

**ORDINANCE NO. 1311-2021**

**AN ORDINANCE OF THE CITY OF RIVER OAKS, TEXAS, AMENDING ARTICLE 13.07 "WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS" OF THE RIVER OAKS CODE OF ORDINANCES (2020) AS AMENDED BY REPEALING THE FORMER PROVISIONS AND INCORPORATING REVISED UPDATED PROVISIONS IN DIVISION 2 AND DIVISION 3 OF THAT ARTICLE; ADOPTING A REVISED WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN; ESTABLISHING CRITERIA FOR DROUGHT RESPONSE STAGES AND RESTRICTIONS ON CERTAIN WATER USES TO ENSURE THE HEALTH AND SAFETY OF RIVER OAKS CITIZENS; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY FOR VIOLATIONS OF THE PLAN; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City of River Oaks is a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

**WHEREAS**, the City of River Oaks recognizes that the amount of water available to the City and its water utility customers is limited and subject to depletion during periods of extended drought, and that due to these natural limitations and other acts of God, an uninterrupted water supply for all purposes cannot be guaranteed;

**WHEREAS**, the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality (TCEQ) require all public water supply systems in Texas to prepare a drought contingency plan; and

**WHEREAS**, growing population and economic development in North Texas has led to an increase in demands for water supplies and it is important that we use the water we already have more efficiently; and

**WHEREAS**, the 2017 State Water Plan reports that 9 percent of future water needs in Region C will be met through municipal conservation and water conservation is the most cost-effective alternative for meeting new water demands; and

**WHEREAS**, the City Council wishes to adopt a Water Conservation and Drought Conservation Plan which provides for the reduction of water usage by customers of the River Oaks water system and the implementation of emergency measures to reduce the demand upon the River Oaks water system during drought conditions; and

**WHEREAS**, the City Council has determined that the adoption of the attached Water Conservation and Drought Contingency Plan in the best interests of the citizens of River Oaks, Texas and is necessary in order to promote and preserve fire safety, and public health and sanitation; and

**WHEREAS**, with the adoption of this ordinance the former provisions codified in Article 13.07 "Water Conservation and Drought Contingency Plans" of the River Oaks Code of Ordinances (2006) as amended is hereby repealed in its entirety and replaced

with the hereinafter revised updated water conservation and drought contingency plans in Division 2 and Division 3 of that article.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF RIVER OAKS, TEXAS;**

**SECTION I.**

With the adoption of this Ordinance Article 13.07 "Water Conservation and Drought contingency Plans" specifically under Division 2 "Drought Contingency Plan" and Division 3 "Water Conservation Plan" are revised and the former provisions are repealed to now read as follows:

**" Division 2. Drought Contingency and Water Management Plan**

**Sec. 13.07.031 Introduction and Objectives**

(a) 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 hereby adopts the following regulations and restrictions on the delivery and consumption of water.

The water supplies upon which we depend on are not endless resources. For one thing, drought conditions are a part of life here in North Texas. Droughts are unpredictable and have a direct impact on our water resources. Without rainfall and runoff, water supply reservoirs are depleted faster than they are replenished. In addition, the number of people living in our region is expected to double in the next 50 years. That means the demand for water will certainly rise – and meeting that need will be a challenge.

Growing population and economic development in North Texas has led to an increase in demands for water supplies. At the same time, local and less expensive sources of water supply are largely developed. In planning and developing new water supplies, water conservation strategies play a vital role in meeting TRWD's projected water needs. The 2017 State Water Plan reports that 9 percent of future water needs in Region C will be met through municipal conservation. Water conservation is the most cost-effective alternative for meeting new water demands. Therefore, it is important that we use the water we already have more efficiently.

The water conservation sections of this plan include measures that are intended to result in ongoing, long-term water savings. Emergency response sections of this plan address strategies designed to temporarily reduce water use in response to specific conditions. Over time, conserving water on a daily basis:

- extends the life of existing supplies to meet new water demands
- slows the drain on reservoirs making more water available during times of drought
- reduces peak supply requirements, which reduces wear and tear on existing infrastructure

- defers increases in capital and operating costs for existing systems, and
  - delays the need for developing expensive, new water supplies.
- (b) The objectives of this water management plan are as follows:
- To reduce water consumption from the levels that would prevail without conservation efforts.
  - To reduce the loss and waste of water.
  - To improve efficiency in the use of water.
  - To document the level of recycling and reuse in the water supply.
  - To extend the life of current water supplies by reducing the rate of growth in demand.
- (c) There are additional water saving measures not specifically mentioned in this plan. TRWD urges all water users to implement the highest level of water saving measures that are feasible. It also encourages all institutional, commercial and industrial entities to further their conservation and reuse efforts to the maximum extent practicable.
- (d) Water uses regulated or prohibited under this drought contingency plan (the "plan") are considered to be nonessential 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 in section 13.07.039 of this plan.
- (e) The City has and will continue to implement an in-house water conservation program with the following efforts:
- Wherever possible, landscapes will use native or adapted drought tolerant plants, trees and shrubs.
  - Irrigation at City facilities will occur before 10 a.m. and after 6 p.m. year-round in order to lower losses due to evaporation.
  - Irrigation will be limited to the amount needed to promote survival and health of plants and lawns.
  - Irrigation will be avoided on Saturday and Sunday if possible, since these are periods of high water use by the public.

**Sec. 13.07.032 Public education**

(a) The city 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 measures to be implemented in each stage. This information will be provided by the water department office through ongoing programs designed to reach a wide variety of customers. These ongoing programs include public outreach to schools, civic groups, and other adult and child groups. The water department office will distribute conservation and drought response brochures, and provide them to the general public. The water department will also use the city website

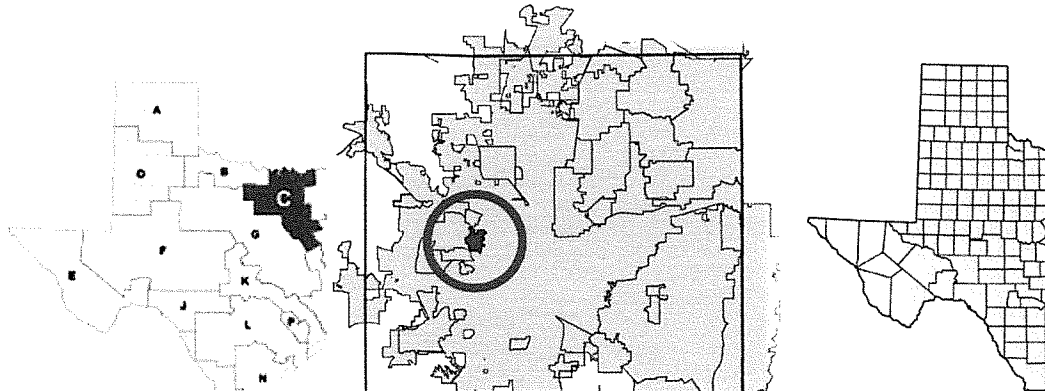
to educate the public on conservation, drought response, as well as other topics affecting water use practices.

(b) At any time this plan is initiated or terminated, the water department director or his/her designee shall notify the public by means of publication in a newspaper of general circulation, publication on the city's website, signs posted in public places, and take-home fliers at schools. Additionally, the water department director or his/her designee shall directly notify the mayor and members of the city council, the fire chief, the police chief, major water users, and any critical water users (i.e., hospitals).

**Sec. 13.07.033 Coordination with regional water planning group**

The service area of the city is located within region C water planning group. A copy of the plan has been submitted to the region C group. This plan includes all the elements required by TCEQ. Some elements go beyond TCEQ requirements. As a customer of the Tarrant Regional Water District (TRWD) the city wishes to adjust elements of this plan in coordination with TRWD and provide TRWD, Texas Commission on Environmental Quality (TCEQ) and the Texas Water Development Board (TWDB) with a copy of this plan.

**Mapping:**



**Sec. 13.07.034 Authorization**

The city secretary 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.

**Sec. 13.07.035 Applicability**

The provisions of this plan shall apply to all persons, customers, and property utilizing water provided retail by the city. The terms "person" and "customer" as used in the plan include individuals, corporations, partnerships, associations, and all other legal entities.

**Sec. 13.07.036 Definitions**

For the 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.

**Alternative Water Source.** Water produced by a source other than a water treatment plant and is not considered potable. These sources can include but are not limited to: reclaimed/recycled water, collected rain water, collected grey water, private well water.

**Athletic Field.** A sports playing field, the essential feature of which is turf grass, used primarily for organized sports for schools, professional sports, or sanctioned league play.

**Automatic Irrigation System.** A site-specific system of delivering water generally for landscaping via a system of pipes or other conduits installed below ground that automatically cycles water use through water emitters to a preset program, whether on a designated timer or through manual operation.

**Aquatic Life.** A vertebrate organism dependent upon an aquatic environment to sustain its life.

**City.** City of River Oaks, a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

**City Manager.** The chief administrative officer of the city.

**City Secretary.** The city secretary shall be appointed by the city manager and perform the duties required by the city council, city manager and those duties required by law.

**Commercial and institutional water use.** Water use which is integral to the operations of commercial and nonprofit establishments and governmental 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 or 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 for future or alternative uses.

**Customer.** Any person, company, or organization using water supplied by the city.

**Director.** The Public Works Director or his/her duly authorized designee responsible for city's water.

**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.

**Drip Irrigation.** An irrigation system (drip, porous pipe, etc.) that applies water at a predetermined controlled low-flow levels directly to the roots of the plant.

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

**Drought Contingency Plan.** A strategy or combination of strategies for temporary supply management and demand management responses to temporary or potentially recurring water supply shortages and other water supply emergencies.

**Fountain.** An artificially created jet, stream or flow of water, a structure, often decorative, from which a jet, stream or flow of water issues.

**Golf Course.** An irrigated and landscaped playing area made up of greens, tees, fairways, roughs and related areas used for the playing of golf.

**Hand-held hose.** A hose physically held by one person, fitted with a manual or automatic shutoff nozzle.

**Hose-end Sprinkler.** A device through which water flows from a hose to a sprinkler to water any lawn or landscape.

**Hosing.** To spray, water, or wash with a water hose.

**Irrigation System.** A system of fixed pipes and water emitters that apply water to landscape plants or turfgrass, including, but not limited to: in-ground and permanent irrigation systems.

**Lake, lagoon or pond.** Artificially created body of fresh or salt water.

**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-way and medians.

**New Landscape.** A landscape:

- a. Installed during construction of a new house, multi-family dwelling, or commercial building;
- b. Installed as part of a governmental entity's capital improvement project; or  
Alters more than one-third the area of an existing landscape.

**Mayor.** The Mayor is the recognized head of the city government for all ceremonial purposes and by the governor for purposes of military law, but has no regular administrative duties.

**Nonessential water use.** Water uses that are not essential or required for the protection of public, health, safety, and welfare, including:

- (1) Irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided by this plan;
- (2) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- (3) Use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- (4) Use of water to wash down buildings or structures for purposes other than the immediate fire protection;
- (5) Flushing gutters or permitting water to run or accumulate in any gutter or street;
- (6) Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
- (7) Use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- (8) Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
- (9) Use of water from hydrants for construction purposes or any other purposes other than firefighting.

**Park.** A non-residential or multifamily tract of land, other than a golf course, maintained by a city, private organization, or individual, as a place of beauty or public recreation and available for use to the general public.

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

**Power Pressure Washer:** A machine that uses water or a water-based product applied at high pressure to clean impervious surfaces.

**Power Pressure Washer (High-Efficiency):** A machine that uses water or a water-based product applied at 1500 pounds per square inch (PSI) or greater.

**Public Works Director.** The person appointed by the City Council that shall have supervision over all matters pertaining to enforcement of regulations of building and zoning, garbage disposal, streets, alleys, gutters, sidewalks, water system, sewer system, sewage disposal facilities, parks and playgrounds.

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

**Reclaimed Water.** Municipal wastewater effluent that is given additional treatment and distributed for reuse in certain applications. Also referred to as recycled water.

**Restrictions.** Limit how and when water may be used.

**Soaker Hose.** A flexible hose that is designed to slowly emit water across the entire length and connect directly to a flexible hose or spigot. Does not include hose that by design or use sends a fine spray in the air. It is not considered drip irrigation.

**Structural Foundation.** The lowest and supporting layer of a structure.

**Swimming Pool.** 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.

**Well Water.** Water that has been, or is, obtained from the ground by digging, boring, or drilling to access an underground aquifer.

**Water.** Water taken from any city public water supply or distribution system, potable or non-potable, and means either raw or potable water delivered to all water connections served by the city whether in the city limits or outside the city limits.

### **Sec. 13.07.037      Initiation and termination of drought response stage**

#### (a)      Initiation of Drought Response Stage

The Public Works Director after consultation with the City Manager may order the implementation of a drought response stage or water emergency when one or more water supply trigger conditions is met. The following actions will be taken when a drought stage is initiated:

- The public will be notified through local media, email or through the city's emergency alert notification system that provides details of the reasons for initiation of the drought stage.
- If any mandatory provisions of the drought contingency plan are activated, the City will notify TCEQ within five business days.

Notwithstanding the foregoing, the Public Works Director may decide, under special circumstances, not to order the implementation of a drought response 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 year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs.

The trigger conditions in this plan pertaining to TRWD's system volume were established following an intensive study of the North Texas climate and its impact on water supplies by Hydrosphere, an engineering firm based in Boulder, Colorado. The 2007 study projected the effects of simulated weather patterns on the combined storage capacity of TRWD reservoirs. Using computer simulations, Hydrosphere compared the water savings that would be achieved at various trigger points with and without outdoor watering restrictions in place. Under severe drought conditions, the estimated water savings that would be achieved by implementing this plan would extend water supplies by several weeks.

#### (b)      Termination of a Drought Stage

The Public Works Director with approval from the City Manager will order the termination of a drought response stage or water emergency when the 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, email or through the city's emergency alert notification system that provides details of the reasons for initiation of the drought stage.
- If any mandatory provisions of the drought contingency plan are activated, the City will notify TCEQ within five business days.

Notwithstanding the foregoing, the Public Works Director with approval from the City Manager may decide, under special circumstances, not to order the termination of a drought response stage or water emergency even though conditions for termination of the stage are met. Factors which could influence such a decision include, but are not limited to, the time of year, weather conditions, or the anticipation of potential changes in conditions that warrant the continuation of the drought stage.

(c) **Monitoring.** All relevant components of the city water system will be monitored to ensure timely response to water situations. The TRWD will monitor water supply and raw water delivery trends and potential system constraints. The director of the city water department will monitor supply, treatment and distribution system trend and potential complaints. Should trends show that any system is approaching trigger levels, more detailed monitoring will be implemented. At a minimum, during noncritical water supply periods, the monitoring and trending will take place monthly. During critical water supply periods the monitoring and trending will take place at least weekly, and may be monitored even more frequently.

### **Sec. 13.07.038 Water management stages**

#### **(a) Stage 1. Water Watch**

##### Triggering and Terminating Conditions

- Total combined raw water supply in TRWD water supply reservoirs (Bridgeport, Eagle Mountain, Richland Chambers and Cedar Creek) drops below 75% (25% depleted) of conservation storage capacity.
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- One or more of the City's or TRWD's water supply sources has become limited in availability.
- Water demand is projected to approach the limit of permitted supply.
- Supply source becomes contaminated or unusable for other regulatory reasons (i.e., invasive species).
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- The Public Works Director finds that conditions warrant the declaration of a Stage 1 drought.

Subject to preceding paragraphs regarding the Termination of a Drought Response stage,

Stage 1, Water Watch, will be terminated when the total combined raw water supply in TRWD's West Fork and East Texas reservoirs exceeds 95% of conservation storage or remains above 85% for 90 consecutive days, whichever occurs first.

Goal for Use Reduction

The goal for water use reduction under Stage 1, Water Watch, is to decrease use by five percent. If circumstances warrant, the Public Works Director can set a goal for greater water use reduction.

Water Use Reduction Actions under Stage 1, Water Watch

The Public Works Director may order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. City must notify TCEQ within five business days if any mandatory measures are implemented.

- Require customers (including indirect customers) to initiate Stage 1 in their drought contingency plans. Indirect customers include any outside city customers who are connected the River Oaks Water System.

All Water Users

- Maximum of twice per week watering for hose-end sprinklers and automatic irrigation systems based on odd/even addresses and day of week schedule.

Stage 1, Water Watch, Outdoor Watering Schedules		
Monday	No Outdoor Watering	Water System Recovery Day
Tuesday and Friday	Non-Residential Sites	Apartments, Parks, Common Areas, HOA's, Businesses
Wednesday and Saturday	Residential Addresses Ending in Even Numbers	0,2,4,6,8
Thursday and Sunday	Residential Addresses Ending in Odd Numbers	1,3,5,7,9

Exceptions:

- Watering with a handheld hose, soaker hose or drip irrigation may occur any day and any time.
- Watering of trees and structural foundations may occur any day and any time by means of handheld hose, soaker hose, or drip irrigation.
- The use of water necessary to protect the health, safety, or welfare of the public.
- Water use necessary for the repair of an irrigation system, plumbing line, fountain, etc. in the presence of person making repair.
- Variances may be available through the City for the following:
  - Establishing new turfgrass and/or landscaping. Variances granted for establishing new turfgrass or landscaping will be for a maximum of 30

- days from the date of approval then maximum of twice per week watering schedule applies.
- Variances do not apply to the installation (over seeding) of cool season grasses.
  - Outdoor watering at addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the City, if the Public Works Director determines that a property cannot be completely irrigated under the twice per week schedule. Under such variance, no irrigation station will be allowed to water more than twice per week.
  - Areas open to the public and have high impact from frequent use may be allowed additional watering with a variance granted by the City if it is deemed to be beneficial to serve and protect the community facility or amenity.
  - Restrictions do not apply to locations using well water, reclaimed water, or other alternative water sources.
- No watering with hose-end sprinklers and/or automatic spray irrigation systems between the hours of 10 a.m. and 6 p.m.
  - Prohibit using water in such a manner as to allow runoff or other waste, including:
    - failure to repair a controllable leak, including, broken sprinkler heads, leaking valves, leaking or broken pipes or faucets;
    - operating an irrigation system with: (a) a broken head; (b) a head that is out of adjustment and spraying into the street, parking area, or sidewalk; or (c) a system that is misting/fogging due to excessive water pressure; or
    - allowing any water to: (a) run off property forming a stream of water for a distance of 50 feet or greater; (b) run into a storm drain; or (c) pond to a depth of ¼ inch or greater; or
    - allowing or causing an irrigation system or other lawn watering device to operate during any form of precipitation or when temperatures are at or below 32 degrees Fahrenheit.
  - All users are encouraged to use native and adapted drought tolerant plants in landscaping.
  - Discourage hosing of paved areas.
  - Discourage hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting or maintenance.
  - 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 automated on-site vehicle washing facilities may wash its vehicles at any time.
  - 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.

#### City and Local Governments

- 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 condition, settings, and operation.
- Identify and encourage voluntary reduction measures by high-volume water users through water use audits.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the Water District. (See exceptions to outdoor watering restrictions in all water users category above for facilities with large multi-station irrigation systems.)

#### Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by five percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by five percent.
- Reduce non-essential water use. As used herein, non-essential water uses are those that do not have a health or safety impact and are not needed to meet the core function of the agency.
- Notify outside city customers that are connected to the River Oaks Water System of actions being taken and request them to implement the same drought stage and measures.

#### Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of parks, golf courses and athletic fields is restricted to the twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the water provider. (See exceptions to outdoor watering restrictions in all water users category above for facilities with large multi-station irrigation systems.)

### Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by five percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by 5 five percent.
- Stock at commercial plant nurseries is exempt from Stage 1 watering restrictions.
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons per request only.
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse 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 to ensure proper condition, settings, and operation. If irrigation audit or repair occurs during restricted watering times or days, a sign indicating such work is taking place must be placed in public view until job is completed.

### **(b) Stage 2. Water Warning**

#### Triggering and Terminating Conditions

- Total raw water supply in TRWD water supply reservoirs (Bridgeport, Eagle Mountain, Richland Chambers and Cedar Creek) drops below 60% (40% depleted) of conservation storage capacity.
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- One or more of the City's or TRWD's water supply sources has become limited in availability.
- Water demand is projected to approach the limit of permitted supply.
- Supply source becomes contaminated or unusable for other regulatory reasons (i.e. invasive species).
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- The Public Works Director with approval from the City Manager finds that conditions warrant the declaration of a Stage 2 drought.

Subject to preceding paragraphs regarding the Termination of a Drought Response stage,

Stage 2, Water Warning, will be terminated when the Total combined raw water supply in TRWD's West Fork and East Texas reservoirs exceeds 75% of conservation storage or remains at or above 70% for 30 consecutive days, whichever occurs first.

#### Goal for Use Reduction

The goal for water use reduction under Stage 2, Water Warning, is to decrease use by 10 percent. If circumstances warrant, the Public Works Director can set a goal for greater water use reduction.

#### Water Use Reduction Actions under Stage 2, Water Warning

The Public Works Director may order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. The City must notify TCEQ within five business days if any mandatory measures are implemented.

- Continue actions under Stage 1.
- Require customers (including indirect customers) to initiate Stage 2 in their drought contingency plans. Indirect customers include any outside city customers that are connected to the River Oaks Water System.
- Initiate engineering studies to evaluate water supply alternatives should conditions worsen.

#### All Water Users

- Maximum of once per week watering for hose-end sprinklers and automatic irrigation systems at each service address.
- An effort will be made by the City and its primary customers to coordinate once per week watering schedules to simplify messages passed to customers through the news media and/or emergency alert notification system.

#### Exceptions:

- Watering with a handheld hose, soaker hose or drip irrigation may occur any day and any time.
- Watering of trees and structural foundations may occur any day and any time by means of handheld hose, soaker hose, or drip irrigation.
- Variances may be available through the City for the following:
  - All users are encouraged to wait until the current drought or emergency situation has passed before establishing new landscaping. Variances granted for establishing new turfgrass or landscaping will be for a maximum of 30 days from the date of approval then maximum of once-per-week watering schedule applies.
  - Variances do not apply to the installation (over seeding) of cool season grasses.
  - Outdoor watering at addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the City, if the Public Works Director determines that a property cannot be completely

irrigated under the once per week schedule. Under such variance, no irrigation station will be allowed to water more than once per week.

- Areas open to the public and have high impact from frequent use may be allowed additional watering with a variance granted by the City if it is deemed to be beneficial to serve and protect the community facility or amenity.
- Restrictions do not apply to well water, reclaimed water, or other alternative water sources.
- Encourage the use of covers for all types of pools, hot tubs, and Jacuzzi type pools when not in use.

### City and Local Governments

#### In addition to the actions listed above:

- Continue actions 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.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a once-per-week schedule; or once-per-week per irrigation station if a variance is granted by the water provider. (See Stage 1 exceptions to outdoor watering restrictions in all water users category for facilities with large multi-station irrigation systems.)

#### Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by ten percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by ten percent.
- 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.
- Notify outside city customers of actions being taken and request them to implement the same drought stage and measures.

### Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a once-per-week schedule; or once-per-week per irrigation station if

a variance is granted by the water provider. (See Stage 1 exceptions to outdoor watering restrictions in all water users category for rules that apply to facilities with large multi-station irrigation systems.)

Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by ten percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by ten percent.

**(c) Stage 3, Water Emergency.**

Triggering and Terminating Conditions

- Total raw water supply in TRWD water supply reservoirs (Bridgeport, Eagle Mountain, Richland Chambers and Cedar Creek) drops below 45% (55% depleted) of conservation storage capacity.
- Water demand exceeds the amount that can be delivered to customers.
- Water demand for all or part of the TRWD delivery system approaches delivery capacity because delivery capacity is inadequate.
- One or more of the City's or TRWD's water supply sources has become limited in availability.
- Water demand is projected to approach the limit of permitted supply.
- Supply source becomes contaminated or unusable for other regulatory reasons (i.e., invasive species).
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- The Public Works Director finds that conditions warrant the declaration of a Stage 3 drought.

Subject to preceding paragraphs regarding the Termination of a Drought Response stage,

Stage 3, Water Emergency, will be terminated when the total combined raw water supply in TRWD's West Fork and East Texas reservoirs exceeds 60% of conservation storage or remains at or above 55% for 30 consecutive days, whichever occurs first.

Goal for Use Reduction

The goal for water use reduction under Stage 3, Water Emergency, is to decrease use by 20 percent. If circumstances warrant, the Public Works Director can set a goal for greater water use reduction.

Actions Available under Stage 3, Water Emergency

The Public Works Director can order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers



require notification to TCEQ. The City must notify TCEQ within five business days if these measures are implemented.

- Continue actions under Stages 1 and 2.
- Require customers (including indirect customers) to initiate Stage 3 in their drought contingency plans. Indirect customers include outside city customers connected to the River Oaks Water System.

All Water Users: Prohibit all outdoor watering with hose-end sprinklers and automatic irrigation systems, including at parks, golf courses, and sports fields.

Exceptions:

- Watering with hand-held hose, soaker hose or drip irrigation system may occur any day and any time.
  - Watering of trees and structural foundations may occur any day and any time by means of handheld hose, soaker hose, or drip irrigation.
  - Restrictions do not apply to well water, reclaimed water, or other alternative water sources.
  - Irrigation of new landscapes and/or turfgrass installations is prohibited by means of automatic irrigation system or hose-end sprinkler. Variances may be granted for those landscape projects started prior to the initiation of stage 3 drought restrictions. However, variances will not be granted for the irrigation of new landscape and/or turfgrass installations after the initiation of Stage 3 drought restrictions.
  - Prohibit washing of paved areas by any means except where a variance is granted to alleviate a possible public health and safety risk. Any pressure/power washing activities must be performed by a professional pressure/power washing service provider utilizing high efficiency equipment and a vacuum recovery system where possible.
  - Prohibit hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting with high-pressure equipment. Services must be performed by a professional pressure/power washing service provider utilizing high efficiency equipment and a vacuum recovery system where possible.
  - Vehicle washing is restricted to commercial car washes, commercial service stations, or professional washing services only. This includes home and charity car washing. The washing of garbage trucks and vehicles used to transport food and/or other perishables may take place as necessary for health, sanitation, or public safety reasons.
  - Prohibit permitting of private pools. Pools already permitted may be completed and filled. Existing private and public pools may add water to maintain pool levels but may not be drained and refilled.
  - Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life or water quality.

## City and Local Governments

- Continue actions under Stages 1 and 2.
- Review conditions or problems that caused Stage 3. Take corrective action.
- Increase frequency of media releases explaining emergency situation and/or water supply conditions.
- Landscape watering at municipal parks, golf courses, and sports fields is prohibited. Variances may be granted by the water provider under special circumstances.

### Exceptions:

- Golf course greens and tee boxes may be watered by hand as necessary.
- Variances may be available for watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events to protect the health and safety of the players, staff, or officials present for the athletic event.
- Professional and college sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as necessary to maintain league standards.
- 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 all water customers, both inside and outside the City.

## Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users. Landscape watering of municipal parks, golf courses and athletic fields is prohibited. Variances may be granted by the water provider under special circumstances.

### Exceptions:

- Golf course greens and tee boxes may be watered by hand, as necessary.
- Variances may be available for watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events to protect the health and safety of the players, staff, or officials present for the athletic event.
- Professional and college sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as necessary to maintain league standards.
- Require hotels, restaurant, and bars to serve drinking water to patrons on an “on demand” basis.
- Require hotels to implement laundry conservation measures by encouraging patrons to reuse linens and towels.

- Stock at commercial plant nursery may be watered by hand only with a handheld hose, hand-held watering can, soaker hose, or drip irrigation system.
- Commercial and industrial water users may be required to reduce water use by a set percentage as determined by the Water District.

**(d) Procedure for Curtailment of Water Supplies**

1. Any mandatory reduction to deliveries from TRWD to its customers shall be distributed as required by Texas Water Code §11.039, which is attached as Appendix I. In addition, every wholesale water supply contract entered into or renewed after adoption of this plan, including contract extensions, shall include a provision that water will be distributed in accordance with the Texas Water Code §11.039 in case of a water shortage resulting from drought.

To the extent not prevented by enforcement of provisions in the Water District's wholesale contracts in effect before November 28, 1999, TRWD will implement pro rata curtailment of water deliveries pursuant to Texas Water Code §11.039.

2. **Procedure for Granting Variances to the Plan.** The Public Works Director may grant temporary variances for existing water uses otherwise prohibited under this drought contingency plan to a customer 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 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 Public Works Director. Persons requesting an exemption from the provisions of this plan shall file a petition for variance with the city within 5 days after the plan for a particular drought response stage have been invoked. All petitions for variances shall be reviewed by the director of the water department, or his designee, and shall include the following:

- Name and address of 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.

Variations granted by the city shall be subject to the following conditions, unless waived or modified by the director of the water department:

- Variations granted shall include a timetable for compliance.
- Variations granted shall expire when the plan is no longer in effect, unless the petitioner has failed to meet specified requirements.
- No variance shall be retroactive or otherwise justify any violation of the plan occurring prior to the issuance of the variance.

3. **Mandatory water use restrictions may be imposed by TRWD.** Water District customers (direct and indirect) shall provide TRWD with an order, ordinance, or resolution to demonstrate adequate enforcement provisions for the customer's own drought contingency plan.

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

- On the first violation, the customer will be given a written warning that they have violated one or more of the mandatory water use restrictions.
- After a second violation, TRWD will notify the customer of its intent to publish the name and contact phone numbers of any entity in violation of this water conservation and drought contingency plan in local print media and on its Web site. In addition, TRWD will require the customer to implement a more comprehensive public education and outreach program in a manner that increases the public's awareness about mandatory water use restrictions and the current drought status. The customer will also be required to submit documentation to TRWD of the steps it has taken to ensure compliance with this water conservation and drought contingency plan within 90 days after receiving the second notice of violation.
- TRWD may petition the Texas Commission on Environmental Quality to initiate formal enforcement action against customers that repeatedly fail to comply with the mandatory water use restrictions implemented during any stage of this water conservation and drought contingency plan.

(e) **Coordination with the Regional Water Planning Groups.** The City of River Oaks as the water purveyor in this plan will coordinate Region C water planning group with this water conservation and drought contingency plan.

#### **Sec. 13.07.039 Enforcement**

- (a) No person shall knowingly or intentionally allow the use of water from the city for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provisions of this plan, or an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the mayor, or his/her designee, in accordance with provisions of this plan.
- (b) Any person who violates this plan is guilty of a misdemeanor. Each day that one or more of the provisions in this plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this plan,

the city secretary shall, upon due notice to the customer, be authorized to discontinue water service to the premises where the violations occur. Services discontinued under such circumstances shall be restored only upon payment of reconnection charge, and any other costs incurred by the city in discontinuing service. In addition, suitable assurance must be given to the city secretary that the same action will not be repeated while the plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.

- (c) Any person, including a person classified as a water customer of the city, in apparent control of the property where the 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 rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show 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 the property within the parent's control shall constitute a rebuttable 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.
- (d) Any employee of the city, police officer, or other employee designated by the city manager, may issue a citation to a person he/she reasonably believes to be in violation of this plan. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged and shall direct him/her to appear in the municipal court, on the date shown on the citation.

**Sec. 13.07.040 Private water well exception**

- (a) Any person who maintains or uses private water well for other than domestic water use (such as landscape irrigation) is exempt from the requirements, restrictions and limitations of the water management stages of this plan. Individuals with private water wells are, however, encouraged by the city to abide by the plan and its water conservation goals in order to protect long-term water supplies.
- (b) At any time this plan is initiated, to be entitled to such exemption, any such person shall be required to post notice of such private water well use. Each person shall pay for an appropriate sign, which will be provided by the city, indicating a private water well supply. The sign shall be placed in the yard in close proximity to the city's water meter indicating private water well use until such time as the plan has been terminated.
- (c) Private well owners must register their well and type of well with the city inspection department.
- (d) Failure to post the required sign or to register any private well during stage 1 through stage 3 water management stages shall result in the loss of the exemption from the landscaping water requirements.

## **Sec. 13.07.041 Water wasting**

“Water wasting” means to permit or cause water flow, spray, or otherwise move or discharge water from the premises to or upon the street, alley, or public right-of-way, ditch or drain, or failing to repair a leak in a private plumbing system or in an irrigation system within five (5) working days of the discovery or notification of such. Any violation of this section is punishable as set forth in section 13.07.001.

## **Sec. 13.07.042 Drought Contingency Plan**

### **Introduction**

The purpose of this drought contingency 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.

TRWD and its customer cities experienced Stage 1 drought restrictions from 2011-2012 and 2013-2015. Fortunately, water supply reservoirs have not dropped below 75% capacity since. With that experience, the City has taken a more active role in educating the public about the importance of reducing water waste and being prepared for the next drought.

### **State Requirements for Drought Contingency Plans**

This drought contingency plan is consistent with the Texas Commission on Environmental Quality (TCEQ) guidelines and requirements for the development of drought contingency plans by wholesale water suppliers, contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.22 of the Texas Administrative Code. This rule is included in Appendix B.

### **Provisions to Inform the Public and Opportunity for Public Input**

The City provided opportunity for public input in the development of this drought contingency plan by the following means:

- The City will provide the draft plan to anyone requesting a copy.
- The proposed plan was posted to the City’s web site (April 2021) providing the public an opportunity to review and comment on the plan in writing.
- Public comment is available at the meeting to be held before the City Council located at 4900 River Oaks Blvd in River Oaks, Texas at 7:00 p.m. on Tuesday, May 11, 2021.

**Review and Update of Drought Contingency Plan.** As required by TCEQ rules, the City of River Oaks will review this water plan every five years thereafter after its adoption in 2021. The plan will be updated as appropriate based on new or updated information.

## **Division 3. Water Conservation Plan**

### **Sec. 13.07.071 Summary**

(a) The City of River Oaks owns and operates a TCEQ rated capacity of 2.66 million gallons of water a day surface water treatment plant located at 1900 Nancy Lane in River Oaks, Texas. The water system serves 7,724 people with approximately 2,900 water connections. The water treatment plant is located ½ mile from Lake Worth on the far northwestern corner of River Oaks. The Plant is computerized and is equipped with a SCADA alarm system. The raw water is purchased under contract with Tarrant Regional Water District.

Raw Water is delivered through two (2) 16-inch raw water transmission mains that are located within a dedicated easement across the City of Fort Worth west of Inspiration Point. Raw Water Flow from the lake is activated through vacuum when the pressure in the prime line drops below 5 p.s.i. opening the prime valve forcing water pressure through the prime line until it reaches 14 p.s.i. at which time the prime valve closes creating suction from the intake valves in the lake that ultimately flows raw water back through the two 16-inch water transmission mains to the raw water pump house located at 1900 Nancy Lane. There are two raw water pumps in the raw water pump house rated to pump 2.66 million gallons a day.

(b) This water conservation plan identifies water conservation goals and identifies and explains conservation practices that will help protect long-term water supplies for the city and its customers. This plan includes information required by the Texas Commission on Environmental Quality (TCEQ) for water conservation plans as well as information specific to the city water supply and treatment system.

### **Sec. 13.07.072 Conservation overview**

The city conservation plan recognizes that the city is under a contract with Tarrant Regional Water District (TRWD) for the purchase of raw water and the quality of that water is monitored and controlled according to said contract. The city conservation plan recognizes the emphasis that is placed on the cooperation with said water district in order to maintain the level of quality and quantity as required. Furthermore, this plan recognizes that, under the terms of the contract with the City of Fort Worth for an emergency connection, any emergency that arises in the Fort Worth water system will cause the same rationing and conservation methods as stated in that contract to be placed upon the residents of the City of River Oaks unless the City of River Oaks is not connected to and using water supplied from Fort Worth at the time the emergency is proclaimed.

### **Sec. 13.07.073 Water conservation goals**

(a) Water customers requested to voluntarily reduce water use, to practice water conservation and to minimize water use for nonessential purposes. Voluntary measures will remain in effect continually as follows:

- (1) Water customers requested to voluntarily reduce water use, to practice water conservation and to minimize water use for nonessential purposes.
  - (2) Request voluntary reduction in city government use of water for street washing, vehicle washing, operation of ornamental fountains and all other nonessential use.
  - (3) Request voluntary reduction in landscape watering by city government.
  - (4) Request voluntary limitation in landscape watering between 10 a.m. and 6 P.M.
  - (5) Request customer service addresses to practice a voluntary reduction in landscape water to every other day based on the last digit of the address per the schedule below:
    - i. Odd-Numbered service addresses water on odd-numbered days; and
    - ii. Even-numbered service addresses water on even-numbered days
    - iii. Avoid over watering. Do not water yard so much that it runs over into the street. The lawn is not a lake.
    - iv. Set lawn irrigation system controls to water at night or early in the morning. Encourage customers not to operate during the day between 10:00 a.m. and 6:00 p.m. and above all limit the time and don't over water.
- (b) The conservation goals for the city are as follows:
- (1) Continue waterline and meter change out programs.
  - (2) Continue meter calibration programs at the water plant.
  - (3) Public education.
  - (4) Reduce peak demands.

**Sec. 13.07.074 Water conservation methods**

- (a) The city water conservation plan includes the following water conservation methods:
- (1) Public information and education on conserving water use inside and outside the home.
  - (2) Plumbing code enforcement.
  - (3) Meter testing and upgrades.
  - (4) Old and deteriorated waterline replacement.
  - (5) Leak detection and repair.
  - (6) Water conserving landscaping.
  - (7) Water use auditing.
  - (8) Certificate of occupancy inspections.



- (b) Each method is presented and described in the following subsections.
- (1) Public information and education. The most important part of the city's conservation program is public education. The city staff will present information upon request to the public.
    - (i) **Presentations at community meetings.** The staff will present conservation updates in order to educate the public.
    - (ii) **Website page.** The city web page can be accessed at <http://www.riveroakstx.com> with any updated conservation information including but not limited to rationing and conservation procedures.
    - (iii) **Code Red Emergency Alert Notification.** quick notifications of time-sensitive information, emergencies and day-to-day operational updates. Sends targeted emergency and community notifications to mobile subscribers located in specific geographic areas within our jurisdiction.
    - (iv) **School programs.** The city staff will make presentations on water conservation to the schools upon request.
    - (v) **Water plant tours.** The water department will offer tours of the plant in order to educate the citizens of the city upon request .
  - (2) **Plumbing code.** The city has adopted the 2015 International Plumbing Code and the city has on staff 3 state-licensed plumbing inspectors who will see that the provisions of this code are enforced.
  - (3) **Meter testing and upgrades.** The meters at the plant are calibrated now semiannually and the city will continue to replace any dead meters in the system. Water meters register the amount of water that a customer uses. Meters have a leak indicator on it to verify if the customer has a leak. Customers are encouraged to call the city if they think they may have a leak and the city will check the meter at no additional charge.
  - (4) **Waterline replacement program.** The city has implemented a program of replacing old and deteriorated water mains and the program will continue until all the old mains have been replaced.
  - (5) **Leak detection and repair.** All water main leaks are monitored closely and repaired as soon as possible. The city representatives will notify the residents of any possible leak that they have on their side through the use of leak detection indicators installed on most meters upon request. **A drip can amount to 2,700 gallons in a day.**
  - (6) **Water conserving landscaping.** The water department encourages the planting of smart- scape plants that are conducive to this environment and requires limited amounts of water to maintain. The city

staff will be happy to assist any resident with questions on this type of program.

*Bushes and shrubs usually don't require a lot of water to keep them alive. You do not have to flood them.* If necessary the staff will direct the resident to a local nursery where they can find more information. Texas Smartscape CD available for contractors, visitors, landscape consultants at the City Hall.

- (7) **Water use auditing.** The utility billing manager will monitor the bills on a monthly basis and report any abnormalities to the distribution department for further investigation. The city annually compares water purchased against water sold and reports this information to the state water development board.
- (8) **Certificate of occupancy inspections.** All vacant housing must make application and obtain a certificate of occupancy prior to occupying the house. During this inspection it will be required that plumbing fixtures will have to comply with the state code for the installation of water saving fixtures as follows:
  - (i) When purchasing fixtures verify what the manufacturer rates the water flow at. Check to make sure the fixtures are code approved. Reference standards include ASSE, ASTM, or ICC approved.
  - (ii) Replace old conventional toilets with a new 1.2 gallon flush that can save the customer in some cases up to as much as 5 gallons per flush.
- (9) **Other programs; landscape watering schedule.** It is recommended that residents abstain from watering during peak water demand times and to control the length of watering to no more than 30 minutes or to the point of runoff in any one area. *For example: Place a small sized tuna can in the area that is being watered; when the can fills up with water, the area is adequately watered.*
- (10) **Car washing; Outdoor Recreational Use.** When washing vehicles don't just leave the hose on the ground and let it run. Turn the water off when you are not actually rinsing the car off. Water flows out of the outside hose bibb at approximately 25 gallons per minute and in one hour that equals 1,500 gallons of water. Leaving the water hose running continuously can add up to 36,000 gallons in a day.
- (11) **Rainwater Harvesting.** Rainwater can be caught and used for watering plants and other non-essential uses but not to drink. For more information on rainfall harvesting and other drought information go to the TCEQ website at <http://www.tceq.state.tx.us>.

**Sec. 13.07.075      Coordination with others**

This plan will be presented to the region C water planning group and also the Tarrant Regional Water District

**Sec. 13.07.076      Reservoir systems operations**

Tarrant Regional Water District as the city's raw water supplier is responsible for operations of the reservoir system as described in the summary section of this plan. Tarrant Regional Water District coordinates this operation plan with all of its water customers and provides recommendations for the operation of regional water systems as well."

**Sec. 13.07.077      Utility Profile**

The Utility Profile of the City off River Oaks is incorporated as Exhibit A "Utility Profile, TWDB Form 1965R" that incorporates water production data known for 2016 through 2020 and projects population growth, water production, capacity and consumption through 2025. The historical averages along with a 1/2 of 1% population growth anticipates a gallon per person per day to be from the 2015 gallons per person per day of 88 with water conserving plans to reduce down to 86 gallons per person per day.

**SECTION II.  
CUMULATIVE CLAUSE**

This ordinance shall be cumulative of all provisions of ordinances and of the Code of the City, as amended, except when the provisions of this ordinance are in direct conflict with the provisions of such ordinances or Code, in which such the conflicting provisions of such ordinances or Code are hereby repealed.

**SECTION III.  
SEVERABILITY CLAUSE**

It is hereby declared to be the intention of the city council that the phrases, clauses, sentences, paragraphs and sections of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the city council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

**SECTION IV.  
PENALTY CLAUSE**

A fine or penalty for the violation of a rule, ordinance or police regulation that governs fire safety, zoning or public health and sanitation including the dumping of refuse may not exceed two thousand dollars (\$2,000.00); provided, however, that no penalty shall be greater or less than the penalty provided for the same or a similar offense under the laws of the state. Each day any violation of this code or of any ordinance shall continue shall constitute a separate offense. In the event that any such violation is designated as

a nuisance under the provisions of this code, such nuisance may be summarily abated by the city. In addition to the penalty prescribed above, the city may pursue other remedies such as abatement of nuisances, injunctive relief and revocation of licenses or permits.

**SECTION V.  
SAVINGS CLAUSE**

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

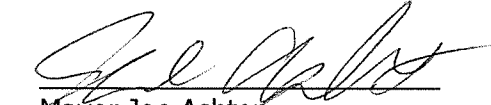
**SECTION VI.  
PUBLICATION**

The City Secretary of the City of River Oaks is hereby directed to publish in the official newspaper the caption, penalty clause, savings clause, publication clause and effective date clause of this ordinance one (1) time after the adoption of this ordinance in accordance with Chapter 5, Section 5.02 (c) of the Charter of the City of River Oaks.

**SECTION VII.  
EFFECTIVE DATE**

This ordinance shall be in full force and effect from and after its passage and publication as required by law, and it is so ordained.

**PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF RIVER OAKS,  
TEXAS, ON THIS 11<sup>TH</sup> DAY OF MAY 2021.**

  
\_\_\_\_\_  
Mayor Joe Ashton

ATTEST:

  
\_\_\_\_\_  
Paula Luck, City Secretary

# EXHIBIT A

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

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

### CONTACT INFORMATION

Name of Utility: City of River Oaks

Public Water Supply Identification Number (PWS ID): 2200069

Certificate of Convenience and Necessity (CCN) Number: CN600648224

Surface Water Right ID Number: 352

Wastewater ID Number: N/A

Completed By: Gordon Smith Title: Public Works Director

Address: 4900 River Oaks Blvd City: River Oaks Zip Code: 76114

Email: gsmith@riveroakstx.com Telephone Number: 817-626-5421 X 322

Date: April 23, 2021

Regional Water Planning Group: C [Map](#)

Groundwater Conservation District: N/A [Map](#)

Check all that apply:

- Received financial assistance of \$500,000 or more from TWDB
- Have 3,300 or more retail connections
- Have a surface water right with TCEQ

## Section I: Utility Data

### A. Population and Service Area Data

1. Current service area size in square miles: 2  
 (Attach or email a copy of the service area map.)
  
2. Provide historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2016	7,427	0	7,427
2017	7,427	0	7,427
2018	7,427	0	7,427
2019	7,427	0	7,427
2020	7,600	0	7,600

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

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020	7,600		7,600
2030	8,283		8,283
2040	8,706		8,706
2050	9,151		9,151
2060	9,619		9,619

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

2016 through 2019- 2010 Census was used  
 2020 North Central Texas Council of Governments project population was used.  
 River Oaks is 99% built out and an estimate of 0.05% increase every 10 years thereafter was used based on redevelopment to multi-family structures in certain areas of the city would be realistic.

**B. System Input**

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2016	225,546,200	0	0	225,546,200	83
2017	227,497,000	3,860,000	0	231,357,000	85
2018	120,560,000	85,966,000	0	206,526,000	76
2019	98,157,000	126,260,000	0	224,417,000	83
2020	150,457,000	76,250,000	0	226,707,000	82
<b>Historic 5-year Average</b>	164,443,440	58,467,200	0	222,910,640	82

**C. Water Supply System (Attach description of water system)**

1. Designed daily capacity of system \_\_\_\_\_ 2,660,000 gallons per day.
2. Storage Capacity:  
 Elevated \_\_\_\_\_ 500,000 gallons  
 Ground \_\_\_\_\_ 1,440,000 gallons
3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
Lake Worth	Surface	2,660,000
City of Fort Worth	Contract	1,080,000
	Choose One	
	Choose One	
	Choose One	
	Choose One	

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

4. If surface water is a source type, do you recycle backwash to the head of the plant?  
 Yes 60,000 estimated gallons per day  
 No



## D. Projected Demands

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

Year	Population	Water Demands (gallons)
2021	7,668	228,891,160
2022	7,736	231,075,320
2023	7,804	233,259,480
2024	7,872	235,443,640
2025	7,940	237,627,800
2026	8,008	239,811,960
2027	8,076	241,996,120
2028	8,144	244,180,280
2029	8,212	246,364,440
2030	8,283	248,644,960

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

Based on River Oaks is 99 Percent built out and with a history of reduced consumption largely ,due to water conserving fixtures, conservation plan and drought contingency plans; its not unreasonable to calculate that based on the historical values that the gallons per person per day of 88 gallons will be a good constant calculation to project future demands. The formula used to calculate water demand above is as follows.

2020 Actual gallons used 226,707,000 + (68x365x88) "2,184,160 gallons" =228,891,160 and each year after until 2030 where 2,280,520 was used due to population calculation was increased from 68 to 71.

**E. High Volume Customers**

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

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
Roy's #10 Wash n Dry	Commercial	593,710	Treated
Quick Wash	Commercial	381,823	Treated
River Ranch Apartments	Residential	370,219	Treated
CISD Irrigation	Agricultural	310,430	Treated
Max Gonzalez	Residential	185,800	Treated

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

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

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
none	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

**F. Utility Data Comment Section**

Provide additional comments about utility data below.

The top two water customers are for a laundry mats. River Ranch Apartments is an 80 unit complex and Max Gonzalez is a 30 unit apartment complex. CISD is irrigation to school football field and is largely due to landscaping the field.

## Section II: System Data

### A. Retail Connections

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

Water Use Category*	Active Retail Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Residential – Single Family	2,704	0	2,704	89%
Residential – Multi-family (units)	5	121	126	4%
Industrial	0		0	0%
Commercial	200		200	7%
Institutional			0	0%
Agricultural	23		23	1%
<b>TOTAL</b>	<b>2,932</b>	<b>121</b>	<b>3,053</b>	

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

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

Water Use Category*	Net Number of New Retail Connections				
	2016	2017	2018	2019	2020
Residential – Single Family	8	6	10	8	6
Residential – Multi-family (units)	0	0	0	0	0
Industrial	0	0	0	0	0
Commercial	0	2	4	1	4
Institutional	0	0	0	0	0
Agricultural	0	0	0	0	0
<b>TOTAL</b>	<b>8</b>	<b>8</b>	<b>14</b>	<b>9</b>	<b>10</b>

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

**B. Accounting Data**

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

Water Use Category*	Total Gallons of Retail Water				
	2016	2017	2018	2019	2020
Residential - Single Family	147,665,685	145,049,030	166,794,276	169,945,891	175,474,046
Residential – Multi-family	5,250,352	6,871,360	7,240,019	6,595,760	6,251,567
Industrial	0	0	0	0	0
Commercial	29,846,601	33,330,955	26,348,599	19,204,286	19,669,909
Institutional	0	0	0	0	3,009,159
Agricultural	5,046,898	306,680	0	363,977	6,216,000
<b>TOTAL</b>	<b>187,809,536</b>	<b>185,558,025</b>	<b>200,382,894</b>	<b>196,109,914</b>	<b>210,620,681</b>

\*For definitions on recommended customer categories for classifying customer water use, refer to the online [Guidance and Methodology for Reporting on Water Conservation and Water Use](#).

**C. Residential Water Use**

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

Water Use Category*	Residential GPCD				
	2016	2017	2018	2019	2020
Residential - Single Family	57	56	65	66	68
Residential – Multi-family	38	50	53	48	45

**D. Annual and Seasonal Water Use**

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

Month	Total Gallons of Treated Retail Water				
	2016	2017	2018	2019	2020
January	16,296,000	15,733,000	15,552,000	14,860,000	13,340,000
February	15,032,100	14,042,000	14,566,000	13,000,000	13,380,000
March	15,695,400	17,387,000	16,218,000	16,091,000	15,479,000
April	16,307,100	16,934,000	12,302,000	16,014,000	15,795,000
May	16,369,800	21,445,000	14,598,000	22,035,000	21,092,000
June	20,137,000	21,031,000	15,998,000	9,937,000	23,937,000
July	25,748,300	24,200,000	18,684,000	25,387,000	24,436,000
August	26,142,100	22,715,000	24,081,000	26,150,000	29,332,000
September	20,495,700	23,463,000	23,917,000	25,884,000	17,920,000
October	19,659,800	19,914,000	21,104,000	23,618,000	20,118,000
November	16,942,700	17,814,000	15,133,300	17,550,000	16,131,000
December	16,720,200	16,679,000	11,762,000	17,325,000	15,297,000
<b>TOTAL</b>	<b>225,546,200</b>	<b>231,357,000</b>	<b>203,915,300</b>	<b>227,851,000</b>	<b>226,257,000</b>

2. For the previous five years, enter the gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Retail Water				
	2016	2017	2018	2019	2020
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
<b>TOTAL</b>	0	0	0	0	0

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use					Average in Gallons
	2016	2017	2018	2019	2020	
Summer Retail (Treated + Raw)	72,027,400	67,946,000	58,763,000	61,474,000	77,705,000	67,583,080 5yr Average
TOTAL Retail (Treated + Raw)	225,546,200	231,357,000	203,915,300	227,851,000	226,257,000	222,985,300 5yr Average

**E. Water Loss**

Provide Water Loss data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365

Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2016	37,736,664	14	17%
2017	41,938,975	15	18%
2018	8,570,131	3	4%
2019	20,657,086	8	9%
2020	13,252,482	5	6%
<b>5-year average</b>	<b>24,431,068</b>	<b>9</b>	<b>11%</b>

**F. Peak Water Use**

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

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2016	540,000	980,000	1.81
2017	640,000	1,182,000	1.85
2018	590,000	1,016,000	1.72
2019	629,000	1,211,000	1.93
2020	623,800	1,307,000	2.10

**G. Summary of Historic Water Use**

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	160,985,786	89%	0%
Residential MF	6,441,812	4%	0%
Industrial	0	0%	0%
Commercial	25,680,070	7%	0%
Institutional	601,832	0%	0%
Agricultural	2,386,711	1%	0%

**H. System Data Comment Section**

Provide additional comments about system data below.

All consumption is taken from the 2016 thru 2020 SWMOR monthly reports or the annual survey report to the Texas Water Development Board; whichever the case may be. Consumptions billed to customers was taken from the City's Utility Incode System.

## Section III: Wastewater System Data

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

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

1. Design capacity of wastewater treatment plant(s): 0  
gallons per day.
2. List the active wastewater connections by major water use category.

Water Use Category*	Active Wastewater Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal			0	0%
Industrial			0	0%
Commercial			0	0%
Institutional			0	0%
Agricultural			0	0%
<b>TOTAL</b>	0	0	0	

2. What percent of water is serviced by the wastewater system?     %
3. For the previous five years, enter the number of gallons of wastewater that was treated by the utility.

Month	Total Gallons of Treated Wastewater				
	2016	2017	2018	2019	2020
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
<b>TOTAL</b>	0	0	0	0	0

4. Can treated wastewater be substituted for potable water?

Yes  No

**B. Reuse Data**

1. Provide data on the types of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Discharge to surface water	
Evaporation pond	
Other	
<b>TOTAL</b>	<b>0</b>

**C. Wastewater System Data Comment**

Provide additional comments about wastewater system data below.

City of River Oaks has no treatment plant and all sewer treatment is contracted with the City of Fort Worth. The sewer is unmetered, due to numerous interconnects between the two Cities. Charges are based off contract to where residential is based monthly on 10,500 gallons and

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



# EXHIBIT B

## Texas Administrative Code

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

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(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 insure 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 any 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.