



## North Texas Municipal Water District (NTMWD)

### Frequently Asked Questions: Wholesale Water Rates and Water Supply Contract

#### What is the role of the NTMWD in providing water to the region?

The North Texas Municipal Water District (NTMWD) is a non-profit, wholesale water provider serving many cities and communities northeast and east of Dallas. In the 1950s, ten cities joined together to form the NTMWD to collectively fund a regional water system that would support their future needs. Three other Member Cities joined years later. The cities recognized the benefit of sharing costs – saving each city the cost of independently funding complex pipelines and facilities to serve their residents. The Member Cities agreed to pay the same wholesale water rate regardless of size, location or proximity to the infrastructure or water sources.

#### What are the benefits of a regional system?

To serve a large region consisting of many cities or towns, the total costs of building and operating a water system can be spread over a greater population. If each individual city had to build, maintain and operate its own water system, they would have greater costs to be covered by fewer customers. The NTMWD regional system allows the cities to benefit from cost-sharing with other participating cities and communities to meet current and future residents' water service needs.

#### Who are the NTMWD Member Cities and Customers?

##### Water System Member Cities

Allen (1998)	McKinney	Rockwall
Farmersville	Mesquite	Royse City
Forney	Plano	Wylie
Frisco (2001)	Princeton	
Garland	Richardson (1973)	

##### Water System Customers

Ables Springs WSC	Gastonia-Scurry SUD	Nevada WSC
Bonham	GTUA	North Collin WSC
Caddo Basin SUD	Josephine	Parker
Cash SUD	Kaufman	Prosper
College Mound SUD	Kaufman Four-One	Rose Hill SUD
Copeville SUD	Lavon SUD	Rowlett
Crandall (Kaufman Four-One)	Little Elm	Sachse
East Fork SUD	Lucas	Seis Lagos UD
Fairview	Melissa	Sunnyvale
Fate	Milligan WSC	Terrell
Forney Lake WSC	Mt. Zion WSC	Wylie N.E. SUD
	Murphy	

WSC = Water Supply Corporation    SUD = Special Utility District    UD = Utility District

## What are the differences between the NTMWD Member Cities and Customers?

The NTMWD Member Cities appoint representatives that serve on the District Board of Directors – two representatives for cities with a population more than 5,000; one representative for cities with under 5,000 residents. NTMWD Water System Customers do not have Board representation, however the Directors are appointed to serve in the best interest of the entire region. NTMWD Customers currently pay a five-cent per thousand gallon premium on top of the Member City wholesale water rate, thus they share the proportionate costs for operating and maintaining the regional system and help repay the debt to finance capital projects.

## Why are water rates projected to continue increasing?

The *Associated Press* recently reported that rising water costs is an issue facing providers nationwide, especially in drought-prone regions. See link to article below.

### Water rates rising across nation:

[http://www.mlive.com/news/us-world/index.ssf/2015/09/water\\_rates\\_rising\\_across\\_nati.html](http://www.mlive.com/news/us-world/index.ssf/2015/09/water_rates_rising_across_nati.html)

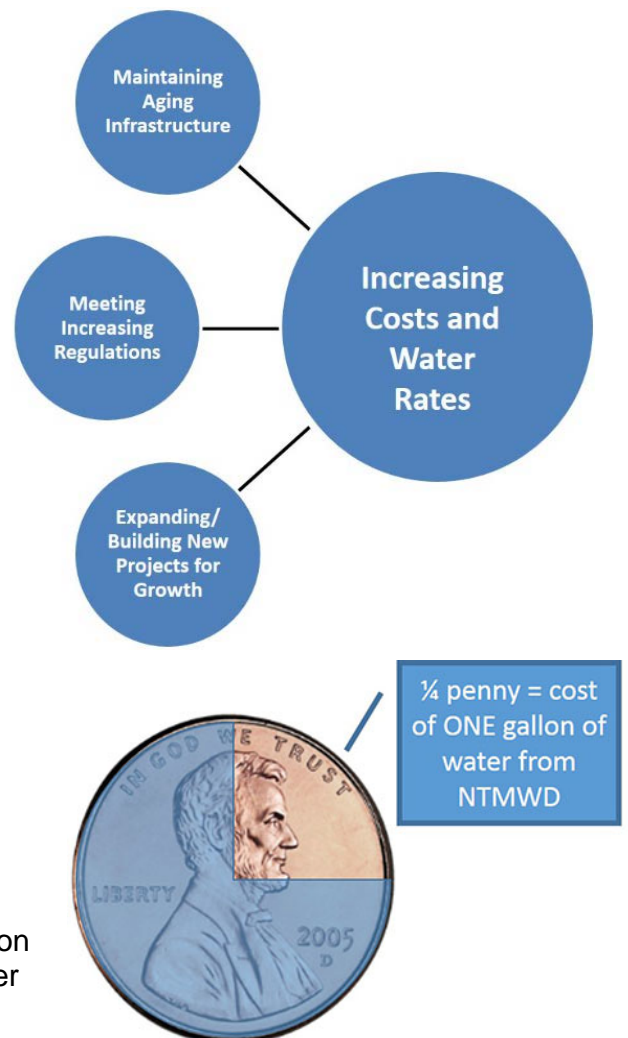
The NTMWD and all water utilities are challenged with increasing costs for maintaining and rehabilitating aging infrastructure, building pipelines and reservoirs for anticipated population growth, as well as implementing new technologies to comply with changing regulatory requirements. Additionally, large water projects take years – often decades – to complete the required environmental permitting, resulting in significant upfront investments before customers receive the benefit.

While water is essential, many experts believe it has been undervalued considering the systems needed to ensure water flows from our taps 24/7. The NTMWD operates and maintains the following key components of the regional water system which serves communities in several counties and covers 2,200 square miles:

- 6 water treatment plants – 806+ million gallons per day capacity
- 566 miles of transmission pipelines
- 9 raw water pump stations
- 8 treated water pump stations
- 77 City delivery points

Despite the complexity and scope of this system, a gallon of water from NTMWD costs Cities less than one-quarter of a penny.

As our region continues to grow, the District is responsibly planning new projects to prepare for projections that the region is expected to double in population over the next 40 years.



Even with a continued focus on conservation programs to stretch existing supplies, NTMWD will need to have another major water source, the Lower Bois d'Arc Creek Reservoir (LBCR) in Fannin County, online as early as 2020. The LBCR will become part of the regional water system serving all Member Cities and Customers. Thus, each of these communities will share in this investment.

### How much does population growth affect water rates?

Water has provided the essential foundation for communities in North Texas to grow over the last several decades. Cities in our region continue to make headlines for welcoming major new businesses, recognized as among the healthiest housing markets, and consistently ranking as some of the best places to live in America. A reliable water supply is critical to meet the needs of current and future generations of residents, as well as to support businesses, jobs and economic prosperity in our region. Based on population growth projections, NTMWD water demands will increase 1.5 times over the next 40 years.

#### NTMWD Largest Member Cities Population Growth

City	1950	1960	1970	1980	1990	2000	2010	2015
Frisco	736	1,184	1,845	3,420	6,138	33,714	116,989	145,510
Garland	10,291	38,501	81,437	138,857	180,635	215,768	226,876	232,960
McKinney	10,560	13,763	15,193	16,249	21,283	54,369	131,117	154,840
Mesquite	1,684	27,526	55,131	67,053	101,484	124,523	139,824	142,230
Plano	2,115	3,695	17,872	72,331	127,885	222,030	259,841	271,140
Richardson	1,289	16,810	48,405	72,496	74,840	91,802	99,223	102,430

#### NTMWD Total Population: Historical and Projected

Year	1956	1961	1974	1994	2015	2040	2070
Population Served	32,000	60,000	200,000	800,000	1,600,000	2,500,000	3,700,000

Collin County recently updated its population growth projections to include 1.3 million more residents than previous estimates. On top of future growth, the last several years of drought and required watering restrictions may have masked the full effects of recent growth on water demands.

### What are the impacts of recent years of drought and conservation on water rates?

The NTMWD appreciates the commitment of all the cities and residents in north Texas to conserve water during recent years of drought. The efforts were vital to help stretch existing supplies. Without these measures, our reservoirs would have been even more severely depleted.

Fortunately, record rainfall last May refilled our reservoirs – averting prolonged water shortages in our region. However, conservation remains a key component of meeting our future water needs. We must continue to use water wisely, especially in landscapes where a large percentage of water is consumed.

The combination of watering restrictions over the last several years followed by significant spring rains means the region has consumed less water than normal. Reduced consumption has presented significant challenges for the Member Cities and Customers as they must cover ongoing fixed costs while collecting less revenues.

Once residents resumed “normal” post-drought watering schedules (with little to no restrictions in place), water consumption increased dramatically from July through October 2015. This demonstrates that Member Cities and Customers still require the system capacity to meet higher water demands when needed. The NTMWD must build and maintain the system to meet those highest potential needs.

Without outdoor watering restrictions in place, the total regional consumption from July through September 2015 was similar to pre-drought demands in 2011 as residents returned to more frequent outdoor watering patterns. The NTMWD has the responsibility to make sure the infrastructure and system is prepared to meet those peak demands today and in the future, especially since our Cities are among some of the fastest-growing in the nation.

### **What is the NTMWD wholesale water supply contract and the term “take or pay”?**

The NTMWD must collect enough revenue to cover the regional water system fixed costs of the pipes and facilities that have been constructed to meet the highest potential water demands. Fixed costs include the repayment of bonds that have funded past projects and debt service on new projects. Other fixed costs are from ongoing operations, maintenance and rehabilitation on the system to maintain reliability and comply with environmental regulations.

Eleven Member Cities signed one water supply contract when it was last amended in 1988 – two cities signed similar contracts when they joined the District later – Allen (1998) and Frisco (2001). The contract is structured so that each City pays for its allocation of the costs for the entire regional water system based on its year of highest annual usage. This is a common cost allocation method to determine proportionate cost-sharing among regional users of a water or energy system. By cost-sharing with fellow Member Cities rather than each city building its own separate infrastructure and systems, each City has saved significantly over the last several decades.

The NTMWD has built (and issued bonds for) the infrastructure costs to meet the Cities’ historic peak demands and must collect enough revenue to make the bond payments and cover ongoing maintenance costs for those pipelines and systems, regardless of the amount of water used. If any of the individual Cities had issued bonds independently to build its own system, they would have to repay that debt regardless of today’s customer usage.

For fiscal year 2015-2016, the NTMWD wholesale water rate for its Member Cities is \$2.29 per thousand gallons of treated water. This rate is made up of two components:

- 1) \$1.88 per thousand gallons funds the fixed/capital costs (infrastructure), and
- 2) \$0.41 cents per thousand gallons for the actual amount of water consumed.

Each City then determines its own end-user rates for residential, commercial and industrial customers to cover the NTMWD wholesale water costs plus the City’s own system and operating costs – typically setting different rates based on tiers or levels of usage so that consumers using higher amounts pay a higher rate.

The “take or pay” term used to describe the water supply contract means that the Cities pay the fixed costs component of the wholesale water rate based on highest year of consumption, even if

in subsequent years they don't reach that same level of water use. This ensures the fixed system costs are covered regardless of the amount of water used. The Cities and Customers receive an annual rebate for the variable costs, such as chemicals and power not used for treatment and delivery, based on each City's actual consumption for that year.

Cities don't pay for "unused" water – they pay an allocation of the regional water infrastructure and system costs based upon the maximum amount of potential capacity each City needs. The Cities and Customers are paying for water service, not just the water molecules that are delivered.

### **Why are some Member Cities asking for a change to the water supply contract?**

With watering restrictions and conservation resulting in reduced revenues to cover fixed costs, some Member Cities have questioned the structure of the water supply contract and are interested in exploring alternate methods for allocating the regional system costs across the Member Cities and Customers.

Because all 13 Member Cities signed the current water supply contract, it will take all 13 to discuss and agree to any changes. Previous analysis and studies related to adjusting a City's annual commitment for water system capacity have shown that lowering one City's percentage would increase the proportionate share of costs for other participating Cities.

The NTMWD supports the Cities coming together to discuss alternatives to the current water supply contract and is open to considering a change with agreement and support from the Cities.

### **For more information and updates, connect with the North Texas Municipal Water District online:**

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