

# TOWN OF ARGYLE WASTEWATER SYSTEM HISTORY, CONTEXT, NEEDS, RATES



Town Council  
Briefing  
August 14, 2018

# SYSTEM HISTORY

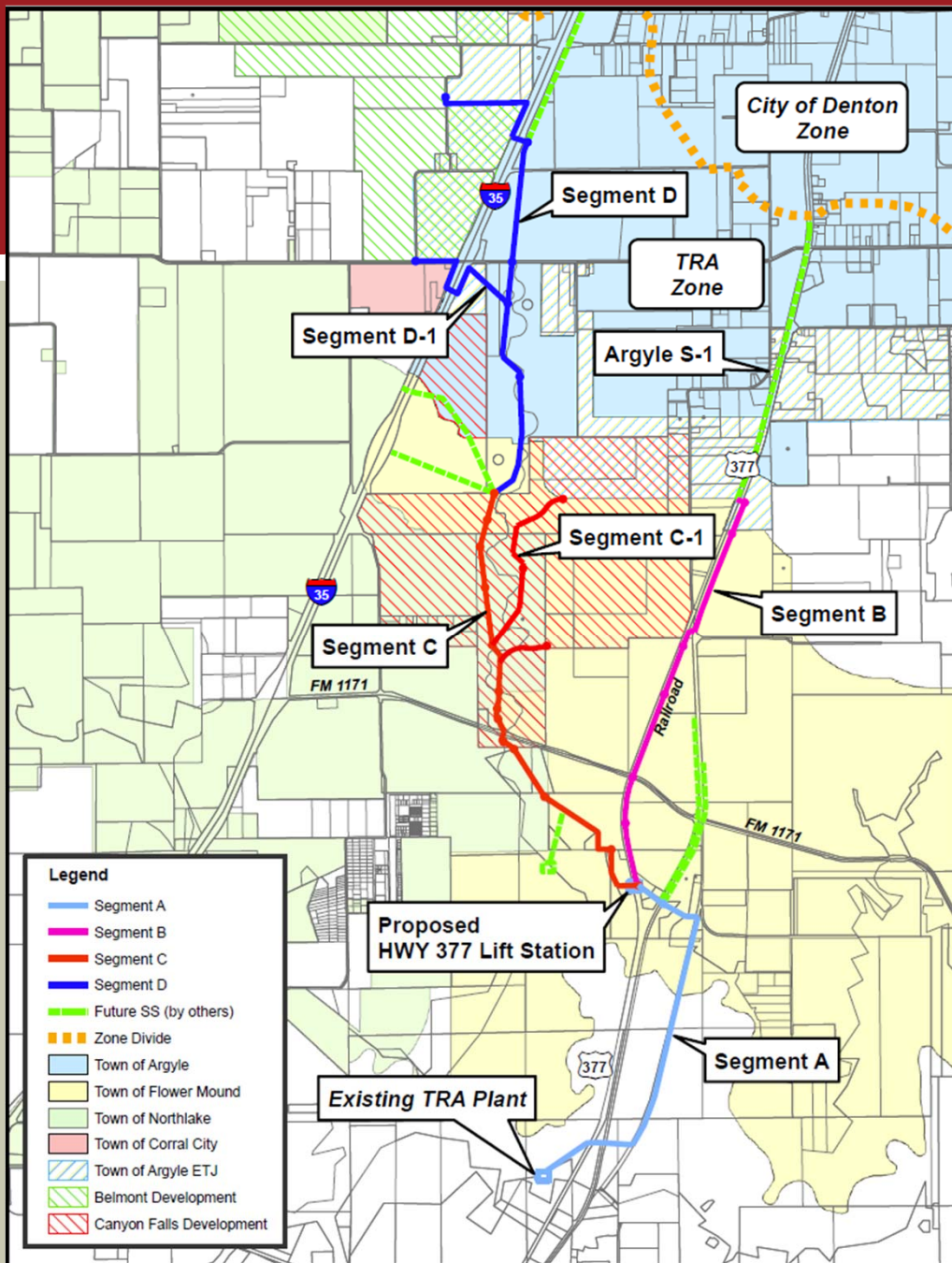
- Town of Argyle originally had no sewer – all septic
- In 1991, first sanitary sewer line installed to serve the Argyle Elementary School
  - Contracted with the City of Denton to treat wastewater
- In 1996, installed the sanitary sewer lines to include:
  - Old Justin Rd.
  - Tanglewood Mobile Home Park
  - US 377
  - Johnson Acres
  - Old Town
  - Settlers Point
  - W. Front Street

## SYSTEM HISTORY (CONT.)

- In 2001, the City of Denton constructed the Graveyard Branch Interceptor to provide additional capacity to Argyle and include service to the Country Lakes subdivision
- In 2005, an additional phase came online to service Liberty Christian School, Integrity Park and Cross Timbers Church.

## SYSTEM HISTORY (CONT.)

- In 2008, entered into a 4-party agreement with the Trinity River Authority (TRA) and the Towns of Northlake and Flower Mound. Canyon Falls and Belmont (Harvest) were also participants.
- The S-1 Sanitary Sewer Line under construction will allow for sanitary sewer service along the southern end of U.S. 377, redirecting flows to the TRA and reducing the amount of wastewater being pumped to the Denton Graveyard Branch Line



# SANITARY SEWER SYSTEM

- **6 lift stations - 5 currently online:**
  - **LS 1 – Crawford (1991) – offline at this time**
  - **LS 2 – Peyton Place (1996)**
  - **LS 3 – Frenchtown (1996) – proposed to take offline by 2021**
  - **LS 4 – Liberty Christian (2005) – to be removed when S-1 line is completed**
  - **LS 5 – The Oaks (2015)**
  - **LS 6 – 5T (2016)**
  - **LS 7 – Waterbrook (pending)**

# FACTS

	<b>1991</b>	<b>1996</b>	<b>2001</b>	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2018</b>
<b>Miles of Line</b>	<b>3.27</b>	<b>9.64</b>	<b>13.29</b>	<b>14.47</b>	<b>15.1</b>	<b>17.65</b>	<b>31.26*</b>
<b>No. of Lift Stations</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>
<b>Manholes</b>	<b>3</b>	<b>128</b>	<b>207</b>	<b>215</b>	<b>228</b>	<b>271</b>	<b>554*</b>

**\*Includes Harvest Townside Phase 1 & 2 and excludes proposed additional Canyon Falls phases**

# FUTURE SYSTEM NEEDS

- **SCADA System – allows employees to check lift stations remotely by computer or smart phone including: resetting alarms, setting pumps and receiving data in real time**
  - **Currently installed on LS 6 will be installed on LS 7**
  - **In design for LS 2**
  - **Needed for LS 5 – approximately \$35,000**
  - **Not planned for LS 3 as it is proposed to be taken offline**

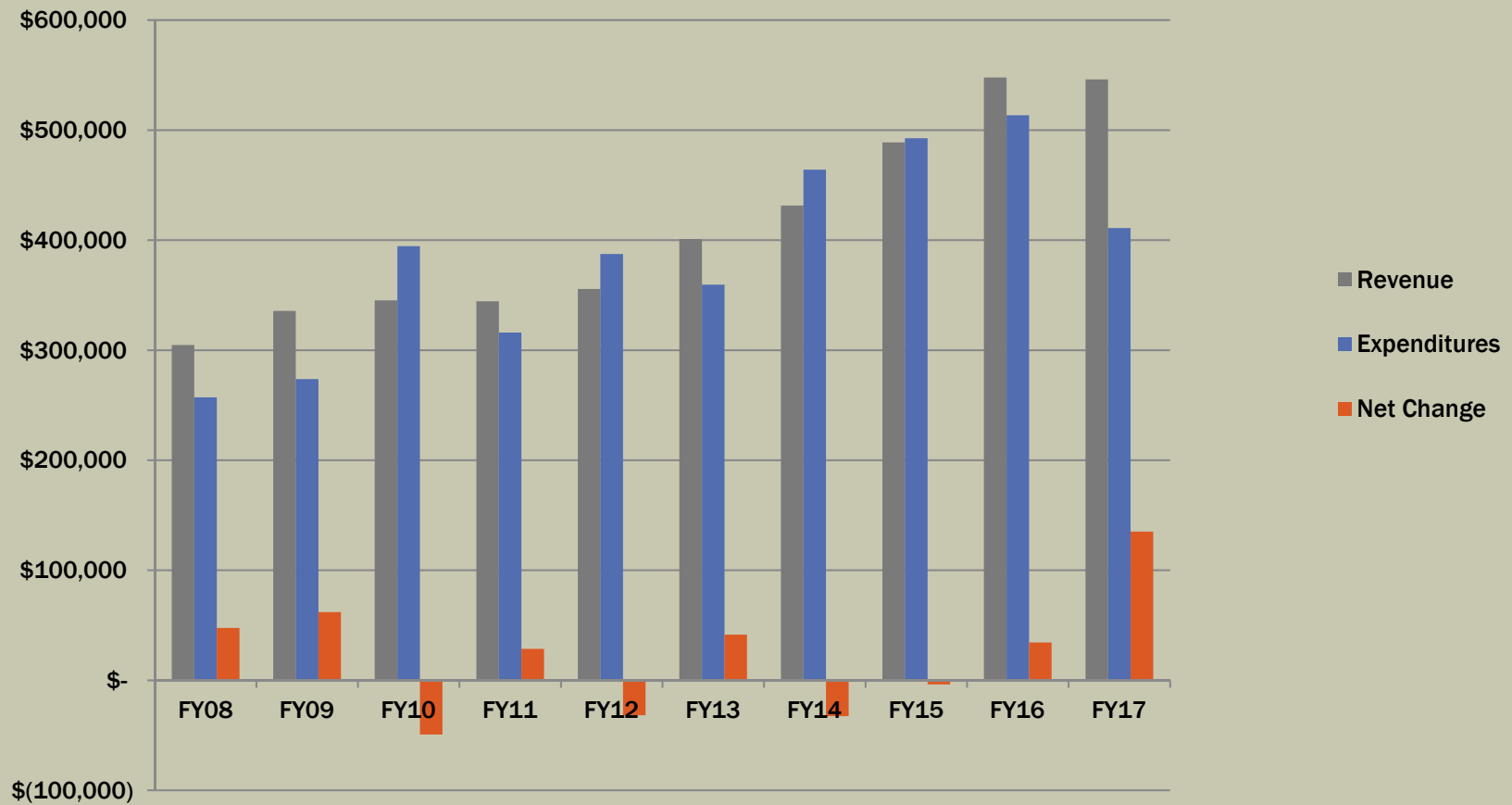
## **FUTURE SYSTEM NEEDS (CONT.)**

- **Meter for Corral City – approximately \$35,000**
  - Meter incoming wastewater flow to provide actual measurement of flow
  - Currently taking readings off water meter which is not as accurate, but have relatively small flows at this time. This will become more urgent as flows increase.
- **Take LS 3 offline and direct flows to TRA – approximate cost of \$380,000**
  - Provide for connection to the S-1 Sewer line from the Frenchtown lift station directing more flows to TRA and eliminating maintenance costs associated with a lift station.

# OTHER CONSIDERATIONS

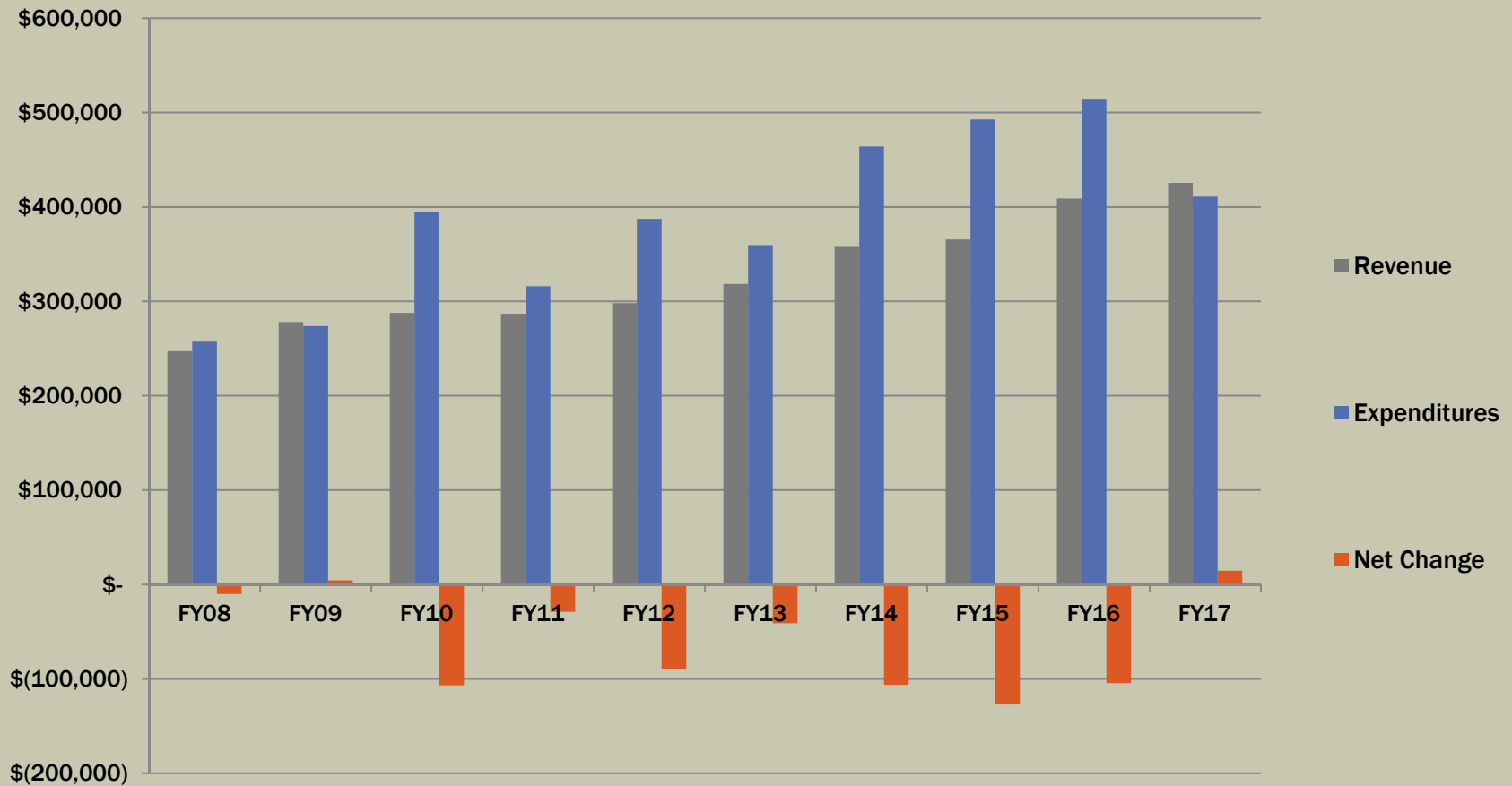
- **Emergency Generators – approximately \$75,000 each**
  - **Installed on LS 4, 5, 6 and 7**
  - **LS 2 will utilize the emergency generators that are removed from LS 4 when it is taken offline**
  - **Not planned for LS 3 as it is proposed to be taken offline**

# WASTEWATER ACTUAL (WITH SUPPORTING TRANSFERS) FY08-FY17



**Note: FY17 Salaries and related expenditures were transferred to the General Fund.**

# WASTEWATER ACTUAL (TRANSFERS REMOVED) FY08-FY17



**Note: FY17 Salaries and related expenditures were transferred to the General Fund.**

# HISTORY OF RATE STUDIES

Council Date	Findings/Action	Year	Rec.	Rate if adjusted per consultant		Equiv. Rate per 5,000/gal
			Increase	Base Rate	Base	
Pre-Feb, 2009				\$ 33.81		
Feb-09	The wastewater enterprise fund was in good financial condition as of 9/30/17. However, due to planned system improvements, the financial conditions will deteriorate without rate increases starting on or about 1/1/09. The WW fund ending FY07 with \$77,044 in operating reserves (136 days). We have incorporated two planned debt issues, one for \$580,000, and another for \$742,400 to fund the design and construction of the Town's proportional share of Segment B of the TRA Regional wastewater improvements. These bond sales will necessitate rate increases over the next four years.	2009	6%	\$ 35.84	\$ 37.99	\$ 2.60
		2010	6%	\$ 37.99	\$ 40.27	\$ 2.76
		2011	6%	\$ 40.27	\$ 42.69	\$ 2.92
		2012	7%	\$ 42.69	\$ 45.67	\$ 3.13
			*recommended rates for 2010-2012 were never implemented			
Mar-12	Engaged McClain for Adequacy Review. Got stalled. Trent helped resurrect when interest in S-1 raised following EDC New Horizon seminar.					
Nov-12	Council received presentation from Bob that included scenario for S-1 costs as prepared by Trent. A specific request for rate increases was not made; presentation was information only.	2013	1%	\$ 35.84	\$ 36.20	\$ 2.60
		2014	1%	\$ 36.20	\$ 36.56	\$ 2.63
		2015	1%	\$ 36.56	\$ 36.93	\$ 2.65
		2016	1%	\$ 36.93	\$ 37.30	\$ 2.68
		2017	1%	\$ 37.30	\$ 37.67	\$ 2.71
		2018	2%	\$ 37.67	\$ 38.42	\$ 2.76
		2019	3%	\$ 38.42	\$ 39.38	\$ 2.83
			*recommended rates for 2010-2019 were never implemented			
Apr-17	NewGen reviews findings of rate study at Council meeting, no action taken or direction provided (4 of 6 new Council Members/Mayor at May 2017 meeting) Options provided included \$1 increase in base bill; \$0.10 increase on volume rate; commercial bill all volumes and increase of tax rate by one-half penny.					
Aug-18	Staff presents proposed wastewater increase.			\$ 36.90	\$ 3.45	\$ 47.25

# HISTORY OF RATE STUDIES

Year	Rec. Increase	Rate if adjusted per consultant			Equiv. Rate per 5,000/gal
		Base Rate	Base	Volume	
		\$ 33.81			
2009	6%	\$ 35.84	\$ 37.99	\$ 2.60	
2010	6%	\$ 37.99	\$ 40.27	\$ 2.76	
2011	6%	\$ 40.27	\$ 42.69	\$ 2.92	
2012	7%	\$ 42.69	\$ 45.67	\$ 3.13	\$ 55.05

\*recommended rates for 2010-2012 were never implemented

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2019	3%	\$ 38.42	\$ 39.38	\$ 2.83	\$ 47.87

\*recommended rates for 2010-2019 were never implemented

# PROPOSED CHANGES

- Staff analyzed historical usage and discussed future development plans with major developers (The Lakes of Argyle, Waterbrook, 5T Ranch and Harvest)
- Analyzed several scenarios in an attempt to identify a rate structure that will support current expenditures while being mindful of the impact to current residents.
- Based on standard 5,000 gallon measurement:
  - Current rate for 5,000 gallons is \$43.64
  - Proposed rate for 5,000 gallons is \$47.25
  - Increase of 8.3% based on 5,000 gallons equal to \$3.61
- Average household usage in Argyle is 6,200 gallons per month.
  - Current rate for average household \$46.76
  - Proposed rate for average household \$51.39
  - Increase of 9.9% on average household equal to \$4.63

# CURRENT RATES (2009)

## RESIDENTIAL, ALL AREAS

Residential monthly service fee\* \$35.84

- (inclusive of first 2,000 gallons from Argyle Water Supply Corp.)

Gallonage charge per 1,000 gallons thereafter \$2.60

Flat monthly rate with private water source: \$43.60

\*Water use averaged for months of December, January & February

## COMMERCIAL, ALL AREAS

Commercial monthly service fee\* \$35.84

- (inclusive of first 2,000 gallons from Argyle Water Supply Corp.) \$3.42

Flat monthly rate with private water source: \$67.82

\*Water use averaged for months of December, January & February

# PROPOSED RESIDENTIAL RATES

## RESIDENTIAL, INSIDE TOWN LIMITS OR UTILITY DISTRICT

Residential monthly service fee\* \$36.90

- (inclusive of first 2,000 gallons from Argyle Water Supply Corp.)

Gallonage charge per 1,000 gallons thereafter \$3.45

Private water sources require the installation of a meter.

\*Water use averaged for months of December, January & February

## RESIDENTIAL, OUTSIDE TOWN LIMITS AND UTILITY DISTRICT

Residential monthly service fee\* \$55.35

- (inclusive of first 2,000 gallons from Argyle Water Supply Corp.)

Gallonage charge per 1,000 gallons thereafter \$5.18

Private water sources require the installation of a meter.

\*Water use averaged for months of December, January & February

# PROPOSED COMMERCIAL RATES

## COMMERCIAL, INSIDE TOWN LIMITS OR UTILITY DISTRICT

Commercial monthly service fee (based on actual usage) **\$47.97**

- (inclusive of first 2,000 gallons from Argyle Water Supply Corp.) **\$4.49**

Private water sources require the installation of a meter.

## COMMERCIAL, OUTSIDE TOWN LIMITS AND UTILITY DISTRICT

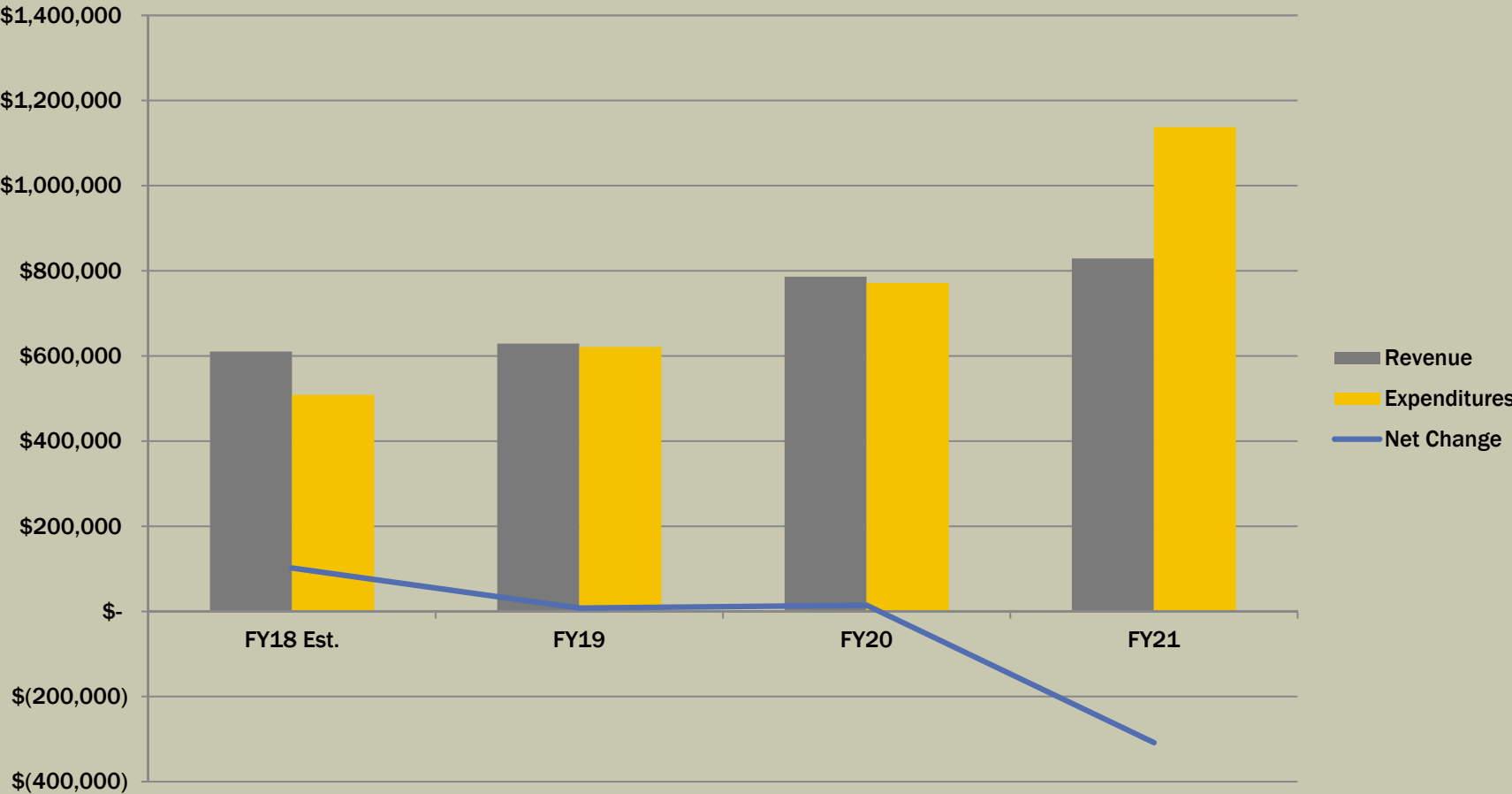
Commercial monthly service fee (based on actual usage) **\$71.96**

- (inclusive of first 2,000 gallons from Argyle Water Supply Corp.) **\$6.74**

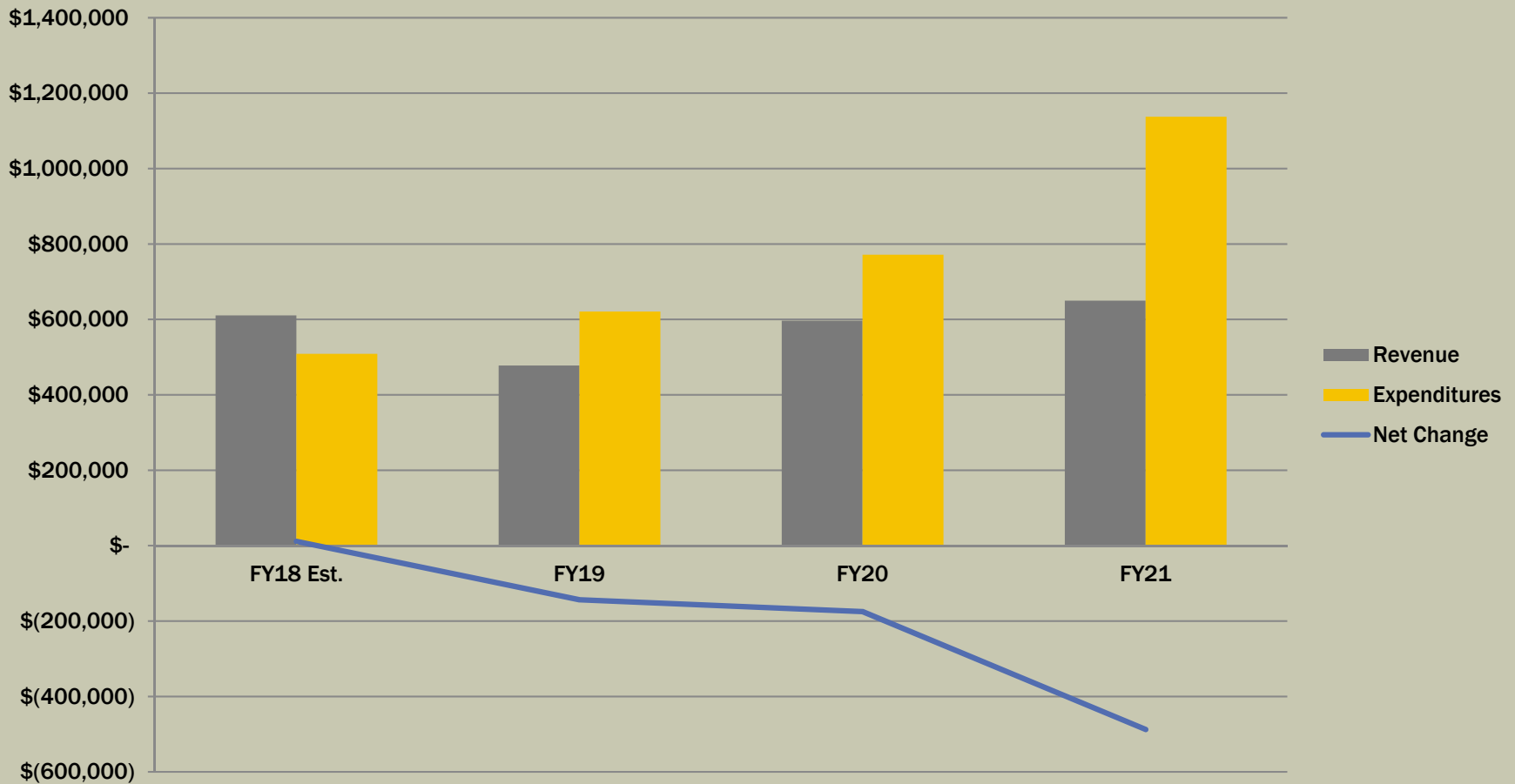
Gallonage charge per 1,000 gallons thereafter

Private water sources require the installation of a meter.

# FORECAST WITH PROPOSED CHANGES

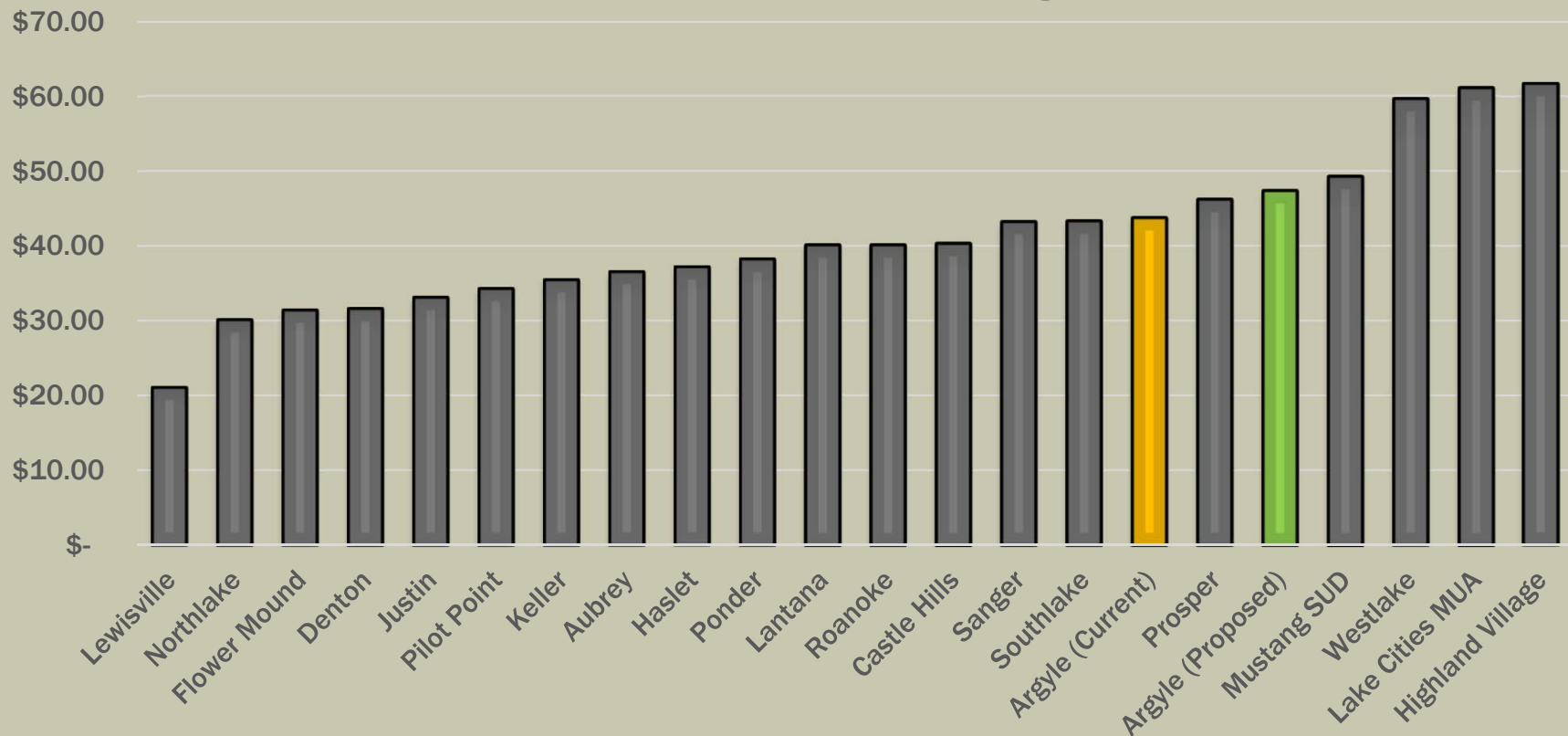


# FORECAST WITH NO RATE CHANGES



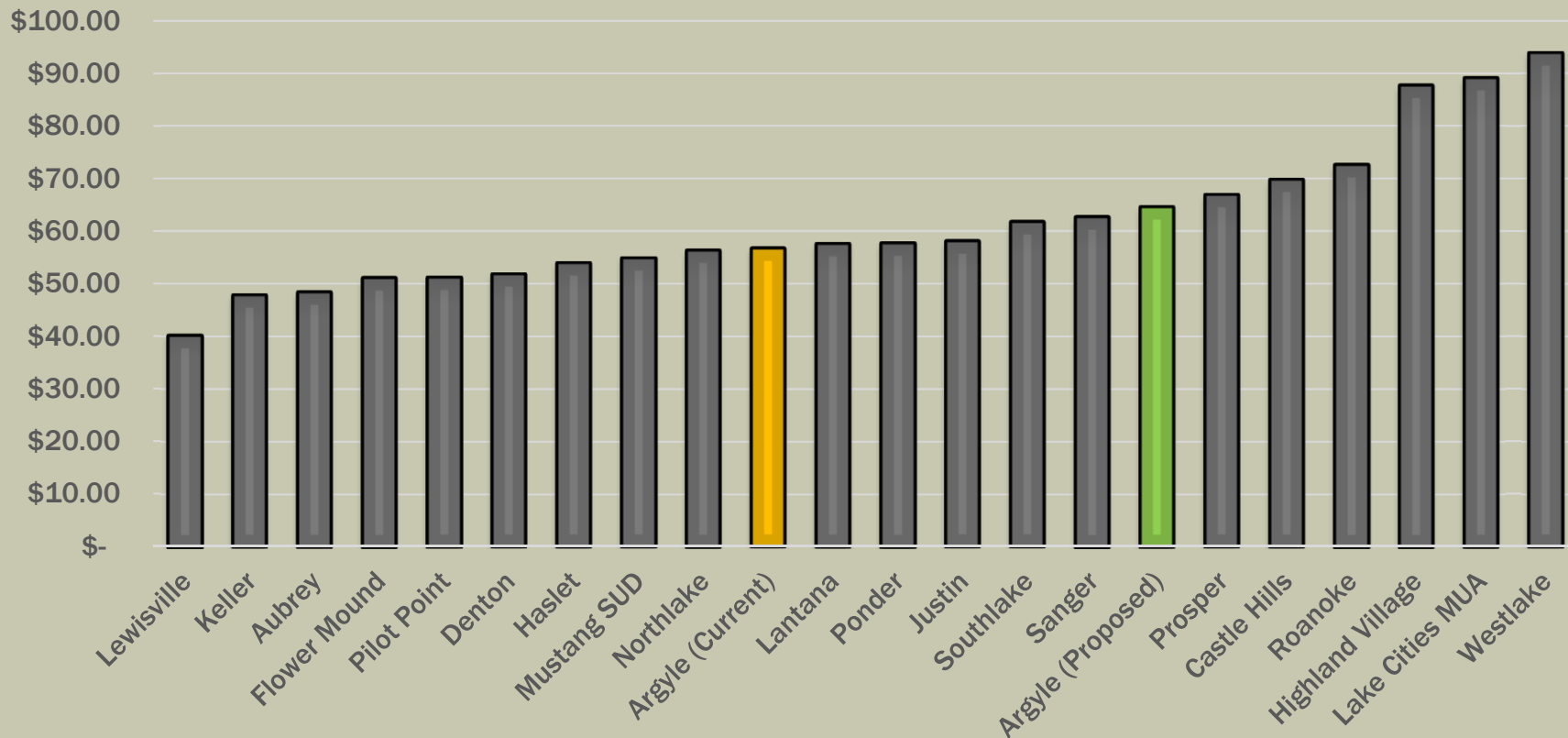
# RESIDENTIAL RATE COMPARISON

## Residential Rate per 5,000 gallons



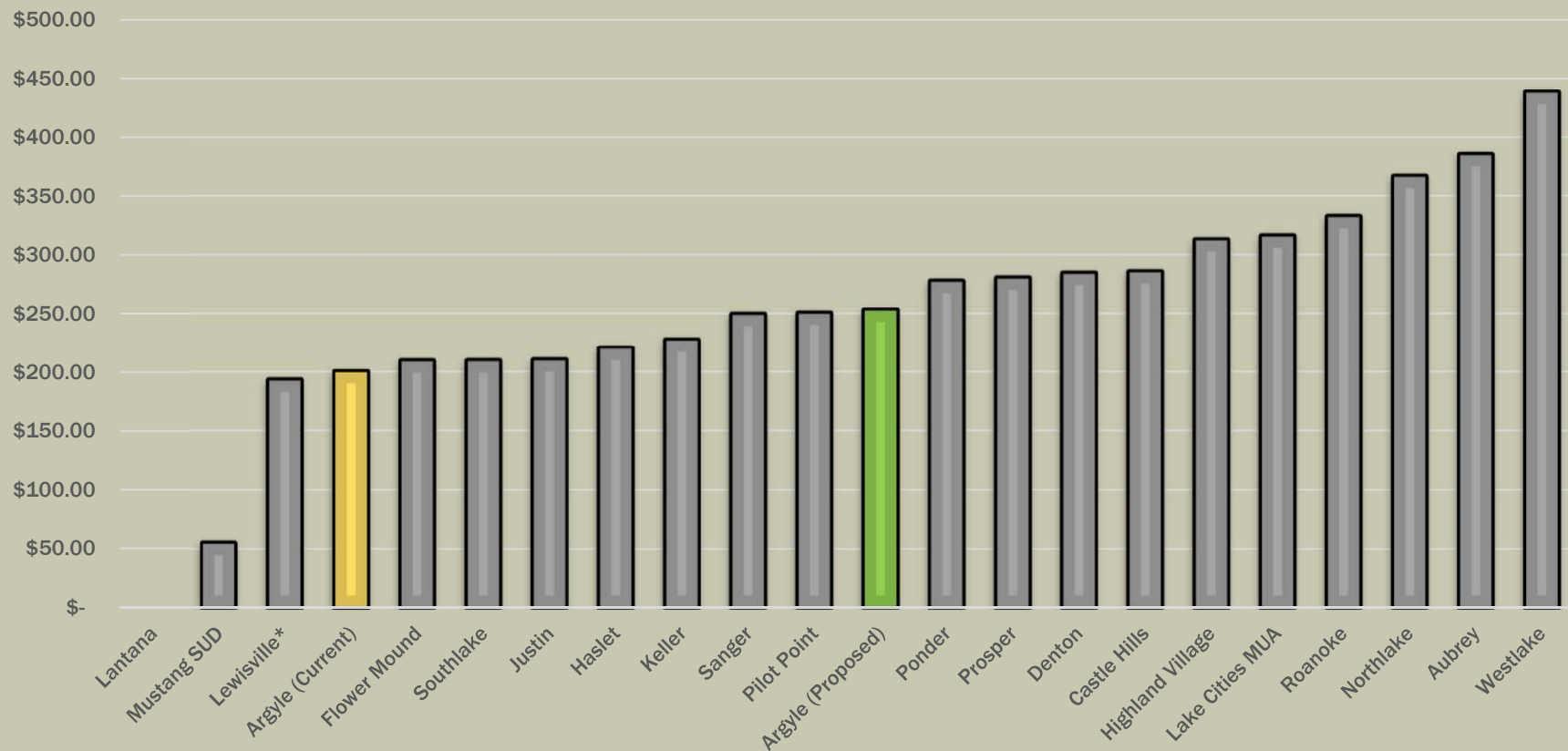
# RESIDENTIAL RATE COMPARISON

## Residential Rate per 10,000 gallons



# COMMERCIAL RATE COMPARISON

Commercial Rate per 50,000 gallons



# HISTORICAL INCREASE BY ENTITY

Entity	% increase since 2009		Entity	% increase since 2009
Argyle (current)	0%		Lantana	73.3%*
Aubrey	53.8%		Mustang SUD	63.8%*
Denton	45.2%		Pilot Point	37.8%
Flower Mound	26.2%		Ponder	27.5%
Haslet	103.2%		Prosper	58.3%
Highland Village	44.1%		Roanoke	158.1%
Justin	6.5%		Sanger	79.6%
Keller	25.6%		Southlake	22.9%
Lake Cities MUA	66.2%*		Westlake	50.3%

\*Indicates increase since 2012, no 2009 data was available

# STAFF RECOMMENDATIONS

- Recommend adoption of the proposed rates at the August 28, 2018 Council Meeting
- Staff will send mailers to customers by the first week of September advising of increase and reasons an increase is needed.
- Educational material to be posted on website and social media.
- Start with October 1, 2018 usage.

**QUESTIONS???**