

"FIND YOUR FUTURE IN FULSHEAR"

30603 FM 1093 West/ PO Box 279 ~ Fulshear, Texas 77441

PHONE: 281-346-1796 ~ FAX: 281-346-2556

www.FulshearTexas.gov

CITY COUNCIL:

MAYOR: Aaron Groff
MAYOR PRO-TEM: Kaye Kahlich
COUNCIL MEMBER: Kent Pool
COUNCIL MEMBER: Kevin White
COUNCIL MEMBER: Debra Cates
COUNCIL MEMBER: Lisa Martin

COUNCIL MEMBER: Joel COUNCIL MEMBER: John Kelly

Patterson

STAFF:

CITY MANAGER: Jack Harper CITY SECRETARY: Kimberly CITY ATTORNEY: J. Grady Randle

Kopecky

SPECIAL CITY COUNCIL MEETING

August 27, 2019

NOTICE IS HEREBY GIVEN OF A SPECIAL CITY COUNCIL MEETING OF THE CITY OF FULSHEAR TO BE HELD ON Tuesday, August 27, 2019 AT 6:00 PM IN IRENE STERN COMMUNITY CENTER, 6920 KATY FULSHEAR ROAD, FULSHEAR, TEXAS FOR CONSIDERING THE FOLLOWING ITEMS. THE CITY COUNCIL RESERVES THE RIGHT TO ADJOURN INTO EXECUTIVE SESSION AT ANY TIME DURING THE COURSE OF THIS MEETING TO DISCUSS ANY MATTERS LISTED ON THE AGENDA, AS AUTHORIZED BY THE TEXAS GOVERNMENT CODE, INCLUDING, BUT NOT LIMITED TO, SECTIONS 551.071 (CONSULTATION WITH ATTORNEY), 551.072 (DELIBERATIONS ABOUT REAL PROPERTY), 551.073 (DELIBERATIONS ABOUT GIFTS AND DONATIONS), 551.074 (PERSONNEL MATTERS), 551.076 (DELIBERATIONS ABOUT SECURITY DEVICES), (ECONOMIC DEVELOPMENT), 418.175.183 (DELIBERATIONS HOMELAND SECURITY ISSUES) AND AS AUTHORIZED BY THE TEXAS TAX CODE, INCLUDING, BUT NOT LIMITED TO, SECTION 321.3022 (SALES TAX INFORMATION).

"Incidental Meeting Notice: A quorum of the City of Fulshear City Council, Planning and Zoning Commission, City of Fulshear Development Corporation (Type A), Fulshear Development Corporation (Type B), Parks and Recreation Commission, Historic Preservation and Museum Commission, Zoning Board of Adjustment, or any or all of these, may be in attendance at the meeting specified in the foregoing notice, which attendance may constitute a meeting of such governmental body or bodies as defined by the Texas Open Meetings Act, Chapter 551, Texas Government Code.

Therefore, in addition to the foregoing notice, notice is hereby given of a meeting of each of the above-named governmental bodies, the date, hour, place, and subject of which is the same as specified in the foregoing notice."

I. CALL TO ORDER

II. QUORUM AND ROLL CALL

A. JOINT MEETING WITH THE PLANNING AND ZONING COMMISSION

III. CITIZEN'S COMMENTS

THIS IS AN OPPORTUNITY FOR CITIZENS TO SPEAK TO COUNCIL RELATING TO AGENDA AND NON-AGENDA ITEMS. SPEAKERS ARE ADVISED THAT COMMENTS CANNOT BE RECEIVED ON MATTERS WHICH ARE THE SUBJECT OF A PUBLIC HEARING ONCE THE HEARING HAS BEEN CLOSED. SPEAKERS ARE REQUIRED TO REGISTER IN ADVANCE AND MUST LIMIT THEIR COMMENTS TO THREE (3) MINUTES.

IV. BUSINESS

- A. JOINT DISCUSSION BETWEEN PLANNING AND ZONING AND CITY COUNCIL REGARDING THE CDO PROJECT AND REVIEW OF PROGRESS TO DATE
- B. JOINT DISCUSSION AND POSSIBLE ACTION WITH THE PLANNING AND ZONING COMMISSION REGARDING A PRESENTATION FROM VERDUNITY, INC. CONCERNING OPERATIONAL AND FISCAL FORECASTING TOOLS FOR ONGOING PLANNING PURPOSES
- C. CONSIDERATION AND POSSIBLE ACTION FOR ITEMS RELATING TO THE CDO PROJECT TO INCLUDE CDO PROJECT ACTIVITIES, DEVELOPMENT REGULATIONS, AND ACCEPTANCE OF DEVELOPMENT ITEMS
- D. CONSIDERATION AND POSSIBLE ACTION TO APPROVE ORDINANCE NO. 2019-1304; AN ORDINANCE REPEALING ORDINANCE NO. 2011-1037 AND APPROVING A REVISED DROUGHT CONTINGENCY PLAN AND RECEIVE PUBLIC COMMENT ON THIS MATTER
- E. DISCUSSION OF FY20 OPERATING AND CAPITAL BUDGET AND TAX RATE

V. ADJOURNMENT

NOTE: IN COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT, THIS FACILITY IS WHEELCHAIR ACCESSIBLE AND ACCESSIBLE PARKING SPACES ARE AVAILABLE. REQUESTS FOR ACCOMMODATIONS OR INTERPRETIVE SERVICE MUST BE MADE AT LEAST 48 BUSINESS HOURS PRIOR TO THIS MEETING. PLEASE CONTACT THE CITY SECRETARY'S OFFICE AT 281-346-1796 FOR FURTHER INFORMATION.

I, KIMBERLY KOPECKY, CITY SECRETARY OF THE CITY, DO HEREBY CERTIFY THAT THE ABOVE NOTICE OF MEETING AND AGENDA FOR THE CITY COUNCIL OF THE CITY OF FULSHEAR, TEXAS WAS POSTED ON Friday, August 23, 2019 by 5:00 p.m. IN PLACE CONVENIENT AND READILY ACCESSIBLE AT ALL TIMES TO THE GENERAL PUBLIC, IN COMPLIANCE WITH CHAPTER 551, TEXAS GOVERNMENT CODE.

KIMBERLY KOPECKY, CITY SECRETARY

AGENDA MEMO BUSINESS OF THE CITY COUNCIL CITY OF FULSHEAR, TEXAS

AGENDA OF: 8/27/2019 **ITEMS:** IV.A.

DATE 8/21/2019 **DEPARTMENT:** Building Services

SUBMITTED:

PREPARED BY:Zach GoodlanderPRESENTER:Zach Goodlander

SUBJECT: JOINT DISCUSSION BETWEEN PLANNING AND ZONING AND CITY COUNCIL

REGARDING THE CDO PROJECT AND REVIEW OF PROGRESS TO DATE

Expenditure Required: 0

Amount Budgeted: 0

Funding Account:

Additional Appropriation Required:

Funding Account:

EXECUTIVE SUMMARY

Kending Keast will provide an update to both Planning and Zoning and City Council regarding the CDO project schedule and new legislation concerning dark skies, building materials, plan and plat review and more. Kending Keast will then move into a review of the draft versions of Module 1 and Module 2 (as it has thus far been completed). These modules entail zoning districts, building and site design, landscaping, and outdoor lighting. Finally, Kendig Keast will provide a report on the progress made regarding the ordinances brought forward in the process at Council's direction, special use permits, platting and outdoor lighting.

RECOMMENDATION

AGENDA MEMO **BUSINESS OF THE CITY COUNCIL** CITY OF FULSHEAR, TEXAS

IV.B. **AGENDA OF:** 8/27/2019 **ITEMS:**

8/21/2019 **Building Services** DATE **DEPARTMENT:**

SUBMITTED:

PREPARED BY: Zach Goodlander PRESENTER: **Brant Gary**

SUBJECT: JOINT DISCUSSION AND POSSIBLE ACTION WITH THE PLANNING AND ZONING COMMISSION REGARDING A PRESENTATION FROM VERDUNITY, INC. CONCERNING OPERATIONAL AND FISCAL FORECASTING TOOLS FOR ONGOING PLANNING PURPOSES

Expenditure Required:

Amount Budgeted:

Funding Account:

Additional Appropriation Required:

Funding Account:

EXECUTIVE SUMMARY

Many cities in Texas are struggling to keep up with growing wants and needs of businesses and residents while working with limited resources. Recently adopted property tax cap legislation makes that challenge even harder, and when combined with the new annexation limitations, it will require cities to find ways other than horizontal expansion to accommodate growth and generate revenue for basic services and infrastructure. In late 2017, the City contracted with Verdunity to assist staff in evaluating and communicating fiscal impacts of the existing MUD agreements to Council and the community. Their work played an impactful role in maintaining a positive relationship with MUD representatives while negotiating more favorable terms for Fulshear. Since that time, Verdunity has expanded its fiscal analysis services to focus on helping cities map the revenue potential of different development patterns, quantify long-term service cost liabilities, identify areas where additional revenue can be captured, and evaluate where investment of taxpayer dollars will get the highest return. This information can be used to guide cities toward a development model that aligns services with what residents are willing and able to pay for now and in the future, and close the resource gap incrementally over time – without raising taxes.

With the MUD agreement negotiations complete and a recently updated CIP, staff believes this would be a good time for City Council to consider re-engaging Verdunity to update Fulshear's fiscal model, develop a long-range projection of revenues and service costs (including future infrastructure replacement), and recommend revisions to the city's development, infrastructure and fiscal policies to position the community for a financially sustainable future. Verdunity's founder and CEO Kevin Shepherd will give a brief overview of their past work in Fulshear and the fiscal modeling work they are currently doing for cities across Texas, and be available to answer any questions Council may have.

The previous presentation they made to Council is provided here for context.

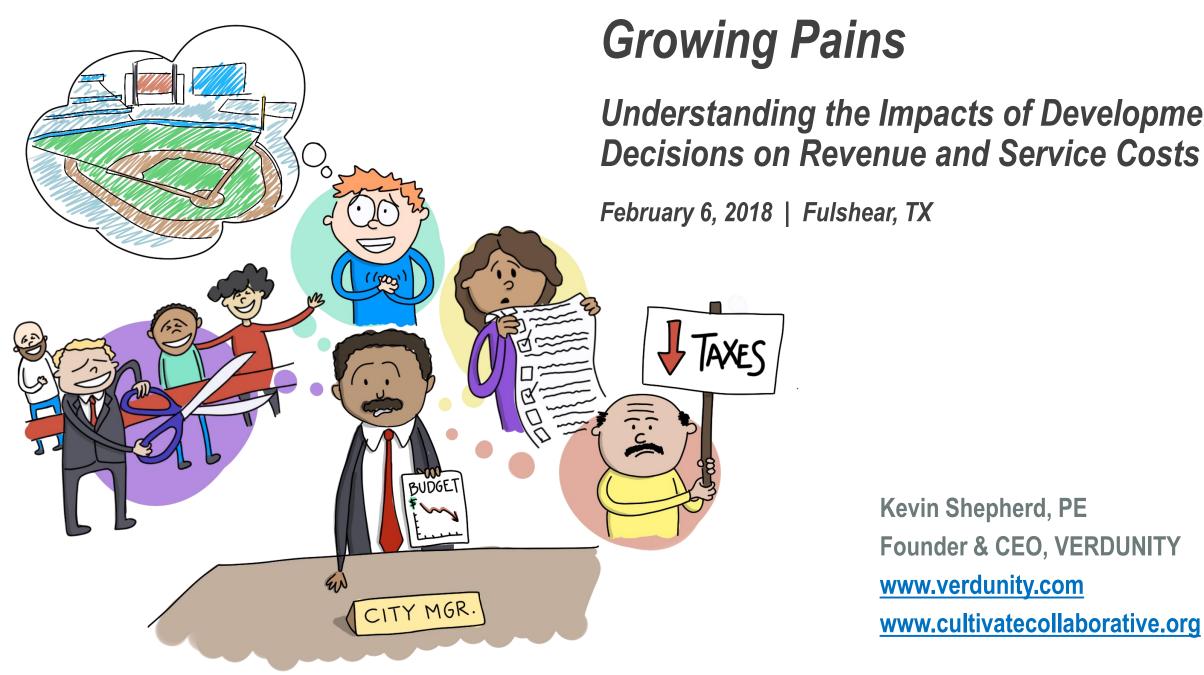
RECOMMENDATION

Staff recommends City Council consider re-engaging Verdunity to update Fulshear's fiscal model, develop a long-range projection of revenues and service costs, and recommend revisions to the city's development, infrastructure and fiscal policies.

ATTACHMENTS:

Description
Previous Verdunity Presentation

Upload Date 8/23/2019 Type Exhibit



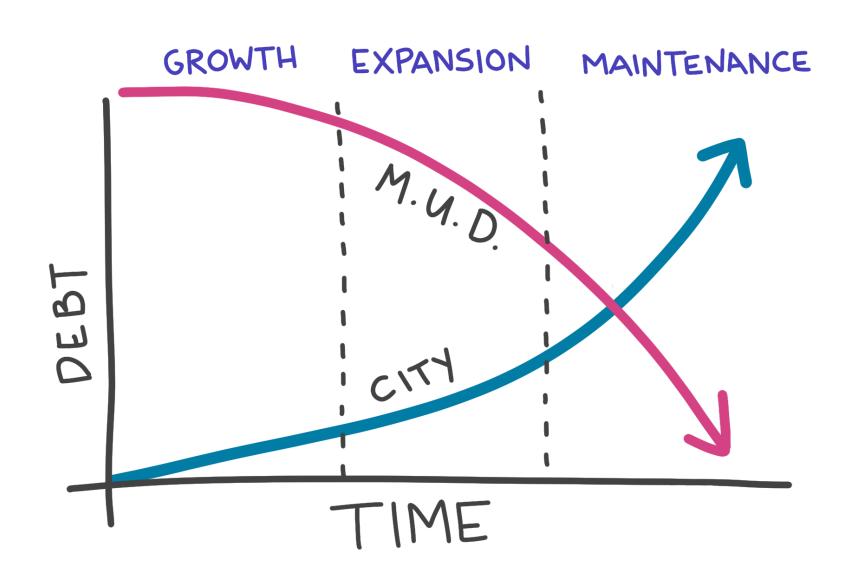
Understanding the Impacts of Development

February 6, 2018 | Fulshear, TX

Kevin Shepherd, PE Founder & CEO, VERDUNITY www.verdunity.com www.cultivatecollaborative.org

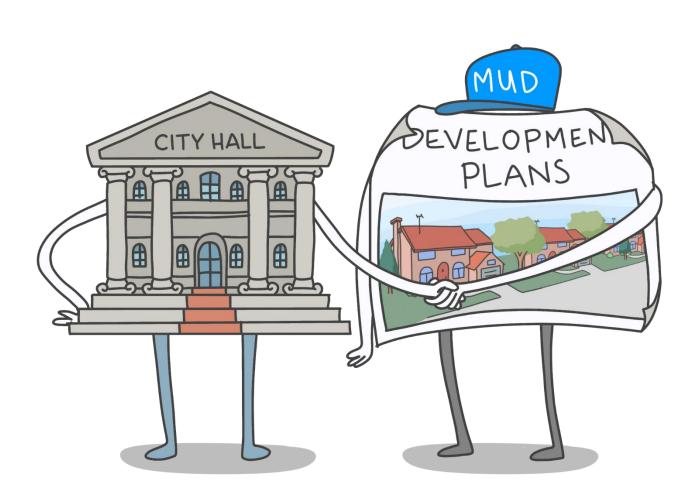


Funding Growth vs Maintenance and Operations





Our Opportunity



- 1. City and MUDS have identified a need to reevaluate and move forward together
- 2. Opportunity to negotiate new terms that preserve original commitment but give the City more flexibility

3. Improved transparency and accountability



Putting the Problem into Context

How did we get here?



Cities' Biggest Challenge

Addressing Growing Needs (and Wants) with Limited Resources















Race to Be the Best Place to Live, Work and Play



Post WW2, cities have aggressively pursued higher quality of life in the short-term without consideration of the long-term fiscal and environmental impacts.



What About Maintenance AFTER Growth?









Municipal Bankruptcies



Source: governing.com



Why don't our cities have enough money to sustain basic services?

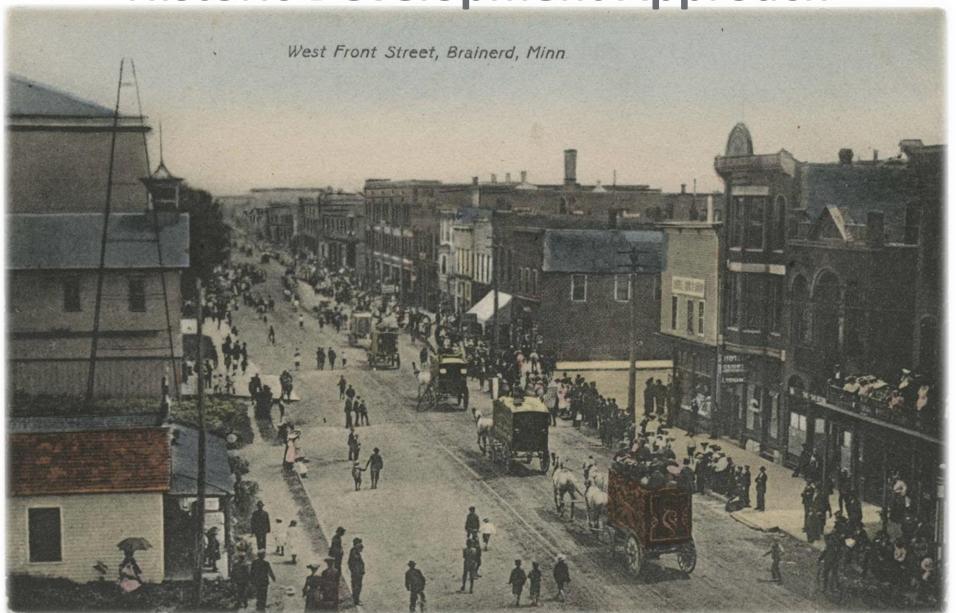


Historic Development Approach



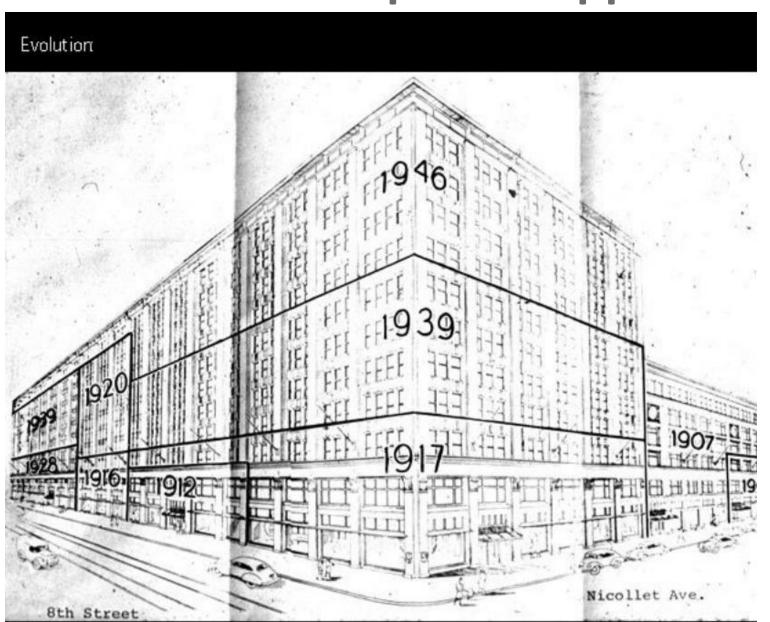


Historic Development Approach





Historic Development Approach





Post-WW2 Development Approach



















New Fast Food Restaurant

Property tax revenue/acre = \$803,200

"Old & Blighted" Block

Property tax revenue/acre = \$1,136,500

Courtesy of: Chuck Marohn, Strong Towns





Auto Oriented "Big Box" \$0.6M/acre



Traditional Grid Downtown \$1.1M/acre







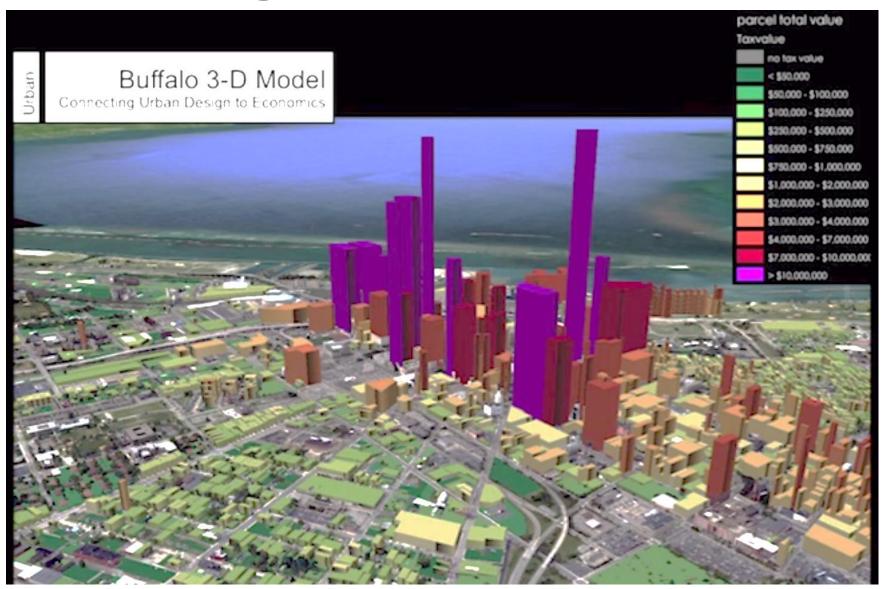
ASHEVILLE WALMART

DOWNTOWN MIXED-USE

Land Consumed (acres):	34.0	00.2
Total Property Taxes per Acre:	\$6,500	\$634,000
Retail Taxes* per Acre to City:	\$47,500	\$ 83,600
Residents per Acre:	0.0	90.0
Jobs per Acre:	5.9	73.7



Highest Producing Parcels Tied to Traditional Pattern





minimal.

Long-Term Fiscal Impacts of Suburban Growth Model

Cumulative Cash Flow - Two Life Cycles

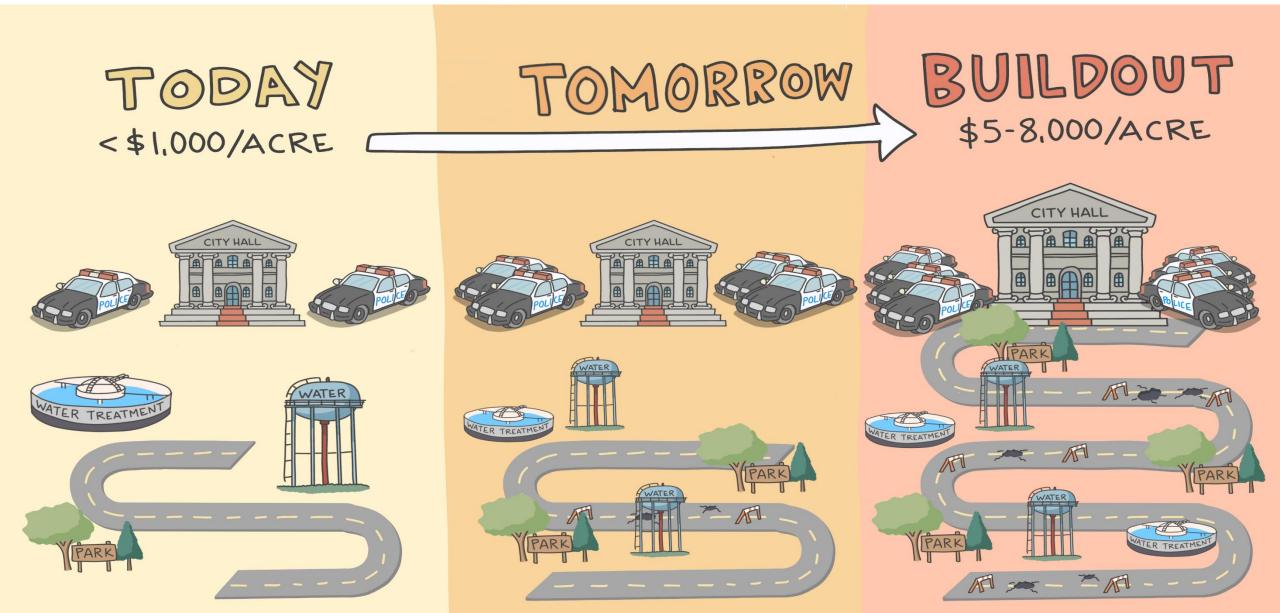


The catch is the public agrees to maintain the improvements in perpetuity.

Courtesy of: Chuck Marohn, Strong Towns



The Evolution of Service Costs

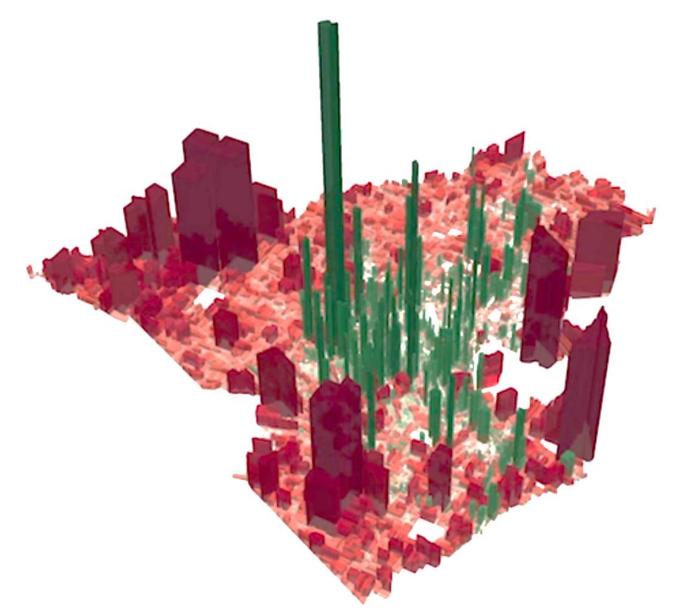




Net Return on Investment (ROI) Modeling

Lafayette, Louisiana

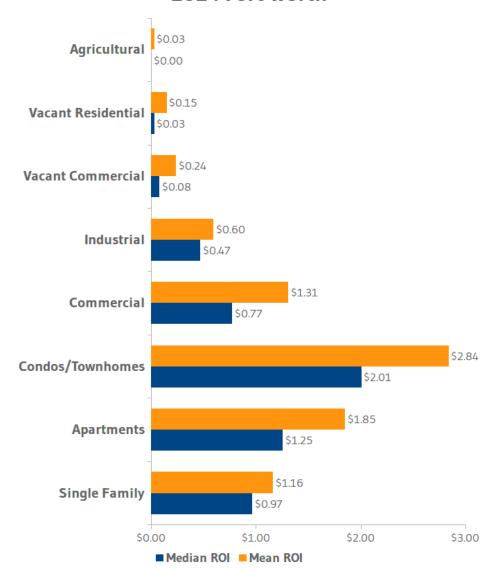
Green = Positive ROI Red = Negative ROI



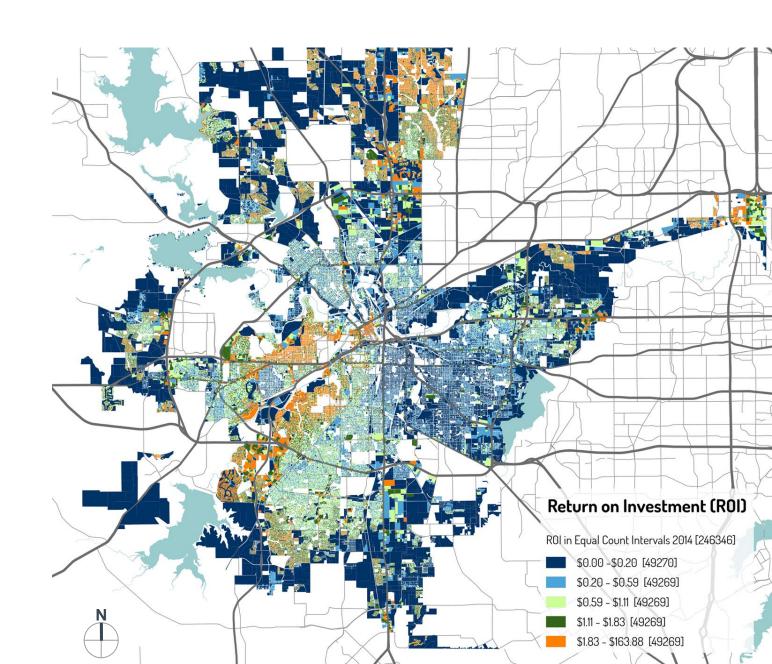


Return on Investment



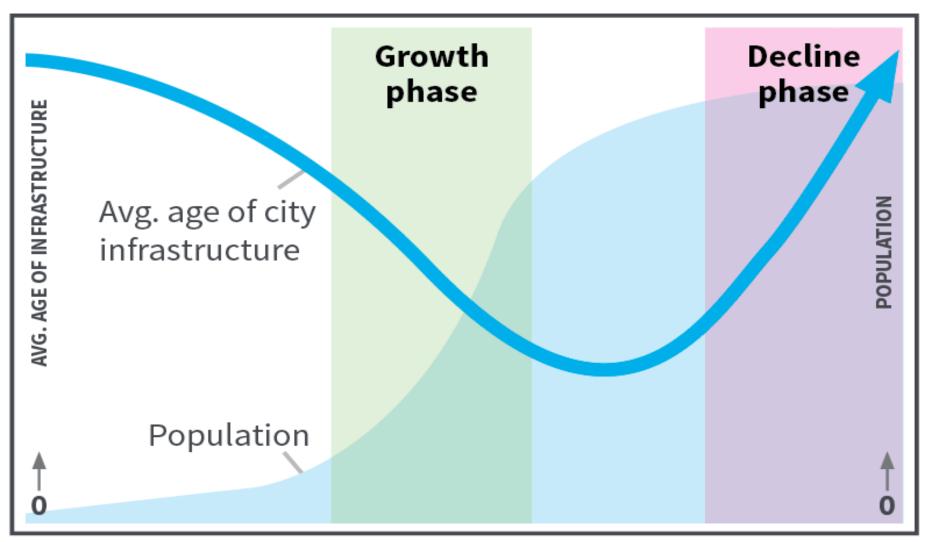


Courtesy of: Felix Landry, Urbex Solutions





Tracking the "Age" of a City

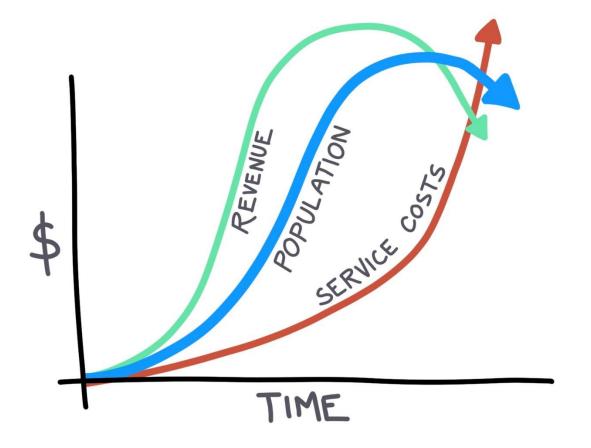


TIME (YEARS)

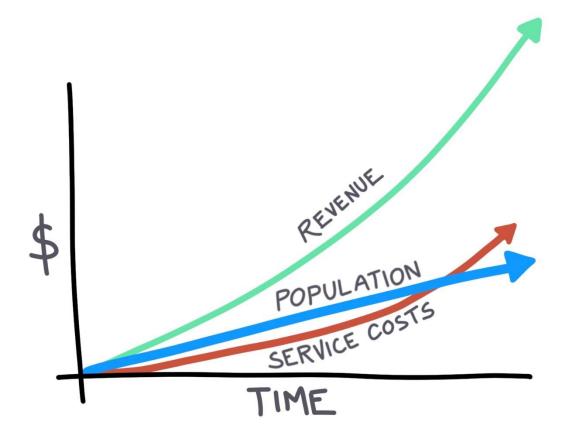


Shifting Back to a Resilient Growth Model





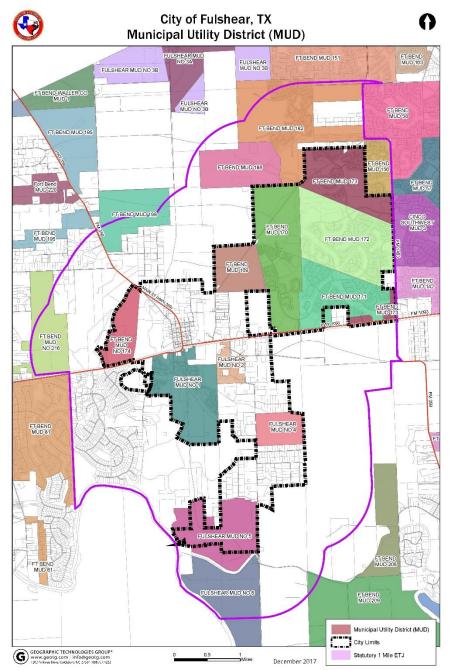
BACK TO Incremental, Resilient Growth





So what about Fulshear?





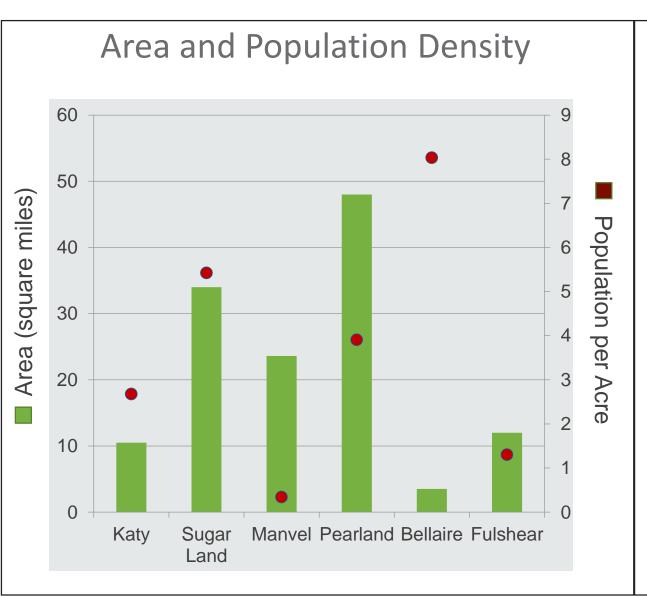
Fulshear Overview

- City Limit Area = 7357 ac (12 mi²)
- In-City MUD Area = 3993 ac (6.2 mi²)

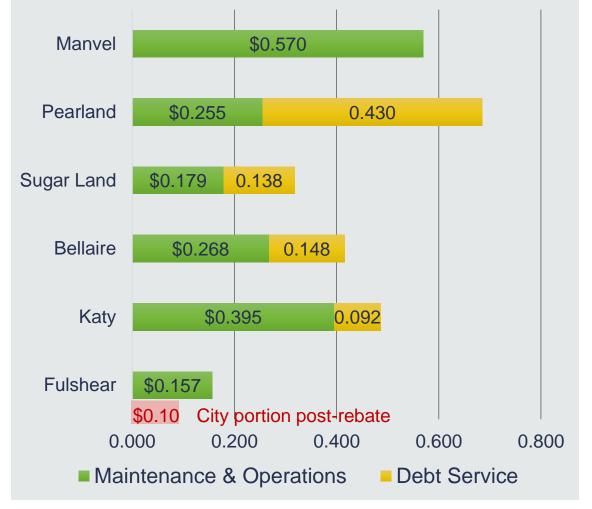
 MUDs account for over 50% of the City's area and over 90% of the City's property tax base.



Benchmark Comparison

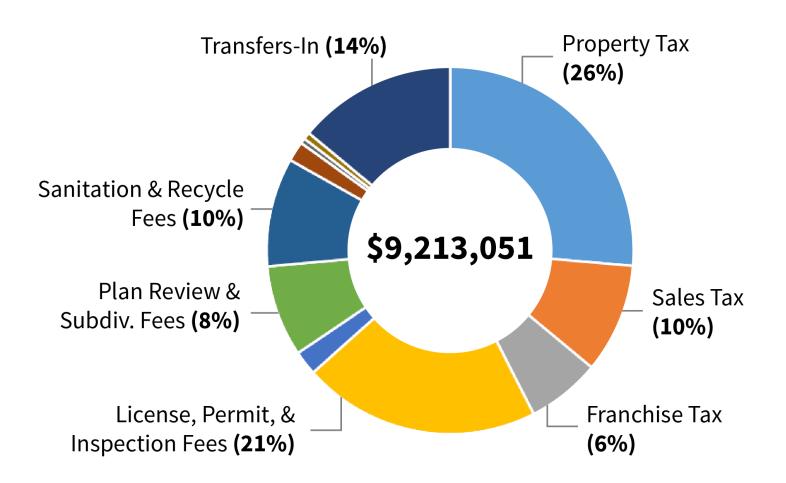








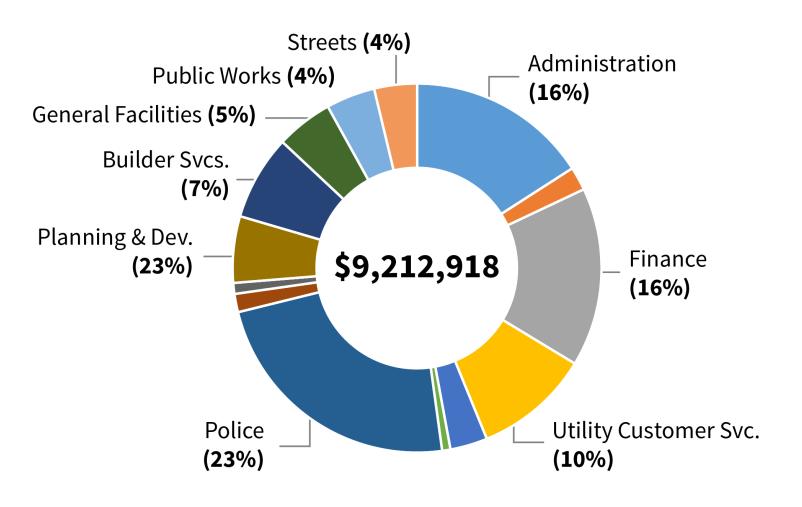
General Fund: Revenue Sources



SOURCE	AMO	DUNT
Property Taxes	\$	2,395,393
Sales and Uses Taxes	\$	1,248,620
Licenses and Permits	\$	1,807,900
Fines and Forfeitures	\$	150,700
Charges for Service	\$	1,516,475
Other Sources	\$	1,870,961
Interest	\$	40,002
Grant Revenue	\$	183,000
TOTAL	\$	9,213,051



General Fund: Expenditures by Department



DEPARTMENT	EX	PENDITURES
Administration	\$	1,466,037
Municipal Court	\$	190,558
Finance	\$	1,445,109
Utility Customer Service	\$	935,970
Economic Development	\$	301,300
Communications	\$	67,100
Police	\$	2,149,124
Emergency Management	\$	147,520
Code Enforcement	\$	88,100
Planning and Development	\$	536,669
Builder Services/Permits and		
Inspections	\$	685,517
General Facilities	\$	459,130
Public Works	\$	395,784
Streets	\$	345,000
TOTALS	\$	9,212,918



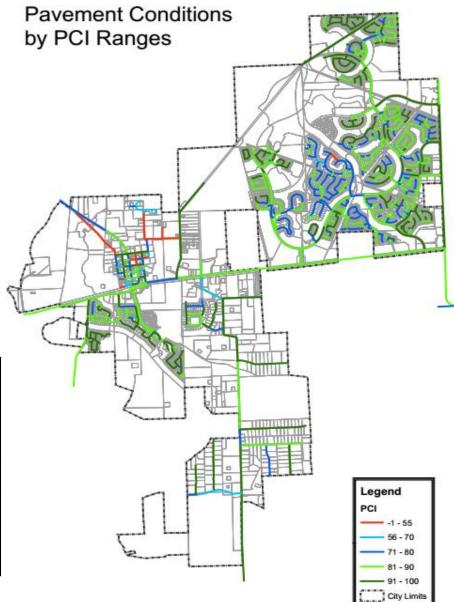
Streets

Street Network Inventory

Category	Description	Miles	% of Mileage
1	Asphalt Segments with PCI	24.6	31.92%
2	Concrete Segments with PCI	48.27	62.63%
3	Not Collected – Unsurfaced	1.67	2.17%
4	Not Collected – Does Not Exist	2.38	3.09%
5	Not Collected – Gated	0.14	0.18%
TOTAL WITH PCI		72.87	94.55%
	4.2	5.45%	
TOTAL		77.07	100%

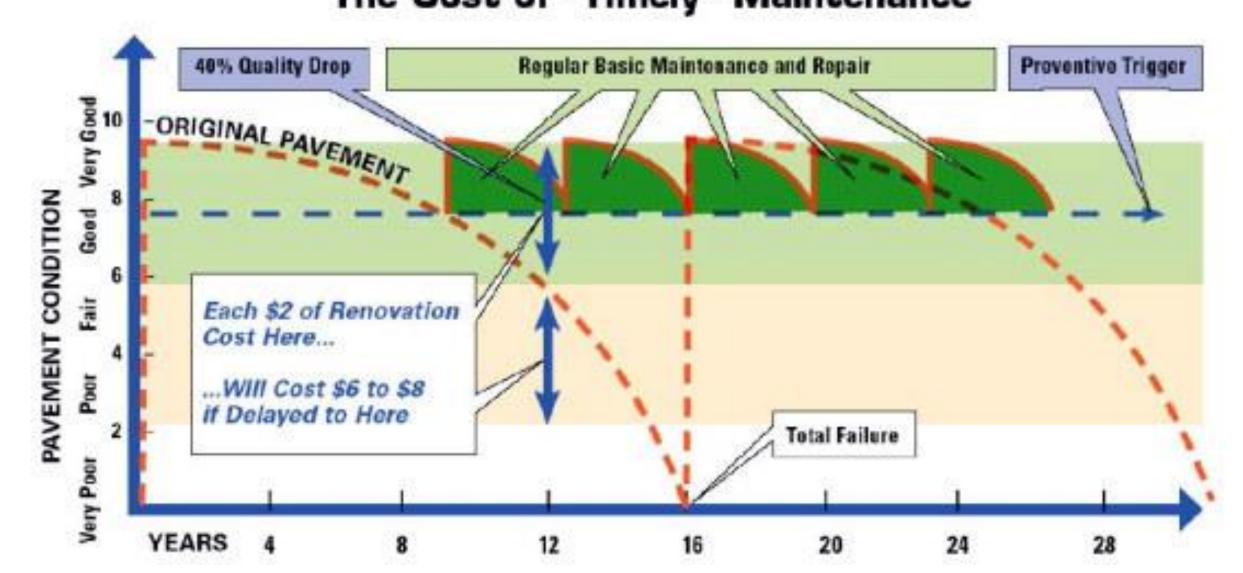
Pavement Condition Index Distribution

City of Fulshear, TX Roadway Network (77 Total Centerline Miles)							
Pavement Type	Very Good (86-100)	Good (71-85)	Fair (56-70)	Poor (41-55)	Very Poor (26-40)	Serious (11-25)	Failed (0-10)
Asphalt	18.64%	10.23%	2.38%	1.81%	0.34%	0.36%	0.00%
Concrete	37.44%	28.10%	0.54%	0.16%	0.00%	0.00%	0.00%
All	56.08%	38.33%	2.92%	1.97%	0.34%	0.36%	0.00%
Miles	43.18	29.51	2.25	1.52	0.26	0.28	0.00





Street Maintenance The Cost of "Timely" Maintenance



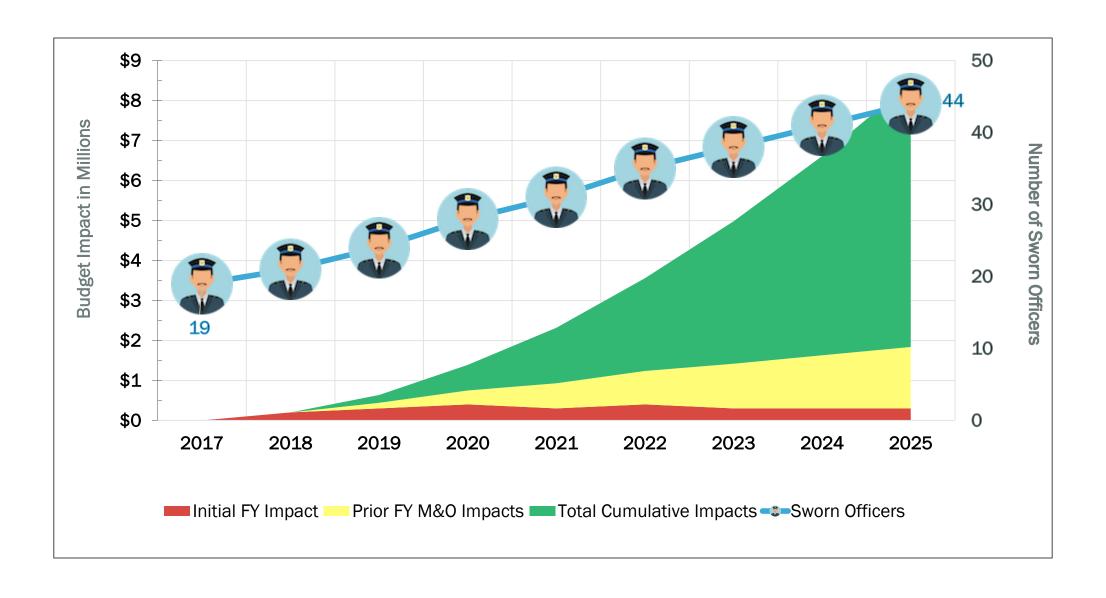


Police Staffing Benchmarks

	Sworn			2011 000	-	Square		5 ./6 5
City	Officers	Dept	Population	SO/1,000	Dept/1,000	Miles	SO/SqMi	Dept/SqMi
Katy	58	76	18,000	3.22	4.22	10.5	5.52	7.24
Pearland	168	223	120,000	1.40	1.86	48	3.50	4.65
Sugar Land	180	229	118,000	1.53	1.94	34	5.29	6.74
Sugar Land	100		110,000	1.33	1.94	34	5.29	0.74
West U	26	38	15,500	1.68	2.45	2	13.00	19.00
Bellaire	37	56	18,000	2.06	3.11	3.5	10.57	16.00
Fulshear	19	22	10,000	1.90	2.20	12	1.58	1.83

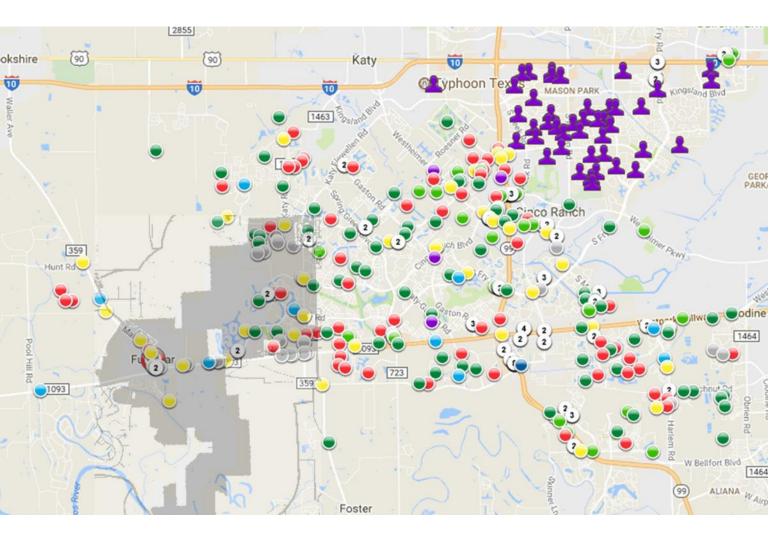


Police Staffing: Projected Needs and Budget Impact





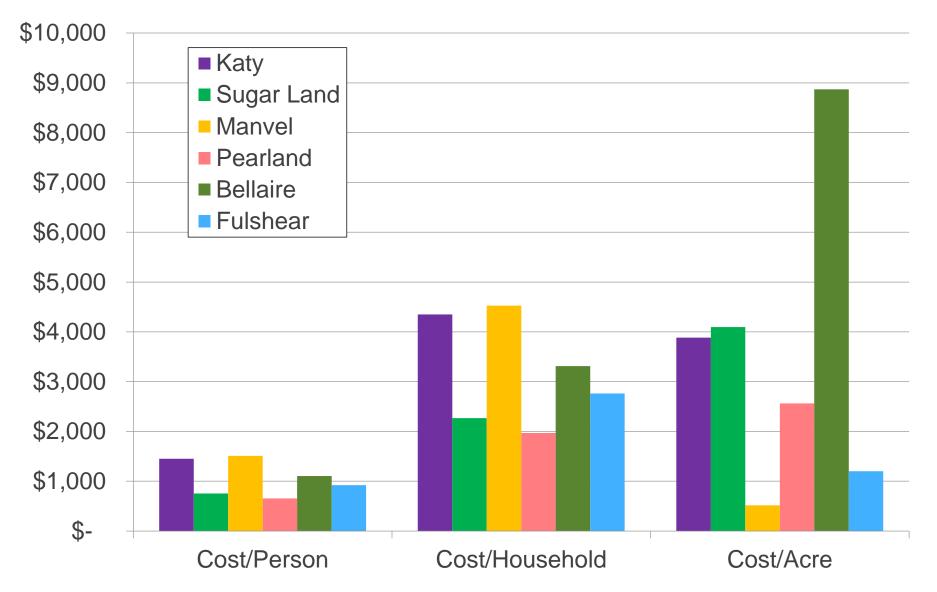
Area Calls for Police Assistance – Dec. 2017



- For calls that are dealing with "in-progress" crimes, the City of Fulshear Police Department average time for response is 2.6 minutes.
- In the areas shown east of the City limits, call volumes and response times can be significantly higher.



Service Costs (General Fund)



Fulshear Estimates:

- \$921/person
- \$2764/household
- \$1200/acre

City of Fulshear Return On Investment (ROI) 2017

Return on Investment 2017

Fulshear Parcels

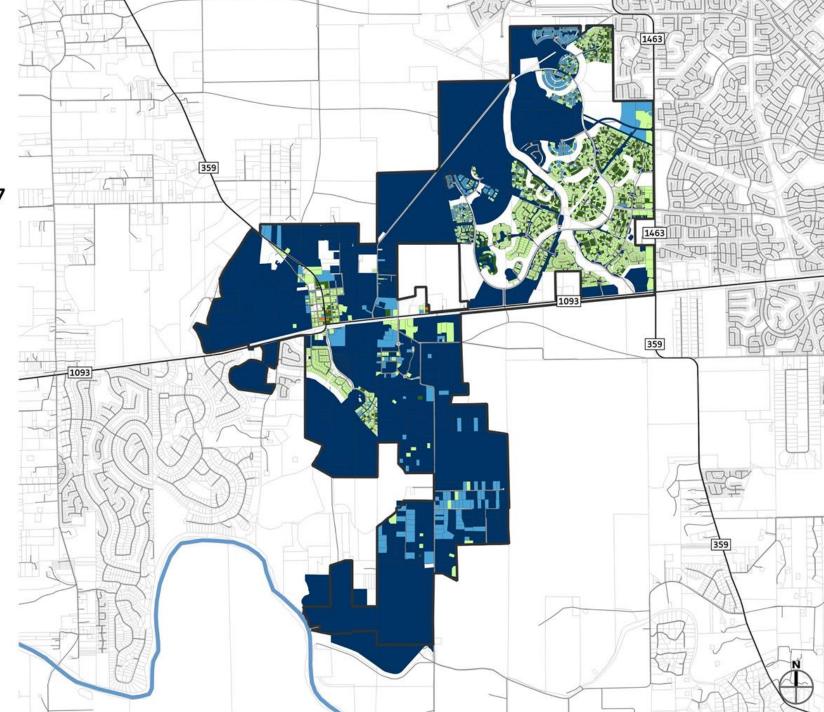
\$0.00 - \$0.50

\$0.50 - \$1.00

\$1.00 - \$4.50

\$4.50 - \$8.00

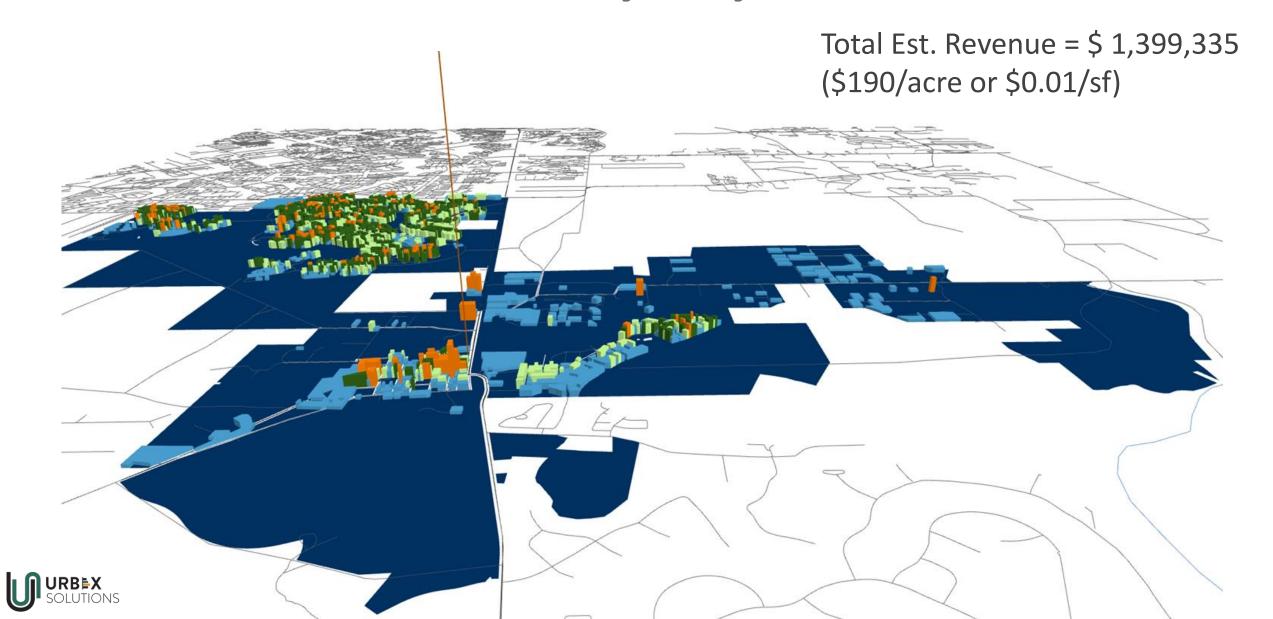
> \$8.00





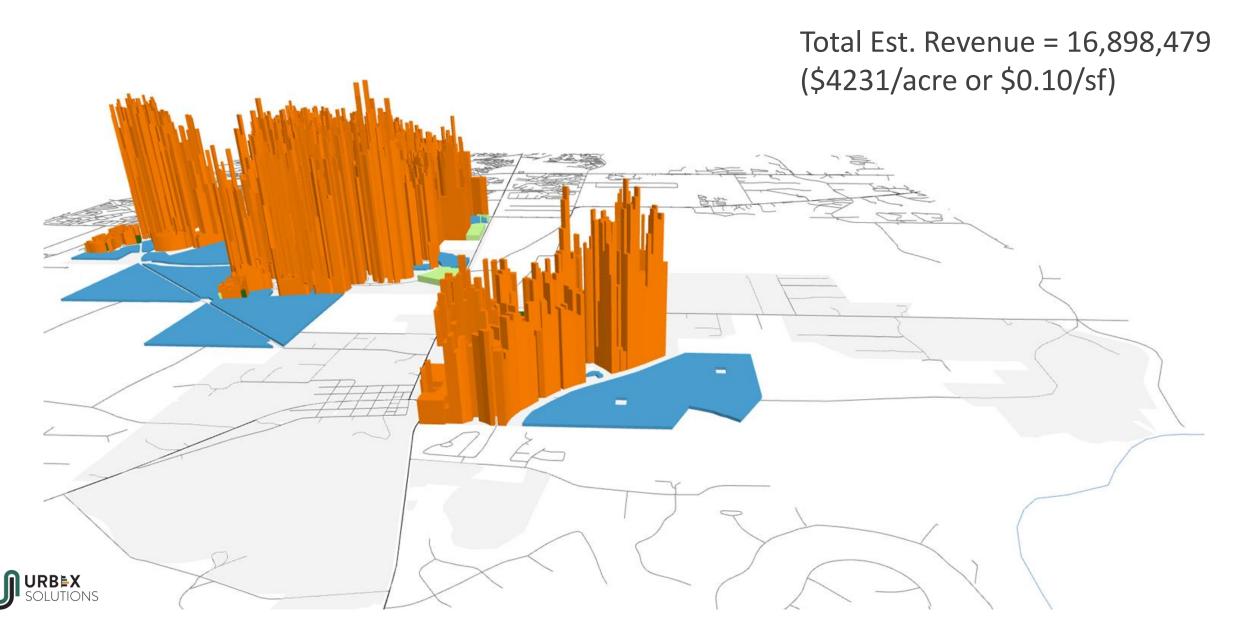


Estimated City Levy Revenue



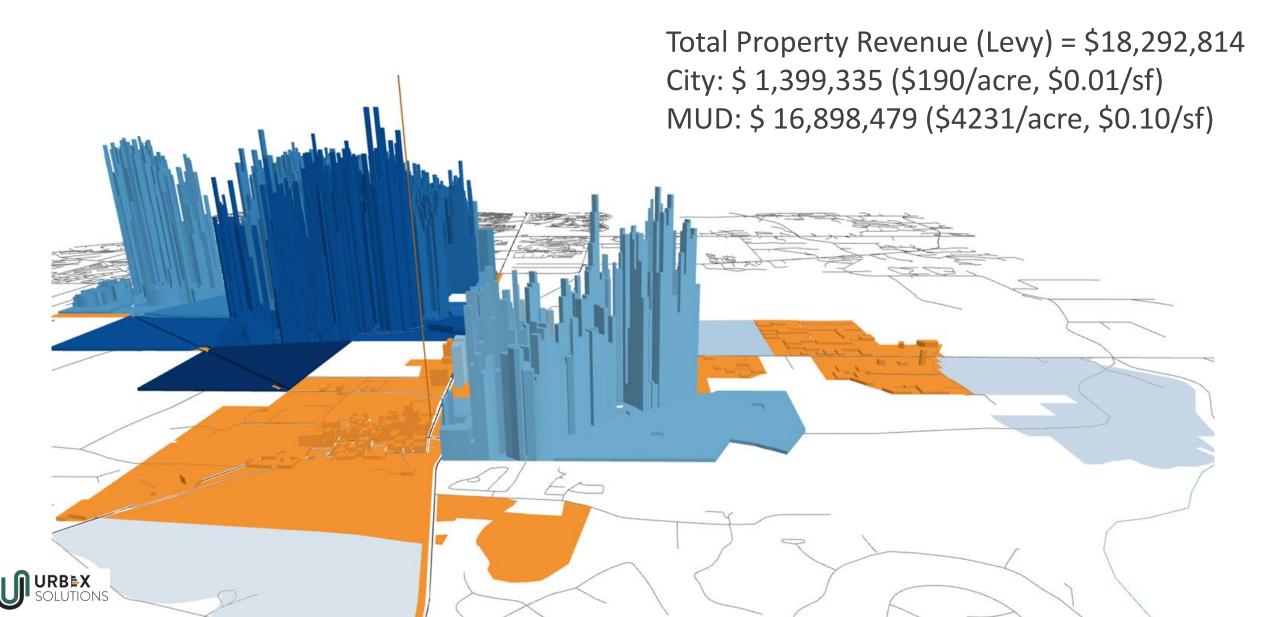


Estimated MUD Levy Revenue



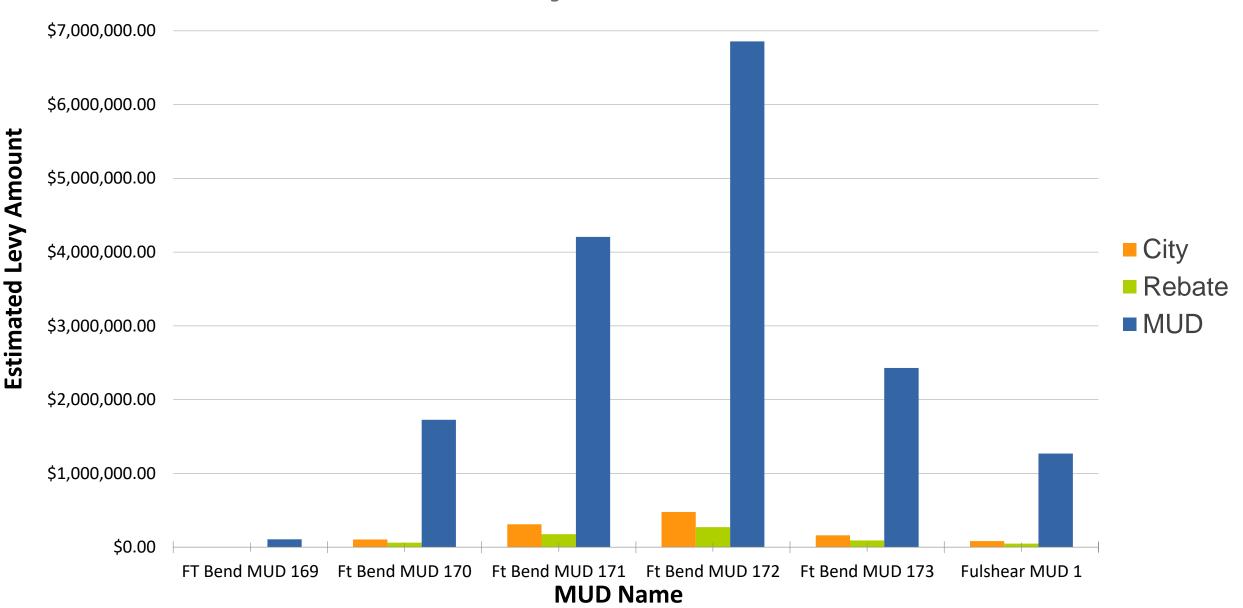


Estimated Combined Levy Revenue





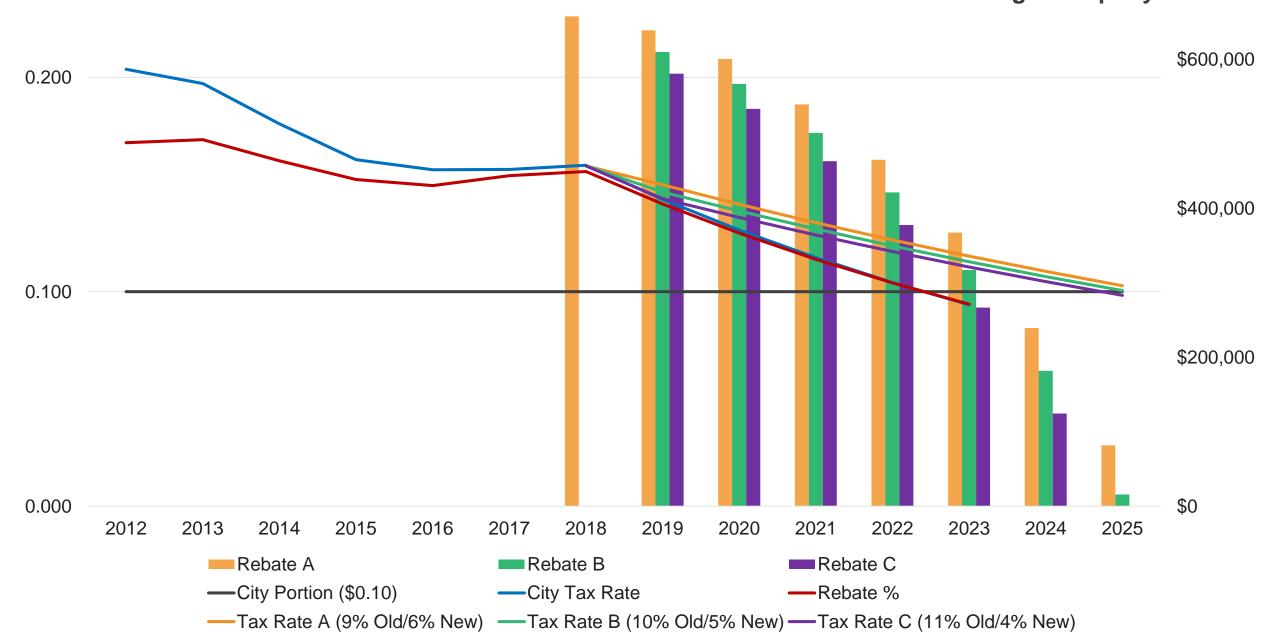
Estimated Levy & Rebate Amounts





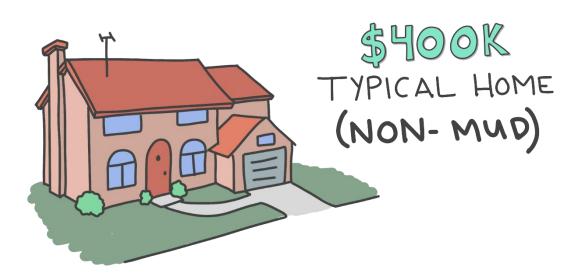
Fulshear Tax Rate Over Time

*Assumes 15% A/V growth per year





Average Home Contribution





2017 Sample Tax Bill – NO M	1UD \$400,000 = Avg	. Home Value			
TAXING ENTITY	EXEMPTIONS	EXEMPTIONS AMOUNT	TAXABLE VALUE	TAX RATE PER 100	TAXES PAID
C04- City of Fulshear	HS	\$56,000	\$344,000	0.158691	\$545.90
D01- Ft Bend Drainage	HS	\$80,000	\$320,000	0.016	\$51.20
G01- Ft Bend Co Gen	HS	\$80,000	\$320,000	0.453	\$1,449.60
R05- Ft Bend Co ESD 4		\$0	\$400,000	0.1	\$400.00
S13- Katy ISD	HS	\$25,000	\$375,000	1.5166	\$5,687.25
TOTALS	(*LCISD Tax Rate - \$1.39)			2.244291	\$8,133.95



Average Home Contribution



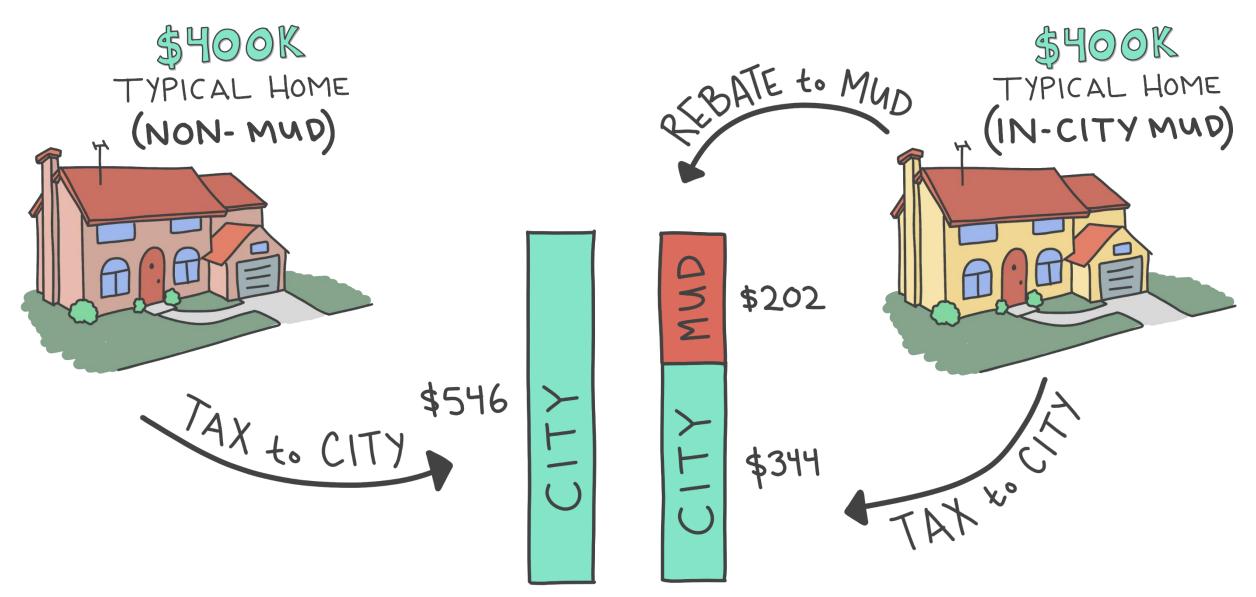




2017 Sample Tax Bill – IN-CITY MUD	\$400,000 = Av	g. Home Value			
TAXING ENTITY	EXEMPTIONS	EXEMPTIONS AMOUNT	TAXABLE VALUE	TAX RATE PER 100	TAXES PAID
C04- City of Fulshear – BEFORE REBATE	HS	\$56,000	\$344,000	0.158691	\$545.90
City of Fulshear - AFTER REBATE				0.1	\$344
M232- Ft Bend MUD 171		\$0	\$400,000	1.1175	\$4,470.00
D01- Ft Bend Drainage	HS	\$80,000	\$320,000	0.016	\$51.20
G01- Ft Bend Co Gen	HS	\$80,000	\$320,000	0.453	\$1,449.60
R05- Ft Bend Co ESD 4		\$0	\$400,000	0.1	\$400.00
S13- Katy ISD	HS	\$25,000	\$375,000	1.5166	\$5,687.25
TOTALS				3.361791	\$12,603.95



Average Home Contribution





Moving Forward

What are the next steps?

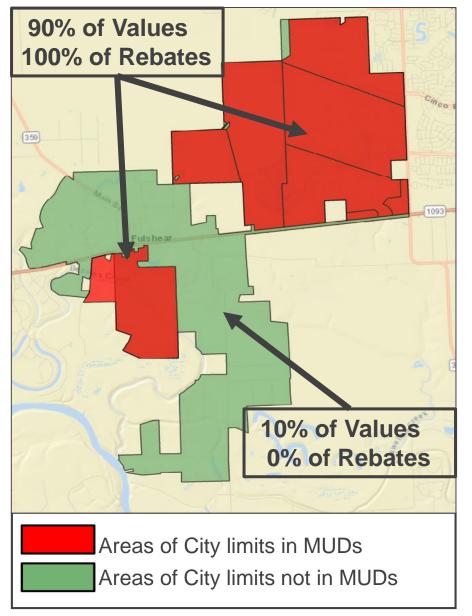


Summarizing the Situation

- 1. Fast growing and high quality of life (thanks to MUDs)
- 2. Growth is putting pressure on City to increase services, but costs will exceed available revenues (due to low overall tax rate and exacerbated by MUD rebate terms)
- 3. City needs more flexibility to be able to issue debt to cover infrastructure expansion needs
- 4. Fulshear is not alone, but being forced into these discussions earlier than most in TX because of the MUD rebate situation
- 5. Opportunity to negotiate new terms to maintain productive relationship w/ MUDs but also serve all citizens in the community
- 6. Time sensitive



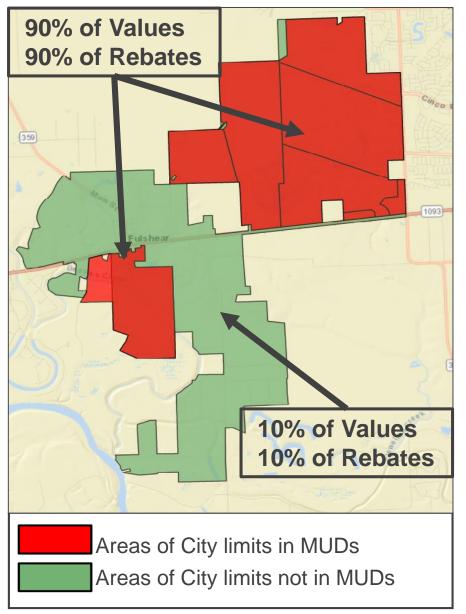
How the Rebates Currently Work



- The City currently assess a 0.158691 citywide tax rate
- The rebate is that portion of the tax rate (0.058691) collected over \$.1000 for MUD properties
- The rebate amount is paid in full from taxes generated by MUD areas
- The City has operational and financial restrictions through these agreements



How the City Would Like the Rebates to Work



- The rebate amount would be a set amount
- A portion of the citywide tax rate would be used to pay the rebate
- The rebate would be paid for by a tax revenue from all City properties
- Restrictions on City operations and finances would be removed



City's Proposed Principles for Moving Forward

The City has identified the following guidelines/core principles regarding potential revisions to the existing agreements:

- 1. <u>Set Rebate Amount</u> Rebate will be a set dollar amount or % of MUD debt service without restrictions on City finances and/or operations
 - Will include any mutually agreeable caps
- **2.** Regionalization Utility Systems would be combined and restrictions on operations and finances removed
- 3. Rebate to Offset MUD Debt Service Rebates paid must be used to reduce the annual debt service payments by the MUDs



Questions and Discussion

AGENDA MEMO BUSINESS OF THE CITY COUNCIL CITY OF FULSHEAR, TEXAS

AGENDA OF: 8/27/2019 **ITEMS:** IV.C.

DATE 8/23/2019 **DEPARTMENT:** Building Services

SUBMITTED:

PREPARED BY: Zach Goodlander PRESENTER: Zach Goodlander

SUBJECT: CONSIDERATION AND POSSIBLE ACTION FOR ITEMS RELATING TO THE CDO PROJECT TO INCLUDE CDO PROJECT ACTIVITIES, DEVELOPMENT REGULATIONS, AND ACCEPTANCE OF DEVELOPMENT ITEMS

Expenditure Required: 0

Amount Budgeted: 0

Funding Account:

Additional Appropriation Required:

Funding Account:

EXECUTIVE SUMMARY

This agenda item is open to provide City Council an opportunity to take action on any items that may arise from the discussion over the Coordinated Development Ordinance (CDO). In particular interim measures pertaining to plat and plan reviews considering recent action taken by the state legislature in HB 3167. Some like the City of Seguin have decided to put a pause on acceptance of most plans and plats until amendments to the City's regulations can be drafted.

RECOMMENDATION

Staff recommends that Council give staff direction regarding items from the CDO, if needed, and how to proceed regarding HB 3167.

AGENDA MEMO BUSINESS OF THE CITY COUNCIL CITY OF FULSHEAR, TEXAS

AGENDA OF: 8/27/2019 **ITEMS:** IV.D.

DATE 8/22/2019 DEPARTMENT: Public Works

SUBMITTED:

PREPARED BY: Sharon Valiante PRESENTER: Sharon Valiante

SUBJECT: CONSIDERATION AND POSSIBLE ACTION TO APPROVE ORDINANCE NO. 2019-1304; AN ORDINANCE REPEALING ORDINANCE NO. 2011-1037 AND APPROVING A REVISED DROUGHT CONTINGENCY PLAN AND RECEIVE PUBLIC COMMENT ON THIS MATTER

Expenditure Required: NA

Amount Budgeted:

Funding Account:

Additional Appropriation Required:

Funding Account:

EXECUTIVE SUMMARY

Water supply has always been a key issue in the development of Texas. In recent years, the increasing population and the economic development in the Regional H Planning Group area (where the City falls), have led to growing demands for water. It is important to make efficient use of existing supplies and make them last as long as possible. The Texas Commission on Environmental Quality (TCEQ) has rules governing and requiring a drought contingency plan for public water suppliers. The rules are outlined in Title 30, Part I, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code.

For the purpose of these rules, a drought contingency plan is defined as:

"A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies."

The City of Fulshear City Council adopted a drought contingency plan by Ordinance 2011-1037. The purpose of the plan is as follows:

To conserve the available water supply in times of drought and emergency

To maintain supplies for domestic water use, sanitation, and fire protection

To protect and preserve public health, welfare and safety

To minimize the adverse impacts of water supply shortages

To minimize the adverse impacts of emergency water supply conditions

To stay current with the TCEQ rules, it is necessary to review and update the plan every five years to coincide with the most current Region H Water Plan. The City's drought contingency plan should be updated as appropriate based on new or updated information. A copy of the City's drought contingency plan should be posted to the City's website and submitted to the Region H Water Planning Group.

The current drought contingency plan was drafted within the guidelines recommended by the model drought contingency plans by Region H. Staff recommends no changes or updates to the existing drought contingency plan.

For City Council to consider approval of the City's Drought Contingency Plan, it is necessary to provide for public comment. As part of this agenda item, staff requests Council open the item for any public comments.

RECOMMENDATION

- 1. Open this item to receive public comment
- 2. Approve Ordinance 2019-1304; an Ordinance repealing Ordinance 2011-1037, that adopts the City of Fulshear's Drought Contingency Plan (with no changes or new updates) and the 2016 Region H Water Plan.

ATTACHMENTS:

Description	Upload Date	Type
Ordinance No. 2019-1304	8/23/2019	Ordinance
Drought Contingency Plan	8/22/2019	Exhibit
2016 Region H Summary	8/23/2019	Exhibit
Ordinance 2011-1037	8/22/2019	Backup Material

ORDINANCE NO. 2019-1304

AN ORDINANCE OF THE CITY OF FULSHEAR, TEXAS, REPEALING AND REPLACING ORDINANCE NO 2011-1037; ADOPTING A DROUGHT CONTINGENCY PLAN; ADOPTING A REGIONAL WATER PLAN; PROVIDING FOR A PENALTY; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL AND PROVIDING FOR AN EFFECTIVE DATE.

* * * * * * * * * *

WHEREAS, under section 11.1272 of the Texas Water Code and 30 Tex. Admin. Code § 288.20, the City of Fulshear, Texas ("City"), is required to adopt a drought contingency plan and to review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan; and

WHEREAS, the City previously adopted a drought contingency plan by the adoption of Ordinance No. 2011-1037; and

WHEREAS, since the adoption of Ordinance No. 2011-1037, there has been an adoption or revision of the regional water plan; and

WHEREAS, based on such new or updated information, and after providing the opportunity for public input, the City finds it appropriate to update its drought contingency plan by repealing and replacing Ordinance No. 2011-1037;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FULSHEAR, TEXAS:

Section 1. Ordinance No. 2011-1037 is hereby repealed.

<u>Section 2</u>. The Drought Contingency Plan attached hereto as Exhibit A is hereby adopted and is incorporated herein for all purposes.

<u>Section 3</u>. The 2016 Regional Water Plan prepared by Region H Water Planning Group is hereby adopted and incorporated herein by this reference for all purposes, the same being available at:

http://www.twdb.texas.gov/waterplanning/rwp/plans/2016/H/Region H 2016 RWP.pdf. For informational purposes, a summary of the 2016 Regional Water Plan is attached hereto as Exhibit B.

<u>Section 4</u>. To the extent of any conflict between the Drought Contingency Plan adopted herein and the 2016 Regional Water Plan adopted herein, and to the extent allowed by law, the provisions of the Drought Contingency Plan shall apply.

Section 5. **Penalty**. Any person who violates or causes, allows, or permits another to violate any provision of this ordinance, rule, or police regulation of the city shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine or penalty not to exceed five hundred dollars (\$500.00), provided that if such rule, ordinance, or police regulation governs fire safety, zoning, or public health and sanitation, other than the dumping of refuse, the fine or penalty shall not exceed two thousand dollars (\$2,000.00), and further provided that if such rule, ordinance, or police regulation governs the dumping of refuse, the fine or penalty shall not exceed four thousand dollars (\$4,000.00). Each occurrence of any violation of this ordinance, rule, or police regulation shall constitute a separate offense. Each day on which any such violation of this ordinance, rule, or police regulation occurs shall constitute a separate offense.

<u>Section 6</u>. <u>Severability</u>. In the event any clause, phrase, provision, sentence or part of this Ordinance or the application of the same to any person or circumstances shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Fulshear, Texas declares that it would have passed each and every part of the same notwithstanding the omission of any part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 7. **Repeal**. All other ordinances or parts of ordinances inconsistent or in conflict herewith are, to the extent of such inconsistency or conflict, hereby repealed.

Section 8. **Effective date**. This Ordinance shall be and become effective immediately upon its adoption.

PASSED, APPROVED, and ADOPTED this, the 27th day of August, 2019.

	Aaron Groff, Mayor	
ATTEST:		
Kimberly Kopecky, City Secretary		

EXHIBIT "A"

CITY OF FULSHEAR DROUGHT CONTINGENCY PLAN

SECTION 1: Introduction and Objectives

Water supply has always been a key issue in the development of Texas. In recent years, the increasing population and economic development in Regional Planning Group H have led to growing demands for water. At the same time, local and less expensive sources of water supply are largely developed. Additional supplies to meet higher demands will be expensive and difficult to develop. Therefore, it is important that we make efficient use of existing supplies and make them last as long as possible. This will delay the need for new supplies, minimize the environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of drought contingency plans for public water suppliers.

The TCEQ rules governing development of drought contingency plans for public water suppliers are contained in Title 30, Part I, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code. For the purpose of these rules, a drought contingency plan is defined as:

"A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s)."

The City of Fulshear has adopted this drought contingency plan pursuant to TCEQ guidelines and requirements.

The purpose of this drought contingency plan is as follows:

- > To conserve the available water supply in times of drought and emergency
- > To maintain supplies for domestic water use, sanitation, and fire protection
- > To protect and preserve public health, welfare, and safety
- > To minimize the adverse impacts of water supply shortages
- To minimize the adverse impacts of emergency water supply conditions

<u>SECTION 2</u>: State Requirements for Drought Contingency Plans

This drought contingency plan is consistent with Texas Commission on Environmental Quality (TCEQ) guidelines and requirements for development of drought contingency plans by public drinking water suppliers, contained in Title 30, Part i, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code, and contained in Section 11.039 of the Texas Water Code.

TCEQ's minimum requirements for drought contingency plans are addressed in the following subsections of this document:

- 288.20(a)(I)(A) Provisions to Inform the Public and Provide Opportunity for Public Input Section 11.903
- > 288.20(a)(I)(B) Provisions for Continuing Public Education and Information
- > 288.20(a)(I)(C) Coordination with Regional Water Planning Group

- 288.20(a)(I)(D) Criteria for Initiation and Termination of Drought Stages
- Section 11.039 TWC Initiation of Drought Response Stages
- 288.20(a)(1)(E) Drought and Emergency Response Stages
- 288.20(a)(1)(F) Specific, Quantified Targets for Water Use Reductions
- 288.20(a)(I)(G) Water Supply and Demand Management Measures for Each Stage
- 288.20(a)(1)(H) Procedures for Initiation and Termination of Drought Stages
- 288.20(a)(1)(1) Procedures for Granting Variances
- > 288.20(a)(1)(J) Procedures for Enforcement of Mandatory Restrictions
- 288.20(a)(3) Consultation with Wholesale Supplier
- 288.20(b) Notification of Implementation of Mandatory Measures
- 288.20(c) Review and Update of Plan

SECTION 3: Provisions to Inform the Public and Opportunity for Public Input

Notice of the adoption of this Ordinance at a regular City Council meeting was posted, and interested members of the public were given an opportunity to express opinions and concerns regarding the plan.

SECTION 4: Provisions for Continuing Public Education and Information

The City of Fulshear will inform and educate the public about its drought contingency plan by the following means:

- Making the plan available to the public through the City of Fulshear's web site.
- Notifying local organizations, schools, and civic groups that City of Fulshear staff members are available to make presentations on the drought contingency plan.

At any time that the drought contingency plan is activated or the drought stage changes, the City of Fulshear will notify local media of the issues, the drought response stage, and the specific actions required of the public. The information will also be publicized on the City of Fulshear's web site. Billing inserts or mail outs will also be used as appropriate.

SECTION 5: Initiation and Termination of Drought Response

a) Initiation of Drought Response Stages

The Mayor or his/her official designee may order the implementation of a drought response stage or water emergency when one or more of the trigger conditions for that stage is met. The following actions will be taken when a drought stage is initiated:

- The public will be notified through local media.
- If any mandatory provisions of the drought contingency plan are activated, the City of Fulshear will notify the Executive Director of the TCEQ within five business days.

For other trigger conditions, the Mayor or his/her designee may decide not to order the implementation of a drought response stage or water emergency even though one or more of the trigger criteria for the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs.

b) Termination of Drought Response Stages

The Mayor or official designee may order the termination of a drought response stage or water emergency when the conditions for termination are met or at his/her discretion. The following actions will be taken when a drought stage is terminated:

- The public will be notified through local media.
- When any mandatory provisions of the drought contingency plan that have been activated are terminated, the City of Fulshear will notify the Executive Director of the TCEQ within five business days.

The Mayor or his/her designee may decide not to order the termination of a drought response stage or water emergency even though the conditions for termination of the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, or the anticipation of potential changed conditions that warrant the continuation of the drought stage.

SECTION 6: Drought and Emergency Response Stages

1) Stage 1, Mild

a) Triggering and Termination Conditions for Stage 1, Mild

- When total daily water demand equals or exceeds 60% of total water well pumpage.
- > Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- ➤ Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply.

Stage 1 can be terminated when the circumstances that caused the initiation of Stage 1 no longer prevail.

b) Goal for Use Reductions and Actions Available Under Stage 1, Mild

The goal for water use reduction under Stage 1, Mild is a **0 percent reduction** of the use that would have occurred in the absence of drought contingency measures. The purpose of actions under Stage 1, Mild is to raise public awareness of potential drought problems. The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary:

- Request voluntary reductions in water use by the public.
- Increase public education efforts on ways to reduce water use.
- Review the problems that caused the initiation of Stage 1.
- > Notify major water users and work with them to achieve voluntary water use reductions.
- Intensify efforts on leak detection and repair.
- > Reduce non-essential city government water use, including street cleaning, vehicle washing, and operation of ornamental fountains.
- Reduce city government water used for landscape irrigation.
- Ask the public to follow voluntary landscape watering schedules

2) Stage 2, Moderate

a) Triggering and Termination Conditions for Stage 2, Moderate

- When total daily water demand equais or exceeds 65% of total water well pumpage.
- > Water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply.

Stage 2 can terminate when the circumstances that caused the initiation of Stage 2 no longer prevail. Stage 1 becomes operative on termination of Stage 2.

b) Goal for Use Reduction and Actions Available Under Stage 2, Moderate

The goal for water use reduction under Stage 2, Moderate is a **2 percent reduction** of the use that would have occurred in the absence of drought contingency measures. The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary:

- Continue or initiate any actions available under Stage 1.
- Initiate engineering studies to evaluate alternatives should conditions worsen.
- Further accelerate public education efforts on ways to reduce water use.
- > Halt non-essential city government water use, including street cleaning, vehicle washing, and operations of ornamental fountains.
- Encourage the public to wait until the current drought or emergency situation has passed before establishing new landscaping.

3) Stage 3, Severe

a) Triggering and Termination Conditions for Stage 3, Severe

- When total daily water demand equals or exceeds 70% total water well pumpage.
- > Water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- > Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply

Stage 3 can terminate when the circumstances that caused the initiation of Stage 3 no longer prevail. Stage 2 becomes operative on termination of Stage 3.

b) Goal for Use Reduction and Actions Available Under Stage 3, Severe

The goal for water use reduction under Stage 3. Severe, is a reduction of 5 percent of the use that would have occurred in the absence of drought contingency measures. If the circumstances warrant, the Mayor or his/her designee can set a goal for greater water use reduction.

The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory

requirements on retail and wholesale customers. The City of Fulshear staff must notify TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stage 1 and 2.
- > Implement viable alternative water supply strategies.
- Requires Notification to TCEQ Initiate mandatory water use restrictions as follows:
 - Prohibit hosing of paved areas, buildings, or windows
 - Prohibit operation of ornamental fountains
 - Prohibit washing or rinsing of vehicles by hose
 - Prohibit using water in such a manner as to allow runoff or other waste
- Requires Notification to TCEQ Limit landscape watering at each service address to once every five days based on the last digit of the address. (Exceptions: Foundations, new plantings {first year} of trees-and shrubs may be watered for up to two hours on any day by a hand-held hose or a soaker hoses without restrictions).
- Requires Notification to TCEQ Prohibit draining and filling of existing pools and filling of new pools. (Pools may add water to replace losses during normal use.)
- Requires Notification to TCEQ Prohibit establishment of new landscaping
- Discontinue city government water use for landscape irrigation, except as needed to prevent foundation damage and preserve new plantings

4) Stage 4, Emergency

a) Triggering-and Termination Conditions for Stage 4 - Emergency

- > When total daily water demand equals or exceeds 80% of total water well pumpage.
- > Water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate.
- Supply source becomes contaminated.
- Water supply system unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply.

Stage 4 can terminate when the circumstances that caused the initiation of Stage 4 no longer prevail. Stage 3 becomes operative on termination of Stage 4.

b) Goal for Use Reduction and Actions Available Under Stage 4, Emergency

The goal for water use reduction under Stage 4, Emergency, is a reduction of 10 percent of the use that would have occurred in the absence of drought contingency measures. If circumstances warrant, the Mayor or his/her designee can set a goal for greater water use reduction.

The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory requirements on retail and wholesale customers. The City of Fulshear staff must notify TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stages 1, 2 and 3.
- Implement viable alternative water supply strategies.
- Requires notification to TCEQ Prohibit washing of vehicles except as necessary for health, sanitation or safety reasons, including car washes.

- Requires notification to TCEQ Prohibit commercial and residential landscape watering, except that foundations may be watered for 2 hours each day with a hand-held hose or soaker hose.
- > Requires notification of TCEQ Prohibit any filling of private pools. Commercial and public pools may refill to replace losses during normal use.
- > Requires notification of TCEQ Require all commercial water users to reduce water use by a percentage established by the Mayor and his/her designee

SECTION 7: Procedure for Granting Variances to the Plan

The Mayor and his/her designee may grant temporary variances for existing water uses otherwise prohibited under this drought contingency plan if one or more of the following conditions is met:

- Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or the person requesting the variance.
- > Compliance with this plan cannot be accomplished due to technical or other limitations.
- > Alternative methods that achieve the same level of reduction in water use can be implemented.

Variances shall be granted or denied at the discretion of the Mayor or his/her designee. All petitions for variances should be in writing and should include the following information:

- Name and address of the petitioner(s)Purpose of water use
- > Specific provisions from which relief is requested
- > Detailed statement of the adverse effect of the provision from which relief is requested
- > Description of relief requested
- > Period of time for which the variance is sought
- Alternative measures that will be taken to reduce water use
- Other information as required

SECTION 8: Procedure for Enforcement of Mandatory Restrictions

Mandatory water use restrictions may be imposed in Stage 3 and Stage 4 drought stages. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

- > On the first violation, customers will be given a written warning that they have violated the mandatory water use restriction.
- > On the second and subsequent violations, citations may be issued to customers, with fines not less than \$200 and not to exceed \$2,000 per incident.
- After two violations have occurred, the City of Fulshear may install a flow restrictor in the line to limit the amount of water that may pass through the meter in a 24-hour period.
- After three violations have occurred, the City of Fulshear may cut off water service to the customer.

SECTION 9: Coordination with the Regional Water Planning Group

The City of Fulshear is located within the Region H water planning area. A letter will be sent to the Chair of the Region H Water Planning Group (RCWPG) with this drought contingency plan.

SECTION 10: Review and Update of Drought' Contingency Plan

As required by TCEQ rules, the City of Fulshear will review this drought contingency plan every five years to coincide with RCWPG. The plan will be updated as appropriate based on new or updated information. As the plan is reviewed and subsequently updated, a copy of the revised drought contingency plan will be kept on file on the City of Fulshear's website, and submitted to the RCWPG for their records.



Summary of the 2016 Region H Regional Water Plan¹

<u>Please Note:</u> The full text of the 2016 Region H Regional Water Plan to be adopted as part of the City's Drought Contingency Plan can be found here: http://www.twdb.texas.gov/waterplanning/rwp/plans/2016/H/Region_H_2016_RWP.pdf

Texas' regional water plans

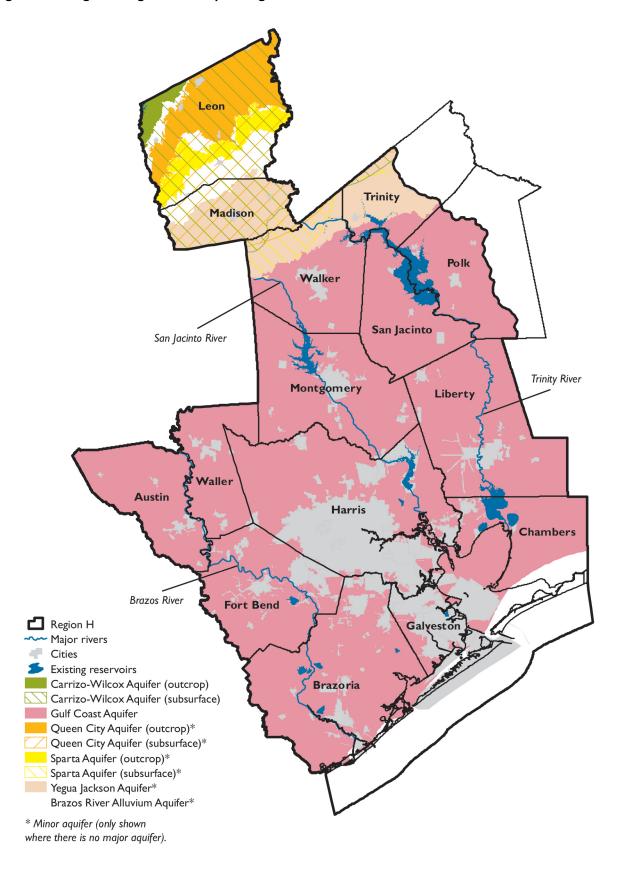
Regional water plans are funded by the Texas Legislature and developed every five years based on conditions that each region would face under a recurrence of a historical drought of record. The 16 regional water plans are developed by local representatives in a public, bottom-up process. The regional plans are reviewed and approved by the TWDB and become the basis for the state water plan. Regional and state water plans are developed to

- provide for the orderly development, management, and conservation of water resources,
- prepare for and respond to drought conditions, and
- make sufficient water available at a reasonable cost to ensure public health, safety, and welfare and further economic development while protecting the agricultural and natural resources of the entire state.

The Region H Regional Water Planning Area includes all or parts of 15 counties (Figure H.1) and portions of the Trinity, San Jacinto, Brazos, Neches, and Colorado river basins. The Houston metropolitan area is located within this region. The largest economic sector in Region H is the petrochemical industry, which accounts for two-thirds of the petrochemical production in the United States. Other major economic sectors in the region include medical services, tourism, government, agriculture, fisheries, and transportation, with the Port of Houston being the nation's second largest port. The 2016 Region H Regional Water Plan can be found on the TWDB Web site at http://www.twdb.texas.gov/waterplanning/rwp/plans/2016/#region-h

¹ Planning numbers presented throughout this document and as compared to the 2017 Interactive State Water Plan may vary due to rounding.

Figure H.I - Region H regional water planning area



Plan highlights

- Additional supply needed in 2070—1,162,000 acre-feet per year
- Recommended water management strategy volume in 2070—1,791,000 acre-feet per year
- 717 recommended water management strategy projects with a total capital cost of \$10.9 billion
- Conservation accounts for 17 percent of 2070 strategy volumes
- Reuse accounts for 25 percent of 2070 strategy volumes
- Two new major reservoirs recommended (Allens Creek and DOW Off-Channel Reservoir)

Population and water demands

Approximately 25 percent of the state's 2020 population will reside in Region H. Between 2020 and 2070, the region's population is projected to increase 60 percent (Table H.4, Figure H.2). By 2070, the total water demands for the region are projected to increase 37 percent (Table H.4).

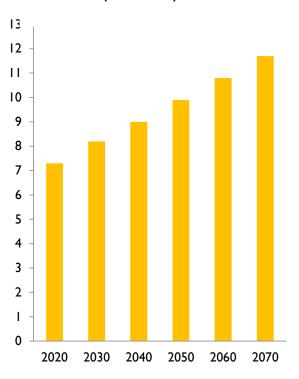
Existing water supplies

More than three-quarters of the existing water supply in Region H is associated with surface water (Table H.I, Figure H.3). By 2070 the total water supply is projected to decline I percent primarily as a result of regulatory limits aimed at reducing groundwater pumping from the Gulf Coast Aquifer to limit land surface subsidence (Table H.4).

Needs

Although on a region-wide basis it might appear that the Region H Region has enough water supplies to meet demands through 2020, with deficits from 2030 and 2070, the total water supply volume is not accessible to all water users throughout the region (Table H.4). In the

Figure H.2 - Projected population for 2020–2070 (in millions)



event of drought, Region H is projected to have a total water supply need of 347,000 acre-feet in 2020 (Table H.4). A relatively small percentage of municipal needs remain unmet in the region, however an unmet need does not prevent an associated entity from pursuing development of additional water supply.

Recommended water management strategies and cost

The Region H Planning Group recommended a variety of water management strategies and projects that would overall provide more water than is required to meet future needs (Figures H.4 and H.5, Tables H.2 and H.3). In all, the 621 strategies and 717 projects would provide 1,791,000 acre-feet of additional water supply by the year 2070 at a total capital cost of \$10.9 billion.

Conservation

Conservation strategies represent 17 percent of the total volume of water associated with all recommended strategies in 2070. Water conservation was recommended for every municipal water user group, regardless of whether they had a need.

Table H.1 - Existing water supplies for 2020 and 2070 (acre-feet per year)

Water supply source	2020	2070
Surface water		
Livingston-Wallisville Lake/Reservoir System	919,000	926,000
Brazos Run-Of-River	335,000	350,000
Houston Lake/Reservoir	141,000	140,000
Brazos River Authority Main Stem Lake/Reservoir System	140,000	140,000
Trinity Run-Of-River	136,000	136,000
Sam Rayburn-Steinhagen Lake/Reservoir System	68,000	71,000
Remaining surface water sources providing less than 2% each	158,000	158,000
Surface water subtotal:	1,897,000	1,921,000
Groundwater		
Gulf Coast Aquifer	575,000	527,000
Remaining groundwater sources providing less than 2% each	14,000	13,000
Groundwater subtotal:	589,000	540,000
Reuse	21,000	21,000
Region total	2,507,000	2,482,000

Figure H.3 - Share of existing water supplies by water source in 2020

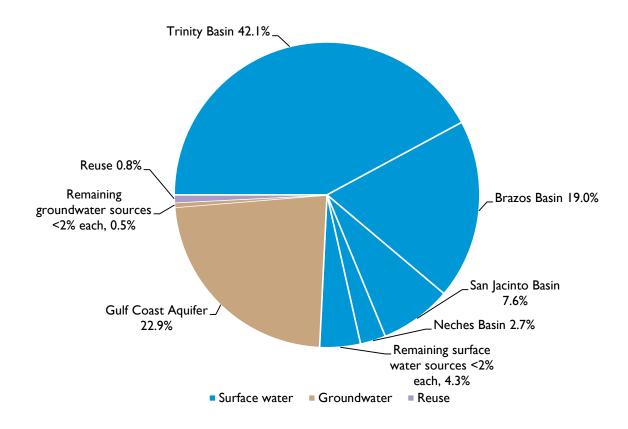


Table H.2 - Ten recommended water management strategy projects with largest capital cost

Recommended water management strategy project	Online decade	Sponsor(s)	Associated capital cost
COH Northeast Water Purification Plant Expansion	2030	Central Harris County Regional Water Authority	\$18,716,000
COH Northeast Water Purification Plant Expansion	2030	Houston	\$192,838,000
COH Northeast Water Purification Plant Expansion	2030	North Fort Bend Water Authority	\$266,358,000
COH Northeast Water Purification Plant Expansion	2030	North Harris County Regional Water Authority	\$462,851,000
COH Northeast Water Purification Plant Expansion	2030	West Harris County Regional Water Authority	\$322,850,000
Water Loss Reduction, Houston	2020	Houston	\$701,969,000
WHCRWA/NFBRWA Transmission Line	2030	North Fort Bend Water Authority	\$292,026,000
WHCRWA/NFBRWA Transmission Line	2030	West Harris County Regional Water Authority	\$350,960,000
NHCRWA Distribution Expansion - 2025 Phase	2030	North Harris County Regional Water Authority	\$537,692,000
WUG Infrastructure Expansion - County-Other, Montgomery County - Phase 2	2050	County-Other, Montgomery	\$390,978,000
East Texas Transfer	2040	Houston	\$388,064,000
East Texas Transfer	2040	Lower Neches Valley Authority	na
East Texas Transfer	2040	Sabine River Authority	na
NHCRWA Distribution Expansion - 2035 Phase	2040	North Harris County Regional Water Authority	\$373,353,000
Luce Bayou Transfer	2020	Houston	\$360,005,000
Allens Creek Reservoir	2030	Brazos River Authority	\$94,868,000
Allens Creek Reservoir	2030	Houston	\$221,359,000
SJRA Groundwater Reduction Plan - 2035 Phase	2040	San Jacinto River Authority	\$291,558,000
Other recommended projects	various	707 various	\$5,612,257,000
		Total capital cost	\$10,878,702,000

Table H.3 - Ten recommended water management strategies with largest supply volume

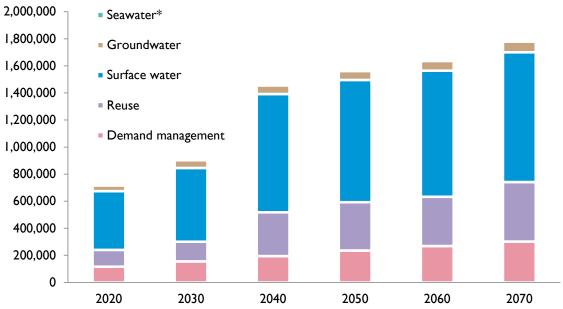
Recommended water management strategy name	Population served by strategy*	Number of water user groups served	Supply in acre- feet per year in 2070
East Texas Transfer	2,851,000	I	250,000
City of Houston GRP	2,851,000	I	98,000
New/Expanded Contract with BRA	116,000	6	82,000
Dow Reservoir And Pump Station Expansion	274,000	9	80,000
Brazos Saltwater Barrier	na	I	69,000
NHCRWA GRP - COH Reuse	914,000	I	68,000
COH Reuse	2,851,000	I	67,000
NHCRWA GRP - Surface Water	952,000	3	57,000
Transfer To Region H (Sam Rayburn)	na	2	55,000
WHCRWA GRP - COH Reuse	690,000	I	51,000
Other recommended strategies		600	895,000
	Total an	nual water volume	1,772,000

^{*} Multiple strategies may serve portions of the same population

Table H.4 - Population, existing water supplies, demands, needs, and strategies 2020–2070 (acre-feet per year)

	Decade	2020	2030	2040	2050	2060	2070	change
	Population	7,325,000	8,208,000	9,025,000	9,868,000	10,766,000	11,743,000	60%
	Surface water	1,897,000	1,903,000	1,909,000	1,913,000	1,917,000	1,921,000	1%
	Groundwater	588,000	524,000	529,000	534,000	537,000	540,000	-8%
	Reuse	21,000	21,000	21,000	21,000	21,000	21,000	0%
	Total water supplies	2,506,000	2,448,000	2,459,000	2,467,000	2,475,000	2,482,000	-1%
Demands	Municipal	1,121,000	1,209,000	1,292,000	1,374,000	1,456,000	1,537,000	37%
	County-other	136,000	169,000	199,000	239,000	292,000	356,000	162%
	Manufacturing	753,000	800,000	844,000	883,000	896,000	910,000	21%
	Mining	15,000	16,000	15,000	15,000	14,000	14,000	-7 %
	Irrigation	346,000	346,000	346,000	346,000	346,000	346,000	0%
	Steam-electric	104,000	121,000	143,000	169,000	200,000	239,000	130%
	Livestock	13,000	13,000	13,000	13,000	13,000	13,000	0%
	Total water demand	2,489,000	2,675,000	2,853,000	3,039,000	3,218,000	3,415,000	37%
	Municipal	113,000	256,000	340,000	408,000	474,000	542,000	380%
	County-other	29,000	55,000	81,000	116,000	162,000	219,000	655%
	Manufacturing	88,000	123,000	151,000	187,000	200,000	213,000	142%
Needs	Mining	5,000	6,000	5,000	5,000	5,000	6,000	20%
riccus	Irrigation	108,000	108,000	111,000	113,000	115,000	117,000	8%
	Steam-electric	2,000	5,000	9,000	15,000	24,000	61,000	2950%
	Livestock	2,000	3,000	3,000	3,000	3,000	3,000	50%
	Total water needs	347,000	555,000	699,000	846,000	984,000	1,162,000	235%
	Municipal	324,000	472,000	922,000	970,000	998,000	1,057,000	226%
	County-other	53,000	71,000	97,000	128,000	163,000	206,000	289%
Strategy supplies	Manufacturing	232,000	249,000	277,000	296,000	303,000	310,000	34%
	Mining	5,000	6,000	6,000	7,000	7,000	7,000	40%
	Irrigation	97,000	97,000	152,000	152,000	152,000	152,000	57%
	Steam-electric	5,000	8,000	13,000	18,000	25,000	59,000	1080%
	Livestock	1,000	1,000	1,000	1,000	1,000	1,000	0%
	Total strategy supplies	716,000	904,000	1,468,000	1,572,000	1,648,000	1,791,000	150%

Figure H.4 - Volume of recommended water management strategies by water resource (thousands of acrefeet per year)



^{*} Strategy volume at a scale not represented in the figure

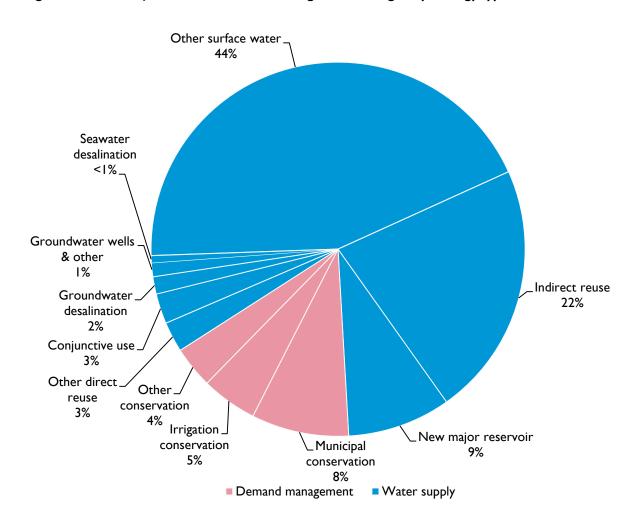
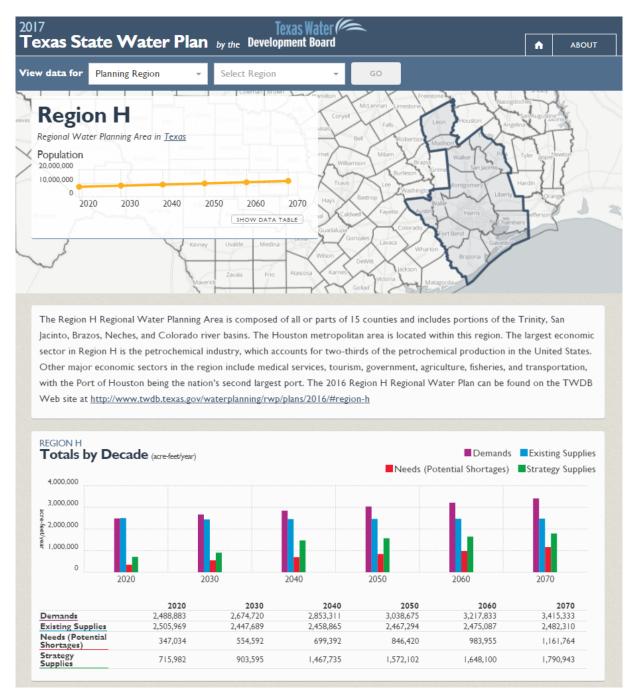


Figure H.5 - Share of recommended water management strategies by strategy type in 2070

Region H voting planning group members (2012 – 2016)

Mark Evans, counties (Chair); David Bailey, groundwater management areas John R. Bartos, environment; John Blount, counties; Robert Bruner, agriculture; Jun Chang, municipalities; David Collinsworth, river authorities; James Comin, industry; Reed Eichelberger, river authorities; Gene Fisseler, electric generating utilities; Robert Hebert, small business; Art Henson, counties; John Hofmann, river authorities; Jace Houston, river authorities; John Howard, small business; Robert Istre, municipalities; Kathy Turner Jones, groundwater management areas; Gená Leathers, industry; Glynna Leiper, industry; Ted Long, electric-generating utilities; Glenn Lord, industry; Marvin Marcell, water districts; Carl Masterson, public; James Morrison, water utilities; Ron J. Neighbors, water districts; Jimmie Schindewolf, water districts; William Teer, water utilities; Steve Tyler, small business; Danny Vance, river authorities; Harold C. Wallace, water utilities; Kevin Ward, river authorities; George "Pudge" Willcox, agriculture

For more information on Texas or specific regions, counties, or cities, please visit the 2017 Interactive State Water Plan website: **texasstatewaterplan.org**





Texas Water Development Board 1700 North Congress Avenue, Austin, Texas 78701 512-463-7847 www.twdb.texas.gov

ORDINANCE NO. 2011-1037

AN ORDINANCE REPEALING AND REPLACING ORDINANCE NO. 2000-863 AND ADOPTING A REVISED DROUGHT CONTINGENCY PLAN

AN ORDINANCE OF THE CITY OF FULSHEAR, TEXAS, REPEALING ORDINANCE NO. 2000-863 AND ADOPTING A REVISED DROUGHT CONTINGENCY PLAN; ESTABLISHING CRITERIA FOR THE INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES; ESTABLISHING RESTRICTIONS ON CERTAIN WATER USES; ESTABLISHING PENALTIES FOR THE VIOLATION OF AND PROVISIONS FOR ENFORCEMENT OF THESE RESTRICTIONS; ESTABLISHING PROCEDURES FOR GRANTING VARIANCES; AND PROVIDING SEVERABILITY AND AN EFFECTIVE DATE

WHEREAS, the City of Fulshear, Texas recognizes that the amount of water available to the City and its water utility customers is limited and subject to depletion during periods of extended drought;

WHEREAS, the City recognizes that natural limitations due to drought condition and other natural disasters cannot guarantee an uninterrupted water supply for all purposes;

WHEREAS, Section 11.1272 of the Texas Water Code and applicable rules of the Texas Natural Resource Conservation Commission require all public water supply systems in Texas to prepare a drought contingency plan; and

WHEREAS, as authorized under law, and in the best interests of the citizens of Fulshear, Texas, the City Council deems it expedient and necessary to establish certain rules and policies for the orderly and efficient management of limited water supplies during drought and other water supply emergencies;

NOW THERFORE, BE IT ORDAINED BY THE CITY OF FULSHEAR, TEXAS:

SECTION 1.0

PURPOSE: The purpose of this Ordinance is to repeal and replace Ordinance No. 2000-863 so that the City Council may promote the public health, safety, and general welfare within the City through the implementation of a revised Drought Contingency Plan.

SECTION 2.0

REPEALED: Ordinance No. 2000-863 and all other previous Ordinances adopted concerning Drought Contingency are hereby repealed and replaced.

SECTION 3.0

ADOPTED: That the revised City of Fulshear, Texas, Drought Contingency Plan attached hereto as Exhibit A and made part hereof for all purposes is the official policy of the City.

SECTION 4.0

PENALTY: Any person who violates or causes, allows or permits another to violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than two thousand dollars (\$2,000.00). Each occurrence of any such violation of this

Ordinance shall constitute a separate offense. Each day on which any such violation of this Ordinance occurs shall constitute a separate offense.

SECTION 5.0

LIABILITY: Neither the City nor any authorized agent acting under the terms of this Ordinance shall be liable or have any liability by reason of orders issued or work done in compliance with the terms of this Ordinance.

SECTION 6.0

REPEALER: All ordinances or parts of ordinances in force when the provisions of this Ordinance becomes effective which are inconsistent or in conflict with the terms and provisions contained in this Ordinance are hereby repealed only to the extent of such conflict.

SECTION 7.0

SEVERABILITY: Should any paragraph, sentence, subdivision, clause, phrase, or section of this Ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this Ordinance as a whole or any part or provision thereof, other that the part so declared to be invalid, illegal or unconstitutional.

SECTION 8.0

EFFECTIVE DATE: This Ordinance shall take effect immediately from and after its passage.

SECTION 9.0

PUBLICATION: The City Secretary is hereby authorized and directed to publish the caption of this ordinance in the manner and for the length of time prescribed by law.

Thomas C. Kuykendall Jr., Mayor

D. Gordon Offord, City Secretary

EXHIBIT "A"

CITY OF FULSHEAR DROUGHT CONTINGENCY PLAN

SECTION 1: Introduction and Objectives

Water supply has always been a key issue in the development of Texas. In recent years, the increasing population and economic development in Regional Planning Group H have led to growing demands for water. At the same time, local and less expensive sources of water supply are largely developed. Additional supplies to meet higher demands will be expensive and difficult to develop. Therefore, it is important that we make efficient use of existing supplies and make them last as long as possible. This will delay the need for new supplies, minimize the environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of drought contingency plans for public water suppliers.

The TCEQ rules governing development of drought contingency plans for public water suppliers are contained in Title 30, Part I, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code. For the purpose of these rules, a drought contingency plan is defined as:

"A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s)."

The City of Fulshear has adopted this drought contingency plan pursuant to TCEQ guidelines and requirements.

The purpose of this drought contingency plan is as follows:

- > To conserve the available water supply in times of drought and emergency
- > To maintain supplies for domestic water use, sanitation, and fire protection
- To protect and preserve public health, welfare, and safety
- To minimize the adverse impacts of water supply shortages
- To minimize the adverse impacts of emergency water supply conditions

SECTION 2: State Requirements for Drought Contingency Plans

This drought contingency plan is consistent with Texas Commission on Environmental Quality (TCEQ) guidelines and requirements for development of drought contingency plans by public drinking water suppliers, contained in Title 30, Part I, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code, and contained in Section 11.039 of the Texas Water Code.

TCEQ's minimum requirements for drought contingency plans are addressed in the following subsections of this document:

- 288.20(a)(I)(A) Provisions to Inform the Public and Provide Opportunity for Public Input Section 11.903
- ≥ 288.20(a)(I)(B) Provisions for Continuing Public Education and Information
- > 288.20(a)(I)(C) Coordination with Regional Water Planning Group

- ➤ 288.20(a)(I)(D) Criteria for Initiation and Termination of Drought Stages
- Section 11.039 TWC Initiation of Drought Response Stages
- > 288.20(a)(1)(E) Drought and Emergency Response Stages
- > 288.20(a)(1)(F) Specific, Quantified Targets for Water Use Reductions
- > 288.20(a)(I)(G) Water Supply and Demand Management Measures for Each Stage
- 288.20(a)(1)(H) Procedures for Initiation and Termination of Drought Stages
- > 288.20(a)(1)(1) Procedures for Granting Variances
- ➤ 288.20(a)(1)(J) Procedures for Enforcement of Mandatory Restrictions
- 288.20(a)(3) Consultation with Wholesale Supplier
- 288.20(b) Notification of Implementation of Mandatory Measures
- > 288.20(c) Review and Update of Plan

SECTION 3: Provisions to Inform the Public and Opportunity for Public Input

Notice of the adoption of this Ordinance at a regular City Council meeting was posted, and interested members of the public were given an opportunity to express opinions and concerns regarding the plan.

SECTION 4: Provisions for Continuing Public Education and Information

The City of Fulshear will inform and educate the public about its drought contingency plan by the following means:

- Making the plan available to the public through the City of Fulshear's web site.
- Notifying local organizations, schools, and civic groups that City of Fulshear staff members are available to make presentations on the drought contingency plan.

At any time that the drought contingency plan is activated or the drought stage changes, the City of Fulshear will notify local media of the issues, the drought response stage, and the specific actions required of the public. The information will also be publicized on the City of Fulshear's web site. Billing inserts or mail outs will also be used as appropriate.

SECTION 5: Initiation and Termination of Drought Response

a) Initiation of Drought Response Stages

The Mayor or his/her official designee may order the implementation of a drought response stage or water emergency when one or more of the trigger conditions for that stage is met. The following actions will be taken when a drought stage is initiated:

- > The public will be notified through local media.
- If any mandatory provisions of the drought contingency plan are activated, the City of Fulshear will notify the Executive Director of the TCEQ within five business days.

For other trigger conditions, the Mayor or his/her designee may decide not to order the implementation of a drought response stage or water emergency even though one or more of the trigger criteria for the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs.

b) Termination of Drought Response Stages

The Mayor or official designee may order the termination of a drought response stage or water emergency when the conditions for termination are met or at his/her discretion. The following actions will be taken when a drought stage is terminated:

- > The public will be notified through local media.
- When any mandatory provisions of the drought contingency plan that have been activated are terminated, the City of Fulshear will notify the Executive Director of the TCEQ within five business days.

The Mayor or his/her designee may decide not to order the termination of a drought response stage or water emergency even though the conditions for termination of the stage are met. Factors that could influence such a decision include, but are not limited to, the time of the year, weather conditions, or the anticipation of potential changed conditions that warrant the continuation of the drought stage.

SECTION 6: Drought and Emergency Response Stages

1) Stage 1, Mild

a) Triggering and Termination Conditions for Stage 1, Mild

- When total daily water demand equals or exceeds 60% of total water well pumpage.
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply.

Stage 1 can be terminated when the circumstances that caused the initiation of Stage 1 no longer prevail.

b) Goal for Use Reductions and Actions Available Under Stage 1, Mild

The goal for water use reduction under Stage 1, Mild is a **0** percent reduction of the use that would have occurred in the absence of drought contingency measures. The purpose of actions under Stage 1, Mild is to raise public awareness of potential drought problems. The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary:

- Request voluntary reductions in water use by the public.
- Increase public education efforts on ways to reduce water use.
- Review the problems that caused the initiation of Stage 1.
- Notify major water users and work with them to achieve voluntary water use reductions.
- Intensify efforts on leak detection and repair.
- Reduce non-essential city government water use, including street cleaning, vehicle washing, and operation of ornamental fountains.
- > Reduce city government water used for landscape irrigation.
- Ask the public to follow voluntary landscape watering schedules

2) Stage 2, Moderate

a) Triggering and Termination Conditions for Stage 2, Moderate

- When total daily water demand equals or exceeds 65% of total water well pumpage.
- Water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply.

Stage 2 can terminate when the circumstances that caused the initiation of Stage 2 no longer prevail. Stage 1 becomes operative on termination of Stage 2.

b) Goal for Use Reduction and Actions Available Under Stage 2, Moderate

The goal for water use reduction under Stage 2, Moderate is a **2 percent reduction** of the use that would have occurred in the absence of drought contingency measures. The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary:

- Continue or initiate any actions available under Stage 1.
- > Initiate engineering studies to evaluate alternatives should conditions worsen.
- Further accelerate public education efforts on ways to reduce water use.
- > Halt non-essential city government water use, including street cleaning, vehicle washing, and operations of ornamental fountains.
- > Encourage the public to wait until the current drought or emergency situation has passed before establishing new landscaping.

3) Stage 3, Severe

a) Triggering and Termination Conditions for Stage 3, Severe

- When total daily water demand equals or exceeds 70% total water well pumpage.
- Water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply

Stage 3 can terminate when the circumstances that caused the initiation of Stage 3 no longer prevail. Stage 2 becomes operative on termination of Stage 3.

b) Goal for Use Reduction and Actions Available Under Stage 3, Severe

The goal for water use reduction under Stage 3, Severe, is a reduction of 5 percent of the use that would have occurred in the absence of drought contingency measures. If the circumstances warrant, the Mayor or his/her designee can set a goal for greater water use reduction.

The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory

requirements on retail and wholesale customers. The City of Fulshear staff must notify TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stage 1 and 2.
- Implement viable alternative water supply strategies.
- > Requires Notification to TCEQ Initiate mandatory water use restrictions as follows:
 - Prohibit hosing of paved areas, buildings, or windows
 - Prohibit operation of ornamental fountains
 - Prohibit washing or rinsing of vehicles by hose
 - Prohibit using water in such a manner as to allow runoff or other waste
- Requires Notification to TCEQ Limit landscape watering at each service address to once every five days based on the last digit of the address. (Exceptions: Foundations, new plantings {first year} of trees and shrubs may be watered for up to two hours on any day by a hand-held hose or a soaker hoses without restrictions).
- Requires Notification to TCEQ Prohibit draining and filling of existing pools and filling of new pools. (Pools may add water to replace losses during normal use.)
- Requires Notification to TCEQ Prohibit establishment of new landscaping
- > Discontinue city government water use for landscape irrigation, except as needed to prevent foundation damage and preserve new plantings

4) Stage 4, Emergency

a) Triggering and Termination Conditions for Stage 4 - Emergency

- When total daily water demand equals or exceeds 80% of total water well pumpage.
- Water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate.
- Supply source becomes contaminated.
- Water supply system unable to deliver water due to the failure or damage of major water system components.
- Water demand is approaching the limit of the permitted supply.

Stage 4 can terminate when the circumstances that caused the initiation of Stage 4 no longer prevail. Stage 3 becomes operative on termination of Stage 4.

b) Goal for Use Reduction and Actions Available Under Stage 4, Emergency

The goal for water use reduction under Stage 4, Emergency, is a reduction of 10 percent of the use that would have occurred in the absence of drought contingency measures. If circumstances warrant, the Mayor or his/her designee can set a goal for greater water use reduction.

The Mayor or his/her designee can order the implementation of any of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" impose mandatory requirements on retail and wholesale customers. The City of Fulshear staff must notify TCEQ within five business days if these measures are implemented.

- Continue or initiate any actions available under Stages 1, 2 and 3.
- Implement viable alternative water supply strategies.
- Requires notification to TCEQ Prohibit washing of vehicles except as necessary for health, sanitation or safety reasons, including car washes.

- Requires notification to TCEQ Prohibit commercial and residential landscape watering, except that foundations may be watered for 2 hours each day with a hand-held hose or soaker hose.
- > Requires notification of TCEQ Prohibit any filling of private pools. Commercial and public pools may refill to replace losses during normal use.
- Requires notification of TCEQ Require all commercial water users to reduce water use by a percentage established by the Mayor and his/her designee

SECTION 7: Procedure for Granting Variances to the Plan

The Mayor and his/her designee may grant temporary variances for existing water uses otherwise prohibited under this drought contingency plan if one or more of the following conditions is met:

- > Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or the person requesting the variance.
- > Compliance with this plan cannot be accomplished due to technical or other limitations.
- > Alternative methods that achieve the same level of reduction in water use can be implemented.

Variances shall be granted or denied at the discretion of the Mayor or his/her designee. All petitions for variances should be in writing and should include the following information:

- > Name and address of the petitioner(s)Purpose of water use
- Specific provisions from which relief is requested
- Detailed statement of the adverse effect of the provision from which relief is requested
- Description of relief requested
- Period of time for which the variance is sought
- > Alternative measures that will be taken to reduce water use
- Other information as required

SECTION 8: Procedure for Enforcement of Mandatory Restrictions

Mandatory water use restrictions may be imposed in Stage 3 and Stage 4 drought stages. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

- > On the first violation, customers will be given a written warning that they have violated the mandatory water use restriction.
- > On the second and subsequent violations, citations may be issued to customers, with fines not less than \$200 and not to exceed \$2,000 per incident.
- After two violations have occurred, the City of Fulshear may install a flow restrictor in the line to limit the amount of water that may pass through the meter in a 24-hour period.
- After three violations have occurred, the City of Fulshear may cut off water service to the customer.

SECTION 9: Coordination with the Regional Water Planning Group

The City of Fulshear is located within the Region H water planning area. A letter will be sent to the Chair of the Region H Water Planning Group (RCWPG) with this drought contingency plan.

SECTION 10: Review and Update of Drought' Contingency Plan

As required by TCEQ rules, the City of Fulshear will review this drought contingency plan every five years to coincide with RCWPG. The plan will be updated as appropriate based on new or updated information. As the plan is reviewed and subsequently updated, a copy of the revised drought contingency plan will be kept on file on the City of Fulshear's website, and submitted to the RCWPG for their records.

AGENDA MEMO BUSINESS OF THE CITY COUNCIL CITY OF FULSHEAR, TEXAS

AGENDA OF:	8/27/2019	ITEMS:	IV.E.							
DATE SUBMITTED:	8/22/2019	DEPARTMENT:	Finance							
PREPARED BY: SUBJECT: DISCUS	Wes Vela SION OF FY20 OPERATING AN	PRESENTER: D CAPITAL BUDGET	Wes Vela AND TAX RATE							
Expenditure Required:										
Amount Budgeted:										
Funding Account:										
Additional Appropriation Required:										

EXECUTIVE SUMMARY

The budget discussion is an opportunity for the City Council to ask questions of staff and discuss their various opinions and direction for the proposed budget.

RECOMMENDATION

There is no action for this agenda item.

Funding Account: