THE CITY OF BURLESON TEXAS

Infrastructure & Development Committee Agenda

Monday, May 11, 2026
2:00 PM

City Hall - 141 W. Renfro
Burleson, TX 76028

1. **CALL TO ORDER**

2. **CITIZEN APPEARANCES**

   Each person in attendance who desires to speak to the Committee on an item NOT posted on the agenda, shall speak during this section. A speaker card must be filled out and turned in to the City Secretary prior to addressing the Committee. Each speaker will be allowed three minutes to speak.

   Each person in attendance who desires to speak on an item posted on the agenda shall speak when the item is called forward for consideration.

3. **GENERAL**

   A. Consider and take possible action of the minutes from the March 25, 2026 Infrastructure & Development committee meeting. *(Staff Contact: Amanda Campos, City Secretary)*

4. **REPORTS AND PRESENTATIONS**

   A. Receive a report, hold a discussion and provide recommendations to the city council on the city's wastewater capacity. *(Staff Contact: Michelle McCullough, P.E., CFM, Deputy Director/City Engineer)*

   B. Receive a report, hold a discussion, and provide recommendations to the city council on Advanced Metering Infrastructure. (*Staff Contact: Brandi Rendon, Customer Service Manager*)

5. **REQUESTS FOR FUTURE AGENDA ITEMS AND REPORTS**

6. **RECESS INTO EXECUTIVE SESSION**

   In accordance with Chapter 551 of the Texas Government Code, the Committee may convene in Executive Session in the City Council Workroom in City Hall to conduct a closed meeting to discuss any item listed on this Agenda.

   Pending or contemplated litigation or to seek the advice of the City Attorney pursuant to Section 551.071, Texas Government Code

7. **ADJOURN**

RANDY MORRISON, PE, PMP, MCE
Capital Engineering
Director of Capital Engineering

rmorrison@burlesontx.com
Phone: (817) 426-9295

CERTIFICATE

I hereby certify that the above agenda was posted on this the 30th of April 2026, by 5:00 p.m., on the official bulletin board at the Burleson City Hall, 141 W. Renfro, Burleson, Texas.

Amanda Campos

City Secretary

BUDGET STATEMENT

Pursuant to Section 551.043, Government Code, the following taxpayer impact statement must be on the City Council meeting agenda at which the City Council will discuss or adopt a budget for the City of Burleson: For a median-valued homestead property ($306,724), the City's portion of the property tax bill in dollars for the current fiscal year (FY24-25) is $2,032.66, the City's portion of the property tax bill for the upcoming fiscal year (FY25-26) for the same property if the proposed budget is adopted is estimated to be $2,213.93, and the City's portion of the property tax bill in dollars for the upcoming fiscal year (FY25-26) for the same property if a budget funded at the no-new-revenue rate under Chapter 26, Tax Code, is adopted is estimated to be $2,021.62.

ACCESSIBILITY STATEMENT

The Burleson City Hall is wheelchair accessible. The entry ramp is located in the front of the building, accessible from Warren St. Accessible parking spaces are also available in the Warren St. parking lot. Sign interpretative services for meetings must be made 48 hours in advance of the meeting. Call the A.D.A. Coordinator at 817-426-9600, or TDD 1-800-735-2989.

THE CITY OF BURLESON TEXAS

Department Memo

Infrastructure & Development Committee

DEPARTMENT: **City Secretary's Office**

FROM: **Amanda Campos, City Secretary**

MEETING: **May 6, 2026**

SUBJECT:

Consider and take possible action of the minutes from the March 25, 2026 Infrastructure & Development committee meeting. *(Staff Contact: Amanda Campos, City Secretary)*

STRATEGIC PRIORITY AND GOAL(S):

Strategic Priority	Strategic Goal
High Performing City Organization Providing Exceptional, People Focused Services	1.2 Continue to improve the efficiency and productivity of operations 1.3 Deliver high-quality service and communications to external and internal customers

SUMMARY:

The Infrastructure & Development committee duly and legally met on March 25, 2026 for a regular meeting.

RECOMMENDATION:

Committee may approve the minutes as presented or approve with amendments.

PRIOR ACTION/INPUT (Council, Boards, Citizens):

N/A

REFERENCE:

N/A

FISCAL IMPACT:

N/A

STAFF CONTACT:

Amanda Campos, TRMC
City Secretary
acampos@burlesontx.com
817-426-9665

INFRASTRUCTURE & DEVELOPMENT COUNCIL COMMITTEE
March 25, 2026
MINUTES

Council Present:
Dan McClendon, Chair
Chris Fletcher
Alexa Boedeker

Council Absent:

Staff:
Tommy Ludwig, City Manager
Harlan Jefferson, Deputy City Manager
Amanda Campos, City Secretary
Matt Ribitzki, Deputy City Attorney

1. CALL TO ORDER – 10:00 a.m.

Chair Dan McClendon called the meeting to order. **Time: 10:05 a.m.**

2. CITIZEN APPEARANCES

- No speakers.

3. GENERAL

A. Minutes from the February 4, 2026 Infrastructure & Development committee meeting. (Staff Contact: Amanda Campos, City Secretary)

Motion was made by Chris Fletcher and seconded by Alexa Boedeker to approve the minutes.

Motion passed 3-0.

4. REPORTS AND PRESENTATIONS

A. Receive a report, hold a discussion, and provide recommendations to the city council regarding the City's Capital Improvement Plan and the proposed FY 27 CIP. (Staff Contact: Randy Morrison, P.E., Director of Capital Engineering))

Randy Morrision, P.E., Director of Capital Engineering, presented the City's Capital Improvement Plan (CIP) to the committee.

The presentation began with a review of the current projects including the amendments from the March 23, 2026 regular council meeting. The committee did not have any questions on the current projects as presented.

Next the Proposed FY2027 Capital Improvement Plan was discussed covering each project on its own.

- ST2301 Alsbury Phase 3 – Widening to CR 914

  - Questions arose concerning the pas trenching and filing of the drainage ditches and the failures in that project.
  - The committee addressed identifying money to fix CR 914
  - Staff agreed and also informed the council that the current stormwater study revealed the issues may also be from stormwater but will continue to review
- WW2601 12" Wastewater Line Replacement in Village Creek Basin
  - After reviewing the scope and the plan the committee had concerns over the traffic impact to Dobson St.
  - Dobson is used more often as a connection and the committee would like the staff to make sure we have a good strong plan for communication and notification to the community.
- WA2703 Renfro Widening Utility Relocations
  - This is a TXDOT project and a timeline for construction as not been identified due to no funding at this time by TXDOT
  - Staff explained that having the design portion completed at least 90% would assure when the funds are available and released and we are ready to avoid delays
  - Staff believes the funding could be end of 2027 but could be early 2027.

Chair McClendon asked staff to define the terms associated with the projects.
Mandatory = Must be done due to legal, regulatory, or contractual obligations
Necessary = Should be done soon for safety, capacity aging infrastructure, or code compliance
Recommended = Strongly advised by staff to meet City goals, improve efficiency, or align with strategic plans
Desired = Community-driven or "nice-to-have" projects that enhance quality of life but are not essential

- WW2701 Turkey Peak Elevated Storage Tank Rehabilitation
  - Committee members asked staff to describe the difference from the previous Turkey Peak Eleveated Storage Tank Rehabilitation. Staff explained the difference was the previous project was for water and this one is concerning sewer
- WW2801 Hyder Ranch Master plan sewer
  - Hyder Ranch timing is uncertain at this time
- PC2710 Green Ribbon Phase 3
  - New project in Green Ribbon.
  - Green Ribbon Phase 1 is complete and Phase 2 is under design
  - This is the start of the design for Phase 3

Park Programs as being moved to be able to maintain a steady fund balance. Staff continue to work to identify ways to accomplish this.

Committee members asked if we could do the water and sewer projects within the current tax rate, water/wastewater fees, and sewer rates. Staff noted the projections in the increase to the water/wastewater fees and sewer rates are not the goal nor the desired outcome. Staff are working on having a reasonable increase with a steady number.

Committee members inquired about the Asset Management Program and the $5 million placeholder. The Asset Management Program is intended to maintain a balanced condition of the sewer system, helping to avoid significant fluctuations over time. It is still too early to determine whether the $5 million placeholder will fully achieve this goal, but more clarity is expected once the model is finalized. Nevertheless, staff anticipate that this investment will place the system in a better condition than it is today and remain confident in its effectiveness.

- Project PC2707 Brick – Locker Room Remodel
    - Committee members questioned why this project was moved up in priority ahead of bathrooms for 2 existing parks – Claudia's Playground (PC3001) and Elk Ridge (PC2804)
    - Staff provided information that the request was made by a councilmember and was based on a tour of the facility as well as the factor this project was included in the scope of the original remodel but was later removed as a cost-cutting option.
    - The committee would like staff to move the project to the future and add back in bathroom for Claudia's Playground (PC3001).
    - Staff will bring forward the recommendation for consideration by the city council.
- FA2601 City Hall EV Charger
    - Committee members wanted to know about the choice of vendor for this project.
    - Staff explained to the members that this project was funded partially by grant from COG and they will choose the vendor for the project.

The committee members asked if we are planning a GO Bond Election in the future. This discussion covered the knowledge that the decision to fund any future projects is ultimately a policy decision by the city council. They may be funded by GO Bond or use of I&S tax rate.

This discussion lead to the review of the 4A fund balance projections covering the time frame of FY24 to FY 31 keeping in mind that staff is balancing the fund balance to not create spikes and valleys in the funds. The same was discussed for the 4B fund balance projections as well.

The 5-Year Capital Improvement Change Summary was reviewed:

- WW2601 12" Wastewater Line Replacement in Village Creek Basin
    - Staff noted this was change to avoid impact to Hidden Creek Golf Course and Dobson right-of-way
- PC2707 Brick Locker Room Remodel
    - Discussed earlier as a broader discussion with the bathrooms at Claudia's Playground and Elk Ridge parks.

Staff moved to the next section of discussion, the Unprogrammed Projects.

- WA2505 New AMI/AMR Implementation

  - Larger capacity of programming using technology is being explored allowing customers more functions as well as staff
  - Cost benefit analysis is being done now before presenting it to the full council with a clear return on investment explained
  - Grants are uncommon for this type of project
  - A replacement plan will be presented to council later this year on meters
- WA2704 Secondary Water Source (w/JCSUD)
  - It is too early to determine if this is the final number and staff is looking for ways to save money and reduce cost.
  - Staff stated we are currently waiting on Arlington and JCSUD, their numbers can reduce our cost
- PC2706 Low Water Crossings
  - Committee members asked questions about the location and the purpose, staff informed the member there are old nature trails and this was to address better access.
- PC2711 Hidden Creek Softball Fields
  - Staff informed the committee they need to re-run the plan model moving to FY26 based on recent discussions with the full city council
  - This item will be brought back to the committee at a later date
- PC2804 Elk Ridge Park – Bathroom Addition
  - Previously discussed need to explore moving this project to 4B
- PC2905 Community Park Phase III
  - Need to add this is related to a dog park
- PC3001 Claudia's Playground Bathroom Addition
  - Previously discussed need to move back into plan
- ST2705 Mobility Plan Update & Impact Fee Assessment & WA2705 Water/Wastewater Master Plan Update & Impact Fees
  - Need to move forward to 2027 to update the plan, with the option to review and adjust impact fees in 2028. Impact fees may only be increased once every three years. The plan itself can be updated at any time, but any changes to impact fees are limited to that three-year cycle. This plan will support new development by ensuring proper alignment is in place as growth occurs, and funding can be sourced from the impact fees collected.
- PC2704 Chisenhall Restroom Remodel and Office Addition
  - Committee members agreed this is a funded project from sponsored revenue received through SFC ONLY
- ST2402 East Ellison Mobility
  - Capacity in the TIF Fund feel short and this project had to be moved.

5. REQUESTS FOR FUTURE AGENDA ITEMS OR REPORTS

No request from committee members

6. RECESS INTO EXECUTIVE SESSION

No Executive Session

7. ADJOURN

There being no further discussion Chair Dan McClendon adjourned the meeting.

Time: 12:10 p.m.

_____

Amanda Campos
City Secretary

THE CITY OF BURLESON TEXAS

Department Memo

Infrastructure & Development Committee

DEPARTMENT: **Development Services**

FROM: **Michelle McCullough, Deputy Director/ City Engineer**

MEETING: **May 6, 2026**

SUBJECT:

Receive a report, hold a discussion and provide recommendations to the city council on the city's wastewater capacity. *(Staff Contact: Michelle McCullough, P.E., CFM, Deputy Director/City Engineer)*

STRATEGIC PRIORITY AND GOAL(S):

Strategic Priority	Strategic Goal
Dynamic & Preferred City Through Managed Growth	2.2 Promote sustainable residential and commercial development through strategic and long-term planning

SUMMARY:

The purpose of this report is to provide historical background on the Fort Worth Wholesale Wastewater contract and to discuss the existing wastewater capacity and future needs based on expected development. Additionally, staff will discuss current initiatives underway as well as potential next steps to plan for the future.

RECOMMENDATION:

No action is required. Staff is seeking the Committee's feedback on the presentation.

PRIOR ACTION/INPUT (Council, Boards, Citizens):

None

REFERENCE:

Volume-I---Executive-Summary

FISCAL IMPACT:

Proposed Expenditure/Revenue: n/a
Account Number(s): n/a
Fund: n/a
Account Description: n/a
Procurement Method: n/a

STAFF CONTACT:

Michelle McCullough, P.E., CFM,
Deputy Director/ City Engineer
mmccullough@burlesontx.com
817-426-9616

Sewer Capacity

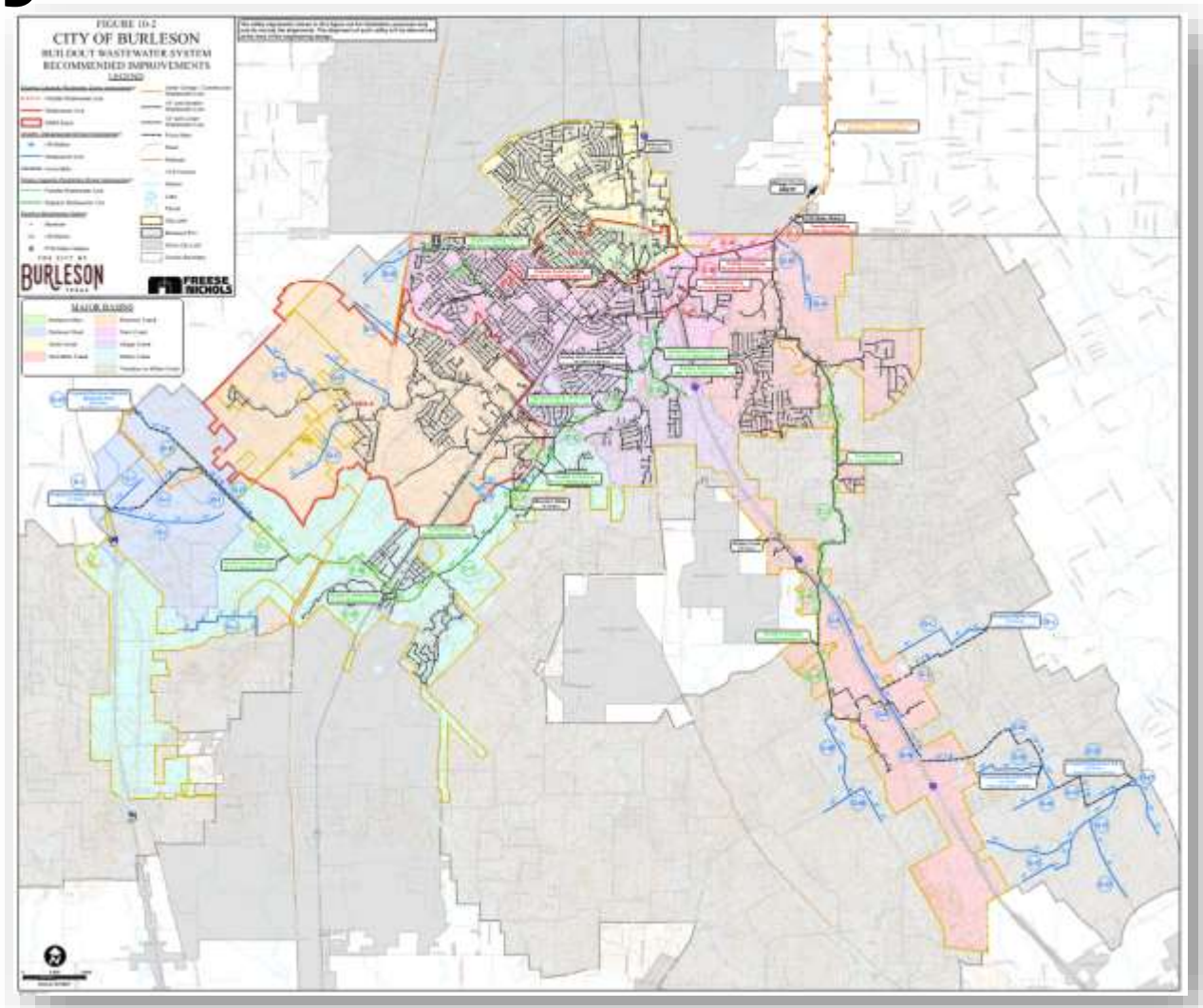
I & D Committee

May 6, 2026

Wastewater Capacity

Purpose:

Review the city's existing wastewater capacity and discuss future wastewater needs



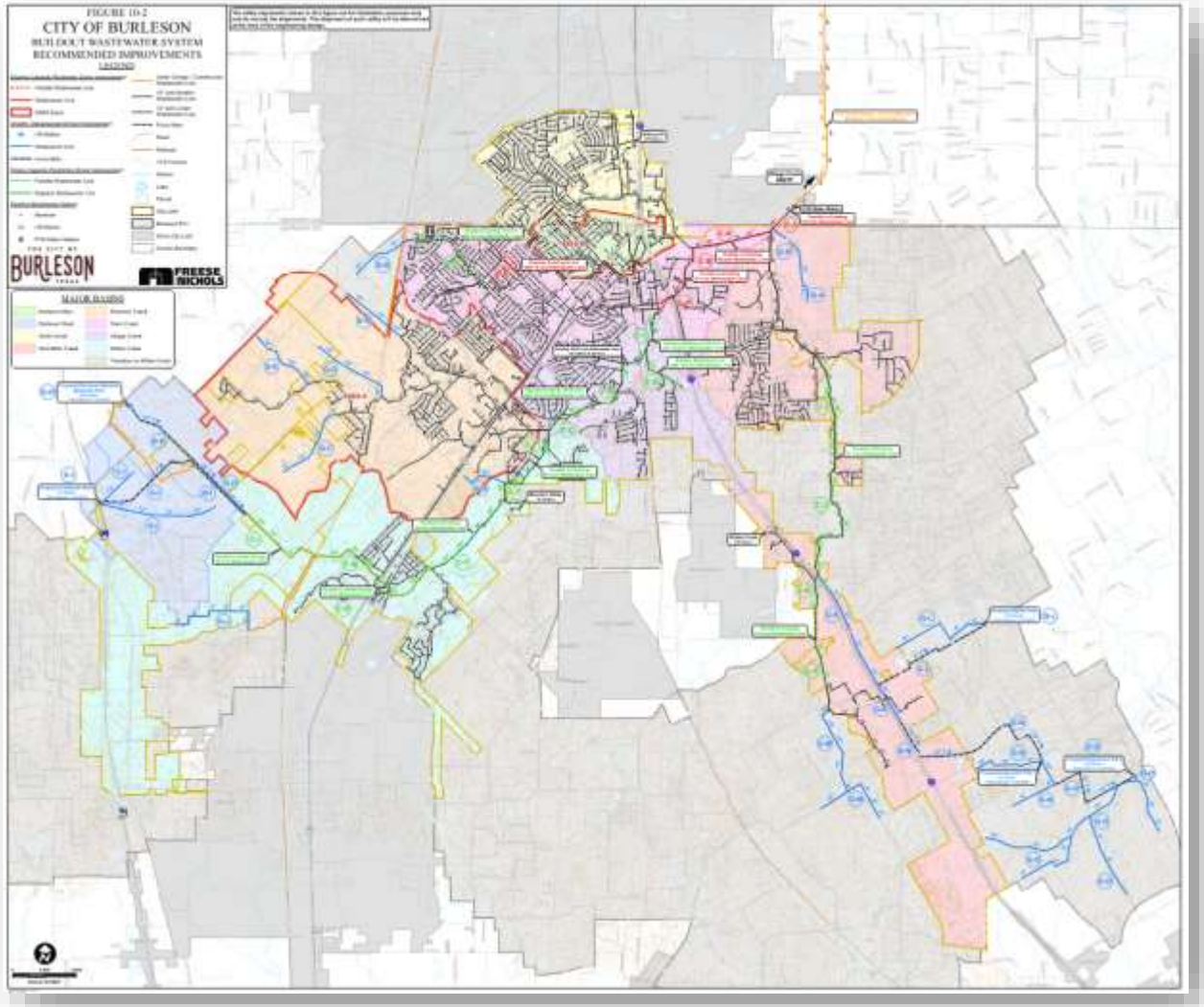
Fort Worth Wholesale Wastewater Contract

May 1987

Initial contract established all capacity improvements borne by FW and passed to customer cities as a system cost, no capacity amount stated

May 2017

- 2010 Masterplan - 2030 projected flows were 21.5 MGD
- Established purchased capacity of **8.76 MGD**
- Improvements related to increased capacity borne by customer
- Peak flow remediation – requires study if peaking factor exceeds 4.0 in 12-month period
- Burleson must agree to reimbursement of $97,370, which is FW's contribution to the City of Crowley's sewer line for the Hyder Tract upon service to the tract
- Burleson to negotiate future terms in good faith to allow service within the ETJ; FW maintains right to manage and protect its wastewater system
- Contract term changed from 20 to 30 years



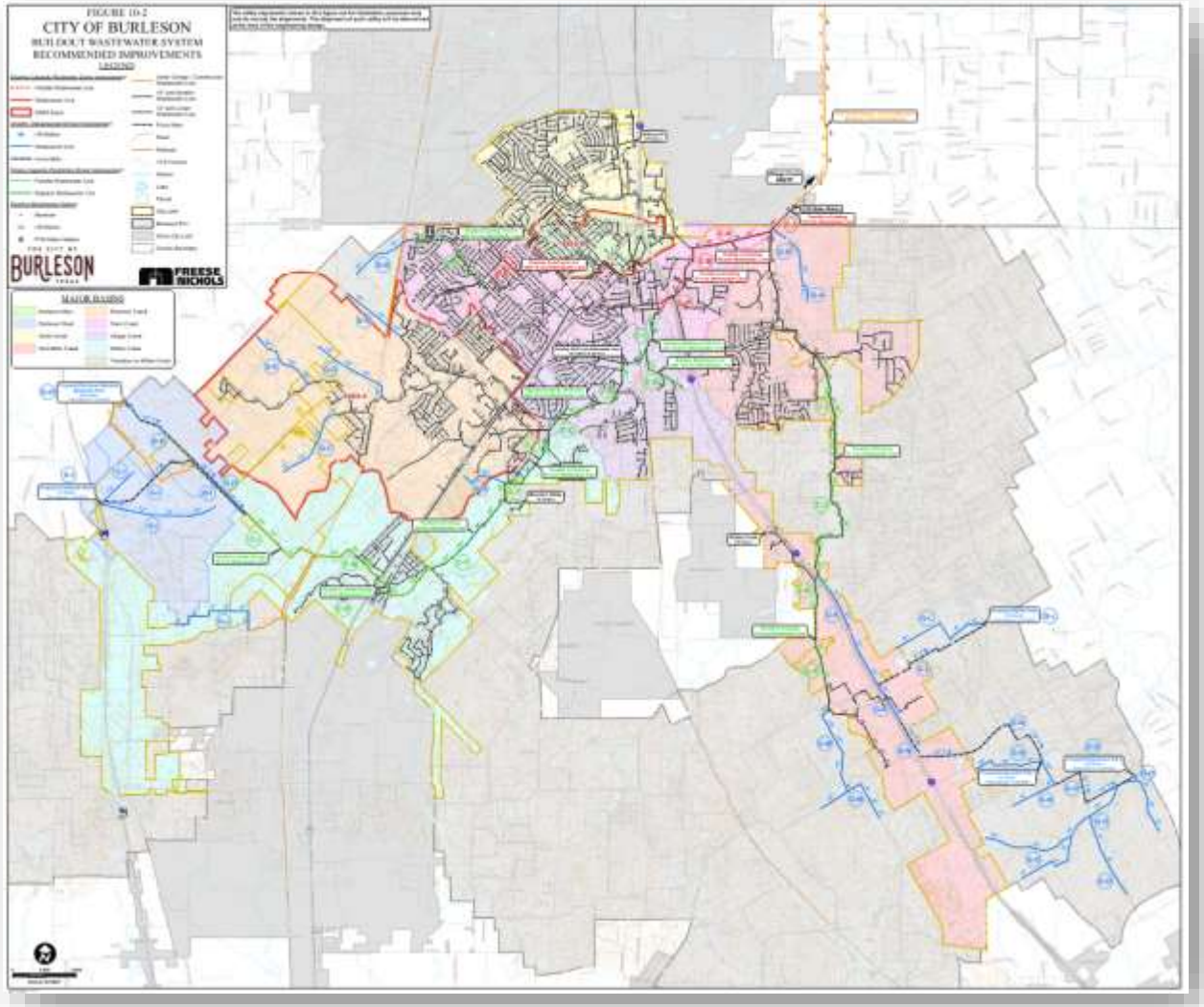
Fort Worth Wholesale Wastewater Contract

August 2017 – Amendment 1

- 2015 Masterplan – 2035 projected flow was 29 MGD

  Did not include ETJ or ultimate buildout scenario

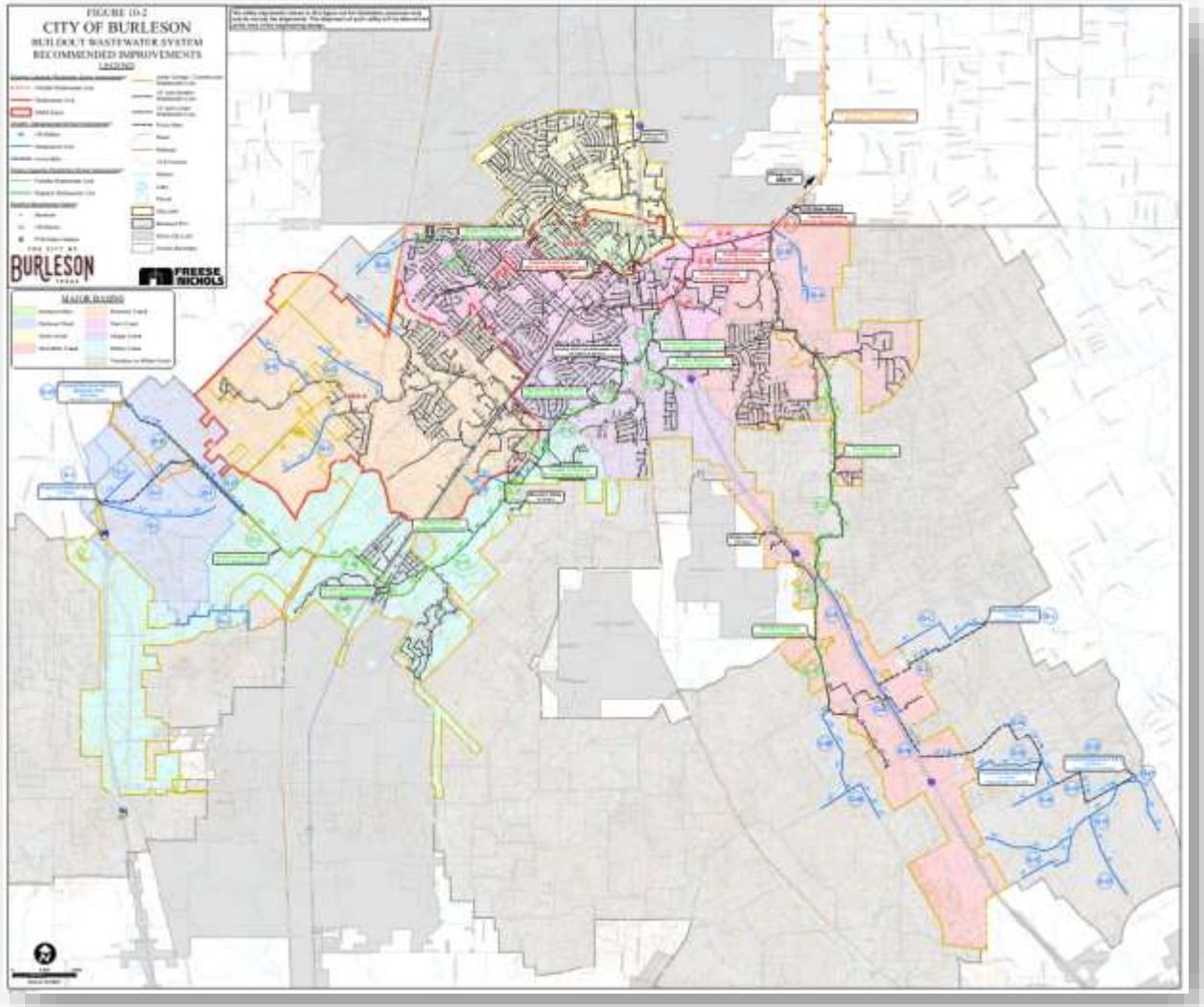
- City requested additional 16.3 MGD, increasing total allowable capacity to **25 MGD**
- Cost to City $14.3 million



Fort Worth Wholesale Wastewater Contract

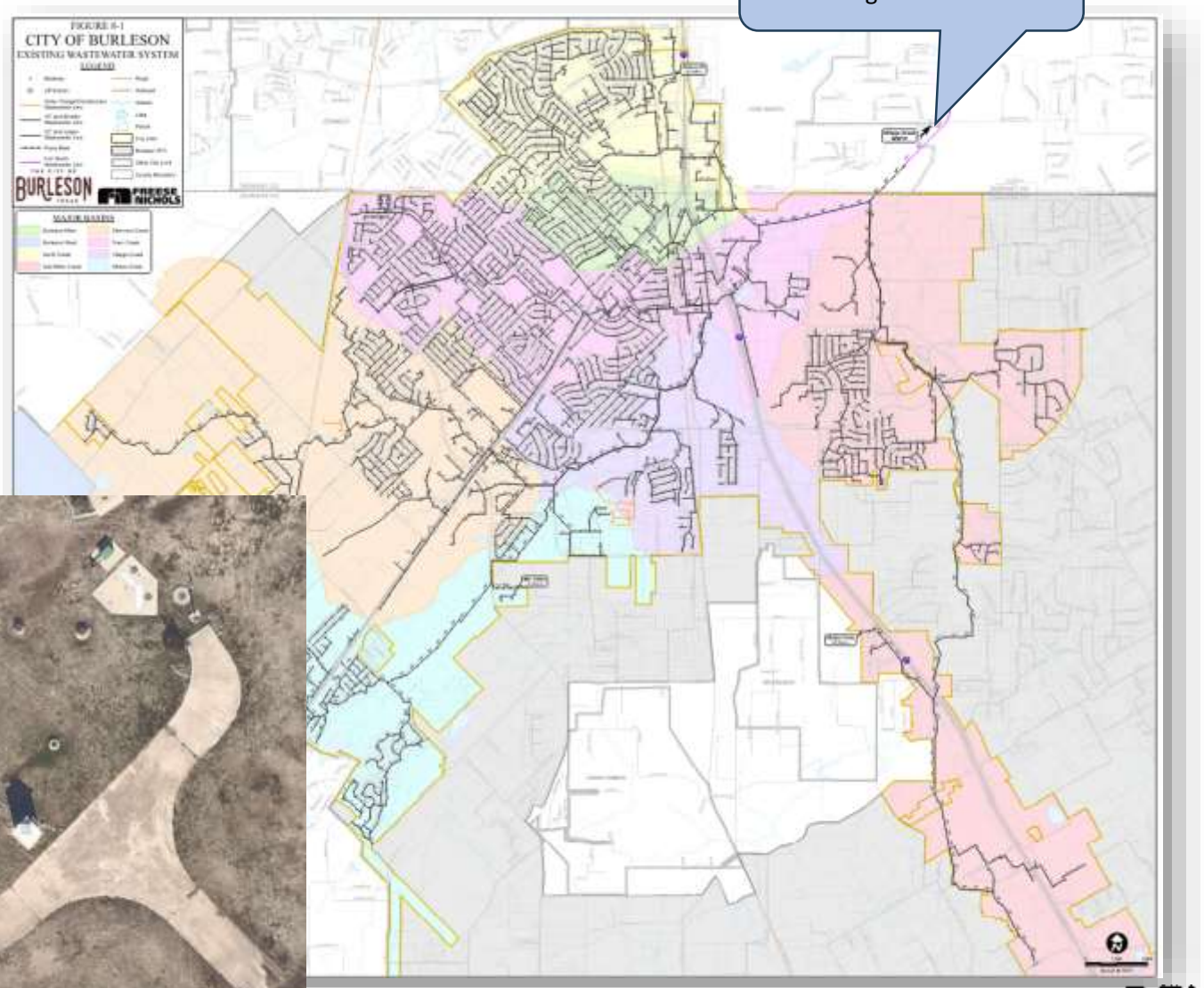
Amendment 2 – Under Review

- 2023 Masterplan included buildout scenario – 41.3 MGD
- Select areas of the ETJ included
  - Hyder Ranch
  - Chisholm Summit
  - Hooper Business Park
  - Small area of Tall Grass located in ETJ
  - Potential Industrial along IH35
- Staff working with FW on terms to purchase additional 10 MGD of FW's capacity for a total allowable capacity of **35 MGD**
- Cost to City $3.671 million
- 35 MGD will not be available until payment is made



Wastewater – Where Does it Go?

Burleson wastewater generally flows through the city towards Southern Oaks Golf Course through existing meter station



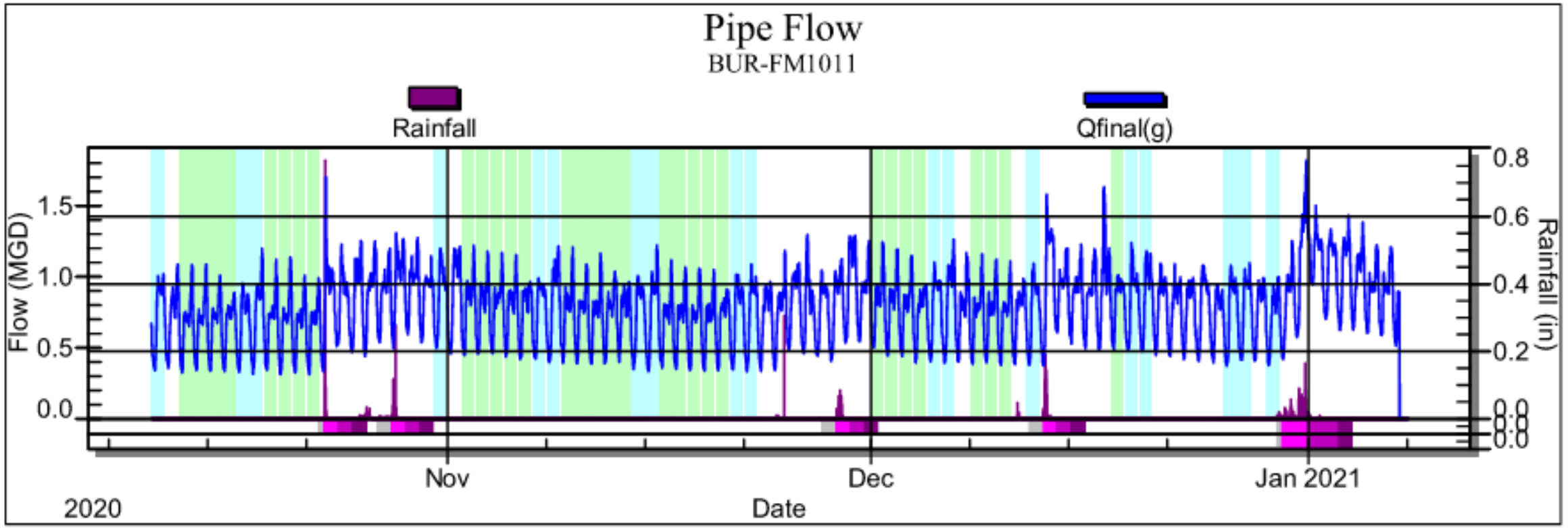
Approximate location of existing meter station

Wastewater Flows Explained

Wastewater flows

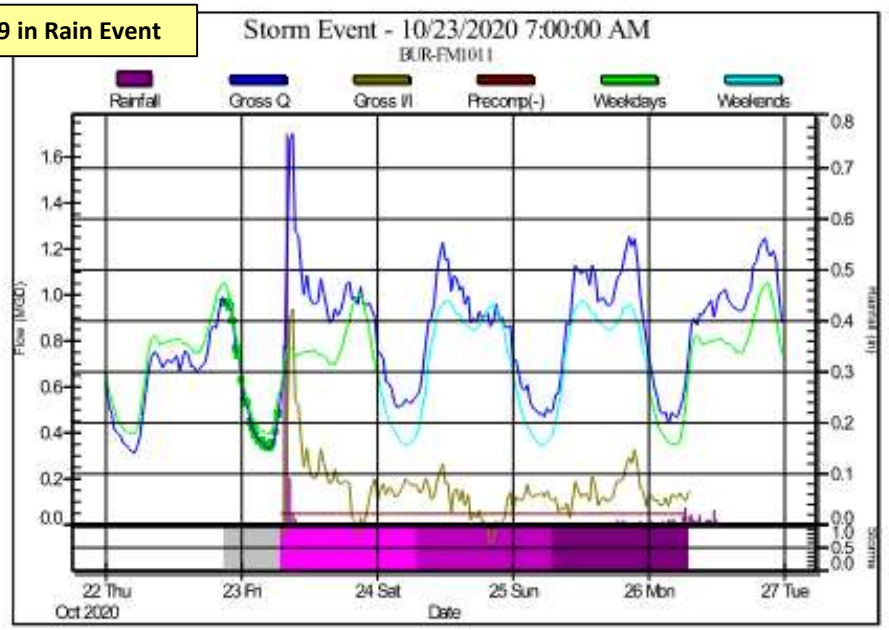
- Average Daily Flow – average of the 24-hour volume over a 12-month period and represents the typical daily inflow to a wastewater collection system
- Inflow/Infiltration – “clear” water that enters the system from storm water or groundwater
  - Inflow – point sources include roof drains, open manholes storm drain cross connections, yard drains, open pipes in creeks
  - Infiltration – occurs when groundwater tables are high and include cracks in pipes, separated joints, gravel drains channeling water towards damaged pipes or manholes
- Peak Flow – maximum flow rate of wastewater that occurs during a specific rain event
  - TCEQ requires wastewater systems be designed utilizing peak flow rates
  - May be calculated for specific developments but typically for masterplans, industry standard of 3.4 is utilized

Wastewater Flows Explained

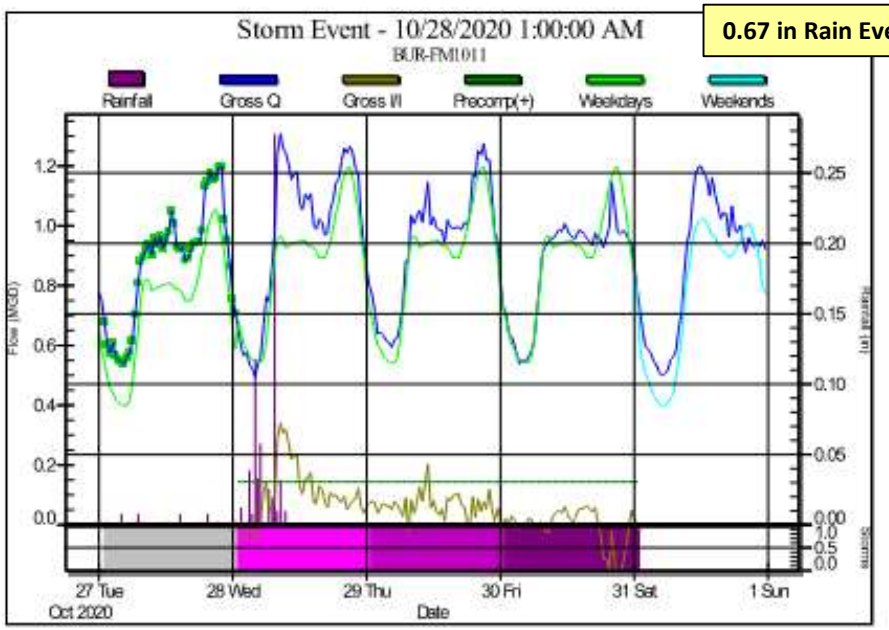


Wastewater Flow Hydrograph

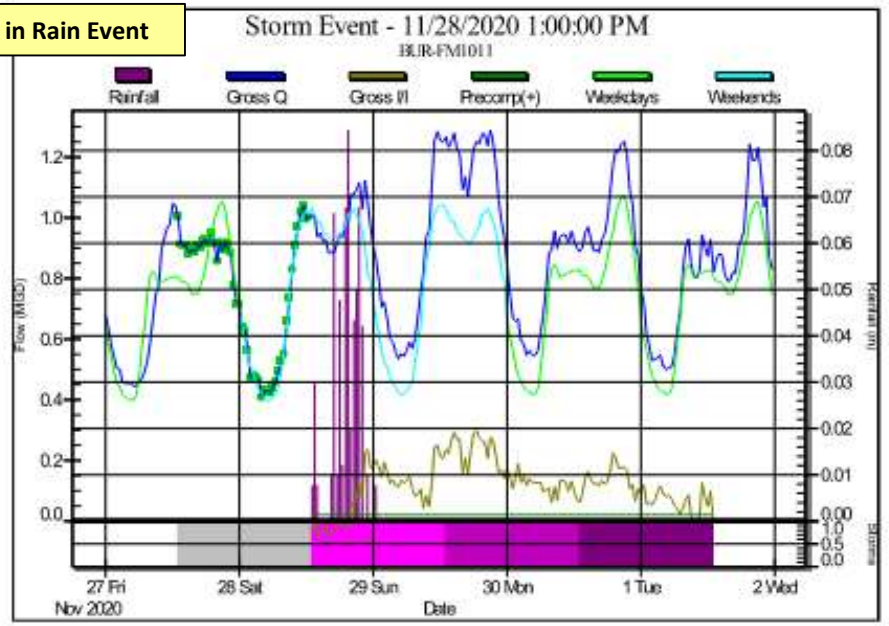
1.39 in Rain Event



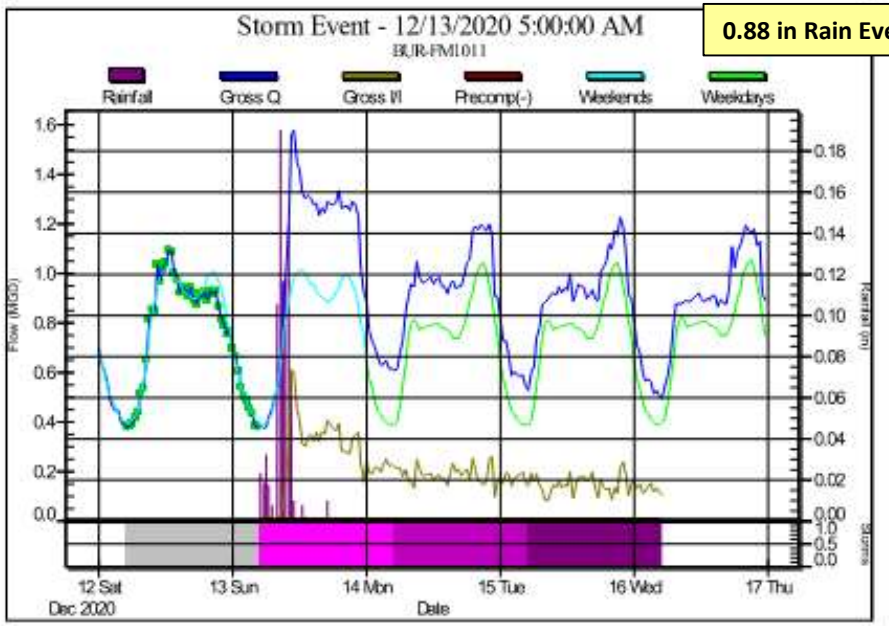
0.67 in Rain Event

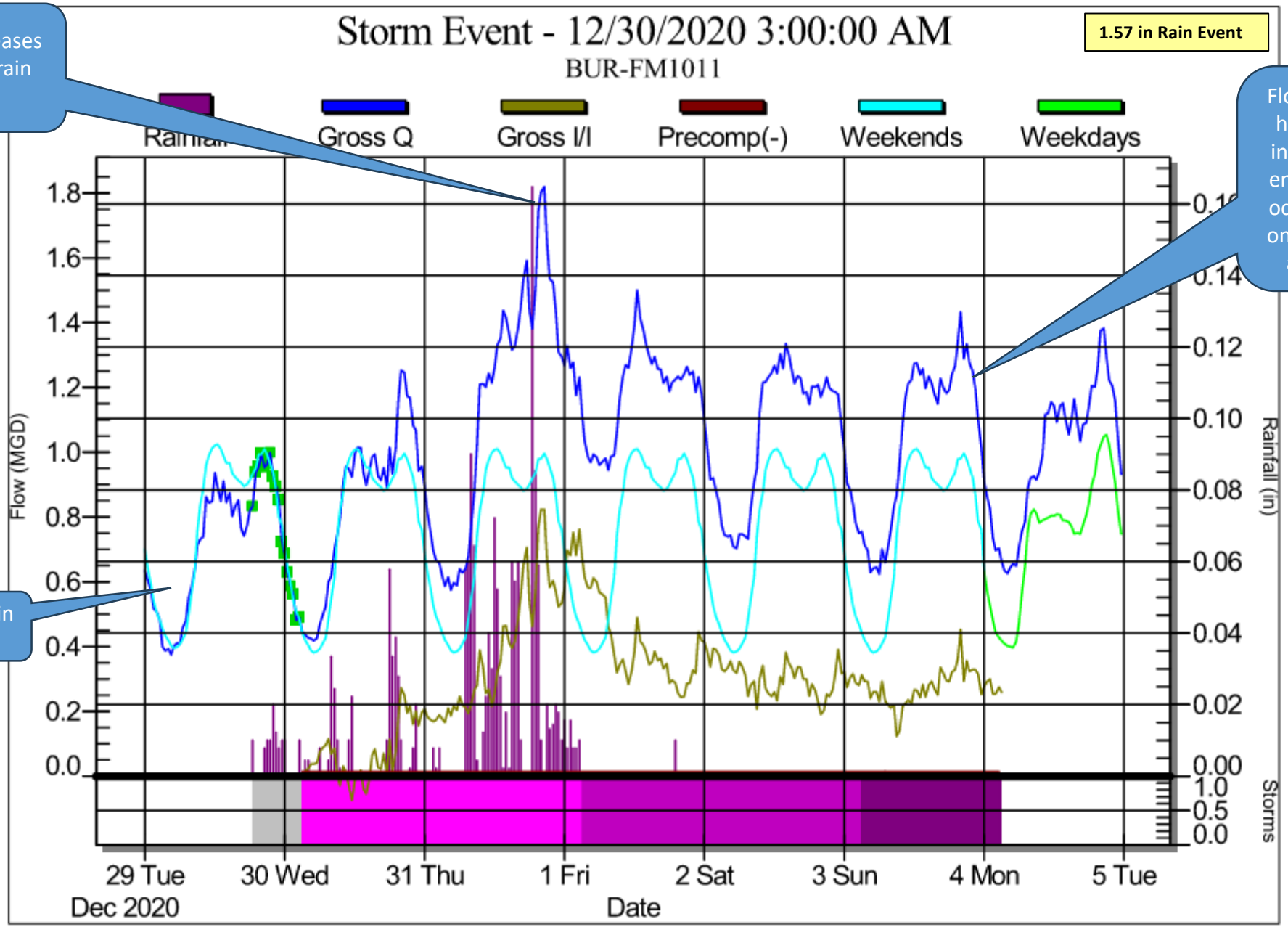


0.58 in Rain Event



0.88 in Rain Event





Wastewater flow increases due to inflow during rain event

Flow remains elevated 24 hours after storm event indicating infiltration still entering system. This can occur for days depending on height of groundwater and defects in system

Average flow before rain event

Peak Flow

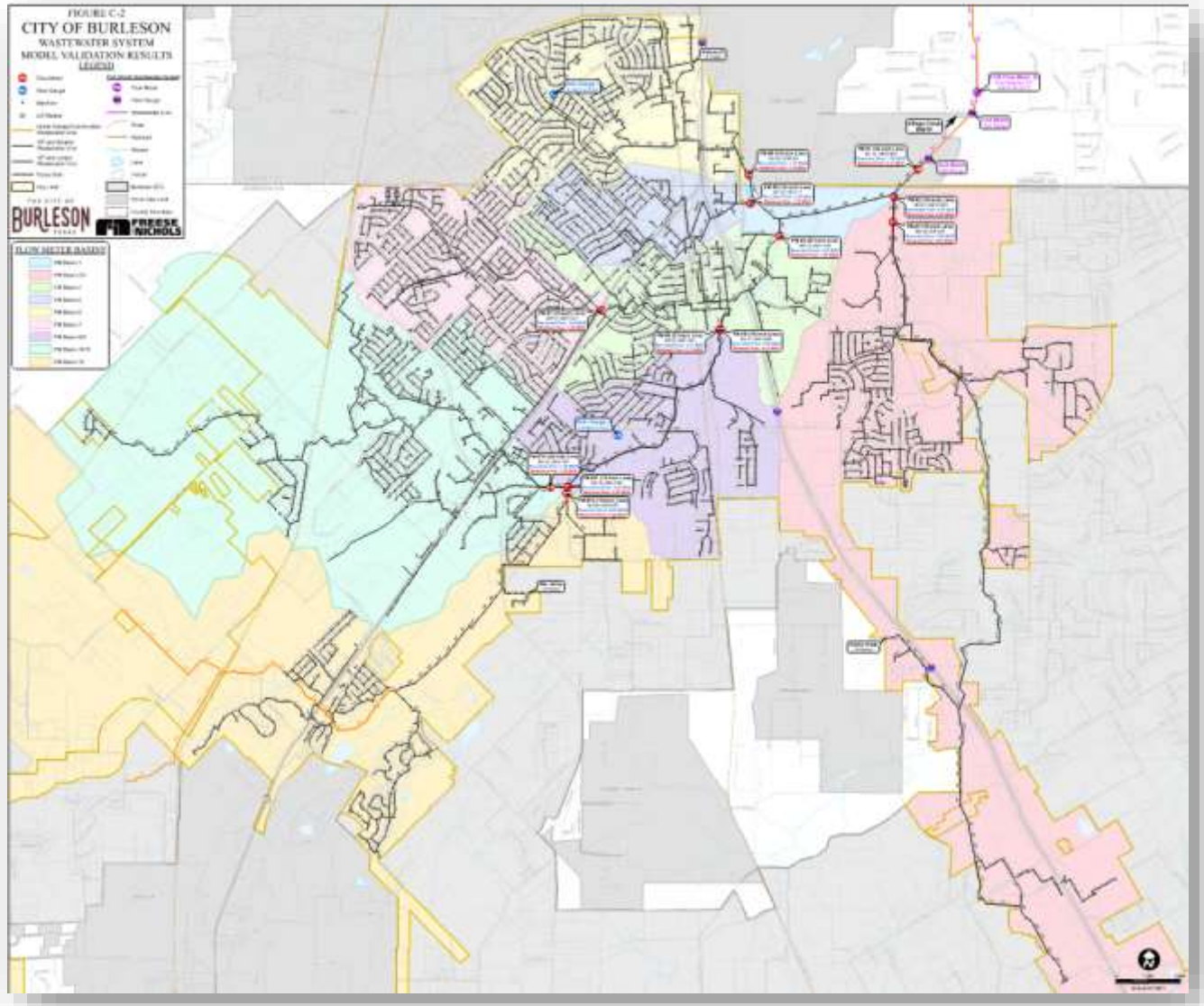
Peaking factors are calculated by dividing the wet weather flows by the average dry weather flows

Historical average peaking factor last 12 years – 3.0

- Based on 12 years of data collected at existing FW meter station
- Peaking factor ranged from 2.0 to 7.12
- Peaking factor correlates directly with amount of rainfall, typically the higher rainfall for the year, the higher the peaking factor

2023 Masterplan updated utilized 12 flow meters to record flow during dry and wet weather events

Peaking factor was calculated to be an average 2.72



Sewer Capacity

Existing meter station maximum flow – 14.5 MGD

- Existing peak wet weather flow – 14.1 MGD
- FW requires meter to be upgraded to avoid bypass flows

Town Creek interceptor project includes parallel line and meter station improvements

- Once completed, new meter will be capable of measuring flow up to 35 MGD, future improvements required
- 35 MGD will not be available until city purchases additional 10 MGD – only 25 MGD available today per contract
- Existing and parallel line will support project build out flows

Table 7-5 Wastewater Service Area Projected Wastewater Flows

Planning Period	Population	Non-Residential Acreage (Acres)	Residential Average Day Flow (MGD)	Non-Residential Average Day Flow (MGD)	Total Average Day Flow (MGD)	Peak Wet Weather Flow (MGD)
Existing	49,760	1,795	4.00	0.84	4.84	14.10
5-Year	62,548	2,383	4.99	1.30	6.29	19.17
10-Year	76,822	2,730	6.15	1.43	7.57	23.56
20-Year	103,799	4,397	8.29	2.19	10.48	33.44
Buildout	120,821	6,523	9.66	3.14	12.80	41.33

Includes approximately 3,000 acres of ETJ

Masterplan buildout flow – 41.33 MGD
Exceeds future allowable 35 MGD capacity through Fort Worth at buildout

Sewer Capacity – Known Developments

Known developments with flows included in masterplan flows

- Hooper Business Park
- Chicken Express
- Chisholm Summit
- Hulen/Alsbury – Kalterra Development
- Hyder Ranch
- Lakes of Burleson
- Bear Ridge
- Panchasarp Farms
- Shannon Creek (Reverie/Apartments)

Table 7-5 Wastewater Service Area Projected Wastewater Flows

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Existing	49,760	1,795	4.00	0.84	4.84	14.10
5-Year	62,548	2,383	4.99	1.30	6.29	19.17
10-Year	76,822	2,730	6.15	1.43	7.57	23.56
20-Year	103,799	4,397	8.29	2.19	10.48	33.44
Buildout	120,821	6,523	9.66	3.14	12.80	41.33

Includes approximately 3,000 acres of ETJ

Tall Grass

- Tall Grass (Only 200 acres located in ETJ at time of report included)
- Additional 3.6 MGD per development agreement **not** included in masterplan

Sewer Capacity – Tall Grass

Years 2028 - 2033

680 Single family homes

Years 2034 – 2039

- 300 Multifamily
- 350 Single family homes
- 140,000 sf commercial

Buildout

- 1,200 Multi-family
- 973 Single Family homes

Year	Masterplan Projected Peak Flows (MGD)	Tall Grass Projected Peak Flows (MGD)	Total (MGD)
2028 - 2033	23.56	0.65	24.21
2034 - 2039	33.44	1.69	35.13
Buildout	41.33	3.62	44.92

Between 2034 and 2039 peak flows will exceed future allowable capacity of 35 MGD through the existing FW meter station if development occurs as projected or if more dense development is allowed

Current Initiatives

Amend current Wholesale Wastewater Contract to include the additional 10 MGD for $3.671 million.

Additional Wastewater Capacity Analysis

Staff is currently reviewing proposal – 4 potential options to consider

- Additional Capacity in Fort Worth's system
  - Two different routes to include improvements to FW's wastewater system
- Partnering with JCSUD to expand their existing wastewater treatment plant
- Feasibility of City owned wastewater treatment plant

Proposed Wastewater Service Area

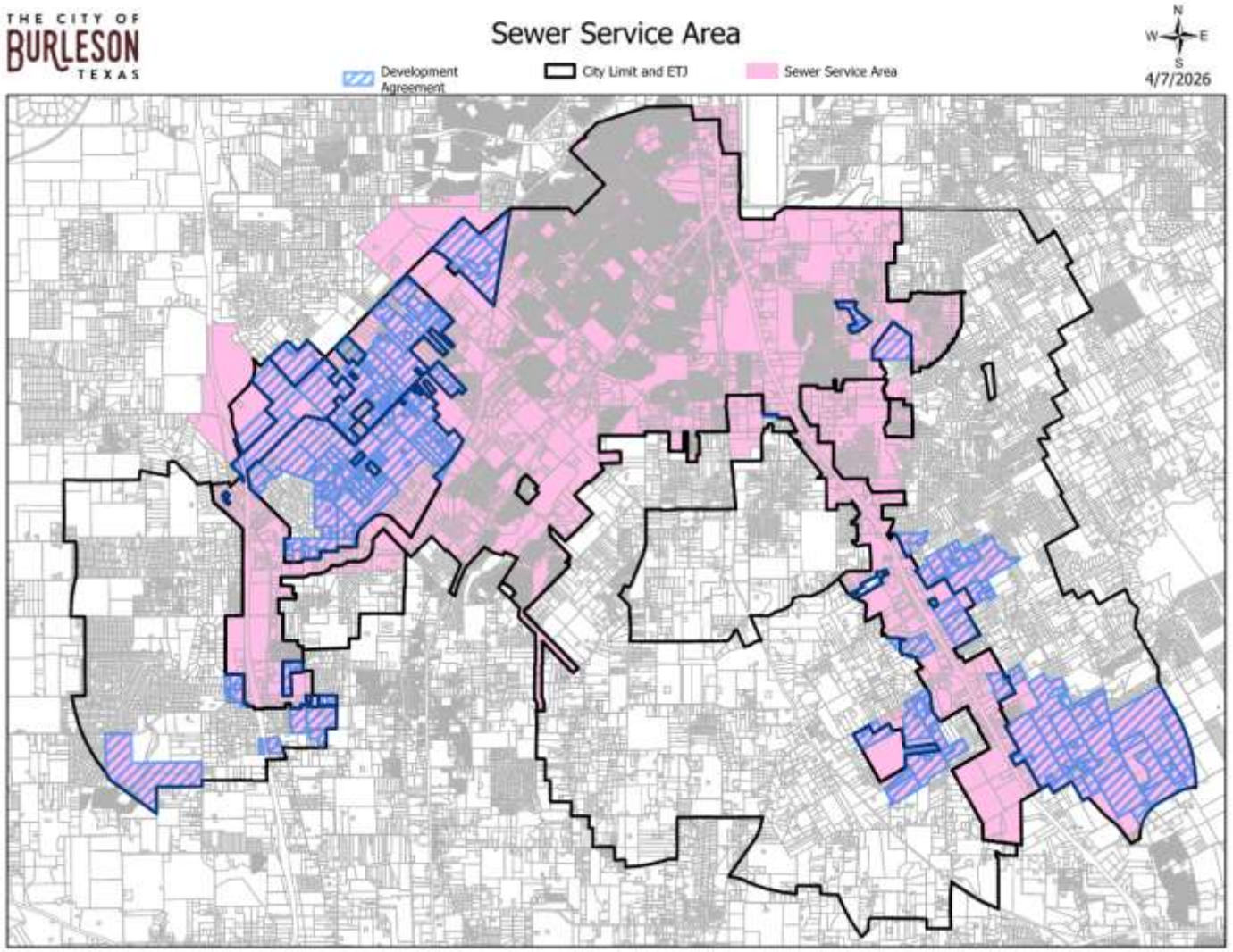
FW Wholesale Wastewater Contract Amendment

FW has shared concerns with city's CCN boundary and their ability to provide capacity in the future for the entire boundary

- Current Model Wastewater flow – 41.3 MGD
- Future Anticipated Model Flow – 44.9 - 46 MGD based on map to the right

Includes the following

- Silo Mills
- Tall Grass
- Development Agreements (potential future development in city)

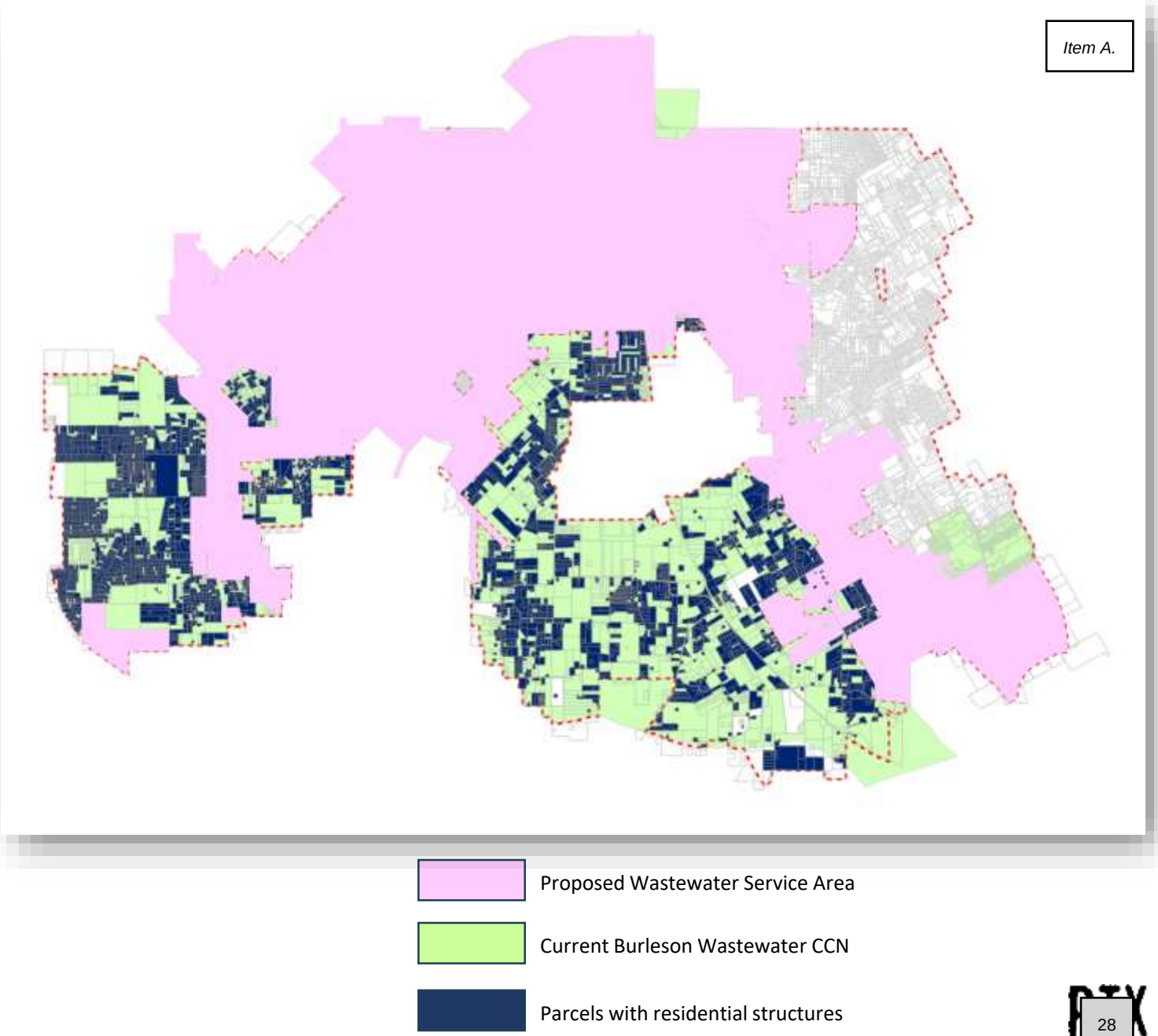


Discussion

Consideration of decertification of CCN in selected areas of the ETJ

- Land within the city limits is considered in the masterplan with the intent to serve upon request
- City has an obligation to serve if within CCN, however, if a request is received for service in the ETJ not considered in the masterplan and capacity is not available, the city may deny service
- ETJ property owner would have the opportunity to request decertification

Develop funding plan for additional wastewater capacity based on analysis



Questions

Staff Contact:

Michelle McCullough, P.E., CFM

Deputy Director/City Engineer

817-426-9616

mmccullough@burlesontx.com

THE CITY OF BURLESON TEXAS

Department Memo

Infrastructure & Development Committee

DEPARTMENT: **Finance**

FROM: **Brandi Rendon, Customer Service Manager**

MEETING: **May 6, 2026**

SUBJECT:

Receive a report, hold a discussion, and provide recommendations to the city council on Advanced Metering Infrastructure. (*Staff Contact: Brandi Rendon, Customer Service Manager*)

STRATEGIC PRIORITY AND GOAL(S):

Strategic Priority	Strategic Goal
High Performing City Organization Providing Exceptional, People Focused Services	1.2 Continue to improve the efficiency and productivity of operations 1.3 Deliver high-quality service and communications to external and internal customers

SUMMARY:

The City Manager's Office has established an inter-departmental committee of staff focused on developing a recommendation regarding the development of an Advanced Meter Infrastructure (AMI) Program. This effort is focused on addressing the condition, accuracy, and reliability of the City's existing meter infrastructure while progressing toward the City's long-term AMI goal.

While AMI remains the long-term objective, the committee has identified that the most immediate and significant need is the replacement of aging and underperforming meters, many of which have reached or exceeded their expected service life. These conditions impact system accuracy, operational efficiency, and revenue visibility. Addressing these core infrastructure issues first provides the City with the strongest foundation for future AMI capabilities.

Today, the City's water usage data is collected through a manual, route-based process supported by a mix of aging meter infrastructure. Each service location is equipped with a meter and register. To collect usage data, staff are required to physically drive routes throughout the city, using laptops to collect meter data. Once collected, the data must be uploaded into meter software, downloaded, and then transferred into a separate system for billing and analysis.

Completing a full citywide read takes approximately eight business days and is divided into four routes each month. Due to inconsistencies such as missing reads or irregular usage, staff generate approximately 200 or more recheck work orders monthly, requiring additional field visits to perform hands-on validation of the data.

As part of the program evaluation, the city engaged Ameresco as an external vendor partner to conduct field surveys, meter testing, and system analysis. Ameresco staff worked directly onsite with City personnel to validate existing conditions and provide technical insight into system performance. This work confirmed that a significant portion of the City's meter infrastructure is beyond its expected service life and that current processes rely heavily on manual effort with limited system visibility. Field validation also confirmed that not all water usage is currently being captured, meaning portions of usage and associated revenue are not fully visible within existing processes.

Over the past 19 years, the city has experienced 65% growth, increasing from approximately 10,000 to over 16,500 service locations without a commensurate growth in staffing. As system demand has increased, staff have prioritized customer support, work orders, and reactive maintenance activities to maintain service levels. As a result, the number of planned meter replacements completed annually has been reduced. Improving meter accuracy through replacement ensures that all water usage is properly measured and billed, strengthening overall revenue capture.

RECOMMENDATION:

N/A

PRIOR ACTION/INPUT (Council, Boards, Citizens):

N/A

REFERENCE:

N/A

FISCAL IMPACT: N/A

Proposed Expenditure/Revenue:
Account Number(s):
Fund:
Account Description:
Procurement Method:

STAFF CONTACT:

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THE CITY OF BURLESON TEXAS

Advanced Metering Infrastructure (AMI) Implementation Development

Infrastructure & Development Committee
May 6, 2026

Purpose

- The City has initiated the development of an Advanced Meter Infrastructure (AMI) Program through an interdepartmental committee, focused on improving the condition, accuracy, and reliability of the City's meter infrastructure.
- While AMI remains the long-term goal, the most immediate need is the replacement of aging and underperforming meters that have reached or exceeded their expected service lives.
- Addressing these core infrastructure issues first provides the foundation for future AMI capabilities.

Department	Name
Utility Customer Service	Brandi Rendon
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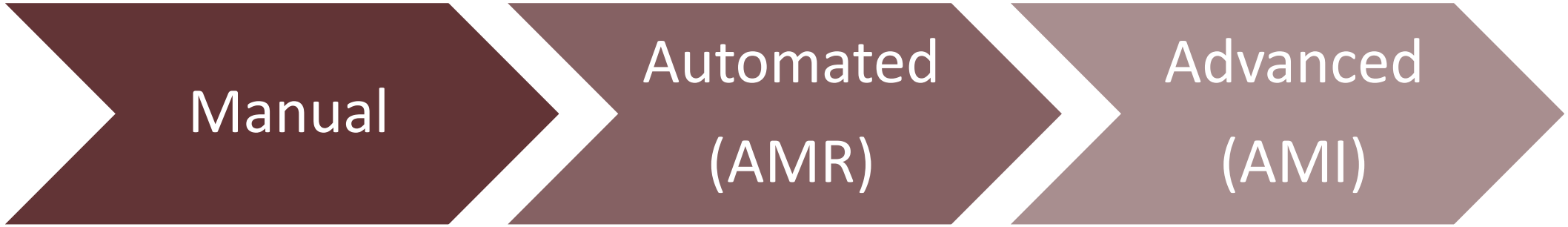
Public Works – Water	Andy Jabben
Public Works – Admin	Errick Thompson
Public Works – Admin	Brandi Stigler
Finance	Mark Davies
Finance	Kevin Hennessey
Finance	Jeremy McCain
Capital Engineering	Randy Morrison
IT	James Grommersch

AMI Planning Committee Members

Background

- Burleson water customers represent approximately 16,500 metered connections (91% residential, 9% non-residential)
- Meter sizes range from 5/8-inch for a typical home to 6-inch for larger commercial/industrial users
- Monthly meter readings used to generate billing based on actual water consumption
- Our goal according to the city's current water conservation plan is to replace 1-inch and smaller meters on a 10-year cycle, larger meters replaced based on testing results (1.5-inch and 2-inch meters tested every 3 years, meters larger than 3-inches tested annually)
- Metering technology continues to evolve from physical, meter-by-meter "walk-by" readings to "Automated Meter Reading" (AMR), to "Advanced Metering Infrastructure" (AMI) systems being deployed over the last two decades

Evolution of Meter Reading



1855: Henry Worthington issued first patent in U.S. for water meter

1950s: Visual Readings Remotely (without entering building)

1980s: Radio Frequency Remote Readings

1990s: Fixed Frequency Radio Readings (cellular)

Current Operations

2000s: Two-way Communication Systems Deployed

Current State of Meters

Automated Meter Reading (AMR) system

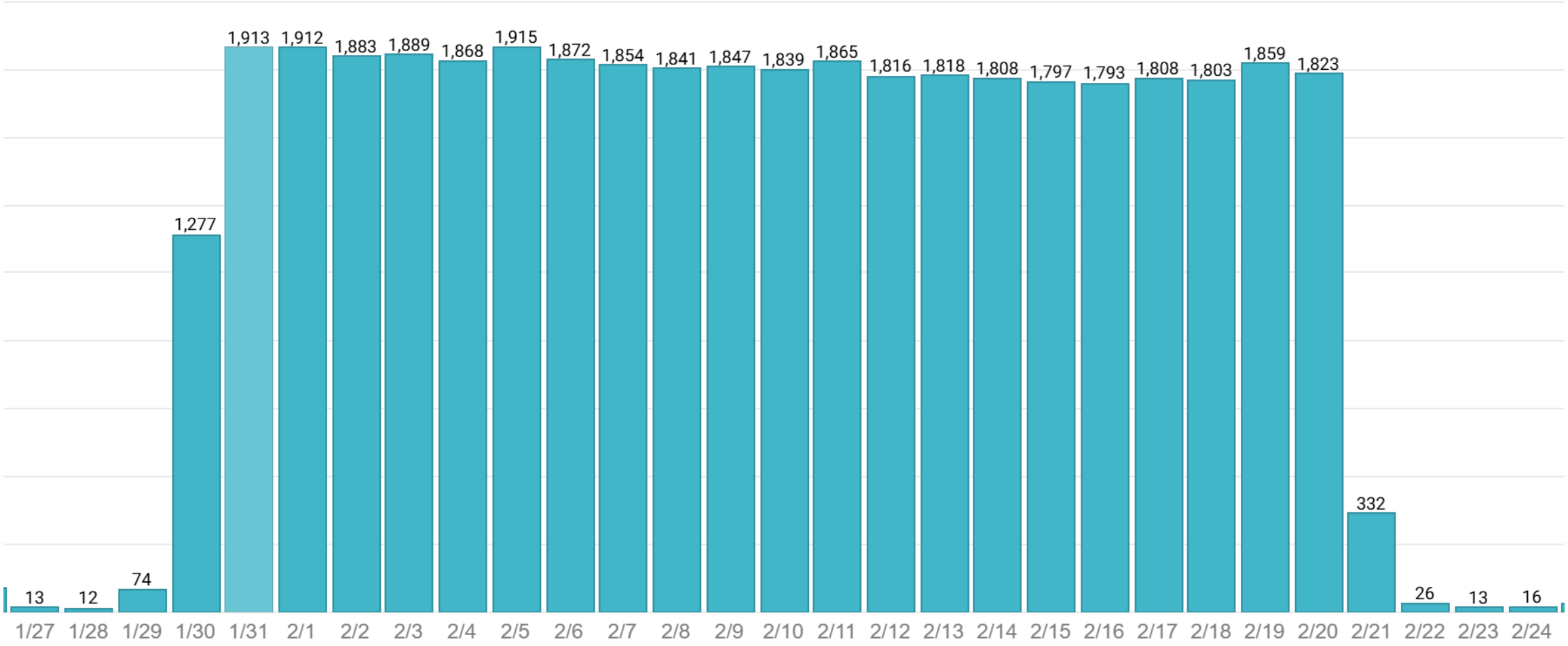
- Meter data is transmitted wirelessly but only over short distances (typically a few hundred feet), requiring field personnel to be in close proximity to collect readings using an in-vehicle transceiver or MRX device with a laptop, tablet, or phone.
- The citywide meter reading process takes approximately eight business days (64 hours) and is divided into four billing cycles, data is downloaded into billing software to generate bills.
- Missed readings are common (around 1%), requiring return visits and contributing to roughly 200 work orders per month due to missing or irregular usage. The work orders take anywhere from 10-20 hours to complete based on complexity.
- There are three water utility workers and one supervisor that perform all meter reading and recheck work orders in addition to their regular daily job duties.

Current State of Meters (continued)

Automated Meter Reading (AMR)

- The current system uses separate meter and register components which can create intermittent connection issues if the register is not secure on the meter.
- Meters are mechanical and have moving parts that wear, resulting in loss of accuracy as they age.
- Residents do not have direct access to daily or hourly usage data without contacting the office.

Real Life Example Customer Consumption Issue



Looking Ahead

Staff has been exploring the feasibility of a meter upgrade project over the past few years as a means of strategically addressing multiple issues.

- Meter Replacement
  Routine meter replacement is behind schedule with respect to the goals included in the city's Water Conservation Plan

- Technology Upgrades
  - Solid state meters are more durable than the current mechanical meters with better warranties
  - Ultrasonic meters provide greater accuracy (especially at low flows) compared to current meters
  - Advanced Metering Infrastructure systems provide customers and staff with actionable data in near real-time

In 2025, Ameresco was hired to evaluate Burleson's water metering infrastructure and identify improvements to restore meter accuracy, increase revenue, reduce operational costs, and modernize aging systems

Looking Ahead, continued

Ameresco Effort Included

- Review of historical consumption and account data
- Testing of meters in the field for accuracy and in accordance with American Water Works Standards (statistically significant sample of meters, not all meters)
- Field survey of meters and boxes
- Development of revenue projections and AMI propagation studies
- Evaluation of meter technologies and costs

Ameresco Results Include

- 10% of the meters evaluated had a register that wasn't secure on the meter
- Based on AWWA standards
  - 68 residential meters had weighted average accuracy of 97.64%
  - Intermediate (2") meters had weighted average accuracy of 98.8%
  - Large (> 3") meters had a wider range of accuracies depending on meter type
  - Meter upgrade projected to increase annual revenue by $198k and reduce annual operational costs by $66k

Staff is also evaluating potential collaboration between an AMI project and telecommunications projects being explored by Information Technology

Future State of Meters

Advanced Metering Infrastructure (AMI) system

- Eliminates the need for physical visits and vehicle-based meter reading by transmitting data over long ranges. (typically 0.5 to 5 miles)
- Sends readings to the cloud as frequently as every 15 minutes.
- Provides highly detailed water usage data, helping quickly identify and address leaks.
- Uses solid-state, ultrasonic meters for accurate and reliable measurement.
- Enhances customer access and communication through web portal, giving residents near real-time insight and greater control over their water usage.
- Allows customers to setup consumption alerts to notify them almost immediately of abnormal usage / potential problems.

Current Meter Stats

2027

Meter size	Newer than 10; AMI	Newer than 10; not AMI	Older than 10; AMI	Older than 10; not AMI
5/8"	3,121	3,529	3,175	5,293
3/4"	3	1	3	3
1"	241	63	177	186
1-1/2"	29	5	60	71
2"	91	4	112	150
3"	10	1	16	9
4"	2	1	2	3
6"	0	0	0	1
	3,497	**3,604**	**3,545**	**5,716**
			9,261	

Conceptual Project Overview

PHASE 1: ADDRESS METER AGING

Replace meters currently beyond their recommended service life consistent with Water Conservation Plan and funding

PHASE 2: AMI IMPLEMENTATION

- Deploy Communication Infrastructure (monopoles and data collectors)
- Integrate system
- Deploy web portal for customers

ADDRESS METER COMPATIBILITY

REPLACE METERS THAT ARE NOT AMI COMPATIBLE

Project Funding Options Under Consideration

Option 1

Fund project in full (one year) or in phases (multiple years) by including in the five-year Capital Improvement Plan

- We are in the process of getting quotes for the additional meter replacements needed to complete the project. (approximately $10-12 million)

Option 2

Fund the project over several years from working capital in the Water Fund

- Replace a set number of meters each year to get all inventory up to date and AMI compatible (number of meters to be replaced and timeline would be determined based on approved funding for the multi-year program)

Option 3

- Pursue a grant (or grants) to fund the entire project or portions of the project.

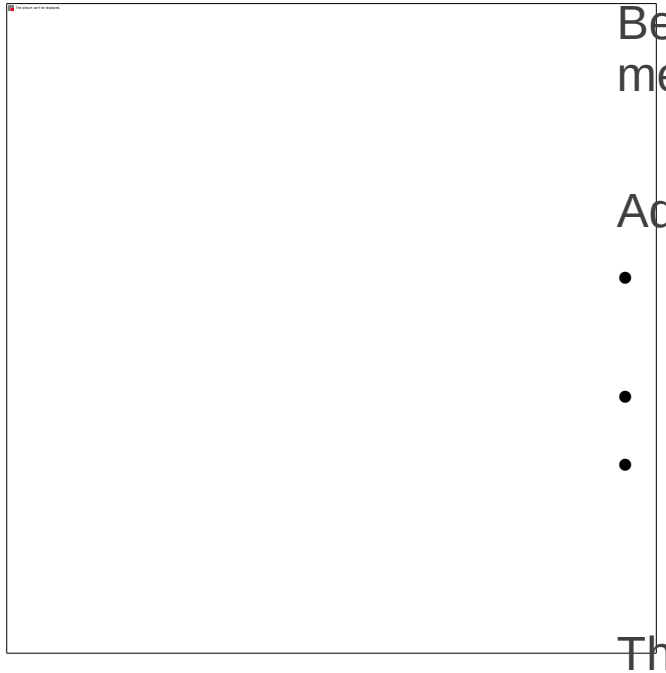
Potential Opportunity

Texas Water Development Board (TWDB)

Water Supply and Infrastructure Grant

- House Bill 500 (89th Legislative Session) appropriated $1.038 billion for water supply and infrastructure projects
- TWDB will award funding in the form of 100 percent grants
- Major criteria (all complete or in progress)
  - Water Use Survey: Applicants must have submitted to the TWDB the annual Water Use Survey (WUS) of groundwater and surface water for the last THREE years.
  - Water Loss Audit: Applicants must have submitted to the TWDB the most recently required water loss audit on or before May 1, 2026.
  - Water Loss Audit Validation: Applicant acknowledges that its most current water loss audit will be validated prior to consideration of a request for financial assistance from the Board.
  - Water Conservation Plan: If the funding request for funding exceeds $500,000, a Water Conservation Plan (WCP) is required. Plans must have been adopted by the applicant's governing body on July 20, 2021, or later.

Meter Standardization



Beginning fiscal year 2027, the City will transition to solid state, ultrasonic water meters as the standard for all new meter sets and replacements.

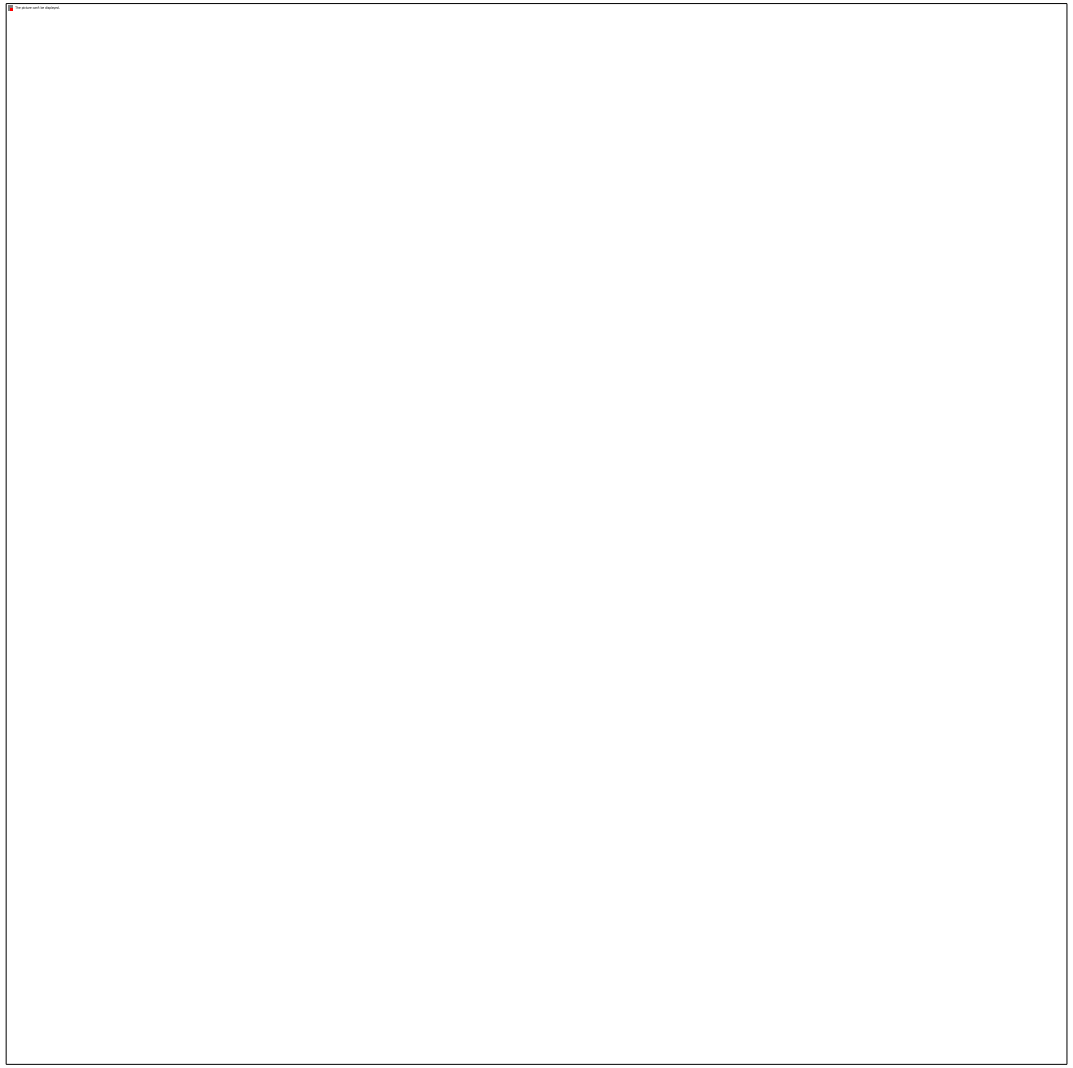
Advantages of Solid-state, Ultrasonic Meters

- Longer term accuracy and reliability warranty due to no moving parts that will wear out over time
- Enhanced ability to detect extremely low flow rates compared to current meters
- Meter and register are combined in a single component, resolving the issue of intermittent connection of the register

This will support the upcoming meter replacement project and future AMI capabilities.

Next Steps

- Continue exploring grants
- Staff committee recommendations to City Manager’s Office
- Fiscal Year 27 budget considerations
- Staff update to Infrastructure & Development Committee in August 2026



Questions/ Comments