2024
DROUGHT CONTINGENCY
AND
EMERGENCY WATER MANAGEMENT PLAN

NORTH RICHLAND HILLS

NRH

THE CITY OF CHOICE

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APPENDICIES

1.0 INTRODUCTION AND OBJECTIVES

Drought or a number of other uncontrollable circumstances can disrupt normal availability of the City's water supply. Even though the City may have an adequate water supply, the supply could become contaminated or a disaster could destroy the supply.

The City's Drought Contingency and Emergency Water Management Plan (EWMP) is not the same as the Water Conservation Plan. While water conservation involves implementing permanent water use efficiency or reuse practices, the EWMP will establish temporary methods or techniques design to use only as long as an emergency exists.

The purpose of this Drought Contingency and EWMP (subsequently referred to as the Plan) is as follows:

- To conserve the available water supply in times of drought 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.

2.0 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

TCEQ Rule Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.1 (4) defines a drought contingency plan 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."

TCEQ rules governing development of and minimum requirements for drought contingency plans for municipal water suppliers and wholesale water suppliers are contained in Texas Administrative Code Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 and Rule 288.22, respectively.

3.0 WATER SYSTEM PROFILE

North Richland Hills purchases water from the Trinity River Authority Northern Region (TRA) and the City of Fort Worth. Tarrant Regional Water District (TRWD) is the wholesale raw water supplier for TRA and the City of Fort Worth. The water supply sources for TRA and the City of Fort Worth are as follows:

- Lake Arlington: TRA pipeline
- West Fork of Trinity River: Lake Worth, Eagle Mountain Lake, and Lake Bridgeport (A pipeline connecting Eagle Mountain Lake to the East Texas supply is under construction).
- East Texas: Cedar Creek Reservoir, located approximately 75 miles southeast of Fort Worth and Richland Chambers Reservoir;

- Clear Fork of the Trinity River via Lake Benbrook. A pipeline connects Lake Benbrook to the East Texas Supply.

3. 1 NORTH RICHLAND HILLS' PUMPING CAPACITY

North Richland Hills provided water to approximately 72,587 residents in 2023 with the population expected to exceed 75,313 by 2028. In addition, North Richland Hills provides treated water to the City of Watauga with a current estimated population of 23,650 and expect to exceed 23,820 by 2028. North Richland Hills purchases treated water from the City of Fort Worth and the TRA Northern Region and distributes water through a series of four (4) ground storage facilities and four (4) elevated storage facilities resulting in a storage capacity of 16 million gallons and an estimated pumping capacity of 47 million gallons/day (MGD) of available potable water.

NORTH RICHLAND HILLS PUMPING CAPACITY

Pump Station Entry Points	Station Capability (MGD)
7699 Airport Freeway at Handley Ederville Road	8.0
5105 Western Center Boulevard	12.0
4145 Stanley Keller Road	4.0
1011 Glade Road	23.0

3.2 COORDINATION WITH REGIONAL WATER PLANNING GROUP

The water service area of the City of North Richland Hills is located within the Tarrant Regional Water District and the City of North Richland Hills has provided a copy of the Plan to the Tarrant Regional Water District.

4.0 DROUGHT CONTINGENCY/EMERGENCY WATER MANAGEMENT PLAN

4.1 WHOLESALE CUSTOMERS OF FORT WORTH AND TRA

The City of North Richland Hills is a wholesale or retail customer of the City of Fort Worth and the Trinity River Authority (TRA) for purchasing potable water. The City is required, per the wholesale contract, to establish a Drought Contingency/Emergency Water Plan similar to the City of Fort Worth and TRA. The City's Plan must follow the same triggering conditions, stages, and responses to drought or emergency water conditions as Fort Worth and TRA plans. Under the City's Plan, we will be notified by the City of Fort Worth or TRA by telephone or facsimile, and a written letter for each stage of the Plan to follow.

The notification process will include the steps the City must take in order to comply with their plans.

The City may also need to implement an Emergency Water Management Plan in lieu of Fort Worth or TRA's plans. For these emergency water situations, the City will follow the same triggers, stages, and responses as outlined in the Plan.

4.2 PUBLIC EDUCATION

The City of North Richland Hills will inform and educate the public about the Drought Contingency/Emergency Water Management Plan by the following means:

- Preparing fact sheets describing the Plan and making these available online and at various City sites and at events where the Public Works Department may have an educational booth.
- Posting a copy of the Plan on the City's web site.
- Notifying local organizations, schools, and civic groups that staff is available to make presentations concerning drought contingencies and emergency water management plans.

When the Drought Contingency/Emergency Water Management Plan is activated or the stage changes, the City will notify local media of the issues, the current response stage, and the specific actions required of the public. The information will also be publicized on the City's web site. Utility bill inserts will also be used as appropriate.

4.3 INITIATION AND TERMINATION OF DROUGHT AND EMERGENCY RESPONSE STAGES

The provisions of this Plan shall apply to all persons, customers, and property utilizing potable water provided by the City of North Richland Hills. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities. The Plan does not apply to locations using treated wastewater effluent, private or public wells or possessing their own water rights in the Trinity River; however, any pond, impoundment, body of water, or other water service that is supplemented, or has the ability to supplement supply, with potable water shall adhere to the provisions of this Plan.

The Plan may be applied to the entire city or geographic portions of the City as necessary. If the Plan is applied only to a limited sector, the boundaries will be defined in terms of roadways, creeks and other easily distinguishable features.

Initiation of a Drought/Emergency Water Management Stage

The City Manager or his/her official designee may order the implementation of a drought response or water emergency stage when one or more of the trigger conditions for that stage is met. The following actions will occur when a stage is initiated:

- The public will be notified through local media and through the City's web site.
- The City of Watauga, a wholesale or retail customer of the City, will be notified by telephone, e-mail, follow-up letter, or fax that provides details of the reasons for initiation of the drought or water emergency stage.
- The public will also be notified by postings at the North Richland Hills' City Hall and at several key public facilities within the City. Temporary signs will also be placed throughout the City.

The notification will include the proper stage level and responses to the stage level so residents and customers of the city will understand what actions are required on their part. A description and details of the reasons for initiation of the drought or water emergency stage will be provided in the public posting.

All stages imposed by the City of Fort Worth or TRA must be initiated by the City of North Richland Hills.

The Tarrant Regional Water District (TRWD) supplies surface water to the City of Fort Worth and TRA. The raw water is treated and made potable for the City of North Richland Hills' use by the City of Fort Worth and TRA. Under the wholesale contracts and agreements, the City of North Richland Hills, the City of Fort Worth and TRA must initiate any drought response or emergency stages that have been initiated by TRWD. TRWD's stages are included in the City's Plan.

Termination of a Drought/Emergency Water Management Stage

The City Manager or his/her official designee may order the termination of a drought response or water emergency stage when notified by the City of Fort Worth or TRA that conditions for termination are met. The following actions will be taken when a drought stage is terminated:

- The public will be notified through local media and through the City's web site.
- The City of Watauga, a wholesale or retail customer of the City, will be notified with a follow-up letter, email or fax.

The City of North Richland Hills may have to implement a water emergency stage on behalf of its water distribution system. Examples may include the loss of pumping capacity, contamination, and water main breaks. The City Manager or his/her official designee may order the termination of the stage.

4.4 DROUGHT AND EMERGENCY RESPONSE STAGES

Stage 1 – Water Watch

Triggering Conditions:

- Water demand reaches or exceeds 90% of reliable delivery capacity for three consecutive days. The delivery capacity could be citywide or in a specified portion of the system.
- Distribution system becomes contaminated.
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Total raw water supply within the Tarrant Regional Water District (TRWD) western and eastern division reservoirs, drops below 75% (25% depleted) of conservation storage.
- Water demand for all or part of the TRWD delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water demand is projected to approach the limit of TRWD's permitted supply.
- TRWD's supply source becomes contaminated.
- TRWD's water supply system is unable to deliver water due to the failure or damage of major water system components.
- The TRWD General Manager, with the concurrence of the TRWD Board of Directors, finds that conditions warrant the declaration of Stage 1 of the Plan.

Terminating Condition for Stage 1

Stage 1 may terminate when the City of Fort Worth or TRA terminates its Stage 1 condition or when circumstances that caused the initiation of Stage 1 no longer prevail.

Goal for use reduction for Stage 1

The goal for water use reduction under Stage 1, Water Watch, is five percent. If circumstances warrant or if required by the City of Fort Worth or TRA, the City Manager of North Richland Hills or his/her official designee can set a goal for greater water use reduction.

Actions available for Stage 1

The City Manager or his/her official designee may order the implementation of any of the actions listed below, as deemed necessary. The City Manager or his/her official designee must implement any action(s) required by the City of Fort Worth or TRA.

All Water Users

Initiate mandatory restrictions to prohibit non-essential water use as follows:

- Discourage hosing of paved areas, such as sidewalks, driveways, parking lots, tennis courts, patios, or other impervious surfaces, except to alleviate an immediate health or safety hazard. This may include premises with raw or processed food, pharmaceutical or vaccine processing, storage or vending establishments, including restaurants and grocery stores may be washed to the extent necessary for sanitary purposes. These areas may also include:
  - Trash and dumpster areas.
  - Areas around fuel pumps.
  - Storefront cleaning areas with accumulated bird droppings and debris.
  - Localized spot cleaning of parking areas to remove oil, grease build-up that may pose a health and safety issue.
- Discourage hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting.
- Prohibit using water in such a manner as to allow runoff or other waste, including:
  - Failure to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet;
  - Operating a permanently installed irrigation system with: (a) a broken head; (b) a head that is out of adjustment and the arc of the spray head is over a street or parking lot; or (c) a head that is misting because of high water pressure; or
  - During irrigation, allowing water: (a) to run off a property and form a stream of water in a street for a distance of 50 feet or greater; or (b) to pond in a street or parking lot to a depth greater than one-quarter of an inch;
  - Allowing or causing an irrigation system or other lawn-watering device to operate during any form of precipitation.
- Prohibit outdoor watering with sprinklers or irrigation systems between 10 a.m. and 6 p.m.
- Limit landscape watering with sprinklers or irrigation systems at each service address to a twice per week schedule as outlined below. This includes landscape watering of parks, and sports fields.
  - Residential addresses ending in an even number (0, 2, 4, 6, or 8) may water on Wednesdays and Saturdays.
  - Residential addresses ending in an odd number (1, 3, 5, 7 or 9) may water on Thursdays and Sundays.
  - All non-residential locations (apartment complexes, businesses, industries, parks, street medians, etc.) may water on Tuesdays and Fridays.

- All users are encouraged to reduce the frequency of draining and refilling swimming pools, hot tubs and Jacuzzi type pools except to maintain adequate water levels for structural integrity, proper operation and maintenance, and /or to alleviate an issue that poses a public safety risk.
- All users are encouraged to use native and adapted drought tolerant plants in landscaping.
- Washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle shall be limited to the use of a hand-held bucket or a hand-held hose equipped with a positive-pressure shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the premises of a commercial car wash or commercial service station. Companies with an automated on-site vehicle washing facility may wash its vehicles at anytime. Further, such washing may be exempt from these requirements if the health, safety, and welfare of the public are contingent upon frequent vehicle cleanings, such as garbage trucks and vehicles used to transport food and perishables.

Exceptions:

- Lawns and landscaping may be watered on any day, at any time, by handheld hose, drip irrigation, a soaker hose or tree bubbler. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials.)
- Water use necessary for the repair of an irrigation system, plumbing line, fountain, etc., in the presence of the person making the repair.
- Foundations may be watered up to two hours on any day using a handheld hose, soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
- Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the Public Works Department, if the department determines that a property can not be completely irrigated with an average of three-quarters of an inch of water in a single day, and that the property should be divided into sections to be irrigated on different days.
- Establishing new turf is discouraged. If hydromulch, grass sod, or grass seed is installed for the purpose of establishing a new lawn, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply. (This does not include over seeding with rye since turf already exists.)
- Skinned areas of sports fields may be watered as needed for dust control.
- Professional sports fields (playing fields within a stadium only, not surrounding landscaping) may be watered as needed to maintain league standards.

City and Local Governments (In addition to the actions listed above):

- Review conditions and problems that caused Stage 1. Take corrective action.
- Increase public education efforts on ways to reduce water use.
- Increase enforcement efforts.
- Intensify leak detection and repair efforts.
- Audit all city and local government irrigation systems to ensure proper conditions, settings, and operations.
- Identify and encourage voluntary reduction measures by high-volume water users through water use audits.
- Reduce non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency.
- The City of Fort Worth or TRA will notify the City of North Richland Hills of actions being taken and require them to implement the same stage and measures. Such action is in accordance with Section 2.5 of the Fort Worth Wholesale Water Contract. Per contract, wholesale customers are required to institute and apply the same rationing, conservation measures or restrictions to the use of water by their customers for so long as any part of their total water supply is being furnished by the City of Fort Worth.
- Advise City of Watauga of actions being taken by North Richland Hills and require enforcement of like procedures in the City of Watauga.
- The City Manager, or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate voluntary measures to reduce water use (e.g., implement Stage 1 of the customer's drought contingency plan).
- The City Manager, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Commercial or Industrial:

- All actions listed above for all water users apply to commercial and industrial users.
- Stock at commercial plant nurseries is exempt from Stage 1 watering restrictions.
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons on an "on demand" basis.
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse their linens and towels.

- Car wash facilities must keep equipment in good working order, which should include regular inspections to be sure there are no leaks, broken or misdirected nozzles, and that all equipment is operating efficiently.
- All commercial and industrial customers are encouraged to audit irrigation systems.

Stage 2 – Water Warning

Triggering Conditions:

- Water demand reaches or exceeds 95% of reliable delivery capacity for three consecutive days. The delivery capacity could be citywide or in a specified portion of the system.
- Contamination of the water supply source(s) or water supply system.
- Demand for all or part of the delivery system equals or exceeds delivery capacity because delivery capacity is inadequate.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Total raw water supply within TRWD, western and eastern division reservoirs, drops below 60% (40% depleted) of conservation storage.
- Water demand for all or part of the TRWD delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water demand is projected to approach the limit of TRWD's permitted supply.
- TRWD's supply source becomes contaminated.
- TRWD's water supply system is unable to deliver water due to the failure or damage of major water system components.
- The TRWD General Manager, with the concurrence of the TRWD Board of Directors, finds that conditions warrant the declaration of a Stage 2 of the Plan.

Terminating Condition for Stage 2

Stage 2 may terminate when the City of Fort Worth or TRA terminates its Stage 2 condition or when circumstances that caused the initiation of Stage 2 no longer prevail.

Goal for Use Reduction for Stage 2

The goal for water use reduction under Stage 2, Water Warning is to decrease use by 10 percent. If circumstances warrant or if required by the City of Fort Worth or TRA, the City Manager of North Richland Hills or his/her official designee can set a goal for greater water use reduction.

Actions Available for Stage 2

The City Manager or his/her official designee may order the implementation of any of the actions listed below, as deemed necessary. The City Manager or his/her official designee must implement any action(s) required by the City of Fort Worth and TRA.

- Continue or initiate any actions available under Stage 1.

All Water Users:

- Limit landscape watering with sprinklers or irrigation systems to a once per week schedule at each service address as determined by the Public Works Department. This includes landscape watering at parks and sports fields.
- All users are encouraged to wait until the current drought or emergency situation has passed before establishing new landscaping and turf. If hydromulch, grass sod, or grass seed is installed for the purpose of establishing a new lawn, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply (this does not include over seeding with rye since turf already exists).
- Prohibit use of water for dust control, except as required to protect public health.
- Discourage the operation of ornamental fountains or ponds that use potable water except where necessary, to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- Prohibit filling of swimming pools with automatic valves.
- Watering for dust control on skinned areas of sport fields is not allowed.

Exceptions:

- Lawns and landscaping may be watered on any day, at any time, by handheld hose, drip irrigation, a soaker hose or tree bubbler. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials.)
- Foundations may be watered up to two hours on any day by a handheld hose, a soaker hose, or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
- Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the Public Works Department if the department determines that a property can not be completely irrigated with an average of three-quarters of an inch of water in a single day and that the property should be divided into sections to be irrigated on different days. If approved, no stations will be watered more than once per week.
- Professional sports fields (playing fields within a stadium only - not surrounding landscaping) may be watered as needed to maintain league standards.

- Discourage the filling, draining, or refilling of swimming pools, wading pools, hot tubs and Jacuzzi type pools except to maintain adequate water levels for structural integrity, proper operation and maintenance, and/or to alleviate an issue that poses a public safety risk.
- Encourage the use of covers for all types of pools, hot tubs, and Jacuzzi type pools when not in use.

City and Local Governments:

- Continue or initiate any actions available under Stage 1.
- Review conditions or problems that caused Stage 2. Take corrective action.
- Increase frequency of media releases on water supply conditions.
- Further, accelerate public education efforts on ways to reduce water use.
- Eliminate non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency.
- Prohibit wet street sweeping.
- The City of Fort Worth or TRA will notify the City of North Richland Hills of actions being taken and require them to implement the same stage and measures. Such action is in accordance with Section 2.5 of the Fort Worth Wholesale Water Contract. Per contract, wholesale customers are required to institute and apply the same rationing, conservation measures or restrictions to the use of water by their customers for so long as any part of their total water supply is being furnished by the City of Fort Worth.
- Advise City of Watauga of actions being taken by North Richland Hills and require enforcement of like procedures in the City of Watauga.
- The City Manager, or his/her designee(s), will initiate weekly contact with wholesale water customers to discuss water supply and/or demand conditions and the possibility of pro rata curtailment of water diversions and/or deliveries.
- The City Manager, or his/her designee(s), will request wholesale water customers to initiate mandatory measures to reduce non-essential water use (e.g., implement Stage 2 of the customer's drought contingency plan).
- The City Manager, or his/her designee(s), will initiate preparations for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer according to the procedures specified in Section 4.5 of the Plan.
- The City Manager, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Commercial or Industrial:

- All actions listed above for all water users apply to commercial and industrial users.
- Use of water from fire hydrants for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare requires approval from the Public Works Department. Fire hydrant use may be limited to only designated hydrants.

Stage 3 – Emergency Water Use

Triggering Conditions for Stage 3:

- Water demand reaches or exceeds 98% of reliable delivery capacity for one day. The delivery capacity could be citywide or in a specified portion of the system.
- Contamination of the water supply source(s) or water supply system.
- Demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- Total raw water supply within TRWD, western and eastern division reservoirs, drops below 45% (55% depleted) of conservation storage.
- Water demand for all or part of the TRWD delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water demand is projected to approach or exceed the limit of TRWD's permitted supply.
- TRWD's supply source becomes contaminated.
- TRWD's water supply system is unable to deliver water due to the failure or damage of major water system components.
- The TRWD General Manager, with the concurrence of the TRWD Board of Directors, finds that conditions warrant the declaration of Stage 3 of the Plan.

Terminating Conditions for Stage 3

Stage 3 may terminate when the City of Fort Worth or TRA terminates its Stage 3 conditions or when circumstances that caused the initiation of Stage 3 no longer prevail.

Goals for Use Reduction for Stage 3

The goal for water use reduction under Stage 3, Emergency Water Use, is to decrease use by 20 percent. If circumstances warrant or if required by the City of Fort Worth or TRA, the City Manager of North Richland Hills or his/her official designee can set a goal for a greater water use reduction.

Actions Available for Stage 3:

The City Manager or his/her official designee may order the implementation of any of the actions listed below, as deemed necessary. The City Manager or his/her official designee must implement any action(s) required by the City of Fort Worth or TRA.

- Continue or initiate any actions available under Stages 1 and 2.

All Water Users:

- Prohibit landscape watering, including at parks, and sports fields.
- Prohibit establishment of new landscaping. Variances may be granted for those landscape projects started prior to the initiation of Stage 3 drought restrictions.
- Vehicle washing restricted to commercial car wash, commercial service station or a private on-site vehicle washing facility and can only be done as necessary for health, sanitation, or safety reasons, including but not limited to the washing of garbage trucks and vehicles used to transport food and other perishables. All other vehicle washing is prohibited.
- Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life.
- Prohibit hosing of buildings or other structures for purpose other than fire protection or surface preparation prior to painting with high-pressure equipment. Must be performed by a professional power washing service utilizing high efficiency equipment and a vacuum recovery system where possible.
- Prohibit the draining, filling, or refilling of swimming pools, wading pools and Jacuzzi type pools. Existing private and public pools may add water to maintain pool levels; however, they may not be refilled using automatic fill valves.

Exceptions:

- Watering with handheld hose, soaker hose or drip irrigation system may occur on any day at any time. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials.)
- Foundations may be watered up to two hours on any day by handheld hose; or using a soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
- Professional sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as needed to maintain league standards.

City and Local Governments:

- Continue or initiate any actions available under Stages 1 and 2.
- Review conditions or problems that caused Stage 3. Take corrective action.
- Implement viable alternative water supply strategies.
- Increase frequency of media releases explaining emergency.
- Reduce city and local government water use to maximum extent possible.
- Prohibit the permitting of new swimming pools, Jacuzzi type pools, spas, ornamental ponds and fountain construction. Pools already permitted and under construction may be completely filled with water.
- Institute a mandated reduction in deliveries to all wholesale customers. Such a reduction will be distributed as required by Texas Water Code §11.039.
- If the City of Fort Worth imposes a reduction in water available to the City of North Richland Hills, the City will then impose a reduction to the City of Watauga.
- The City of Fort Worth or TRA will notify the City of North Richland Hills of actions being taken and require the City to implement the same stage and measures. Such action is in accordance with Section 2.5 of the Fort Worth Wholesale Water Contract. Per contract, wholesale customers are required to institute and apply the same rationing, conservation measures or restrictions to the use of water by their customers for so long as any part of their total water supply is being furnished by the City of Fort Worth.
- Advise City of Watauga of actions being taken by North Richland Hills and require enforcement of like procedures in the City of Watauga.
- The City Manager, or his/her designee(s), will contact wholesale water customers to discuss water supply and/or demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (e.g., implement Stage 3 of the customer's drought contingency plan).
- The City Manager, or his/her designee(s), will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer according to the procedures specified in Section 4.5 of the Plan.
- The City Manager, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Commercial or Industrial:

- All actions listed above for all water users apply to commercial and industrial users.
- Hotels, restaurants, and bars required to serve drinking water to patrons on an "on demand" basis.

- Hotels are required to implement laundry conservation measures by encouraging patrons to reuse their linens and towels.
- Stock at commercial plant nursery may be watered only with a hand-held hose, hand-held watering can or drip irrigation system.
- Commercial and industrial water users required to reduce water use by a set percentage as determined by the Public Works Department.
- Use of water from hydrants for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare requires approval by the Public Works Department. Fire hydrant use may be limited to only designated hydrants.

4.5 PRO RATA WATER ALLOCATION

In the event that the triggering criteria specified in Section 4.4 of the Plan for Stage 3 "Emergency Water Use" have been met, the City Manager is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code Section §11.039. This provision will be included in every wholesale water contract entered into or renewed after adoption of the Plan, including contract extensions.

4.6 PROCEDURES FOR ENFORCING MANDATORY WATER USE MEASURES

Mandatory water use restrictions may be imposed in Stages 1, 2, and 3. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

- On the first violation, customers will be given a written warning that they have violated the mandatory water use restriction.
- On the second and subsequent violations, citations may be issued to customers with minimum and maximum fines established by ordinance.
- After three violations have occurred, the City may cut off water service to the customer. Appendix B contains a copy of the City of North Richland Hills' ordinance adopting this Plan and the enforcement actions and penalties.

4.7 ALTERNATIVE WATER SOURCES

In the event that the City would have to consider alternative water sources. The City would utilize five groundwater wells located within the City. The wells have the ability to produce 1.28 MGD at the well sites. Production from the groundwater well sites would not meet the demands for the City on a daily basis. Therefore alternative water sources would need to be obtained. These alternative water sources could include the following:

- Purchasing potable water from neighboring cities. Currently the City has connections with the cities of Colleyville and Watauga for emergency use.
- Purchasing potable water from vendor sources that deliver water from their distribution centers or facilities.

4.8 VARIANCE PROVISIONS

The City Manager or his/her official designee may, in writing, grant temporary variance for existing water uses otherwise prohibited under the EWMP if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

- Failure to grant such a variance would cause emergency condition adversely affecting health, sanitation, or fire safety for the public or the person requesting the variance.
- Compliance with the 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.

Persons requesting an exemption from the provisions of this ordinance shall file a petition for variance with the City of North Richland Hills within five days after the EWMP for a particular drought response stage that has been invoked. All petitions for variances shall be reviewed by the City Manager or his/her official designee and shall include the following:

- Name and address of the petitioner(s).
- 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.
- Other pertinent information.
- Detailed schedule of reduction that shows a reduction in use over the 30 day period for new lawns and landscapes. Schedule should be designed so that at the end of the 30-day period, lawn and landscaped areas can adhere to the twice per week schedule defined in Stage 1.

Variances granted by the City shall be subject to the following conditions, unless waived or modified by the City Manager or his/her official designee.

- Variances granted shall include a timetable for compliance.
- Variances granted shall expire when the EWMP is no longer in effect.

4.9 REVIEW AND UPDATE OF DROUGHT CONTINGENCY PLAN

As required by TCEQ rules, the City of North Richland Hills will review this drought contingency plan as required by the state, TCEQ, or per wholesale contracts and at least every five years from adoption of the Plan. The Plan will be updated as appropriate, based on new or updated information.

APPENDIX A
LETTER TO WHOLESALE CUSTOMER

APPENDIX B

LETTERS TO:

THE CITY OF FORT WORTH

TRINITY RIVER AUTHORITY

THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

THE TEXAS WATER DEVELOPMENT BOARD

APPENDIX C

CITY ORDINANCE

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APPENDIX D

EMERGENCY WATER MANAGEMENT PLAN IMPLEMENTATION

APPENDIX D

Emergency Water Management Plan Implementation

I. Authority

It is the intent of this Plan to outline when and how to implement a water rationing plan.

A. Ordinance No. 2893 establishes the authority for the City Manager or his/her official designee to execute the elements of the Emergency Water Management Plan, which includes "Water Rationing."

B. The City Manager as the **Water Rationing Coordinator** will implement the water rationing measures necessary to protect the health and safety of the citizens and achieve the elements of the Emergency Water Management Plan.

II. INITIATION OF RATIONING

Any of the following entities can force implementation of a water rationing plan on the North Richland Hills customers:

A. Tarrant Regional Water District (TRWD)

The Tarrant Regional Water District is the wholesale raw water supplier for the City of Fort Worth (FW) and the Trinity River Authority (TRA). The raw water pump stations and pipelines may develop problems, which could limit raw water supply to FW or TRA. If the TRWD imposes a rationing plan on its wholesale customers, it is the intent of the City to impose an equal or more restrictive plan.

B. City of Fort Worth

By wholesale contract, the City of North Richland Hills is required to follow whatever rationing plan the City of Fort Worth imposes on itself.

C. Trinity River Authority (TRA):

By wholesale contract with the City of Fort Worth, TRA and its wholesale customer's are required to at a minimum follow whatever rationing plan the City of Fort Worth imposes on itself. In addition, TRA's delivery system could have problems, which would limit their ability to deliver treated water. If TRA requests a rationing plan be implemented by all its wholesale customers, it is the intent of the City to impose the requested rationing plan or one more restrictive.

D. City of North Richland Hills:

If the water distribution system for the City develops problems which limit the ability for it to safely provide adequate treated water to its customers, the City Manager may initiate an appropriate water rationing plan. In the absence of the

City Manager, the designated acting City Manager will also be the acting **Water Rationing Coordinator**. The following list shows the normal succession of the Water Rationing Coordinator's position in case of absences.

1. City Manager or Acting City Manager
2. Director of Public Works
3. Public Works Operations Manager
4. Public Works Utility Superintendent

III. DETERMINATION OF RATIONING METHOD TO BE IMPLEMENTED

A. Initial Water Rationing (WR) Team Meeting:

Once a water rationing notification from TRWD, Fort Worth, or TRA is received by the Mayor or any member of the City staff, a copy of the notification will be given directly to the City Manager or the acting Water Rationing Coordinator. The Water Rationing Coordinator (WRC) will as soon as possible call a Water Rationing (WR) Team Meeting.

1. Meeting Place - Administrative Conference Room at City Hall unless designated otherwise in meeting notification.
2. WR Team Members to be notified:
   - City Manager
   - Assistant City Manager
   - Public Works Director
   - Neighborhood Service Director
   - Public Works Operations Manager
   - Public Works Utility Superintendent
   - Utility Service Manager
   - Public Information Officer
   - Assistant to City Manager

IV. NOTIFICATION OF INITIATION OF RATIONING

A. City Staff

Notifying City employees is the Public Information Officer's responsibility.

1. Computer Network System:

   All City employees, along with the Mayor and Council, connected to the City's computer network will be notified via electronic mail (e-mail) of the water rationing plan to be implemented. The notification should explain

clearly what has caused the rationing, what is the plan to be implemented, when will it start, how long will it be in effect (i.e., until further notice), what is the employee's responsibility, and where to call with a complaint or question.

2. Facsimile (Fax) Machine:

   All City employees located in buildings without access to the computer network e-mail system will be notified by postings with content identical to the e-mail message.

B. Customers

1. News Release:

   The Public Information Officer with assistance from the Public Works Department will draft the news release. The release will contain the same basic information, as the employee's message except there should be some explanation of what the City will be doing with respect to water use by municipal facilities (i.e. parks, golf course, and NRH20) and fining violators.

   The news release will be distributed to local newspapers, radio and TV stations by the Public Information Officer.

2. Citicable TV Release:

   Public Works will notify the Public Information Officer of the water rationing plan to be implemented. The Public Information Officer and the Citicable TV Coordinator will script an "Alert Message" to put on the TV screen via ticker tape method during regular programming and as a full screen message in absence of programming.

3. Outdoor Signs:

   Outdoor signs will be utilized to notify the City's customers and will be in accordance with the following requirements.

   - Size: 18" x 24" rectangle
   - Material: corrugated plastic with black metal posts
   - Color: yellow with black lettering
   - Content: depends on rationing methods
   - Placement:
     - The Operations Manager will have the Utility Superintendent distribute and place the signs as well as remove them.
     - Maps showing proposed locations for signs will determine placement.

4. Birdville Independent School District (BISD) and Tarrant County College (TCC) Marquees:

   The Public Information Officer will coordinate with BISD and TCC as to any broadcast of the water rationing plan on their marquees. This coordination will be subsequent to the news release.

5. Voice Message Machine:

   The Utility Service Manager will be responsible for recording a message on the Utility Service Department telephone line 817-427-6200 for activation after working hours. The message will state the water rationing plan the City is currently under and will ask the caller to leave a message if they want a call back after 8:00 a.m. the next business day. If they have a violation to report, they will be told to call Police Dispatch at 817-427-7191. All messages left will be handled by the Utility Service Manager's staff.

6. Leaflets:

   - Use of leaflets will be determined at initial WR Team Meeting. Public Works will coordinate with the Finance Department to have an appropriate amount of leaflets printed under an emergency purchase for mandatory rationing plans only. The leaflets will be utilized by employees to hand out to customers who come into municipal offices or who are found to be violating the rationing plan at their homes due to having no knowledge of its existence. The leaflets will be disbursed to other City departments by Public Works staff. The leaflet color will be different for each rationing plan.
   - Mandatory No Outdoor Watering Plan – White background with red lettering.
   - Mandatory Six Day Cycle Outdoor Watering Plan – Yellow background with black lettering.

C. <u>City Of Watauga</u>

North Richland Hills' Public Works Department will be responsible for formally contacting the City of Watauga. This will be done by electronic mail or fax. The email or a fax will be directed to the City Manager, Public Works Director, and Police Dispatch. It will contain all the same information as the North Richland Hills City employee's notification. The receipt of the email or fax by Watauga's Police Dispatch will be confirmed by phone call.

North Richland Hills will confirm with Watauga's City Manager their intent to implement the same water rationing plan as North Richland Hills. Their name will then be added to our notifications and they will be asked to make and distribute the same type of signs in their City at their expense.

V. NOTIFICATION OF END OF RATIONING

The notification to all employees, customers, and the City of Watauga concerning the end of the water rationing plan will be in the same manner as notification of the Plan being put into effect. The exception to this will be the water rationing signs will be removed to indicate the end of the rationing plan.

APPENDIX E

KEY CITY OFFICIALS CONTACT NUMBERS

APPENDIX E

Key City Officials' Contact Numbers

CITY OF NORTH RICHLAND HILLS

NAME/TITLE	CONTACT NUMBER
Paulette Hartman, City Manager	817-427-6007
Caroline Waggoner, Assistant City Manager	817-427-6006
Boe Blankenship. Director of Public Works	817-427-6401
Kenneth Garvin, Public Works Utilities Superintendent	817-427-6452
Mary Peters, Public Information Officer	817-427-6125

CITY OF WATAUGA

NAME/TITLE	CONTACT NUMBER
Joshua Jones, City Manager	817-514-5837
Paul D. Hackleman, Director of Public Works	817-514-5837
Taylor Alvarez, Public Works Utilities Superintendent	817-514-5846

APPENDIX F

WATER SAVING METHODS

APPENDIX F

Water Saving Methods that can be practiced by the individual water user

In-home water use accounts for an average of 65 percent of total residential use, while the remaining 35 percent is used for exterior residential purposes such as lawn watering and car washing. Average residential in-home water use data indicates that about 40 percent is used for toilet flushing, 35 percent for bathing, 11 percent for kitchen uses, and 14 percent for clothes washing. Water saving methods that can be practiced by the individual water user are listed below.

A. Bathroom

- Take a shower instead of filling the tub and taking a bath. Showers usually use less water than tub baths.
- Install a low-flow shower head, which restricts the quantity of flow at 60 psi to no more than 3.0 gallons per minute.
- Take short showers and install a cutoff valve or turn the water off while soaping and back on again only to rinse.
- Do not use hot water when cold will do. Water and energy can be saved by washing hands with soap and water. Hot water should only be added when hands are especially dirty.
- Reduce the level of the water being used in a bathtub by one or two inches if a shower is not available.
- Turn water off when brushing teeth until it is time to rinse.
- Do not let the water run when washing hands. Instead, hands should be wet, and water should be turned off while soaping and scrubbing and turned on again to rinse. A cut off valve may also be installed on the faucet.
- Shampoo hair in the shower. Shampooing in the shower takes only a little more than is used to shampoo hair during a bath and much less than shampooing and bathing separately.
- Hold hot water in the basin when shaving instead of letting the faucet continue to run.
- Test toilets for leaks. To test for a leak, a few drops of food coloring can be added to the water in the toilet tank. The toilet should not be flushed. The customer can then watch to see if the coloring appears in the toilet bowl within a few minutes. If coloring does appear, the fixture needs adjustment or repair.
- Use a toilet tank displacement device. A one-gallon plastic milk bottle can be filled with stones or with water, recapped, and placed in the toilet tank. This will reduce the amount of water in the tank but still provide enough for flushing. Bricks, which some people use for this purpose are not recommended since they crumble eventually and could damage the working mechanism, necessitating a

call to the plumber. Displacement devices should never be used with new low-volume flush toilets.

- Install faucet aerators to reduce water consumption.
- Never use the toilet to dispose of cleansing tissues, cigarette butts, or other trash. This can waste a great deal of water and places an unnecessary load on the sewage treatment plant or septic tank.
- Install a new low-volume flush toilet that uses 3.5 gallons or less per flush when building a new home or remodeling a bathroom.

B. Kitchen

- Use a pan of water for rinsing when washing dishes by hand rather than running the faucet.
- Never run the dishwasher without a full load.
- Use the sink disposal sparingly, and never use it for just a few scraps.
- Keep a container of drinking water in the refrigerator. Running water from the tap until it is cool is wasteful. Better still; both water and energy can be saved by keeping cold water in a picnic jug on a kitchen counter to avoid opening the refrigerator door frequently.
- Use a small pan of cold water when cleaning vegetables rather than letting the faucet run.
- Use only a little water in the pot and put a lid on it for cooking most food. Not only does this method save water, but food is more nutritious since vitamins and minerals are not poured down the drain with the extra cooking water.
- Always keep water conservation in mind and think of other ways to save in the kitchen.

C. Laundry

- Wash only a full load when using an automatic washing machine (32 to 59 gallons are required per load).
- Use the lowest water level setting on the washing machine for light loads whenever possible.
- Use cold water as often as possible to save energy and to conserve the hot water for uses which cold water cannot serve (This is also better for clothing made of today's synthetic fabrics).

D. Appliances/Water Fixtures

- Check water requirements of various models and brands when considering purchasing any new appliance that uses water. Some use less water than others.

- Check all water line connections and faucets for leaks. If the cost of water is $1.00 per 1,000 gallons, one could be paying a large bill for water that simply goes down the drain because of leakage. A slow drip can waste as much as 70 gallons of water EACH DAY or 2,100 gallons per month, and can add as much as $5.00 per month to the water bill.
- Learn to replace faucet washers so that drips can be corrected promptly. It is easy to do, cost is very little, and can represent a substantial amount saved in plumbing and water bills.
- Check for water leakage that the customer may be entirely unaware of, such as a leak between the water meter and the house. To check, all indoor and outdoor faucets should be turned off and the water meter should be checked. If it continues to run or turn, a leak probably exists and needs to be located.
- Be sure the hot water heater thermostat is not set too high. Extremely hot settings waste water and energy because the water often has to be cooled with cold water before it can be used.
- Use a moisture meter to determine when house plants need water. More plants die from over watering than from being on the dry side.

E. Outdoor Use

- Water lawns early in the morning during the hotter summer months. Much of the water used on the lawn can simply evaporate between the sprinkler and the grass.
- Use a sprinkler that produces large drops of water rather than a fine mist to avoid evaporation.
- Turn soaker hoses so the holes are on the bottom to avoid evaporation.
- Water slowly for better absorption and never water in high winds.
- Forget about watering the streets or walks or driveways. They will never grow.
- Condition the soil with compost before planting grass for flowerbeds so that the water will soak in rather than run off.
- Fertilize lawns at least twice a year for root stimulation. Grass with a good root system makes better use of less water.
- Learn to know when grass needs watering. If it has turned a dull grey-green or it footprints remain visible, it is time to water.
- Do not water too frequently. Too much water can overload the soil so that air cannot get to the roots and can encourage plant diseases.
- Do not over-water. Soil can absorb only so much moisture and the rest simply runs off. A timer will help, and either a kitchen timer or an alarm clock will do. An inch of water applied once a week will keep most Texas grasses alive and healthy.

- Operate automatic sprinkler systems only when the demand on the City's water supply is lowest. Set the system to operate between four and six a.m.
- Do not scalp lawns when mowing during hot weather. Taller grass holds moisture better. Rather, grass should be cut often, so that only ½ to ¾ inches is trimmed off. A better looking lawn will result.
- Use a watering can or hand water with the hose in small areas of the lawn that need more frequent watering (those near walks or driveways or in especially hot, sunny spots).
- Learn what types of grass, shrubbery, and plants do best in the area and in which parts of the lawn, and then plant accordingly. If one has a heavily shaded yard, no amount of water will make roses bloom. In especially dry sections of the state, attractive arrangements of plants that are adapted to arid or semi-arid climates should be chosen.
- Consider decorating areas of the lawn with rocks, gravel, wood chips or other materials now available that require no water at all.
- Do not "sweep" walks and driveways with a hose. Use a broom or rake instead.
- Use a bucket of soapy water and use the hose only for rinsing when washing a car.

APPENDIX G

MATRIX OF ACTIONS BY CUSTOMER TYPE AND STAGE

APPENDIX G

Matrix of Actions by Customer Type and Stage

All Matrix of Actions apply to the use of potable water for the City of North Richland Hills. These actions also apply to the potable water supplied to wholesale customers by the City of North Richland Hills. Restrictions do not apply to locations, which own their water rights or are using treated wastewater effluent or well water for irrigation.

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
All Water Users	Hosing / Washing	• Discourage: hosing of paved areas, such as sidewalks, driveways, parking lots, tennis courts, patios, or other impervious surfaces, except to alleviate an immediate health or safety hazard. • Discourage: hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting.	• Same as Stage 1.	• Same as Stage 1. • Prohibit: hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting.
	Runoff/ Waste/ Leaks	• Prohibited: using water in such a manner as to allow runoff or other waste, including: 1) failure to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet; 2) operating a permanently installed irrigation system with: (a) broken head; (b) a head that is out of adjustment and the arc of the spray head is over a street or parking lot; or (c) a head that is misting because of high water pressure; or 3) during irrigation, allowing water to (a) to run off a property and form a stream of water in a street for a distance of 50 feet or greater; or (b) to pond in a street or parking lot to a depth greater than one-quarter of an inch.	• Same as Stage 1.	• Same as Stage 1.

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
All Water Users (Continued)	Outdoor Watering	• Prohibited: outdoor watering with sprinklers or irrigation systems between 10 a.m. and 6 p.m. • Limited to twice per week: landscape watering with sprinklers or irrigation systems at each service address is limited to twice per week schedule. This includes landscape watering of parks, and sports fields. • Residential addresses ending in an even number (0, 2, 4, 6, or 8) may water on Wednesdays and Saturdays. • Residential addresses ending in an odd number (1, 3, 5, 7 or 9) may water on Thursday and Sundays. • All non-residential locations (apartment complexes, businesses, industries, parks, medians, etc.) may water on Tuesdays and Fridays.	• Same as Stage 1. • Restricted to once every seven days: outdoor watering with sprinklers or irrigation systems at each service address is limited to a once per week schedule as determined by Public Works. This includes landscape watering of parks and sports fields. • Dust control not allowed on skinned areas of sports fields.	• Prohibited: all outdoor watering. .
	Exceptions to Outdoor Watering Restrictions	• Lawns and Landscaping: may be watered on any day, at any time, by handheld hose, drip irrigation, a soaker hose or tree bubbler. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials.) • Foundations: foundations may be watered up to two hours on any day by handheld hose; or using soaker hose or drip system placed within 24 inches of the foundation that does not produce a spray of water above the ground.	• Same as Stage 1. • Foundations, selected landscaping plants, large multi-station irrigation, and turf establishment rules: Same as Stage 1. • Professional sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as needed to maintain league standards.	• Same as Stage 1. .

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
All Water Users (continued)	Exceptions to Outdoor Watering Restrictions (Continued)	• New Turf: Establishing new turf is discouraged. If hydromulch, grass sod, or grass seed is installed for the purpose of establishing a new lawn, there are now watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply. (This does not include over seeding with rye since turf already exists.) • Large Multi-Station Irrigation: outdoor watering may take place in accordance with a variance granted by the Public Works Department. If the Public Works Department determines that a property cannot be completely watered with an average of three-quarters of an inch of water in a single day, then the property should be divided into sections to be watered on different days. • Skinned areas of sports fields may be watered as needed for dust control. • Professional sports fields (playing fields with a stadium only-not surrounding landscaping) may be watered as needed to maintain league standards.	• Same as Stage 1.	• Same as Stage 1.

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
All Water Users (continued)	Landscaping	• All users are encouraged to use native and drought tolerant plants in landscaping	• All users are encouraged to wait until the current drought or emergency situation has passed before installing and establishing new landscape plants and turf.	• Prohibited: installing and establishing new landscape plants and turf.
	Vehicle Washing	• Washing of any motor vehicle, motorbike, boat, trailer, recreational vehicle, airplane, or other vehicle shall be limited to the use of a hand-held bucket or a hand-held hose equipped with a positive-pressure shutoff nozzle for quick rinses. • Vehicle washing may be done at any time on the premises of a commercial car wash or commercial service station. Companies with an automated on-site vehicle washing facility may wash its vehicles at anytime. • Washing may be exempt from these requirements if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.	• Same as Stage 1.	• Vehicle washing restricted to commercial car wash, commercial service station or a private on-site vehicle washing facility and can only be done as necessary for health, sanitation, or safety reasons, including but not limited to the washing of garbage trucks and vehicles used to transport food and other perishables. All other vehicle washing is prohibited.
	Swimming Pools	• All users are encouraged to reduce the frequency of draining and refilling swimming pools.	• Prohibited: Swimming pools may not be filled with automatic fill valves.	• Prohibited: the draining, filling, or refilling of swimming pools, wading pools and Jacuzzi type pools. Existing private and public pools may add water to maintain pool levels. Swimming pools may not be refilled with automatic fill valves.

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
All Water Users (continued)	Dust Control	• No restriction	• Prohibited: use of water for dust control, except as required to protect public health.	• Same as Stage 2.
	Ornamental Fountains/ Ponds	• No restriction	• Discourage: the operation of ornamental fountains or ponds that use potable water, except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.	• Prohibited: the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life.

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
	All actions listed for All Users apply to City and Local Governments.			
City and Local Government	Administrative	• Review conditions and problems that caused Stage 1 and take corrective action. • Notify wholesale customers of actions being taken and request them to implement similar procedures. • Provide a weekly report to news media with information regarding current water supply, demand conditions, and projected water supply	• Review conditions and problems that caused Stage 2 and take corrective action. • Initiate weekly contact with wholesale customers to discuss water supply and the possibility of pro rata curtailment • Request wholesale customers to initiate mandatory measures to reduce non-essential water use • Initiate preparations for the implementation of pro rata curtailment of water diversions • Provide a weekly report to news media with information regarding current water supply, demand conditions, and projected water supply	• Review conditions and problems that caused Stage 3 and take corrective action. • Implement viable alternative water supply strategies. • Reduce city and local government water use to maximum extent possible. • Notify wholesale customers of actions being taken and request them to implement similar procedures. • Institute a mandated reduction in deliveries to all wholesale customers. Such a reduction will be distributed as required by Texas Water Code §11.039. • If TRWD has imposed a reduction in water available to customers, impose the same percent reduction on wholesale customers. • Contact wholesale customers to discuss water supply and will request that wholesale customer initiate additional mandatory measures to reduce non-essential water use • Initiate pro rata curtailment of water diversions for each wholesale customer • Provide a weekly report to news media with information regarding current water supply, demand conditions, and projected water supply

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
City and Local Governments (Continued)	Public Education	• Increase public education efforts on ways to reduce water use.	• Increase frequency of media releases on water supply conditions. • Further, accelerate public education efforts on ways to reduce water use.	• Increase frequency of media releases explaining emergency situation. • Further, accelerate public education efforts on ways to reduce water use.
	Enforcement	• Increase enforcement efforts.	• Same as Stage 1.	• Same as Stage 1.
	Runoff / Waste/ Leaks	• Intensify leak detection and repair efforts. • Audit all City and local government irrigation systems to ensure proper conditions, settings, and operations.	• Same as Stage 1.	• Same as Stage 1.
	High Volume Users	• Identify and encourage voluntary reduction measures by high-volume water users through water use audits.	• Same as Stage 1.	• Same as Stage 1.
	Wet Street Sweeping	• No restriction	• Prohibited: wet street sweeping.	• Same as Stage 2.
	Non-essential water use (those uses that do not have any health or safety impact, and are not needed to meet the core function of the agency).	• Reduce non-essential water use.	• Eliminate non–essential water use.	• Same as Stage 2.
	All actions listed for All Users apply to Commercial and Industrial users.			
	Commercial Plant Nursery Stock	• Stock at a commercial plant nursery is exempt from Stage 1 watering restrictions.	• Same as Stage 1.	• Stock at a commercial plant nursery may be watered only with a hand-held hose, hand-held watering can, or drip irrigation system.

Matrix of Actions by Customer Type and Stage

Use Reduction Goal:		5%	10%	20%
Water User	Water Use or Action Category	Stage 1 – Water Watch	Stage 2 – Water Warning	Stage 3 – Water Emergency
Commercial and Industrial Users	Hotels, Restaurants, and Bars	• Hotels, restaurants, and bars are encouraged to serve drinking water to patrons on an "on demand" basis. • Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels.	• Same as Stage 1.	• Same as Stage 1.
	Commercial and Industrial Users			• Commercial and industrial users may be required to reduce water use by a set percentage.
	Contract (Hydrant) Meters		• Use of water from hydrants for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare requires approval from the Public Works Department. Fire hydrant use may be limited to only designated hydrants (excluding firefighting).	• Same as Stage 2.