

**CITY
OF
RICHLAND HILLS**

**DROUGHT CONTINGENCY /
EMERGENCY WATER
MANAGEMENT PLAN**

**City of Richland Hills
Drought Contingency Plan
May 1, 2005**

SECTION I: DECLARATION OF POLICY, PURPOSE AND INTENT

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Richland Hills hereby adopts the following regulations and restrictions of the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined by Ordinance.

SECTION II: PUBLIC INVOLVEMENT

Public input on the Plan will be solicited using the following means:

1. The City will provide the opportunity for public input during scheduled City Council meetings.
2. The City will provide written notice of the plan to anyone who requests it.
3. The proposed Plan will be posted at the Richland Hills City Hall.

SECTION III: PUBLIC EDUCATION

The City of Richland Hills will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by the following means:

1. The Plan will be available at the Water Department offices in City Hall and at the Public Works Department.
2. The City will contact local media regarding the Plan.
3. The City may place information on customers' water bills.

SECTION IV: COORDINATION WITH REGIONAL WATER PLANNING GROUPS

The City of Richland Hills is located within the Tarrant Regional Water District and purchases a portion of its water from the City of Fort Worth. The City of Richland Hills has provided the City of Fort Worth and Tarrant Regional Water District with a copy of this plan.

SECTION V: AUTHORIZATION

The City Manager or his/her designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The City Manager or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

SECTION VI: APPLICATION

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the City of Richland Hills. The terms “person” and “customer” as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

SECTION VII: DEFINITIONS

For purposes of this Plan, the following definitions shall apply:

Aesthetic water use: Water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Commercial and institutional water use: Water use which is integral to the operations of commercial and non-profit establishments and government entities such as retail establishments, hotels and motels, restaurants, and office buildings.

Conservation: Those practices, techniques and technologies that reduce the consumption of water, reduce the loss of waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available to future or alternative uses.

City: The City of Richland Hills

City Manager: The City Manager of the City of Richland Hills or his duly authorized designee.

Customer: Any person, company, or organization using water supplied by the City.

Domestic water use: Water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Drought: Generally a lack of adequate water to supply needs or replenish supplies used.

Even number address: Street addresses or box numbers ending in 0,1,4,6 or 8 and locations without addresses.

Industrial water use: The use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: Water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-ways and medians.

Non-Essential water use: Water uses that are neither essential nor required for the protection of public, health, safety, and welfare, including:

- a. irrigation of landscape areas, including parks and athletic fields, except otherwise provided under this Plan;
- b. use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- c. use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- d. use of water to wash down buildings or structures for purposes other than immediate fire protection;
- e. flushing gutters or permitting water to run or accumulate in any gutter or street;
- f. use of water to fill, refill, or add to any indoor or outdoor swimming pools or jacuzzi-type pools;
- g. use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- h. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
- i. use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Odd numbered address: Street addresses and box numbers ending in 1,3,5,7, or 9.

Person: Any person entity, firm, partnership, association, corporation, company or organization of any kind.

Rationing: Limits the amount of water that can be used.

Restrictions: Limits how and when water may be used.

Water: Water taken from any public water supply or distribution system within the boundaries of the City, potable or nonpotable, and means either raw or potable water. Specifically excluded is water taken from any private well which is not a part of or connected to the public water supply or distribution system.

Wholesale customer: A municipality, town, village or other governmental entity or private firm contracting with a governmental entity for the provision of water service.

SECTION VIII: CRITERIA FOR INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES

The City Manager or his/her designee shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan, that is, when the specified “triggers” are reached.

The City receives a portion of its water supply from the City of Fort Worth and will work with the Fort Worth Water Department to establish water restrictions during drought conditions. The establishments of drought trigger conditions for the water supply are to be determined by the Tarrant Regional Water District, initially. Trigger conditions will be conveyed by the Fort Worth Water Department to the City as each drought trigger condition is reached. The notification will include the steps the City must take. The City must impose restrictions equivalent to those that have, at the time, been implemented in the City of Fort Worth. The City may need to implement an emergency demand management program in lieu of notification by the Fort Worth Water Department. In such cases the trigger conditions will be the same.

The triggering criteria described below are based on the system capacity with regards to the defined triggers is the total reliable pumping capacity. Therefore the system capacity baseline for triggers is 2.2 million gallons per day (mgd). See Table 1 below for more details of the yields of each water source. The trigger number will be evaluated each year to take into consideration improvements that may have been added to the system.

TABLE 1: WATER SOURCE CAPACITIES

LAST DIGIT OF ADDRESSES	ALLOWED WATERING DATES
0 and 5	5th, 10th, 15th, 20th, 25th, 30th
1 and 6	1st, 6th, 11th, 16th, 21st, 26th
2 and 7	2nd, 7th, 12th, 17th, 22nd, 27th
3 and 8	3rd, 8th, 13th, 18th, 23rd, 28th
4 and 9	4th, 9th, 14th, 19th, 24th, 29th

The City has set voluntary schedule of watering guidelines as outlined in Table 2 below. These guidelines become mandatory if Stage 2 or any subsequent stage is initiated. The guidelines for times of watering also follow the same pattern: The 10 a.m. to 6 p.m. guidelines are voluntary until Stage 2 or any subsequent stage is initiated.

TABLE 2: SCHEDULE OF WATERING

WATER SOURCE (mgd-in million gallons per day)	DESIGN CAPACITY (mgd)	RELIABLE PUMPING CAPACITY (mgd)
CITY OF FORT WORTH	1.5 mgd	1.2 mgd
BOOTH TRINITY & PALUXY WELLS	.5 mgd	.4 mgd
RENA TRINITY & PALUXY WELLS	.6 mgd	.5 mgd
PARK PALUXY WELL	.1 mgd	.1 mgd
TOTALS	2.7 mgd	2.2 mgd

STAGE 1 TRIGGERS: DRY CONDITIONS/MILD WATER SHORTAGE

This stage is currently implemented full-time on a voluntary basis.

Actions by the City

- The City will continue its ongoing public education efforts.
- The City will continue to reduce its own water use (e.g., fountains, landscape watering).
- When, pursuant to requirements specified in the City of Richland Hills wholesale water purchase contract with The City of Fort Worth, notification is received requesting initiation of Stage 1 of the Drought Contingency Plan.

Requested Actions

- The City requests that residents voluntarily water only as outlined previously in Table 2.
- The City requests there be no watering between the hours of 10 a.m. and 6 p.m.

Goal

The goal is to achieve a voluntary reduction in water use.

Termination Notification

This stage is currently voluntary and there will be no notification of termination.

STAGE 2 TRIGGERS: WATER WATCH/MODERATE WATER SHORTAGE CONDITIONS

Daily water demand reaches 80% of the production capacity of the system for 3 consecutive days.

Actions by the City

- When this stage is initiated, the City will further reduce its own water use. The City will prohibit its own use of water for street washing, vehicle washing, and all other non-essential uses.
- The City will increase public information efforts on water conservation.
- Installation of new landscaping will be discouraged.
- Advise the public of the trigger conditions daily.

Prohibited Actions

- Watering, except on the schedule of once every five days, as previously outlined in Table 2: Schedule for Watering.
- Watering between the hours of 10 a.m. and 6 p.m.
- Hosing off paved areas, buildings, or windows.
- Actions, which create, water running into the street, or otherwise waste water.
- Use of water from hydrants for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare.
- Non-commercial vehicle washing that does not occur at a commercial car wash or commercial service station which uses a recirculating water system.

Exceptions

- Watering using hand-held hose or bucket can be conducted any day.
- Newly planted landscaping (planted in the spring of the current year) and public gardens may be planted any day.
- Use of water from designated fire hydrants for construction purposes may be allowed under a special permit from the Richland Hills Water Department.

All landscape watering exceptions must still abide by the 10 a.m. to 6 p.m. restriction.

Requested Actions

The City requests that installation of new landscapes should be delayed until all watering restrictions are lifted.

Goal

By the end of the first week after initiation of the stage, the City anticipates a 5% reduction in system demand.

Termination

All initiated actions will remain in effect until the conditions that triggered the state have been eliminated. If the order is initiated because of excessive demands, all initiated conditions will remain in effect through September 30 of the year in which they are triggered or until the City Manager determines that conditions exist which allow termination of this stage. Upon termination of Stage 2, Stage 1 becomes effective.

STAGE 3 TRIGGERS: WATER WARNING/SEVERE WATER SHORTAGE

Daily water demand reaches 90% of the production capacity of the system for 2 consecutive days.

Actions by City

- When this stage is triggered, the City will further reduce its own water use. The City will prohibit its own use for street washing, vehicle washing, and all other non-essential uses.
- The City will discontinue its landscape watering except as needed to prevent foundation damage, to preserve new plantings, and save rare plantings. The daily watering restrictions will be enforced for these exceptions.
- The City will increase public information efforts on the water supply.
- Request industries or other non-municipal water users to stop certain used, find additional sources, increase recycling or modify production processes where possible.
- Institute an excessive use fee, special pricing structure or surcharge.
- Fine water wasters.

Prohibited Actions

- Watering, except on the schedule of once every five days, as previously outlined in Table 2: Schedule for Watering.
- Watering between the hours of 10 a.m. and 6 p.m.
- Hosing off paved areas, buildings, or windows.

- Operation of ornamental fountains.
- Draining, filling, refilling or adding water to swimming pools and/or jacuzzi type pools.
- Foundation watering, except done by hand-held hose or watering cans, using the five day schedule.
- Use of water from hydrants for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare.
- Vehicle washing.
- Actions, which create, water running into the street or otherwise waste water.

Exceptions

- Watering using a hand-held bucket or hose can be conducted on any day
- Newly planted landscaping (planted in the spring of the current year); commercial plant nurseries and public gardens may water on any day.
- Vehicles that need to be washed for health, sanitation, or safety reasons (e.g., food carriers) are excepted, for businesses whose operation is based in the City.
- Use of water from designated fire hydrants for construction purposes may be allowed under a special permit from the Richland Hills Water Department.

All landscape watering exceptions must still abide by the 10a.m. to 6 p.m. water restrictions

Requested Actions

Installation of new landscapes should be delayed until all watering restrictions are lifted.

Goal

By the end of the first week after initiation of the stage, the City anticipates a 10% reduction in system demand.

Termination

All initiated actions will remain in effect until the conditions that triggered the stage have been eliminated. If the stage is initiated because of excessive demands, all initiated conditions will remain in effect through September 30 of the year in which they are triggered or until the City Manager determines that conditions exist which allow termination of the stage. Upon termination of Stage 3, Stage 2 or Stage 1 may become effective. This shall be determined by the City manager in consultation with the Director of Public Works.

STAGE 4 TRIGGERS: WATER CRISIS/CRITICAL WATER SHORTAGE

Daily water demand reaches 100% of the production capacity of the system for 3 consecutive days; or the imminent or actual failure of a major component of the system is experienced which can cause an immediate health or safety hazard; or a significant reduction in the production capacity of the system is experienced.

Actions by City

- When this stage has been triggered, the City will discontinue its landscape watering except as needed to prevent foundation damage and to save rare plantings. Foundation watering must be done by hand-held hose or watering cans.
- The City will increase public information efforts on the water supply. More information will be available from the Richland Hills Public Works Department or Richland Hills City Hall.
- The City may limit the amount of water each customer can use and establish legal penalties for those who fail to comply.
- The City may require industrial or commercial water users to stop operation so that remaining water is available for essential health and safety related uses.

Prohibited Actions

- Landscape watering
- Installation of new landscaping.
- Hosing off paved areas, buildings, or windows.
- Operation of ornamental fountains.
- Draining, filling, refilling or adding water to swimming pools and/or jacuzzi type pools.
- Foundation watering, except done by hand-held hose or watering cans, using the five day schedule.
- Actions, which create, water running into the street, or otherwise waste water.
- Washing of vehicles.
- Use of water from hydrants for any purpose other than firefighting related activities, or other activities necessary to maintain public health, safety and welfare.

Exceptions

- Vehicles that need to be washed for health, sanitation, or safety reasons (e.g., food carriers) are excepted.
- Landscape watering and foundation watering must be done by hand-held hose or hand-held watering cans using a five-day schedule.
- New landscaping (landscaping installed during the spring of the current year) may be watered daily for the first ten days after establishment, every other day for the next ten days and then every third for the next ten days. Beyond that, it shall follow the schedule above.
- Commercial plant nurseries can water plant stock by hand every other day.

All landscape watering exceptions must still abide by the 10 a.m. to 6 p.m. water restrictions.

Goal

The City will reduce system demand enough to address and rectify the emergency situation as soon as possible.

Termination

All initiated actions will remain in effect until the conditions that triggered the stage have been eliminated. If the stage is initiated because of excessive demands, all initiated conditions will remain in effect through September 30 of the year in which they are triggered or until the City Manager determines that conditions exist which allow termination of the stage. Upon termination of Stage 4, Stage 3, or Stage 2 may become effective. This shall be determined by the City Manager in consultation with the Director of Public Works.

Exemption for Private Wells

The restrictions imposed hereunder shall not apply to water taken from a private well not a part of or connected to the public water supply or distribution system.

Triggers

Data from studies conducted on system supply dynamics from 2000, 2002, and 2003 by the City of Fort Worth suggest that system usage related to a combination of rainfall and air temperature. When temperatures are higher than 100 degrees and there has been no rain for three days, system demand increases sharply. After the third day, historically, system demand continues to increase until either the temperature drops below 100 degrees or there is noticeable rainfall of more than 0.05 inches in 24 hours. During the same period, therefore, the triggers are set to initiate after at least three consecutive days of demand equal to or above the stated trigger points.

Additional measures may be invoked whenever necessary or if the Plan stages listed above do not reduce demand enough to allow proper management of the system.

Reasons for Termination

Once these triggers have been met and a stage has begun, the stage will not be lifted until one of the following requirements has been met: The specific situation is addressed (such as in the case of an emergency situation); or the City Manager determines that the condition has subsided. It is anticipated that no Plan stage will be terminated before September 30, unless the conditions that triggered the stage have been eliminated, or unless the City Manager determines that conditions exist which allow termination of the stage.

SECTION IX: VARIANCES

Grounds for Granting Variances

The Director of Public Works may grant temporary variances for water uses otherwise prohibited under this Plan only if all of the following conditions are met:

1. Granting the variance would not cause an immediate significant reduction in the city's water supply;
2. Failure to approve the variance would result in an extreme hardship or need relating to the health, safety, or welfare of the applicant;
3. Granting the variance would not adversely affect the health, safety, and welfare of other persons; and
4. The applicant signs a compliance agreement on forms provided by the Director and approved by the City Attorney, agreeing to use water only in the amount and manner approved by the variance.

Information Required for Variance Request

Any application for variances shall be in writing and shall include the following information:

1. Name and address of applicant(s);
2. Purpose of water use;
3. Specific provisions from which relief is requested;
4. Detailed statement of the adverse effect of the provision from which relief is requested;
5. Description of the relief requested;
6. Period of time for which the variance is sought;
7. Alternative measures that will be taken to reduce water use;
8. Methods of measurement and reporting to confirm water use reductions (if applicable); and

9. Other pertinent information.

Direct application to the following address:

City of Richland Hills
Director of Public Works
3200 Diana Drive
Richland Hills, TX 76118

Revocation of Variances

The Director may revoke a variance when he/she determines that:

1. The conditions set out in the grounds for granting the variance are not being met or are no longer applicable;
2. The terms of the compliance agreement have been violated; or
3. Revocation is advisable to protect the health, safety, or welfare of the public or any person.

SECTION X: ENFORCEMENT

Procedures for Enforcing Mandatory Water Use Restrictions

Mandatory water use restrictions will be imposed during the following stages: Dry Conditions, Water Watch, Water Warning and Water Crisis. These water use restrictions will be enforced in the following manner:

First Offense:	Written warning.
Subsequent Offences:	Citation, with fines established by Ordinance.

After three violations, the City may cut off water service to the customer.

**SECTION XI: REVIEW AND UPDATE OF EMERGENCY
WATER MANAGEMENT PLAN**

As required by the TCEQ rules, the City of Richland Hills will review this Plan at least every five years. The plan may be updated as appropriate based on new or updated information.