

**YOLANDA FORD**  
Mayor

**VASHAUNDRA EDWARDS**  
Councilmember at Large Position No. 1

**CHRIS PRESTON**  
Mayor Pro Tem  
Councilmember at Large Position No. 2



**REGINALD PEARSON**  
Councilmember District A

**JEFFREY L. BONEY**  
Councilmember District B

**ANTHONY G. MAROULIS**  
Councilmember District C

**FLOYD EMERY**  
Councilmember District D

## CITY COUNCIL SPECIAL MEETING AGENDA

Notice is hereby given of a Special City Council Meeting to be held on **Monday, August 19, 2019**, at **5:15 p.m.** at: **City Hall, Council Chamber, 2nd Floor**, 1522 Texas Parkway, Missouri City, Texas, 77489, for the purpose of considering the following agenda items. All agenda items are subject to action. The City Council reserves the right to meet in a closed session on any agenda item should the need arise and if applicable pursuant to authorization by Title 5, Chapter 551 of the Texas Government Code.

**1. CALL TO ORDER**

**2. DISCUSSION/POSSIBLE ACTION**

- (a) Presentation of the municipal utility district feasibility analysis.
- (b) Discussion of the accounting of certain utility funds related to the Groundwater Reduction Plan.
- (c) Presentation and discussion on proposed Fiscal Year 2020 budget.

**3. CLOSED EXECUTIVE SESSION**

*The City Council may go into Executive Session regarding any item posted on the Agenda as authorized by Title 5, Chapter 551 of the Texas Government Code.*

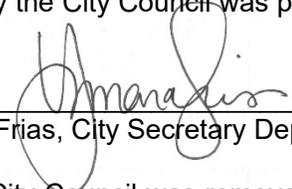
**4. RECONVENE** into Special Session and consider action, if any, on items discussed in Executive Session.

**5. ADJOURN**

**In compliance with the Americans with Disabilities Act, the City of Missouri City will provide for reasonable accommodations for persons attending City Council meetings. To better serve you, requests should be received 24 hours prior to the meetings. Please contact Maria Jackson, City Secretary, at 281.403.8686.**

### CERTIFICATION

I certify that a copy of the August 19, 2019, agenda of items to be considered by the City Council was posted on the City Hall bulletin board on August 15, 2019, at 4:00 p.m.

  
\_\_\_\_\_  
Yomara Frias, City Secretary Department

I certify that the attached notice and agenda of items to be considered by the City Council was removed by me from the City Hall bulletin board on the \_\_\_\_ day of \_\_\_\_\_, 2019.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_



August 19, 2019

# Update on MUD Feasibility Analysis City of Missouri City, Texas

David S. Yanke  
President – Environmental Practice



ECONOMICS STRATEGY STAKEHOLDERS SUSTAINABILITY

[www.newgenstrategies.net](http://www.newgenstrategies.net)

# City Team

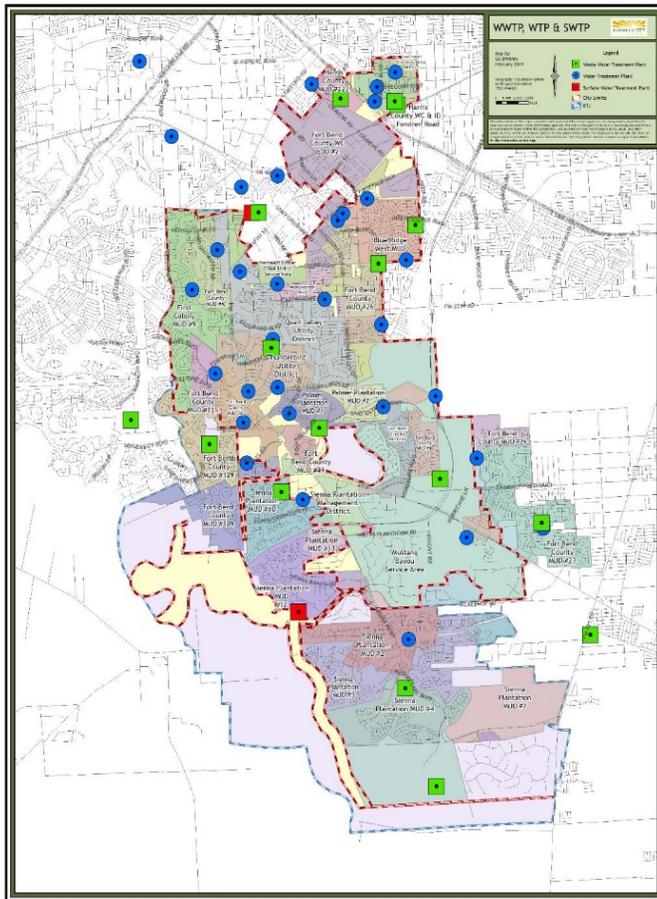
- City of Missouri City – Bill Atkinson, Shashi Kumar, Dan McGraw, Millie Holifield
- Greenberg Traurig, LLP – Phillip Gildan, Karen Kennard, Ron Green
- NewGen Strategies & Solutions – David Yanke, Grant Rabon
- Enprotec, Hibbs and Todd – Jordan Hibbs, Joshua Berryhill

# Premise

- Determine whether or not the current city-wide MUD utility service delivery structure can be improved upon in the citizen's interest (financially, operationally, cost of service, level of service, future capital improvements)
- Determine alternative City/MUD utility service structures and consider all options for potential improvement in utility service delivery city-wide, short term, mid term and long term.
- Determine optimal timing for alternative structures and potential community-wide improvements

# Background

## MUD Map



## Opportunities for achieving economies of scale

Currently there are about 11 wastewater and 26 water treatment plants!

# eHT Report – Water

- Additional interconnects between systems to:
  - Improve pressure control, water quality, and fire protection
  - Serve undeveloped areas
  - Transition from groundwater to surface water
- Additional elevated storage tanks to improve pressure control and buffer surface water flows
- Use regional surface water plants as existing plants reach end of useful lives to reduce dependence on groundwater
- Timing – progress as appropriate (not all at once)

# eHT Report – Wastewater

- Opportunity for financial savings associated with regionalization

**Table 5-1. Summarized Total Costs for Options 1–4**

Option	Extent of Regionalization	OPPC, \$	Annual O&M Cost, \$	30-Year Life Cycle Cost, \$
1	Maintain existing WWTP infrastructure	119,338,000	3,673,000	193,491,000
	Existing WWTP infrastructure & WC&ID #2	115,034,000	3,609,000	187,895,000
2	Five regional WWTPs	109,832,000	2,188,500	154,014,000
	Five regional WWTPs & WC&ID #2	110,281,000	2,002,500	150,708,000
3	Four regional WWTPs	106,489,000	1,759,000	141,999,000
	Four regional WWTPs & WC&ID #2	106,938,000	1,573,000	138,693,000
4	Two master regional WWTPs	89,204,000	1,180,000	113,026,000
	Two master regional WWTPs & WC&ID #2	97,200,000	1,227,000	121,970,000

Note: Refer to Section 4 for assumptions regarding life cycle analysis and plant specific assumptions

OPPC = Opinion of Probable Project Cost

# Background

- Goals of MUDs Feasibility Analysis
  - Benefit the joint citizens of Missouri City and the MUDs
  - Opportunities for long-term increased utility service efficiency at lower cost
  - Win-win partnership opportunities
  - Develop a path forward
- Operating Guidelines
  - Stakeholder Involvement
  - Open Mind - No prejudgment of the results
  - Consider ALL options
  - Honest evaluation of the status of the city-wide utility system and future capital requirements
  - Consider all aspects: financial, engineering, operating, community development

# Utility Service Scenarios Evaluated

- Identified various scenarios to be analyzed
  - Natural groupings of MUDs by region
  - Grouping of MUDs by In-City vs ETJ
- Identified sub-scenarios to be analyzed
  - By ETJ MUDs with annexation agreements
  - By development build-out dates
  - By outstanding debt maturation

# Outstanding Obligations

## Scenario 1 - MUDs Annexation Agreements

Scenario	MUD	Debt Maturity Year	Principal Outstanding <sup>1,2</sup>	Total Remaining Debt Service Payments <sup>1,3</sup>	Current Developer Reimbursement Obligations <sup>1,4</sup>
1.1	Fort Bend County #129	2035	\$ 19,065,000	\$ 25,605,157	\$ 824,070
1.1	Fort Bend County #149	2041	25,145,000	36,068,280	-
1.2	<b>Sienna Plantation #1 (master)</b>	2049	25,010,000	34,622,418	497,982
1.2	Sienna Plantation #2	2026	14,335,000	16,403,300	-
1.2	Sienna Plantation #3	2032	31,890,000	41,724,860	-
1.2	Sienna Plantation #10	2040	56,985,000	80,377,351	1,936,170
1.2	Sienna Plantation #12	2041	55,030,000	78,424,481	14,861,749
1.2	Sienna Plantation #13 <sup>5</sup>		-	-	-
1.2	Sienna Plantation Management District	2042	31,280,000	45,551,572	11,410,210
1.3	Sienna Plantation #4	2043	27,800,000	40,150,280	17,860,294
1.3	<b>Sienna Plantation #5 (master)</b>	2043	9,645,000	14,225,449	21,034,992
1.3	Sienna Plantation #6		-	-	-
1.3	Sienna Plantation #7		-	-	-
			<b>\$296,185,000</b>	<b>\$413,153,148</b>	<b>\$ 68,425,467</b>

Notes:

- 1) As of the most recent financial statement available for NewGen's review
- 2) Sum of all future principal payments from 2020 until maturity
- 3) Sum of all future principal and interest payments from 2020 until maturity
- 4) Does not include committed developer reimbursement obligations that are not yet reflected on the MUDs' balance sheets (because the projects are not yet complete)
- 5) Financials for "the Woods" are consolidated and reported with the financials for Sienna Plantation #1

# Outstanding Obligations

## Scenario 2 - Harris County MUDs

Scenario	MUD	Debt Maturity Year	Principal Outstanding <sup>1,2</sup>	Total Remaining Debt Service Payments <sup>1,3</sup>	Current Developer Reimbursement Obligations <sup>1,4</sup>
2	Harris County Fondren Road	2030	\$ 2,255,000	\$ 2,619,711	\$ -
2	Southwest Harris County #1	2027	1,450,000	1,729,841	-
2	Harris County #122	2031	1,220,000	1,534,535	-
			\$ 4,925,000	\$ 5,884,087	\$ -

Notes:

- 1) As of the most recent financial statement available for NewGen's review
- 2) Sum of all future principal payments from 2020 until maturity
- 3) Sum of all future principal and interest payments from 2020 until maturity
- 4) Does not include committed developer reimbursement obligations that are not yet reflected on the MUDs' balance sheets (because the projects are not yet complete)

# Outstanding Obligations

## Scenario 3 - Inside City MUDs

Scenario	MUD	Debt Maturity Year	Principal Outstanding <sup>1,2</sup>	Total Remaining Debt Service Payments <sup>1,3</sup>	Current Developer Reimbursement Obligations <sup>1,4</sup>
3.1	Quail Valley Utility District		\$ -	\$ -	\$ -
3.1	Thunderbird Utility District		-	-	-
3.2	Meadow Creek		-	-	-
3.2	Palmer Plantation #1		-	-	-
3.2	Palmer Plantation #2	2026	4,525,000	5,233,775	-
3.2	Fort Bend County #26	2029	8,800,000	9,877,256	1,096,156
3.2	Fort Bend County #42	2026	6,155,000	6,859,300	-
3.2	Fort Bend County #46	2027	9,790,000	10,525,262	3,051,002
3.2	Fort Bend County #47	2034	5,390,000	6,940,003	4,179,370
3.2	Fort Bend County #48	2038	15,010,000	19,024,256	7,083,109
3.2	Fort Bend County #49	2030	470,000	626,529	-
3.2	Fort Bend County #115	2028	8,740,000	10,141,167	-
3.2	First Colony #9	2035	6,645,000	7,637,088	-
3.2	Blue Ridge	2041	2,250,000	3,230,587	-
			<u>\$ 67,775,000</u>	<u>\$ 80,095,223</u>	<u>\$ 15,409,637</u>

Notes:

- 1) As of the most recent financial statement available for NewGen's review
- 2) Sum of all future principal payments from 2020 until maturity
- 3) Sum of all future principal and interest payments from 2020 until maturity
- 4) Does not include committed developer reimbursement obligations that are not yet reflected on the MUDs' balance sheets (because the projects are not yet complete)

# Feasibility Options Evaluated

- Maintain Status Quo
- Potential MUDs Annexation/Dissolution
- Potential Negotiated Utility Asset Acquisitions
- Potential Wholesale/Retail Utility Restructuring
- Potential Privatization

# Methodology

- City/ETJ wide Water/Sewer regional utility capital plan through 2040 developed by eHT
- Modeled cash flow for 30 years developed by NewGen
- Analyzed MUDs and City's revenue sources for utility operating costs, capital improvements, and debt repayment
- Developed Net Present Values for various scenarios with favorable/unfavorable financial assessments
- Assumed no net increase to any MUD/City residents' utility related monthly costs as a result of any scenario (based on current combination of utility rates and portion of MUDs ad valorem taxes funding utility expenses), except annual 2% CPI for utility rates

# MUDs Annexation/Dissolution vs. Negotiated Asset Acquisition

- Two Financial Options Analyzed for Each Scenario:
  - Annexation/Dissolution: City Assumes all Debts and Obligations of the MUDs, and Operating, Maintenance and CIP Costs of both Utility Facilities and all other MUDs Facilities (storm water, roads, parks, levees, etc.)
  - Negotiated Asset Transfer: City and MUDs Negotiate Mutually Acceptable Terms for Voluntary Transfer of Utility Assets Only to City with MUDs Remaining in Place to:
    - Repay Existing Utility Debt
    - Issue New Debt to Fund Future Utility Development Costs and Developer Reimbursements
    - Continue operating non-Utility (i.e., non-water, non-sewer) Facilities
    - Continue Assessment of Ad Valorem Taxes, with Existing Utility Funding from Ad Valorem Taxes Transferred to City to Continue Funding Transferred Utility Operating Costs

# NPV Results

## Scenario 1 - MUDs Annexation Agreements

Option	NPV	
<b>Scenario 1.1 – Riverstone MUDs</b>		
Asset Acquisition	(\$10,396,835)	unfavorable
Annexation	(\$71,398,108)	unfavorable
<b>Scenario 1.2 – Sienna Plantation #1 MUDs</b>		
Asset Acquisition	\$6,178,851	favorable
Annexation	(\$269,621,643)	unfavorable
<b>Scenario 1.3 – Sienna Plantation #5 MUDs</b>		
Asset Acquisition <sup>1</sup>	\$0	favorable
Annexation	(\$93,942,989)	unfavorable

1. Reflects unique assumptions regarding developer support and capital funding, without which the NPV would be negative \$31.7 million

# NPV Results

## Scenario 2 - Harris County MUDs

Option	NPV	
Asset Acquisition	\$ 3,942,434	favorable
Dissolution	(\$12,393,853)	unfavorable

# NPV Results

## Scenario 3 - Inside City MUDs

Option	NPV	
<b>Scenario 3.1 – Inside City MUDs with No Property Tax Revenue</b>		
Asset Acquisition	(\$16,058,088)	unfavorable
Dissolution	(\$8,018,183)	unfavorable <sup>1</sup>
<b>Scenario 3.2 – Other Inside City MUDs</b>		
Asset Acquisition	\$11,779,472	favorable
Dissolution	(\$169,120,624)	unfavorable

1. Relatively close to breakeven

# Wholesale/Retail Utility Option

- City and MUDs Negotiate Transfer of MUDs Water Supply Facilities/Treatment Facilities/Storage Facilities to City for Operation (like Steep Bank/Flat Bank Facility)
- MUDs Retain Retail Utility Systems and Customer Interface
- City Can Consider Benefits of Transferring Existing City Retail Systems to Appropriate MUDs for Operation with City Serving Role of Wholesale Water Supply/Wastewater Treatment and Disposal for all City/ETJ Areas

# Privatization Option

- Legal issue – multiple entities own the assets (i.e., MUDs and City); City would need to acquire assets as pre-requisite
- Financial issues:
  - a) Cost of capital (debt and equity)
  - b) Taxes
  - c) O&M cost savings and operational efficiencies need to be greater than  $a + b$
- Evaluated privatization options

# Stakeholder Feedback (thus far)

- Concern whether there is a demonstrable benefit from consolidation
  - see eHT report for analysis
- Concern whether City would continue level of service provided by MUDs to their customers
  - can be addressed by negotiation of standards with City
- Framing of available capacity should be viewed based on peak demands (rather than average demands)
  - will be reconciled in final report, as appropriate
- Additional questions posed related to the analysis
  - these have been addressed in this presentation

# Next Steps

- Final report and presentation to all stakeholders (First week of Sept. 2019)
- City Council Determines Path Forward (1<sup>st</sup> Quarter 2020)



QUESTIONS?

3420 Executive Center Drive  
Suite 165  
Austin, TX 78731  
Phone: (512) 479-7900

NewGen  
Strategies & Solutions



**CITY COUNCIL  
AGENDA ITEM COVER MEMO**

**August 19, 2019**

**To:** Mayor and City Council  
**Agenda Item:** 2(b) Presentation of the Utility Funds Review Report  
**Submitted by:** Allena J Portis, Director of Financial Services

**SYNOPSIS**

In response to a concern that \$2.5 million was missing and impacted the calculation of the GRP fees, staff engaged the CPA Firm, McConnell & Jones to perform a review of the City's utility funds. The purpose of the engagement was to review the City's Utility Funds to determine whether the City appropriately recorded and tracked operating and construction related financial transactions in the general ledger for its water, sewer and wastewater treatment funds.

This review included analyzing the general ledger activity of each utility fund and tracking back the underlying supporting documents with a bulk of the effort to ensure that financial transactions were accumulated accurately in the proper fund. The focus on the financial transactions were on recording of impact fees, sewer fees, maintenance service charges, Ground Reduction Plan (GRP) Pumpage fees, groundwater user fee, operator fees, infrastructure improvement expenses, contractual service expenses, and inter-fund transfers. The main purpose was to identify any misallocation or missing funds within the Utility Funds for FY 2012 through FY 2018.

**STRATEGIC PLAN 2019 GOALS ADDRESSED**

- Maintain a financially sound city

**BACKGROUND**

The primary purpose of the review was to determine whether funds within the Utilities were inaccurately recorded which may have impacted the GRP Fee calculation. According to the report (Page 4) revenue and expense transactions for operating and construction related funds were accumulated in the proper funds. In this same section, there was mention of debits to the revenue account. Prior to FY2019 revenue received from Sienna Plantation MUD #1 was recorded in Fund 505 when received by a clerk and later moved (within the same accounting period) by an accountant to the correct fund, Fund 540. This is no longer a practice; the funds are placed in Fund 540 when received. In addition, the GRP fee calculation which focused on determining revenue requirements calculated the fees based on cost, not available revenue debunking the thought that \$2.5 million would have changed the calculation. The calculation is found in Attachment 2.

The City's new Financial Services Director began in January 2019. She has been tasked with reviewing all financial policies and procedures. In addition to reviewing the general ledger, McConnell & Jones provided recommendations for improvement based on the transactions reviewed. The firm's recommendations are in line with changes that were in the process of being implemented by the new Director prior to the review.

Recommendations made by McConnell & Jones, of which we agree and have implemented are as follows:

- Impact Fees are now recorded in separate funds. It must be mentioned that Impact Fees were never recorded in separate funds within the City's accounting system. After speaking with previous Finance Directors it is assumed that this was due to materiality.
- New Debt Issues are recorded in funds designated for receipt and expenditure of bond proceeds only, utilizing project accounting.
- Requested an additional Utility Employee in the FY2020 Proposed Budget to assist with the workload.
- In addition to the changes that have already been implemented, staff plans to prepare a written impact fee procedure.

The City's annual audit will begin in September 2019 and McConnell & Jones report will be shared with the new auditors, Weaver & Tidwell. Consistent with past practice, our auditor, Weaver and Tidwell, will assist with preparation of the financial statements and working with the new auditors, staff will ensure that the financial statements accurately reflect restricted net assets for unspent impact fees.

#### **BUDGET/FISCAL ANALYSIS**

**Purchasing Review: N/A**  
**Financial/Budget Review: N/A**

#### **SUPPORTING MATERIALS**

1. McConnell & Jones – Utility Report - *Forthcoming*
2. GRP Fee Analysis

#### **STAFF'S RECOMMENDATION**

Staff recommends the City Council receive a presentation of the Utility Funds Review Report.

**Director Approval:**  
**City Manager Approval:**

**Allena J Portis, Director of Financial Services**  
**Anthony J. Snipes, City Manager**



# MEMORANDUM

**To:** Dan McGraw  
Director of Utilities  
City of Missouri City

**From:** Nelisa Heddin   
Nelisa Heddin Consulting, LLC

**Date:** May 16, 2018

**Re:** GRP Fee Analysis, FINAL REPORT

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## Background

### Overview

In meeting requirements set forth by the Fort Bend County Subsidence District (Subsidence District) to achieve a significant reduction in ground water pumping in Fort Bend County, the City of Missouri City has assembled a group of participants to form a Joint Ground Water Reduction Plan (Missouri City Joint GRP). These participants include mostly entities lying within the city limits of Missouri City as well as some entities within the City's ETJ and outlying areas. Together, these entities have identified a plan for which, as a whole, the participants will meet the groundwater reduction requirements set forth by the Subsidence District. This plan is among the first of its type and has been hailed as an innovative approach to meeting these difficult to achieve regulatory requirements. Since inception, the Missouri City Joint GRP has had the lowest cost of participation in comparison to neighboring communities. Furthermore, projections indicate that even with new expenditures associated with the higher plant capacity, the City should still have the most affordable GRP participation costs in the area.

In order to meet the next phase of conversion requirements and the water supply needs of this growing community, the City needs to expand its treatment plant capacity. In so doing, the City has retained Nelisa Heddin Consulting, LLC (NHC) to conduct a fee analysis and make projections of the GRP fees in the future. This report details the methodology utilized in that analysis as well as findings and recommendations.

### Ground Water Reduction Plan

The Subsidence District requires that by 2013, groundwater production be limited to 70% of total water demand. The remaining demand must be met through alternative sources. By 2025, the Subsidence District requires that only 40% of total water demand be met by groundwater sources. The Missouri City Joint GRP has met and will continue to meet these requirements through the conversion of some entities, largely those lying to the southern portion of the City and its ETJ entirely to surface water. While most entities lying to the northern portion of the City will remain on ground water supplies. The basic philosophy associated with this conversion plan is that those entities in the southern portion of the City are largely undeveloped, and thus, groundwater supplies in that area are also largely undeveloped. This has limited and should continue to limit the cost impact associated with abandoning groundwater infrastructure upon conversion. Additionally, this plan considers that there are few interconnections within the built-out entities, thereby making it quite difficult to provide surface water to these entities without the construction of an entirely new transmission system throughout the City.

As the converting entities are not yet built-out, there is some risk associated with this plan as the City is still required to meet the conversion percentages outlined by the Subsidence District, regardless of whether growth projections occur. As a contingency, the City has entered into inter-local agreements with every participant on the system requiring them to convert to surface water if and when directed by the City. The City would convert entities one by one beginning in the southern portion of the City, and working in a generally northerly direction.

Raw water supplies have been obtained through a pre-existing agreement the City of Missouri City has with the Gulf Coast Water Authority (GCWA). The City is currently identifying additional sources of raw water.

### GRP Fee

The City of Missouri City has been appointed the GRP administrator. As the GRP administrator, among other things, the City will see that the overall project is meeting conversion requirements, is providing required reporting to the Subsidence District, and will also oversee the financial cost-sharing program of the project. The cost share program involves an annual calculation of a pumpage fee to be assessed to each participant based on their respective groundwater pumpage. There are fundamentally two different GRP fees charged to customers:

1. Groundwater Pumpage Fee – a groundwater pumpage fee is charged to each participant on a monthly basis based on the volume of ground water they actually pump. While participants using groundwater do not receive water produced from the City, these customers receive the benefit of compliance with the Subsidence District's requirements.
2. Surface Water Usage Fee – a surface water use fee is charged to any entity utilizing surface water on a monthly basis based on the volume of surface water they actually utilize. This fee includes the cost of compliance with the Subsidence District's requirements as well as a component for the commodity actually utilized.

### Plant Expansion

In order to meet the growing needs of the community and to continue to meet the conversion requirements, it is now necessary for the City to expand the surface water treatment plant. In doing so, the City anticipates issuing an additional \$20M in debt to fund the necessary improvements.

### **GRP Fee Analysis**

In determining recommended GRP Fees, NHC utilized a three-step process in calculating the fees:

Step 1: Determination of Revenue Requirements – the revenue requirements were determined using the adopted FYE2018 operating budget for the surface water treatment plant, which was adjusted for the following elements:

1. Variable costs including chemicals, electricity, raw water purchases and sludge removal were determined using a variable cost basis whereby the actual historical costs were analyzed to determine a unit cost based upon the actual historical volumes produced. The unit cost adjusted for inflation was then applied to the projected future consumption.
2. General fund transfers which reimburse the City for its administrative time associated with managing the utility were increased based upon staff's recommendation in order to better reflect the City's actual cost associated with providing administrative oversight to the GRP and plant operations.
3. Annual debt service was adjusted to reflect the future debt service payments associated with the City's outstanding debt on the system as well as projected future debt payments that are associated with the proposed plant expansion.
4. The addition of \$60,000 in annual salaries related to staffing the treatment plant 24/7 beginning in FYE2019.
5. Most line items also reflected an assumed annual inflation rate of 3%.
6. Annual reserve fund contributions necessary to build a debt service reserve fund to be equal to one-year total annual debt payments<sup>1</sup>.
7. Finally, annual operating reserve contributions were projected to be made every year in order to maintain an operating fund balance equal to six-months average annual operating expenses.

Schedule 1 provides the five-year projection of revenue requirements.

Step 2: Projection of Future Groundwater and Surface Water Demands – future projections of demands were made by first projecting future customer growth. Future growth was projected for each individual participating entity taking into consideration several factors, including historical growth, ultimate build-out capacity, and known factors such as permitting information. Once a conservative estimate of future customer growth was made, NHC next analyzed historical demands on an average use per connection basis for 2014-2017. Historical demands were normalized to reflect fluctuations in demand that may be associated with

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<sup>1</sup> Reserve contributions are discussed further in the following section of this memorandum.

weather. This normalized average use per connection, on an individual participant basis was applied to the projected future connection count on the system. The five-year projection of groundwater and surface water demands is presented on Schedule 2.

Step 3: Determination of Pumpage Fees – Pumpage fees were determined by adding the actual revenue requirements of the surface water operations (Revenue Requirements determined in Schedule 1) to a theoretical cost of groundwater operations, in accordance with participant agreements, to arrive at an assumed total system cost of providing groundwater and surface water to all customers within the Joint GRP. The surface water pumpage fee was then determined by dividing the total cost of groundwater and surface water by the total groundwater and surface water pumpage. This fee is what is charged to all customers receiving surface water from the City. The groundwater pumpage fee, which is charged to customers who do not receive surface water from the City, is determined by subtracting the theoretical groundwater unit cost from the surface water pumpage fee. The determination of these fees is outlined on Schedule 3.

### **Reserve Funds**

As referenced above, the analysis included certain reserve fund contributions to be included in the revenue requirements. While the City has a healthy reserve fund balance for the surface water treatment plant, additional reserve contributions have been included in the revenue requirements. This analysis has been provided as Schedule 4. The required reserve fund contributions were determined based upon the following:

1. Current surface water operating fund balance - FYE2017 year end balance =\$10,648,568, which includes operating reserves, debt reserves and capital reserves, which are allocated as follows:
  - a. Operating Reserve = \$2,023,026 (6-months of 2018 budgeted O&M)
  - b. Debt Reserve = \$3,734,446 (equal to 2018 actual debt service payment)
  - c. Capital Replacement reserve = \$3,000,000 (based upon City staff's recommendation of balance to be maintained for capital replacements)
  - d. CIP = \$1,891,096 (balance available for capital projects)
2. Additional annual contributions for operating fund balance were determined based upon the amount required to achieve 6-months operating expenses, based upon projected annual increases in operating expenses.
3. Additional annual contributions for debt reserves in order to build the debt reserve balance to be equal to equal to one-year annual debt payment, based upon the projected future debt service, to be built over a ten-year period.

### **Findings and Recommendations**

Based upon this analysis, NHC recommends increasing the GRP Fee from \$1.65 to \$1.73 for FYE2019 and FYE2020. Based upon inflation, the Fee is projected to increase to \$1.75 by 2022. NHC must emphasize that this fee is still the lowest in the area, and the proposed increase is relatively small in impact to customers. A customer using an average of 10,000 gallons per month would see an increase in their monthly bill by only \$.80. This is largely due to the City's outstanding efforts in fiscal responsibility, diligent planning, and keeping operating costs low through efforts such as partnering with a local MUD to operate the treatment plant.

City of Missouri City  
Groundwater Reduction Plan  
GRP Fee Analysis

Schedule 1  
Five-Year Projection of Revenue Requirement

Expense	2018	2019	2020	2021	2022	Inflation	Notes
Minor Tools, Furniture & Equipment	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	3%	
Contr Asts	-	-	-	-	-	3%	
Audit adjustment	-	-	-	-	-	3%	
Purchase of Water	1,211,200	1,392,880	1,601,812	1,842,084	2,118,397		Based on Variable Costs
Chemicals	494,608	531,413	571,106	613,922	660,112		Based on Variable Costs
Operator Fees	525,000	600,750	618,773	637,336	656,456	3%	Plus added \$60,000 for 24/7 staffing at the WTP in 2019
Sludge Removal	147,608	158,591	170,437	183,215	196,999		Based on Variable Costs
Permit Services	72,000	74,160	76,385	78,676	81,037	3%	
General Maintenance & Repairs	260,000	267,800	275,834	284,109	292,632	3%	
Laboratory Testing	25,000	25,750	26,523	27,318	28,138	3%	
Landscaping Services	65,000	66,950	68,959	71,027	73,158	3%	
Contractual Service	150,000	154,500	159,135	163,909	168,826	3%	
Garbage Collection Service	-	-	-	-	-	3%	
Depreciation	-	-	-	-	-		Removed from analysis
Subcontractors & Material	220,000	226,600	233,398	240,400	247,612	3%	
Telecommunications	5,000	5,150	5,305	5,464	5,628	3%	
Electric Utilities	358,236	384,893	413,642	444,652	478,107		Based on Variable Costs
Property/Liability Insurance	47,500	48,925	50,393	51,905	53,462	3%	
Other/Misc	-	-	-	-	-	3%	
Capital Replacement Reserve	-	-	-	-	-		Per Capital Replacement Reserve Analysis
Pay Agent/Registrar	-	-	-	-	-	3%	
Transfer Fund 101 - General Fund	300,000	309,000	318,270	327,818	337,653	3%	
Transfer to 505 - WWW Utility Fund	-	-	-	-	-	3%	
Transfer to 542	-	-	-	-	-	3%	
Transfer to 510	-	-	-	-	-	3%	
Total Debt Service	5,333,441	5,225,191	5,227,491	5,223,091	5,218,391		Based upon actual annual payment
Debt Service Reserves	159,899	159,899	159,899	159,899	159,899		Per reserve fund analysis
Operating Reserves	-	183,180	171,381	191,012	213,273		Per reserve fund analysis
Princ - 2009B CO Prin	-	-	-	-	-		Included above
2014A CO Utility Princip	-	-	-	-	-		Included above
2016 CO Utilil Principal	-	-	-	-	-		Included above
2016 Refund CO Utilil Prin	-	-	-	-	-		Included above
2016A CO Principal	-	-	-	-	-		Included above
2009B Interest Expense	-	-	-	-	-		Included above
2014A CO Utility Int Exp	-	-	-	-	-		Included above
2016 CO Interest Expense	-	-	-	-	-		Included above
2016 Refund CO Utili Int	-	-	-	-	-		Included above
2016A CO Interest	-	-	-	-	-		Included above

City of Missouri City  
 Groundwater Reduction Plan  
 GRP Fee Analysis

Schedule 1  
 Five-Year Projection of Revenue Requirement

	2018	2019	2020	2021	2022	Inflation	Notes
	\$ 9,379,492	\$ 9,820,783	\$ 10,154,046	\$ 10,551,300	\$ 10,995,407		
<b>Revenue Off-Sets</b>							
GRP Pump Fees - RSWTP	\$ -	\$ -	\$ -	\$ -	\$ -		Removed from analysis
Water Sales - RSWTP	-	-	-	-	-		Removed from analysis
Interest Income	170,000	170,000	170,000	170,000	170,000		
Other Revenue	10,000	10,000	10,000	10,000	10,000		
	\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000		
Total Revenue Requirement	\$ 9,199,492	\$ 9,640,783	\$ 9,974,046	\$ 10,371,300	\$ 10,815,407		
	TRUE						

City of Missouri City  
Groundwater Reduction Plan  
GRP Fee Analysis

Schedule 2  
Pumpage Projection

Pumpage Summary	2016 Actual Use	2017 Actual Use	2018	2019	2020	2021	2022	Average Use Assumption	% of total use that's surface water	Notes
Sienna Plantation MUD 1-Ground Water	22,066,000	25,375,000	24,990,210	26,315,393	27,710,848	29,180,302	30,727,677			
Sienna Plantation MUD 1-Surface Water	1,283,174,400	1,452,161,800	1,430,141,035	1,505,978,682	1,585,837,854	1,669,931,806	1,758,485,100		98%	
Total Sienna Plantation	1,305,240,400	1,477,536,800	1,455,131,245	1,532,294,075	1,613,548,703	1,699,112,108	1,789,212,777	13,445		
Fort Bend MUD 46 - Groundwater	130,581,000	33,548,000	7,261,708	7,537,968	7,824,739	8,122,419	8,431,424			
Fort Bend MUD 46 - Surface Water	-	98,227,500	128,014,967	132,885,101	137,940,513	143,188,249	148,635,629		95%	Based on last 9 months of 2017
Total Fort Bend 46	130,581,000	131,775,500	135,276,674	140,423,069	145,765,251	151,310,669	157,067,053	14,461		
Fort Bend MUD 115 - Groundwater	523,134,000	142,416,000	20,854,739	21,137,386	21,425,334	21,718,685	22,017,538			
Fort Bend MUD 115 - Surface Water	-	429,474,400	457,395,587	463,594,720	469,910,142	476,344,033	482,898,618		96%	Based on last 9 months of 2017
Total Fort Bend 115	523,134,000	571,890,400	478,250,326	484,732,105	491,335,476	498,062,718	504,916,155	19,506		MUD #129 gets water from MUD #115
Palmer Plantation MUD #1	153,883,000	100,633,000	128,198,900	129,222,767	130,256,901	131,301,413	132,356,413	10,536		MUD#49 gets water from Palmer MUD #1
Palmer Plantation MUD #2	96,935,000	140,359,000	105,758,712	105,929,566	106,100,696	106,272,102	106,443,786	10,640		
First Colony MUD 9	342,844,000	341,638,000	326,960,805	327,481,652	327,963,266	328,465,648	328,968,799	10,204		
Fort Bend MUD #23	460,382,000	464,392,000	487,316,128	504,798,571	523,273,521	542,822,040	563,532,867	7,548		MUD #24 gets water from MUD #23
Fort Bend #24	0	0	0	0	0	0	0	-		MUD #24 gets water from MUD #23
Fort Bend MUD 26	124,219,000	120,310,000	126,067,392	128,151,960	130,270,997	132,425,073	134,614,767	6,629		
Fort Bend MUD 42	196,919,000	178,664,000	180,004,800	180,467,509	180,931,407	181,396,498	181,862,785	10,897		
Fort Bend #49	0	0	0	0	0	0	0	-		MUD#49 gets water from Palmer MUD #1
Fort Bend #129	0	0	0	0	0	0	0	-		MUD #129 gets water from MUD #115
Fort Bend MUD 149	33,316,000	0	79,107,251	79,107,251	79,107,251	79,107,251	79,107,251	5,503		
Blue Ridge West MUD	193,368,000	244,550,000	220,532,241	220,532,241	220,532,241	220,532,241	220,532,241	7,267		
Meadowcreek Municipal Utility District	78,932,000	72,855,000	73,119,402	73,119,402	73,119,402	73,119,402	73,119,402	7,177		
Lake Shore Harbour	5,031,700	2,665,100	2,665,100	2,665,100	2,665,100	2,665,100	2,665,100	222,092		
Manors POA	2,823,500	1,044,200	1,044,200	1,044,200	1,044,200	1,044,200	1,044,200	87,017		
Mustang Bayou - MC	295,929,000	307,552,000	324,474,044	350,475,505	378,560,571	408,896,211	441,662,773	9,268		
Quail Valley Utility District	466,082,000	457,277,000	484,138,273	492,575,564	501,159,896	509,893,831	518,779,976	10,438		
Estates of Silver Ridge	802,500	845,300	748,000	748,000	748,000	748,000	748,000	62,333		
Thunderbird Utility District	202,338,000	238,979,000	225,374,505	227,394,929	229,433,467	231,490,279	233,565,530	9,521		
Lake Olympia	0	0	0	0	0	0	0	-		
Total	4,612,760,100 TRUE	4,852,966,300 TRUE	4,834,167,997	4,981,143,466	5,135,816,345	5,298,664,784	5,470,199,876			
Total Ground Water	3,329,585,700	2,873,102,600	2,818,616,409	2,878,684,963	2,942,127,837	3,009,200,695	3,080,180,530			
Total Surface Water	1,283,174,400	1,979,863,700	2,015,551,588	2,102,458,503	2,193,688,508	2,289,464,089	2,390,019,346			
Total Water	4,612,760,100	4,852,966,300	4,834,167,997	4,981,143,466	5,135,816,345	5,298,664,784	5,470,199,876			
Conversion Percentage	27.82%	40.80%	41.69%	42.21%	42.71%	43.21%	43.69%			

City of Missouri City  
 Groundwater Reduction Plan  
 GRP Fee Analysis

Schedule 3  
 Pumpage Fee Projection

	2018	2019	2020	2021	2022	Notes
Total Cost of Surface Water	\$ 9,199,492	\$ 9,640,783	\$ 9,974,046	\$ 10,371,300	\$ 10,815,407	
Total Cost of Groundwater	<u>1,324,750</u>	<u>1,393,571</u>	<u>1,467,013</u>	<u>1,545,470</u>	<u>1,629,382</u>	
Total System Cost	\$ 10,524,242	\$ 11,034,354	\$ 11,441,058	\$ 11,916,771	\$ 12,444,789	
Total Estimated Metered Volume (Ground + Surface)	4,834,167,997	4,981,143,466	5,135,816,345	5,298,664,784	5,470,199,876	
Surface Water Pumpage Fee	\$ 2.18	\$ 2.22	\$ 2.23	\$ 2.25	\$ 2.28	
Less Groundwater User's Fee	<u>(0.47)</u>	<u>(0.48)</u>	<u>(0.50)</u>	<u>(0.51)</u>	<u>(0.53)</u>	
Groundwater Pumpage Fee	\$ 1.71	\$ 1.73	\$ 1.73	\$ 1.74	\$ 1.75	

City of Missouri City  
 Groundwater Reduction Plan  
 GRP Fee Analysis

Schedule 4  
 Reserve Analysis

Total Fund 540 Reseves \$ 10,648,568

Operating Fund reserves	2017 Actual	2018	2019	2020	2021	2022	Notes
Budgeting Operating Expense	\$	4,046,051	\$ 4,412,412	\$ 4,755,174	\$ 5,137,198	\$ 5,563,744	Does not include debt service.
6 Month Reserve Target	\$	2,023,026	\$ 2,206,206	\$ 2,377,587	\$ 2,568,599	\$ 2,781,872	
Projected end of year balance available for Op Fund	\$	2,023,026	\$ 2,206,206	\$ 2,377,587	\$ 2,568,599	\$ 2,781,872	
Variance	\$	-	\$ 183,180	\$ 171,381	\$ 191,012	\$ 213,273	
Additional Contribution	\$	-	\$ 183,180	\$ 171,381	\$ 191,012	\$ 213,273	

Debt Service Reserve Fund	2018	2019	2020	2021	2022	Notes	
Reserve Target (Highest Annual Payment)	\$	5,333,441	\$ 5,333,441	\$ 5,333,441	\$ 5,333,441	\$ 5,333,441	
Projected end of year balance available for debt service	\$	3,734,446	\$ 3,894,345	\$ 4,054,245	\$ 4,214,144	\$ 4,374,044	\$ 4,533,943
Variance	\$	1,598,995	\$ 1,439,095	\$ 1,279,196	\$ 1,119,296	\$ 959,397	
Additional Contribution	\$	159,899	\$ 159,899	\$ 159,899	\$ 159,899	\$ 159,899	

Capital Replacement Reserve	2018	2019	2020	2021	2022	Notes	
Reserve Target (Highest Annual Payment)	\$	3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	
Projected end of year balance, avail for Cap Replacement Reserve	\$	3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	Amount per R. Gadbois
Variance	\$	-	\$ -	\$ -	\$ -	\$ -	
Additional Contribution	\$	-	\$ -	\$ -	\$ -	\$ -	

New Capital Projects Reserve	2018	2019	2020	2021	2022	Notes	
Projected end of year balance, avail for Cap Replacement Reserve	\$	1,891,096	\$ 1,891,096	\$ 1,891,096	\$ 1,891,096	\$ 1,891,096	



**CITY COUNCIL  
AGENDA ITEM COVER MEMO**

**August 19, 2019**

**To:** Mayor and City Council  
**Agenda Item:** 2(c) Presentation and discussion on proposed FY 2020 annual budget.  
**Submitted by:** Anthony Snipes, City Manager

**SYNOPSIS**

Staff recommends the City Council receive a presentation of the Proposed Fiscal Year 2020 Annual Budget.

**STRATEGIC PLAN 2019 GOALS ADDRESSED**

- Maintain a financially sound city

**BACKGROUND**

An overview of the Proposed Fiscal Year 2020 Annual Budget, including notable highlights, will be presented. This will be Council's first opportunity to discuss, provide direction and receive public comment on the Proposed Budget. The second opportunity to present, discuss, and receive public comment on the Annual Budget will be at the September 3, 2019 City Council meeting. The third opportunity will be at the September 16, 2019 City Council meeting, at which time City Council may consider formal adoption of the recommended Fiscal Year 2020 Budget. Per the City Charter, the Fiscal Year 2020 Budget Ordinance must be adopted by September 25, 2019 and shall require an affirmative vote of at least a majority of all members of the whole council.

**BUDGET/FISCAL ANALYSIS**

**Purchasing Review: N/A**  
**Financial/Budget Review: Allena J Portis, Director of Financial Services**

**SUPPORTING MATERIALS**

1. Proposed Fiscal Year 2020 Annual Budget - *Forthcoming*
2. PowerPoint Presentation – *Forthcoming*

**STAFF'S RECOMMENDATION**

Staff recommends the City Council receive a presentation of the Proposed Fiscal Year 2020 Annual Budget.

**City Manager Approval: Anthony J. Snipes, City Manager**