

WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN

FOR THE



KAUFMAN COUNTY, TEXAS

MAY 2022

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1. INTRODUCTION AND OBJECTIVES

This document has been prepared from the January 2019 model Water Resource and Emergency Management Plan (WREMP), available for use for the North Texas Municipal Water District (NTMWD) Customers. This Water Resource and Emergency Management Plan (WREMP) addresses all of the current TCEQ requirements for a drought contingency plan.¹

The measures included in this WREMP are intended to provide short-term water savings during drought or emergency conditions. Water savings associated with ongoing, long-term strategies are discussed in the document entitled Model Water Conservation Plan for North Texas Municipal Water District Member Cities and Customers.²

The purpose of this WREMP is as follows:

- To conserve the available water supply in times of drought, water supply shortage, and emergency.
- To maintain supplies for domestic water use, sanitation, and fire protection.
- To protect and preserve public health, welfare, and safety.
- To minimize the adverse impacts of water supply shortages.
- To minimize the adverse impacts of emergency water supply conditions.

NTMWD supplies treated potable water to Rose Hill Special Utility District (SUD). This WREMP calls for Rose Hill SUD to adopt Water Resource Management Stages initiated by NTMWD during a drought or water supply emergency.

In the absence of drought response measures, water demands tend to increase during a drought due to increased outdoor irrigation. The severity of a drought depends on the degree of depletion of supplies and on the relationship of demand to available supplies. NTMWD considers a drought to end when all of NTMWD's supply reservoirs refill to conservation storage pool levels.

¹ Superscripted numbers match references listed in Appendix A.

2. DEFINITIONS AND ABBREVIATIONS

1. AQUATIC LIFE means a vertebrate organism dependent upon an aquatic environment to sustain its life.
2. ATHLETIC FIELD means a public sports competition field, the essential feature of which is turf grass, used primarily for organized sports practice, competition or exhibition events for schools; professional sports and league play sanctioned by the utility providing retail water supply.
3. COMMERCIAL FACILITY means business or industrial buildings and the associated landscaping, but does not include the fairways, greens, or tees of a golf course.
4. COMMERCIAL VEHICLE WASH FACILITY means a permanently-located business that washes vehicles or other mobile equipment with water or water-based products, including but not limited to self-service car washes, full service car washes, roll-over/in-bay style car washes, and facilities managing vehicle fleets or vehicle inventory.
5. CUSTOMERS include those entities to whom NTMWD provides wholesale water that are not Member Cities of NTMWD.
6. DESIGNATED OUTDOOR WATER USE DAY means a day prescribed by rule on which a person is permitted to irrigate outdoors.
7. DRIP IRRIGATION is a type of micro-irrigation system that operates at low pressure and delivers water in slow, small drips to individual plants or groups of plants through a network of plastic conduits and emitters; also called trickle irrigation.
8. DROUGHT, for the purposes of this report, means an extended period of time when an area receives insufficient amounts of rainfall to replenish the water supply, causing water supply sources (in this case reservoirs) to be depleted.
9. EVAPOTRANSPIRATION (ET) represents the amount of water lost from plant material to evaporation and transpiration. The amount of ET can be estimated based on the temperature, wind, and relative humidity.
10. EXECUTIVE DIRECTOR means the Executive Director of the NTMWD and includes a person the Executive Director has designated to administer or perform any task, duty, function, role, or action related to this Plan or on behalf of the Executive Director.
11. FOUNDATION WATERING means an application of water to the soils directly abutting (within 2 feet) the foundation of a building, structure.
12. INTERACTIVE WATER FEATURES means water sprays, dancing water jets, waterfalls, dumping buckets, shooting water cannons, inflatable pools, temporary splash toys or pools, slip-n-slides, or splash pads that are maintained for recreation.
13. IRRIGATION SYSTEM means a permanently installed, custom-made, site-specific system of delivering water generally for landscape irrigation via a system of pipes or other conduits installed below ground.

14. LANDSCAPE means any plant material on a property, including any tree, shrub, vine, herb, flower, succulent, ground cover, grass or turf species, that is growing or has been planted out of doors.
15. MEMBER CITIES include the cities of Allen, Farmersville, Forney, Frisco, Garland, McKinney, Mesquite, Plano, Princeton, Richardson, Rockwall, Royse City, and Wylie, Texas, which are members of NTMWD.
16. NEW LANDSCAPE means: (a) vegetation installed at the time of the construction of a residential or commercial facility; (b) installed as part of a governmental entity’s capital improvement project; or (c) installed to stabilize an area disturbed by construction.
17. ORNAMENTAL FOUNTAIN means an artificially created structure (up to a certain diameter) from which a jet, stream, or flow of treated water emanates and is not typically utilized for the preservation of aquatic life.
18. PENALTY means fines and other actions that shall be imposed by the Rose Hill Special Utility District on those who violates the provisions of this WREMP.
19. RETAIL CUSTOMERS include those customers to whom the Supplier provides retail water from a water meter.
20. SOAKER HOSE means a perforated or permeable garden-type hose or pipe that is laid above ground that provides irrigation at a slow and constant rate.
21. SPRINKLER means an above-ground water distribution device that may be attached to a garden hose.
22. SUPPLIER means a Member City or Customer that purchases wholesale water from NTMWD and provides water to retail and/or wholesale customers.
23. SWIMMING POOL means any structure, basin, chamber, or tank including hot tubs, containing an artificial body of water for swimming, diving, or recreational bathing, and having a depth of two (2) feet or more at any point.
24. WATER RESOURCE MANAGEMENT PLAN means a strategy or combination of strategies for temporary supply management and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies required by Texas Administrative Code Title 30, Chapter 288, Subchapter B. This is sometimes called a drought contingency plan.

Abbreviations

Abbreviation	Full Nomenclature
ED	NTMWD Executive Director
NTMWD or District	North Texas Municipal Water District
TCEQ	Texas Commission on Environmental Quality
TWDB	Texas Water Development Board
WREMP	Water Resource and Emergency Management Plan

3. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

The TCEQ rules governing development of drought contingency plans for public water suppliers are contained in Title 30, Chapter 288, Section 288.20 of the Texas Administrative Code, a current copy of which is included in Appendix B. For the purpose of these rules, a drought contingency plan is defined as “a strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies.”¹

Minimum Requirements

TCEQ’s minimum requirements for drought contingency plans are addressed in the following subsections of this report:

- 288.20(a)(1)(A) – Provisions to Inform the Public and Provide Opportunity for Public Input – Section 4.1
- 288.20(a)(1)(B) – Program for Continuing Public Education and Information – Section 4.2
- 288.20(a)(1)(C) – Coordination with the Regional Water Planning Group – Section 4.6
- 288.20(a)(1)(D) – Description of Information to be Monitored and Criteria for the Initiation and Termination of Water Resource Management Stages – Section 4.3
- 288.20(a)(1)(E) – Water Resource Management Stages – Section 4.3
- 288.20(a)(1)(F) – Specific, Quantified Targets for Water Use Reductions During Water Shortages – Section 4.3
- 288.20(a)(1)(G) – Water Supply and Demand Management Measures for Each Stage – Section 4.3
- 288.20(a)(1)(H) – Procedures for Initiation and Termination of Water Resource Management Stages – Section 4.3
- 288.20(a)(1)(I) - Procedures for Granting Variances – Section 4.4
- 288.20(a)(1)(J) - Procedures for Enforcement of Mandatory Restrictions – Section 4.5
- 288.20(a)(3) – Consultation with Wholesale Water Supplier – Sections 1 and 4.3
- 288.20(b) – TCEQ Notification of Implementation of Mandatory Measures – Section 4.3
- 288.20(c) – Review and Update of WREMP – Section 4.7

4. WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN

4.1 PROVISIONS TO INFORM THE PUBLIC AND OPPORTUNITY FOR PUBLIC INPUT

Rose Hill SUD will provide opportunity for public input in the development of this WREMP by the following means:

- Providing written notice of the proposed WREMP and the opportunity to comment on the WREMP by newspaper, posted notice, and notice on the utility's web site and social media (if available).
- Making the draft WREMP available on the supplier's web site.
- Providing the draft WREMP to anyone that requests a copy.
- Supplier may hold a public meeting providing advance public notice of such meeting.

4.2 PROGRAM FOR CONTINUING PUBLIC EDUCATION AND INFORMATION

Rose Hill SUD will inform and educate the public about the Water Resource and Emergency Management Plan by the following means:

- Preparing a bulletin describing the plan and making it available at Rose Hill SUD office and other appropriate locations.
- Making the plan available to the public through the supplier's web site.
- Including information about the Water Resource and Emergency Management Plan on the supplier's web site.
- Notifying local organizations, schools, and civic groups that utility staff are available to make presentations on the Water Resource and Emergency Management Plan (usually in conjunction with presentations on water conservation programs).
- At any time that the Water Resource and Emergency Management Plan is activated or changes, Rose Hill SUD will notify local media of the issues, the Water Resource Management Stage (if applicable), and the specific actions required of the public. The information will also be publicized on the supplier's web site. Billing inserts will also be used as appropriate.

4.3 CRITERIA FOR INITIATION AND TERMINATION OF WATER RESOURCE AND EMERGENCY MANAGEMENT STAGES AND TARGETS FOR WATER USE REDUCTIONS

Initiation of a Water Resource Management Stage

The General Manager or official designee may order the implementation of a Water Resource Management Stage when one or more of the trigger conditions for that stage is met.

- Water Resource and Emergency Management Plan stages imposed by NTMWD action must be initiated by Rose Hill SUD.
- For other trigger conditions internal to a city or water supply entity, the General Manager or official designee may decide not to order the implementation of a Water Resource Management Stage or Water Emergency even though one or more of the trigger criteria for the stage are met. Factors which could influence such a decision include, but are not limited to, the time of the year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs. The reason for this decision should be documented.

The following actions will be taken when a water resource management stage is initiated:

- The public will be notified through local media and the supplier's web site as described in Section 4.2.
- Wholesale customers (if any) and NTMWD will be notified by e-mail with a follow-up letter that provides details of the reasons for initiation of the Water Resource Management Stage.
- If any mandatory provisions of the Water Resource and Emergency Management Plan are activated, Rose Hill SUD will notify the TCEQ Executive Director and the NTMWD Executive Director within 5 business days.

Termination of a Water Resource Management Stage

WREMP stages initiated by NTMWD may be terminated after NTMWD has terminated the stage. For WREMP stages initiated by the General Manager or official designee may order the termination of a Water Resource Management Stage when the conditions for termination are met or at their discretion.

The following actions will be taken when a Water Resource Management Stage is terminated:

- The public will be notified through local media and the supplier's web site as described in Section 4.2.
- Wholesale customers (if any) and NTMWD will be notified by e-mail with a follow-up letter.
- If any mandatory provisions of the Water Resource and Emergency Management Plan that have been activated are terminated, Rose Hill SUD will notify the TCEQ Executive Director and the NTMWD Executive Director within 5 business days.

The General Manager or official designee may decide not to order the termination of a Water Resource Management Stage even though the conditions for termination of the stage are met. Factors which could influence such a decision include, but are not limited to, the time of the year, weather conditions, or the anticipation of potential changed conditions that warrant the

continuation of the Water Resource Management Stage. The reason for this decision should be documented.

Water Resource and Emergency Management Plan Stages and Corresponding Measures

4.3.1 Stage 1

Initiation and Termination Conditions for Stage 1

NTMWD has initiated Stage 1, which may be initiated due to one or more of the following:

- The Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 1.
- Water demand is projected to approach the limit of NTMWD's permitted supply.
- The storage level in Lavon Lake as published by the Texas Water Development Board (TWDB),³ is less than 70 percent of the total conservation pool capacity during any of the months of April through October or less than 60 percent of the total conservation pool capacity during any of the months of November through March.
- The Sabine River Authority (SRA) has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Stage 1 drought.
- NTMWD has concern that Lake Texoma, Jim Chapman Lake, the East Fork Water Reuse Project, the Main Stem Pump Station, or some other NTMWD water source may be limited in availability within the next six (6) months.
- Water demand exceeds 95 percent of the amount that can be delivered by NTMWD to Customers for three (3) consecutive days.
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Supply source is interrupted or unavailable due to contamination, invasive species, equipment failure, or other cause.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Part of the system has a shortage in supply or damage to equipment. NTMWD may implement measures for only that portion of the NTMWD system impacted.

Supplier has initiated Stage 1 due to one or more of the following reasons:

- Supplier's water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days.
- Supplier's water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Supplier's water system is unable to deliver water due to the failure or damage of major water system components.
- Supplier's individual plan may be implemented if other criteria dictate.

NTMWD has terminated Stage 1, which may be terminated due to one or more of the following:

- The Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the termination of Stage 1.
- The storage level in Lavon Lake, as published by the TWDB,³ is greater than 75 percent of the total conservation pool capacity during any of the months of April through October or greater than 65 percent of the total conservation pool capacity during any of the months of November through March.
- Other circumstances that caused NTMWD initiation of Stage 1 no longer prevail.

The circumstances that caused the Supplier's initiation of Stage 1 no longer prevail.

Goal for Use Reduction and Actions Available under Stage 1

The goal for water use reduction under Stage 1 is a two percent (2%) reduction in the amount of water produced by NTMWD from the previous corresponding annual payment period prior to institution of drought restrictions. **If circumstances warrant, or if required by NTMWD, the General Manager or official designee can set a goal for greater or lesser water use reduction under Stage 1.** The General Manager or official designee may order the implementation of any or all of the actions listed below, as deemed necessary, to achieve a two-percent reduction. Measures described as “requires notification to TCEQ” are those that impose mandatory requirements on customers. The supplier must notify TCEQ and NTMWD within five (5) business days if such mandatory measures are implemented.

- Continue actions established by the Water Conservation Plan.
- Notify any wholesale customers of actions being taken and request that they implement similar procedures.
- Initiate engineering studies to evaluate alternative water sources and/or alternative delivery mechanisms should conditions worsen.
- Further accelerate public education efforts on ways to reduce water use.
- Halt non-essential city government water use. Examples include street cleaning, vehicle washing, operation of ornamental fountains, etc.
- Encourage the public to wait until the current drought or emergency situation has passed before establishing New Landscape.
- Encourage all users to reduce the frequency of draining and refilling swimming pools.
- **Requires Notification to TCEQ** – Increase enforcement of the following landscape watering restrictions established by the Water Conservation Plan: (1) limit landscape watering with sprinklers or irrigation systems at each service address to no more than two (2) days per week, on designated days, between April 1 and October 31; and (2) limit landscape watering with sprinklers or irrigation systems at each service address to once every week, on designated days, between November 1 and March 31. Exceptions are as follows:
 - An exception is allowed for New Landscape associated with new construction that maybe watered as necessary for 30 days from the date of installation of new landscape features.

- An exception for additional watering of landscape may be provided by hand-held hose with shutoff nozzle, and/or use of dedicated irrigation drip zones provided no run off occurs.
- Foundation (within 2 feet), New Landscape Watering, watering of new plantings (first year) of shrubs, and watering of trees (within a ten foot radius of its trunk) may occur by a hand-held hose, a soaker hose, or a dedicated zone using a Drip Irrigation system provided no runoff occurs.
- Locations using alternative sources of water supply only for irrigation may irrigate without day of the week restrictions provided proper signage is employed. However, irrigation using alternative sources of supply is subject to all other restrictions applicable to this stage. If the alternative supply source is a well, proper proof of well registration with the North Texas Groundwater Conservation District is required. Other sources of water supply may not include imported treated water.
- **Requires Notification to TCEQ** – Initiate a rate surcharge for all water use over a certain level.
- **Requires Notification to TCEQ** – Parks, golf courses and Athletic Fields using potable water for landscape watering are required to meet the same reduction goals and measures outlined in this stage. Exception for golf course greensand tee boxes that may be hand-watered as needed.

4.3.2 Stage 2

Initiation and Termination Conditions for Stage2

NTMWD has initiated Stage 2, which may be initiated due to one or more of the following:

- The Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 2.
- Water demand is projected to approach the limit of NTMWD's permitted supply.
- The storage level in Lavon Lake, as published by the TWDB,³ is less than 55 percent of the total conservation pool capacity during any of the months of April through October or less than 45 percent of the total conservation pool capacity during any of the months of November through March.
- SRA has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Stage 2 drought.
- NTMWD has concern that Lake Texoma, Jim Chapman Lake, the East Fork Water Reuse Project, the Main Stem Pump Station, or some other NTMWD water source may be limited in availability within the next three (3) months.
- Water demand exceeds 98 percent of the amount that can be delivered to Customers for three (3) consecutive days.
- Water demand for all or part of the delivery system equals delivery capacity, because delivery capacity is inadequate.
- Supply source is interrupted or unavailable due to contamination, invasive species, equipment failure, or other cause.

- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Part of the system has a shortage in supply or damage to equipment. NTMWD may implement measures for only that portion of the system impacted.

Supplier has initiated Stage 2 due to one or more of the following reasons:

- Supplier's water demand exceeds 98 percent of the amount that can be delivered to customers for three consecutive days.
- Supplier's water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Supply source is interrupted or unavailable due to invasive species.
- Supplier's water supply system is unable to deliver water due to the failure or damage of major water system components.
- Supplier's individual plan may be implemented if other criteria dictate.

NTMWD has terminated Stage 2, which may be terminated due to one or more of the following:

- The Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the termination of Stage 2.
- The storage level in Lavon Lake, as published by the TWDB,³ is greater than 70 percent of the total conservation pool capacity during any of the months of April through October or greater than 60 percent of the total conservation pool capacity during any of the months of November through March.
- Other circumstances that caused the NTMWD's initiation of Stage 2 no longer prevail.

The circumstances that caused the Supplier's initiation of Stage 2 no longer prevail.

Goals for Use Reduction and Actions Available under Stage 2

The goal for water use reduction under Stage 2 is a reduction of ten percent (10%) in the amount of water obtained from NTMWD from the previous corresponding annual payment period prior to the institution of drought restrictions. **If circumstances warrant, or if required by NTMWD, General Manager or official designee can set a goal for greater or lesser water use reduction.** The General Manager or official designee may order the implementation of any or all of the actions listed below, as deemed necessary to achieve a ten percent reduction. Measures described as "requires notification to TCEQ" are those that impose mandatory requirements on customers. The supplier must notify TCEQ and NTMWD within five (5) business days if such mandatory measures are implemented.

- Continue or initiate any actions available under the Water Conservation Plan and Stage 1.
- Notify any wholesale customers of actions being taken and request that they implement similar procedures.
- Implement viable alternative water supply strategies.

- Encourage all users to reduce the frequency of draining and refilling swimming pools.
- **Requires Notification to TCEQ** – Limit landscape watering with sprinklers or irrigation systems at each service address to once per week on designated days between April 1 and October 31. Limit landscape watering with sprinklers or irrigation systems at each service address to once every other week on designated days between November 1 and March 31. Exceptions are as follows:
 - New Landscape may be watered as necessary for 30 days from the date of the installation of new landscape features.
 - Foundation Watering (within 2 feet), New Landscape Watering, watering of new plantings (first year) of shrubs, and watering of trees (within a ten foot radius of its trunk) may occur for up to two hours on any day by a hand-held hose, a dedicated zone using a Drip Irrigation system and/or Soaker Hose, provided no runoff occurs.
 - Athletic Fields may be watered twice per week.
 - Locations using alternative sources of water supply only for irrigation may irrigate without day-of-the-week restrictions, provided proper signage is employed to notify the public of alternative water source(s) being used. However, irrigation using alternative sources of supply is subject to all other restrictions applicable to this stage. If the alternative supply source is a well, proper proof of well registration with the North Texas Groundwater Conservation District or Red River Groundwater Conservation District is required. Alternative sources of water supply may not include imported treated water.
 - An exemption is allowed for Drip Irrigation systems from the designated outdoor water use day limited to no more than one day per week. Drip Irrigation systems are however subject to all other restrictions applicable under this stage.
 - Hand watering with shutoff nozzle, drip lines, and Soaker Hoses are allowed before 10 am and after 6 pm, provided no runoff occurs.
- **Requires Notification to TCEQ** – Prohibit hydro seeding, hydro mulching, and sprigging.
- **Requires Notification to TCEQ** – Initiate a rate surcharge as requested by NTMWD.
- **Requires Notification to TCEQ** – Initiate a rate surcharge for all water use over a certain level.
- **Requires Notification to TCEQ** – If NTMWD has imposed a reduction in water available to Rose Hill SUD, impose the same percent reduction on any wholesale customers.
- **Requires Notification to TCEQ** – Parks and golf courses using potable water for landscape watering are required to meet the same reduction goals and measures outlined in this stage. Exception for golf course greens and tee boxes which may be hand watered as needed.

4.3.3 Stage 3

Initiation and Termination Conditions for Stage 3

NTMWD has initiated Stage 3, which may be initiated due to one or more of the following:

- The Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 3.
- Water demand is projected to approach or exceed the limit of the permitted supply.
- The storage level in Lavon Lake, as published by the TWDB,³ is less than 30 percent of the total conservation pool capacity during any of the months of April through October or less than 20 percent of the total conservation pool capacity during any of the months of November through March.
- SRA has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Stage 3 drought.
- The water supply from Lake Texoma, Jim Chapman Lake, the East Fork Water Reuse Project, Main Stem Pump Station, or some other NTMWD water source has become limited in availability.
- Water demand exceeds the amount that can be delivered to Customers.
- Water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Supply source is interrupted or unavailable due to contamination, invasive species, equipment failure or other cause.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Part of the system has a shortage in supply or damage to equipment. NTMWD may implement measures for only that portion of the system impacted.

Supplier has initiated Stage 3 due to one or more of the following reasons:

- Supplier's water demand exceeds the amount that can be delivered to customers.
- Supplier's water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate.
- Supply source becomes contaminated.
- Supplier's water supply system is unable to deliver water due to the failure or damage of major water system components.
- Supplier's individual plan may be implemented if other criteria dictate.

NTMWD has terminated Stage 3, which may be terminated due to one or more of the following:

- The Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the termination of Stage 3.

- The storage level in Lavon Lake, as published by the TWDB,³ in Lavon Lake is greater than 55 percent of the total conservation pool capacity during any of the months of April through October or greater than 45 percent of the total conservation pool capacity during any of the months of November through March.
- Other circumstances that caused the NTMWD's initiation of Stage 3 no longer prevail.

When other circumstances that caused the Supplier's initiation of Stage 3 no longer prevail.

Goals for Use Reduction and Actions Available under Stage 3

The goal for water use reduction under Stage 3 is a reduction of whatever amount is designated by NTMWD in the amount of water obtained from NTMWD from the corresponding previous annual payment period prior to institution of drought restrictions. **If circumstances warrant or if required by NTMWD, General Manager, or official designee can set a goal for greater or lesser water use reduction.** The General Manager, or official designee may order the implementation of any or all of the actions listed below, as deemed necessary. Measures described as "requires notification to TCEQ" are those that impose mandatory requirements on Member Cities and Customers. The supplier must notify TCEQ and NTMWD within five (5) business days if such mandatory measures are implemented.

- Continue or initiate any actions available under the Water Conservation Plan and Stages 1 and 2.
- Notify any wholesale customers of actions being taken and request them to implement similar procedures.
- Implement viable alternative water supply strategies.
- **Requires Notification to TCEQ** – Initiate mandatory water use restrictions as follows:
 - Hosing and washing of paved areas, buildings, structures, windows or other surfaces is prohibited except by variance and performed by a professional service using high efficiency equipment.
 - Prohibit operation of ornamental fountains or ponds that use potable water except where supporting aquatic life or water quality.
- **Requires Notification to TCEQ** – Prohibit new sod, hydro-seeding, hydro-mulching, and sprigging.
- **Requires Notification to TCEQ** – Prohibit the use of potable water for the irrigation of New Landscape.
- **Requires Notification to TCEQ** – Prohibit all commercial and residential landscape watering, except that Foundation Watering (within 2 feet) and watering of trees (within a ten foot radius of its trunk) may occur for two hours one day per week with a hand-held hose or with a dedicated zone using a Drip Irrigation system and/or Soaker Hose, provided no runoff occurs. Drip Irrigation systems are not exempt from this requirement.
- **Requires Notification to TCEQ** – Prohibit washing of vehicles except at a Commercial Vehicle Wash Facility.

- **Requires Notification to TCEQ** – Landscape watering of parks, golf courses, and Athletic Fields with potable water is prohibited. Exception for golf course greens and tee boxes that may be hand watered as needed. Variances may be granted by the water provider under special circumstances.
- **Requires Notification to TCEQ** – Prohibit the filling, draining, and/or refilling of existing swimming pools, wading pools, Jacuzzi and hot tubs except to maintain structural integrity, proper operation and maintenance, or to alleviate a public safety risk. Existing pools may add water to replace losses from normal use and evaporation. Permitting of new swimming pools, wading pools, Jacuzzi, and hot tubs is prohibited.
- **Requires Notification to TCEQ** – Prohibit the operation of interactive water features such as water sprays, dancing water jets, waterfalls, dumping buckets, shooting water cannons, inflatable pools, temporary splash toys or pools, slip-n-slides or splash pads that are maintained for recreation.
- **Requires Notification to TCEQ** – Require all commercial water users to reduce water use by a percentage established by the General Manager or official designee.
- **Requires Notification to TCEQ** – If NTMWD has imposed a reduction in water available to Rose Hill SUD, impose the same percent reduction on any wholesale customers.
- **Requires Notification to TCEQ** – Initiate a rate surcharge over normal rates for all water use or for water use over a certain level.

4.4 PROCEDURES FOR GRANTING VARIANCES TO THE PLAN

The General Manager or official designee may grant temporary variances for existing water uses otherwise prohibited under this Water Resource and Emergency Management Plan if one or more of the following conditions are met:

- Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or the person or entity requesting the variance.
- Compliance with this plan cannot be accomplished due to technical or other limitations.
- Alternative methods that achieve the same level of reduction in water use can be implemented.

Variances shall be granted or denied at the discretion of the General Manager or official designee. All petitions for variances should be in writing and should include the following information:

- Name and address of the petitioners.
- Purpose of water use.
- Specific provisions from which relief is requested.
- Detailed statement of the adverse effect of the provision from which relief is requested.
- Description of the relief requested.
- Period of time for which the variance is sought.
- Alternative measures that will be taken to reduce water use and the level of water use reduction.

- Other pertinent information.

4.5 PROCEDURES FOR ENFORCING MANDATORY WATER USE RESTRICTIONS

Mandatory water use restrictions may be imposed in Stage 1, Stage 2 and Stage 3. The penalties associated with the mandatory water use restrictions can be found in Appendix E.

Appendix D contains an order adopted by the Rose Hill SUD Board approving the Water Resource and Emergency Management plan, including enforcement of same.

4.6 COORDINATION WITH THE REGIONAL WATER PLANNING GROUP AND NTMWD

Appendix C includes a copy of a letter sent to the Chair of the Region C Water Planning Group in conjunction with this Water Resource and Emergency Management Plan.

Rose Hill SUD will send a draft of its ordinance(s) or other regulation(s) implementing this plan to NTMWD for NTMWD's review and comment. The supplier will also send the final ordinance(s) or other regulation(s) to NTMWD.

4.7 REVIEW AND UPDATE OF WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN

As required by TCEQ rules, Rose Hill SUD must review their respective Water Resource and Emergency Management plan every five years. The plan will be updated as appropriate based on new or updated information, such as the revision of the regional water plans.

APPENDIX A

LIST OF REFERENCES

1. Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter B, Rules 288.20 and 288.22, downloaded from [http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=288&sch=B&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=288&sch=B&rl=Y), July 2018.
2. Freese and Nichols, Inc.: 2019 Model Water Resource Management Plan for NTMWD Members Cities and Customers, prepared for the North Texas Municipal Water District, Fort Worth, February 2019.
3. Texas Water Development Board, Water Data for Texas, Lavon Lake, <https://waterdatafortexas.org/reservoirs/individual/lavon>

APPENDIX B
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES ON
DROUGHT CONTINGENCY PLANS

APPENDIX B

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES ON DROUGHT CONTINGENCY PLANS

TITLE 30	ENVIRONMENTAL QUALITY
PART 1	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288	WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS
SUBCHAPTER B	DROUGHT CONTINGENCY PLANS
RULE §288.20	Drought Contingency Plans for Municipal Uses by Public Water Suppliers

- (a) A drought contingency plan for a retail public water supplier, where applicable, must include the following minimum elements.
- (1) Minimum requirements. Drought contingency plans must include the following minimum elements.
- (A) Preparation of the plan shall include provisions to actively inform the public and affirmatively provide opportunity for public input. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.
- (B) Provisions shall be made for a program of continuing public education and information regarding the drought contingency plan.
- (C) The drought contingency plan must document coordination with the regional water planning groups for the service area of the retail public water supplier to ensure consistency with the appropriate approved regional water plans.
- (D) The drought contingency plan must include a description of the information to be monitored by the water supplier, and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.
- (E) The drought contingency plan must include drought or emergency response stages providing for the implementation of measures in response to at least the following situations:
- (i) reduction in available water supply up to a repeat of the drought of record;
 - (ii) water production or distribution system limitations;
 - (iii) supply source contamination; or
 - (iv) system outage due to the failure or damage of major water system components (e.g., pumps).

- (F) The drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this subparagraph are not enforceable.
 - (G) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:
 - (i) curtailment of non-essential water uses; and
 - (ii) utilization of alternative water sources and/or alternative delivery mechanisms with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).
 - (H) The drought contingency plan must include the procedures to be followed for the initiation or termination of each drought response stage, including procedures for notification of the public.
 - (I) The drought contingency plan must include procedures for granting variances to the plan.
 - (J) The drought contingency plan must include procedures for the enforcement of mandatory water use restrictions, including specification of penalties (e.g., fines, water rate surcharges, discontinuation of service) for violations of such restrictions.
- (2) Privately-owned water utilities. Privately-owned water utilities shall prepare a drought contingency plan in accordance with this section and incorporate such plan into their tariff.
 - (3) Wholesale water customers. Any water supplier that receives all or a portion of its water supply from another water supplier shall consult with that supplier and shall include in the drought contingency plan appropriate provisions for responding to reductions in that water supply.
- (b) A wholesale or retail water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.
 - (c) The retail public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan.
-

Source Note: The provisions of this §288.20 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384

APPENDIX C

LETTER TO REGION C WATER PLANNING GROUPS

APPENDIX C

LETTER TO REGION C WATER PLANNING GROUPS

Rose Hill SUD

May 24, 2022

Region C Water Planning Group
c/o Trinity River Authority
P.O. Box 60
Arlington, TX 76004

Subject: Rose Hill Special Utility District Water Resource and Emergency Management Plan

Dear Mr. Ward

Enclosed please find a copy of the recently updated Water Resource and Emergency Management Plan for the Rose Hill Special Utility District. I am submitting a copy of this plan to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules. The Board of the Rose Hill Special Utility District adopted the plan on May 24, 2022

Sincerely,



Nanci Essary, General Manager
Rose Hill SUD
1377 CR 274
Terrell, TX 75160
(972) 932-3077

APPENDIX D

**ADOPTION OF WATER RESOURCE AND EMERGENCY
MANAGEMENT PLAN**

APPENDIX D

ADOPTION OF WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN

Rose Hill Special Utility District Order Adopting Water Resource and Emergency Management Plan

Order No. 2022-07

AN ORDER ADOPTING A WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN FOR THE ROSE HILL SPECIAL UTILITY DISTRICT TO PROMOTE THE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALTIES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE WATER RESOURCE AND EMERGENCY MANAGEMENT PLAN.

WHEREAS, the Rose Hill Special Utility District (the “District”), recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the District recognizes that due to natural limitations, drought conditions, system failures and other acts of God which may occur, the District cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality (the “Commission”) require that the District adopt a Water Resource and Emergency Management Plan; and

WHEREAS, the District has determined an urgent need in the best interest of the public to adopt a Water Resource and Emergency Management Plan; and

WHEREAS, pursuant to Chapter 65 of the Water Code, the District is authorized to adopt such policies necessary to accomplish the purposes for which it was created, including but not limited to the preservation and conservation of water resources; and

WHEREAS, the Board of Directors of the District desires to adopt the North Texas Municipal Water District (the “NTMWD”) Model Water Resource and Emergency Management Plan as official District policy for the conservation of water.

NOW THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF THE ROSE HILL SPECIAL UTILITY DISTRICT THAT:

Section 1. The Board of Directors hereby approves and adopts the NTMWD Model Water Resource and Emergency Management Plan (the “Plan”), attached hereto as Addendum A. The District commits to implement the requirements and procedures set forth in the adopted Plan.

Section 2. Any customer, defined pursuant to 30 Tex. Admin. Code Chapter 291, failing to comply with the provisions of the Plan shall be subject to a monetary fine as allowed by law, and/or discontinuance of water service by the District. Proof of a culpable mental state is not required for a conviction of an offense under this section. Each day a customer fails to comply with the Plan is a separate violation. The District's authority to seek injunctive or other civil relief available under the law is not limited by this section.

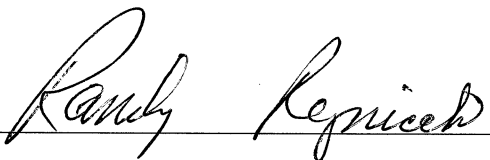
Section 3. The Board of Directors does hereby find and declare that sufficient written notice of the date, hour, place and subject of the meeting adopting this Order was posted at a designated place convenient to the public for the time required by law preceding the meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Order and the subject matter thereof has been discussed, considered and formally acted upon. The Board of Directors further ratifies, approves and confirms such written notice and the posting thereof.

Section 4. The General Manager or his/her designee is hereby directed to file a copy of the Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

Section 5. Should any paragraph, sentence, clause, phrase or word of this Order be declared unconstitutional or invalid for any reason, the remainder of this Order shall not be affected.

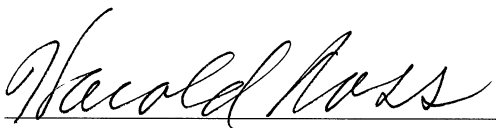
Section 6. Order No. 2011-01, adopted on August 23, 2011 is hereby repealed.

Approved and adopted by the Board of Directors on this 24th day of May, 2022.



Randy Reznicek
President, Board of Directors
Rose Hill Special Utility District

Attest:



Harold Ross
Secretary/Treasurer, Board of Directors
Rose Hill Special Utility District

APPENDIX E

WATER ALLOCATION, PENALTIES AND ENFORCEMENT

WATER ALLOCATION AND PENALTIES

In the event that water shortage conditions threaten public health, safety, and welfare, the General Manager is hereby authorized to ration water according to the following water allocation plan:

Single-Family Residential Customers

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household	Gallons per Month
1 or 2	6,000
3 or 4	7,000
5 or 6	8,000
7 or 8	9,000
9 or 10	10,000
11 or more	12,000

“Household” means the residential premises served by the customer’s meter. “Persons per household” includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer’s household is comprised of two (2) persons unless the customer notifies the Rose Hill Special Utility District of a greater number of persons per household on a form prescribed by the General Manager. The General Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer’s responsibility to go to the Rose Hill Special Utility District offices to complete and sign the form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the General Manager. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the Rose Hill Special Utility District on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the Rose Hill Special Utility District in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the General Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the Rose Hill Special Utility District of a reduction in the number of person in a household shall be fined not less than \$100.00. Residential water customers shall pay the following surcharges:

- \$10.00 for the first 1,000 gallons over allocation.
- \$15.00 for the second 1,000 gallons over allocation.
- \$20.00 for the third 1,000 gallons over allocation.
- \$25.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Master-Metered Multi-Family Residential Customers

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (example: apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the Rose Hill Special Utility District of a greater number on a form prescribed by the General Manager. The General Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the Rose Hill Special Utility District offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the General Manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the Rose Hill Special Utility District in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the General Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the Rose Hill Special Utility District of a reduction in the number of person in a household shall be fined not less than \$100.00. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

- \$10.00 for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
- \$15.00 thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.
- \$20.00 thereafter, for each additional 1,000 gallons over allocation up through a third 1,000 gallons for each dwelling unit.
- \$25.00 thereafter for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

In addition to the surcharges the following fees will be assessed for Single-Family and Multi-Family Residential Customers:

- 1st Violation – a warning**
- 2nd Violation - \$100.00 fee**
- 3rd Violation - \$100.00 fee, meter locked and additional \$100.00 lock fee.**

Commercial Customers

A monthly water usage allocation shall be established by the General Manager, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately 50 percent of the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. Provided, however, a customer, 75 percent of whose monthly usage is less than 100,000 gallons, shall be allocated 75,000 gallons. The General Manager shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the Rose Hill Special Utility District to determine the allocation. Upon request of the customer or at the initiative of the General Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Board of Directors. Nonresidential commercial customers shall pay the following surcharges:

Customers whose allocation is 100,000 gallons through 1,000,000 gallons per month:

- \$ 10.00 per thousand gallons for the first 1,000 gallons over allocation.
- \$ 15.00 per thousand gallons for the second 1,000 gallons over allocation.
- \$ 20.00 per thousand gallons for the third 1,000 gallons over allocation.
- \$ 25.00 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is >1,000,000 gallons per month or more:

- 1 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
- 2 times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
- 3 times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
- 4 times the block rate for each 1,000 gallons more than 15 percent above allocation.

As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

The surcharges shall be cumulative.

ENFORCEMENT

1. No person shall knowingly or intentionally allow the use of water from the Rose Hill Special Utility District for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by General Manager, or official designee, in accordance with provisions of the plan.
2. Any person who violates this plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than one-hundred dollars (\$100.00) and not more than five-hundred dollars (\$500.00). Each day that one or more of the provisions in this WMERP is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the General Manager, or official designee shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at \$100.00, and any other costs incurred by the Rose Hill Special Utility District in discontinuing service. In addition, suitable assurance must be given to the General Manager, or official designee that the same action shall not be repeated while the plan is in effect. Compliance with this plan may also be sought through injunctive relief in the District court.
3. Any person, including a person classified as a water customer of the Rose Hill Special Utility District, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a reputable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a reputable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this plan and that the parent could not have reasonably known of the violation.
4. Any employee of the Rose Hill Special Utility District, or other employee designated by the Board of Directors, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance.