CORNERSTONES MUNICIPAL UTILITY DISTRICT

FOURTH AMENDED AND RESTATED ORDER ADOPTING WATER CONSERVATION, DROUGHT AND EMERGENCY CONTINGENCY PLAN; PROVIDING FOR IMPLEMENTATION AND ENFORCEMENT THEREOF; PROVIDING PENALTIES FOR VIOLATION; AND CONTAINING OTHER PROVISIONS RELATED TO THE SUBJECT

WHEREAS, Southeast Texas from time to time suffers from a severe shortage of rainfall; and

WHEREAS, such shortages of rainfall result in decreased supplies of potable water; and

WHEREAS, Cornerstones Municipal Utility District (the "District") was created for, among other purposes, the conservation and development of its water and the control, abatement, and change of any shortage of water, and the District has statutory authority to accomplish such purposes, including without limitation authority to prevent waste; and

WHEREAS, the Board of Directors (the "Board") of the District has carefully considered the situation and has determined that the adoption of this Water Conservation, Drought and Emergency Contingency Plan (this "Plan") by the District is necessary to prevent waste and to ensure that adequate supplies of water are maintained; and

WHEREAS, the Board of the District also desires to provide in the Plan for the possibility of a natural disaster or an equipment failure; and

WHEREAS, the Board of the District desires to evidence its approval of this Plan and to adopt such Plan as the official policy of the District; and

WHEREAS, the Board has found and determined and does hereby find and determine that No Private Real Property Impact will result from adoption or enforcement of this Order; NOW THEREFORE,

BE IT ORDERED BY THE BOARD OF THE DISTRICT THAT:

Section 1: Public Involvement/Approval of the Plan. Opportunity for the public to provide input into the preparation of this Plan was provided by means of scheduling and providing public notice of a public meeting to accept input on the Plan. The Board of the District hereby approves and adopts this Plan as set forth in this Order, and the provisions of such Plan shall be implemented immediately and enforced as a rule of the District.

Section 2: Coordination with Regional Water Planning Groups. The service area of the District is located within Regional Water Planning Area H as designated by the Texas Water

Development Board. The District will provide a copy of this Plan to the Regional Planning Group for Regional Water Planning Area H.

Section 3: The Water Conservation Plan.

- A. <u>Purpose</u>. The purpose of the Water Conservation Plan is to promote efficient and responsible use of water within the District. This plan is based on the requirements of Chapter 288, Subchapter A, Rule 288.2 "Water Conservation Plans for Municipal Uses by Public Water Suppliers" as per Title 30 of the Texas Administrative Code (TAC).
- B. <u>Utility Profile.</u> A copy of the Utility Profile, which includes data on the District's service area, population, water usage, and water and wastewater facilities, is provided under Appendix A.
- C. <u>Water Rate Structure</u>. A water rate structure which encourages water conservation will be maintained. The District's adopted Rate Order includes a step rate to increase with increased water usage. The water rate structure is intended to encourage water conservation and discourage excessive use and waste of water.
- D. <u>Metering and Loss Accounting.</u> The District currently meters 100% of the water used. The District has a policy of testing all meters which appear to have abnormally high or low water usage. The District's operator shall calibrate, test and maintain the District's metering devices to insure that they have the ability to measure and account for the amount of water treated or diverted from the source of supply within an accuracy of five percent (5.0%). The District follows a regular meter testing schedule for all water meters within the District. The District also maintains monthly records of water pumped; water delivered, water sales and water losses, and a program of leak detection, repair and water loss accounting in order to control unaccounted-for uses of water.
- E. <u>Five and Ten Year Targets for Water Savings.</u> The District's municipal water use for 2011 was approximately 184 gallons per capita per day. The following five and ten year targets for water savings are the District stated goals and are not mandatory.
 - 1. <u>Five Year Target.</u> Within five (5) years of the date hereof, the District's goal for its water loss programs is to continue to account for 90% or more of the amount of water treated in comparison to the amount of water sold. The District's goal for municipal water use is to reduce it by 2 gallons per capita per day within five (5) years.
 - 2. <u>Ten Year Target.</u> Within ten (10) years of the date hereof, the District's goal for its water loss program is to continue to account for 90% or more of the amount of water treated in comparison to the amount of water sold. The District's goal for

municipal water use is to reduce it by 4 gallons per capita per day within ten (10) years.

The Plan will be monitored annually to evaluate the progress towards meeting the targets and goals. The District shall update the Plan every five years, or more frequently as appropriate, based on the assessment of previous targets and any other new or updated information.

- F. <u>Plumbing Fixtures.</u> Under the District's water and sewer rate order, no new connections to the District's water system are allowed until a Service Inspection Certificate completed by a qualified inspector has been received by the District. Such certification must include certification that no plumbing fixture is installed which is not in compliance with State approved plumbing code. Such an inspection and certification are also required at any existing service location when the District has reason to believe that unacceptable plumbing practices exist, or after any material improvement, correction, or addition to private plumbing facilities.
- G. <u>Education and Information</u>. The District hereby institutes an educational program, to be implemented immediately, to promote water conservation by the general public which may include any of the following:
 - 1. Publications of articles in a newsletter of general circulation in the District's service area, providing information regarding water conservation; and
 - 2. Direct distributions to all District residents and other users of water within the District ("Users") explaining the Plan; and
 - 3. Direct distribution to Users of educational and informational material regarding water conservation; and
 - 4. Additional educational activities consisting of (i) publishing an article or articles in a local newspaper or newsletter of general circulation in the District's service area, providing tips or information on water saving techniques, or (ii) conducting an informational school program in a school attended by student's within the District's service area, or (iii) conducting an educational program for Users at a public place within or accessible to residents of the District, or (iv) conducting or engaging in such other informational or educational activity designed to further water conservation, as, in the discretion of the Board of Directors, may be consistent with the purposes and policies of this Plan, or (v) any combination of the foregoing.
- H. <u>Retrofit Education Program.</u> The District shall make information regarding water conservation available to Users to consider when purchasing and installing various plumbing fixtures, lawn watering equipment, and other water-using appliances.

I. <u>Implementation and Enforcement.</u> Without limitation to specific actions stated in this Plan to be taken by the District's operator, the District's operator will administer and enforce this Plan, and will oversee and be responsible for the execution and implementation of all elements of this Plan. The operator shall keep adequate records for Plan verification including tracking annual water use in order to evaluate the progress toward meeting the target goals. The District's operator shall report to the Board of the District, at meetings of the Board, regarding actions taken and which need to be taken under this Plan.

Section 4: The Drought Contingency Plan.

- A. <u>Trigger Conditions.</u> For the purpose of this Plan, the District hereby adopts the trigger conditions (the "Trigger Conditions") set forth below:
 - 1. <u>Mild Drought</u>. This condition (herein, "Mild Drought Conditions") exists when average well run hours are at or above 18 hours per day for 3 consecutive days, as determined by the District's operator.
 - 2. <u>Moderate Drought.</u> This condition (herein, "Moderate Drought Conditions") exists when average well run hours are at or above 20 hours per day for 3 consecutive days, as determined by the District's operator.
 - 3. <u>Severe Drought.</u> This condition (herein, "Severe Drought Conditions") exists when average well run hours are at or above 22 hours per day for 3 consecutive days, as determined by the District's operator.
- B. <u>Notice.</u> Once one of the above Trigger Conditions has occurred, Users will be notified that such Trigger Condition has occurred and of the Drought Response Measures (as defined below) to be taken. The process for notifying Users may include any of the following:
 - 1. Mailing, at least 48 hours prior to the commencement of the required Drought Response Measures, a written notice to each User;
 - 2. Posting of signs at the entrances to the District; and
 - 3. Posting of notices at public places in the District.

Any notice issued shall contain (i) the date the Drought Response Measures will begin, (ii) the date the Drought Response Measures will terminate, if known, (iii) a list of Drought Response Measures to be implemented, and (iv) an explanation of penalties for violations of such Drought Response Measures.

- C. <u>Emergency Management Program.</u> The District hereby establishes and adopts the following measures ("Drought Response Measures") for the respective Trigger Conditions. The Drought Response Measures related to each Trigger Condition shall automatically become effective and shall be implemented by the District when such Trigger Conditions occurs.
 - 1. <u>Mild Drought.</u> In the event of Mild Drought Conditions, the following Drought Response Measures shall be taken, with a target of achieving a 5% reduction in daily water demand:
 - a. Users will be asked to voluntarily reduce water use, and will be informed of specific steps that can be taken to reduce water use.
 - b. All outdoor water usage, including, but not limited to, lawn and garden watering, car washing, and window washing, shall be limited as follows:
 - (1) Users with even-numbered addresses may use water outdoors only on Wednesdays and Sundays and Users with odd-numbered addresses may use water outdoors only on Tuesdays and Saturdays. In the event no street address exists, Users living on the north and west side of a street may use water outdoors only on Wednesdays and Sundays, and Users on the south and east side of a street may use water outdoors only on Tuesdays and Saturdays.
 - (2) Outdoor water use shall be prohibited between the hours of 7:00 a.m. and 10:00 a.m., and between the hours of 6:00 p.m. and 10:00 p.m.
 - 2. <u>Moderate Drought.</u> In the event of Moderate Drought Conditions, the following Drought Response Measures shall be taken, with a target of achieving a 10% reduction in daily water demand:
 - a. The Drought Response Measures established for Mild Drought Conditions shall continue to be implemented.
 - b. All outdoor water use, including, but not limited to, lawn and garden watering, car washing, washing of sidewalks and driveways, and window washing, must be conducted with a hand-held hose with a manual on-off nozzle.
 - c. The District shall recommend that the following public water uses not essential for public health and safety be curtailed:
 - (1) Street washing;
 - (2) Fire hydrant flushing;
 - (3) Filling of swimming pools;

- (4) Washing of sidewalks and driveways; and
- (5) Irrigation of greenbelts, esplanades, and neighborhood entrances.
- 3. <u>Severe Drought.</u> In the event of Severe Drought Conditions, the following Drought Response Measures shall be taken, with a target of achieving a 15% reduction in daily water demand:
 - a. The Drought Response Measures established for Mild Drought Conditions and Moderate Drought Conditions shall continue to be implemented.
 - b. All outdoor use of water, including but not limited to lawn and garden watering, car washing, washing of sidewalks and driveways, and window washing shall be prohibited. This shall include irrigation of the District Greenbelt area, Highland Knolls esplanades, and any other irrigation by the District.
 - c. A surcharge equal to 200% of the applicable rate for all water used in excess of 10,000 gallons/month, shall be imposed on all Users.
 - d. The Board of the District may prohibit water use by certain industrial or commercial Users which uses are not essential to the health and safety of the community so that remaining water is available for essential health and safety related uses.
- D. Termination of Trigger Conditions Notification. When a Trigger Condition occurs, the District shall enforce the Drought Response Measures applicable to such Trigger Condition for a minimum of five (5) days after the last day the demand on the District's water supply facilities reaches or exceeds the limits of such Trigger Condition. After such five (5) day period, the Drought Response Measures prescribed may, in the discretion of the Board, be continued for an additional five (5) day period. After the expiration of ten (10) days, and assuming no other Trigger Conditions have occurred, the Drought Response Measures prescribed shall terminate and the District shall cease implementation and enforcement of such measures. The District will notify Users of the termination of the particular Drought Response Measures and may utilize the same manner of notification used to inform Users of the occurrence of the Trigger Condition and implementation of the Drought Response Measures.
- Section 5: Emergency Contingency Plan. In the event of a fire, flood, hurricane, lightning strike, tornado, windstorm, or any other act of God, riot, terrorist act, or any other act of civil disobedience, or any other occurrence which results in the reduced ability of the District to provide potable water to Users (or the likelihood thereof), the Board, in its discretion, may, without prior notice, invoke all or any of the Drought Response Measures set forth in this Plan as

"Emergency Response Measures." The Board may establish any of the penalties set forth in Section 7 for violations of the Emergency Response Measures.

- Section 6: Implementation. Without limitation to specific actions stated in this Plan to be taken by the District's operator, the District's operator will administer and enforce the Plan, and will oversee and be responsible for the execution and implementation of all elements of this Plan (or, if the District employs its own peace officers pursuant to Texas Water Code §49.216, such peace officers will be responsible for enforcement of this Plan). The operator shall keep adequate records for Plan verification. The District's operator shall report to the Board of the District, at meetings of the Board, regarding actions taken and which need to be taken under this Plan. Without limiting the foregoing, the District's operator shall advise the President of the Board (or if the President is unavailable to receive notification, another member of the Board) as soon as reasonably practicable when a particular Trigger Condition has been reached under this Plan and when a particular drought condition no longer exists. The District's operator shall notify the executive director of the Texas Commission on Environmental Quality within five (5) business days of the implementation of any mandatory provisions of this Plan.
- Section 7: Penalties. The following penalties shall apply to anyone violating the terms of this Plan or the Drought Response Measures or Emergency Response Measures adopted pursuant hereto:
- A. <u>First Violation</u>. Any person or entity who violates this Plan shall receive written notification of such violation, which notice shall set forth (i) the date of the violation, (ii) the nature of the violation, (iii) the Drought Response Measures then in effect, and (iv) the penalties applicable for any further violations of this Plan; provided, however, that if such person or entity has ever previously violated the Plan, the penalties set forth in Subsection (B) below, may, in the discretion of the Board, be imposed.

B. Subsequent Violations.

- 1. <u>Disconnection for Noncompliance</u>. If any person or entity violates any provision of this Plan more than one time (which violation shall constitute an unauthorized use of District services and/or facilities), then in addition to any other remedies, penalties, sanctions and enforcement procedures provided for herein, the District shall have the right to terminate water service to such person or entity after notice and any other procedural requirements in the District's rate order are satisfied.
- 2. <u>Monetary Penalties for Noncompliance.</u> If any person or entity violates any provision of this Plan more than one time (which violation shall constitute an unauthorized use of District services and/or facilities), then, in addition to disconnection as provided in Subsection (B.1) of this Section, the Board of the District may impose a penalty of up to \$5,000.00 for each violation of this Plan. Each day that a breach of any provision of this

Plan continues shall be considered a separate violation. This penalty shall be in addition to any other legal rights and remedies of the District as may be allowed by law.

Section 8: <u>Variances.</u> The Board may grant a temporary variance for existing water uses otherwise prohibited under this Plan if the Board determines that failure to grant such a 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:

- A. 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.
- B. Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting a variance from the provisions of this Order shall file a petition for variance with the District within 5 days after the Plan or a particular Drought Response Measure has been invoked. All petitions for variances shall be reviewed by the Board, and shall include the following:

- a. Name and address of the petitioner(s).
- b. Purpose of water use.
- c. Specific provision(s) of the Plan from which the petitioner is requesting relief.
- d. 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 Order.
- e. Description of the relief requested.
- f. Period of time for which the variance is sought.
- g. 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.
- h. Other pertinent information.

Unless waived or modified by the Board, variances granted shall include a timetable for compliance, and variances granted shall expire when the Plan or particular Drought Response Measure is no longer in effect. No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

<u>Section 9:</u> <u>Remedies Cumulative.</u> All rights, remedies, sanctions, penalties and enforcement procedures provided for in this Order are cumulative. In addition, the District shall have and may exercise and enforce any and all rights and remedies provided by law or in equity.

- Section 10: Severability. If any provision, section, subsection, sentence, clause, or phrase of this Order, or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, void or invalid, the validity of the remaining portions of this Order or their application to other persons or sets of circumstances shall not be affected thereby, it being the intent of the Board of Directors in adopting this Order that no portion hereof or provision or regulation contained herein shall become inoperative or fail by reason of unconstitutionality, voidness or invalidity of any other portion hereof. And all provisions of this Order are declared to be severable for that purpose.
- Section 11. Open Meeting. The Board of Directors finds and determines that a sufficient written notice of the date, hour, place and subject to this meeting of the Board of Directors was posted at a place convenient to the public for the time required by law preceding this meeting, as required by Chapter 551 of the Texas Government Code and Section 49.063 of the Texas Water Code, as amended, and that this meeting has been open to the public as required by law at all times during which this Order and the subject matter thereof has been discussed, considered and formally acted upon. The Board further ratifies, approves and confirms such written notice and the contents and posting thereof.
- Section 12. Public Record. This Order shall be kept with the other records of the District by the official custodian of the records of this District, and this Order is hereby declared to be a public record.
- Section 13. Authority. This Order is promulgated pursuant to Section 49.004 and Sections 54.205, et. seq., Texas Water Code.
- Section 14. Renew and Update. The District shall renew and update, as appropriate, this Plan at least every five (5) years, based on new or updated information, such as adoption or revision of any applicable regional water plan.
- Section 15: Repeal of Prior Orders Relating to Water Conversation, Drought and Emergency Contingency Planning. Any and all prior orders or resolutions relating to water conservation, drought and emergency contingency planning are hereby repealed, and this Order shall supersede any such prior orders or resolutions.
- Section 16. Effective Date. This Order shall be effective from and after the date of its adoption.

(The remainder of this page has been intentionally left blank.)

PASSED, APPROVED, AND EFFECTIVE this 19th day of November, 2012.

CORNERSTONES MUNICIPAL UTILITY DISTRICT

President, Board of Directors

ATTEST:

[SEAL]

CORNERSTONES MUNICIPAL UTILITY DISTRICT NOTICE OF ADOPTION OF WATER CONSERVATION, DROUGHT AND EMERGENCY CONTINGENCY PLAN

Notice is hereby given that at a meeting held November 19, 2012, the board of directors of the captioned district adopted a Water Conservation, Drought and Emergency Contingency Plan (the "Plan"). The Plan was adopted as rules of the district for the purpose of protecting and preserving the pressure and supply of water available for essential purposes and to promote the public health, safety, and welfare. The Plan defines mild drought, moderate drought, and severe drought conditions and regulates the use of water during such periods. Failure to adhere to the provisions of the Plan can result in termination of water service and monetary penalties. A full copy of the Order adopting the Plan is on file at 10000 Memorial Drive, Suite 260, Houston, Texas, and in the office of the district's operator. The Order is effective immediately.

CORNERSTONES MUNICIPAL UTILITY DISTRICT

 By_{-}

Morgan/Stagg, Preside

Board of Directors



APPENDIX A

TEXAS WATER DEVELOPMENT BOARD

UTILITY PROFILE

The purpose of the Utility Profile is to assist with water conservation plan development and to ensure that important information and data be considered when preparing your water conservation plan and its target and goals. Please complete all questions as completely and objectively as possible. See *Water Conservation Plan Guidance Checklist* (WRD-022) for information on other water conservation plan provisions. You may contact the Municipal Water Conservation Unit of the TWDB at 512-936-2391 for assistance.

ARREIGANTEDAVIA)
Name of Utility: Cornerstones MUD
Public Water Supply Identification Number (PWS ID): 1011692
Address: 6420 Reading Road City: Rosenberg
State: TX Zip Code: 77471 Email:
Telephone Number: (832) 490-1554 Fax: (832) 490-1502
Regional Water Planning Group: H
Groundwater Conservation District: Fort Bend Subsidence District
Form Completed By: Michael Thornhill
Signature: Date:
Contact information for the person or department responsible for implementing the water conservation program:
Name: Dusty Lane, SI Environmental Phone: (832) 490-1575
Email: dlane@sienv.com
REPORTED AND A
A. Population and Service Area Data
1. Current population of service area: 5,221
2. Current population served by utility: Water: 5,221
Wastewater: <u>5,221</u>

3. Population served by water utility for the previous five years starting with the most recent year:

Year	Population
2011	5,221
2010	5,218
2009	5,218
2008	5,209
2007	5,209

4. Projected population for service area in the following decades:

Year	Population
2010	5,218
2020	5,236
2030	5,254
2040	5,272
2050	5,272

5. List source(s)/method(s) for the calculation of current and projected population:

(connections x 3) + (multi-family units x 2) = population

B. Active Connections

1. Current number of active connections by user type. If not a separate classification, check whether multi-family service is counted as **Residential** or **Commercial**

Water User Type*	Metered	Un-metered	Total
Residential Single Family	1,370	0	1,370
Residential Multi-family	353	0	353
Commercial/Institutional	53	0	53
Industrial	0	0	0
Other (please describe):			
irrigation, district	. 82	0	82

^{*} See Appendix A #1.

2. List the net number of new connections per year for most recent three years:

Water User Type*	2011	2010	2009
Residential Single Family	1	0	0
Residential Multi-family	0	0	0
Commercial/Institutional	0	0	1
Industrial	0	0	0
Other (please describe):			
irrigation, district	1	0	2

^{*} See Appendix A #1.

C. High Volume Customers

List annual water use for the five highest volume retail and wholesale customers. Please indicate if treated or raw water delivery.

Customer	Water User Type*	Annual Water Use (in gallons)	Treated	Raw
Cornerstone Ranch Apts	multi-family	17,541,900	•	Q
Cornerstone Ranch Apts	irrigation	6,419,600	⊙	Q
HEB (MMRL)	commercial	5,363,300	•	Q
Cornerstones MUD	district	4,572,800	©	Q
Cornerstones MUD	district	4,123,100	⊙	0

^{*} See Appendix A #1

D. Water Supply System

1. Dongii duity oupdoity of byboom. 1,020,000 gordon per my	1.	Design daily	capacity of s	ystem: 1,020,0	000 gallons per da	ıy
---	----	--------------	---------------	----------------	--------------------	----

Storage Ca	pacity: Elevated 0	gallons per day
------------------------------	--------------------	-----------------

3.	If surfac	e water,	do you	recycle filt	er backwa	ish to the head	l of the p	lant?
				approxima			gallons	

E. Water Accounting Data

1. Amount of water use in gallons for previous five years.
Please indicate whether: Treated Water O or Raw Water O

YEAR	2011	2010	2009	2008	2007
January	13,663,000	12,995,000	20,336,000	14,706,000	14,033,000
February	15,914,000	13,403,000	19,635,000	16,331,000	15,097,000
March	19,380,000	18,629,000	20,335,000	18,585,000	17,774,000
April	34,354,000	20,423,000	21,453,000	23,827,000	18,440,000
May	32,876,000	27,487,000	27,553,000	31,944,000	24,960,000
June	43,924,000	28,874,000	45,029,000	33,694,000	20,600,000
July	38,333,000	23,563,000	41,295,000	32,907,000	16,962,000
August	39,068,000	33,731,000	35,554,000	25,993,000	22,929,000
September	37,552,000	30,572,000	25,156,000	26,112,000	25,107,000
October	31,398,000	29,681,000	17,247,000	27,113,000	22,009,000
November	26,258,000	28,627,000	18,865,000	22,984,000	19,530,000
December	18,120,000	23,072,000	15,120,000	19,308,000	18,152,000
TOTAL	350,840,000	291,057,000	307,578,000	293,504,000	235,593,000

Please indicate how the above figures were determined (e.g., from a master meter located at the point of a diversion from a stream or located at a point where raw water enters the treatment plant).

master meter located at well

2. Amount of water sold in gallons as recorded by Water User Type for the previous five years (See Appendix A #1)

Year	Residential Single Family	1	Commercial/ Institutional	Industrial	Other	Wholesale	Total Sold
2011	249,858,000	17,541,900	27,119,100	0	47,396,600	0	341,915,600
2010	196,700,000	15,284,000	29,253,500	0	33,602,300	0	. 274,839,800
2009	257,230,200	14,285,300	25,231,900	.0	90,000	0	296,837,400
2008	205,082,800	13,461,300	33,457,900	0	2,580,000	0	254,582,000
2007	194,964,800	12,191,400	19,542,200	0	875,000	0	227,573,400

3. GPCD and Seasonal Water Use for the previous five years

					SEASONAL W	'ATER USE***
Year	Population	Total Water Use	Total gallons per capita per day (GPCD)*	Residential GPCD**	Winter per capita per day	Summer per capita per day
2011	5,221	350,840,000	184	140	102	258
2010	5,218	291,057,000	153	111	105	183
2009	5,218	307,578,000	161 ·	143	117	260
2008	5,209	293,504,000	154	115	107	198
2007	5,209	235,593,000	124	109	101	129
Five Year Average	5,215	295,714,400	155	124	106	206

^{*} Total GPCD (See Appendix A #2):

4. Water Loss Data for the previous five years (See Appendix A #5)

Year	Water Loss expressed in gallons	Water Loss expressed in GPCD	Water Loss expressed as a percentage
2011	8,924,400	5	2.54%
2010	16,217,200	9	5.57%
2009	10,740,600	6	3.49%
2008	38,922,000	20	13.26%
2007	8,019,600	4	3.40%
Five Year Average	16,564,760	9	5.65%

^{**} Residential GPCD (See Appendix A #3):

^{***} Seasonal Water Use (See Appendix A #4)

5. Peak Day Use (in gallons) to Average Daily Use (in gallons) Ratio for the previous five years (See Appendix A #6)

Year	Average Daily Use	Peak Day Use	Ratio
2011	961,205	1,725,000	1.79
2010	797,416	1,843,000	2.31
2009	842,679	2,158,000	2.56
2008	804,121	1,855,000	2.31
2007	645,460	1,860,000	2.88

F. Projected Demands

Estimate water supply requirements for at least the next ten years using population trends, historical swater use, and economic growth, etc.

Year	Population	Water Demand (in gallons)
2011	5,221	350,800,000
2012	5,224	350,868,000
2013	5,228	350,936,000
2014	5,228	350,936,000
2015	5,231	351,004,000
2016	5,231	351,004,000
2017	5,234 351,072,0	
2018	5,236 351,140,000	
2019	5,236 351,140,000	
2020	5,236	351,140,000

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

Projected demands are based on historical data and trends for the MUD. Cornerstone MUD has a limited amount of developable land which will be almost all commercial. Projects are based on 68,000 gallons / connection from 2011.

G.	Wastewater	System	Data
----	------------	--------	------

1.	Design capacity of wastewater treatment plant(s):	gallons pe	r day
	2 Joseph Tolor Control of Control	0 1	-

2. Is treated effluent used for:

Use	Total Annual Volume (in gallons)		
On-site irrigation			
Plant wash down			
Chlorination/de-chlorination			
Industrial			
Landscape irrigation (parks, golf courses)			
Agricultural			
Other (please describe):			

Could treated effluent be substituted for certain potable water now being used? Yes O No O

H. Wastewater Data for Service Area

- 1. Percent of water service area served by wastewater system: 100 %
- 2. Monthly wastewater volume in gallons, treated for previous five years.

YEAR	2011	2010	2009	2008	2007
January					
February					·
March	•				
April				·	
May					
June		•	*		·
July					
August					
September					
October					
November					
December					
TOTAL	0	0	0	0	0

0.4.45.4.5.4	· ·	15:45	!	D(E
Submit Form by Email		Print Form		Reset Form

Appendix A

Definitions of Utility Profile Terms

- Residential Single Family should include water sold to single family and duplexes.
 Residential Multi-Family should include water sold to this class of customers only.
 Commercial/Institutional sales should include water sold to retail businesses, offices, hospitals, etc.
 Industrial sales should include water sold to manufacturing and other heavy industry.
 Wholesale sales should include water sold to another utility for resale to the public.
 Other water sales should be noted as necessary.
- 2. Total use in gallons per capita per day is defined as total average daily amount of water treated or raw water provided for potable use by a public water supply system. The calculation is made by dividing the water diverted or pumped for treatment by population served. Indirect reuse volumes shall be credited against total diversion volumes for the purpose of calculation gallons per capita per day for targets and goals developed for the water conservation plan. Total water use is calculated by subtracting the wholesale sales from the total treated or raw water.
- 3. Residential use in gallons per captita per day is calculated by dividing the total single family plus multi-family residential water sales by the population served and then dividing by 365.
- 4. Seasonal water use is the difference between winter daily per capita use and summer daily per capita use. To calculate the winter daily per capita use, add the monthly diversions for December, January, and February, and divide by 90. Then divide this figure by the population. To calculate the summer daily per capita use, use the months of June, July, and August.
- 5. Water Loss is the difference between water a utility purchases or produces and the amount of water that it can account for in sales and other use, metered and unmetered, such as firefighting, line flushing, and water for public buildings and water treatment plants. Water loss can result from:
 - 1. Inaccurate or incomplete record keeping;
 - 2. Meter error;
 - 3. Leaks; and
 - 4. Water theft and unauthorized use.
- 6. The peak-day to average-day ratio is calculated by dividing the maximum daily pumpage by the average daily pumpage. Average daily pumpage is the total pumpage for the year divided by 365.

CERTIFICATE

I, the undersigned secretary of the board of directors of Cornerstones Municipal Utility District, hereby certify that the foregoing is a true and correct copy of the Order Adopting Water Conservation, Drought and Emergency Contingency Plan adopted at a board meeting held on November 19, 2012, as said Order appears of record in the official minute book of the District on file in the District's office.

I further certify that said meeting was open to the public, and that notice thereof was posted in compliance with the provisions of Chapter 551 of the Texas Government Code, as amended, and Section 49.063 of the Texas Water Code, as amended.

Witness my hand and the official seal of said District, this 17th day of December, 2012.

Secretary, Board of Directors

