# D&MWSC

# Water Conservation and Drought Contingency Plan

**Updated By** 



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### 1.0 INTRODUCTION

This water conservation plan has been developed for D & M Water Supply Corporation's (WSC) residential, commercial, and industrial retail water customers. The purpose of this plan is to encourage a permanent reduction in the quantity of water utilized by the WSC's customers through the implementation of efficient water supply and usage practices. Through the structured and systematic application of the contents of this water conservation plan the WSC anticipates a significant reduction in per capita water use over the next 10 years.

#### 2.0 LOCATION AND GENERAL DESCRIPTION

The D & M WSC headquarters is located in East Texas just outside of the city of Nacogdoches in Nacogdoches County. The WSC currently provides potable water service to the Southwest Nacogdoches County area. As of 2023 the WSC's service population was approximately 6,495 customers with that number expected to rise as the population of Nacogdoches County is projected to rise by the Texas Water Development Board. Local terrain consists of rolling hills covered with pine and hardwood trees in native grasses as is common in the Piney Woods region of Texas. The area serviced by D & M has an average annual rainfall of approximately 49 inches.

### 3.0 WATER SYSTEM DESCRIPTION

A CCN map of the limits of D & M WSC's existing water system has been included in this plan as **Exhibit 1**.

- 3.1 Service Area: D & M WSC currently provides water to approximately 2,165 service connections. The majority of these connections are residential and located southwest of Nacogdoches along U.S. Highway 59 and State Highway 7, and west of Nacogdoches along State Highway 21. The approximate water service area is 140 square miles. The Certificate of Convenience and Necessity (CCN) limits (CCN 10502) are shown on attached Exhibit 1.
- 3.2 <u>Water Supply:</u> The D & M WSC currently has two supply sources of water: self-supplied ground water from the Carrizo-Wilcox Aquifer and purchased water from the City of Nacogdoches. Purchased water from the City of Nacogdoches is a combination of surface and ground water.
- 3.3 <u>Water System Operation:</u> D & M WSC consists of eight pressure planes. Five of these supply their own source water, and three have the ability to be fed by and pressured by the City of Nacogdoches. Pressure throughout the system is provided by a combination of pressure tanks and elevated storage tanks.

Average residential water consumption for the D & M WSC is approximately 83 gallons per capita day (gpcd) based on records for treated water within the WSC's distribution system for 2023.

# 4.0 UTILITY PROFILE

**Appendix B** of this plan is a utility profile for D & M WSC which includes population and customers' information, water use data, water supply data, and wastewater system data.

## 5.0 SPECIFIC, QUANTIFIED 5 & 10-YEAR TARGETS

Specific 5 and 10 year water conservation targets for D & M WSC are as follows:

- 5-Year Target: Reduce average per capita water loss to below 20% or 17 GPCD.
- 10-Year Target: Reduce average per capita water loss to below 15% or 12.5 GPCD.

### 6.0 METERING SERVICES

The D & M WSC owns several water meters on their wells and master meters with the City of Nacogdoches. These meters measure the total amount of water pumped into the distribution system. The meters shall be calibrated every three years to within +/- 5% accuracy to insure proper measurement of the quantity of water delivered into its distribution system.

## 7.0 UNIVERSAL METERING

The D & M WSC meters all water pumped into its distribution system as described in the section above. In addition, service lines connecting to the WSC's water distribution system shall be metered. Meters two inches and larger shall be tested every three years, and meters 5/8 inches to two inches shall be replaced every 15 years.

## 8.0 UNACCOUNTED-FOR WATER USE

In effort to reduce unaccounted-for water use due to broken water mains, leaky joints, faulty service meters, illegal service connections, and unmetered water usages such as line flushing, the WSC shall perform the following tasks:

- Yearly: Perform water system audits comparing the amount of water pumped into the distribution system to the amount of water consumed based on water meter readings.
- <u>Monthly</u>: Review monthly water consumption for all system meters in comparison to previous monthly usages.
- <u>Daily</u>: Record unmetered water usages such as line flushing activities and review monthly.
- Daily: Observe distribution system piping and meters for leaks daily.

## 9.0 CONTINUING PUBLIC EDUCATION & INFORMATION

D & M WSC is committed to providing continuing public education on the importance of water conservation and water conserving strategies. The WSC's continuing public education and information program is as follows:

- The WSC shall provide a packet of water conservation literature for all new water customers.
- The WSC shall provide water conservation literature to all customers annually.
- The WSC shall conduct a public participation meeting annually to review this water conservation plan and to solicit input from water service customers.

• The WSC shall obtain water conservation literature and materials as developed by the Texas Water Development Board (TWDB) and the American Water Works Association (AWWA) and make this information readily available to all water service customers.

Water conservation literature to be distributed shall include information on low flow plumbing features and devices, retrofitting existing plumbing features, conservation orientated landscaping and irrigation, and other general conservation strategies.

# 10.0 NON-PROMOTIONAL WATER RATE STRUCTURE

In an effort to maintain a water rate structure that encourages water conservation, the WSC shall examine its rates annually. Current water rates for the WSC are as attached in **Exhibit 2**.

# 11.0 RESERVOIR SYSTEM OPERATIONS PLAN

There are currently no reservoir systems operated by the D & M WSC.

# 12.0 ENFORCEMENT PROCEDURE & PLAN ADOPTION

Implementation and enforcement of this plan shall be by the authority of D & M WSC.

The General Manager and System Operator shall be responsible for implementation of this water conservation plan. The System Operator shall be responsible for general oversight of all portions of implementation and enforcement of this plan, as well as notifying customers of deviations in the WSC's water conservation plan. The System Operator shall be responsible for record keeping and preparation of an annual report on the status of the WSC's water conservation program. The annual report shall include but not be limited to an evaluation of the overall effectiveness of the plan, public acceptance of the plan, and the status of implementation for this water conservation plan. This report shall be submitted to the D & M WSC General Manager and presented for approval before the D & M WSC board members.

The WSC shall perform the following items in conjunction with enforcing and adopting this plan:

- Adopt a resolution supporting the water conservation plan.
- Adopt an ordinance to levy penalties for failure to comply with this plan.
- Adopt an ordinance implementing this plan.

# 13.0 COORDINATION WITH THE REGIONAL WATER PLANNING GROUPS

The service area of D & M WSC is located within the East Texas Regional Water Planning Area of Texas (Region I) and D & M will provide a copy of this water conservation plan to the Region I Water Planning Group.

## 14.0 WATER CONSERVATION RETROFIT PROGRAM

Retrofit of existing plumbing fixtures for D & M WSC shall be accomplished through voluntary efforts of D & M water customers. The WSC shall encourage citizens to install conservation oriented plumbing features through literature and materials distributed as part of the public education portion of this water conservation program. Local plumbers shall also be encouraged to recommend water conserving applications and devices including but not limited to low flow toilets, shower heads, faucets, and urinals. Recirculation filtration equipment will also be encouraged for use in swimming pools.

# 15.0 PLUMBING CODE

The WSC shall consider an ordinance to adopt the National Standard Plumbing Code, 2015 Edition.

# 16.0 REVISIONS AND MODIFICATIONS

This Plan is applicable to the water supply and water distribution system as it currently exists for D & M WSC. The WSC reserves the right to amend this plan when conditions change that affect its water supply and/or distribution system. All modifications, deletions, additions, or changes to this plan shall be submitted to the Texas Water Development Board for approval.

# DROUGHT CONTINGENCY AND EMERGENCY WATER DEMAND MANAGEMENT PLAN

### 1. INTRODUCTION

The goal of this plan is to cause a reduction in water use in response to drought or emergency conditions so that the water availability can be preserved. Since emergency conditions can occur rapidly, responses must also be enacted quickly. This plan has been prepared in advance considering conditions that will initiate and terminate the water use restriction program.

A Drought/Emergency Management Committee consisting of two Board Members and the System Manager will monitor usage patterns and public education efforts and will make recommendations to the Board on future conservation efforts, demand management procedures or any changes to this plan. The Committee will develop public awareness notices, bill stuffers, and other methods that will begin and continue as a constant type of reminder that water should be conserved at all times, not just during a drought or emergency. This Committee will also review and evaluate any needed amendments or major changes due to changes in the WSC service area population, distribution system or supply. This review and evaluation will be done on a regular basis of five years unless conditions necessitate more frequent amendments.

The plan will be implemented according to the three stages of water use restrictions as imposed by the Board. Paragraph 4 describes the conditions that will trigger these stages.

## 2. PUBLIC INVOLVEMENT

Opportunity for the public to provide input into the preparation of the Plan was provided by the Board by scheduling and providing public notice of a public meeting to accept input on the Plan. Notice of the meeting was provided to all customers. In the adoption of this plan, the Board considered all comments from customers.

### 3. COORDINATION WITH REGIONAL WATER PLANNING GROUP

Being located within the Pineywoods Groundwater Conservation District, a copy of this Plan has been provided to that Regional Water Planning Group.

## 4. TRIGGER CONDITIONS

The Drought Emergency Management Committee is responsible for monitoring water supply and demand conditions on a monthly basis (or more frequently if conditions warrant) and

shall determine when conditions warrant initiation or termination of each stage of the plan, that is, when the specified triggers are reached. The Committee will monitor monthly operating reports, water supply or storage tank levels and/or rainfall as needed to determine when trigger conditions are reached. The triggering conditions described below take into consideration: the vulnerability of the water source under drought of record conditions, the production, treatment and distribution capacities of the system, and member usage based upon historical patterns.

- **a. Stage I Mild Condition:** Stage I water allocation measures may be implemented when one or more of the following conditions exist:
  - 1) Water consumption has reached 80 percent of daily maximum supply for three (3) consecutive days.
  - 2) Water supply is reduced to a level that is only 20 percent greater than the average consumption for the previous month.
  - 3) There is an extended period (at least eight (8) weeks) of low rainfall and daily use has risen 20 percent above the use for the same period during the previous year.
- **b.** Stage II Moderate Conditions: Stage II water allocation measures may be implemented when one of the following conditions exist:
  - 1) Water consumption has reached 90 percent of the amount available for three consecutive days.
  - 2) The water level in any of the water storage tanks cannot be replenished for three (3) consecutive days.
- c. Stage III Severe Conditions: Stage III water allocation measures may be implemented when one of the following five conditions exist:
  - 1) Failure of a major component of the system or an event which reduces the minimum residual pressure in the system below 20 psi for a period of 24 hours or longer.
  - 2) Water consumption of 95 percent or more of the maximum available for three (3) consecutive days.
  - 3) Water consumption of 100 percent of the maximum available and the water storage levels in the system drop during one 24-hour period.
  - 4) Natural or man-made contamination of the water supply source(s).
  - 5) The declaration of a state of disaster due to drought conditions in a county or counties served by the Corporation.
  - 6) Reduction of wholesale water supply due to drought conditions.
  - 7) Other unforeseen events which could cause imminent health or safety risks to the public.

# 5. STAGE LEVELS OF WATER ALOCATIONS

The stage levels of water allocations are to be placed in effect by the triggers in Paragraph 4. The System shall institute monitoring and enforce penalties for violations of the Drought Plan for each of the Stages listed below. The water allocation measures are summarized

below.

# a. Stage I - Mild Conditions

- 1) Alternate day, time of day, or duration restrictions for outside water usage allowed. (System will notify Customers which restriction is in effect)
- 2) The system will reduce flushing operations.
- 3) Reduction of customers' water use will be encouraged through notices on bills or other method.

# b. Stage II - Moderate Conditions

- 1) All outside water use is prohibited (except for a livestock or other exemption or variance granted under this section).
- 2) Make public service announcements as conditions change via local media (TV, radio, newspapers, etc.).

# c. Stage III - Severe Conditions

- 1) All outside watering prohibited.
- 2) Water use will be restricted to a percentage of each member's prior month usage. This percentage may be adjusted as needed according to demand on the system. Notice of this amount will be sent to each customer.
- 3) Corporation shall continue enforcement and educational efforts.

### NOTE:

- Refer to your water purchase contract for additional restrictions/requirements that may be imposed by stipulations from the wholesale supplier.
- There may be additional restrictions imposed by Governmental Entities.
- Meters will be read as often as necessary to insure compliance with this program for the benefit of all the customers.

### 6. INITIATION AND TERMINATION PROCEDURES

Once a trigger condition occurs, the Corporation, or its designated responsible representative, shall, based on recommendation from the Chairperson of the Drought/Emergency Management Committee, decide if the appropriate stage of water use restrictions shall be initiated. The initiation may be delayed if there is a reasonable possibility the water system performance will not be compromised by the condition. If water allocation is to be instituted, written notice to the customers shall be given.

Written notice of the proposed water use restrictions measure shall be mailed or delivered to each affected customer upon the initiation of each stage. Notice may be sent by email only if the customer chooses the option to receive email notices instead of mailed notices and provides a valid email address. In addition, upon adoption of Stage II or Stage III, a notice will be placed in a local newspaper or announced on a local radio or television station. The customer notice shall contain the following information:

- a. The date water restriction shall begin,
- b. The expected duration,
- c. The stage (level) of water allocations to be employed,
- d. Penalty for violations of the water allocation program, and
- e. Affected area or areas.

A sample Customer Notice of Water Restrictions conditions is included in Miscellaneous Transaction Forms of this tariff.

If the water allocation program extends 30 days then the Chairperson of the Drought/Emergency Management Committee or manager shall present the reasons for the allocations at the next scheduled Board Meeting and shall request the concurrence of the Board to extend the allocation period.

When the trigger condition no longer exists then the responsible official may terminate the water allocations provided that such an action is based on sound judgment. Written notice of the end of allocations shall be given to customers. A water allocation period may not exceed 60 days without extension by action of the Board.

### 7. PENALTIES FOR VIOLATIONS

- a. First Violation The customer/member will be notified by a written notice of their specific violation and their need to comply with the tariff rules. The notice will show the amount of penalty \* to be assessed and inform the customer that failure to pay the penalty will result in termination of service. Reconnection will require payment of the penalty and a charge for the service call to restore service. The notice will also inform the customer that additional violations will trigger more severe penalties and may result in termination of service regardless of whether the customer pays the penalties.
- **b. Second Violation** The Corporation will assess a penalty \* of \$ 125.00. The notice of second violation will show the amount of penalty to be assessed and will inform the customer that failure to pay the penalty will result in termination of service to be restored only upon payment of penalty and service call to restore service. The notice will also inform the customer that additional violations will trigger more severe penalties and may result in termination of service regardless of whether the customer pays the penalties.
- c. Subsequent Violations The Corporation will assess an additional penalty \* of \$125.00 for violations continuing after the Second Violation. The notice of subsequent violation will show the amount of the penalty to be assessed and will inform the violator that failure to pay the penalty will result in termination of service to be restored only upon payment of penalty and service call to restore service. The notice will also inform the customer that the Corporation may also install a flow restricting device in the customer's meter service to limit the amount of water that will pass through the meter in a 24 hour period. The costs of this procedure will be for the actual work and equipment and shall be paid by the customer. Removal of this device will be considered Meter Tampering and will result in disconnection of service without further notice. The notice of subsequent violation will also inform the customer that additional penalties will be assessed for additional violations; and in addition to penalties, that water service will be terminated

- for a period of three (3) days regardless of whether the customer pays the penalties for the additional violations.
- d. Termination For each continuing violation, the Corporation will assess an additional penalty of \$ 125.00. Service will also be terminated for a period of three (3) days. The notice of termination will show the date on which water service will be terminated and the date on which service will be restored, unless the customer has failed to pay delinquent penalties, assessments or charges. Service will remain off until any delinquent penalty or other assessment is fully paid including a charge for the service call to restore service.

# These provisions apply to all customers of the Corporation.

**NOTE: PENALTY** \* – A WSC is allowed to charge a reasonable penalty to customers that fail to comply with the water use restriction procedures in accordance with 30 TAC 291.41(j) if:

- (1) the penalty is clearly stated in the tariff;
- (2) the penalty is reasonable and does not exceed six (6) times the minimum monthly bill stated in the water supply corporation's current tariff; and
- (3) the water supply corporation has deposited the penalty in a separate account dedicated to enhancing water supply for the benefit of all the water supply corporation's customers.

## 8. EXEMPTIONS OR WAIVERS

The Drought/Emergency Management Committee may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health or sanitation for the public or the person requesting such variance and if one or more of the following conditions are met:

**a.** Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.

Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the Drought/Emergency Management Committee within five (5) days after the Plan or a particular drought response stage has been invoked or after a condition justifying the variance first occurs. All petitions for variances shall be reviewed by the Committee and shall include the following:

- Name and address of the petitioner(s).
- Purpose of water use.
- Specific provision(s) of the Plan from which the petitioner is requesting relief.

- Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan.
- Description of the relief requested.
- Period of time for which the variance is sought.
- Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- Other pertinent information, as requested by the Committee.

Variances granted by the Committee shall be subject to the following conditions, unless specifically waived or modified by the Committee or Board of Directors:

- Variances granted shall include a timetable for compliance.
- Variances granted shall expire when the water allocation is no longer in effect, unless the petitioner has failed to meet specified requirements. No variance allowed for a condition requiring water allocation will continue beyond the termination of water allocation under Section F. Any variance for a subsequent water allocation must be petitioned again. The fact that a variance has been granted in response to a petition will have no relevance to the Committee's decision on any subsequent petition.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

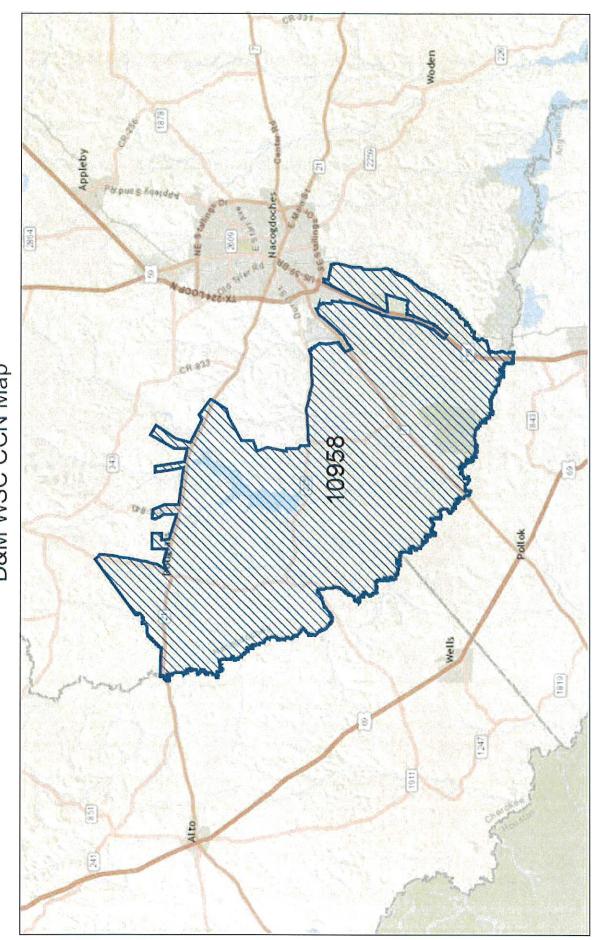
### 9. IMPLEMENTATION

The Board establishes a Drought/Emergency Management Committee by Resolution, the chairperson of which will be the responsible representative to make Drought and Emergency Water Management actions. This Committee will review the procedures in this plan annually or more frequently. Modifications may be required to accommodate system growth, changes in water use demand, available water supply and/or other circumstances.

This Plan was adopted by the Board at a properly noticed meeting held on April 27, 2023.

# Exhibit 1 CCN System Map

# D&M WSC CCN Map



December 20, 2016



Sourses: Esri, HERE, DeLorme, USGS, Intermap, INOREMENT P. NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thaibnd).

1:288,895 4.5

225

# Exhibit 2 Water Rate Structure

# D & M WATER SUPPLY CORPORATION

P.O. BOX 9

Douglass, Texas 75943
Phone: 936-559-9900 Fax: 936-559-0112

Email: office@dmwater.org

# RATES & FEES

Standard		Non-Standard	
Base Water Rate:	\$32.00	Base Water Rate:	<sup>3</sup> / <sub>4</sub> ''=48.00
Standard meter	Monthly	Charges based on meter equivalents chart,	1"=80.00
	Charge	Tariff Section G. 6.	1½"=160.00
			2"=256.00*
Gallonage Charge Water:		Gallonage Charge Water:	
Rate per 1,000 gallons		Rate per 1,000 gallons	
0-2,000	\$4.25	0-2,000	Charges
2,001-8,000	\$5.25	2,001-8,000	based on
8,001-12,000	\$5.75	8,001-12,000	meter
12,001-20,000	\$6.25	12,001-20,000	equivalents
Over 20,000	\$7.25	Over 20,000	chart, Tariff
			Section G. 6.
*Base Sewer Rate:	\$26.00	*Base Sewer Rate:	<sup>3</sup> / <sub>4</sub> "=39.00
Standard meter	Monthly	Charges based on meter equivalents chart,	1"=65.00
	Charge	Tariff Section G. 6.	1½"=130.00
	(SEE 14.5 15.18		2"=208.00*
*Gallonage Charge Sewer:	\$5.00	*Gallonage Charge Sewer:	\$5.00
for any usage per 1,000 gallons		for any usage per 1,000 gallons	
Equity Buy In Fee:	\$1200.00	Equity Buy In Fee:	Quote required
(Standard new service)		(Non-Standard new service)	
Installation Fee:	\$300.00	153	
Standard Service		Non-Standard Service	
	Additio	onal Fees	
Membership/Deposit (Water):	\$100.00	Membership/Deposit (Sewer):	\$100.00
per service unit		per service unit	22.00 S-00 MARKAGAMANA
<b>Customer Service Inspection</b>	\$100.00	Transfer Fee	\$30.00
Reconnect Fee	\$30.00	Owner notification fee for rentals	\$10.00
Service Trip Fee	\$30.00	Returned Check/Item Fee	\$30.00
Late Payment Fee	10%	Regulatory Assessment Fee	.5%
Equipment Damage Fee:	Actual	Road Bore as required:	
(Labor & all costs to repair/ replace	Cost		
equipment)			
Meter Tampering/Diversion Penalty	Not to exc	eed 6 x's monthly base charge	
*Note: Sewer service available only to CR 5	21 & CR 52	22	

D & M WSC is an equal opportunity provider and employer

# Attachment A Utility Profile

Utility Profile TWDB Form No. 1965 - R Revised on: 4/1/14



# UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Fill out this form as completely as possible. If a field does not apply to your entity, leave it blank.

# **CONTACT INFORMATION**

Name of Utility:D & M Water Supply Corporation	າ	
Public Water Supply Identification Number (PWS ID): $\frac{1}{2}$	740010	
Certificate of Convenience and Necessity (CCN) Number		
Surface Water Right ID Number:		
Wastewater ID Number:		
Completed By:	Title:	ral Manager
Address:		
Email: dbabb@dmwater.org		
Date:		
Regional Water Planning Group: Map  Groundwater Conservation District: 68		
Check all that apply:		
Received financial assistance of \$500,000 or m	ore from TWDB	
Have 3,300 or more retail connections		
Have a surface water right with TCEQ		

Utility Profile TWDB Form No. 1965 - R Revised on: 4/1/14



# Section I: Utility Data

# A. Population and Service Area Data

1.	Current service area size in square miles:	140
	(Attach or email a copy of the service area map.)	

2. Provide historical service area population for the <u>previous five years</u>, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2018	6,198	0	0
2019	6,198	0	0
2020	6,387	0	0
2021	6,555	0	0
2022	6,495	0	0

3. Provide the projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020	6,238	0	0
2030	7,009	0	0
2040	7,767	0	0
2050	8,574	0	0
2060	9,430	0	0

4. Describe the source(s)/method(s) for estimating current and projected populations.

Current populations were estimated by taking the number of connections and multiplying by the average family size for the area.

Projected populations were estimated by observing historic populations and TWDB population projections for D & M WSC, Nacogdoches County, City of Nacogdoches, and Regional Water Planning Group I to find average growth rates for the service area of D & M. The composite growth rate was then used to project the population.

\*D & M closed their WWTF in 2016



# B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2018	154,256,700	31,415,500	0	185,672,200	82
2019	157,913,300	35,142,300	0	193,055,600	85
2020	170,406,500	27,108,500	0	197,515,000	85
2021	158,456,200	36,363,700	0	194,819,900	81
2022	179,653,800	11,762,110	0	191,415,910	81
Historic 5- year Average	164,137,300	28,358,422	0	192,495,722	83

C. Water Supply System (Attach description of water s	1	Water Supply	System	(Attach	description	of water sy	ystem	)
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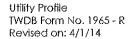
L.	Designed daily capa	acity of system	1,548,000 gallons per day.
2.	Storage Capacity:		
	Elevated	407,000 gallons	
	Ground	789,000 gallons	

3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
Carrizo-Wilcox Aquifer	Ground	179,653,800
City of Nacogdoches	Ground	6,667,400
City of Nacogdoches	Surface	5,094,710
	Choose One	
	Choose One	
	Choose One	

<sup>\*</sup>Select one of the following source types: Surface water, Groundwater, or Contract

4.	If surface wat	er is a source type, o	do you recycle backwash to the head of the plant?
		Yes	estimated gallons per day
	•	No	





# D. Projected Demands

1. Estimate the water supply requirements for the <u>next ten years</u> using population trends, historical water use, economic growth, etc.

Year	Population	Water Demands (gallons)
2023	6,571	199,071,008
2024	6,648	201,402,992
2025	6,726	203,762,294
2026	6,805	206,149,234
2027	6,884	208,564,135
2028	6,965	211,007,325
2029	7,047	213,479,135
2030	7,129	215,979,901
2031	7,203	218,210,514
2032	7,277	220,464,165

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.

Projected population was determined in the same fashion as described in Section A part 4.
Demand was then determined by using the historic per capita usage and applying that usage by the projected population.

Utility Profile TWDB Form No. 1965 - R Revised on: 4/1/14



# E. High Volume Customers

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers**. Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
Wayne Boozer	Residential	878,100	Treated
Larry Don Davis	Residential	735,700	Treated
Brad Lowery	Residential	724,200	Treated
A T Mast	Commercial	711,000	Treated
Douglass ISD	Commercial	675,600	Treated

<sup>\*</sup>For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and Methodology for Reporting on Water Conservation and Water Use.</u>

2. If applicable, list the annual water use for the five highest volume **WHOLESALE customers**. Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One

<sup>\*</sup>For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and Methodology for Reporting on Water Conservation and Water Use.</u>

F. Utilit	y Data	Comment	Section
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Provide addit	tional commo	ents about	utility c	data b	elow.



# Section II: System Data

# A. Retail Connections

1. List the active retail connections by major water use category.

		Active Re	Active Retail Connections			
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections		
Residential – Single Family	2,098	125	2,223	97%		
Residential – Multi-family (units)	9		9	0%		
Industrial	0		0	0%		
Commercial	21		21	1%		
Institutional	18		18	1%		
Agricultural	18		18	1%		
TOTAL	2,164	125	2,289			

<sup>\*</sup>For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and Methodology for Reporting on Water Conservation and Water Use.</u>

2. List the net number of new retail connections by water use category for the previous five years.

W-1-11-6-1*	Net Number of New Retail Connections						
Water Use Category*	2018	2019	2020	2021	2022		
Residential – Single Family	30	28	35	56	-18		
Residential – Multi- family (units)	0	6	-6	-1	0		
Industrial	0	0	0	0	0		
Commercial	2	0	2	0	0		
Institutional	0	0	-1	0	0		
Agricultural	-1	0	-2	-1	0		
TOTAL	31	34	28	54	-18		

<sup>\*</sup>For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and Methodology</u> for Reporting on Water Conservation and Water Use.



# B. Accounting Data

For the <u>previous five years</u>, enter the number of gallons of RETAIL water provided in each major water use category.

Water Hee Cote com:*	Total Gallons of Retail Water						
Water Use Category*	2018	2019	2020	2021	2022		
Residential - Single Family	133,776,300	119,025,000	125,634,800	128,824,400	145,287,440		
Residential – Multi-family	2,876,800	3,388,700	3,190,000	2,647,800	2,800,560		
Industrial	0	0	0	0	0		
Commercial	1,887,600	11,700	1,276,000	1,553,800	1,780,300		
Institutional	2,546,900	1,950,300	2,509,000	2,273,400	2,564,100		
Agricultural	5,407,800	4,102,100	4,765,800	3,895,100	4,691,400		
TOTAL	146,495,400	128,477,800	137,375,600	139,194,500	157,123,800		

<sup>\*</sup>For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and Methodology for Reporting on Water Conservation and Water Use.</u>

# C. Residential Water Use

For the <u>previous five years</u>, enter the residential GPCD for single family and multi-family units.

	Residential GPCD						
2018	2019	2020	2021	2022			
60	54	55	55	62			
79	58	87	81	85			
		60 54	60 54 55	60 54 55 55			

# D. Annual and Seasonal Water Use

1. For the <u>previous five years</u>, enter the gallons of treated water provided to RETAIL customers.

D. C. L.	Total Gallons of Treated Retail Water						
Month	2018	2019	2020	2021	2022		
January	11,976,191	9,225,752	9,927,553	11,126,296	11,506,850		
February	9,482,420	8,859,390	9,861,995	11,128,734	9,554,190		
March	10,438,346	9,711,685	10,976,846	10,645,092	10,256,828		
April	10,416,033	9,028,928	10,223,350	11,078,965	11,520,323		
May	13,475,530	11,052,960	11,588,321	9,583,429	13,273,420		
June	14,839,702	11,429,072	13,894,912	11,475,116	16,639,835		
July	15,977,357	15,037,515	14,488,572	12,695,267	18,317,059		
August	15,424,358	13,714,318	15,050,665	13,988,854	17,069,115		
September	14,217,185	11,693,468	12,554,597	14,233,257	15,538,170		
October	12,456,853	10,101,000	11,512,288	13,408,396	14,214,427		
November	10,234,063	10,716,930	10,706,060	11,045,330	11,503,941		
December	10,627,163	10,141,082	9,962,541	9,305,464	9,697,643		
TOTAL	149,565,201	130,712,100	140,747,700	139,714,200	159,091,801		



# 2. For the <u>previous five years</u>, enter the gallons of raw water provided to RETAIL customers.

	Total Gallons of Raw Retail Water							
Month	2018	2019	2020	2021	2022			
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
TOTAL	0	0	0	0	0			

# 3. Summary of seasonal and annual water use.

	TABLE TO SERVICE	Seasonal	and Annual \	Water Use		Average in
Water Use	2018	2019	2020	2021	2022	Gallons
Summer Retail (Treated + Raw)	46,241,417	40,180,905	43,434,149	38,159,237	52,026,009	44,008,343 5yr Average
TOTAL Retail	149,565,201	130,712,100	140,747,700	139,714,200	159,091,801	143,966,200
(Treated + Raw)	20 30-20-20-20-20-20-20-20-20-20-20-20-20-20	× × ×				5yr Average

# E. Water Loss

Provide Water Loss data for the <u>previous five years</u>.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365 Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2018	36,107,000	16	19%
2019	62,343,500	28	32%
2020	56,767,300	24	29%
2021	55,105,700	23	28%
2022	32,324,110	14	17%
5-year average	48,529,522	21	25%



# F. Peak Water Use

Provide the Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2018	409,768	1,265,229	3.09
2019	358,115	931,042	2.60
2020	385,610	993,023	2.58
2021	382,779	834,332	2.18
2022	435,868	899,981	2.06

# G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	130,509,588	97%	0%
Residential MF	2,980,772	0%	0%
Industrial	0	0%	0%
Commercial	1,301,880	1%	0%
Institutional	2,368,740	1%	0%
Agricultural	4,572,440	1%	0%

Discrepancy from Table D and E is from Reuse Water that D&M reported, but the category

# H. System Data Comment Section

Provide additional comments about system data below.

is not available in Table D.
•

Utility Profile TWDB Form No. 1965 - R Revised on: 4/1/14



# Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the <u>Water Conservation Plan Checklist</u> to complete your Water Conservation Plan.

A.	Wastewater System Data (Attach a description of your wastewater system.)

2. List the active wastewater connections by major water use category.

		Active Wast	ewater Connection	ns
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal			0	0%
Industrial			0	0%
Commercial			0	0%
Institutional			0	0%
Agricultural			0	0%
TOTAL	0	0	0	

2. What percent of water is serviced by the wastewater system? \_\_\_\_\_%

3. For the <u>previous five years</u>, enter the number of gallons of wastewater that was treated by the utility.

		Total Gallon	s of Treated Wast	ewater	Control of the Contro
Month	2018	2019	2020	2021	2022
January			,		
February					
March					
April					
May					
June					
July					
August		1			
September					
October					
November					
December					
TOTAL	0	0	0	0	0



4.



<ol> <li>Reuse Data</li> <li>Provide data on the types of recycling</li> </ol>	
Provide data on the types of recycling	
current reporting period.	and reuse activities implemented during the
Type of Reuse	Total Annual Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Discharge to surface water	
Evaporation pond	
Other	
TOTAL	0
D & M closed down their WWTF in 2017-2018.	

Can treated wastewater be substituted for potable water?

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the <u>Water Conservation Plan Checklist</u> to complete your Water Conservation Plan.

# Attachment B 5 & 10 Year Goals for Water Savings

# WATER CONSERVATION PLAN 5- AND 10-YR GOALS FOR WATER SAVINGS

Facility Name: D & M WSC

Water Conservation Plan Year: 2023

	Historic 5yr Average	Baseline	5-yr Goal for year 2028	10-yr Goal for year 2033
Total GPCD1	83	83	83	83
Residential GPCD <sup>2</sup>	29	25	57	57
Water Loss (GPCD)³	21	21	17	12.5
Water Loss (Percentage) <sup>4</sup>	25 %	25 %	20%	15 %

<sup>1.</sup> Total GPCD = (Total Gallons in System + Permanent Population) + 365

<sup>2.</sup> Residential GPCD = (Gallons Used for Residential Use + Residential Population) + 365

<sup>3.</sup> Water Loss GPCD = (Total Water Loss + Permanent Population) + 365

<sup>4.</sup> Water Loss Percentage = (Total Water Loss + Total Gallons in System) x 100; or (Water Loss GPCD + Total GPCD) x 100

# Attachment C Resolution Adopting Plan

# RESOLUTION FOR ADOPTING THE D & M WATER SUPPLY CORPORATION WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN

# A RESOLUTION OF THE BOARD OF DIRECTORS ADOPTING THE WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN FOR D & M WATER SUPPLY CORPORATION

WHEREAS, the Board of Directors recognizes that the amount of water available to the D & M Water Supply Corporation and its water utility customers is limited and subject to depletion during periods of extended drought; and

WHEREAS, the Board of Directors recognizes that natural limitations due to drought conditions and other acts of God cannot guarantee an uninterrupted water supply for all purposes; and

WHEREAS, Section 11.1272 of the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality require certain public water supply systems in Texas to prepare a Water Conservation Plan; and

WHEREAS, as authorized under law, and in the best interests of the customers of the D & M Water Supply Corporation, the Board of Directors deems it expedient and necessary to establish certain rules and policies for the orderly and efficient management of limited water supplies;

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE D & M WATER SUPPLY CORPORATION:

SECTION 1. That the Water Conservation Plan attached hereto as Exhibit "A" and made part hereof for all purposes be adopted as the official policy of the D & M Water Supply Corporation.

SECTION 2. That the General Manager of the D & M Water Supply Corporation is hereby directed to implement, administer, and enforce the Water Conservation Plan.

SECTION 3. That this resolution shall take effect immediately upon its passage.

DULY PASSED BY THE BOARD OF DIRECTORS OF D & M WATER SUPPLY CORPORATION ON THIS 15th, day of Jone, 2023.

ATTESTED TO:

Jennifer Gordon, Secretary

Gloria Montes, Board President