Barton Creek Water Supply Corporation Drought Contingency Plan

1.0 Declaration of Policy, Purpose, and Intent

It is hereby declared that, because of the limited supply of water available to Barton Creek Water Supply Corporation (hereinafter referred to as "BCWSC"), the water resources available to BCWSC shall be put to the maximum beneficial use, and the waste, unreasonable use, or unreasonable method of use of water be prevented, and the conservation of such water to be extended with a view to the reasonable and beneficial use thereof in the interests of the customers of BCWSC and for the public health and welfare.

BCWSC shall to account for all treated water delivered into the distribution system by means of metering at each connection and constant reconciliation of the amount of water delivered from its wholesale water supplier. In order to conserve the available water supplies and protect the integrity of water facilities, with particular regard for domestic water use, sanitation, 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, BCWSC adopts the regulations and restrictions on the delivery and consumption of water set forth in this Drought Contingency Plan ("Plan").

Water uses regulated or prohibited under this Plan are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water.

2.0 Authorization

The Manager of BCWSC 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 Manager of BCWSC shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan. This authorization is part of the Plan's approval by the BCWSC's Board of Directors.

3.0 Public Education

BCWSC 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 measure to be implemented in each stage. This information will be provided by means of utility bill inserts and postings at public places within BCWSC and by means of news media, as necessary.

4.0 Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by BCWSC by means of the opportunity to provide input into the Plan at a posted meeting of the Board of Directors of the Corporation.

5.0 Coordination with Regional Planning Groups

BCWSC has provided a copy of this Plan to the Lower Colorado Regional Planning Group (Region K).

6.0 Applicability

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

7.0 Notice Requirements

BCWSC shall notify the executive director of the Texas Commission on Environmental Quality and LCRA General Manager in writing within five (5) business days of the implementation of any mandatory provisions of this Drought Contingency Plan.

8.0 **Permanent Water Use Restrictions**

The following restrictions apply to all of BCWSC's customers on an annual basis, regardless of water supply conditions. According to the restrictions, a water user must not:

- 1) Fail to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet;
- 2) Operate an irrigation system:
 - with a broken head;
 - with a head that is out of adjustment and the arc of the spray head is over a street or parking area; or
 - with a head that is fogging or misting because of excessive water pressure.
- 3) During irrigation, allow water:
 - to run off a property and form a stream of water in a street for a distance of 50 feet or greater; or
 - to pool in a street or parking lot to a depth greater than one-quarter of an inch.
- 4) Irrigate outdoors using an in-ground irrigation system or hose-end sprinkler other than authorized days and times as set forth in this Plan.

9.0 Definitions

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

<u>Aesthetic water use</u>: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

<u>Commercial and institutional water use</u>: 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.

<u>Conservation</u>: 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 BCWSC.

<u>Domestic water use</u>: water use for personal needs or for house hold or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Even numbered address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6 or 8, and locations without addresses.

<u>Landscape irrigation</u>: water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, athletic fields, golf courses, parks, and rights-of-way and medians.

<u>Non-essential water use</u>: water uses that are not essential or 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;
- d) Use of water to wash down buildings or structures for purposes other than immediate fire protection;
- e) Flushing gutters or permitting water to run or accumulate in any gutter or street;
- f) Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi type pools;
- g) Use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- h) Failure to repair a controllable leak(s) within a reasonable period after having been

given notice directing the repair of such leak(s); and

i) Use of water from hydrants for construction purposes or any other purposes other than firefighting.

Odd numbered address: street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

<u>Odd/Even Water Schedule</u>: includes watering day as follows: an even-numbered day for those customers whose last digit of their address is an even number, and an odd-numbered day for those customers whose last digit of their address is an odd number.

<u>Outdoor Water Use</u>: includes but is not limited to watering lawns, shrubs, and other types of outdoor vegetation; washing vehicles, boats, and trailers; use of landscape irrigation systems; the refilling or adding water to swimming pools or wading pools or ponds; the operation of any ornamental fountain or other similar structure; the use of water from fire hydrants for uses other than fire fighting or other activities necessary to maintain health and safety conditions; the watering of patios, driveways, parking areas, streets, tennis courts, sidewalks or other paved areas; and the watering of ground foundations.

<u>TCMUD 4</u>: Travis County Municipal Utility District No. 4, the wholesale water supplier to BCWSC.

10.0 Initiation and Termination of Response Stages

BCWSC's Manager shall monitor water supply and demand conditions on a regular basis and shall determine when conditions warrant initiation and termination of each stage of this Plan in accordance with LCRA's Water Management Plan and the availability of water from TCMUD 4. Water supply conditions will be determined by the source of supply, system capacity, and weather conditions.

Public notification of the initiation or termination of drought response stages shall be by a variety of ways, examples include: bill inserts, e-mail and automated telephone calls, signs posted at entry points to the service area or a combination of these methods.

The following triggering criteria shall apply to BCWSC's water utility system(s) and customer service area:

10.1 Triggering Criteria for Initiation and Termination of Drought Response Stages

(1) STAGE 1 - Voluntary Measures

A. Requirements for initiation - Customers shall be requested to adhere to the Stage 1 Drought Response Measures when the combined storage of Lakes Travis and Buchanan reaches 1.4 million acre-feet in accordance with the LCRA Drought Contingency Plan for Firm Water Customers (DCP).

B. Requirements for termination - Stage 1 of the Plan may be rescinded at any time by BCWSC's Manager, including when LCRA announces that voluntary restrictions by its firm raw water customers are no longer needed in accordance with the LCRA DCP.

(2) STAGE 2 - Initial Water Shortage Conditions (Mandatory Initial Water Conservation Measures)

- A. Requirements for initiation Customers shall be required to adhere to the Stage 2 Drought Response Measures when the combined storage of Lakes Travis and Buchanan reaches 900,000 acre-feet, or when LCRA otherwise imposes mandatory irrigation restrictions.
- **B.** Requirements for termination Stage 2 of the Plan may be rescinded when the conditions that initiated Stage 2 have ceased to exist for a period of three consecutive days.

Upon termination of Stage 2, Stage 1 becomes operative.

(3) STAGE 3 - Moderate Water Shortage Conditions (Mandatory Water Conservation Measures)

- A. Requirements for initiation Customers shall be required to adhere to the Stage 3 Drought Response Measures when:
 - The average daily water consumption reaches 90% of production/distribution capacity for a period of three consecutive days; or
 - The LCRA Board determines that the river system is experiencing a drought more severe than the Drought of Record; or
 - LCRA requires mandatory irrigation restrictions more stringent than Even/ODD Schedules.
- **B.** Requirements for termination Stage 3 of the Plan may be rescinded when the conditions that initiated Stage 3 have ceased to exist for a period of three consecutive days.

Upon termination of Stage 3, Stage 1 becomes operative.

(4) STAGE 4- Severe Water Conditions (Mandatory Water Conservation Measures)

- **A. Requirements for initiation** Customers shall be required to adhere to the Stage 4 Drought Response Measures when:
 - Combined storage in the Highland Lakes falls below 600,000 acre-feet;
 - Daily water consumption reaches 95% of production/distribution capacity for a period of three consecutive days;

- Daily water consumption will not enable storage levels to be maintained;
- System demand exceeds available high service pump capacity;
- Water system is contaminated whether accidentally or intentionally;
- Water system fails from acts of God (tornadoes, hurricanes) or man;
- Any mechanical failure of pumping equipment which will require more than twelve hours to repair which causes unprecedented loss of capability to provide water service; or
- LCRA requires BCWSC or TCMUD 4 to prohibit all use of permanently installed irrigation system or hose-end irrigation.
- **B.** Requirements for termination Stage 4 of the Plan may be rescinded when all of the conditions that trigger Stage 4 have ceased to exist for a period of three consecutive days.

Upon termination of Stage 4, Stage 3 becomes operative as directed by the Manager.

11.0 Drought Response Measures

11.1 Customer Measures

(1) STAGE 1 - Voluntary Measures

- A. <u>Target</u>- Achieve a 5% reduction in total water use and to raise customer awareness of water demand conditions.
- B. <u>Supply Management Measures</u>: BCWSC will review system operations and identify ways to improve system efficiency and accountability.
- C. Demand Management Measures:
 - 1. Water customers must voluntarily limit outdoor water use by participating in the Odd/Even Water Schedule for outdoor water use. Outdoor water use must only occur on a designated outdoor watering day, which will be once every other day.
 - 2. Outdoor water use is discouraged between the hours of 10:00 a.m. and 7:00 p.m. except with hand-held hoses equipped with a positive pistol grip nozzle or other device that automatically shuts off water flow when the hose is not being used, or hand-held buckets. The time restrictions do not apply to: (1) the irrigation of commercial plant nurseries, (2) irrigation using treated wastewater effluent, (3) new landscape installation during installation and the first ten days, and (4) the testing of new irrigation systems or existing irrigation systems being tested or under repair.
 - 3. All operations of BCWSC will adhere to non-essential water use restrictions

in this Plan.

4. Water customers are requested to practice water conservation and adhere to the restrictions on non-essential water uses.

(2) STAGE 2 - Initial Water Shortage Conditions (Mandatory Measures)

- A. <u>Target</u>- Achieve a 10-20 percent reduction in total water use and maintain peak hourly water demand at levels which will provide adequate water storage levels within the system.
- B. <u>Supply Management Measures</u>:
 - 1. Apply all water-use restrictions prescribed for Stage 2 of the Plan for BCWSC's utility owned facilities and properties;
 - 2. Explore ways to reduce system water loss by measures such as fixing leaks, replacing old meters, and recycling line flush water, as appropriate for the utility system.
 - 3. BCWSC will actively communicate drought-related issues, including the current and projected water supply conditions, water supply restrictions and the need to conserve to its retail customers.
- C. <u>Demand Management Measures</u>:

Under threat of penalty, the following water-use restrictions shall apply to all retail water customers:

- 1. Water customers must participate in an Even/Odd Water Schedule for outdoor water use.
- 2. Water customers are encouraged to practice water conservation and adhere to the restrictions on non-essential water uses.

(3) STAGE 3 - Moderate Water Shortage Conditions (Mandatory Measures)

- A. <u>Target</u>- Achieve a 10-20% reduction in demand and maintain maximum daily water demand at or below ninety percent of system capacity.
- B. Supply Management Measures:
 - 1. BCWSC will aggressively reduce system water loss by measures such as fixing leaks, replacing old meters, and recycling line flush water, as appropriate for the utility system.
 - 2. BCWSC will actively communicate drought-related issues, including the current and projected water supply conditions, water supply restrictions

and the need to conserve to its retail customers.

- 3. In addition to measures implemented in the preceding stages of the Plan, BCWSC will explore additional emergency water supply options.
- C. <u>Demand Management Measures:</u> Under threat of penalty for violation, the following water use restrictions will apply to all persons:
 - 1. Water customers must participate in the Five Day Watering Schedule for outdoor water use in the Five Day Watering Schedule for outdoor water uses. Outdoor water use may only occur on a designated outdoor watering day, which will be once every five days. The Five Day Watering Schedule will be determined and distributed each year by BCWSC and shall correspond to the same schedule as TCMUD 4.
 - 2. Outdoor water use is prohibited between the hours of 10:00 a.m. and 7:00 p.m. except with hand-held hoses equipped with a positive pistol grip nozzle or other device that automatically shuts off water flow when the hose is not being used, or hand-held buckets. The time restrictions do not apply to: (1) the irrigation of commercial plant nurseries, (2) irrigation using treated wastewater effluent, (3) new landscape installation during installation and the first ten days, and (4) the testing of new irrigation systems or existing irrigation systems being tested or under repair.
 - 3. The washing of automobiles, trucks, motorbikes, boats, trailers, airplanes or other vehicle is prohibited except on designated watering days. Washing is prohibited between the hours of 10:00 a.m. and 7:00 p.m. Such washing, when allowed, must be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. The washing of individual vehicles may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, this restriction does not apply to the washing of vehicles or any other type of mobile equipment (such as garbage trucks and vehicles to transport food and perishables) when the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing. Charity car washes are prohibited.
 - 4. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or jacuzzi-type pools is prohibited except on designated watering days. This water use is prohibited between the hours of 10:00 a.m. and 7:00 p.m.
 - 5. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
 - 6. Use of water from hydrants is limited to fire fighting related activities, or other activities necessary to maintain public health, safety, and welfare,

except that use of water from designated fire hydrants for construction purposes may be allowed under written permission from BCWSC's Manager.

- 7. The following uses constitute a waste of water and are prohibited:
 - i. washing sidewalks, walkways, driveways, parking lots, tennis courts, patios or other hard-surfaced areas except to alleviate immediate health or safety hazards;
 - ii. use of water for dust control;
 - iii. allowing water to run off a property or allowing water to pond in the street or parking;
 - iv. operating a permanently installed irrigation system with broken heads, heads that are out of adjustment and spray more than 10% of the spray on street or parking lots, or heads that are misting;
 - v. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).
 - vi. washing an automobile, truck, trailer, boat, airplane, or other mobile equipment with a hand-held hose not equipped with a pistol grip nozzle or other device that automatically shuts off

(4) **STAGE 4 – Severe Water Shortage Conditions**

- A. <u>Target</u>- Reduce demand by a minimum of twenty percent (20%) and maintain maximum daily water demand at or below ninety five percent (95%) of system capacity.
- B. <u>Supply Management Measures:</u>
 - 1. BCWSC will cease the flushing of water mains except when necessary for reasons of health or safety. BCWSC will discontinue irrigating public landscaped areas.
- C. <u>Demand Management Measurers</u>: All requirements of Stage 3 remain in effect, with the following modifications and additions:
 - 1. Outdoor water use and any non-essential use is prohibited;
 - 2. The washing of automobiles, trucks, trailers, boats, airplanes, and other types of mobile equipment not occurring on the immediate premises of a commercial car wash or a commercial service station and not in the immediate interest of the public health, safety, and welfare are prohibited;
 - 3. The washing of vehicles listed in (2) to protect public safety and health

may only occur between 6 a.m. and 10 a.m.;

- 4. The filling, refilling, or adding of potable water to swimming or wading pools is prohibited;
- 5. No new landscapes of any type may be installed; and
- 6. The use of water for construction purposes from designated fire hydrants under written permission from the Manager must be discontinued.

11.2 TCMUD 4 Restrictions

In addition to the mandatory restrictions set forth above, all BCWSC water customers shall be required to comply with any mandatory watering restrictions that are applicable to the retail customers of the TCMUD 4, as mandated and required by the TCMUD 4.

13.0 Variances

- A. <u>Variance Authority</u>. BCWSC's Manager 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. <u>Application for Variance</u>: Persons requesting an exemption from the provisions of this Order must file a petition for variance with BCWSC within five days after the Plan or a particular drought response stage has been invoked. All petitions for variances will be reviewed by the Manager and must include the following:
- 1. Name and address of the petitioner(s);
- 2. Purpose of 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; and
- 8. Other pertinent information.
 - C. <u>Conditions to Variance</u>: Variances granted by the Manager are subject to the following conditions, unless waived or modified by the Manager:
- 1. Variances granted must include a timetable for compliance.
- 2. Variances granted expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.
- 3. No variance will be retroactive or otherwise justify any violation of this Plan occurring before the variance is issued.

14.0 Plan Updates

The Plan will be reviewed and updated as needed to meet both TCEQ and LCRA Drought Contingency Plan rules.