

**Jay Joyce** 

**Expergy** 

Water Rate Study

May 2020



## Agenda

- Introduction
- Overview of Water Ratemaking
- Revenue Requirements (Costs)
  - Operations & Maintenance Expenses
  - Capital Costs: Debt Service & Rate-Funded CapEx
- Projected Revenues at Current Rates
- Projected Excess or Shortfall of Revenues versus Costs
- Rate Design
  - Base Rates
  - Surcharges



## Introduction

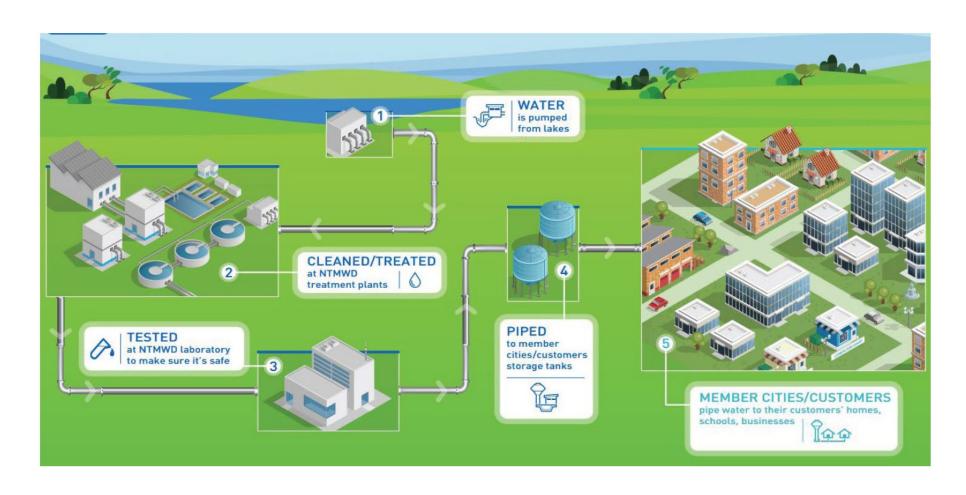
- Expergy
- The Carlton Law Firm
- Why We're Here
  - Pending Rate Appeal at Public Utility Commission of Texas
  - Periodic Rate Studies are Industry Best Practice
- Tonight's Objectives
  - Explain how water rates are developed
  - Present the Water Rate Study for Bear Creek
     SUD
  - Respond to applicable questions from the pending Rate Appeal



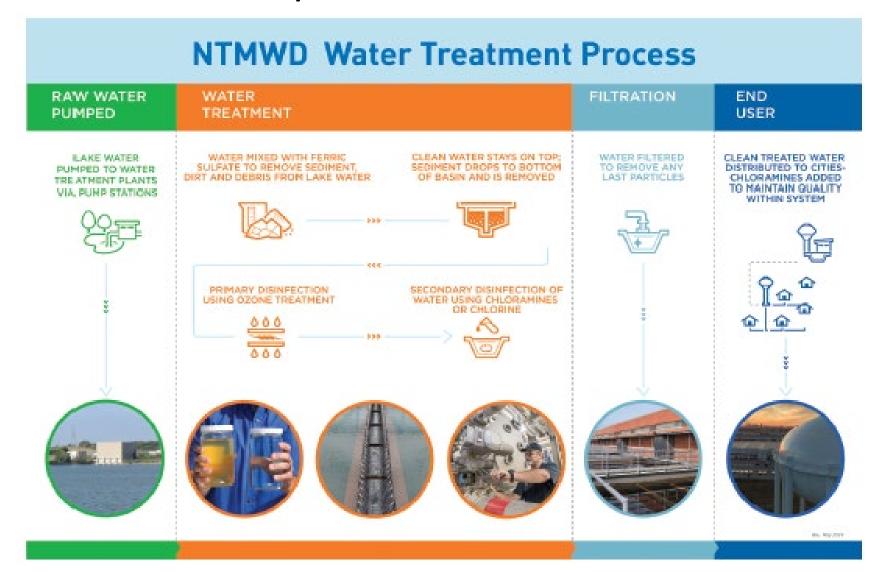
## NTMWD Water System

#### **GETTING WATER TO YOU**

**Shared Regional Systems Serves 80 North Texas Communities** 



## NTMWD Water System



## Overview of Water Ratemaking— Components of a Rate Study

- Revenue Requirements (Costs)—How much money do you need?
- Revenues at Current Rates—How much money do you expect to make?
- Under recovery or Overrecovery (Excess Revenue or Revenue Shortfall)—Do you need to increase or reduce rates?
- Rate Design—What's your rate structure to recover costs? Base monthly fees? Volume rates per thousand gallons of water sold? Miscellaneous charges?

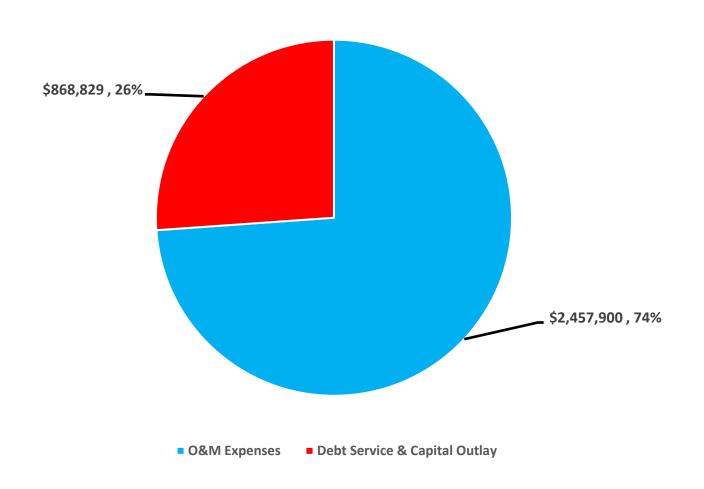
## **Public Utility Commission Requirements**

The PUCT ratemaking requirements are more restrictive than your regular budgeting guidelines

For example, adjustments to costs must be <u>known</u> and <u>measurable</u> to be included in rates at the PUCT

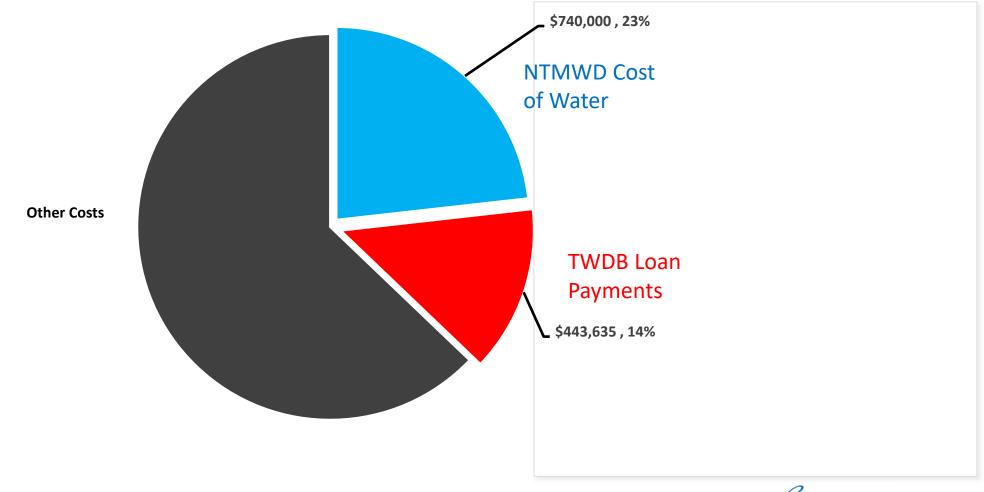


# Revenue Requirements (Costs) Two Categories

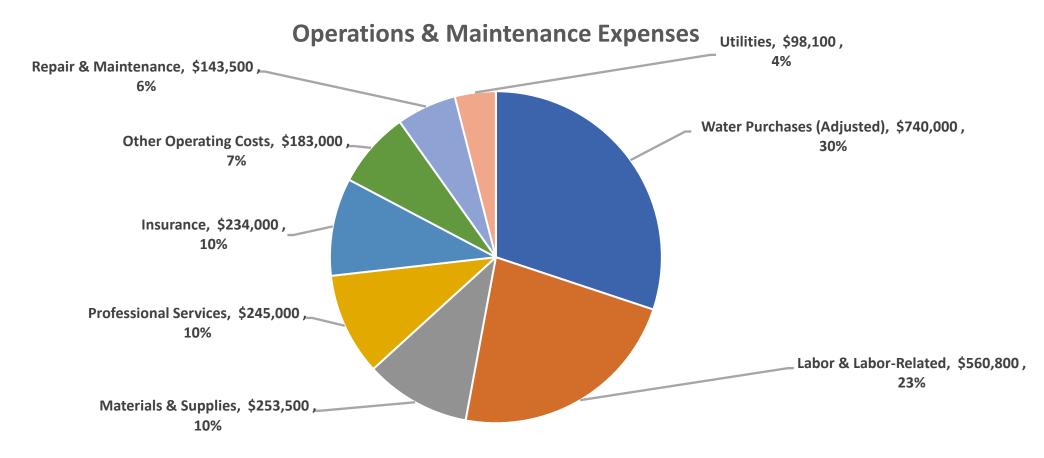


- Operations &
   Maintenance Expenses
   (2020 Budget)
- 2. Capital: Debt Service
  (Principal + Interest +
  Reserve) for Capital
  Costs financed with
  Loans (2020 Adjusted
  Budget) + Rate-Funded
  Capital Outlays

NTMWD Cost of Water and TWDB Loan Payments dominate Cost of Service



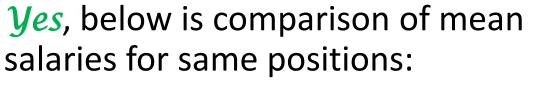
## Operations & Maintenance Expenses

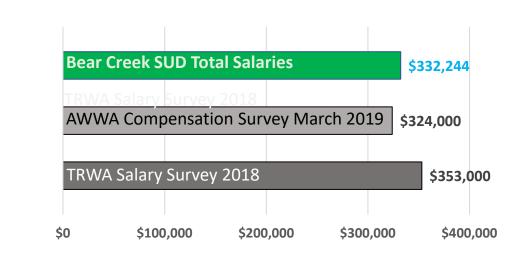




# Questions on Operations & Maintenance Expenses from Rate Appeal

#### Are salaries reasonable?





## Are staffing levels reasonable?

yes.

Year	Overtime Hrs Worked	FTE Equivalent
2017	880	0.42
2018	824	0.40

# Questions on Operations & Maintenance Expenses from Rate Appeal

## Additional notes on salary comparison:

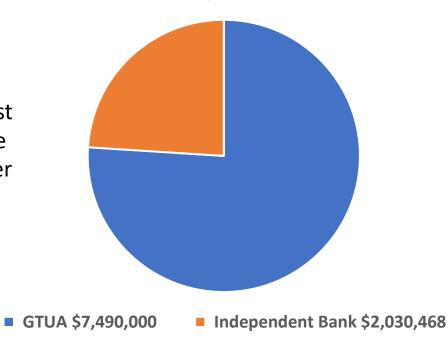
- The \$332,244 in BCSUD salaries was the amount budgeted for ALL salaries/wages for the entire 2019 fiscal year, excluding bonuses and overtime.
- Actual BCSUD salaries/wages in 2019 were \$338,407.45 which is gross pay of \$370k less overtime (\$21k) and bonus (\$11k) = \$338k.
- The TRWA average of \$353,000 also excludes bonuses and overtime.

Note that virtually all the labor costs are FIXED which will be important later when we discuss rate design...

#### **Debt Service**

#### **Debt Service = Principal + Interest + Reserve**

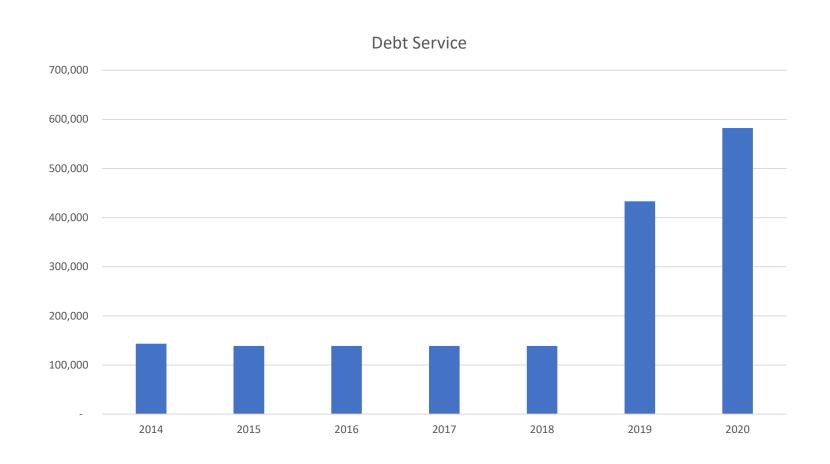
Debt service is beneficial because it spreads out the cost of capital projects over the life of the projects making it easier to fund reserves



Debt service allows for lower rates today vs cash funding capital projects

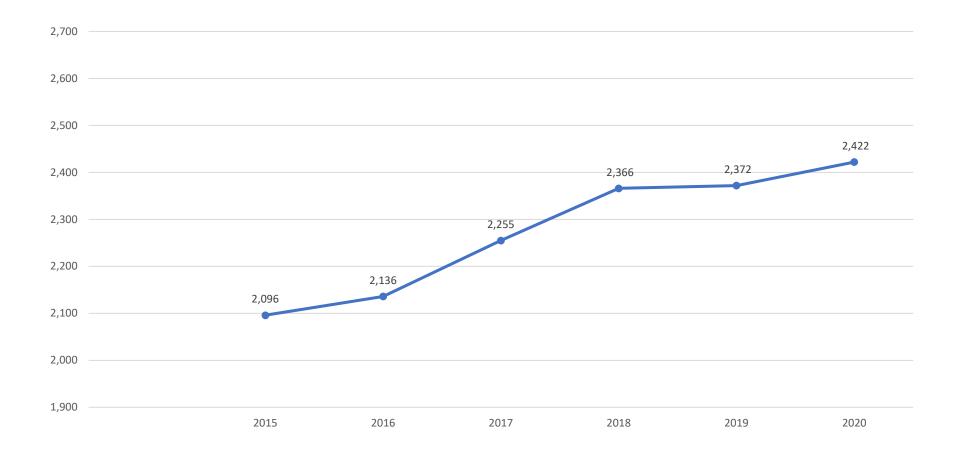
**Total Debt Service = \$583,635** 

## Debt Service has Increased over Historical Levels

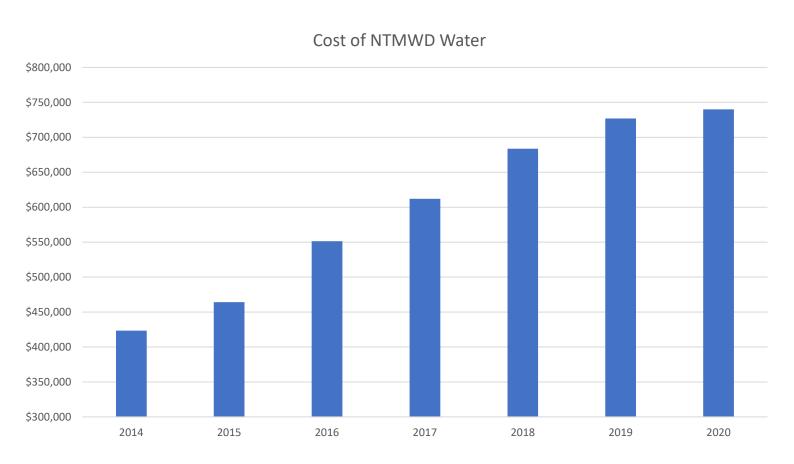


## Revenue Requirements vs Revenues

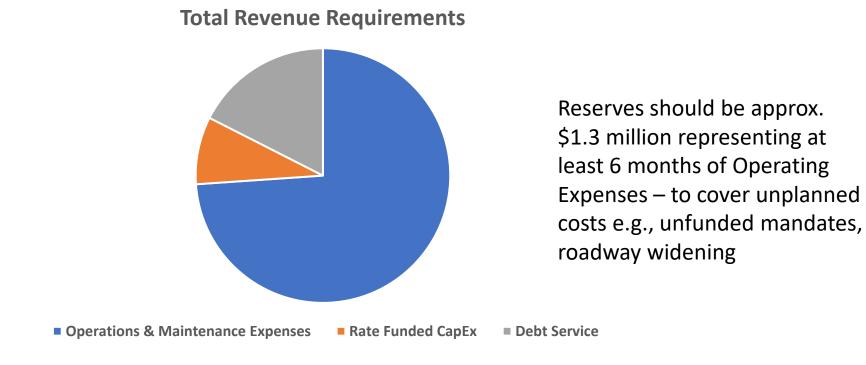
## Number of Connections at 12/31



## Total Revenue Requirements



## Total Revenue Requirements



## Revenues at Current Rates



#### **Base Revenues**

Minimum Monthly Bill based on Meter Size



#### **Volumetric Revenues**

**Inverted Block Rate Structure** 

- Volume Rate Increases as Usage Increases
- Promotes Conservation



#### **Miscellaneous Revenues**

Interest Income

**Tower Rent** 

**Meter Sales** 

**Account Transfer Fees** 

Late Fees

**Reconnect Fees** 

**Returned Check Fee** 



## 2020 Revenues at Current Rates

## Minimum Bill Revenues

<b>Meter Size</b>	Count	Base Rate	Revenues	<b>Base Revenues</b>
3/4"	2,368	\$35.00	\$994,511	95%
1"	35	\$60.00	\$24,996	3%
2"	18	\$98.00	\$21,614	2%
3"	1	\$186.00	\$2,279	
Totals	2,422		\$1,043,400	100%

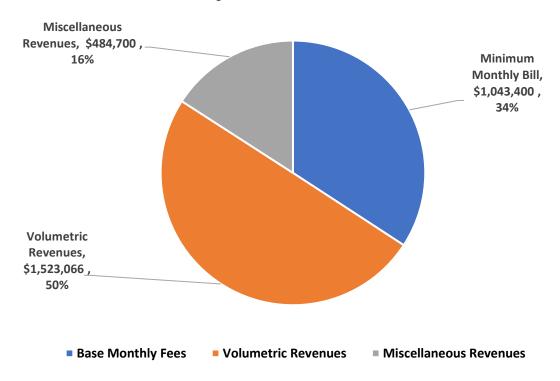
## 2020 Revenues at Current Rates

### Volume Revenues

Usage Block (Gallons/Month)	Projected Volume	Percent of Volume	Rate per 1000 Gallons	Volume Revenues	Percent Volume Revenues
0-5,000	110,006,315	55%	\$ 6.50	\$ 715,041	47%
5,001-10,000	36,775,963	18%	7.22	265,522	17%
10,001-15,000	14,799,323	7%	8.28	122,538	8%
15,001-25,000	12,760,131	6%	10.24	130,664	9%
25,001+	25,069,364	13%	11.54	289,300	19%
	199,411,095	100%		\$ 1,523,066	100%

## Projected Revenues for 2020 at Current Rates Total

#### **Total Projected Annual Revenues**



# Projected Excess or Shortfall of Revenues vs. Costs—Does the District need to adjust rates?



## Rate Design

#### **Base Rates**

- Minimum Monthly Bill revenues are a Fixed Revenue Source = 41% of rate revenues
- Volume Rate revenues are a Variable Revenue Source – 59% of rate revenues

But, approximately 88% of costs are FIXED and only 12% are VARIABLE

## Additional Cost of Rate Appeal – Above Normal Costs

\$300,000 divided by #customers =

\$125.00 per customer

## Some Additional Known Costs related to COVID-19

Suspended late fees

Suspended disconnect fees

• Estimated \$60,000 in additional costs to-date

## Thank You!

## Questions?

