199	201	197	197	191	177
Current PWS	BLUE RIDGE WEST MUD	100.1	264	265	270	285	291	296	302	316
Current PWS	BLUE SAGE GARDENS SUBDIVISION	77.9	2	3	3	3	3	3	3	3
Current PWS	BLUEBONNET MOBILE HOME PARK	77.9	0	0	1	1	1	1	1	1
Current PWS	BOLING MWD	100.0	21	21	21	21	21	21	21	21
Current PWS	BOLIVAR PENINSULA SUD	204.4	223	225	226	228	228	228	229	229
Current PWS	BOUDREAUX GARDENS	128.2	2	3	3	3	3	3	3	4

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	BOULAIS MOBILE HOME PARK	100.0	0	0	1	1	1	1	1	1
Current PWS	BOYS & GIRLS COUNTRY	128.2	2	2	2	2	2	2	2	2
Current PWS	BRANDI ESTATES	104.7	3	3	2	2	2	2	2	2
Current PWS	BRANDYWINE OAKS	128.2	3	3	3	3	3	3	3	3
Current PWS	BRANDYWINE PINES	128.2	14	14	14	14	14	14	14	14
Current PWS	BRAZORIA COUNTY FWSD 1 DAMON	160.8	48	54	54	54	54	54	53	52
Current PWS	BRAZORIA COUNTY MUD 2	232.7	327	344	356	372	378	376	370	362
Current PWS	BRAZORIA COUNTY MUD 21	126.2	219	225	225	227	227	226	221	216
Current PWS	BRAZORIA COUNTY MUD 22	194.0	199	201	201	201	213	219	220	222
Current PWS	BRAZORIA COUNTY MUD 24	100.0	29	29	32	32	33	37	38	42
Current PWS	BRAZORIA COUNTY MUD 25	83.3	133	136	136	137	139	140	141	142
Current PWS	BRAZORIA COUNTY MUD 29	84.4	133	143	144	145	148	152	153	156
Current PWS	BRAZORIA COUNTY MUD 3	113.0	173	178	180	184	189	192	195	196
Current PWS	BRAZORIA COUNTY MUD 31	155.7	186	186	185	185	184	182	177	172
Current PWS	BRAZORIA COUNTY MUD 32	77.9	11	11	11	11	11	10	10	10
Current PWS	BRAZORIA COUNTY MUD 39	204.4	127	138	138	147	153	155	158	161
Current PWS	BRAZORIA COUNTY MUD 40	100.0	11	13	13	17	19	20	22	24
Current PWS	BRAZORIA COUNTY MUD 55	204.4	133	133	132	130	128	125	121	117
Current PWS	BRAZORIA COUNTY MUD 6	147.6	391	417	421	434	444	450	451	450
Current PWS	BRAZORIA COUNTY SHERIFFS OFFICE DETENTIO	126.4	1	1	1	1	1	1	1	1
Current PWS	BRAZOS LAKES WATER SUPPLY	138.0	11	19	33	52	61	68	72	81
Current PWS	BRAZOS RIVER CLUB	160.8	0	0	0	0	0	0	0	0
Current PWS	BRIAR MEADOWS	126.4	15	15	15	15	14	14	14	13
Current PWS	BRIDGEPOINT SUBDIVISION	104.7	25	31	32	36	39	42	44	47
Current PWS	BRIDGESTONE MUD	132.1	864	871	885	898	930	946	973	1,030
Current PWS	BRIDLEWOOD ESTATES WATER SYSTEM	161.1	136	218	297	360	415	447	465	469
Current PWS	BRITTMOORE UTILITY	204.4	263	265	265	267	279	284	287	306
Current PWS	BROOKSHIRE MWD	135.1	278	289	290	294	319	343	367	388
Current PWS	BRUSHY CREEK UTILITY	160.8	13	13	14	15	15	15	16	16
Current PWS	CADDO VILLAGE	114.1	37	40	41	42	42	43	44	44
Current PWS	CALICO FARMS SUBDIVISION	77.9	1	1	1	1	1	1	1	1
Current PWS	CANAL TERRACE SUBDIVISION	77.9	15	15	15	15	15	15	15	15
Current PWS	CANDLELIGHT HILLS SUBDIVISION	179.8	111	113	114	115	116	119	125	134
Current PWS	CANEY CREEK UTILITY	104.7	1	1	1	1	1	1	1	1
Current PWS	CAPE MALIBU WSC	77.9	5	5	5	5	5	5	5	5
Current PWS	CARBY MOBILE HOME PARK	126.4	2	2	2	2	2	2	2	2
Current PWS	CAROL NORRA MHP	160.8	0	0	0	0	0	0	0	0
Current PWS	CARRIAGE HILLS	126.4	86	128	159	171	178	258	274	286
Current PWS	CARRIAGE TRAIL SUBDIVISION	104.7	0	1	1	2	2	3	3	4
Current PWS	CASTLEWOOD MUD	129.5	127	131	132	133	136	139	147	154
Current PWS	CASTLEWOOD SUBDIVISION	104.7	53	53	55	55	54	54	53	49
Current PWS	CEDAR BAYOU ESTATES	77.9	2	3	4	5	5	4	4	4
Current PWS	CEDAR BAYOU PARK	77.9	11	12	18	19	16	13	16	23
Current PWS	CEDAR CREEK FOREST MOBILE HOME COMMUNITY	128.2	5	6	6	7	7	7	7	7
Current PWS	CEDAR CREEK RANCH SUBDIVISION	104.7	1	1	1	1	1	1	1	1
Current PWS	CEDAR CREEK WATER SYSTEM	77.9	17	19	21	26	32	33	35	36

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CEDAR ESTATES SUBDIVISION	100.0	2	3	3	3	3	5	6	6
Current PWS	CEDAR OAKS MOBILE HOME COMMUNITY	128.2	5	5	5	5	5	5	5	5
Current PWS	CENTENNIAL PLACE	100.0	1	1	1	1	1	1	2	3
Current PWS	CHAMBERS COUNTY MUD 1	143.9	114	136	162	189	218	251	287	355
Current PWS	CHAMPION LAKES ESTATES WATER PLANT	128.2	24	24	24	24	24	25	25	29
Current PWS	CHAMPIONS MUD	211.6	251	263	267	273	290	311	338	388
Current PWS	CHAPARRAL PLACE WATER SYSTEM	77.9	3	4	4	4	4	4	5	5
Current PWS	CHAPMANS MHP	204.4	14	14	14	21	21	21	21	21
Current PWS	CHARTERWOOD MUD	128.2	193	196	197	198	205	211	221	226
Current PWS	CHATEAU WOODS MUD	85.3	97	128	130	133	135	139	140	141
Current PWS	CHELFORD CITY MUD	122.0	417	424	428	439	453	466	481	510
Current PWS	CHELFORD ONE MUD	111.7	205	212	212	211	216	220	223	238
Current PWS	CHENANGO RANCH	123.3	6	6	6	6	6	6	5	5
Current PWS	CHIMNEY HILL MUD	104.7	202	202	202	202	202	202	202	204
Current PWS	CHINQUAPIN PREPARATORY SCHOOL	100.0	0	0	0	0	0	0	0	0
Current PWS	CHOCTAW SUBDIVISION	104.7	1	1	1	1	1	0	0	0
Current PWS	CIMARRON COUNTRY	126.4	67	96	115	128	139	148	157	166
Current PWS	CIMARRON MUD	150.1	649	657	665	668	698	719	742	786
Current PWS	CINCO MUD 1	192.1	97	97	98	99	100	105	109	120
Current PWS	CINCO MUD 10	192.1	193	197	199	208	216	225	233	252
Current PWS	CINCO MUD 12	192.1	137	137	137	142	147	153	157	168
Current PWS	CINCO MUD 14	192.1	367	368	372	373	377	383	391	412
Current PWS	CINCO MUD 2	192.1	270	270	270	282	291	301	309	328
Current PWS	CINCO MUD 3	192.1	159	165	165	169	173	182	186	199
Current PWS	CINCO MUD 5	192.1	177	178	186	197	205	213	220	235
Current PWS	CINCO MUD 6	192.1	189	192	196	201	206	216	223	244
Current PWS	CINCO MUD 7	192.1	326	328	332	344	354	364	372	391
Current PWS	CINCO MUD 8	192.1	276	279	279	282	287	290	292	302
Current PWS	CINCO MUD 9	192.1	278	280	283	289	300	308	319	339
Current PWS	CINCO SOUTHWEST MUD 1	176.0	30	30	30	38	39	41	43	46
Current PWS	CINCO SOUTHWEST MUD 2	176.0	410	410	412	429	444	460	473	504
Current PWS	CINCO SOUTHWEST MUD 3 DAYCARE	176.0	388	389	389	402	414	425	435	459
Current PWS	CINCO SOUTHWEST MUD 4	176.0	373	377	386	399	408	416	427	452
Current PWS	CITY OF ALVIN	112.9	1,088	1,131	1,201	1,206	1,197	1,202	1,198	1,216
Current PWS	CITY OF ANAHUAC	104.7	76	76	76	76	81	81	85	99
Current PWS	CITY OF ANGLETON	104.7	736	738	729	713	695	670	640	607
Current PWS	CITY OF ARCOLA	138.0	113	170	240	262	280	307	318	341
Current PWS	CITY OF BAYTOWN	120.9	4,651	5,439	5,796	5,984	6,004	6,022	6,378	7,009
Current PWS	CITY OF BEASLEY	91.2	22	50	61	68	71	72	76	76
Current PWS	CITY OF BELLAIRE	177.2	1,149	1,172	1,173	1,175	1,157	1,145	1,100	1,013
Current PWS	CITY OF BELLVILLE	178.1	282	286	295	299	303	307	310	315
Current PWS	CITY OF BRAZORIA	104.7	108	108	108	105	103	99	95	90
Current PWS	CITY OF BRAZOS COUNTRY	160.8	31	31	31	31	31	31	31	31
Current PWS	CITY OF BUNKER HILL VILLAGE	279.4	402	422	423	423	424	423	410	381
Current PWS	CITY OF CLEVELAND	137.5	401	449	503	553	604	654	708	769
Current PWS	CITY OF CLUTE	113.3	423	413	409	399	387	371	352	332

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CITY OF CONROE	129.1	4,612	5,623	7,078	8,518	9,372	10,223	10,799	11,285
Current PWS	CITY OF DAISETTA	104.6	36	36	36	36	36	36	36	36
Current PWS	CITY OF DANBURY	86.1	53	53	53	53	52	50	48	46
Current PWS	CITY OF DAYTON	204.4	951	1,188	1,367	1,552	1,688	1,838	2,045	2,250
Current PWS	CITY OF DEER PARK	128.3	1,636	1,651	1,663	1,668	1,674	1,668	1,735	1,847
Current PWS	CITY OF DEVERS	204.4	41	41	41	41	41	41	41	41
Current PWS	CITY OF EL CAMPO	137.6	629	632	637	641	644	647	650	654
Current PWS	CITY OF FREEPORT	126.4	475	464	459	448	436	419	399	377
Current PWS	CITY OF FREEPORT SLAUGHTER ROAD	126.4	11	11	11	11	11	11	11	11
Current PWS	CITY OF FRIENDSWOOD	141.3	2,270	2,347	2,387	2,417	2,445	2,469	2,521	2,581
Current PWS	CITY OF FULSHEAR - CROSS CREEK RANCH	127.4	807	1,191	1,194	1,194	1,197	1,201	1,201	1,201
Current PWS	CITY OF FULSHEAR - OLD TOWN	176.0	463	999	1,032	1,104	1,198	1,264	1,265	1,394
Current PWS	CITY OF GALENA PARK	71.3	285	288	296	299	304	291	282	262
Current PWS	CITY OF GALVESTON	257.3	5,372	5,406	5,483	5,528	5,565	5,600	5,638	5,670
Current PWS	CITY OF HEMPSTEAD	135.6	329	338	338	340	342	343	344	346
Current PWS	CITY OF HILLCREST VILLAGE	117.2	29	28	28	28	27	26	25	24
Current PWS	CITY OF HILSHIRE VILLAGE	190.5	56	56	56	56	56	56	55	51
Current PWS	CITY OF HITCHCOCK	116.6	315	325	326	327	330	332	335	336
Current PWS	CITY OF HOUSTON BELLEAU WOODS	112.7	24	25	63	73	76	79	82	91
Current PWS	CITY OF HOUSTON DISTRICT 73	112.7	390	597	603	608	609	609	630	669
Current PWS	CITY OF HOUSTON DISTRICT 82	112.7	52	143	144	146	146	148	153	161
Current PWS	CITY OF HOUSTON UD 5 - KINGWOOD	112.7	3,353	3,421	3,640	3,738	3,834	3,903	4,066	4,326
Current PWS	CITY OF HUMBLE	174.6	1,508	1,564	1,789	1,893	1,955	1,985	2,084	2,231
Current PWS	CITY OF JACINTO CITY	74.8	264	267	276	280	284	269	261	243
Current PWS	CITY OF JAMAICA BEACH	195.8	78	78	78	78	78	78	78	78
Current PWS	CITY OF JERSEY VILLAGE	175.0	594	616	622	626	643	666	696	747
Current PWS	CITY OF KATY	179.3	1,769	2,343	2,623	2,786	2,986	3,130	3,390	3,624
Current PWS	CITY OF KENDLETON	204.4	21	117	117	117	123	126	126	129
Current PWS	CITY OF LA MARQUE	160.8	1,114	1,189	1,225	1,250	1,266	1,280	1,297	1,311
Current PWS	CITY OF LA PORTE	110.3	1,429	1,532	1,545	1,555	1,506	1,545	1,597	1,696
Current PWS	CITY OF LAKE JACKSON	131.1	1,288	1,256	1,244	1,218	1,188	1,146	1,095	1,039
Current PWS	CITY OF LEAGUE CITY	110.4	4,925	5,148	5,285	5,362	5,420	5,474	5,539	5,609
Current PWS	CITY OF LIBERTY	157.1	471	478	488	499	505	509	514	516
Current PWS	CITY OF LIVERPOOL	77.9	16	16	16	16	15	14	13	12
Current PWS	CITY OF MAGNOLIA	204.4	236	282	330	346	356	368	384	400
Current PWS	CITY OF MANVEL	146.1	237	344	407	427	456	515	551	574
Current PWS	CITY OF MEADOWS PLACE	111.9	204	211	220	233	241	249	256	271
Current PWS	CITY OF MISSOURI CITY MUSTANG BAYOU WATE	102.3	372	437	467	481	507	518	531	551
Current PWS	CITY OF MONT BELVIEU	241.7	1,001	1,278	1,339	1,655	2,002	2,399	2,871	3,281
Current PWS	CITY OF MONTGOMERY	206.0	214	274	287	293	300	304	312	318
Current PWS	CITY OF MORGANS POINT	204.4	23	24	24	24	24	23	23	23
Current PWS	CITY OF NASSAU BAY	185.4	366	370	372	373	375	373	391	418
Current PWS	CITY OF NEEDVILLE	94.5	113	182	212	219	221	222	230	238
Current PWS	CITY OF OAK RIDGE NORTH	134.1	155	184	195	218	216	216	230	234
Current PWS	CITY OF ORCHARD	126.4	14	14	41	43	44	45	45	46
Current PWS	CITY OF OYSTER CREEK	174.4	77	77	76	74	71	67	63	59

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CITY OF PANORAMA VILLAGE	167.6	182	189	194	199	205	210	215	221
Current PWS	CITY OF PASADENA	115.9	6,006	6,093	6,140	6,160	6,162	6,147	6,036	5,764
Current PWS	CITY OF PASADENA EL CARY ESTATES	117.5	21	21	21	22	22	22	22	22
Current PWS	CITY OF PEARLAND	112.2	6,049	6,759	7,029	7,294	7,494	7,611	7,704	7,762
Current PWS	CITY OF PEARLAND MUD 1	126.4	237	242	246	246	247	247	245	241
Current PWS	CITY OF PRAIRIE VIEW	125.9	175	214	232	253	279	297	314	334
Current PWS	CITY OF RICHMOND	136.7	904	976	1,026	1,036	1,067	1,116	1,132	1,139
Current PWS	CITY OF RICHWOOD	87.2	146	143	142	138	134	128	121	114
Current PWS	CITY OF ROSENBERG	107.6	2,103	2,609	3,051	3,360	3,589	3,793	3,969	4,090
Current PWS	CITY OF SEABROOK	148.4	751	765	776	780	779	776	814	869
Current PWS	CITY OF SEALY	143.4	374	392	414	423	430	434	438	442
Current PWS	CITY OF SHENANDOAH	280.5	533	640	664	687	694	698	714	753
Current PWS	CITY OF SHOREACRES	121.9	68	68	69	69	69	69	74	74
Current PWS	CITY OF SOUTH HOUSTON	98.0	594	605	609	611	612	612	594	552
Current PWS	CITY OF SOUTHSIDE PLACE	159.4	111	113	113	113	110	108	103	94
Current PWS	CITY OF SPLENDORA	78.3	330	431	538	681	799	813	853	900
Current PWS	CITY OF SPRING VALLEY VILLAGE	186.0	293	302	302	302	300	299	289	269
Current PWS	CITY OF SUGAR LAND	211.7	6,573	6,871	7,121	7,292	7,472	7,689	7,855	8,122
Current PWS	CITY OF SUGAR LAND - GREATWOOD	187.4	808	810	814	817	822	834	841	847
Current PWS	CITY OF SUGAR LAND - NEW TERRITORY	163.1	898	900	902	907	916	929	939	944
Current PWS	CITY OF SUGAR LAND RIVER PARK	183.5	269	269	269	269	270	277	281	283
Current PWS	CITY OF SWEENY	129.1	147	147	146	145	143	138	132	126
Current PWS	CITY OF TEXAS CITY	108.1	2,260	2,357	2,426	2,471	2,501	2,528	2,558	2,588
Current PWS	CITY OF TOMBALL	187.8	1,142	1,238	1,413	1,490	1,587	1,625	1,695	1,804
Current PWS	CITY OF WALLER	160.8	168	187	198	202	208	213	218	237
Current PWS	CITY OF WALLIS	97.7	47	47	47	47	47	47	47	47
Current PWS	CITY OF WEBSTER	192.4	795	820	825	826	829	827	859	923
Current PWS	CITY OF WEST COLUMBIA	98.6	155	154	153	151	148	144	139	132
Current PWS	CITY OF WEST UNIVERSITY PLACE	153.1	868	883	884	882	858	844	801	728
Current PWS	CITY OF WHARTON	155.3	494	498	501	503	505	508	511	513
Current PWS	CITY OF WILLIS	126.4	304	326	347	365	381	393	405	418
Current PWS	CITY OF WOOD BRANCH VILLAGE	94.2	57	73	93	124	128	131	141	148
Current PWS	CLASSIC PINES SUBDIVISION	100.0	8	8	8	8	8	8	9	11
Current PWS	CLAY ROAD MUD	73.5	133	134	134	135	138	142	147	156
Current PWS	CLEAR BROOK CITY MUD	96.0	718	723	720	716	724	727	742	767
Current PWS	CLEAR CREEK FOREST SECTION 12	77.9	35	46	48	49	51	51	53	54
Current PWS	CLEAR LAKE CITY WATER AUTHORITY	146.8	3,449	3,518	3,561	3,582	3,601	3,559	3,709	3,946
Current PWS	CLEAR WATER COVE INC	77.9	11	12	12	12	12	12	12	12
Current PWS	CLEVELAND MH AND RV PARK	204.4	0	0	0	0	0	0	0	0
Current PWS	CLOVER CREEK MUD	104.1	25	28	34	35	37	38	39	40
Current PWS	CNP UTILITY DISTRICT	153.2	517	528	546	551	562	571	594	638
Current PWS	COE COUNTRY	194.5	66	85	90	98	103	108	112	117
Current PWS	COE INDUSTRIAL PARK	128.2	0	0	0	0	0	0	0	0
Current PWS	COLES CROSSING	82.5	71	102	142	179	220	267	321	381
Current PWS	COLONIAL HILLS	77.9	20	20	20	20	20	20	19	18
Current PWS	COLONY COVE SUBDIVISION WATER SYSTEM	77.9	2	2	2	2	2	2	2	2

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	COLONY M H SUBDIVISION WS	123.3	2	2	3	4	4	4	4	4
Current PWS	COLONY TRAILS SUBDIVISION	77.9	7	7	7	7	7	7	7	7
Current PWS	COMMODORE COVE IMPROVEMENT DISTRICT	77.9	2	2	2	2	2	2	2	2
Current PWS	CONROE BAY WATER SEWER SUPPLY	77.9	3	3	4	4	4	4	4	4
Current PWS	CONROE OAKS	104.7	1	2	2	2	2	2	3	3
Current PWS	CONROE RESORT	204.4	56	60	65	71	76	82	88	94
Current PWS	CORBELLO WATER SYSTEM	77.9	5	5	5	5	5	5	5	5
Current PWS	CORINTHIAN POINT MUD 2	204.1	47	51	61	64	66	68	71	73
Current PWS	CORNERSTONE MOBILE HOME COMMUNITY	128.2	0	1	1	1	1	2	2	2
Current PWS	CORNERSTONES MUD	153.7	279	283	284	285	295	302	313	333
Current PWS	CORONADO COUNTRY	77.9	2	3	3	3	4	4	4	4
Current PWS	COTTAGE GARDENS	128.2	74	74	74	74	77	78	80	83
Current PWS	COTTON BAYOU PARK	126.4	2	2	3	3	3	4	4	5
Current PWS	COTTONWOOD PARK WATER SYSTEM	77.9	7	8	8	8	8	8	8	7
Current PWS	COUNTRY ACRE ESTATES	77.9	2	2	2	2	2	2	2	2
Current PWS	COUNTRY CLUB GREENS	128.2	7	7	7	7	8	8	9	9
Current PWS	COUNTRY CREEK ESTATES WATER SYSTEM	77.9	8	8	11	12	12	12	12	13
Current PWS	COUNTRY LIVING APARTMENTS	77.9	5	5	5	5	5	5	5	4
Current PWS	COUNTRY LIVING MOBILE HOME PARK	77.9	0	1	1	1	1	1	1	1
Current PWS	COUNTRY MEADOWS	77.9	4	4	4	4	4	4	3	3
Current PWS	COUNTRY ROAD PARK	128.2	6	6	6	6	6	6	5	5
Current PWS	COUNTRY TERRACE SUBDIVISION	77.9	34	34	34	34	34	34	34	34
Current PWS	COUNTRY WEST	178.2	103	117	117	121	124	128	132	136
Current PWS	COUNTRYSIDE MOBILE HOME PARK	100.0	0	0	0	0	0	0	0	0
Current PWS	COUSHATTE CAMPGROUND	100.0	3	3	3	3	3	3	3	3
Current PWS	CREEKSIDE ACRES WATER SYSTEM	77.9	15	18	20	20	20	21	21	22
Current PWS	CREEKSIDE ESTATES SOUTH	128.2	54	56	57	58	57	57	55	51
Current PWS	CREEKSIDE VILLAGE	144.9	111	111	111	111	114	117	121	124
Current PWS	CRICKETT HILL ESTATES	128.2	4	4	4	4	4	6	7	8
Current PWS	CROSBY MUD	140.8	352	391	394	410	437	437	437	438
Current PWS	CROWN RANCH SUBDIVISION	181.8	18	40	58	65	78	84	96	101
Current PWS	CRYSTAL FOREST SUBDIVISION	77.9	31	33	36	38	39	40	41	43
Current PWS	CRYSTAL LAKE ESTATES	204.4	3	3	3	3	3	3	3	3
Current PWS	CRYSTAL SPRINGS SUBDIVISION	77.9	5	7	10	15	21	20	21	22
Current PWS	CRYSTAL SPRINGS WATER COMPANY CHASEWOOD	104.7	4	5	6	7	7	8	8	9
Current PWS	CY CHAMP PUD	179.5	291	296	297	297	300	303	309	317
Current PWS	CYPRESS BEND SUBDIVISION	128.2	68	68	68	68	68	68	69	90
Current PWS	CYPRESS BROOK ESTATES	128.2	1	1	1	1	1	1	1	1
Current PWS	CYPRESS CREEK RANCH	128.2	0	0	0	0	0	0	0	0
Current PWS	CYPRESS CREEK UTILITY DISTRICT	135.8	142	142	143	143	144	147	154	168
Current PWS	CYPRESS CROSSING	128.2	6	6	6	6	8	9	10	10
Current PWS	CYPRESS FIELDS SUBDIVISION	128.2	99	101	108	112	122	126	136	156
Current PWS	CYPRESS FOREST PUD	230.7	451	455	457	458	464	473	489	523
Current PWS	CYPRESS FOREST WATER SYSTEM	72.1	15	15	15	15	15	17	20	22
Current PWS	CYPRESS GARDENS MOBILE HOME SUBDIVISION	128.2	1	1	1	1	1	1	1	1
Current PWS	CYPRESS HILL MUD 1	257.5	952	959	962	970	995	1,015	1,038	1,058

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	CYPRESS HILL SUBDIVISION	128.2	1	1	1	1	1	1	1	1
Current PWS	CYPRESS KLEIN UTILITY DISTRICT WIMBLETON	170.2	204	208	210	211	216	221	227	239
Current PWS	CYPRESS LAKES WATER SYSTEM	104.7	8	8	8	8	8	8	8	8
Current PWS	CYPRESS PASS ESTATES	128.2	4	4	4	4	4	5	5	6
Current PWS	CYPRESS PLACE	128.2	4	4	4	4	4	4	4	4
Current PWS	CYPRESS VILLAGE TRAILER & RV PARK	128.2	1	1	1	1	1	1	1	1
Current PWS	CYPRESSWOOD ESTATES	104.7	8	9	11	12	13	14	15	16
Current PWS	CYPRESSWOOD MHP	128.2	4	4	4	4	4	4	4	4
Current PWS	CYPRESSWOOD UTILITY DISTRICT	93.6	173	173	175	176	180	183	192	203
Current PWS	DAYTON CREEK WATER SYSTEM	204.4	10	10	10	10	10	10	10	10
Current PWS	DAYTON OAKS ESTATE	77.9	1	1	1	1	1	1	1	1
Current PWS	DECKER HILLS	77.9	110	123	135	140	146	151	156	161
Current PWS	DECKER OAKS	212.0	47	49	49	50	50	50	51	51
Current PWS	DECKER WOODS SUBDIVISION	77.9	14	18	18	19	20	21	21	22
Current PWS	DEER GLEN WATER SYSTEM	79.4	57	74	77	81	84	87	91	94
Current PWS	DEER PINES SUBDIVISION	100.0	1	1	1	1	2	2	2	3
Current PWS	DEER RIDGE SUBDIVISION	110.4	4	5	6	6	7	7	8	8
Current PWS	DEER RUN	135.3	13	14	15	16	17	18	18	19
Current PWS	DEER TRAIL MOBILE HOME PARK	104.7	2	2	3	3	3	3	3	2
Current PWS	DEERWOOD SUBDIVISION	100.0	63	68	76	76	76	76	76	76
Current PWS	DEL LAGO ESTATES WSC	204.4	15	15	16	17	18	19	21	22
Current PWS	DELYNN WATER SYSTEM	104.7	2	3	5	5	5	4	4	4
Current PWS	DEMI JOHN PLACE WATER SYSTEM	100.0	4	4	4	4	4	3	3	3
Current PWS	DIAMOND HEAD WSC	77.9	7	7	7	8	8	8	8	8
Current PWS	DOBBIN PLANTERSVILLE WSC 1	77.9	277	448	618	742	834	881	929	997
Current PWS	DOBBIN PLANTERSVILLE WSC 2	77.9	0	0	0	0	0	0	0	0
Current PWS	DOGWOOD HILLS	77.9	23	31	45	51	55	58	61	64
Current PWS	DOGWOOD TREE WATER SYSTEM	103.1	1	1	1	1	1	1	1	1
Current PWS	DOMESTIC WATER COMPANY ROYAL FOREST SUBD	78.9	40	40	41	46	50	50	53	55
Current PWS	DORSETT PLACE	128.2	2	2	2	2	2	2	2	2
Current PWS	DOWDELL PUD	77.6	183	188	195	196	203	210	218	232
Current PWS	EAST MONTGOMERY COUNTY MUD 3	100.0	21	25	29	36	36	41	46	47
Current PWS	EAST MONTGOMERY COUNTY MUD 6	126.4	100	105	119	146	167	164	169	175
Current PWS	EAST MONTGOMERY COUNTY MUD 7	77.9	14	20	27	40	51	51	53	56
Current PWS	EAST PLANTATION UTILITY DISTRICT	156.5	68	68	98	113	111	111	117	122
Current PWS	EASTWOOD HILLS SUBDIVISION	126.4	8	12	12	12	12	13	14	14
Current PWS	ED LOU MOBILE HOME PARK	128.2	1	1	1	1	1	1	1	1
Current PWS	ED LOU MOBILE HOME PARK 2	100.0	0	0	0	0	0	0	0	1
Current PWS	EL DORADO MOBILE HOME COMMUNITY	100.0	21	21	22	22	22	22	21	19
Current PWS	EL DORADO UTILITY DISTRICT	111.6	136	141	152	156	159	160	166	174
Current PWS	EMERALD FOREST UTILITY DISTRICT	131.0	279	282	285	286	291	297	306	316
Current PWS	EMERALD LAKES SUBDIVISION	135.3	62	64	66	72	77	82	86	91
Current PWS	EMERSON ESTATES	77.9	53	59	63	63	64	64	64	64
Current PWS	ENCANTO REAL UTILITY DISTRICT	128.2	128	128	137	148	153	164	174	199
Current PWS	ENCHANTED COVE WATER SYSTEM	104.7	1	1	3	3	3	3	3	3
Current PWS	ENCHANTED FOREST	77.9	2	3	3	4	4	4	4	5

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	ENCHANTED VALLEY ESTATES WSC	128.2	14	18	19	19	22	23	25	30
Current PWS	ENCINO ESTATES	100.0	4	4	4	4	5	5	5	5
Current PWS	ESTATES OF HOLLY LAKES	128.2	4	4	4	4	4	4	4	4
Current PWS	ESTATES OF LEGENDS RANCH	204.4	82	87	93	102	108	114	121	127
Current PWS	ESTATES OF WILLOW CREEK	128.2	27	27	27	28	28	28	28	28
Current PWS	ESTATES WATER CORP	104.7	1	2	2	2	2	2	2	2
Current PWS	ESTATES WOODLAND II	100.0	4	4	5	5	6	6	6	6
Current PWS	EVERETT SQUARE WINDCREST ESTATES	160.8	27	30	35	38	41	43	45	48
Current PWS	FAIRFIELD ESTATES	77.9	8	9	9	9	10	11	11	11
Current PWS	FAIRVIEW ACRES MOBILE HOME SUBDIVISION	77.9	2	2	2	2	2	2	2	2
Current PWS	FAIRVIEW GARDENS MHP	160.8	0	0	0	0	0	0	0	1
Current PWS	FAIRWAY CROSSING	126.4	37	48	48	48	48	51	51	51
Current PWS	FAIRWAY MOBILE HOME VILLAGE	128.2	0	0	0	0	0	0	0	0
Current PWS	FALLBROOK UTILITY DISTRICT	101.5	245	246	250	252	251	249	241	224
Current PWS	FALLS OF WILDWOOD	160.8	1	1	2	2	2	2	2	3
Current PWS	FAR HILLS UTILITY DISTRICT	166.1	72	91	105	115	123	129	135	142
Current PWS	FATIMA FAMILY VILLAGE MHP	100.0	1	1	1	1	1	1	1	1
Current PWS	FAULKEY GULLY MUD	222.6	507	511	524	532	553	559	583	630
Current PWS	FIRST COLONY MUD 9	130.5	372	376	397	416	435	451	463	480
Current PWS	FIVE OAKS ESTATES	77.9	4	4	4	4	4	4	4	4
Current PWS	FIVE OAKS MOBILE HOME SUBDIVISION	128.2	33	33	33	33	33	33	33	34
Current PWS	FLAMINGO LAKES LOT OWNERS ASSOCIATION IN	77.9	2	2	3	3	3	3	3	3
Current PWS	FLORA 6	100.0	0	0	0	0	0	0	0	0
Current PWS	FLORA 7	100.0	0	1	1	1	1	1	1	2
Current PWS	FOREST HILLS MUD	77.9	83	83	83	83	83	82	80	74
Current PWS	FOREST MANOR SUBDIVISION	104.7	8	18	18	18	18	18	18	20
Current PWS	FOREST TRACE	204.4	53	53	58	61	69	73	75	77
Current PWS	FOREST WOODS SUBDIVISION	77.9	4	4	4	4	4	4	4	4
Current PWS	FORT BEND COUNTY FWSD 1	138.0	519	829	946	979	1,023	1,065	1,091	1,145
Current PWS	FORT BEND COUNTY FWSD 2	77.9	220	227	244	256	270	285	295	321
Current PWS	FORT BEND COUNTY MUD 115 RIVERSTONE	217.0	118	119	131	133	138	141	143	144
Current PWS	FORT BEND COUNTY MUD 116 CANYON GATE	177.2	271	316	316	322	326	332	336	337
Current PWS	FORT BEND COUNTY MUD 118	117.1	206	206	210	210	210	212	215	218
Current PWS	FORT BEND COUNTY MUD 119	131.4	247	247	249	253	259	265	272	286
Current PWS	FORT BEND COUNTY MUD 121	108.8	151	151	151	151	151	151	152	152
Current PWS	FORT BEND COUNTY MUD 122	99.5	128	129	129	132	134	138	141	148
Current PWS	FORT BEND COUNTY MUD 123	99.5	165	166	169	173	179	184	189	200
Current PWS	FORT BEND COUNTY MUD 124	144.2	143	152	153	157	160	164	167	174
Current PWS	FORT BEND COUNTY MUD 128	204.4	847	860	866	866	881	902	913	920
Current PWS	FORT BEND COUNTY MUD 129	167.9	326	334	337	342	349	363	368	371
Current PWS	FORT BEND COUNTY MUD 130	235.5	150	150	151	151	151	151	153	158
Current PWS	FORT BEND COUNTY MUD 131	187.3	106	113	118	121	137	146	146	147
Current PWS	FORT BEND COUNTY MUD 132	148.2	138	162	191	206	221	226	232	236
Current PWS	FORT BEND COUNTY MUD 133	148.2	390	433	440	447	455	472	478	478
Current PWS	FORT BEND COUNTY MUD 134B	138.0	407	412	433	438	451	459	469	490
Current PWS	FORT BEND COUNTY MUD 134C	138.0	375	375	377	377	379	383	383	391

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	FORT BEND COUNTY MUD 134D	138.0	140	150	165	165	169	176	177	177
Current PWS	FORT BEND COUNTY MUD 134E	138.0	90	92	98	98	100	103	107	109
Current PWS	FORT BEND COUNTY MUD 140 RIVERS EDGE	112.0	93	93	93	93	107	117	124	126
Current PWS	FORT BEND COUNTY MUD 141	138.0	23	32	41	48	59	69	69	69
Current PWS	FORT BEND COUNTY MUD 142	107.4	405	434	467	486	525	543	551	561
Current PWS	FORT BEND COUNTY MUD 143 WATER VIEW ESTA	86.3	194	197	203	209	219	224	229	245
Current PWS	FORT BEND COUNTY MUD 145 RIO VISTA	73.6	26	26	26	26	26	26	27	30
Current PWS	FORT BEND COUNTY MUD 146	221.3	375	410	412	412	412	414	418	424
Current PWS	FORT BEND COUNTY MUD 149	102.3	193	193	199	199	200	203	208	208
Current PWS	FORT BEND COUNTY MUD 151	176.7	633	725	861	873	897	921	941	992
Current PWS	FORT BEND COUNTY MUD 152	98.2	125	125	126	132	138	138	141	147
Current PWS	FORT BEND COUNTY MUD 155	103.5	155	189	230	262	290	306	315	317
Current PWS	FORT BEND COUNTY MUD 156	138.0	87	93	93	93	93	93	93	93
Current PWS	FORT BEND COUNTY MUD 158	111.4	98	111	128	141	152	159	163	163
Current PWS	FORT BEND COUNTY MUD 162	72.1	75	75	81	89	112	121	130	135
Current PWS	FORT BEND COUNTY MUD 165	138.0	243	243	245	245	247	252	257	269
Current PWS	FORT BEND COUNTY MUD 182	138.0	364	515	516	516	517	517	517	517
Current PWS	FORT BEND COUNTY MUD 184	126.4	79	80	82	97	105	105	109	117
Current PWS	FORT BEND COUNTY MUD 185	178.3	168	171	171	173	177	184	189	200
Current PWS	FORT BEND COUNTY MUD 189	138.0	36	41	46	49	65	73	73	74
Current PWS	FORT BEND COUNTY MUD 19	102.9	37	38	38	38	38	39	40	40
Current PWS	FORT BEND COUNTY MUD 190	138.0	137	137	137	147	154	160	166	178
Current PWS	FORT BEND COUNTY MUD 192	126.4	17	19	19	19	19	19	19	19
Current PWS	FORT BEND COUNTY MUD 194	221.3	239	254	263	263	263	274	285	312
Current PWS	FORT BEND COUNTY MUD 2	73.9	189	191	193	194	200	205	209	218
Current PWS	FORT BEND COUNTY MUD 206 VICTORIAN GARDE	138.0	80	80	80	80	82	83	86	90
Current PWS	FORT BEND COUNTY MUD 213	104.7	1	31	53	54	54	66	66	95
Current PWS	FORT BEND COUNTY MUD 218	77.9	25	28	41	51	61	66	69	69
Current PWS	FORT BEND COUNTY MUD 220	126.4	69	107	107	107	111	111	111	111
Current PWS	FORT BEND COUNTY MUD 23	91.6	488	505	505	509	514	517	523	547
Current PWS	FORT BEND COUNTY MUD 24	102.3	111	123	123	123	124	124	124	126
Current PWS	FORT BEND COUNTY MUD 25	148.6	689	710	719	721	729	737	750	777
Current PWS	FORT BEND COUNTY MUD 26 QUAIL GREEN WEST	73.1	149	155	160	170	173	178	181	191
Current PWS	FORT BEND COUNTY MUD 30	89.1	571	587	606	637	661	680	700	737
Current PWS	FORT BEND COUNTY MUD 34	139.2	269	277	291	299	312	324	331	351
Current PWS	FORT BEND COUNTY MUD 35	139.2	363	365	369	372	380	390	401	425
Current PWS	FORT BEND COUNTY MUD 37	314.4	155	157	158	158	158	160	164	171
Current PWS	FORT BEND COUNTY MUD 41	144.5	150	154	162	163	167	173	177	188
Current PWS	FORT BEND COUNTY MUD 42 WAT PLAT	147.0	204	213	219	225	231	237	243	259
Current PWS	FORT BEND COUNTY MUD 46	192.9	175	191	204	210	211	211	211	216
Current PWS	FORT BEND COUNTY MUD 47	111.7	100	100	100	100	100	106	110	120
Current PWS	FORT BEND COUNTY MUD 48	101.6	154	156	158	167	172	174	177	180
Current PWS	FORT BEND COUNTY MUD 49	162.1	51	54	54	54	59	59	62	73
Current PWS	FORT BEND COUNTY MUD 5	103.0	97	117	136	145	147	148	151	151
Current PWS	FORT BEND COUNTY MUD 50	119.1	321	370	414	445	463	476	488	514
Current PWS	FORT BEND COUNTY MUD 57	138.0	308	308	308	324	335	345	354	376

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	FORT BEND COUNTY MUD 58	138.0	618	620	627	632	639	646	651	669
Current PWS	FORT BEND COUNTY MUD 66	77.9	27	36	50	62	71	77	80	81
Current PWS	FORT BEND COUNTY MUD 81 WESTON LAKES	204.4	192	192	280	344	378	403	406	428
Current PWS	FORT BEND COUNTY WCID 2	183.4	2,471	2,687	2,812	2,914	3,004	3,110	3,190	3,368
Current PWS	FORT BEND COUNTY WCID 3	321.8	73	73	73	73	79	82	146	152
Current PWS	FORT BEND COUNTY WCID 8	145.3	2	2	2	2	2	2	2	2
Current PWS	FOUNTAINHEAD MUD	130.1	278	286	289	291	296	302	308	324
Current PWS	FOUNTAINVIEW SUBDIVISION	126.4	99	100	102	104	101	102	98	90
Current PWS	FOUR SEASONS MHP	100.0	0	0	0	0	0	0	0	0
Current PWS	FREEMAN RANCH	123.3	5	5	5	5	13	18	22	22
Current PWS	FRONTIER WATER	104.7	38	38	54	58	58	58	58	68
Current PWS	FRY ROAD MUD	200.7	231	235	237	239	244	251	263	283
Current PWS	FULBROOK SUBDIVISION WATER PLANT	138.0	39	70	99	132	167	187	190	233
Current PWS	FULSHEAR MUD 3A	138.0	194	228	261	262	264	264	264	265
Current PWS	G & W WSC	77.9	313	318	324	329	333	339	350	368
Current PWS	G & W WSC WOODLAND LAKES WATER SYSTEM	77.9	0	0	0	0	0	0	0	0
Current PWS	GALVESTON COUNTY FWSD 6 TIKI ISLAND	191.1	77	77	77	77	77	77	77	77
Current PWS	GALVESTON COUNTY MUD 12	102.2	86	86	86	86	86	86	86	86
Current PWS	GALVESTON COUNTY WCID 1	95.7	925	958	975	987	996	1,003	1,012	1,020
Current PWS	GALVESTON COUNTY WCID 12	198.4	248	256	261	263	265	267	268	270
Current PWS	GALVESTON COUNTY WCID 19	86.1	20	24	26	27	27	28	28	29
Current PWS	GALVESTON COUNTY WCID 8	160.8	251	257	261	262	263	264	264	265
Current PWS	GEMSTONE ESTATES SUBDIVISION	100.0	10	11	13	16	17	18	19	20
Current PWS	GENERATION PARK MANAGEMENT DISTRICT	160.8	350	677	804	857	889	902	929	983
Current PWS	GLENWOOD MOBILE HOME SUBDIVISION	77.9	2	2	2	2	2	2	2	2
Current PWS	GOLDENROD WSC	138.0	4	4	8	8	8	10	11	22
Current PWS	GRAND ESTATES	100.0	28	28	28	28	28	28	29	30
Current PWS	GRAND HARBOR WATER SYSTEM	192.3	151	163	169	171	182	190	196	202
Current PWS	GRAND LAKES MUD 1	173.6	224	224	224	224	224	228	234	248
Current PWS	GRAND LAKES MUD 2	173.6	146	146	146	146	149	153	158	169
Current PWS	GRAND LAKES MUD 4	173.6	242	242	242	247	256	264	271	288
Current PWS	GRAND MISSION MUD 1	110.1	248	249	250	256	260	264	268	280
Current PWS	GRAND MISSION MUD 2	140.4	241	245	265	287	299	314	320	339
Current PWS	GRAND OAKS MUD	77.9	33	34	35	35	36	37	38	39
Current PWS	GRANDE SAN JACINTO WATER SYSTEM	123.3	156	169	217	236	259	285	312	343
Current PWS	GRANGER SUBDIVISION	104.7	2	2	2	2	2	2	2	2
Current PWS	GRANT ROAD ESTATES MOBILE HOME SUB	128.2	6	6	6	6	6	7	7	7
Current PWS	GRANT ROAD PUD	213.4	200	207	208	210	211	216	220	231
Current PWS	GRANTWOOD SUBDIVISION	128.2	8	8	8	8	8	8	8	15
Current PWS	GRASSLANDS	104.7	19	19	19	19	19	18	18	17
Current PWS	GRAY UTILITY SERVICE	100.0	48	54	55	66	77	90	105	118
Current PWS	GREEN MEADOWS WSC	77.9	0	0	0	0	0	0	0	0
Current PWS	GREEN TRAILS MUD	255.2	184	188	188	188	193	196	209	227
Current PWS	GREENBRIAR ESTATES	104.7	2	4	6	8	11	13	16	22
Current PWS	GREENGATE ACRES SUBDIVISION	128.2	23	24	29	33	33	36	39	41
Current PWS	GREENLAND SQUARE SUBDIVISION WS	122.0	10	10	8	6	6	6	6	12

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	GREENS ROAD MOBILE HOME COMMUNITY	128.2	29	29	29	29	29	29	29	29
Current PWS	GREENVILLA MOBILE HOME PARK	100.0	2	2	2	2	2	2	2	2
Current PWS	GREENWOOD UTILITY DISTRICT	77.9	284	286	286	287	284	285	274	249
Current PWS	GREENWOOD VILLAGE	77.9	99	104	104	105	104	105	102	94
Current PWS	H & L NEW GULF	100.0	6	6	6	6	6	6	6	6
Current PWS	H O E WSC	86.7	23	26	27	28	32	37	46	57
Current PWS	HACKBERRY CREEK SUBDIVISION	77.9	6	7	7	9	10	11	13	15
Current PWS	HARBORSIDE	135.3	9	10	12	12	14	15	15	16
Current PWS	HARDIN WSC	95.0	146	148	151	155	161	168	174	183
Current PWS	HARRIS COUNTY FWSD 1A	77.9	76	77	77	77	78	75	76	87
Current PWS	HARRIS COUNTY FWSD 1B	70.6	25	27	31	32	34	37	52	67
Current PWS	HARRIS COUNTY FWSD 27	90.2	97	115	121	125	144	138	146	156
Current PWS	HARRIS COUNTY FWSD 45	104.7	20	20	21	22	22	22	22	23
Current PWS	HARRIS COUNTY FWSD 47	120.1	122	123	129	133	133	134	133	135
Current PWS	HARRIS COUNTY FWSD 51	163.7	1,087	1,124	1,134	1,140	1,129	1,131	1,096	1,017
Current PWS	HARRIS COUNTY FWSD 58	167.4	102	102	102	102	102	102	103	103
Current PWS	HARRIS COUNTY FWSD 6	169.5	130	130	130	130	130	130	132	142
Current PWS	HARRIS COUNTY FWSD 61	125.7	657	673	680	687	712	730	762	806
Current PWS	HARRIS COUNTY IMPROVEMENT DISTRICT 18	128.2	405	437	479	491	498	498	500	507
Current PWS	HARRIS COUNTY LEADERSHIP ACADEMY	122.0	0	0	0	0	0	0	0	0
Current PWS	HARRIS COUNTY MUD 1	133.1	414	415	415	416	418	420	421	434
Current PWS	HARRIS COUNTY MUD 102	122.0	454	460	467	470	489	501	520	552
Current PWS	HARRIS COUNTY MUD 104	141.5	185	185	185	185	188	193	198	211
Current PWS	HARRIS COUNTY MUD 105	88.9	348	361	357	354	361	368	383	402
Current PWS	HARRIS COUNTY MUD 106	138.8	226	230	238	242	251	254	266	286
Current PWS	HARRIS COUNTY MUD 109	120.6	406	411	418	420	423	424	433	442
Current PWS	HARRIS COUNTY MUD 11	94.7	129	129	129	129	128	127	123	114
Current PWS	HARRIS COUNTY MUD 118	102.8	248	249	251	252	249	248	240	223
Current PWS	HARRIS COUNTY MUD 119	102.3	253	260	260	260	258	257	249	232
Current PWS	HARRIS COUNTY MUD 120	101.0	473	482	484	484	495	503	522	553
Current PWS	HARRIS COUNTY MUD 122	89.2	44	46	45	45	46	49	51	61
Current PWS	HARRIS COUNTY MUD 127	83.7	230	233	235	237	241	245	251	259
Current PWS	HARRIS COUNTY MUD 130	187.5	182	187	189	192	195	199	220	230
Current PWS	HARRIS COUNTY MUD 132	195.0	468	480	496	502	517	524	555	591
Current PWS	HARRIS COUNTY MUD 136	169.9	166	166	166	166	166	166	166	174
Current PWS	HARRIS COUNTY MUD 144	101.3	93	98	99	100	103	108	113	122
Current PWS	HARRIS COUNTY MUD 147	85.7	80	84	84	84	86	87	90	96
Current PWS	HARRIS COUNTY MUD 148 KINGSLAKE	76.1	173	177	195	204	204	204	192	163
Current PWS	HARRIS COUNTY MUD 149	89.1	130	132	133	134	137	141	147	157
Current PWS	HARRIS COUNTY MUD 150	77.2	265	269	271	273	288	294	305	324
Current PWS	HARRIS COUNTY MUD 151	131.6	324	330	337	340	355	358	365	382
Current PWS	HARRIS COUNTY MUD 152	102.4	320	326	337	342	353	357	372	398
Current PWS	HARRIS COUNTY MUD 153	128.4	421	428	440	445	459	465	484	515
Current PWS	HARRIS COUNTY MUD 154	106.2	405	409	420	423	434	439	452	477
Current PWS	HARRIS COUNTY MUD 155	125.3	125	127	128	129	136	143	148	156
Current PWS	HARRIS COUNTY MUD 156	250.5	140	143	145	147	154	162	167	183

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 157	85.6	467	475	471	467	478	485	499	528
Current PWS	HARRIS COUNTY MUD 158	83.6	211	214	214	213	215	219	225	232
Current PWS	HARRIS COUNTY MUD 16	147.0	163	169	171	173	179	183	191	196
Current PWS	HARRIS COUNTY MUD 162	144.4	139	142	144	145	145	148	155	167
Current PWS	HARRIS COUNTY MUD 163	111.9	197	200	202	203	204	205	211	223
Current PWS	HARRIS COUNTY MUD 165	96.8	944	968	966	964	989	1,004	1,050	1,096
Current PWS	HARRIS COUNTY MUD 166	122.0	176	179	180	183	187	192	200	216
Current PWS	HARRIS COUNTY MUD 167	98.7	564	572	574	577	589	604	624	660
Current PWS	HARRIS COUNTY MUD 168	125.3	425	429	432	434	445	458	473	499
Current PWS	HARRIS COUNTY MUD 170	128.2	63	64	64	65	65	66	68	71
Current PWS	HARRIS COUNTY MUD 171	122.0	51	63	63	64	64	64	68	70
Current PWS	HARRIS COUNTY MUD 172	253.8	238	243	243	244	250	259	268	290
Current PWS	HARRIS COUNTY MUD 173	166.7	231	234	234	235	239	247	264	277
Current PWS	HARRIS COUNTY MUD 179	116.7	134	134	134	134	135	136	139	141
Current PWS	HARRIS COUNTY MUD 18 HEATHERWOOD HUNTERS	162.8	207	211	212	214	218	222	244	267
Current PWS	HARRIS COUNTY MUD 180	79.7	180	184	184	185	189	193	203	215
Current PWS	HARRIS COUNTY MUD 183	99.7	129	129	129	129	131	131	138	142
Current PWS	HARRIS COUNTY MUD 185	130.3	128	131	132	133	135	139	144	153
Current PWS	HARRIS COUNTY MUD 186	224.2	198	199	200	201	203	211	223	236
Current PWS	HARRIS COUNTY MUD 188	116.5	253	257	259	260	263	267	274	286
Current PWS	HARRIS COUNTY MUD 189	154.9	225	233	235	237	245	255	268	289
Current PWS	HARRIS COUNTY MUD 191	233.3	219	223	225	227	232	234	243	255
Current PWS	HARRIS COUNTY MUD 196	160.9	402	404	405	405	413	423	431	449
Current PWS	HARRIS COUNTY MUD 200 CRANBROOK	118.3	419	426	429	431	437	443	446	459
Current PWS	HARRIS COUNTY MUD 202	103.3	110	111	111	111	115	117	119	123
Current PWS	HARRIS COUNTY MUD 205	93.2	65	65	65	65	68	71	75	80
Current PWS	HARRIS COUNTY MUD 208	137.6	168	171	172	172	174	179	186	198
Current PWS	HARRIS COUNTY MUD 211	128.2	48	48	48	48	51	53	55	56
Current PWS	HARRIS COUNTY MUD 213-A	100.0	152	182	182	182	182	182	185	213
Current PWS	HARRIS COUNTY MUD 215	99.3	59	61	61	62	63	65	66	68
Current PWS	HARRIS COUNTY MUD 216	201.2	181	185	184	183	184	185	187	194
Current PWS	HARRIS COUNTY MUD 217	70.8	75	76	76	76	78	81	84	89
Current PWS	HARRIS COUNTY MUD 220	134.0	53	56	56	56	56	55	54	50
Current PWS	HARRIS COUNTY MUD 221	104.7	215	217	222	224	229	231	239	256
Current PWS	HARRIS COUNTY MUD 222	132.8	233	238	241	242	244	248	256	264
Current PWS	HARRIS COUNTY MUD 23	83.5	116	116	116	116	115	115	111	103
Current PWS	HARRIS COUNTY MUD 230	142.1	262	267	270	273	283	292	301	313
Current PWS	HARRIS COUNTY MUD 231	100.0	8	8	11	12	14	16	19	23
Current PWS	HARRIS COUNTY MUD 233	226.3	60	63	63	64	65	69	76	93
Current PWS	HARRIS COUNTY MUD 238	95.3	287	288	288	288	293	296	302	313
Current PWS	HARRIS COUNTY MUD 239	114.6	258	259	259	260	261	268	280	295
Current PWS	HARRIS COUNTY MUD 24	165.6	590	600	603	608	617	630	651	683
Current PWS	HARRIS COUNTY MUD 248	128.2	110	113	115	117	122	126	128	133
Current PWS	HARRIS COUNTY MUD 249	179.8	196	196	193	189	190	191	196	202
Current PWS	HARRIS COUNTY MUD 25 BROOK HOLLOW WEST S	128.2	37	38	38	38	38	38	38	37
Current PWS	HARRIS COUNTY MUD 250	123.1	32	36	37	40	43	45	48	52

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 255	195.9	74	74	74	74	74	74	82	88
Current PWS	HARRIS COUNTY MUD 257	114.9	116	117	118	118	121	123	127	134
Current PWS	HARRIS COUNTY MUD 26	85.8	472	476	494	504	515	520	537	566
Current PWS	HARRIS COUNTY MUD 261	216.7	83	86	88	89	89	89	87	82
Current PWS	HARRIS COUNTY MUD 264	140.9	179	180	181	181	183	185	191	201
Current PWS	HARRIS COUNTY MUD 275	230.5	50	50	51	51	51	53	56	59
Current PWS	HARRIS COUNTY MUD 276	105.3	176	179	180	181	185	189	200	215
Current PWS	HARRIS COUNTY MUD 278	91.7	331	334	357	366	370	373	380	395
Current PWS	HARRIS COUNTY MUD 280	128.2	140	140	140	140	140	140	141	149
Current PWS	HARRIS COUNTY MUD 281	128.2	170	170	180	184	194	197	202	214
Current PWS	HARRIS COUNTY MUD 282	128.2	193	194	210	217	233	236	245	259
Current PWS	HARRIS COUNTY MUD 284	91.4	148	151	153	153	156	159	169	181
Current PWS	HARRIS COUNTY MUD 285	132.3	588	594	639	688	680	687	682	664
Current PWS	HARRIS COUNTY MUD 286	128.2	42	42	42	42	42	48	48	48
Current PWS	HARRIS COUNTY MUD 287	100.4	176	178	210	229	264	270	300	322
Current PWS	HARRIS COUNTY MUD 290	106.8	377	386	409	418	431	436	454	482
Current PWS	HARRIS COUNTY MUD 304	119.1	226	228	234	237	246	253	270	291
Current PWS	HARRIS COUNTY MUD 316	193.1	61	61	61	61	61	62	66	73
Current PWS	HARRIS COUNTY MUD 319	128.2	45	45	45	45	45	45	45	45
Current PWS	HARRIS COUNTY MUD 321	160.8	73	80	82	83	82	82	79	74
Current PWS	HARRIS COUNTY MUD 322 FAIRFIELD VILLAGE	149.7	213	213	214	214	218	220	224	232
Current PWS	HARRIS COUNTY MUD 33	91.1	186	189	190	191	196	199	206	222
Current PWS	HARRIS COUNTY MUD 341	194.6	142	143	146	148	153	156	161	170
Current PWS	HARRIS COUNTY MUD 342	125.8	196	198	240	260	261	265	274	289
Current PWS	HARRIS COUNTY MUD 344	161.3	264	320	320	320	320	320	329	331
Current PWS	HARRIS COUNTY MUD 345	205.8	287	290	291	293	305	307	315	332
Current PWS	HARRIS COUNTY MUD 354	131.7	312	313	314	316	326	334	348	364
Current PWS	HARRIS COUNTY MUD 358	128.2	122	126	129	129	130	131	131	136
Current PWS	HARRIS COUNTY MUD 36	296.5	200	211	287	319	321	331	352	391
Current PWS	HARRIS COUNTY MUD 360	194.6	276	276	277	279	283	292	303	325
Current PWS	HARRIS COUNTY MUD 361	140.8	249	253	266	272	279	282	291	305
Current PWS	HARRIS COUNTY MUD 364	145.4	295	295	297	298	304	305	311	322
Current PWS	HARRIS COUNTY MUD 365	194.9	288	288	289	289	291	296	299	321
Current PWS	HARRIS COUNTY MUD 367	227.5	490	493	522	557	595	607	631	672
Current PWS	HARRIS COUNTY MUD 368	92.7	397	406	410	414	420	424	434	448
Current PWS	HARRIS COUNTY MUD 370	184.6	312	314	320	322	331	338	348	364
Current PWS	HARRIS COUNTY MUD 371	301.2	189	189	189	190	196	198	212	216
Current PWS	HARRIS COUNTY MUD 372	221.1	209	221	221	221	227	235	255	290
Current PWS	HARRIS COUNTY MUD 374 CYPRESS CREEK LAKE	122.0	184	189	189	190	190	190	190	192
Current PWS	HARRIS COUNTY MUD 383	227.5	403	406	422	425	446	458	475	510
Current PWS	HARRIS COUNTY MUD 387	128.2	1	1	1	1	1	1	1	1
Current PWS	HARRIS COUNTY MUD 389	154.5	122	122	123	124	131	131	134	135
Current PWS	HARRIS COUNTY MUD 391	131.5	402	410	413	413	419	425	434	469
Current PWS	HARRIS COUNTY MUD 396	128.2	175	175	194	213	230	233	241	255
Current PWS	HARRIS COUNTY MUD 397	141.1	271	273	291	296	317	322	332	350
Current PWS	HARRIS COUNTY MUD 399	70.4	71	72	72	72	73	74	75	80

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 400 - EAST	155.6	213	219	229	231	243	245	249	262
Current PWS	HARRIS COUNTY MUD 400 - WEST	155.6	327	329	351	361	368	373	382	397
Current PWS	HARRIS COUNTY MUD 401	105.8	150	151	153	153	162	165	172	180
Current PWS	HARRIS COUNTY MUD 405	122.0	11	11	10	8	8	8	8	8
Current PWS	HARRIS COUNTY MUD 412	147.8	233	239	272	286	291	295	305	322
Current PWS	HARRIS COUNTY MUD 418	122.0	44	92	92	92	100	101	103	111
Current PWS	HARRIS COUNTY MUD 419	182.8	795	808	808	808	811	815	822	842
Current PWS	HARRIS COUNTY MUD 420	69.0	43	43	45	45	44	44	43	39
Current PWS	HARRIS COUNTY MUD 421	104.7	61	66	127	150	149	150	149	146
Current PWS	HARRIS COUNTY MUD 422	77.9	42	42	61	69	69	71	75	81
Current PWS	HARRIS COUNTY MUD 423	100.0	38	39	41	42	45	46	49	53
Current PWS	HARRIS COUNTY MUD 43	73.7	157	158	160	160	162	165	176	190
Current PWS	HARRIS COUNTY MUD 432	117.8	175	175	175	175	179	192	204	225
Current PWS	HARRIS COUNTY MUD 433	122.0	220	220	220	220	220	220	220	220
Current PWS	HARRIS COUNTY MUD 434	122.0	66	66	62	59	59	59	59	59
Current PWS	HARRIS COUNTY MUD 44	136.2	104	104	104	104	104	105	107	108
Current PWS	HARRIS COUNTY MUD 449	122.0	205	224	227	227	228	230	231	246
Current PWS	HARRIS COUNTY MUD 454	128.2	2	2	2	3	3	3	4	5
Current PWS	HARRIS COUNTY MUD 457	122.0	101	101	101	101	101	101	101	112
Current PWS	HARRIS COUNTY MUD 458	122.0	26	42	42	44	45	45	53	57
Current PWS	HARRIS COUNTY MUD 46	100.3	166	166	166	167	167	167	168	178
Current PWS	HARRIS COUNTY MUD 468	265.2	277	278	278	278	279	283	288	312
Current PWS	HARRIS COUNTY MUD 48	81.5	14	15	15	15	16	16	17	20
Current PWS	HARRIS COUNTY MUD 480	128.2	5	6	6	7	8	8	10	22
Current PWS	HARRIS COUNTY MUD 489	122.0	303	355	355	355	355	374	402	442
Current PWS	HARRIS COUNTY MUD 49	97.0	313	320	338	347	348	349	346	341
Current PWS	HARRIS COUNTY MUD 494	204.4	215	219	234	240	248	250	260	282
Current PWS	HARRIS COUNTY MUD 495	122.0	170	170	170	170	170	170	170	170
Current PWS	HARRIS COUNTY MUD 5	77.9	187	190	192	194	198	204	213	225
Current PWS	HARRIS COUNTY MUD 50	101.7	134	137	142	145	151	155	169	183
Current PWS	HARRIS COUNTY MUD 500	122.0	39	39	39	39	39	39	39	39
Current PWS	HARRIS COUNTY MUD 501	122.0	105	105	105	105	105	105	105	105
Current PWS	HARRIS COUNTY MUD 502	122.0	137	137	137	137	137	137	137	138
Current PWS	HARRIS COUNTY MUD 504	104.7	77	77	77	78	78	79	84	88
Current PWS	HARRIS COUNTY MUD 53	82.5	623	636	656	663	682	689	712	751
Current PWS	HARRIS COUNTY MUD 530	128.2	71	75	76	77	81	86	93	99
Current PWS	HARRIS COUNTY MUD 531	128.2	50	50	50	50	50	50	51	52
Current PWS	HARRIS COUNTY MUD 536	122.0	93	93	93	93	93	93	93	93
Current PWS	HARRIS COUNTY MUD 537	104.7	11	11	11	11	10	10	10	9
Current PWS	HARRIS COUNTY MUD 538	122.0	17	17	17	17	17	17	17	20
Current PWS	HARRIS COUNTY MUD 542	128.2	8	9	9	9	10	11	12	15
Current PWS	HARRIS COUNTY MUD 55 HERITAGE PARK	86.8	494	500	495	490	493	496	505	533
Current PWS	HARRIS COUNTY MUD 551	128.2	41	43	43	43	45	48	50	52
Current PWS	HARRIS COUNTY MUD 558	128.2	8	10	10	10	11	13	13	16
Current PWS	HARRIS COUNTY MUD 58	104.7	71	71	71	71	71	71	71	73
Current PWS	HARRIS COUNTY MUD 6 CARRIAGE LANE	86.7	118	119	119	119	118	117	113	105

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HARRIS COUNTY MUD 61	170.2	139	139	148	151	155	157	159	162
Current PWS	HARRIS COUNTY MUD 62	86.3	69	71	71	71	79	81	85	91
Current PWS	HARRIS COUNTY MUD 63	122.0	10	10	10	10	14	18	29	47
Current PWS	HARRIS COUNTY MUD 64	107.2	170	170	170	170	171	171	172	174
Current PWS	HARRIS COUNTY MUD 65	83.4	132	134	134	134	134	137	143	152
Current PWS	HARRIS COUNTY MUD 69	128.2	158	159	160	160	165	167	171	175
Current PWS	HARRIS COUNTY MUD 70	113.7	255	260	262	264	269	274	284	302
Current PWS	HARRIS COUNTY MUD 71	98.0	501	514	542	555	578	593	613	650
Current PWS	HARRIS COUNTY MUD 8	90.0	168	172	181	185	183	183	177	165
Current PWS	HARRIS COUNTY MUD 81	106.8	409	418	418	418	429	437	454	484
Current PWS	HARRIS COUNTY MUD 82	91.3	450	458	465	465	478	482	492	517
Current PWS	HARRIS COUNTY MUD 86	168.7	232	237	241	250	263	271	285	306
Current PWS	HARRIS COUNTY MUD 96	77.9	242	243	260	267	269	271	277	287
Current PWS	HARRIS COUNTY UD 14	126.4	144	145	146	147	146	148	146	146
Current PWS	HARRIS COUNTY UD 15	96.1	132	132	132	132	135	138	141	148
Current PWS	HARRIS COUNTY UD 16	83.8	213	217	221	225	230	234	241	250
Current PWS	HARRIS COUNTY UTILITY DISTRICT 6	99.5	338	344	346	348	357	367	382	406
Current PWS	HARRIS COUNTY WCID 1	108.0	336	341	356	362	383	387	397	415
Current PWS	HARRIS COUNTY WCID 109	172.4	462	466	468	471	476	484	504	528
Current PWS	HARRIS COUNTY WCID 110	190.6	485	495	509	514	538	550	564	589
Current PWS	HARRIS COUNTY WCID 113 ENCHANTED VILLAGE	140.3	62	64	65	66	68	69	73	85
Current PWS	HARRIS COUNTY WCID 114	172.5	325	334	337	339	345	353	372	402
Current PWS	HARRIS COUNTY WCID 116	198.2	215	221	241	249	265	265	271	271
Current PWS	HARRIS COUNTY WCID 119	111.8	353	359	360	361	367	374	384	405
Current PWS	HARRIS COUNTY WCID 132	134.1	122	129	129	129	130	137	139	148
Current PWS	HARRIS COUNTY WCID 133	92.4	209	214	215	215	213	213	206	192
Current PWS	HARRIS COUNTY WCID 136	79.3	89	91	94	96	101	101	106	113
Current PWS	HARRIS COUNTY WCID 156	165.0	49	49	49	49	49	49	50	54
Current PWS	HARRIS COUNTY WCID 161	149.8	61	61	61	61	60	58	58	58
Current PWS	HARRIS COUNTY WCID 21	102.0	545	577	655	680	685	697	731	777
Current PWS	HARRIS COUNTY WCID 36	66.5	386	401	409	413	410	411	399	372
Current PWS	HARRIS COUNTY WCID 50 EL LAGO	104.7	122	122	122	122	122	121	122	130
Current PWS	HARRIS COUNTY WCID 70	143.9	79	79	79	79	79	79	79	81
Current PWS	HARRIS COUNTY WCID 74	107.5	224	227	234	235	232	232	224	207
Current PWS	HARRIS COUNTY WCID 84	140.6	305	308	317	327	332	337	356	380
Current PWS	HARRIS COUNTY WCID 89	160.8	281	284	284	284	282	282	273	253
Current PWS	HARRIS COUNTY WCID 91	110.1	107	113	114	115	118	120	133	141
Current PWS	HARRIS COUNTY WCID 92	140.5	178	182	170	158	157	162	179	187
Current PWS	HARRIS COUNTY WCID 96	162.1	488	498	566	587	575	577	558	516
Current PWS	HARRIS COUNTY WCID 99	177.3	122	131	140	142	144	144	147	154
Current PWS	HARRIS COUNTY WCID FONDREN ROAD	84.5	88	91	91	91	90	90	87	81
Current PWS	HARRIS FORT BEND COUNTIES MUD 1	104.8	170	171	173	177	180	184	189	201
Current PWS	HARRIS FORT BEND COUNTIES MUD 5	152.6	215	217	219	228	240	247	253	267
Current PWS	HARRIS MONTGOMERY COUNTIES MUD 386	211.2	1,143	1,162	1,168	1,175	1,187	1,205	1,240	1,308
Current PWS	HARRIS MONTGOMERY COUNTIES MUD 386 MAY V	160.8	159	165	166	166	168	178	194	204
Current PWS	HARRIS-FORT BEND COUNTIES MUD 3	122.3	278	289	289	289	292	294	310	325

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HASTINGS HOMEOWNERS WATER SYSTEM	104.7	7	8	10	11	12	28	28	28
Current PWS	HAVENSHIRE WATER SYSTEM	104.7	1	1	1	1	1	1	1	2
Current PWS	HAZY HOLLOW EAST ESTATES	69.2	63	70	71	72	72	72	74	76
Current PWS	HEATHERGATE ESTATES	77.9	8	8	8	8	8	8	16	16
Current PWS	HEATHERLOCH MUD	174.9	223	224	224	224	227	233	241	261
Current PWS	HEAVENS MOBILE HOME PARK	100.0	0	0	1	1	1	1	1	1
Current PWS	HEIGHTS COUNTRY SUBDIVISION	77.9	3	3	4	4	4	5	6	7
Current PWS	HERITAGE OAKS SUBDIVISION	77.9	10	11	12	12	12	12	13	13
Current PWS	HERMANN OAKS MOBILE HOME VILLAGE	100.0	1	1	1	1	1	1	1	1
Current PWS	HERON LAKES ESTATES	108.4	99	101	101	102	103	107	115	118
Current PWS	HIDDEN FOREST ESTATES	100.0	13	14	14	14	14	14	14	15
Current PWS	HIGH MEADOWS RANCH WATER SUPPLY	203.3	212	308	367	406	439	465	491	519
Current PWS	HIGHLAND BAYOU ESTATES WSC	100.0	1	1	1	1	1	1	1	1
Current PWS	HIGHLAND MEADOWS MOBILE HOME PARK	77.9	1	1	1	1	1	1	1	1
Current PWS	HIGHLAND MOBILE HOME SUBDIVISION	204.4	0	0	0	0	0	0	0	0
Current PWS	HIGHLAND RIDGE SUBDIVISION	140.0	22	22	22	22	22	22	22	22
Current PWS	HIGHLINE OAKS WATER UTILITY	77.9	6	8	10	10	10	10	10	10
Current PWS	HILLGREEN SUBDIVISION WATER CO	77.9	2	3	5	7	9	9	9	10
Current PWS	HILLSIDE ESTATES WATER SYSTEM	77.9	1	1	1	1	1	1	1	1
Current PWS	HOLIDAY SHORES	77.9	8	8	8	8	7	7	7	6
Current PWS	HOLLY OAKS MOBILE HOME PARK	204.4	1	1	1	1	1	1	1	1
Current PWS	HOMELAND SUBDIVISION	77.9	0	0	0	0	0	0	0	0
Current PWS	HOMESTEAD OAKS MOBILE HOME COMM	128.2	2	2	2	2	2	2	2	2
Current PWS	HOOKS MOBILE HOME PARK	77.9	4	4	4	4	4	4	4	4
Current PWS	HOOP N HOLLER LAKE ESTATES	77.9	7	7	7	7	7	7	7	7
Current PWS	HORSEPEN BAYOU MUD	119.1	270	273	276	277	282	289	296	307
Current PWS	HOUSE CORRAL STREET WATER SYSTEM	128.2	0	0	0	0	0	0	0	0
Current PWS	HOUSTON SA_Acres Homes 2030_EWPP	112.7	7,818	7,968	8,122	8,187	8,123	8,087	7,830	7,270
Current PWS	HOUSTON SA_Bellaire Braes 2030_EWPP	112.7	4,532	4,649	4,650	4,658	4,750	4,853	5,051	5,388
Current PWS	HOUSTON SA_EWPP I 2030_EWPP	112.7	10,901	11,084	11,181	11,234	11,081	11,114	10,617	9,753
Current PWS	HOUSTON SA_EWPP I 2030_SEWPP-W	112.7	5,869	6,063	6,505	6,694	6,605	6,645	6,441	5,992
Current PWS	HOUSTON SA_EWPP III 2030_EWPP	112.7	11,675	12,147	12,687	12,900	12,732	12,698	12,218	11,284
Current PWS	HOUSTON SA_Isolated Groundwater 2030_NEWPP	112.7	171	175	191	198	206	209	219	237
Current PWS	HOUSTON SA_Katy Addicks 2030_EWPP	112.7	8,314	8,507	8,527	8,538	8,728	8,900	9,200	9,695
Current PWS	HOUSTON SA_NEWPP 2030_NEWPP	112.7	5,238	5,402	5,676	5,822	5,835	5,872	5,829	5,685
Current PWS	HOUSTON SA_SEWPP 2030_SEWPP-SE	112.7	4,917	5,212	5,365	5,423	5,315	5,323	5,292	5,171
Current PWS	HOUSTON SA_Sims Bayou 2030_EWPP	112.7	9,506	9,993	10,428	10,654	10,638	10,709	10,506	10,052
Current PWS	HOUSTON SA_Southwest 2030_EWPP	112.7	18,304	18,637	18,743	18,792	18,547	18,415	17,746	16,393
Current PWS	HOUSTON SA_Spring Branch 2030_EWPP	112.7	4,768	4,851	4,894	4,918	4,913	4,899	4,766	4,460
Current PWS	HOUSTON SA_UKN 2030_	112.7	0	0	0	0	0	0	0	0
Current PWS	HOUSTON SA_West Lake Houston Parkway Cost Share 2030_NEWPP	112.7	342	349	381	395	407	412	428	456
Current PWS	HOUSTON SA_Willowchase 2030_NEWPP	112.7	346	356	359	362	372	378	388	415
Current PWS	HOUSTON SUBURBAN HEIGHTS MHP	100.0	1	1	2	2	2	2	2	2
Current PWS	HUFFMAN HEIGHTS SUBDIVISION	77.9	7	10	10	11	11	11	11	12
Current PWS	HUFFMAN HOLLOW APARTMENTS	77.9	0	0	0	0	0	0	0	0
Current PWS	HULON LAKES SUBDIVISION	96.4	36	40	42	45	49	51	53	56

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	HUNGERFORD MUD 1	104.7	11	11	11	11	11	12	12	12
Current PWS	HUNTER PLACE	122.0	8	8	8	8	8	8	8	8
Current PWS	HUNTERS COVE SEC 1	77.9	0	0	0	0	0	0	0	0
Current PWS	HUNTERS COVE SUB SOUTH	77.9	0	0	1	1	1	2	2	2
Current PWS	HUNTERS GLEN MUD	75.2	293	299	312	316	325	328	337	353
Current PWS	HUNTERS RETREAT	118.0	48	58	60	61	62	64	66	68
Current PWS	HUNTERS VILLAGE SUBDIVISION	100.0	4	6	6	6	6	6	6	6
Current PWS	HUNTINGTON ESTATES	100.0	11	12	18	18	18	18	19	19
Current PWS	HWY 59 ESTATES	77.9	8	13	15	16	18	21	24	27
Current PWS	HYDIES CROSSING	128.2	4	4	5	5	7	8	9	9
Current PWS	IMPERIAL VALLEY MHC	100.0	38	38	38	39	39	39	39	41
Current PWS	INDIAN SPRINGS WATER SYSTEM	77.9	7	7	8	9	9	9	9	9
Current PWS	INDIGO LAKES WATER SYSTEM	125.9	120	167	224	250	268	281	295	310
Current PWS	INDIGO RANCH	160.8	39	52	56	59	62	64	67	69
Current PWS	INTERSTATE MUD	148.8	284	292	291	291	296	302	313	330
Current PWS	INVERNESS FOREST IMPROVEMENT DISTRICT	104.6	115	123	130	133	141	145	159	170
Current PWS	IS ZEN CENTER LOTUS LAKE	100.0	1	1	1	1	2	2	2	2
Current PWS	ISAACSON MUD	100.0	16	16	16	16	16	16	16	16
Current PWS	J & L TERRY LANE	100.0	1	1	1	2	2	2	2	2
Current PWS	J M P UTILITIES	77.9	5	5	5	5	5	5	5	4
Current PWS	JACKRABBIT ROAD PUD	85.4	297	304	305	306	316	322	333	351
Current PWS	JOHNSONS WATER SERVICE	100.0	2	2	2	3	3	3	3	3
Current PWS	JONES CREEK TERRACE	70.7	23	23	23	23	22	21	20	19
Current PWS	JONES CREEKWOOD	77.9	1	1	1	1	1	1	1	1
Current PWS	JOY VILLAGE	104.7	2	3	4	5	7	7	7	7
Current PWS	K & B WATERWORKS	100.0	3	3	3	3	3	3	3	3
Current PWS	K ESTATES WATER SYSTEM	77.9	2	2	2	2	2	2	2	3
Current PWS	K LAKE TERRACE	104.7	3	3	3	3	3	4	4	4
Current PWS	KEENAN WSC	83.3	34	47	66	74	80	85	93	98
Current PWS	KENWOOD SUBDIVISION WATER SYSTEM	77.9	6	6	6	6	5	5	5	5
Current PWS	KEY LARGO UTILITIES	100.0	0	0	0	0	0	0	0	0
Current PWS	KICKAPOO FARMS SUBDIVISION	110.4	1	1	0	0	0	0	0	0
Current PWS	KICKAPOO PRESERVE SUBDIVISION	160.8	3	3	3	3	3	3	3	3
Current PWS	KINGDOM HEIGHTS WATER SYSTEM	169.4	137	144	144	144	144	144	146	146
Current PWS	KINGMONT MOBILE HOME PARK	77.9	4	5	5	5	5	5	4	4
Current PWS	KINGS MANOR MUD	115.1	168	171	173	176	180	183	186	190
Current PWS	KINGSBRIDGE MUD	111.0	370	371	377	389	404	415	423	441
Current PWS	KINGSLAND ESTATES WSC	104.7	16	17	17	16	17	18	18	20
Current PWS	KIPLING OAKS 1	95.7	42	43	44	46	48	50	51	53
Current PWS	KIPLING OAKS AND TIMBERGREEN	132.5	54	57	70	75	79	82	85	88
Current PWS	KIRKMONT MUD	112.0	101	103	102	101	102	102	106	112
Current PWS	KITZWOOD SUBDIVISION	128.2	1	1	1	1	1	1	1	1
Current PWS	KLEIN PUD	165.4	177	177	178	178	181	183	186	193
Current PWS	KLEINWOOD MUD	200.2	266	270	272	273	278	291	303	323
Current PWS	KUCERA FARMS SUBDIVISION	100.0	3	3	3	3	3	3	3	3
Current PWS	LA CASITA HOMES II	160.8	1	1	1	1	1	1	1	0

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	LAIRD ESTATES	104.7	4	4	4	4	4	4	4	4
Current PWS	LAKE BONANZA WSC	69.6	62	75	89	100	107	112	117	122
Current PWS	LAKE CONROE FOREST SUBDIVISION	77.9	16	16	16	16	16	16	17	17
Current PWS	LAKE CONROE HILLS MUD	106.9	67	79	81	84	87	90	93	96
Current PWS	LAKE CONROE TERRACE WATER SYSTEM	100.0	2	2	2	2	2	2	2	3
Current PWS	LAKE CONROE VILLAGE	77.9	32	33	33	33	33	33	34	34
Current PWS	LAKE CONROE WEST	100.0	5	6	6	6	7	7	7	7
Current PWS	LAKE CREEK FALLS	100.0	14	23	40	45	45	57	66	76
Current PWS	LAKE CREEK FOREST	126.4	34	40	58	71	73	74	79	82
Current PWS	LAKE FOREST FALLS SUBDIVISION	77.9	8	10	14	15	16	17	18	19
Current PWS	LAKE FOREST UTILITY DISTRICT	153.5	297	297	297	297	297	297	297	304
Current PWS	LAKE HOUSTON STORAGE	160.8	3	2	4	4	4	4	4	3
Current PWS	LAKE JACKSON MOBILE HOME PARK & RV	100.0	0	0	0	0	0	0	0	0
Current PWS	LAKE LIVINGSTON BIG THICKET LAKE 2	104.7	7	7	7	7	7	7	7	7
Current PWS	LAKE LIVINGSTON HORSESHOE LAKE ESTATES	77.9	4	4	4	4	4	4	4	4
Current PWS	LAKE LIVINGSTON NEW RIVER LAKE ESTATES	77.9	2	2	2	2	2	2	2	2
Current PWS	LAKE LORRAINE WS	77.9	3	5	5	5	5	5	5	6
Current PWS	LAKE LOUISE SUBDIVISION	77.9	10	10	10	11	11	11	11	11
Current PWS	LAKE MUD	87.1	273	282	287	289	304	307	316	330
Current PWS	LAKE SOUTH WSC	204.4	19	21	22	23	25	27	28	30
Current PWS	LAKE WINDCREST WATER SYSTEM	228.9	317	418	489	539	574	600	627	655
Current PWS	LAKEHOUSE WATER PLANT	123.3	1	1	1	1	1	1	4	14
Current PWS	LAKELAND WATER SYSTEM	104.7	14	17	18	18	19	20	20	21
Current PWS	LAKES OF FAIRHAVEN	324.0	183	208	211	217	225	239	264	288
Current PWS	LAKES OF MAGNOLIA	100.4	28	28	28	28	29	29	29	30
Current PWS	LAKES OF MISSION GROVE	138.0	26	26	29	33	50	68	90	91
Current PWS	LAKES OF ROSEHILL WATER SYSTEM	128.2	54	55	67	72	77	81	88	103
Current PWS	LAKESIDE ESTATES SUBDIVISION	77.9	4	4	4	4	4	4	4	4
Current PWS	LAKESIDE ESTATES WATER SYSTEM	104.7	0	0	0	0	0	0	0	0
Current PWS	LAKEVIEW POINTE APARTMENTS	100.0	0	0	0	0	0	0	0	0
Current PWS	LAKEVIEW WATER	77.9	4	4	7	7	7	7	8	8
Current PWS	LAKEWOOD COLONY	77.9	5	6	6	7	7	7	7	7
Current PWS	LAKEWOOD ON LAKE CONROE POA	126.4	6	8	10	12	13	14	15	15
Current PWS	LANGHAM CREEK UTILITY DISTRICT	82.5	347	355	358	361	368	376	389	412
Current PWS	LAS PLAYAS	77.9	1	1	1	1	1	1	1	1
Current PWS	LAZY ACRES MOBILE HOME PARK	100.0	0	0	0	0	0	0	0	0
Current PWS	LAZY LANE MOBILE HOME PARK	104.7	2	3	3	3	3	3	3	3
Current PWS	LAZY RIVER IMPROVEMENT DISTRICT	152.7	64	68	70	74	77	81	84	88
Current PWS	LEANING OAK MOBILE HOME PARK	104.7	1	1	1	1	1	1	1	1
Current PWS	LEANING TOWERING OAKS SUBDIVISION	104.7	3	3	5	5	7	8	10	11
Current PWS	LEE RIDGE SUBDIVISION	77.9	5	7	10	13	14	23	28	34
Current PWS	LEISURE LANE RV RESORT MAGNOLIA	100.0	0	1	1	1	1	1	1	1
Current PWS	LIBERTY COUNTY FWSD 1 HULL	160.8	29	29	29	29	29	29	29	29
Current PWS	LILLIPUT FARMS WATER SYSTEM	100.0	3	3	4	6	7	7	8	8
Current PWS	LINCECUM WATER POWERS ADDITION	77.9	0	0	0	0	0	0	0	0
Current PWS	LINCOLN SQUARE SUBDIVISION PWS	128.2	26	27	44	50	54	55	58	61

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	LIVE OAK ESTATES	77.9	6	6	6	6	7	7	9	10
Current PWS	LOCH NESS COVE SUBDIVISION WATER SYSTEM	77.9	2	2	2	2	2	2	2	3
Current PWS	LONE PINE SUBDIVISION	104.7	3	3	3	3	3	3	3	3
Current PWS	LONE STAR PUBLIC WATER SYSTEM	110.6	69	74	77	80	81	83	85	87
Current PWS	LONE WILLOW MHP WEST	77.9	1	1	1	1	1	1	1	1
Current PWS	LONE WILLOW MOBILE HOME PARK	126.4	2	2	2	2	2	2	2	2
Current PWS	LONGHORN MOBILE HOME COMMUNITY	100.0	3	3	3	3	3	3	3	4
Current PWS	LONGHORN TOWN UTILITY DISTRICT	201.7	142	142	142	141	142	145	150	153
Current PWS	LORI HEIGHTS MOBILE HOME SUBDIVISION	100.0	1	1	1	1	1	1	1	1
Current PWS	LOST LAKES	77.9	1	1	2	2	3	4	4	5
Current PWS	LOUETTA NORTH PUD	133.6	197	197	198	199	203	209	218	232
Current PWS	LOUETTA ROAD UTILITY DISTRICT	171.7	88	92	93	95	99	103	110	121
Current PWS	LUCE BAYOU PUD	117.1	19	37	38	38	38	38	39	41
Current PWS	M B MOBILE HOME PARK	100.0	0	0	0	0	0	0	0	0
Current PWS	MADING LANE WATER SYSTEM	160.8	18	18	18	18	17	17	17	16
Current PWS	MAGNOLIA COUNTRY RV PARK	100.0	0	0	0	0	0	0	0	0
Current PWS	MAGNOLIA RESERVE WATER PLANT	123.3	9	11	11	12	12	13	13	13
Current PWS	MALCOMSON ROAD UTILITY DISTRICT	178.7	437	449	458	464	493	500	515	536
Current PWS	MALLARD LAKE CLUB	104.7	0	0	0	0	0	0	0	0
Current PWS	MANVEL ROAD TERRACE SUBDIVISION	100.0	9	10	10	11	11	11	11	11
Current PWS	MAPLE LEAF MOBILE HOME SUBDIVISION	128.2	51	52	56	57	56	56	54	50
Current PWS	MAREK ROAD WATER SYSTEM	103.1	4	4	4	4	4	4	4	4
Current PWS	MARK V ESTATES	77.9	1	1	1	1	1	1	1	1
Current PWS	MARKS GLEN SUBDIVISION	128.2	5	5	5	5	5	5	5	5
Current PWS	MARLIN MARINA WATER SYSTEM	100.0	0	0	0	0	0	0	0	0
Current PWS	MARY FRANCIS SUBDIVISION	77.9	56	59	60	61	61	61	59	55
Current PWS	MASON CREEK UTILITY DISTRICT	161.9	441	447	447	448	457	465	484	515
Current PWS	MASON LAKE WATER SYSTEM	77.9	0	0	0	0	0	0	0	0
Current PWS	MAXIM PRODUCTION SUBDIVISION	77.9	0	0	0	0	0	0	0	0
Current PWS	MAYDE CREEK MUD	86.4	183	186	186	188	192	197	205	219
Current PWS	MAYWOOD ACRES	77.9	4	8	9	10	11	13	14	16
Current PWS	MCFARLAND VILLAGE APARTMENTS	77.9	0	0	0	0	0	0	0	0
Current PWS	MCGEE PLACE	77.9	4	6	13	13	12	11	11	11
Current PWS	MEACHEN MEADOWS SUBDIVISION WATER SYSTEM	77.9	3	3	3	16	30	30	32	34
Current PWS	MEADOW GLEN CRYSTAL SPRINGS WATER	114.4	24	37	42	45	49	50	52	52
Current PWS	MEADOWCREEK MUD	129.8	82	82	85	86	87	89	92	99
Current PWS	MEADOWHILL REGIONAL MUD	128.2	382	386	393	400	405	414	423	444
Current PWS	MEADOWLAKE ESTATES	204.4	95	96	96	96	96	96	96	96
Current PWS	MEADOWLAND SUBDIVISION	100.0	10	10	11	11	15	15	15	16
Current PWS	MEADOWLARK SUBDIVISION	100.0	3	3	4	4	4	4	4	4
Current PWS	MEADOWVIEW ESTATES	104.7	1	1	1	1	1	1	1	1
Current PWS	MEADOWVIEW ESTATES II	77.9	1	1	1	1	1	1	1	1
Current PWS	MEADOWVIEW SUBDIVISION	104.7	3	3	3	3	5	5	5	5
Current PWS	MELROSE MOBILE HOME PARK	100.0	2	2	2	2	2	2	2	2
Current PWS	MEMORIAL HILLS UTILITY DISTRICT	159.1	90	99	99	99	99	99	99	99
Current PWS	MEMORIAL MUD	108.3	273	277	277	276	282	282	293	311

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	MEMORIAL VILLAGES WATER AUTHORITY	379.2	1,555	1,571	1,697	1,750	1,724	1,724	1,672	1,556
Current PWS	MERCY WSC	75.6	19	19	19	19	19	20	21	23
Current PWS	MESQUITE MHP	104.7	1	1	1	1	1	1	0	0
Current PWS	MILL CREEK ESTATES	77.9	3	3	3	3	3	3	3	3
Current PWS	MILLER MHP	77.9	0	0	1	1	1	1	1	1
Current PWS	MILLERS CROSSING	135.3	8	9	10	11	12	13	13	14
Current PWS	MILLS ROAD MUD	94.1	182	186	187	189	191	193	198	210
Current PWS	MINK BRANCH VALLEY	110.4	2	3	4	5	5	6	6	6
Current PWS	MISSION BEND MUD 1	106.9	276	284	297	306	312	320	331	353
Current PWS	MISSION BEND MUD 2	137.6	542	559	558	557	567	579	600	637
Current PWS	MOBILE HOME ESTATES	128.2	12	13	13	13	13	13	13	12
Current PWS	MONTEBELLO UTILITY	77.9	38	43	52	54	58	63	68	73
Current PWS	MONTGOMERY COUNTY FWSD 6	77.9	11	14	14	15	16	16	17	18
Current PWS	MONTGOMERY COUNTY MUD 105	204.4	91	97	102	107	112	116	120	124
Current PWS	MONTGOMERY COUNTY MUD 111	100.0	17	28	34	36	38	39	42	45
Current PWS	MONTGOMERY COUNTY MUD 112	173.5	223	237	253	254	260	328	339	348
Current PWS	MONTGOMERY COUNTY MUD 115	96.5	170	175	182	186	192	199	205	212
Current PWS	MONTGOMERY COUNTY MUD 119 SPRING TRAILS	104.7	369	405	423	441	459	477	497	516
Current PWS	MONTGOMERY COUNTY MUD 126	160.8	59	67	87	112	132	131	135	140
Current PWS	MONTGOMERY COUNTY MUD 127	104.7	108	110	111	111	115	120	124	129
Current PWS	MONTGOMERY COUNTY MUD 137	204.4	37	56	71	80	85	87	92	99
Current PWS	MONTGOMERY COUNTY MUD 139	104.7	63	72	93	112	114	117	123	128
Current PWS	MONTGOMERY COUNTY MUD 141	126.4	17	21	24	25	26	27	28	29
Current PWS	MONTGOMERY COUNTY MUD 15	72.0	188	201	205	208	213	219	224	230
Current PWS	MONTGOMERY COUNTY MUD 16 WHITE OAK PLANT	77.9	21	30	46	62	64	65	70	74
Current PWS	MONTGOMERY COUNTY MUD 164	204.4	13	16	18	20	31	33	35	37
Current PWS	MONTGOMERY COUNTY MUD 18	338.6	582	619	642	663	684	706	729	753
Current PWS	MONTGOMERY COUNTY MUD 19	174.7	176	179	180	182	182	183	185	192
Current PWS	MONTGOMERY COUNTY MUD 24 COUNTRY COLONY	77.9	30	37	38	40	41	43	45	46
Current PWS	MONTGOMERY COUNTY MUD 36	140.5	248	250	253	255	265	279	305	320
Current PWS	MONTGOMERY COUNTY MUD 39	152.9	265	284	297	310	322	334	347	360
Current PWS	MONTGOMERY COUNTY MUD 42	90.1	27	30	41	52	59	59	61	64
Current PWS	MONTGOMERY COUNTY MUD 46	179.3	1,690	1,824	1,887	1,913	1,994	2,356	2,502	2,596
Current PWS	MONTGOMERY COUNTY MUD 47	147.0	1,168	1,183	1,195	1,200	1,237	1,443	1,536	1,583
Current PWS	MONTGOMERY COUNTY MUD 56	75.3	16	17	20	21	22	22	23	23
Current PWS	MONTGOMERY COUNTY MUD 6	155.3	375	383	390	394	415	426	459	484
Current PWS	MONTGOMERY COUNTY MUD 60	201.5	752	813	835	839	874	895	960	1,012
Current PWS	MONTGOMERY COUNTY MUD 67	181.5	585	616	621	627	653	717	753	782
Current PWS	MONTGOMERY COUNTY MUD 7	130.5	462	470	485	489	508	518	550	569
Current PWS	MONTGOMERY COUNTY MUD 8	204.4	308	320	331	342	353	364	376	389
Current PWS	MONTGOMERY COUNTY MUD 83	164.5	131	137	142	147	152	156	161	166
Current PWS	MONTGOMERY COUNTY MUD 84	186.0	166	175	183	191	198	205	213	220
Current PWS	MONTGOMERY COUNTY MUD 88	131.6	177	178	179	179	185	191	197	204
Current PWS	MONTGOMERY COUNTY MUD 89	124.9	254	261	269	277	288	299	310	322
Current PWS	MONTGOMERY COUNTY MUD 9	204.4	365	375	388	402	416	430	445	460
Current PWS	MONTGOMERY COUNTY MUD 94	177.9	376	406	421	436	451	467	483	499

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	MONTGOMERY COUNTY MUD 95	126.4	155	195	210	212	216	218	219	220
Current PWS	MONTGOMERY COUNTY MUD 96	104.7	36	42	45	48	50	53	55	57
Current PWS	MONTGOMERY COUNTY MUD 98	104.7	93	96	99	102	105	108	111	114
Current PWS	MONTGOMERY COUNTY MUD 99	194.8	108	119	138	143	156	157	158	161
Current PWS	MONTGOMERY COUNTY UD 2	205.2	123	141	146	150	154	158	163	168
Current PWS	MONTGOMERY COUNTY UD 3	204.4	169	175	182	189	196	204	211	219
Current PWS	MONTGOMERY COUNTY UD 4	225.3	284	293	304	316	327	340	352	365
Current PWS	MONTGOMERY COUNTY WCID 1	104.7	159	184	191	192	198	203	215	225
Current PWS	MONTGOMERY PLACE WATER SYSTEM	77.9	5	6	7	7	7	8	9	11
Current PWS	MONTGOMERY TRACE WATER SYSTEM	160.8	1,072	1,373	1,617	1,769	1,806	1,888	1,976	2,070
Current PWS	MOORELAND SUBDIVISION WATER SYSTEM	77.9	5	6	8	8	8	8	8	10
Current PWS	MORELAND SUBDIVISION	100.0	13	15	19	19	19	19	20	23
Current PWS	MORTON ROAD MUD	89.2	102	106	107	108	109	112	117	125
Current PWS	MOSTYN MANOR	238.2	62	73	76	77	79	79	81	83
Current PWS	MOUNT HOUSTON ROAD MUD	71.4	208	213	213	213	212	211	204	190
Current PWS	MOUNT HOUSTON SQUARE	204.4	0	0	0	0	0	0	0	0
Current PWS	MOUNT PLEASANT VILLAGE WATER SYSTEM	77.9	5	5	6	7	7	7	7	7
Current PWS	NEW CANEY MUD	97.7	623	774	879	972	1,052	1,090	1,138	1,189
Current PWS	NEW DANVILLE COMMUNITY	126.4	1	1	1	2	2	2	2	2
Current PWS	NEW ULM WSC	128.1	11	11	11	11	11	11	11	11
Current PWS	NEWPORT MUD	126.4	584	586	628	653	680	681	708	744
Current PWS	NIAGRA PUBLIC WATER SUPPLY	138.0	7	7	7	7	7	7	7	7
Current PWS	NITSCH & SON UTILITY	115.3	78	78	78	78	78	78	75	69
Current PWS	NORTH BELT FOREST SUBDIVISION WATER SYST	77.9	56	59	64	65	66	67	69	74
Current PWS	NORTH BELT UTILITY DISTRICT	168.2	172	173	200	212	213	216	221	222
Current PWS	NORTH FOREST MUD	100.0	45	45	46	46	46	48	49	50
Current PWS	NORTH GREEN MUD	106.5	185	189	195	198	202	203	210	223
Current PWS	NORTH LAKE ESTATES	77.9	2	3	5	6	6	7	7	8
Current PWS	NORTH MISSION GLEN MUD	76.3	259	260	262	265	271	276	281	296
Current PWS	NORTH PARK PUD	128.2	151	153	157	159	165	166	173	185
Current PWS	NORTH POINT VILLA	77.9	3	3	3	3	3	3	3	2
Current PWS	NORTH WOODS ESTATES	128.2	4	4	4	4	4	4	7	9
Current PWS	NORTHAMPTON MUD	246.7	615	653	664	675	688	702	726	744
Current PWS	NORTHCREST RANCH WATER SYSTEM	127.0	66	94	113	127	129	132	132	135
Current PWS	NORTHEAST HARRIS COUNTY MUD 1 EDGEWOOD V	204.4	38	38	38	38	38	40	40	41
Current PWS	NORTHEAST HARRIS COUNTY MUD 1 SHELDON RI	103.9	12	12	12	12	12	12	12	12
Current PWS	NORTHGATE CROSSING MUD 1	103.7	107	107	101	95	94	94	94	95
Current PWS	NORTHGATE CROSSING MUD 2	157.3	212	216	204	191	189	192	192	193
Current PWS	NORTHPARK WSC	77.9	5	5	6	7	7	8	9	9
Current PWS	NORTHWEST FREEWAY MUD	90.6	103	103	103	103	103	103	103	103
Current PWS	NORTHWEST HARRIS COUNTY MUD 10	167.8	485	494	512	520	552	565	588	608
Current PWS	NORTHWEST HARRIS COUNTY MUD 12	79.7	148	159	159	159	159	160	167	169
Current PWS	NORTHWEST HARRIS COUNTY MUD 15	92.0	192	193	208	216	231	236	245	260
Current PWS	NORTHWEST HARRIS COUNTY MUD 16	111.0	144	148	149	150	155	160	164	172
Current PWS	NORTHWEST HARRIS COUNTY MUD 19	128.2	187	201	201	203	208	217	221	243
Current PWS	NORTHWEST HARRIS COUNTY MUD 20	172.8	167	170	171	171	171	172	174	184

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	NORTHWEST HARRIS COUNTY MUD 21	216.5	95	100	102	104	105	109	116	127
Current PWS	NORTHWEST HARRIS COUNTY MUD 22	78.0	113	114	114	115	117	119	120	123
Current PWS	NORTHWEST HARRIS COUNTY MUD 23	77.2	130	132	134	136	139	143	150	163
Current PWS	NORTHWEST HARRIS COUNTY MUD 24	204.5	83	89	89	89	89	90	91	92
Current PWS	NORTHWEST HARRIS COUNTY MUD 28	117.4	77	79	75	71	71	73	77	84
Current PWS	NORTHWEST HARRIS COUNTY MUD 29	183.0	202	205	210	213	223	225	232	244
Current PWS	NORTHWEST HARRIS COUNTY MUD 30	167.5	225	230	239	241	247	249	253	258
Current PWS	NORTHWEST HARRIS COUNTY MUD 32	187.6	278	279	293	298	319	325	337	357
Current PWS	NORTHWEST HARRIS COUNTY MUD 36	183.7	142	142	143	144	144	146	148	152
Current PWS	NORTHWEST HARRIS COUNTY MUD 5	185.6	1,555	1,563	1,671	1,727	1,832	1,857	1,912	2,003
Current PWS	NORTHWEST HARRIS COUNTY MUD 6	138.2	92	93	95	95	98	100	104	110
Current PWS	NORTHWEST HARRIS COUNTY MUD 9	156.1	315	321	325	327	332	339	350	370
Current PWS	NORTHWEST PARK MUD	98.0	687	702	707	708	700	700	677	625
Current PWS	NORTHWEST PINES MOBILE HOME COMMUNITY	128.2	37	38	38	38	38	39	39	42
Current PWS	NORTHWOOD MUD 1	160.8	31	31	31	31	31	31	31	36
Current PWS	NORTHWOODS MOBILE HOME PARK	204.4	0	0	0	0	0	1	1	1
Current PWS	NORTHWOODS WSC	80.0	18	19	20	20	22	22	22	22
Current PWS	NOTTINGHAM COUNTRY MUD	169.8	517	535	534	533	545	557	581	615
Current PWS	O ACES MHP	100.0	0	0	0	0	0	0	0	0
Current PWS	OAK BEND ESTATES	100.0	2	1	1	1	1	1	1	1
Current PWS	OAK CREEK II	126.4	7	8	11	15	18	18	18	19
Current PWS	OAK CREST OF MANVEL	73.0	18	18	18	18	18	18	18	18
Current PWS	OAK HIGH WS	100.0	4	4	4	4	4	4	4	4
Current PWS	OAK HILL ESTATES WATER SYSTEM	128.2	27	27	33	36	38	38	41	46
Current PWS	OAK HOLLOW SUBDIVISION	72.6	42	42	42	43	43	43	43	45
Current PWS	OAK MANOR	104.7	14	14	14	14	14	15	16	17
Current PWS	OAK MANOR MUD	108.0	16	16	16	16	16	16	15	15
Current PWS	OAK MEADOWS ESTATES SUBDIVISION	100.0	1	1	1	1	1	1	1	1
Current PWS	OAK MEADOWS SUBDIVISION II AND III	104.7	1	1	1	1	1	1	2	2
Current PWS	OAK TREE SUBDIVISION	100.0	12	18	22	24	27	28	29	32
Current PWS	OAKLAND VILLAGE MOBILE HOME COMMUN	128.2	4	4	4	4	4	4	4	4
Current PWS	OAKMONT PUD	144.8	193	200	200	200	201	201	202	206
Current PWS	OAKS AT HOUSTON POINT	160.8	3	3	7	9	11	14	17	20
Current PWS	OAKS OF ROSEHILL	128.2	3	3	3	3	3	3	3	3
Current PWS	OAKS OF TRINITY SUBDIVISION	135.3	20	38	50	65	79	95	112	132
Current PWS	OAKWOOD ACRES	77.9	3	4	7	8	8	9	10	10
Current PWS	OAKWOOD VILLAGE MOBILE HOME SUBDIVISION	128.2	7	7	7	7	7	7	8	12
Current PWS	OAKWOOD WATER SYSTEM	77.9	5	6	7	7	7	8	8	8
Current PWS	OCEAN MOBILE HOME PARK	77.9	4	4	4	5	5	6	6	6
Current PWS	OLD EGYPT SUBDIVISION	100.0	94	99	107	111	113	117	122	126
Current PWS	OLD MILL LAKE	135.3	13	17	18	19	19	19	20	21
Current PWS	OLD SNAKE RIVER ESTATES EAST	77.9	5	5	5	5	5	5	5	5
Current PWS	OLD TAMINA WSC	92.2	20	24	50	64	64	68	77	83
Current PWS	OLSEN ESTATES WATER SYSTEM	104.7	4	5	5	6	7	9	10	12
Current PWS	ORANGE GROVE WATER SUPPLY	66.9	35	35	46	47	47	47	46	44
Current PWS	ORCHARD CROSSING SUBDIVISION	77.9	5	5	5	5	5	5	5	5

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	OYSTER CREEK ESTATES	126.4	0	0	0	0	0	0	0	0
Current PWS	P & B WATER SYSTEM	77.9	7	7	9	9	8	8	8	8
Current PWS	PADOK TIMBERS SUBDIVISION WS	77.9	1	1	1	1	1	1	1	1
Current PWS	PALM CREST	160.8	7	7	7	7	7	7	7	6
Current PWS	PALMER PLANTATION MUD 1	176.0	121	122	122	122	123	128	128	130
Current PWS	PALMER PLANTATION MUD 2	119.6	119	119	119	119	119	119	119	119
Current PWS	PALMETTO SUBDIVISION	77.9	5	5	6	6	6	6	6	6
Current PWS	PALOMA ACRES SUBDIVISION	77.9	5	5	4	4	4	4	4	4
Current PWS	PARADISE COVE WATER SYSTEM	104.7	9	9	12	13	13	13	14	14
Current PWS	PARK FOREST WATER SYSTEM	128.2	10	10	10	10	11	12	14	17
Current PWS	PARKLAND ESTATES	77.9	12	12	12	12	12	12	12	11
Current PWS	PARKWAY UTILITY DISTRICT	83.0	198	202	203	203	201	201	195	181
Current PWS	PATTISON WSC	115.1	63	63	67	68	70	72	73	84
Current PWS	PATTON VILLAGE EAST WATER SYSTEM	100.0	24	27	49	65	66	68	73	77
Current PWS	PATTON VILLAGE WEST WATER SYSTEM	96.7	23	28	35	45	46	47	50	53
Current PWS	PEACH CREEK COLONY	96.7	6	6	7	10	10	10	11	11
Current PWS	PEACH CREEK OAKS SUBDIVISION	77.9	6	6	7	9	11	11	11	12
Current PWS	PEACH CREEK PLANTATION WATER SYSTEM	204.4	57	69	88	116	157	168	195	219
Current PWS	PEAKES PARK	77.9	0	0	1	1	1	1	1	1
Current PWS	PEARLAND ACRES MHP	160.8	16	16	18	18	18	18	18	18
Current PWS	PECAN GROVE MUD	174.4	809	878	921	937	946	958	972	977
Current PWS	PEEK ROAD MOBILE HOME PARK	122.0	1	1	1	1	1	1	1	1
Current PWS	PEEK ROAD UTILITIES	122.0	21	25	25	25	25	25	26	26
Current PWS	PETERSON PLACE SUBDIVISION WATER SYSTEM	77.9	3	3	3	3	4	5	5	5
Current PWS	PIN OAK MOBILE HOME PARK	100.0	11	11	11	11	11	11	11	10
Current PWS	PINE COLONY MOBILE HOME PARK	100.0	16	16	16	16	16	16	16	16
Current PWS	PINE GROVE ESTATES WATER SYSTEM	104.7	3	3	3	3	3	3	3	3
Current PWS	PINE KNOB SUBDIVISION	77.9	0	0	0	0	0	0	0	0
Current PWS	PINE LAKE SUBDIVISION NORTH WSC	100.0	6	8	10	10	10	10	10	11
Current PWS	PINE OAK FOREST WATER	128.2	29	32	33	33	33	34	34	35
Current PWS	PINE TRAILS UTILITY	103.9	271	284	291	294	290	290	280	259
Current PWS	PINE VILLAGE PUD	84.6	89	92	93	95	93	93	90	84
Current PWS	PINE VISTA MOBILE HOME VILLAGE	77.9	5	6	6	6	6	6	6	7
Current PWS	PINEDALE MOBILE HOME COMMUNITY	104.7	7	7	7	8	8	8	8	8
Current PWS	PINEHURST DECKER PRAIRIE WSC	80.4	44	56	66	79	86	90	95	100
Current PWS	PINEWOOD PLACE MOBILE HOME COMMUNITY	128.2	44	45	46	47	49	49	50	51
Current PWS	PINEY POINT SUBDIVISION	77.9	4	4	6	8	8	8	9	10
Current PWS	PIONEER TRAILS SUBDIVISION	104.7	31	32	36	37	39	42	43	44
Current PWS	PITCAIRN WSC	128.2	12	12	12	13	14	17	19	21
Current PWS	PLANTATION MUD	89.1	127	130	137	139	141	144	146	147
Current PWS	PLANTATION ON COTTON BAYOU	77.9	42	44	58	67	76	86	98	109
Current PWS	PLEASANT FOREST SUBDIVISION	110.4	3	4	4	4	4	4	5	5
Current PWS	PLEASANT MEADOWS SUBDIVISION	77.9	1	1	1	1	3	3	3	3
Current PWS	PLEASANTDALE SUBDIVISION	100.0	2	2	2	3	4	4	4	5
Current PWS	POINT AQUARIUS MUD	181.5	181	221	254	276	286	298	309	321
Current PWS	PONDEROSA FOREST UTILITY DISTRICT	177.7	397	398	399	401	409	420	423	450

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	PORTER SUD	77.9	833	1,021	1,125	1,198	1,254	1,315	1,374	1,438
Current PWS	PORTER TERRACE	77.9	14	15	15	16	17	17	18	19
Current PWS	POSTWOOD MUD	102.5	107	107	108	108	110	110	112	117
Current PWS	POWDER MILL ESTATES	128.2	10	10	10	10	10	10	10	10
Current PWS	PRAIRIE VIEW A&M UNIVERSITY	204.4	452	459	462	466	470	476	487	503
Current PWS	PRESTONWOOD FOREST UTILITY DISTRICT	174.0	239	244	245	247	253	259	268	276
Current PWS	PROVENCE WATER SYSTEM	128.2	8	8	8	8	8	8	8	8
Current PWS	PYSSENS LIVE OAK ESTATES SUBDIVISION	104.7	3	3	3	3	3	3	3	3
Current PWS	QUAIL HOLLOW MOBILE HOME PARK	100.0	2	2	2	2	2	2	2	2
Current PWS	QUAIL MEADOWS SUBDIVISION	100.0	5	6	6	6	6	6	6	6
Current PWS	QUAIL VALLEY UTILITY DISTRICT	167.7	691	719	728	774	798	822	848	910
Current PWS	QUAILWOOD WATER SYSTEM	103.1	2	2	2	2	3	3	3	3
Current PWS	R&K WEIMAN MHP	104.7	7	7	7	7	9	9	9	10
Current PWS	RAIN RIVER ESTATES	100.0	4	4	4	4	4	4	4	4
Current PWS	RALSTON ACRES WATER SUPPLY CORPORATION	77.9	15	25	25	25	25	25	24	23
Current PWS	RAMBLEWOOD UTILITY & WSC	128.2	8	8	9	9	9	9	11	13
Current PWS	RANCH CREST SUBDIVISION	160.8	68	79	81	81	83	84	86	89
Current PWS	RANCHO SAN VICENTE	123.3	1	1	1	1	1	1	1	1
Current PWS	RANKIN ROAD WEST MUD	71.0	62	63	64	65	66	69	70	74
Current PWS	RAYFORD ROAD MUD	150.8	466	477	489	498	512	527	548	562
Current PWS	RAYWOOD WATER SYSTEM	104.7	3	3	3	3	3	3	3	3
Current PWS	RAYWOOD WSC	160.8	42	42	42	43	46	51	51	51
Current PWS	RED OAK RANCH WATER SYSTEM	123.3	29	42	49	69	70	73	79	83
Current PWS	RED OAK TERRACE	128.2	4	4	4	4	4	4	4	4
Current PWS	REDWOOD ESTATES MOBILE HOME PARK	103.9	11	12	12	12	12	12	11	10
Current PWS	REED ESTATES WATER SYSTEM	100.0	5	6	7	8	8	8	7	7
Current PWS	REID ROAD MUD 1	109.5	257	260	263	264	269	276	286	306
Current PWS	REID ROAD MUD 2	162.2	207	213	214	215	218	223	232	246
Current PWS	REMINGTON MUD 1	87.9	445	454	457	460	468	478	500	532
Current PWS	REMINGTON PLACE	77.9	7	10	12	15	18	21	25	29
Current PWS	RENES WATER SYSTEM	160.8	5	5	5	5	5	5	5	5
Current PWS	RENN ROAD MUD	76.3	128	131	133	134	137	140	144	152
Current PWS	RESERVOIR ACRES SUBDIVISION	98.5	46	49	58	62	71	72	74	78
Current PWS	RICE UNIVERSITY	141.1	143	144	146	147	150	150	142	142
Current PWS	RICEWOOD MUD	103.1	206	212	215	216	220	225	235	251
Current PWS	RICHEY ROAD MUD	128.2	131	131	131	131	131	131	133	133
Current PWS	RILEY ROAD ESTATES WS	77.9	0	0	0	0	0	0	0	0
Current PWS	RIMWICK FOREST	110.4	7	10	12	15	15	16	17	18
Current PWS	RIO VILLA WSC	103.9	2	12	12	12	12	12	12	12
Current PWS	RIO VISTA SUBDIVISION	135.3	28	31	58	80	98	97	101	106
Current PWS	RIVER CLUB WATER	77.9	9	11	12	13	14	15	15	16
Current PWS	RIVER OAKS	77.9	1	1	1	1	1	1	1	1
Current PWS	RIVER OAKS SUBDIVISION	77.9	4	5	6	6	7	8	9	10
Current PWS	RIVER PLANTATION MUD	248.1	239	305	356	446	439	440	465	485
Current PWS	RIVER RANCH	138.0	10	10	10	10	10	10	10	10
Current PWS	RIVER RUN WATER SYSTEM	104.7	1	1	0	0	0	0	0	0

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	RIVERBEND RV PARK AND RESORT	100.0	1	1	1	1	2	2	2	3
Current PWS	RIVERBOAT BEND TRAILER PARK	126.4	6	12	14	17	20	24	28	32
Current PWS	RIVERSIDE ESTATES	104.7	1	1	1	1	1	1	1	1
Current PWS	RIVERTON RANCH	128.2	1	1	1	1	1	1	1	1
Current PWS	RIVERWALK SUBDIVISION	154.3	139	169	197	213	226	236	246	255
Current PWS	RIVERWOOD ESTATES	77.9	10	10	11	14	15	16	17	19
Current PWS	RIVERWOOD FOREST	160.8	50	50	50	50	56	78	88	146
Current PWS	RIVERWOOD SUBDIVISION WATER SYSTEM	104.7	6	6	6	6	6	5	5	5
Current PWS	ROBIN COVE WATER SUBDIVISION	104.7	1	1	1	1	1	1	1	1
Current PWS	ROCKY CREEK ESTATES	122.0	1	1	0	0	0	0	0	0
Current PWS	ROGERS ROAD WATER SYSTEM	77.9	36	42	44	47	50	53	55	58
Current PWS	ROLLAN HEIGHTS SUBDIVISION	77.9	1	1	1	1	1	1	1	1
Current PWS	ROLLING CREEK UTILITY DISTRICT	136.6	214	214	214	214	215	215	216	218
Current PWS	ROLLING FOREST SUBDIVISION	160.8	5	7	7	8	9	9	9	9
Current PWS	ROLLING FORK PUD	121.3	105	108	112	113	112	112	108	100
Current PWS	ROLLING HILLS COLONY WATER SYSTEM	90.4	15	15	15	15	15	15	15	15
Current PWS	ROLLING OAKS	128.2	13	14	15	15	22	28	28	29
Current PWS	ROMAN FOREST CONSOLIDATED MUD	125.9	74	100	127	164	181	182	191	199
Current PWS	ROMAN FOREST PUD 3	77.9	4	5	21	33	40	41	43	46
Current PWS	ROMAN FOREST PUD 4	204.4	6	28	54	88	114	114	120	127
Current PWS	ROSEMEADOWS III	77.9	20	22	33	36	52	52	54	54
Current PWS	ROSEWOOD MOBILE HOME PARK	77.9	2	2	2	2	2	2	2	1
Current PWS	ROSHARON ROAD ESTATES SUBDIVISION	77.9	4	4	4	4	4	4	4	3
Current PWS	ROSHARON TOWNSHIP	77.9	7	8	8	8	8	8	8	7
Current PWS	ROVING MEADOWS WATER SYSTEM	104.7	4	4	4	4	4	4	4	4
Current PWS	ROYAL COACH MOBILE HOME VILLAGE	77.9	22	22	22	22	24	24	24	26
Current PWS	ROYAL LAKES ESTATES	169.4	42	54	63	91	97	109	122	134
Current PWS	ROYAL RIDGE	77.9	1	1	1	1	1	1	1	1
Current PWS	ROYALWOOD MUD	116.4	82	82	87	95	93	94	91	84
Current PWS	RUSTIC OAKS SUBDIVISION	110.4	1	3	3	3	3	3	3	3
Current PWS	RYAN LONG SUBDIVISION 2 WATER SYSTEM	160.8	1	1	1	1	2	2	2	2
Current PWS	SADDLE & SURREY ACRES WATER SYSTEM	160.8	5	5	5	5	5	5	5	6
Current PWS	SAGEMEADOW UTILITY DISTRICT	80.8	213	216	215	213	216	219	228	237
Current PWS	SAKO PROPERTIES	100.0	1	1	4	4	5	5	5	5
Current PWS	SAM HOUSTON LAKE ESTATES 1	77.9	1	1	1	1	1	1	1	1
Current PWS	SAN BERNARD RIVER ESTATES	77.9	1	1	1	1	1	1	1	1
Current PWS	SAN JO UTILITIES	104.7	1	1	1	1	1	1	1	1
Current PWS	SAN LEON MUD	107.1	244	253	260	262	265	267	270	273
Current PWS	SANDY MEADOW ESTATES SUBDIVISION	77.9	3	3	3	3	3	3	3	3
Current PWS	SANDY RIDGE SUBDIVISION	100.0	1	1	1	1	1	1	1	2
Current PWS	SAVANNAH PLANTATION SUBDIVISION	104.7	9	9	9	9	9	9	9	8
Current PWS	SEDONA LAKES MUD 1	180.2	120	126	140	146	147	149	151	156
Current PWS	SELLERS ESTATES MOBILE HOME COMM	160.8	7	7	7	8	8	8	7	7
Current PWS	SENDERA LAKE ESTATES	99.2	34	42	51	56	61	65	68	72
Current PWS	SENDERA RANCH	127.6	63	103	142	149	149	195	229	268
Current PWS	SEQUOIA IMPROVEMENT DISTRICT	113.9	37	37	37	37	37	37	35	33

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	SERENITY WOODS SUBDIVISION	77.9	7	10	10	11	11	12	12	12
Current PWS	SETTLERS CROSSING	77.9	4	7	7	7	7	7	8	8
Current PWS	SETTLERS CROSSING WATER SYSTEM	77.9	2	2	2	2	2	2	2	2
Current PWS	SETTLERS CROSSING WATER SYSTEM 2	77.9	1	1	1	1	1	1	1	1
Current PWS	SETTLERS ESTATES SEC II	126.4	1	1	1	1	1	1	1	1
Current PWS	SETTLERS MEADOWS WATER SYSTEM	77.9	1	1	1	1	1	1	1	1
Current PWS	SHADOW BAY SUBDIVISION	77.9	14	16	16	16	17	17	18	18
Current PWS	SHADOW GROVE ESTATES	204.4	9	9	25	27	27	27	27	27
Current PWS	SHADY ACRES	110.4	1	2	2	2	2	3	3	3
Current PWS	SHADY BROOK ACRES	77.9	3	5	6	6	6	7	7	7
Current PWS	SHADY CREEK SECTION 3 WATER SYSTEM	204.4	3	3	3	3	3	3	3	3
Current PWS	SHADY OAKS ESTATES	128.5	19	23	25	29	32	32	33	36
Current PWS	SHADY OAKS MHP	77.9	0	0	0	0	0	0	0	0
Current PWS	SHARONDALE SUBDIVISION	77.9	2	3	3	3	3	3	3	3
Current PWS	SHASLA PUD	138.9	109	109	112	112	122	122	124	125
Current PWS	SHAW ACRES	128.2	24	24	24	25	26	27	29	31
Current PWS	SHELDON ROAD MUD	121.0	84	86	86	86	87	87	89	90
Current PWS	SIENNA PLANTATION MANAGEMENT DISTRICT	257.1	160	190	212	216	228	230	230	230
Current PWS	SIENNA PLANTATION MUD 10	151.2	450	452	478	492	499	517	523	526
Current PWS	SIENNA PLANTATION MUD 12	102.3	206	229	243	248	256	270	281	285
Current PWS	SIENNA PLANTATION MUD 2	166.8	394	405	414	417	418	420	424	425
Current PWS	SIENNA PLANTATION MUD 3	162.4	488	495	510	526	534	542	549	550
Current PWS	SIENNA PLANTATION MUD 4	102.3	289	289	297	297	305	314	317	320
Current PWS	SIENNA PLANTATION THE WOODS	333.1	162	162	162	162	163	165	166	167
Current PWS	SILVERWOODS SUBDIVISION	77.9	2	2	2	2	2	2	2	3
Current PWS	SIX LAKES SUBDIVISION	104.7	4	4	4	4	4	4	4	4
Current PWS	SJOLANDER ROAD MOBILE HOME PARK	77.9	4	4	4	4	2	1	2	4
Current PWS	SK MOBILE HOME PARK	77.9	0	0	0	0	0	0	0	0
Current PWS	SKY LAKES WSC	104.7	13	13	13	13	13	13	13	13
Current PWS	SNUG HARBOR SUBDIVISION	104.7	2	2	2	2	2	1	1	1
Current PWS	SONOMA RIDGE-MCCALL SOUND	123.3	8	10	12	13	14	15	15	16
Current PWS	SOUTH CLEVELAND WSC	77.9	216	333	447	542	656	778	913	1,063
Current PWS	SOUTH DAYTON OAKS	100.0	0	1	2	2	2	2	3	3
Current PWS	SOUTH MEADOWS EAST	100.0	12	12	12	11	11	10	10	9
Current PWS	SOUTH MEADOWS WEST	100.0	10	9	9	9	9	8	8	7
Current PWS	SOUTH TAYLOR LAKE VILLAGE WSC	149.8	7	7	7	7	7	7	9	10
Current PWS	SOUTHAMPTON SUBDIVISION	77.9	11	15	17	23	24	24	26	29
Current PWS	SOUTHERN CROSSING WATER SYSTEM PHASE 2	77.9	16	22	24	28	33	38	44	50
Current PWS	SOUTHERN MONTGOMERY COUNTY MUD	173.4	545	573	577	579	598	611	640	667
Current PWS	SOUTHERN OAKS WATER SYSTEM	204.4	4	7	8	10	12	13	15	18
Current PWS	SOUTHERN WATER	78.5	139	140	148	151	148	148	143	132
Current PWS	SOUTHWEST ENVIRONMENTAL RESOURCES	77.9	9	18	22	24	25	26	26	27
Current PWS	SOUTHWEST HARRIS COUNTY MUD 1	66.1	41	42	42	42	42	42	41	39
Current PWS	SOUTHWOOD ESTATES	100.0	13	13	13	14	14	14	14	13
Current PWS	SPANISH COVE PUD	126.4	18	28	28	28	36	36	36	36
Current PWS	SPENCER ROAD PUD	152.7	239	247	254	257	269	280	294	327

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	SPLENDORA WOODS	89.4	14	14	14	14	14	14	14	14
Current PWS	SPRING CREEK FOREST	128.2	6	6	6	5	5	5	5	7
Current PWS	SPRING CREEK FOREST PUD	147.6	131	132	132	133	134	134	135	146
Current PWS	SPRING CREEK UTILITY DISTRICT	90.5	334	345	357	368	379	390	404	419
Current PWS	SPRING CREEK VALLEY ESTATES	128.2	5	6	6	6	6	6	6	6
Current PWS	SPRING FOREST SUBDIVISION	77.9	24	25	27	27	30	35	37	44
Current PWS	SPRING MEADOWS MUD	77.6	128	156	157	157	157	157	157	157
Current PWS	SPRING OAKS SUBDIVISION	135.3	5	5	5	5	5	5	5	5
Current PWS	SPRING PRESERVE WATER SYSTEM	100.0	0	0	0	0	0	0	0	0
Current PWS	SPRING WEST MUD	157.3	150	156	159	165	184	190	200	213
Current PWS	SPRINGMONT SUBDIVISION	128.2	20	22	22	22	23	23	24	24
Current PWS	SRALLA MOBILE HOME PARK	104.7	0	0	0	0	0	0	0	0
Current PWS	STABLE GATES	128.2	28	29	39	45	49	50	52	55
Current PWS	STANLEY LAKE MUD	168.1	235	244	251	259	266	275	284	293
Current PWS	STERLING ESTATES	104.7	1	1	1	1	1	1	1	1
Current PWS	STETTNER ADDITION	77.9	3	3	3	3	3	3	3	3
Current PWS	STILLWATER ESTATES	161.8	14	17	19	25	26	28	29	31
Current PWS	STONE HEDGE ESTATES	77.9	0	0	1	2	2	2	2	2
Current PWS	STONECREST RANCH	123.3	10	27	38	42	43	43	44	46
Current PWS	STONERIDGE LAKE SUBDIVISION	100.0	2	2	2	2	2	2	2	2
Current PWS	STRAIGHTWAY TRAINING CENTER	104.7	0	0	0	0	0	0	0	0
Current PWS	SUBURBAN MOBILE HOME PARK 2	160.8	0	0	0	0	1	1	1	1
Current PWS	SUGARBERRY PLACE	128.2	58	58	59	59	61	61	63	65
Current PWS	SUMMER LAKE RANCH	204.4	83	83	120	135	136	139	146	158
Current PWS	SUN RANCH WATER SYSTEM	138.0	4	4	4	4	4	24	26	29
Current PWS	SUNBELT FWSD HEATHER GLEN SUBDIVISION	67.0	70	70	70	71	71	70	68	63
Current PWS	SUNBELT FWSD HIGH MEADOWS SUBDIVISION	88.4	296	297	303	306	302	303	293	271
Current PWS	SUNBELT FWSD NORTHLINE TERRACE	87.1	108	111	116	119	117	117	113	105
Current PWS	SUNBELT FWSD OAKGLEN SUBDIVISION	81.9	20	20	20	20	20	20	19	18
Current PWS	SUNBELT FWSD OAKWILDE SUBDIVISION	80.1	202	213	215	220	218	218	212	196
Current PWS	SUNBELT FWSD WOODLAND OAKS SUBDIVISION	92.8	141	143	143	143	142	141	137	127
Current PWS	SUNCREEK ESTATES SECTION 1	123.3	16	16	16	16	16	16	15	15
Current PWS	SUNCREEK RANCH SECTION 2	123.3	8	8	8	8	8	8	8	7
Current PWS	SUNDOWN MOBILE HOME PARK	126.4	4	4	4	4	4	4	4	3
Current PWS	SUNRISE RANCH	135.3	1	2	2	2	2	2	2	2
Current PWS	SUNSET MOBILE HOME PARK 1	77.9	0	0	1	1	1	1	0	0
Current PWS	SUNSET MOBILE HOME PARK 2	128.2	1	1	1	1	1	1	1	1
Current PWS	SWEA GARDENS ESTATES	77.9	1	2	2	2	2	2	1	1
Current PWS	SWEETGUM FOREST	100.0	6	6	6	6	6	7	8	10
Current PWS	TALL CEDARS MOBILE HOME SUBDIVISION	104.7	2	2	2	2	2	2	2	2
Current PWS	TALL PINES UTILITY	128.2	10	10	10	10	10	10	10	10
Current PWS	TALLOWS MOBILE HOME PARK	160.8	1	1	2	2	2	2	2	2
Current PWS	TARA PARK WATER SYSTEM	104.7	8	8	8	8	8	8	8	8
Current PWS	TARKINGTON SUD	68.2	137	140	144	147	152	155	159	162
Current PWS	TASFIELD	100.0	8	9	9	9	8	8	8	8
Current PWS	TATTOR ROAD MUD	95.2	168	173	175	175	181	179	180	187

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	TBCD WEST TREATMENT PLANT	149.5	180	201	220	240	260	286	309	326
Current PWS	TBCD WINNIE STOWELL	104.7	189	205	220	225	236	248	269	275
Current PWS	TDCJ ID DARRINGTON UNIT	100.0	64	64	63	63	62	61	59	57
Current PWS	TDCJ JESTER 1 UNIT	204.4	25	30	31	36	36	44	45	45
Current PWS	TDCJ RAMSEY AREA	204.4	135	135	134	132	131	127	123	118
Current PWS	TDCJ SCOTT UNIT	204.4	73	72	71	69	68	66	64	61
Current PWS	TEJAS LAKES SUBDIVISION	104.7	7	17	26	26	26	26	26	27
Current PWS	TELGE MANOR MHP	128.2	6	6	6	6	6	7	7	7
Current PWS	TELGE TERRACE MOBILE HOME SUBDIVISION	128.2	3	3	3	3	3	3	3	3
Current PWS	TEPATITLAN MOBILE HOME PARK	100.0	0	0	0	0	0	0	0	0
Current PWS	TERRANOVA WEST MUD	181.9	165	165	165	166	169	171	175	182
Current PWS	TEXABA SUBDIVISION	77.9	14	17	22	23	25	27	27	28
Current PWS	TEXAS LANDING UTILITIES DEERWOOD	77.9	3	3	5	6	8	8	8	8
Current PWS	TEXAS LANDING UTILITIES GOODE CITY	77.9	5	8	9	9	9	9	9	9
Current PWS	TEXAS NATIONAL MUD	129.7	28	36	42	44	46	48	50	52
Current PWS	THE COMMONS WATER SUPPLY INC	142.5	154	154	154	154	154	154	154	154
Current PWS	THE OAKS	104.7	1	1	1	1	1	1	1	1
Current PWS	THE RANCH SUBDIVISION	135.3	15	15	22	24	24	25	26	29
Current PWS	THE WOODLANDS METRO CENTER MUD	160.8	620	642	643	644	647	652	676	687
Current PWS	THE WOODLANDS MUD 1	181.3	455	469	488	490	507	523	568	603
Current PWS	THOUSAND OAKS	193.7	75	82	101	119	125	130	136	141
Current PWS	THUNDERBIRD UTILITY DISTRICT 1	177.2	207	209	223	226	231	244	251	278
Current PWS	THUNDERBIRD UTILITY DISTRICT SYSTEM 2	107.0	56	60	64	65	66	66	67	68
Current PWS	TIDWELL FOREST NEW SUBDIVISION	77.9	20	21	21	21	21	21	21	19
Current PWS	TIFFANY WATER	104.7	2	3	3	3	3	4	4	4
Current PWS	TIMBER CREEK ESTATES	128.2	2	2	2	2	2	2	2	3
Current PWS	TIMBER LANE UTILITY DISTRICT	98.1	637	645	661	667	684	689	710	742
Current PWS	TIMBER LINE ESTATES	77.9	10	14	15	25	27	27	30	33
Current PWS	TIMBER RIDGE SECTION 2	77.9	5	5	6	7	8	8	9	10
Current PWS	TIMBER SWITCH WATER PLANT	77.9	2	2	4	4	4	4	5	5
Current PWS	TIMBERCREST VILLAGE	128.2	60	61	61	61	63	63	65	70
Current PWS	TIMBERDALE MOBILE HOME SUBDIVISION	128.2	1	1	1	1	1	1	1	2
Current PWS	TIMBERLAKE IMPROVEMENT DISTRICT	141.0	104	105	106	107	108	108	109	109
Current PWS	TIMBERLAND ESTATES	77.9	101	120	130	135	139	144	149	154
Current PWS	TIMBERLOCH ESTATES	77.9	20	24	24	25	26	26	27	28
Current PWS	TIMBERWILDE MH SUBDIVISION	128.2	23	23	25	25	26	28	39	39
Current PWS	TOWER GLEN ESTATES	77.9	10	14	15	16	19	20	21	22
Current PWS	TOWER OAK BEND WSC	128.2	11	12	12	12	14	14	15	15
Current PWS	TOWER TERRACE	94.8	40	46	53	61	69	78	88	107
Current PWS	TOWER WOODS	77.9	1	1	1	1	2	2	2	2
Current PWS	TOWERING OAKS AND ROSEWOOD HILLS SUBDIVI	143.8	81	88	95	100	104	107	111	114
Current PWS	TOWN OF CUT AND SHOOT	77.9	298	370	438	500	556	567	590	615
Current PWS	TOWN OF HOLIDAY LAKES	77.9	29	29	29	28	28	27	26	25
Current PWS	TOWN OF QUINTANA	204.4	2	2	2	2	2	2	2	2
Current PWS	TOWN OF WOODLOCH	120.4	24	31	41	43	45	47	50	52
Current PWS	TRAIL OF THE LAKES MUD	83.4	317	321	331	336	346	349	360	380

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	TRAILWOOD SUBDIVISION	128.2	14	14	14	14	14	14	14	18
Current PWS	TREASURE ISLAND MUD	77.9	3	3	3	3	3	3	2	2
Current PWS	TREICHEL WOODS ESTATES	128.2	4	4	4	4	4	4	4	4
Current PWS	TRINITY AT WINDFERN MOBILE HOME PARK	128.2	4	4	5	5	5	5	5	5
Current PWS	TRINITY COVE SUBDIVISION	104.7	1	2	3	4	5	6	7	10
Current PWS	TRINITY ROYAL COACH TRAILS MOBILE HOME	77.9	4	4	4	4	3	3	3	3
Current PWS	TRINITY SPRING OAKS MOBILE HOME PARK	128.2	4	4	5	6	6	6	6	8
Current PWS	TURTLE COVE	77.9	2	2	2	2	2	1	1	1
Current PWS	TURTLE CREEK	77.9	14	17	20	22	23	24	25	27
Current PWS	TURTLE CREEK VILLAGE	160.8	2	2	2	2	2	2	2	2
Current PWS	TWIN LAKES CLUB	77.9	2	2	2	2	2	2	2	2
Current PWS	TWIN OAKS MHP HARRIS	160.8	6	13	13	13	13	13	14	15
Current PWS	URBAN ACRES SUBDIVISION	160.8	0	0	0	0	0	0	0	0
Current PWS	VACEK COUNTRY MEADOWS	123.3	3	3	3	3	3	3	5	6
Current PWS	VALLEY RANCH MUD 1	104.7	127	147	159	164	169	174	180	186
Current PWS	VAN MANOR MOBILE HOME PARK	204.4	1	1	2	2	2	2	2	2
Current PWS	VARNER CREEK UTILITY DISTRICT	98.6	85	85	83	83	83	80	77	74
Current PWS	VILLA UTILITIES	100.0	2	2	2	2	2	2	2	2
Current PWS	VILLAGE ESTATES MOBILE HOME PARK	100.0	0	0	0	0	0	0	0	0
Current PWS	VILLAGE OF NEW KENTUCKY	128.2	16	16	16	16	16	16	16	16
Current PWS	VILLAGE OF SURFSIDE BEACH	330.2	76	76	74	71	68	63	59	55
Current PWS	VILLAGE TRACE WATER SYSTEM	77.9	5	5	5	5	5	5	5	5
Current PWS	VILLAS OF WILLOWBROOK	128.2	8	8	8	8	9	9	9	9
Current PWS	VISTA UTILITIES	100.0	1	3	3	4	5	7	9	10
Current PWS	VISTA VERDE WATER SYSTEMS	126.4	5	5	7	7	7	7	7	7
Current PWS	WAGON WHEEL ESTATES WATER SYSTEM	160.8	26	28	29	33	33	33	33	32
Current PWS	WALLER COUNTY ROAD IMPROVEMENT DIST 1	100.0	41	67	121	218	257	285	286	294
Current PWS	WALNUT COVE WSC	78.5	32	32	36	37	38	39	39	40
Current PWS	WALNUT CREEK SUBDIVISION	104.7	20	20	30	37	39	42	47	52
Current PWS	WALNUT SPRINGS	77.9	19	26	27	29	31	32	33	35
Current PWS	WALRAVEN SUBDIVISION	100.0	13	23	23	24	24	24	25	26
Current PWS	WASHINGTON COUNTY RAILROAD	77.3	22	24	27	29	30	31	32	33
Current PWS	WATERSTONE ESTATES	128.2	7	7	7	7	7	7	7	7
Current PWS	WAYNEWOOD PLACE CIVIC ASSOCIATION	128.2	7	7	7	7	8	8	8	8
Current PWS	WEBB WAY SUBDIVISION	100.0	0	0	0	0	0	1	1	1
Current PWS	WELLBORN ACRES	77.9	0	0	0	0	0	0	0	1
Current PWS	WEST END WSC	82.0	34	34	34	34	34	34	34	34
Current PWS	WEST HARDIN WSC	100.0	16	16	16	16	16	16	16	16
Current PWS	WEST HARRIS COUNTY MUD 1	192.1	107	109	109	109	108	107	104	96
Current PWS	WEST HARRIS COUNTY MUD 10	101.4	247	252	257	261	273	280	291	310
Current PWS	WEST HARRIS COUNTY MUD 11	312.6	742	754	772	783	803	821	846	885
Current PWS	WEST HARRIS COUNTY MUD 14	110.5	113	116	117	118	122	125	129	135
Current PWS	WEST HARRIS COUNTY MUD 15	122.0	92	94	96	97	101	105	110	118
Current PWS	WEST HARRIS COUNTY MUD 17	107.8	82	83	83	84	85	86	89	94
Current PWS	WEST HARRIS COUNTY MUD 2 CHASE	90.6	166	167	200	214	234	242	254	271
Current PWS	WEST HARRIS COUNTY MUD 21	128.2	52	53	54	55	55	55	55	55

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	WEST HARRIS COUNTY MUD 4	125.1	84	85	86	86	90	95	100	108
Current PWS	WEST HARRIS COUNTY MUD 5	110.7	69	73	75	76	81	85	88	91
Current PWS	WEST HARRIS COUNTY MUD 6	104.6	108	110	110	109	110	111	113	118
Current PWS	WEST HARRIS COUNTY MUD 7	105.0	182	184	184	185	188	191	197	214
Current PWS	WEST HARRIS COUNTY MUD 9	140.5	216	217	218	220	226	230	238	252
Current PWS	WEST HOUSTON MOBILE HOME COMMUNITY	122.0	18	19	19	19	22	23	24	27
Current PWS	WEST MEMORIAL MUD	165.8	238	240	246	249	264	269	279	298
Current PWS	WEST MONTGOMERY UTILITY	77.9	73	75	80	82	81	80	78	72
Current PWS	WEST PARK MUD	233.5	200	205	207	209	218	229	240	254
Current PWS	WESTADOR MUD	242.9	253	256	258	259	264	274	283	295
Current PWS	WESTERN HILLS CRYSTAL SPRINGS WATER	100.0	11	12	13	13	14	15	15	16
Current PWS	WESTERN HOMES SUBDIVISION	121.8	35	35	40	40	38	38	36	30
Current PWS	WESTERN MOBILE HOME PARK	160.8	1	1	1	1	1	1	1	1
Current PWS	WESTERN PINES MHP	122.0	43	44	44	44	45	47	49	51
Current PWS	WESTERN TRAILS SUBDIVISION	128.2	1	1	1	2	3	4	5	6
Current PWS	WESTFIELD GARDEN MOBILE HOME PARK	77.9	18	18	18	18	18	18	17	16
Current PWS	WESTFIELD MEADOWS	77.9	0	0	0	0	0	0	0	0
Current PWS	WESTGATE SUBDIVISION	128.2	8	10	10	10	12	15	17	17
Current PWS	WESTLAKE MUD 1	113.1	168	172	174	176	178	181	188	201
Current PWS	WESTMONT MOBILE HOME COMMUNITY	204.4	11	11	11	11	11	12	12	12
Current PWS	WESTON MUD	122.0	256	259	261	262	268	275	283	302
Current PWS	WESTWOOD NORTH WSC	108.5	135	143	162	165	165	194	215	240
Current PWS	WESTWOOD SUBDIVISION - BRAZORIA	77.9	1	1	1	1	1	1	1	2
Current PWS	WESTWOOD SUBDIVISION - WALLER	123.3	0	0	0	0	0	0	0	0
Current PWS	WEYBRIDGE SUBDIVISION WATER SYSTEM	77.9	3	3	3	3	2	2	2	2
Current PWS	WHARTON COUNTY WCID 1 LOUISE	160.1	42	42	42	42	42	42	42	42
Current PWS	WHARTON COUNTY WCID 2	185.1	108	108	108	109	110	111	111	111
Current PWS	WHEAT MEADOW MOBILE HOME PARK SECTION I	104.7	0	0	0	0	0	0	0	0
Current PWS	WHEAT MEADOW MOBILE HOME PARK SECTION II	77.9	0	0	0	0	0	0	0	0
Current PWS	WHISPER MEADOWS MOBILE HOME SUBDIVISION	128.2	1	1	1	1	1	2	2	2
Current PWS	WHISPERING PINES	81.7	15	18	18	19	20	20	21	22
Current PWS	WHITE OAK BEND MUD	141.2	86	88	88	89	92	94	98	104
Current PWS	WHITE OAK HILLS	77.9	2	3	5	5	7	8	8	8
Current PWS	WHITE OAK MANOR MOBILE HOME PARK	128.2	35	35	35	35	34	34	33	30
Current PWS	WHITE OAK RANCH SECTION ONE	126.4	8	15	46	73	84	85	93	100
Current PWS	WHITE OAK VALLEY ESTATES	204.4	61	65	66	66	66	67	69	71
Current PWS	WHITE OAK WATER SUPPLY CORPORATION	77.9	50	60	66	76	81	88	98	109
Current PWS	WHITEWING SUBDIVISION	104.7	0	0	0	0	0	1	1	3
Current PWS	WILCO WATER	77.9	0	0	0	0	0	0	0	0
Current PWS	WILLOW CREEK FARMS MUD	138.0	206	218	255	275	280	280	280	280
Current PWS	WILLOW OAKS MOBILE HOME SUBDIVISION	128.2	15	15	15	15	15	15	15	15
Current PWS	WILLOW POINT MUD	138.0	95	138	175	178	183	188	192	202
Current PWS	WILLOW RIVER FARMS	77.9	0	0	0	0	0	0	0	0
Current PWS	WILSHIRE SUBDIVISION	77.9	3	3	3	3	3	3	3	3
Current PWS	WINCHESTER PLACE	104.7	3	4	4	4	5	5	5	5
Current PWS	WINDFERN FOREST UTILITY DISTRICT	151.6	267	267	273	275	272	271	263	244

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
Current PWS	WINDSONG PARK	77.9	0	0	0	0	0	0	0	0
Current PWS	WINDSONG SUBDIVISION	77.9	1	1	1	1	1	1	1	2
Current PWS	WINDWOOD WATER SYSTEM	128.2	11	11	11	11	11	11	11	11
Current PWS	WINTERHAVEN SUBDIVISION	128.2	7	7	7	7	9	10	12	12
Current PWS	WOLF GLEN WATER SYSTEM	104.7	3	3	3	3	3	3	3	3
Current PWS	WOLFE AIR PARK	100.0	1	1	2	7	8	9	12	14
Current PWS	WOOD ACRES MHP	77.9	0	0	0	0	0	0	0	0
Current PWS	WOOD OAKS WATER WORKS	77.9	0	0	0	0	0	0	0	0
Current PWS	WOOD TRACE MUD 1	204.4	117	120	124	131	138	143	149	154
Current PWS	WOODCREEK MUD	139.3	147	147	147	147	147	147	147	147
Current PWS	WOODCREEK PHASE II	77.9	2	2	2	3	3	3	3	4
Current PWS	WOODCREEK SUBDIVISION SEC I	77.9	0	0	1	1	1	1	1	1
Current PWS	WOODGATE MOBILE HOME VILLAGE	77.9	2	2	2	2	2	2	2	2
Current PWS	WOODHAVEN ESTATES	104.7	2	3	3	4	4	4	5	5
Current PWS	WOODLAND ACRES SUBDIVISION	90.0	23	24	29	33	36	40	44	48
Current PWS	WOODLAND LAKES ESTATES WSC	77.9	9	10	10	11	11	11	12	12
Current PWS	WOODLAND OAKS SUBDIVISION	77.9	112	127	139	147	154	160	165	171
Current PWS	WOODLAND RANCH	77.9	8	9	9	10	10	10	10	10
Current PWS	WOODLANDS HILLS WATER	94.8	42	42	42	42	42	43	43	43
Current PWS	WOODLOCH MHP	77.9	4	4	4	4	4	4	4	3
Current PWS	WOODRIDGE ESTATES WATER SYSTEM	77.9	3	5	8	10	10	10	10	11
Current PWS	WOODRIDGE MUD	126.4	93	107	113	119	126	132	139	147
Current PWS	WOODRIDGE PARK SUBDIVISION	77.9	0	0	1	1	1	1	1	1
Current PWS	WOODWAY SUBDIVISION WATER SYSTEM	126.4	29	29	38	41	43	46	50	54
Current PWS	YESTERDAYS CROSSING	123.3	1	2	2	2	3	3	3	3
Current PWS	ZAM ZAM WATER SUPPLY	128.2	1	1	1	1	1	1	1	1
Future PWS	EXPANSION CITY OF FULSHEAR	127.4	520	1,159	1,360	1,510	1,634	1,782	1,801	1,989
Future PWS	EXPANSION CITY OF MANVEL	146.1	551	755	1,043	1,218	1,412	1,654	1,970	2,226
Future PWS	EXPANSION CITY OF RICHMOND	138.0	802	1,076	1,361	1,532	1,672	1,766	1,870	1,932
Future PWS	EXPANSION CITY OF ROSENBERG	138.0	847	1,244	1,817	2,654	3,489	4,167	4,905	5,325
Future PWS	EXPANSION CITY OF SUGAR LAND	211.7	464	505	529	556	610	669	732	774
Future PWS	FULSHEAR LAKES	138.0	149	177	178	178	182	183	184	185
Future PWS	Future PWS Baytown Area Water Authority	120.9	357	726	1,078	1,457	1,756	2,104	2,547	3,114
Future PWS	Future PWS NFBWA	122.5	1,957	2,676	3,389	4,062	4,469	4,858	5,057	5,471
Future PWS	Future PWS NHCRWA	106.4	5,770	6,016	6,446	6,632	7,010	7,254	7,702	8,403
Future PWS	Future PWS North Channel Water Authority	103.9	223	249	256	261	263	264	271	279
Future PWS	Future PWS WHCRWA	108.4	2,249	2,587	2,605	2,611	2,746	2,903	3,089	3,420
Future PWS	GEORGE RANCH	138.0	233	427	860	1,227	1,782	2,036	2,354	2,622
Future PWS	No. 152 Walnut Creek and Millers Pond in Rosenberg ETJ	138.0	10	13	24	28	28	28	28	28
Future PWS	No. 231 Bridlewood Meadows in Rosenberg ETJ	138.0	24	24	24	33	45	57	62	64
Future PWS	No. 250 Star Bridge in Rosenberg ETJ	138.0	3	34	34	36	49	59	66	75
Future PWS	No. 253 in Rosenberg ETJ	138.0	1	5	42	47	82	122	128	130
Future PWS	SC UTILITIES	128.2	13	13	13	13	14	15	16	17
Future PWS	TAMARRON WEST	138.0	194	403	448	448	448	448	448	448
Future PWS	TEJAS CREEK	204.4	38	48	49	50	53	56	59	62
Future PWS	TOWER OAKS PLAZA MUD	128.2	26	26	27	28	29	29	29	29

Table E-1 – Total Municipal Water Demand Projections by Water User (MGY) [1]

Water User Type	Water User Name	Baseline Per-Capita Demand (gpcd)	2030	2040	2050	2060	2070	2080	2090	2100
NonPWS	No System - Domestic Use	100.0	19,927	24,562	29,121	32,967	36,407	39,352	42,601	46,158
NonPWS	NonPWS West Fort Bend Water Authority	138.0	2,468	6,164	10,526	13,876	17,369	20,812	24,793	27,631

1. The values in this table reflect total water demand projections based on the baseline per-capita demands. These demands may be met by groundwater or alternative water supplies. The portion of demand projected to be met by groundwater varies in each model scenario assessed in Task D.

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Table E-2 – Municipal Water Demand Projections by Groundwater Reduction Plan (MGY) [1]

GRP Sponsor	Description [2]	2030	2040	2050	2060	2070	2080	2090	2100
Central Harris County Regional Water Authority	Existing PWS	1,885	1,911	1,934	1,949	1,997	2,029	2,080	2,160
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**1,885**	**1,911**	**1,934**	**1,949**	**1,997**	**2,029**	**2,080**	**2,160**
City of Houston	Existing PWS	106,875	110,192	113,213	114,589	114,279	114,718	113,042	109,229
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**106,875**	**110,192**	**113,213**	**114,589**	**114,279**	**114,718**	**113,042**	**109,229**
City of Missouri City	Existing PWS	6,502	6,754	6,981	7,164	7,328	7,506	7,642	7,889
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**6,502**	**6,754**	**6,981**	**7,164**	**7,328**	**7,506**	**7,642**	**7,889**
City of Richmond	Existing PWS	1,557	1,675	1,725	1,740	1,795	1,865	1,958	1,979
	Future Growth Areas	802	1,076	1,361	1,532	1,672	1,766	1,870	1,932
	Total	**2,359**	**2,751**	**3,087**	**3,273**	**3,467**	**3,632**	**3,828**	**3,910**
City of Rosenberg	Existing PWS	3,140	3,815	4,466	4,954	5,349	5,646	5,887	6,062
	Future Growth Areas	885	1,320	1,942	2,797	3,693	4,433	5,187	5,622
	Total	**4,025**	**5,135**	**6,407**	**7,752**	**9,042**	**10,078**	**11,075**	**11,684**
City of Sugar Land	Existing PWS	9,606	9,945	10,221	10,437	10,653	10,946	11,161	11,461
	Future Growth Areas	464	505	529	556	610	669	732	774
	Total	**10,070**	**10,450**	**10,751**	**10,993**	**11,264**	**11,615**	**11,893**	**12,235**
Clear Lake City Water Authority	Existing PWS	3,932	4,006	4,050	4,073	4,092	4,047	4,217	4,487
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**3,932**	**4,006**	**4,050**	**4,073**	**4,092**	**4,047**	**4,217**	**4,487**
Fort Bend County MUD 25	Existing PWS	689	710	719	721	729	737	750	777
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**689**	**710**	**719**	**721**	**729**	**737**	**750**	**777**

GRP Sponsor	Description [2]	2030	2040	2050	2060	2070	2080	2090	2100
Fort Bend County WCID 2	Existing PWS	2,795	3,019	3,157	3,274	3,378	3,500	3,592	3,797
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**2,795**	**3,019**	**3,157**	**3,274**	**3,378**	**3,500**	**3,592**	**3,797**
North Channel Water Authority	Existing PWS	4,248	4,380	4,569	4,686	4,686	4,722	4,737	4,705
	Future Growth Areas	223	249	256	261	263	264	271	279
	Total	**4,470**	**4,629**	**4,825**	**4,947**	**4,949**	**4,986**	**5,008**	**4,984**
North Fort Bend Water Authority	Existing PWS	17,548	19,543	20,392	20,994	21,700	22,362	22,807	23,928
	Future Growth Areas	1,961	3,750	5,144	6,334	7,424	8,215	8,752	9,623
	Total	**19,510**	**23,293**	**25,536**	**27,328**	**29,125**	**30,576**	**31,559**	**33,550**
North Harris County Regional Water Authority	Existing PWS	39,027	39,810	40,722	41,215	42,410	43,203	44,558	46,817
	Future Growth Areas	1,169	1,415	1,846	2,033	2,412	2,657	3,106	3,809
	Total	**40,195**	**41,225**	**42,569**	**43,248**	**44,822**	**45,860**	**47,664**	**50,626**
Pecan Grove MUD	Existing PWS	809	878	921	937	946	958	972	977
	Future Growth Areas	0	0	0	0	0	0	0	0
	Total	**809**	**878**	**921**	**937**	**946**	**958**	**972**	**977**
West Fort Bend Water Authority	Existing PWS	0	0	0	0	0	0	0	0
	Future Growth Areas	2,468	6,164	10,526	13,876	17,369	20,812	24,793	27,631
	Total	**2,468**	**6,164**	**10,526**	**13,876**	**17,369**	**20,812**	**24,793**	**27,631**
West Harris County Regional Water Authority	Existing PWS	26,945	28,111	28,681	29,008	29,857	30,548	31,831	33,723
	Future Growth Areas	646	984	1,002	1,008	1,143	1,300	1,486	1,817
	Total	**27,591**	**29,095**	**29,683**	**30,016**	**31,000**	**31,848**	**33,317**	**35,541**

1. *The values in this table reflect total water demand projections based on the baseline per-capita demands (see Table E-1). These demands may be met by groundwater or alternative water supplies. The portion of demand projected to be met by groundwater varies in each model scenario assessed in Task D.*
2. *Future Growth Areas are areas outside existing Public Water Systems (PWS) that are expected to develop into new PWS over time or to eventually receive water supply from existing PWS in the GRP. In NHCRWA, NFBWA, and WHCRWA, the existing (2020) population of undeveloped area outside of planned developments within each Authority's jurisdiction is assumed to use domestic well water and continue using domestic supply, so the estimated 2020 demand is excluded from the future growth area water demand estimates of these three GRPs. In other GRPs, it is assumed that all population may eventually be served by a PWS in the GRP, so the entirety of the projected water demand in this area is included in this table.*

APPENDIX F

INDUSTRIAL GROUNDWATER DEMAND PROJECTIONS

Table F-1 – Projected Industrial Groundwater Demand by County (MGY) [1]

County	2030	2040	2050	2060	2070	2080	2090	2100
Austin	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Brazoria	197	204	212	220	228	236	236	236
Chambers	978	1,014	1,051	1,090	1,131	1,173	1,173	1,173
Fort Bend	812	842	873	906	939	974	974	974
Galveston	42	43	45	47	48	50	50	50
Harris	13,955	14,472	15,007	15,562	16,138	16,735	16,735	16,735
Liberty	28	30	31	32	33	34	34	34
Montgomery	643	667	692	717	744	771	771	771
Waller	42	43	45	47	49	50	50	50
Wharton	36	37	39	40	41	43	43	43

1. *The values in this table reflect only the portion of industrial water demand that is anticipated to be met by groundwater.*

APPENDIX G

MINING GROUNDWATER DEMAND PROJECTIONS

Table G-1 – Projected Groundwater Demand for Mining Use by County (MGY) [1]

County	2030	2040	2050	2060	2070	2080	2090	2100
Austin	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5
Brazoria	41.8	46.5	51.4	56.8	62.7	69.0	69.0	69.0
Chambers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fort Bend	3.8	4.4	5.0	5.6	5.9	6.5	6.5	6.5
Galveston	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Harris	23.7	25.2	26.5	27.8	29.1	30.4	30.4	30.4
Liberty	19.1	20.9	22.7	24.6	26.2	27.8	27.8	27.8
Montgomery	5.2	5.8	6.6	7.6	8.7	10.0	10.0	10.0
Waller	4.4	5.1	5.9	6.7	7.6	8.5	8.5	8.5
Wharton	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

1. *The values in this table reflect only the portion of water demand for mining that is anticipated to be met by groundwater.*

APPENDIX H

AGRICULTURAL GROUNDWATER DEMAND PROJECTIONS

Table H-1 – Projected Agricultural Groundwater Demand by County (MGY) [1]

County	2030	2040	2050	2060	2070	2080	2090	2100
Austin	1,883	1,883	1,883	1,883	1,883	1,883	1,883	1,883
Brazoria	1,849	1,849	1,849	1,849	1,849	1,849	1,849	1,849
Chambers	90	90	90	90	90	90	90	90
Fort Bend	4,664	4,664	4,664	4,664	4,664	4,664	4,664	4,664
Galveston	87	87	87	87	87	87	87	87
Harris	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152
Liberty	128	128	128	128	128	128	128	128
Montgomery	1,001	1,001	1,001	1,001	1,001	1,001	1,001	1,001
Waller	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724
Wharton	42,429	42,429	42,429	42,429	42,429	42,429	42,429	42,429

1. *The values in this table reflect only the portion of agricultural water demand that is anticipated to be met by groundwater.*

JOINT REGULATORY PLAN REVIEW
ADDENDUM

TO: Ashley Greuter

CC: Mike Turco

FROM: Courtney Corso

SUBJECT: Revisions to Agricultural Groundwater Demand Projections
Addendum to Task A Projected Water Needs Evaluation Draft Technical Memorandum

DATE: April 2, 2025

INTRODUCTION

FNI submitted a draft memorandum describing the development of Projected Water Needs for the 2023 Joint Regulatory Plan Review (JRPR) to HGSD and FBSD on June 8, 2023. A final memorandum, with revisions in response to comments, was submitted on March 6, 2024. In August 2024, the agricultural demands presented in the previous memorandum were revised, resulting in a new baseline scenario (B6). This addendum describes the purpose of these revisions, the associated methodology, and the resulting revised projections.

BACKGROUND

The agricultural groundwater demands described in the March 2024 technical memorandum, which were used in the previous baseline scenario (B5), were developed based on water use estimates from the Texas Water Development Board (TWDB). Trends in irrigated rice acreage were considered but not determined to be significant, so constant demands were used in each county for the projection period (2020 through 2100). Modeling results for the B5 scenario indicated unexpected subsidence in areas such as Wharton County, where demands are primarily agricultural and not driven by municipal growth. These results were found to result from adjustments made during the calibration of the GULF-2023 model.

In the development of the GULF-2023 model, most pumping input in the model was based on actual historical pumping. However, during calibration of the model, not all calibration errors could be resolved by adjusting parameters such as aquifer characteristics. After all other parameters had been calibrated, pumping was adjusted to achieve acceptable results for modeled water levels and subsidence. Adjustments were primarily applied to pumping for agricultural irrigation uses, as historical pumping quantities for irrigation have higher uncertainty than other use types due to data constraints and are often estimated rather than metered in some counties. Because of this adjustment, using actual projected demands for irrigation groundwater use in the JRPR model resulted in overstated subsidence over time because of the sudden increase from lower calibrated irrigation pumping in the historical period to higher projected irrigation pumping in the projection period.

After review, the JRPR project team and District staff agreed to develop a revised baseline scenario (B6) with revised agricultural groundwater demand projections. In Harris, Galveston, and Fort Bend counties, the revised projections are based on HGSD and FBSD pumping records. In the remaining seven counties, pumping used in the B6 scenario reflects pumping in the

calibration period of the GULF-2023 model instead of actual demand projections. The approach is described in more detail in the following sections.

METHODOLOGY

Counties Outside Subsidence Districts

In the seven counties outside of the subsidence districts, groundwater pumping for irrigation was revised to the average calibrated annual pumping amount in each county from 2010-2018. This value was used as a constant demand for the projection period (2020-2100).

Harris-Galveston Subsidence District

In each HGSD regulatory area, groundwater use for agricultural irrigation has been relatively consistent for the last two decades. Revised projections were developed using the average annual pumping for irrigation within each county and regulatory area from 2010-2020, based on HGSD pumping records. Usage codes in HGSD pumping records designated 361 wells as agricultural irrigation wells, 165 of which reported pumping during 2010 to 2020. After reviewing the pumping data, FNI reclassified an additional 60 wells for inclusion in historical irrigation pumping. These included wells for golf courses, polo clubs, and country clubs which had non-zero pumping during 2010 to 2020. Although these are not agricultural uses, these demands are not reflected in other JRPR demand categories, so they were included with irrigation pumping to avoid underrepresenting pumping in the area.

Fort Bend Subsidence District

Revised projections for irrigation groundwater demand in Fort Bend County were similarly developed using the average annual pumping for irrigation within each regulatory area from 2010-2020, based on FBSD pumping records. In addition to 228 wells classified by FBSD as agricultural irrigation wells (150 of which had pumping in 2010-2020), FNI reclassified 18 wells for inclusion in irrigation pumping, which included golf courses and country clubs which had non-zero pumping during 2010 to 2020. However, irrigation use in Fort Bend County has declined over time, so the revised demand projections incorporate a continuing decrease from 2020 to 2100, as described below.

FNI evaluated irrigation pumping trends over time within each regulatory area. In Regulatory Area A, irrigation use has experienced a consistent decline over time, which has been observed over both short (2010-2020) and moderate time periods (1990-2020). In Area B, declining irrigation pumping was observed from 2010 to 2020 but not over the longer period from 1990 to 2020. As the Palmer Drought Severity Index has trended from dry to wet over the period from 2010 to 2020, it is likely that the declining trend in Area B from 2010 to 2020 may be mostly attributed to climate correlation and not to declines in agriculture. Overall, it is anticipated that irrigation use in Area A will continue to decline as municipal development advances. While Area B has not experienced a long-term decline in irrigation use, a similar trend in conjunction with development is anticipated over the long-term future.

The approach used to develop revised irrigation demand projections in both regulatory areas assumes that irrigation pumping will decline in conjunction with the projected conversion of land use from open land to developed land. This conversion was predicted spatially as part of the development of detailed population projections in Task A and is illustrated in **Figure 1**. Near-term (2020) projected irrigation pumping in Fort Bend County was assumed to be equal to the recent (2010-2020) average pumping in each regulatory area. This level of pumping was reduced each decade corresponding with the percentage of open land projected to be converted to medium-density or high-density development. **Figure 2** and **Figure 3** show the historical irrigation pumping and the long-term projections of groundwater demand for irrigation in Regulatory Areas A and B, respectively.

Figure 1 – Progression of Projected Land Use Change from 2020 to 2100 in Fort Bend County

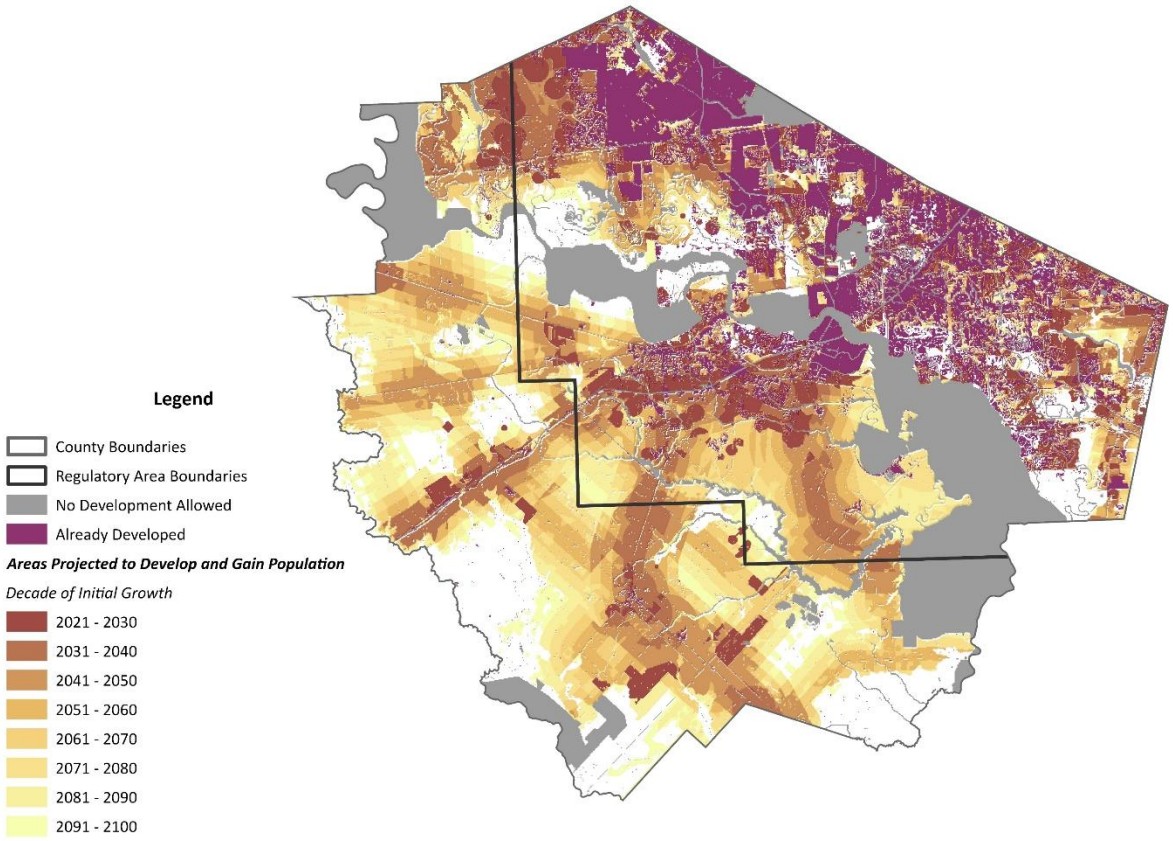


Figure 2 – Historical Groundwater Pumping for Irrigation and Irrigation Groundwater Demand Projections in FBSD Regulatory Area A

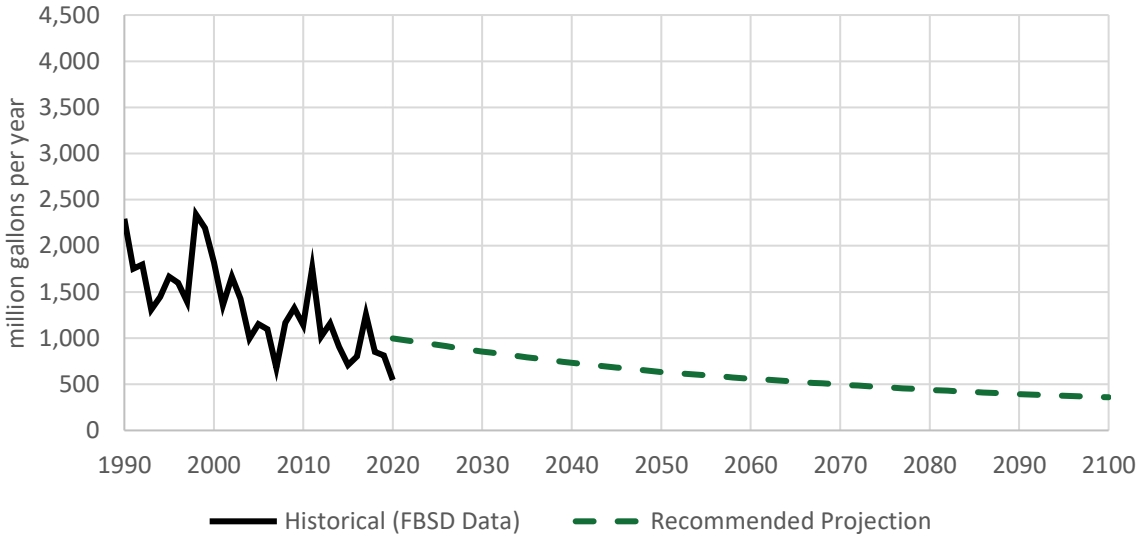
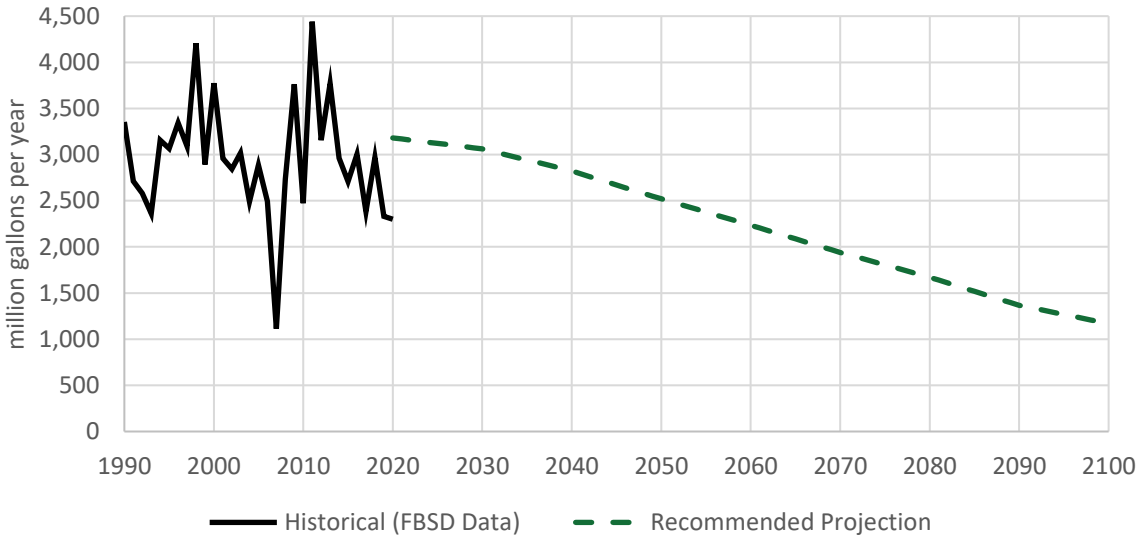


Figure 3 – Historical Groundwater Pumping for Irrigation and Irrigation Groundwater Demand Projections in FBSD Regulatory Area B



SUMMARY OF CHANGES

Revised agricultural pumping demands in the B6 scenario reflect changes to groundwater demand for irrigation; no changes were made to projected demand for livestock. Additionally, no changes were made to demand projections for alternative water supplies for agricultural uses.

Revised agricultural pumping in B6 is substantially lower than the pumping in B5 for counties outside the subsidence districts (**Figure 4** and **Figure 5**). Within HGSD, revisions resulted in lower demands in Galveston County and higher demands in Harris County as a result of using HGSD data instead of TWDB data (**Figure 6**). Within FBSD, near-term agricultural groundwater demand has been slightly reduced and is projected to decline over time (**Figure 7**).

Figure 4 – Agricultural Groundwater Demand Projections in Counties outside Subsidence Districts, excluding Wharton County
(includes irrigation and livestock demand; constant all decades 2020-2100)

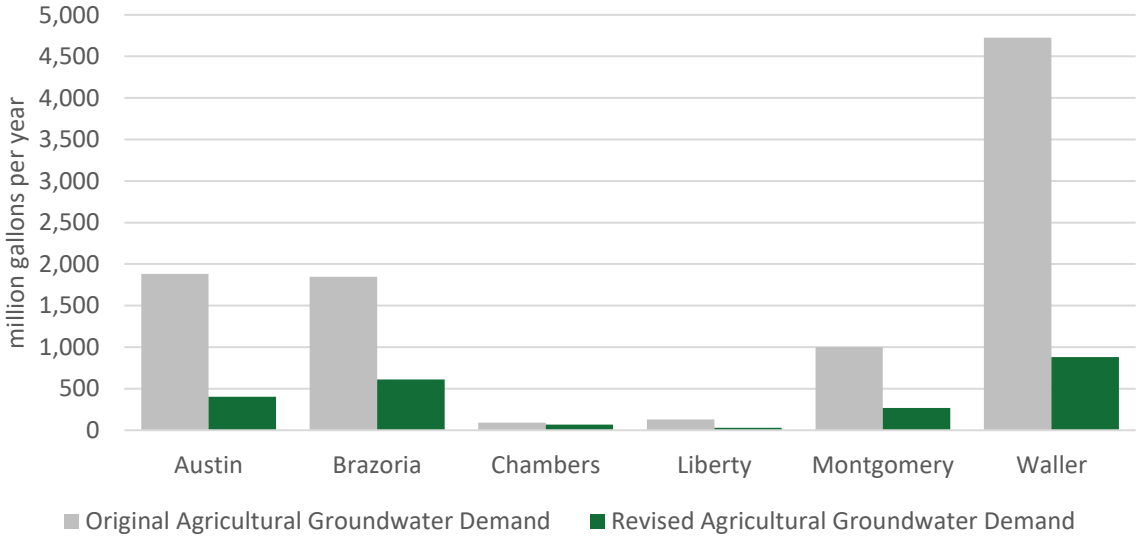


Figure 5 – Agricultural Groundwater Demand Projections in Wharton County
(includes irrigation and livestock demand; constant all decades 2020-2100)

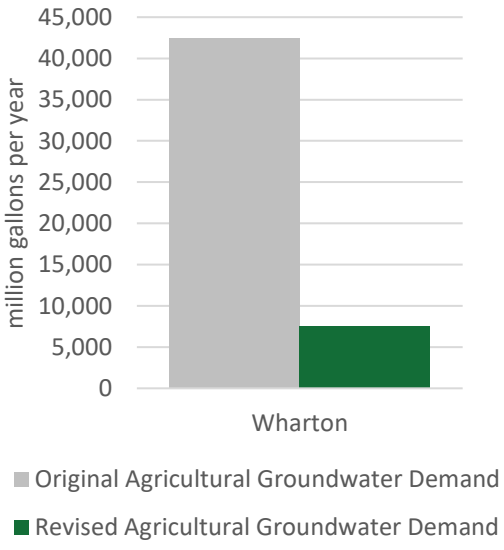


Figure 6 – Agricultural Groundwater Demand Projections in Harris and Galveston Counties (includes irrigation and livestock demand; constant all decades 2020-2100)

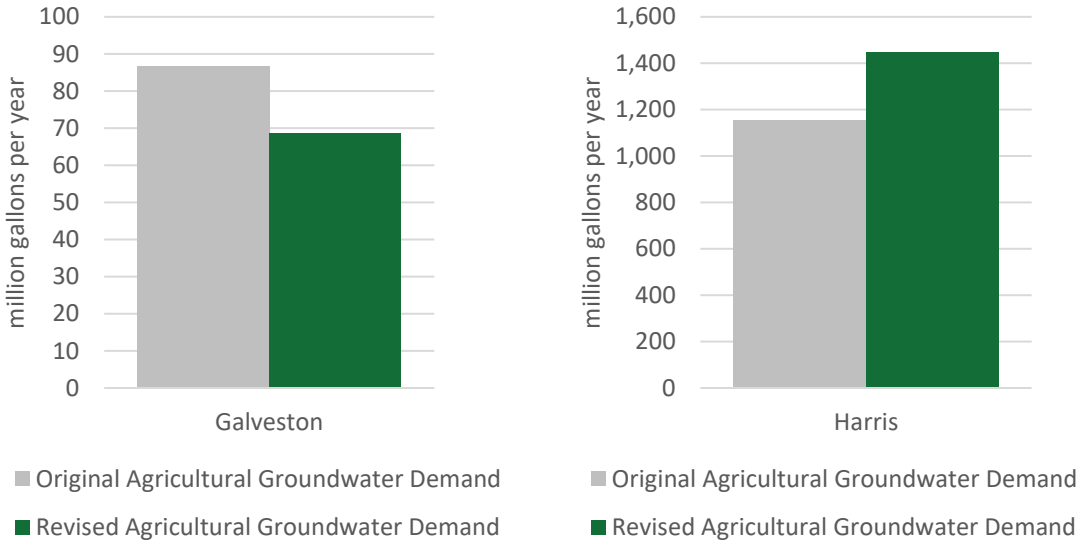


Figure 7 – Agricultural Groundwater Demand Projections in Fort Bend County (includes irrigation and livestock demand)