

**WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN  
FOR THE**

**WALNUT CREEK SPECIAL UTILITY DISTRICT (WCSUD)**

**Revised and Amended November 12, 2002**

**Revised and Amended January 30, 2005**

**Revised and Amended July 12, 2005**

**Revised and Amended October 18, 2005**

**Revised and Amended February 19, 2008**

**Revised and Amended September 20, 2011**

**Revised and Amended September 16, 2014**

**Revised and Amended May 24, 2016**

**Revised and Amended August 19, 2019**

**Section I. Declaration of Policy, Purpose, Intent and Distribution of Water During Shortage**

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 to minimize the adverse impacts of water supply shortage or other water supply emergency conditions, i.e., water production or distribution systems limitations, supply source contamination or outage due to the failure or damage of major water systems components (i.e., pumps) and for water conservation plans with qualified five and ten year target goals the Walnut Creek Special Utility District Board (“the Board”) acting for and on behalf of the Walnut Creek Special Utility District (“the District”) hereby adopts the following conservation goals, regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Water Conservation and 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 enforcement actions as defined in Section XVIII of this Plan. Water conservation goals are enacted by the District as a means to reduce the per capita water consumption based on five and ten-year target periods.

Distribution of Water During Shortage

- A. If a shortage of water in a water supply result from drought, accident, or other cause, the water to be distributed shall be divided among all customers pro rata, according to the amount each may be entitled to, so that preference is given to no one and everyone suffers alike.
- B. Nothing in Subsection A. of this section precludes the person, association of persons, or corporation owning or controlling the water from supplying water to a person who has a prior vested right to the water under the laws of this state.

## **Section II. Profile and Description of the District**

### **1. Service Area**

The District provides water service to a 500 square mile area that is located between Lake Bridgeport to the North and Eagle Mountain Lake to the southeast. The service area consists mainly of rural agricultural farmland, rural communities and small incorporated cities.

The District does not own or operate a wastewater treatment or collection system.

### **2. Customer Data**

The District presently has 7,782 residential meters and 5 master meters that facilitate the primary water supply or a supplemental water supply to the following system:

- West Wise Special Utility District, Wise County
- City of Paradise, Wise County
- City of Boyd, Wise County
- City of Reno, Parker County
- City of Rhome, Wise County

Approximately 23,300 people are served by the Walnut Creek S.U.D.

### **3. Supply Source**

The Walnut Creek S.U.D. owns and operates a surface water treatment plant located on Lake Bridgeport. Raw water is purchased under a contract with Tarrant Regional Water District, the lake owner.

The District has a treatment plant with a capacity of 6 MGD.

The District has taken steps to have future plans that would double the treatment capacity to 12 MGD by duplicating a second treatment plant under Phase II infrastructure. The second plant would be developed at the same site as the existing plant. Intake facilities and raw water facilities for future Phase II were built with a shared facility contract with Brazos Electric Power Cooperative, Inc. This new raw water pump station is contiguous to the District's existing raw water pump station. The second 6MGD treatment plant is scheduled for construction to start in the fall of 2019.

## **Section III: Supply Evaluation (Water Production and Water Usage)**

The treatment plant capacity is 6 MGD.

The State supply requirement of 0.6 gpm per meter was reduced to 0.48 gpm per meter based on a variance granted by the TNRCC in the year 2000, when it was demonstrated by historic records that the actual peak day demand (recorded in 1996) was 0.48 gpm and the average day demand during the drought summer was 0.17 gpm. Since this period, the system recorded a peak day use of 4.262 mgd on September 1, 2016. With approximately 7,029 customers, the peak demand still remains low at 0.45 gpm per customer meter.

The surface water treatment production capacity is adequate based on present system demands from both residential meters and present wholesale customers use. The surface water treatment plant was designed and constructed with multiple individual treatment units and with multiple raw water pumps, transfer pumps and high service booster pumps. By utilizing this design in the construction of the surface water treatment plant, the District has multiple redundant supply and treatment facilities should one, two or three experience damage or failure. These are automatic response strategies that were planned in the design of the treatment facilities should emergency response stages be implemented.

#### **Section IV: Long Term Supply Source Strategies**

##### **1. Lake Bridgeport**

In accordance with Senate Bill One, Region C Water Planning Groups under the direction of the Texas Water Development Board (T.W.D.B.), several advanced plans for addressing the water needs of this region, including supply source limitations and the future supply demands placed upon Lake Bridgeport. After numerous public meetings, three plans have emerged to bolster water resources; the supplemental supply (raw water pipeline) from East Texas lakes that would recharge Eagle Mountain Reservoir, thus reducing the demand upon the upper Trinity Watershed (Lake Bridgeport) now utilized to maintain supply levels in Eagle Mountain Lake for supplying portions of the City of Fort Worth.

A second, somewhat subordinate plan would be for a supplemental raw water supply line directly into Lake Bridgeport. This would be in addition to a supply line to Eagle Mountain Lake.

A third, preliminary plan would be to construct water impounds in Oklahoma and bring water into the West Fork of the Trinity River and into Lake Bridgeport; however, this plan is opposed by the State of Oklahoma and in a Federal Court ruling, rejected the right-of-use by the State of Texas (Tarrant Regional Water District).

These plans will address the future regional water needs for the Walnut Creek S.U.D. and all cities dependent upon Lake Bridgeport as their single source of supply.

Walnut Creek S.U.D. has been very active in support of these plans together with all other water providers dependent upon Lake Bridgeport.

##### **2. Alternate Supply Source Strategies**

In the event supply source contamination of Lake Bridgeport occurs, the system could be supplied on an emergency basis through emergency alternate connections with other water utility providers. The two primary emergency suppliers, where system line connections have been undertaken for such emergency conditions are the Community Water Supply Corporation and the City of Azle.

Both of these alternate suppliers own and operate independent surface water treatment plants on Eagle Mountain Lake. With the use of backflow prevention devices at these two strategic points of connection, metered potable water could be introduced from two independent supply sources.

Engineering problems that must be confronted in supplying higher hydraulic planes of operation above

these emergency supply points could be addressed with the use of direct in-line booster pumps equipped with vacuum suction brakes. These pumping units can be skid mounted for mobile transportation. Electrical service at these supply points could be prearranged with local electrical providers or portable generators could be employed. Additionally, these portable pumping units would also need to be provided at two other locations within Walnut Creek's distribution system, to address the hydraulic high-pressure planes of operation.

The numerous pump stations presently employed within the distribution systems were designed for bypass operation, however with internal line modifications where the otherwise discharge line could be converted into a supply line feeding each ground storage tank and with station line modifications that would allow distribution system pressurization back to Lake Bridgeport. This plan would be implemented in the event the supply source (Lake Bridgeport) is contaminated. It is noted that specific engineering design features not addressed in this text for such emergency use should be outlined with specific design features for implementation; however, this is a workable strategy that could be implemented in a critical response stage for source contamination.

## **Section V: Storage, Pumping and Distribution Failure or Outage**

### **1. Storage**

The existing system has the following storage capacity. This capacity is divided into elevated storage and ground storage.

#### Ground Storage

1,500,000 Gal.- S.W.T.P.  
500,000 Gal. - S.W.T.P.  
500,000 Gal. - BPS (F.M. 2123)  
500,000 Gal. - BPS (F.M. 2257)  
250,000 Gal. - BPS (F.M. 920)  
3,250,000 Gal. Total Ground Storage

#### Elevated Storage

300,000 Gal. - Newsom Mound Road  
1,000,000 Gal. - (F.M. 2048)  
500,000 Gal. - (Agnes) E.L.  
500,000 Gal. - (F.M. 920) S.P.  
500,000 Gal. - (Highland Sta.) S.P.  
2,800,000 Gal. Elevated Storage

With the use of multiple independent storage facilities, located through the service area, reliance upon a single system can be avoided. With the use of a looped distribution network, facility contamination or system component failure can be addressed by valving-off and by bypassing the problem component. This would be a primary response strategy, implemented as warranted by actual conditions.

It is noted that standpipes are located on high isolated summits, where they can be used as elevated storage. However, if services are located adjacent to these locations, then the effective usage as elevated facilities will be reduced to only that portion of the standpipe that extends above 80 feet.

The combined storage (elevated and ground) is 6,530,000 gallons.

Based on the Texas Commission on Environmental Quality (T.C.E.Q.), the minimum storage capacity is 200 gallons per connection. The equivalent number of services can then be found as follows:

$$\frac{6,050,000 \text{ gallons}}{200 \text{ gallons}} = 30,250 \text{ services}$$

The systems peak day high usage when applied to storage would equate to the following service capability.

$$\frac{6,050,000 \text{ gallons}}{606.35 \text{ gallons}} = 9,977 \text{ services (Aug. 2016)}$$

## 2. High Service Booster Pumping Facilities

Existing booster pumping facilities consist of high service pumps employed to elevate system pressure to a specific pressure plan in conjunction with numerous elevated storage tanks. Booster pumps do not include raw water pumps or transfer pumps at the surface water treatment plant. Booster stations are located throughout the system and employ multiple pumping units at each station. This redundancy is required to address system pumping demands should there be a systems failure or outage at any particular pump station.

Should an emergency response be required due to local power outage, pump station failure or damage, the problem pump station can be valved-off and bypassed.

This would be a response strategy to be implemented as warranted by the particular problem.

## 3. Water Distribution System

The 500 square mile service area has a water distribution network of over 500 miles of potable water lines. These lines vary in size from 20-inch diameter down to 2-inch diameter. In the event of system breaks or the loss of a major system component, pressure and service can be maintained by valving-off the problem area or in the case of a major line break, by the isolation of the break and by feeding the system through another network of looped water lines. The emergency response for line breaks is addressed by the District's maintenance policy, which required a prompt response monitored on a 24-hour basis to such conditions. Both maintenance personnel and equipment are maintained by the District for such emergency responses.

Additionally, the District utilizes engineering firms to perform hydraulic operating performance

calculations in order to address problem areas or conditions that warrant future capital improvement to bolster distribution system performance in advance of reaching critical system limitations.

**Section VI: Water Conservation Plan (5-Year and 10-Year Target Goals)**

In order to evaluate and to quantify both 5-year and 10-year water conservation goals, it is necessary to review and quantify the historical records of past water use in relation to system growth, system expansion, per capita (meter) demands, peak usage and yearly average daily demands. As a prerequisite for establishing obtainable 5-year and 10-year water reduction goals, we have listed pertinent information in the form of tabular displays listing the Historical Average Water Demand 1985-2018, System Growth (meters) 1985-2018 and we have quantified Average Day Demands Per Meter and Average System Growth Rates and Max Day Demands per Meter as follows:

| <b>HISTORICAL AVERAGE WATER DEMAND<br/>RETAIL AND WHOLESALE<br/>1985-2018</b> |                |                       |                                  |   |
|---|----------------|-----------------------|----------------------------------|---|
| Year  | Gallons Pumped | Number of Connections | System Average Day Demand (Gal.) | Average Day Demand per Connection (GPD & GPM) |
| 1985  | 132,899,000    | 1,310                 | 364,107                          | 278 / 0.14                                    |
| 1986  | 142,999,000    | 1,432                 | 391,778                          | 274 / 0.19                                    |
| 1987  | 149,180,000    | 1,561                 | 408,712                          | 262 / 0.18                                    |
| 1988  | 164,774,000    | 1,608                 | 451,436                          | 281 / 0.20                                    |
| 1989  | 167,959,000    | 1,653                 | 460,162                          | 278 / 0.19                                    |
| 1990  | 161,671,000    | 1,695                 | 442,934                          | 261 / 0.18                                    |
| 1991  | 171,135,000    | 1,726                 | 468,863                          | 272 / 0.19                                    |
| 1992  | 138,452,500    | 1,779                 | 380,364                          | 214 / 0.15                                    |
| 1993  | 156,084,600    | 1,832                 | 428,803                          | 234 / 0.16                                    |
| 1994  | 150,081,200    | 1,902                 | 412,311                          | 217 / 0.15                                    |
| 1995  | 156,120,700    | 2,000                 | 428,903                          | 214 / 0.15                                    |
| 1996  | 208,480,700    | 2,290                 | 572,749                          | 250 / 0.17                                    |
| 1997  | 225,939,000    | 2,825                 | 619,011                          | 219 / 0.15                                    |
| 1998  | 302,903,000    | 3,200                 | 829,871                          | 259 / 0.18                                    |
| 1999  | 288,325,000    | 3,397                 | 787,833                          | 232 / 0.16                                    |
| 2000  | 448,216,000    | 3,826                 | 1,222,083                        | 319 / 0.22                                    |
| 2001  | 469,431,000    | 4,388                 | 1,283,583                        | 293 / 0.20                                    |
| 2002  | 483,989,000    | 4,723                 | 1,324,583                        | 280 / 0.19                                    |
| 2003  | 569,175,000    | 4,772                 | 1,556,417                        | 326 / 0.23                                    |
| 2004  | 511,258,000    | 4,939                 | 1,395,583                        | 283 / 0.20                                    |
| 2005  | 653,711,000    | 5,232                 | 1,790,989                        | 342 / 0.24                                    |
| 2006  | 678,417,000    | 5,455                 | 1,858,676                        | 341 / 0.24                                    |
| 2007  | 603,350,000    | 5,683                 | 1,653,013                        | 291 / 0.20                                    |
| 2008  | 676,600,000    | 5,777                 | 1,853,699                        | 321 / 0.22                                    |
| 2009  | 734,810,000    | 5,872                 | 2,013,178                        | 343 / 0.24                                    |
| 2010  | 675,970,000    | 5,958                 | 1,851,973                        | 311 / 0.23                                    |
| 2011  | 736,510,000    | 6,091                 | 2,017,836                        | 331 / 0.23                                    |
| 2012  | 672,250,000    | 6,229                 | 1,841,780                        | 295 / 0.20                                    |
| 2013  | 652,810,000    | 6,416                 | 1,788,520                        | 278 / 0.19                                    |
| 2014  | 648,764,000    | 6,605                 | 1,777,436                        | 261 / 0.18                                    |
| 2015  | 549,891,200    | 6,802                 | 1,506,551                        | 221 / 0.15                                    |
| 2016  | 678,390,000    | 7,096                 | 1,853,510                        | 265 / 0.184                                   |

|      |             |       |           |             |
|------|-------------|-------|-----------|-------------|
| 2017 | 688,000,000 | 7,404 | 1,888,910 | 259 / 0.180 |
| 2018 | 787,294,000 | 7,782 | 2,156,083 | 283 / 0.197 |

The 10-Year Average Day Demand per meter 1985 – 1994 = 257 GPD / 0.19 GPM  
 The 10-Year Average Day Demand per meter 1995 – 2004 = 267 GPD / 0.19 GPM  
 The 10-Year Average Day Demand per meter 2005 – 2015 = 333.5 GPD / 0.23 GPM  
 The 5-Year Average Day Demand per Meter 2010 – 2015 = 339.4 GPD / 0.24 GPM

System Growth (Meters) 1985 – 2018

1985 – 1995 Average Annual Growth Rate 4.5% per year  
 1995 – 2000 Average Annual Growth Rate 14% per year  
 2000 – 2005 Average Annual Growth Rate 5% per year  
 2005 – 2010 Average Annual Growth Rate 8% per year  
 2010 – 2011 Average Annual Growth Rate 2% per year  
 2011 – 2012 Average Annual Growth Rate 2% per year  
 2012 – 2013 Average Annual Growth Rate 3% per year  
 2013 – 2014 Average Annual Growth Rate 6% per year  
 2014 – 2015 Average Annual Growth Rate 3% per year  
 2015 – 2016 Average Annual Growth Rate 4.2% per year  
 2016 – 2017 Average Annual Growth Rate 4.3% per year  
 2017 – 2018 Average Annual Growth Rate 4.9% per year

| <b>WHOLESALE &amp; RETAIL CUSTOMERS<br/>                     MAX DAILY DEMAND PER METER 2005 - 2018</b> |             |             |                    |
|---|-------------|-------------|--------------------|
| Year  | Month / Day | GPD / Meter | Supply GPM / Meter |
| 2005  | Aug / 01    | 562         | 0.39               |
| 2006  | May / 22    | 526         | 0.36               |
| 2007  | Aug / 08    | 467         | 0.35               |
| 2008  | Oct / 26    | 477         | 0.33               |
| 2009  | July / 13   | 592         | 0.41               |
| 2010  | June / 12   | 614         | 0.42               |
| 2011  | Aug / 07    | 648         | 0.45               |
| 2012  | Aug / 02    | 623         | 0.43               |
| 2013  | July / 11   | 513         | 0.36               |
| 2014  | Aug / 24    | 426         | 0.30               |
| 2015  | Aug / 07    | 476         | 0.33               |
| 2016  | Sep / 01    | 606         | 0.42               |
| 2017  | July / 23   | 418         | 0.29               |
| 2018  | July / 17   | 505         | 0.35               |

Analysis and Review of Historical Records

In review of the Historical Average Water Demand Table, it is apparent that the District had a substantial water usage reduction from 2005 to 2018. In 2005 the system average demand per meter was 342 GPD and in 2015 it was 221 GPD. This decrease was the direct result of the District’s well managed conservation efforts and greatly exceeded Regional target goals.

This water conservation reduction was a direct result in the District efforts to inform its customer base

of conservation methods such as a listing of water fixtures designed to reduce water usage, mail-outs of water conservation pamphlets, notices in monthly billing statements listing methods to conserve and not waste water and through public advertisements and notices.

From 2005 to 2015 the system commenced serving wholesale water to Cities and Water Districts in addition to serving retail customers. This accounted for a direct increase in water usage and explains the usage per meter. In 2005 the average daily demand per meter was 342 GPD and in 2015 the average daily demand was 221 GPD per meter. The historic 5-year average (2010-2015) was 277.2 GPD per meter. The system average for this 10-year period was 333.5 GPD per meter. The average supply requirement for this period (2005 – 2010) was 0.23 GPM per meter. The maximum daily usage per meter from 2005 through 2015 was 592 GPD / meter and 0.41 GPM / meter.

It should be noted that the Walnut Creek S.U.D. has a low average daily demand water requirement per customer meter, compared to other cities and water districts, even when considering jointly supplying individual meters and wholesale supplies to other water providers. It is for this reason that the State (TCEQ) granted the District a variance supply reduction requirement from 0.60 GPM per meter to 0.48 GPM per meter.

### Target Goals

In parallel with the Tarrant Regional Water District, the Walnut Creek S.U.D. seeks a 5-year water reduction conservation goal of 7.6% per meter usage. The 5-year 7.6% reduction goal can be achieved by implementing yearly conservation goals through newspaper releases, printed conservation pamphlets and through public meetings to review all conservation methods and conservation strategies.

Note: Please see attached Water Conservation Plan, 5-Year and 10-Year Goals for Water Savings

The District will also utilize the same conservation methods to achieve a 10-year water conservation reduction goal of 11.4% per meter usage. The target 5-year and 10-year reduction goals are expressed as follows:

#### 5-Year Target Goal (2024)

Five-year 7.6% Reduction Goal:  $221 \text{ GPD} \times 0.924 = 204.20$

The target goal is 204.20 GPD average demand day per connection by the year 2020.

#### 10-Year Goal (2029)

Ten-year 11.4% Reduction Goal:  $221 \text{ GPD} \times 0.886 = 195.81$

The target goal is 195.81 GPD average demand day per connection by the year 2029.

### Qualifying Statements

The target goals establish specific measurement levels necessary to monitor conservation efforts in parallel with the Tarrant Regional Water District. However, these goals are separate from mandatory conservation levels caused by extreme drought, equipment/system failures or source contamination.

### Economic Considerations

Please note that while the conservation target goals are commensurate with State and Regional Planning Groups, the District should be aware that past conservation measures have been extremely effective to a point where the overall consumption reduction has had a profound effect upon yearly income revenues. A fine line must be balanced between conservation efforts and maintaining sufficient revenues to operate the system.

Water sale reduction losses can be offset by growth, where new customers are added, by water rate increases or by a combination of both. The District has experienced a decline in water revenues since 2010 as a direct result of water conservation measures. While conservation efforts address Statewide and Regional areas, specific economic requirements should always be a major factor in determining conservation strategies.

The Walnut Creek Special Utility District's only source of revenues is through the sale of water and water related fees. The District does not levy any taxes or generate any tax revenues, therefore, when water sales decline, so does yearly income.

As a prerequisite to funding any project through the various Texas Water Development Board (T.W.D.B.) Bond financing programs, the Engineer must prepare a detailed PROFORMA, based upon historical information generated by water rates, income, operating cost, debt service and growth projections in order to demonstrate the District's or Political Entity's ability to sustain sufficient income to address future projected costs associated with a new bond issue and to maintain adequate bond coverage. This PROFORMA is then submitted by the Bond Attorney to the Texas Attorney General's Office for final review and approval.

This captioned title, "Economic Considerations", has not been incorporated into any prior known T.W.D.B. or T.C.E.Q. printed materials or offered in any State guidelines; however, it should be due to the potential profound effect it could have upon the financial status or existence of any District. As a consultant for the District, we are compelled to explain this economic factor to the Board of Directors so that future negative economic impacts can be avoided and addressed accordingly.

### Water Conservation Plan Strategies

A Long-Term Water Conservation Plan has many elements which must be considered to fully utilize its benefits. The most beneficial elements of the plan are indoor water conservation practices, outdoor water conservation practices, landscaping and lawn conservation practices, and water conserving plumbing retrofits. The principal water conservation methods included in this plan are:

- Education and Information Programs
- Conservation-Oriented Water Rate Structures
- Universal Metering and Repair/Replace Programs
- Leak Detection and Repair Programs
- Water-Conserving Landscaping
- Water Recycling/Reuse Programs
- Plumbing Retrofit Program

- Water-Conserving Plumbing Code
- Periodic Review/Evaluation
- Plan Implementation and Enforcement

1. Public Education and Information Regarding Water Conservation

Articles are published annually and at certain other times as precipitated by drought conditions equipment failure or source contamination in the local paper to disseminate information regarding wasteful water use practices and the need for conservation of water. The District highlights emphasis on water conservation practices through yearly mailings that address the following:

Bathroom water conservation practices  
Kitchen water conservation practices  
Laundry water conservation practices  
Appliance and plumbing conservation practices  
Outdoor water conservation practices

2. New Customer Education Program

New customers will receive the information that details the District's adopted Long-Term Water Conservation Plan, the Emergency Water Demand Management Plan, and any information that is attributed to the customer's specific water usage when they apply for service. The customers will then be included in specific educational programs as deemed necessary.

3. Water Rate Structure

The District's rate structures are designed to discourage the excessive use of water. That is, the higher the usage is each month, then the higher the unit price per gallon will be.

4. Reservoir Systems Operations Plan

The District does not maintain or operate any reservoirs. Contact with the Tarrant Regional Water District is maintained during drought periods of the year to coordinate usage and assignment of available water supplies and to coordinate conservation goals.

5. Universal Metering and Repair/Replace Programs

The District has changed to all electric read meters. This will ensure a more efficient accounting of water usage.

Typical Types of Meter Service Checking

Public Use Meters

Public use meters are checked and maintained yearly to insure accurate flow measurements.

Abandoned Services

During regular inspections of distribution lines, maintenance personnel check for abandoned services. Also, meters with usage which has dropped to near zero, are checked for abandonment or discontinuation of service.

6. Leak Detection Repair

The District has several in-place programs that effectively minimize the loss of water due to leaks in the system. Continual checking and servicing of production, pumping, and storage facilities insure that the water gets to the customer without encountering a leak in the system. Reports to the District from citizens who have discovered leaks are encouraged to minimize the amount of water lost from such a disruption in the system. Quick response by the District's Maintenance Staff to correct leakage problems as soon as they are discovered helps decrease the water loss.

7. Record Management – to segregate water sales and uses into the following user classes: Residential, Commercial, Public/Institutional, and Industrial

Data tracked:

1. Water pumped.
2. Water deliveries and sales
3. Water losses

8. Passing on Water Conservation Requirements

The District requires that successive wholesale customers develop and implement a water conservation plan or water conservation measures.

The contract between the District and customers provides that any contract for the resale for the water must have water conservation requirements with a provision that any successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this Plan.

9. Conservation Methods

- a. Conservation-oriented water rates and water rate structures have been implemented by the District to penalize higher usage.
- b. The distribution of educational information on an annual basis is used to show customers the benefits of installing water saving devices in replacing out-dated household fixtures. Targeted items to be retrofitted with the low-demand devices are showerheads, toilets, and faucets. Local appliance dealers are encouraged to stock these items, and those that do so will have their name included with the educational material sent to the customer. The emphasis on the savings to the customer will be highlighted in an effort to have the older fixtures retrofitted to water-conserving appliances.
- c. Reuse and/or recycling of wastewater and/or greywater for beneficial irrigation use is recommended by the District. The District does not own or operate any wastewater systems.
- d. Pressure control and/or reduction in the distribution system for customer connections.

- e. The District will distribute educational material to its customers concerning water conservation practices that can be implemented through landscaping and irrigation practices. Some of the suggested methods are:
    - No use of irrigation devices and sprinkler systems between the hours of 10:00 a.m. – 6:00 p.m.
    - Encourage landscape architects to use low water systems using plants and grasses and efficient irrigation systems.
    - Encourage commercial businesses to use drip irrigation for landscape watering instead of fine mist and a sprinkler layout, where practical.
    - The District will encourage customers to install ornamental fountains that recycle and use a minimum amount of water.
10. Monitoring and Periodic Review/Evaluation  
Monitoring the effectiveness and efficiency of the water conservation plan is a management function that will be performed as part of the day-to-day and month-to-month activities of the District. It will be incumbent on all District personnel to conduct operations in accordance with this Plan and to report findings/deviations from norms to higher authorities in the District. The District Board will require periodic reports on the progress of the Plan toward its 5-year and 10-year water conservation goals.

### **Section VII: Public Involvement**

Opportunity for the public to provide input into the preparation of the Plan was provided by the District by means of public hearings held on July 19, 2005. Advertisement of these hearings was made in accordance with applicable governmental regulations and the By-Laws of the Board.

### **Section VIII: Public Education**

The District 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 means of billing inserts, newspaper announcements and radio public service announcements, or other means as necessary.

### **Section IX: Coordination with Regional Water Planning Groups**

The service area of the District is located within Planning Region “C” as established by the Texas Water Development Board. The District has provided a copy of this Plan to the Planning Region “C” and to the Water Development Board. Additionally, this plan will first be sent to the Tarrant Regional Water District in accordance with amended Title 30, Chapter 288 of the water code.

## **Section X: Authorization**

The president of the Board, the District Manager, or a designee of the president or District Manager 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 designated officials or their designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

## **Section XI: Application**

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

## **Section XII: 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.

Supplier: Tarrant Regional Water District (TRWD)

Commercial and institutional water use: water use which is integral to the operations of commercial and non-profit 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.

Conservation Goals: In accordance with the reduction of water use per capita goals, established by the District's supplier, Tarrant Regional Water District, the Walnut Creek S.U.D. shall implement conservation strategies that will establish a 5-year 7.6% water usage per capita reduction and a 10-year 11.4% water usage per capita reduction.

Customer: any person, company, or organization using water supplied by the District.

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.

The General Manager will determine watering schedules.

Even number address: Street addresses ending in 0, 2, 4, 6, or 8.

Odd number address: Street addresses ending in 1, 3, 5, 7, or 9.

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-way and medians.

Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

- a) irrigation of landscape areas, including parks, athletic fields, and golf courses, 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; use of water to wash down buildings or structures for purposes other than immediate fire protection,
- d) flushing gutters or permitting water to run or accumulate in any gutter or street,
- e) use of water to fill, refill or add to any indoor or outdoor swimming pool or Jacuzzi-type pool,
- f) use of water in fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life,
- g) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s) and,
- h) use of water from hydrants for construction purposes or any other purposes other than firefighting.

### **Section XIII: Criteria for Initiation of Response Stages**

The District Manager or his/her designee shall monitor water supply and/or demand conditions on a monthly 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 triggering criteria for supply source contamination or system outages due to failure or damage would be implemented by the District Manager immediately after the problem is identified. The District Manager would then set into motion the Emergency Response Plans so listed in this text. The same conservation strategies implemented for E. Emergency Water Use Management will also be applicable for implementation when the District has supply source contamination or system outages due to failure or damage to major system components.

The triggering criteria described below are based on the Tarrant Regional Water District’s Drought Management Plan as promulgated in “Water Conservation and Emergency Demand Management Plan,” 2005. Specifically, excessive system demand, supply pipeline at 90% of capacity, pipeline exceeds capacity and pipeline failure or reservoir (of the Plan identifies four levels of potential or actual water shortage due to drought and these are based on the water in storage in the TRWD West Fork reservoirs or the West Fork reservoirs supply pipeline delivery system.

#### **A. Seasonal Water Shortage Conditions**

##### Requirements for Initiation

Customers shall be requested voluntarily to conserve water annually, beginning on May 1 through September 30.

#### **B. Dry Conditions**

##### Requirements for Initiation, Water Supply Conditions

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section XII of this Plan when water in storage in the TRWD West Fork reservoirs is projected in decline to 75% capacity within 3 months, based upon projected water demands and inflows.

##### Requirements for Initiation, Excessive Demand Conditions

Demands are 25% above projected in any month (voluntary conservation measures).

#### **C. Stage 1 Water Watch**

##### Requirements for Initiation, Water Supply Conditions

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses when water in storage in the TRWD West Fork reservoirs is projected to decline to less than 75% of capacity within 2 weeks, based upon projected water demands and inflows, or water in storage in the TRWD reservoirs has declined to 1,426,752 acre-feet (75 percent of capacity).

Requirements for Initiation, Excessive Demand Conditions

Demands are 25% above projected for two conservative months, Action A Pipelines at 90% capacity for 3 consecutive days, Action B.

D. Stage 2 Water Warning

Requirements for Initiation, Water Supply Conditions

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses when water in storage in the TRWD reservoirs has declined to 60% of total system capacity.

Requirements for Initiation, Excessive Demand Conditions

E. Stage 3 Emergency Water Use Management

Requirements for Initiation, Water Supply Conditions

Customers shall be required to comply with the requirements and restrictions when water in storage in the TRWD reservoirs has declined to 45% of total system capacity or when supply source contamination or system outages due to failure or damage of a major system component occurs.

Requirements for Initiation, Contamination Major System Component Failure

When a supply source is contaminated or when major system component fails.

**Section XIV: Drought Response Stages**

The District Manager or his/her designee shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section XIII of this Plan, shall determine that a water shortage condition exists or may soon exist and shall implement the following notification procedures:

Notification

Notification of the Public:

The District Manager or his/her designee shall notify the public by means of:

- Publication in a newspaper of general circulation,*
- Direct mail to each customer,*
- Public service announcements,*
- Signs posted in public places,*
- Take-home fliers at schools.*

Additional Notification:

The District Manager or his/ her designee shall notify directly, or cause to be notified directly, the following individuals and entities:

- Members of the Board*
- Mayor of the cities affected.*
- Fire Chief(s) of cities affected.*
- County Judge & Commissioners*

*Department of Public Safety  
TCEQ (required when mandatory restrictions are imposed)  
Major water users  
Critical water users, i.e., hospitals  
Parks / street superintendents & public facilities managers / cities affected.*

#### A. Response - Seasonal Water Shortage Conditions

Goal: Achieve a voluntary five (5) percent reduction in total water use.

Supply Management Measures:

Coordinate supply management strategies with Tarrant Regional Water District (Lake Bridgeport).

Voluntary Water Use Restrictions:

Customers are requested to watch water consumption and to avoid wasteful practices. Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

#### B. Dry Conditions

Goal: Achieve a five (5) percent reduction in total water use.

Supply Management Measures:

Coordinate supply management strategies Tarrant Regional Water District (Lake Bridgeport).

Water Use Restrictions

- a. Increase surveillance to detect wasteful and unnecessary water use.
- b. Advertise/inform customers of the increasing need to conserve water.

### **Section XV: Drought and Emergency Response Stages and Measures**

#### Stage 1, Water Watch

##### Triggering and Terminating Conditions

Total combined raw water supply in TRWD western and eastern division reservoirs 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.

- Water demand is projected to approach the limit of permitted supply.
- Supply source become contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- The **General Manager**, with concurrence of the WCSUD Board of Directors, finds that conditions warrant the declaration of a Stage 1 drought.

Stage 1 may terminate when raw water supply exceeds 75% storage capacity, and/or when the circumstances that caused the initiation of Stage 1 no longer prevail, or at the discretion of the **General Manager**.

#### 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 **General Manager** can set a goal for greater water use reduction.

#### Actions Available Under Stage 1, Water Watch

The **General Manager** may order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ; WCSUD must notify TCEQ within five business days if any mandatory measures are implemented.

Require wholesale customers (including indirect wholesale customers) to initiate Stage 1 in their drought contingency plans. Indirect customers include any successive wholesale customers of WCSUD's primary wholesale customers.

#### All Water Users

- Initiate mandatory restrictions to prohibit non-essential water use as follows:
  - Prohibit hosing of paved areas, such as sidewalks, driveways, parking lots, tennis courts, or other impervious surfaces, except to alleviate an immediate health or safety hazard.
  - Prohibit hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting.
  - Prohibit using water in such a manner as to allow runoff or other waste, including:
    - 1) failure to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes or a leaking faucet;
    - 2) operating a permanently installed irrigation system with: (a) a broken head; (b) a head that is out of adjustment and the arc of the spray head is over a street or parking lot; or (c) a head that is misting because of high water pressure;
    - 3) during irrigation, allowing water to (a) run off the property and form a stream of water in a street for a distance of 50 feet or greater; or (b) to pond in a street or parking lot to a depth greater than one-quarter of an inch.
- Prohibit outdoor watering with sprinklers or irrigation systems between 10 a.m. and 6 p.m.

- Limit landscape watering with sprinklers or irrigation systems at each service address to twice per week. Includes landscape watering of parks, golf courses and sports fields.

Exceptions:

- Foundations may be watered for up to two hours on any day by handheld hose or using a soaker hose or drip system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
  - Newly installed shrubs (first year) and trees may be watered up to two hours on any day by handheld hose, drip irrigation, soaker hose or tree bubbler. Tree watering is limited to an area not to exceed the drip line of a tree.
  - Establishing new turf is discouraged. If new hydro mulch grass sod or grass seed is installed for the purpose of establishing a new lawn, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply. (This exception does not include overseeding with rye since turf already exists).
  - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the **General Manager**, if the **General Manager** determines that a property cannot be completely irrigated with an average of three-quarters of an inch of water in a single day, and that the property should be divided into sections to be watered on different days.
  - Twice per week watering restrictions do not apply to locations using well water or treated wastewater effluent for irrigation.
- 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 handheld hose equipped with a positive 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. Further, such washing may be exempt from these requirements if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
  - All users are encouraged to reduce the frequency of draining and refilling swimming pools.
  - All users are encouraged to use Texas native and drought tolerant plants in landscaping.

City and Local Governments

In addition to actions listed above:

- Review conditions and problems that caused Stage 1. Take corrective action.
- Increase public education efforts on ways to reduce water use.
- Increase enforcement efforts.

- Intensify leak detection and repair efforts.
- Audit all city and local government irrigation systems to ensure proper 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 sports fields is limited to twice per week watering schedule or twice per week per irrigation station if a variance is granted by the **General Manager**. (See 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 without restrictions; however, watering must be done before 10:00 a.m. and after 6:00 p.m.
- Skinned areas of sports fields may be watered as needed for dust.
- Reduce non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency.
- Notify wholesale 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 parks, golf courses and sports fields is limited to twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the **General Manager**. (See exceptions to outdoor watering restrictions in all water users category above for rules that apply to facilities with large multi-station irrigation systems.)

Exceptions:

- Golf Courses may water greens and tee boxes without restrictions; however, watering must be done before 10:00 a.m. and after 6:00 p.m.
- Skinned areas of sport fields may be watered without restrictions as needed for dust control.
- Professional sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as needed to maintain league standards.

- Stock at commercial plant nurseries is exempt from Stage 1 watering restrictions.
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons on an “on demand” basis.
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels.

## Stage 2. Water Warning

### Triggering and Terminating Conditions

- Total raw water supply in TRWD western and eastern division reservoirs 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.
- Water demand is projected to approach the limit of permitted supply.
- Supply source becomes contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- The **General Manager**, with concurrence of the WCSUD Board of Directors, finds that conditions warrant the declaration of a Stage 2 drought.

Stage 2 may terminate when raw water supply exceeds 60% storage capacity, and/or when the circumstances that caused the initiation of Stage 2 no longer prevail, or at the discretion of the **General Manager**.

### Goal for Use Reduction

The goal for water use reduction under Stage 2, Water Warning, is to decrease use by 10%. If circumstances warrant, the **General Manager** can set a goal for greater water use reduction.

### Actions Available Under Stage 2, Water Warning

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

- Continue or initiate any actions available under Stage 1.
- Require customers (including indirect customers) to initiate Stage 2 in their drought

contingency plans. Indirect customers include any wholesale customer of WCSUD's primary wholesale customers.

- Initiate engineering studies to evaluate water supply alternatives should conditions worsen.

#### All Water Users

- Limit landscape watering with sprinklers or irrigation systems at each service address to once every seven days. Outdoor watering schedule to be determined by the **General Manager**.

#### Exceptions:

- Foundations may be watered up to two hours on any day by hand-held hose; or using a soaker hose or drip system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
  - Newly installed shrubs (first year), and trees may be watered up to two hours on any day by hand-held hose, drip irrigation or a soaker hose. Tree watering is limited to an area not to exceed the drip line of a tree.
  - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the **General Manager**, if the **General Manager** determines that a property cannot be completely irrigated with an average three-quarters of an inch of water in a single day, and that the property should be divided into sections to be watered on different days.
- Once per week watering restrictions do not apply to locations using well water or treated wastewater effluent for irrigation.
  - All users are encouraged to wait until the current drought or emergency situation has passed before establishing new landscaping and turf. If new hydro mulch, grass sod or grass seed is installed for the purpose of establishing a new lawn, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply. (This exception does not include over seeding with rye since turf already exists.)
  - Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
  - Prohibit filling of swimming pools with automatic valves.

#### City and Local Governments

In addition to actions listed above:

- Continue or initiate any actions available under Stage 2.

- 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 sports fields is limited to once every seven days; or once every seven days per irrigation station if a variance is granted by the **General Manager**. (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 needed to keep them alive; however, watering must be done before 10:00 a.m. and after 6:00 p.m. Fairways are restricted to once per week watering as outlined above. Golf course rough cannot be watered.
- Watering for dust control on skinned areas of sports fields is not allowed.
- Eliminate non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency.
- Prohibit wet street sweeping.
- Notify wholesale customers of actions being taken and request them to implement the same drought stage 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 sports fields is limited to once every seven days; or once every seven days per irrigation station if a variance is granted by the **General Manager**. (See Stage 1 exceptions to outdoor watering restrictions in all water user categories for rules that apply to facilities with large multi-station irrigation systems.)

Exceptions:

- Golf courses may water greens and tee boxes as needed to keep them alive; however, watering must be done before 10:00 a.m. and after 6:00 p.m. Fairways are restricted to once per week watering as outlined above. Golf course rough cannot be watered.
- Watering for dust control on skinned areas of sports fields is not allowed.
- Professional sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as needed to maintain league standards.

- Stock at commercial plant nurseries may be watered as needed to keep them alive.
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons on an “on demand” basis.
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels

### Stage 3. Water Emergency

#### Triggering and Terminating Conditions

- Total raw water supply in TRWD western and eastern division reservoirs 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 WCSUD delivery system approaches delivery capacity because delivery capacity is inadequate.
- One or more of WCSUD’s water supply sources has become limited in availability.
- Water demand is projected to approach the limit of permitted supply.
- Supply source becomes contaminated.
- Water supply system is unable to deliver water due to the failure or damage of major water system components.
- The **General Manager**, with concurrence of the WCSUD Board of Directors, finds that conditions warrant the declaration of a Stage 3 drought.

Stage 3 may terminate when raw water supply exceeds 45% storage capacity, and/or when the circumstances that caused the initiation of Stage 3 no longer prevail, or at the discretion of the **General Manager**.

#### Goal for Use Reduction

The goal for water use reduction under Stage 3, Water Emergency, is to decrease use by 30%. If circumstances warrant, the **General Manager** can set a goal for greater water use reduction.

#### Actions Available Under Stage 3, Water Emergency

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

- Continue or initiate any actions available under Stages 1 and 2.
- Require customers (including indirect customers) to initiate Stage 3 in their drought contingency plans. Indirect customers include any wholesale customer of WCSUD's primary wholesale customers.

#### All Water Users

- Prohibit all landscape watering, including parks, golf courses and sports fields.

#### Exceptions:

- Foundations may be watered up to two hours on any day by hand-held hose; or using a soaker hose or drip system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
- Trees may be watered up to two hours on any day by hand-held hose, drip irrigation or a soaker hose. Tree watering is limited to an area not to exceed the drip line of a tree.
- Prohibit establishment of new landscaping.
- Vehicle washing restricted to commercial car wash or commercial service station and can only be done as necessary for health, sanitation, or safety reasons, including but not limited to, the washing of garbage trucks and vehicles used to transport food and other perishables. All other vehicle washing is prohibited.
- Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life.
- Prohibit the draining, filling or refilling of swimming pools, wading pools and Jacuzzi type pools. Existing private and public pools may add water to maintain pool levels; however, they may not be refilled using automatic fill valves.

#### City and Local Governments

In addition to actions listed above:

- Continue or initiate any actions available under Stages 1 and 2.
- Review conditions or problems that caused Stage 3. Take corrective action.
- Implement viable alternative water supply strategies.
- Increase frequency of media releases explaining emergency situation.
- Reduce city and local government water use to maximum extent possible.
- Landscape watering at municipal parks, golf courses and sports fields is prohibited.

Exceptions:

- Golf courses may be watered by hand as needed to keep them alive; however, watering must be done before 10:00 a.m. and after 6:00 p.m.
- Watering for dust control on skinned areas of sports fields is not allowed.
- Institute a mandated reduction in deliveries to all customers. Such reduction will be distributed as required by Texas Water Code §11.039.
- If WCSUD has imposed a reduction in water available to customers, impose the same percent reduction on wholesale customers.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering at parks, golf courses and sports fields is prohibited.

Exceptions:

- Golf courses greens may be watered by hand as needed to keep them alive; however, watering must be done before 10:00 a.m. and after 6:00 p.m.
- Professional sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as needed to maintain league standards.
- Hotels, restaurants and bars required to serve drinking water to patrons on an “on demand” basis.
- Hotels are required to implement laundry conservation measures by encouraging patrons to reuse linens and towels.
- Stock at commercial plant nursery may be watered only with a hand-held hose, hand-held watering can or drip irrigation system.
- Commercial water users required to reduce water use by a set percentage determined by the General Manager.

**Section XVI: Procedure for Curtailment of Water Supplies**

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

**Section XVII: Procedure for Granting Variances to the Plan**

The General Manager 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.

Response Water Allocation

The Board recognizes that severe water shortage conditions may threaten public health, safety and welfare. Having authority under Texas Statutes to enact resolutions, by adopting this Plan the Board hereby authorizes the District Manager to allocate the following schedule:

a. Single-Family Residential Customers

Water consumption for normal household uses such as bathing, sanitation and cooking is estimated to be 100 gallons per day for the household plus 25 gallons per person per day. Using this model, the allocation to those water customers residing in a single-family dwelling that is metered separately shall be as follows:

| Persons per Household | Gallons per Month |
|-----------------------|-------------------|
| 1 or 2                | 4,500             |
| 3 or 4                | 6,000             |
| 5 or 6                | 7,500             |
| 7 or 8                | 9,000             |
| 9 or 10               | 10,500            |
| 11 or more            | 12,000            |

“Household” means the residential premises served by the customer’s meter. “Persons per Household” includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period.

It shall be assumed that a particular customer’s household is comprised of two (2) persons unless the customer notifies the District of a greater number of persons per household on a form prescribed by the District Manager. The District Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If a customer does not receive such a form, it shall be the customer’s responsibility to go to the District’s office to complete and sign the form to claim more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the District Manager.

When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the District on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is

reduced, the customer shall notify the District in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the District Manager shall adopt methods to ensure the accuracy of the claim.

Any person who knowingly, recklessly or with criminal negligence, falsely reports the number of persons in a household or fails to timely notify the District of a reduction in the number of persons in a household shall be subject to a complaint filed in a court having jurisdiction to hear such complaints and shall be subject to civil penalties amounting to the cost and fees of obtaining compliance with the Plan.

If water usage exceeds the allocation as determined by above, an additional fee shall be due and payable with the invoice immediately following the additional usage. This surcharge shall be based on the following schedule:

A surcharge of ten dollars (\$10.00) for the first unit of 1,000 gallons and a pro rata amount for each fraction thereof shall be levied for water metered over the allocation up to 3,000 gallons over the allocation for a total of thirty dollars (\$30.00). Thereafter, a surcharge of twenty dollars (\$20.00) per unit of 1,000 gallons shall be levied on a pro rata basis for each additional unit metered.

There is no specified maximum surcharge for usage over the allocated amount, but the Board delegates to the District Manager the authority to reduce surcharges if deemed excessive or unduly burdensome.

b. Multi-Family Residential Customers – Master Meters

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (i.e., apartments, mobile homes) shall be allocated for each dwelling unit according to the schedule above. It shall be assumed that a master meter serves only two (2) dwelling units and it shall be the customer's responsibility to notify the District of a greater number of units using a form prescribed by the District Manager. The District Manager shall give his/her best effort to see that such forms are mailed or otherwise provided or are made available to every such customer. If a customer does not receive such a form, it shall be the customer's responsibility to go to the District's office to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the District Manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the District in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the District Manager shall adopt methods to ensure the accuracy of the claim.

Any person who knowingly, recklessly or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the District of a reduction in the number of persons in a household shall be subject to a complaint filed in a court having jurisdiction to hear such complaints.

Customers billed from a master meter under this provision shall pay the following monthly surcharges:

A surcharge of ten dollars (\$10.00) for the first unit of 1,000 gallons and a pro rata amount for each fraction thereof shall be levied for water metered over the allocation up to 3,000 gallons over the allocation for a total of thirty dollars (\$30.00). Thereafter, a surcharge of twenty dollars (\$20.00) per unit of 1,000 gallons shall be levied on a pro rata basis for each additional unit metered. For example, if 6,000 gallons are allocated and the usage for one month is 10,400 gallons, the surcharge shall be (3 x \$10.00) for the first 3,000 gallons, plus (1.4 x \$20.00) for the additional 1,400 gallons, for a total surcharge of \$58.00.

c. Commercial and Industrial Customers

A monthly water allocation shall be established by the District Manager, or his/her designee, for each non-residential commercial customer. The non-residential customer's allocation shall be approximately eighty percent (80%) of the customer's usage for an average month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. However, a customer shall be allocated 2,000 gallons when 80 percent (80%) of the average monthly usage is less than 2,000 gallons. The District Manager shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the District to determine the allocation.

Upon request of the customer or at the initiative of the District Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one non-residential customer agrees to transfer part of its allocation to another non-residential customer, or (3) other objective evidence demonstrates that the designated allocation creates an undue burden under present conditions. A customer may appeal an allocation established hereunder to the District Manager or to the Board.

Non-residential commercial customers shall pay the following surcharges:

Customers whose allocation is 2,000 gallons through 5,000 gallons per month:

\$20 per thousand gallons for the first 3,000 gallons over allocation, on a pro rata basis.

\$30 per thousand gallons for each additional 1,000 gallons over allocation, on a pro rata basis.

Customers whose allocation is 5,000 gallons per month or more:

1.2 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.

1.5 times the block rate for each 1,000 gallons more than 30 percent above allocation.

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

**Section XVIII: Enforcement**

Having the authority under Texas Statutes to enact resolutions, the Board hereby authorizes the District Manager to enforce the provisions of this Plan. Penalties may be extracted only by civil suit; however, the District retains the right to discontinue service to particular customers as outlined below if usage is deemed to be excessive and a threat to the District's ability to serve all customers equitably.

- a) No person shall knowingly or intentionally allow the use of water from the District for residential, commercial, industrial, agricultural, governmental or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to the action by the District Manager, or his/her designee, in accordance with provisions of this Plan.
- b) Any person, including a person classified as a water customer of the District, in apparent control of the property where a violation occurs or originates, shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a refutable presumption *ipso facto* that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violation of their minor children and proof that a violation committed by a child did occur on property within the parents' control shall constitute a refutable presumption that the parent committed the violation, but any such parent may be found not liable for the violation if he/she proves (a) that he/she had directed the child not to use the water as it was allegedly used in violation of this Plan and (b) that the parent could not have reasonably known of the violation prior to or during the instance of the violation. Knowledge of the instance or prior instances of a violation and failing to stop the violation shall be deemed to be a refutable presumption that the parent is liable for the violation.
- c) The District, having no direct authority to cite and seek criminal (misdemeanor) penalties, shall have the right of civil suit and proceeding against any person who violates this Plan. Also a complaint of unlawful taking (theft) may institute in a court having jurisdiction to hear such complaints.
- d) Any employee of the District or other person designated by the District Manager may file a complaint with the Justice of the Peace in which district the apparent violation occurs. A complaint shall contain the name and address of the alleged violator, if known, and the violation charged. The complaint shall direct the alleged violator to appear in the designated court on the date shown which shall not be less than 3 days or more than 7 days from the date the complaint was issued. A copy of the complaint shall be served to the alleged violator. Service of the complaint shall be complete upon delivery of the complaint to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in the court designated by the complaint to enter a plea for the alleged violation of this Plan. If the alleged violator fails to appear in court, the District Manager may request a warrant be issued for his/her arrest. A summons to appear may be issued in lieu of an arrest warrant.

- e) Each day that one or more of the provisions in this Plan is violated shall constitute a separate violation.
- f) If a person is alleged to have violated this Plan three (3) or more times, and after due notice has been given to the customer, the District Manager shall be authorized to discontinue water service to the premises where such violations occur. Service discontinued under such circumstances shall be restored only upon payment of a reconnection charge, as established by other operating procedures, and any other costs incurred by the District in discontinuing service. In addition, suitable assurance must be given to the District Manager that compliance with the Plan will be effected.
- g) Compliance with this Plan may also be sought through injunctive relief in the District court.

### **Section XIX: Variances**

- a) The District Manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:
  - 1) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
  - 2) Alternative methods can be implemented which will achieve the same level of reduction in water use.
- b) Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the District within three (3) days after a particular drought response stage has been invoked. All petitions for variances shall be promptly reviewed by the District Manager, or his/her designee. Petitions shall include the following information:
  - 1) Name and address of the petitioner(s).
  - 2) Purpose of the water use.
  - 3) Specific provision(s) of the Plan from which the petitioner is requesting relief.
  - 4) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan.
  - 5) Description of the relief requested.
  - 6) Period of time for which the variance is sought.
  - 7) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
  - 8) Other pertinent information.
- c) Variances shall be subject to the following conditions, unless waived or modified by the District Manager:

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